

Wari and Tiwanaku: Early Imperial Repertoires in Andean South America

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Abstract:

Imperialism in the Andes is rooted in the interactions among regional polities active on the coast and highlands of Peru and Bolivia in the early first millennium CE. These regional polities included the Moche, Recuay, and Cajamarca polities of the Peruvian north coast and highlands; the Nasca, Lima, and Huarpa polities of the central Peruvian coast and highlands; and the Pukara, Taraco, and other Late Formative (1–500 CE) groups of the Titicaca Basin. While each of these polities varied greatly in scale and organization, they were critical to the development of the political concepts of integrating cultural diversity into political organizational frameworks that characterized the Andes' earliest empires. The interactions among and between these societies resulted in the cross fertilization of ideas and the emergence of two great cities in the south-central Andean highlands by 600 CE: the cities of Huari and Tiwanaku (Figure 8.1).

Keywords: Wari | Tiwakanu | Hari | Peru | Titicaca Basin

Book chapter:

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Wari and Tiwanaku

Early Imperial Repertoires in Andean South America

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Introduction

Imperialism in the Andes is rooted in the interactions among regional polities active on the coast and highlands of Peru and Bolivia in the early first millennium CE. These regional polities included the Moche, Recuay, and Cajamarca polities of the Peruvian north coast and highlands; the Nasca, Lima, and Huarpa polities of the central Peruvian coast and highlands; and the Pukara, Taraco, and other Late Formative (1–500 CE) groups of the Titicaca Basin. While each of these polities varied greatly in scale and organization, they were critical to the development of the political concepts of integrating cultural diversity into political organizational frameworks that characterized the Andes' earliest empires. The interactions among and between these societies resulted in the cross fertilization of ideas and the emergence of two great cities in the south-central Andean highlands by 600 CE: the cities of Huari and Tiwanaku (Figure 8.1).

Huari, situated in the Huamanga Basin of Ayacucho, Peru, in the Huarpa heartland, emerged as the capital of the Wari Empire, which rapidly expanded across the Andes by 600 CE. At its height, Wari stretched from the fringes of the Atacama Desert with its southern provincial capital at Cerro Baul to the Cajamarca and Huamachuco regions of northern Peru, some 1,300 kilometers away. Wari's influence over this territory varied across geographies and sociopolitical organization of incorporated territories, following a model Schreiber (1992) has characterized as a mosaic of control. We reject globalization models to explain this variation as they fail to acknowledge the power dynamics at play, and there is clear intent by Wari state agents to establish influential centers throughout the highland Andes from south to north. The great unfinished center of Viracochapampa

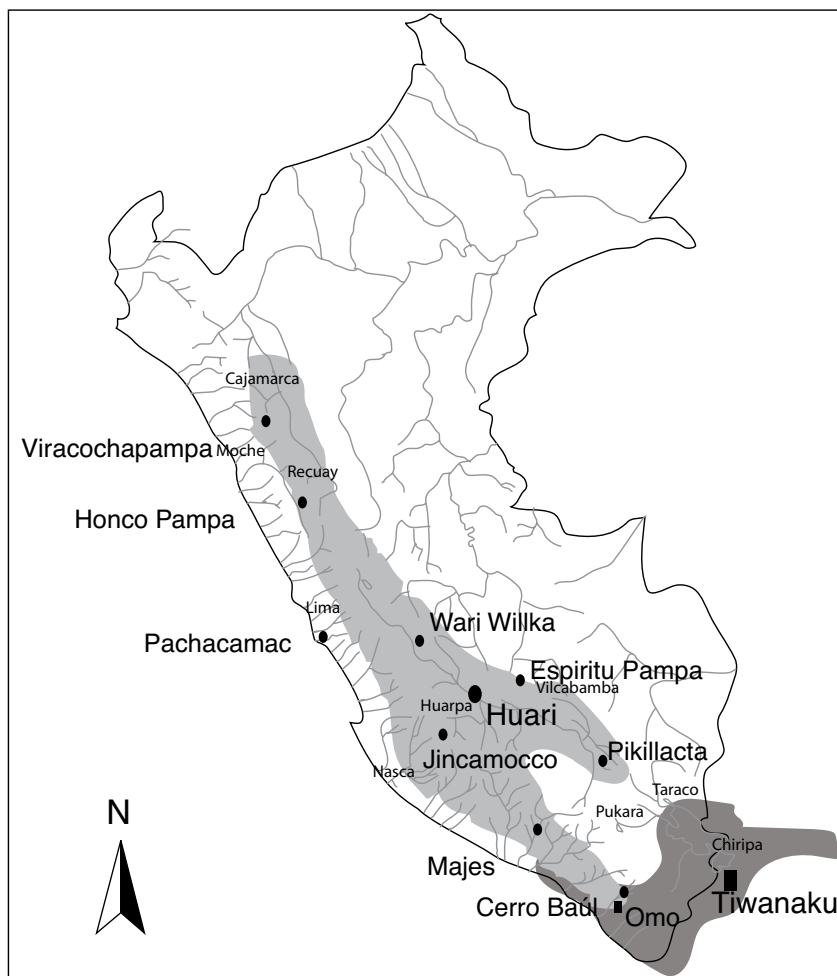


Figure 8.1. Map of the Wari and Tiwanaku imperial extents. Produced by Patrick Ryan Williams.

anchors the northern region, which became the interface with the coastal Moche polities to the west. To the southwest, Wari entered the high jungle regions of Vilcabamba and implanted settlements in the Cuzco region, the future heartland of the Inka state. Wari's Cuzco infrastructure included its largest administrative center at Pikillacta (McEwan 2005), and a Wari settlement at Raqchi bordered the Titicaca Basin, where Wari's largest state rival, the Tiwanaku, emerged.

Tiwanaku is perhaps best described as an expansive colonizing state. It consolidated the southern Titicaca Basin with its capital at the site of the same name. From there it reached out across the southern Andes, forming trading relationships with regions like San Pedro de Atacama, one thousand kilometers to the south, and the Cochabamba region in the headwaters of the Amazon, three hundred kilometers east. It also colonized other areas, such as the Moquegua Valley of southern Peru, three hundred kilometers west of its capital, and locales on the north shore of Lake Titicaca, such as the Puno Bay. Tiwanaku is known for its massive temple-mound cut-stone architecture and in dryland regions for its well-preserved textiles of fine manufacture and prolific ceramic assemblage. We argue that Tiwanaku traded with other groups and colonized certain regions with citizens from its homeland in order to produce goods for export, but it did not incorporate the distant ethnic groups they traded or cohabited with in distant lands into their political realm.

Both states—Wari and Tiwanaku—influenced the later and more massive Inka empire (1400–1532 CE; see Alconini, this volume), and we argue at the end of this chapter that Inka statecraft was largely drawn from Wari political and economic models, while Inka religious practice and the arts drew heavily from Tiwanaku cultural norms. We also argue that the characterization of these models of statecraft has too often been simplistically depicted, and we attempt to take a comprehensive perspective in examining the relationship between expanding Andean states and the local polities they interact with and sometimes incorporate into their political realms. The manner in which these expansive states persuaded local polities to join their political union is of critical importance in the study of early imperialism. Scholars have focused on coercive versus reward strategies in the incorporation of new territories into imperial realms. We explore mechanisms of both incorporation and isolation across several categories of evidence, from landscapes to settlements and from household economies to prestige-good exchange. We also argue that archaeologists can fall into a trap if their focus for measuring imperial hegemony relies on only one category of evidence, with a particular caution in the Andean case in regard to the use of ceramic data.

Andean archaeologists have often relied on the presence of imperial pottery as the primary or only material correlate of imperial hegemony. This tends to lead to a tyranny of pottery style as a determinant of imperial influence. We demonstrate that even though ceramic exchange may have been fundamental to the imperial governance model, imperial ceramic styles are only likely

to be found in the principal centers of governance, where patron-role feasts were likely to have taken place. We further explore other material correlates for imperial-local interaction and influence that go beyond the feasting model. In particular, we examine how agents use imperial repertoires to express, first, military and political power in the provinces; second, ideological power in the landscape; third, economic power as expressed in productive infrastructure; fourth, political economy in goods marking imperial intersections; and fifth, incorporation of local communities in imperial networks. We examine these variations in hegemony in the cases of early state expansion in the south-central Andes by Tiwanaku and Wari and the states that succeeded them.

Markers of Political and Military Power on the Landscape

The symbolic transformation of landscape marks one way that imperial identities are imprinted on place. It also provides a complementary perspective on imperial intentions to the ceramic-focused viewpoint espoused by the feasting model commonly employed. In this section, we examine how the establishment of provincial centers, fortifications, and defensive works reflect imperial intentions in governance in provincial settings.

One way in which empires exert their influence is through the establishment of urban centers reflective of imperial identities. These provincial centers often replicate architectural forms from the urban capital and represent the attempt to impose a vision of political hegemony in provincial areas (see Boozer, this volume; S. T. Smith, this volume). They represent the imperial identity within the provincial sphere and are a manifest attempt at representing the power of the core in the periphery. The extent, distribution, scale, and complexity of administrative centers may be a telling indication of imperial intentions across the empire.

Tiwanaku centers are concentrated in the Andean altiplano in the core region of the Tiwanaku capital at sites like Lukurmata, Iwawe, and Khonko Wankane. The best example of Tiwanaku urbanism outside the core region is located in the Moquegua Valley of southern Peru. Here, at least three Tiwanaku towns of several thousand inhabitants were established between 500 and 1000 CE (Goldstein 2005). Each town was composed of neighborhoods of domestic architecture surrounding large open plazas. Cemeteries were located in ravines adjacent to these domestic areas. Public architecture is rare, with a large temple at one of the three towns being the most conspicuous

example of monumental expression. Palatial complexes evident in the center are not replicated in the provinces, and the creation of an administrative nexus is arguably minimal or absent outside of the central core of the state. However, large migrant populations from the core regions do inhabit these distant valleys in towns constructed around central plazas unlike the previous architectural patterns in the region, which are composed of small villages of a dozen houses located next to bottom valley agricultural land. Tiwanaku provincial towns are built not to interface with others but to serve the migrant populations from the Tiwanaku heartland itself. This role is manifested in their inward orientation and the lack of material remains affiliated with surrounding groups.

Wari provincial centers are dispersed along the spine of the Andes, with a preference for areas between two thousand and three thousand meters above sea level. Two of these centers—Pikillakta and Viracochapampa (Figure 8.2)—built on opposite ends of the empire, were truly monumental in scope. Others were of intermediate to large size (tens of hectares or larger), such as Jinca-mocco, Cerro Baul, and Espiritu Pampa (Vilcabamba), and contained all the hallmarks of Wari urbanisms, whereas others are more modest, such as Pataraya and Honco Pampa. The former centers were designed to accommodate administrative activities and bring locals and imperial officials together for ritual and sociopolitical relations; whereas the smaller centers may have been served to facilitate trade or monitor resource extraction. These complexes vary across the empire and do not follow a standardized blueprint; however, they do exhibit spatial forms that likely represent Wari institutions (Nash and Williams 2005, 2009) and probably also served to materialize and communicate facets of the empire's ideology (Nash 2017). Thus, Wari provincial centers were not merely edifices constructed to house Wari officials and colonists; they were also in and of themselves instruments for integrating locals, particularly local elites, into the empire. Unlike the Tiwanaku case, they are distributed throughout the realm of Wari highland influence in the Andes.

Another way in which imperial ideology may be expressed on the landscape is through the construction of forts and citadels throughout the imperial lands, but especially in areas of contestation or on political and ethnic borderlands. The archaeology of defensive architecture is a facet of imperial projections of power and might. In borderlands and other contested landscapes, fortresses and citadels likely reflect the pragmatic concerns with defense of land, territory, and populations (see Boozer, this volume; Yao, this volume).

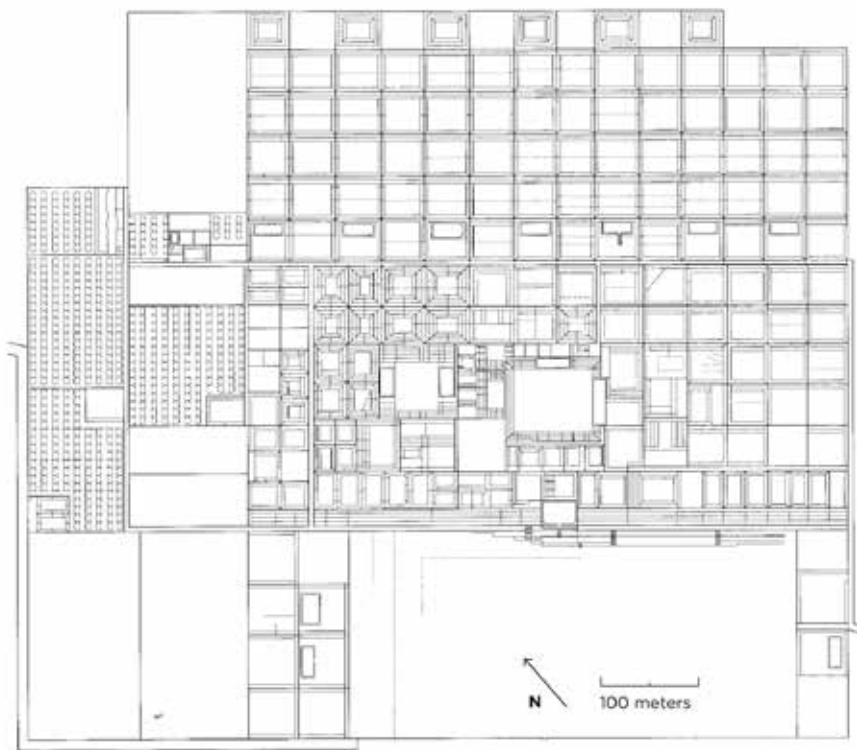


Figure 8.2. Map of example Wari provincial center: Pikillacta, Cerro Baul. Courtesy Gordon McEwan, Patrick Ryan Williams.

Tiwanaku defensive architecture is practically absent in capital or province, except perhaps for the use of canals around the core of the Tiwanaku capital. While large walls and entrance portals graced the sides of temple mounds, these wall structures were more likely built for ceremonial rather than for defensive purposes. The canals or moats that surrounded the sacred precinct of Tiwanaku are just as likely to relate to the management of productive resources and as symbolic manipulations of life forces as they are practical considerations for defense (Figure 8.3). In provincial towns, there are no walls or moats surrounding communities until after the Tiwanaku state collapses. For the first time, the terminal Tiwanaku communities constructed defensive features to protect against marauding bands in the absence of a *pax Tiwanaku*. Even on the Wari frontier where Wari hilltop fortifications were

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Figure 8.3. Map of Tiwanaku. Courtesy John Janusek.

constructed, Tiwanaku architecture in surrounding towns is unconcerned with defense.

Wari defensive works are more overt, including mountaintop redoubts replete with surrounding monumental walls on the Tiwanaku borderlands in Moquegua, as evidenced by sites such as Cerro Baul and Cerro Mejia (Williams 2001). Wari monumental regional centers, such as Pikillacta, Jincamocco, and Viracochapampa, are surrounded by high walls with guarded entrance avenues, reflecting a concern with defense as well as impressing the neighbors (see Figure 8.2; Schreiber 1992; McEwan 2005). Wari site planning also has pronounced defensive functions, with broad entrance avenues that lead to complex entry patterns into the core of the sites. Only a knowledgeable resident could navigate the complex passageways that lead to key monuments in the central core of administrative centers like Pikillacta (McEwan 2005).

Ideological Power in the Landscape

Provincial centers and military fortresses are not the only source of political statements on the imperial landscape. Religious ideology can be intertwined with political aims, but it relies on a unique set of beliefs that transcend the mundane and ties political power to supernatural power. Formal religious architecture and the propagation of religious rites through material representation is an enduring example of how empires interact with local polities. Interaction may take the form of imposition of an imperial religious ideology on a local public but may also include the incorporation of local religious practices into an imperial pantheon of beliefs (Rappaport 1999; Williams and Nash 2016). While the former has high costs and may take generations to implant, the latter can be very effective at providing a unifying religious ideology that may be transformed into political unity among diverse populaces in shorter time frames.

Tiwanaku religious architecture is concentrated in the altiplano heartland and especially in the capital. Several large-scale monuments grace the capital, including the Akapana, Pumapunku, Kalasasaya and semi-subterranean temple, Kantatayita, and Mollo Kontu (Figure 8.3). Regional centers in the altiplano basin also have monumental temple architecture, consisting of sunken courts and adjacent temple mounds in locales such as Iwawe, Lukurmata, and Khonko Wankane. Outside the altiplano, monumental religious architecture has only one exemplar, the Tiwanaku temple at Omo in the Moquegua Valley (Goldstein 1993), which also consists of a lower court and upper ceremonial precinct on the top of a hill. The incorporation of Tiwanaku religious rites in temples on and around Cerro Baul (Williams and Nash 2016) do not represent Tiwanaku monumental construction, but they do represent the incorporation of elite Tiwanaku rituals within the monumental constructions of the competing Wari state. Tiwanaku thus concentrated religious architecture in the capital and heartland, and used it only sparingly in colonial settings.

Wari temples are more ubiquitous throughout the Wari realm and include D-shaped temples and tiered platforms and sunken courts (Cook 2001; Nash and Williams 2005). Recent excavations around the Temple Mayor, Vegachayuq Moqo, is fleshing out the current picture of the imperial Wari religious canon (Ochatoma, Cabrera, and Mancilla 2015). Yet much like in the Inka case, the manifestation of Wari religion in the provinces was more modest in form and took preexisting local practice into account. Wari religion, in part, focused on the veneration of entities dating back to the Formative Period in Ayacucho

(Leoni 2006), Cusco (Glowacki and Malpass 2003), and Sondondo (Schreiber 2005b). Schreiber's work in particular suggests that Wari positioned D-shaped temples in order to co-opt local practices focused on the veneration of a local mountain by orienting sightlines and offering rituals toward these peaks (Williams and Nash 2016). Thus, the Wari may have added new features to an existing practice, such as mountain worship, as part of their expansionary strategies, effectively taking imperial ownership of local practices.

On the other hand, other ritual practices seem to have spread with Wari expansion. We cannot discount the evidence of ritual that has been found in domestic compounds. Researchers have recovered evidence of ritual ceramic smashes along with other types of offerings (Cook 1984; Glowacki 2012) in Wari patio groups across the empire (Glowacki 2005). These buildings are recognizable by their relative uniformity. Evidence indicates that feasting and political gatherings took place in elite compounds, patio group compounds, and palatial residences (Moseley et al. 2005; Nash 2012). Certain features of these compounds may provide clues to understanding the Wari rituals performed in these structures (Nash 2017). The ideology underpinning these practices may have been a powerful tool for incorporating local elites (see Coben 2006; 2014 for the Inka).

Religious architecture is complemented by other ritual means by which empires expressed their ideologies of divine right to rule. Marking the landscape through symbolic massive representations imprinted on the earth is another way empires inscribe their identities on the countryside. The physical act of sculpting place reinforces notions of imperial hegemony by creating an ever-visible imprimatur upon landscape space and attempts to impress the same mental image on those who inhabit it.

Tiwanaku changed the lands it occupied through the carving and movement of massive stones, creating not only visually impressive buildings but also personages carved from monolithic stone. These massive stone sculptures are imbued with animism and mobility, and modern stories speak of their journeys through the landscape in primordial time. This world of stone was especially prominent in the altiplano heartland (Protzen and Nair 2013; Janusek and Williams 2016). In far-flung regions of influence outside the altiplano, Tiwanaku also cleared the patinated desert surfaces to form symbols on the earth that spoke to their connections over long distances. In the Moquegua Valley, camelid geoglyphs mark the arrival on the long roads from the altiplano to the Tiwanaku desert towns (Stanish et al. 2010). Geoglyphs were also present along Tiwanaku trade routes in northern Chile.

Wari monolithic sculpture does not compare with that found at Tiwanaku, but examples of anthropomorphic sculpture do exist. Unfortunately, the features of these statues are eroded, and their original context is unknown (Schaeffel 1948). Wari symbolic landscape modification includes visualization of sight lines toward mountain peaks (Williams and Nash 2006), as well as the carving of petroglyphs on boulders in some parts of the empire. Sites were placed or oriented in order to view particular mountains. As mentioned above, the focus on mountains may have been a widely shared practice when Wari expansion began. Evidence for an emphasis on mountains is shared by Wari and Tiwanaku but manifested in different ways. At Tiwanaku, the Akapana mound is thought to be an effigy mountain because of the canals that run through it, its tiered design, and its position relative to Mt. Kimsachata (Kolata and Sanginés 1992). Alternatively, the Wari viewed mountains through the doorways of D-shaped temples or earlier round structures (Cook 2001; Leoni 2006). At some sites, modest tiered platforms were used to stage elites in front of sacred peaks (Nash and Williams 2005). It also seems that different mountains may have represented different classes or groups within the empire as different sites, or parts of sites, are oriented toward different mountain peaks (Williams and Nash 2006, 2016).

Economic Power as Expressed in Productive Infrastructure

A corollary of marking identity on landscape through symbolic means is the transformation of the environment through massive productive pursuits. We assess these investments in the three broad categories practiced by the Andean states: road systems, agrarian infrastructure, and mining. Each of these productive pursuits is designed to bring new goods for use in the imperial political economy and to transport those items to their locale of implementation and use. Road systems utilized by human or camelid transport were the principal means of movement throughout each of the Andean highland states.

Roads and way stations are the means of connection between distant imperial centers. The formality of roads and the infrastructure of movement are critical components to understanding the level of state control over these aspects of communication. Roads also channel the movement of goods between capital and provinces, and they may be designed to support travelers along the way and facilitate movement over rough terrain. Tiwanaku and Wari had very different strategies of investment in road infrastructure.

Tiwanaku roads over the several hundred kilometers between capital and distant colonies or trade outposts show little formal state investment in the areas in which it has been investigated. Way stations are non-existent, though small villages to serve travelers did spring up along well-traveled paths. Formal state investment in road infrastructure from bridges to paving is not apparent along the most well-traveled of long-distance routes connecting the Pacific watershed colonies of Moquegua to the altiplano homeland (Stanish et al. 2010), for example. In contrast, Inka roads along this same route contained evidence of state infrastructure, including formal *tambos*, or way stations, and regional towns along the way. Yet given the quantity of lowland products found in Tiwanaku heartland contexts, movement of bulk goods was clearly a component of Tiwanaku exchange, facilitated through vast camelid caravans that crossed the altiplano on ancient informal paths.

The Wari road system, in contrast, demonstrates the origin of formal way stations and investment in road infrastructure, especially along its southern route (Schreiber 1991; Williams 2009; Williams 2017). The Wari built small way stations located approximately one day's walk apart along its principal southern highway, as recently documented between Moquegua and Arequipa. Larger groups of towns developed on the Wari road every two to three days distance and around the principal rivers that crosscut the southern desert that represented the southern extent of Wari's realm. Large provincial centers were also connected by these same roads and tend to be located every two hundred kilometers along the principal route, or approximately a week's travel distance. For example, from the capital of Huari traveling south, the royal Wari road likely passed through Jincamocco and Quillcapampa before arriving at Cerro Baul on the southern frontier. Wari roads are not as well preserved as later Inka routes, perhaps in part as a result of their reuse and reconstruction in later periods, but also because infrastructural investment was primarily in services along the way and not in the roadbed itself in the Wari case.

Investment in productive infrastructure for agrarian or pastoral pursuits can be another indicator of imperial intentions in a region, especially as it relates to the production of bulk comestibles and food supply. Often, these investments occur at a scale not seen in a local region previously and may have been designed to produce massive surpluses that could be used to support state projects. Scale alone is not an indicator of imperial influence in agricultural pursuits, as various studies have demonstrated that small communities over long periods of time can also generate massive landscape transformation. However, imperial

investments may be marked by rapid implementation and the use of extra-local labor resources to achieve results in abbreviated time frames. Likewise, imperial systems may implement new labor organization strategies that are reflected in the infrastructure of water distribution, land tenure, and landscape modifications. These modifications may also disrupt traditional production strategies and exchange networks.

Raised-field agriculture is perhaps the best known of Tiwanaku investments in agrarian infrastructure. Raised fields are created by excavating a network of canals alongside a lake or riverbed and depositing the rich organic sediments on raised beds between the waterways. In the high altiplano environment of the Titicaca Basin, they not only provide nutrient rich soil, but also mitigate the effects of cold and frost on the crops by means of the convection effects of the waterways. The vast fields of the Pampa Koani in the valley north of the capital are argued to have been a state-sponsored intensification effort coincident with Tiwanaku expansion (Janusek and Kolata 2004). While raised fields may be constructed and utilized by local communities (Graffam 1992; Erickson 1993), the argument that this was an imperial system is based on the large scale and large surplus production that vastly exceeded the needs of a local population in the Katari Valley, where the Koani system is located. Likewise, the expansion of raised-field agriculture on the Koani Pampa is linked to the emergence of Tiwanaku as pan-regional power, and it was largely abandoned around the time Tiwanaku hegemony ended around 1100 CE (Janusek and Kolata 2004). Tiwanaku also long built canals and irrigated high riverine terraces in the western valleys of the Pacific watershed, introducing a new type of agricultural infrastructure located adjacent to Tiwanaku towns that established the first habitation of these high-desert riverine terraces (Williams 2002). Tiwanaku landscape modifications for agricultural pursuits were apparently directed by state or municipal authorities to meet the growing needs of increasing demographics in both heartland and provinces.

Like Tiwanaku, Wari investment in agrarian infrastructure was also prolific and perhaps even more ubiquitous. The Wari specialized in the development of high mountain slopes with sophisticated irrigation canals that negotiated steep terrain and the massive re-sculpting of mountainous landscapes through agricultural terracing. In many places in Peru, this was the first time this irrigation technology was implemented. In the Moquegua Valley, the field system was built in a way that integrated both Wari settlements and local communities' productive resources to be reliant on a single state-sponsored canal source (Figure 8.4;

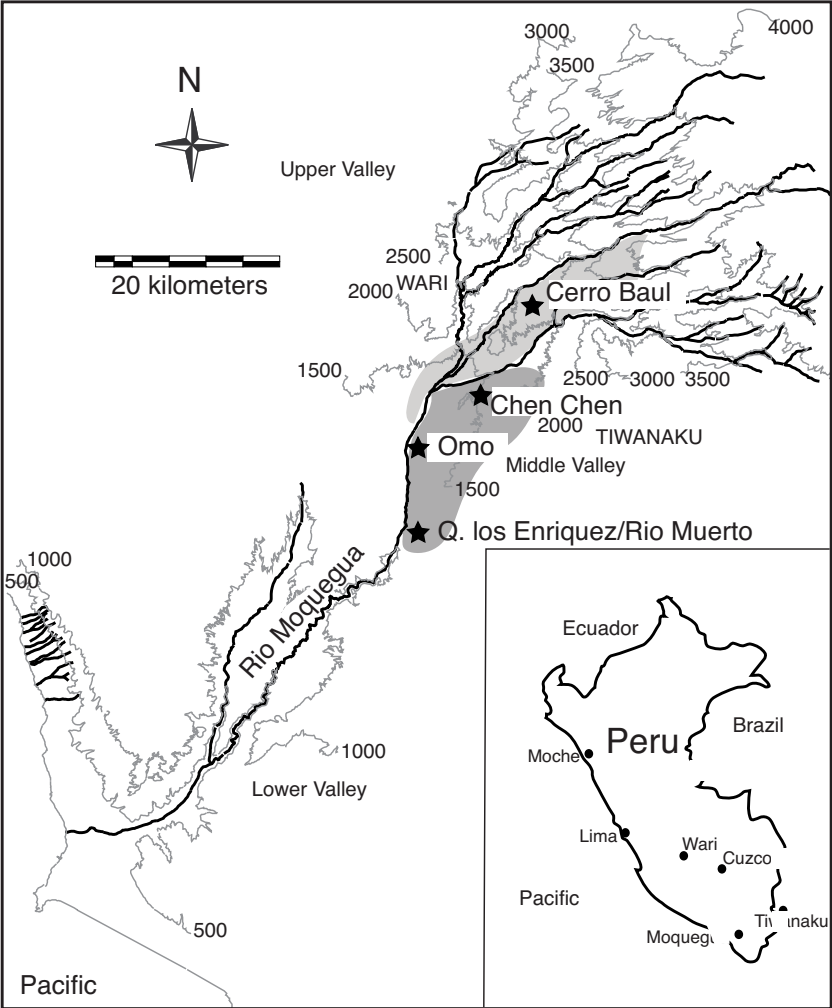


Figure 8.4. Tiwanaku and Wari settlement patterns in the Moquegua valley, Peru.
Produced by Patrick Ryan Williams.

Williams 2006). This high mountain agrarian technology seems to have identified the ecological niche that Wari focused on in its original imperial expansion. It is an area between two thousand and three thousand meters above sea level that is ideal for the production of a wealth of crops, including maize, cucurbits, and peppers. This *quichua* zone is also extremely efficient in the use of water, and

it held an adaptive advantage in times of drought. Similar Wari systems, whose labor requirements and productive capacities exceeded local communities' capabilities and thus were likely directed by imperial colonizers (Williams 2006), are replicated around many Wari provincial centers and represent an imperial mark on the landscape. Other provincial examples of Wari investment of agriculture include in Cuzco (McEwan 2005) and Jincamocco (Schreiber 1992).

Prestige goods are often created through the collection of rare materials and conversion through extensive labor inputs into desirable aesthetics. Mining and quarrying extraction of geological source material for the production of value-added objects is another area in which imperial investment in landscape infrastructure is manifested in support of the imperial economy. In particular, the extraction of stone building materials, ores for the manufacture of precious metalwork, clays for the production of ceramics, and minerals for lapidary or lithic crafts may be marked by the investment in mine infrastructure. The distribution of these commodities and finished products made from them across exchange networks that map onto political centers can be evidence of imperial authority over certain goods.

Tiwanaku mining and quarrying was extensive, from the sandstone and volcanic monoliths from which they built monumental architecture in the altiplano core to extraction of minerals for metal working in silver and bronze. The Tiwanaku capital itself was reconstructed many times over based first on sandstone quarries from the Kimsachata range then later from the Andesites extracted from the Ccapia volcano. As the Tiwanaku state expanded geographically, it began to incorporate visually distinctive massive stone monoliths into the architecture of the capital, representing perhaps its hegemony over neighboring groups (Janusek and Williams 2016). The scars of those extractive endeavors are imprinted on the landscape and represent a massive effort by an imperial center to remake itself by incorporating parts of the mountains belonging to distinct communities under its influence. Likewise, some of the earliest evidence in the region for environmental contamination from extractive mining of silver ores comes from the Tiwanaku period in the area around Potosi (Abbott and Wolfe 2003).

Recent excavations at Huari have revealed finely finished, cut-stone masonry (Ochatoma, Cabrera, and Mancilla 2015). This stonework, affiliated mining activity, and quarries have yet to be studied in the same way as the monumental architecture at Tiwanaku. Yet we do know that Wari utilized many mined resources. Lapidary extraction for lithic crafts was pronounced as was ore

extraction for work in copper-arsenic bronze. Obsidian quarrying and pre-forming also was a marked component of Wari prestige goods exchanged throughout the empire. In terms of lapidary work, chrysacolla and sodalite were extensively utilized to make beads for necklaces and exotic figurines that made their way into Wari elite households, trade networks, and dedicatory offerings.

Political Economy in Goods Marking Imperial Intersections

In addition to investments in productive infrastructure and symbolic imprimatur on the landscape as evidence for imperial hegemony, the way in which imperial states built relationships with local leaders reflects imperial repertoires (see Alconini, this volume; Düring, this volume; Overholtzer, this volume; S. T. Smith, this volume). Imperial political economy, and especially the production and exchange of elite status markers, is important to assessment of imperial intentions in relation to local leaders. Not every class of status good produced is necessarily a tool of imperial hegemony, however. Likewise, variability in centralization of production may characterize different strategies in imperial states. We examine the role of elite ceramics, metalwork, lithic production, and textiles in the Andean states to ascertain the strategies in political economy employed differentially by each one.

Despite the focus on feasting in Andean governance, centralized ceramic production for distribution to distant parts of Andean empires is not the norm, according to preliminary ceramic sourcing studies. While Tiwanaku, Wari, and Inka production and distribution mechanisms of ceramic wares were distinct, they shared a complex set of local and regional production and distribution strategies.

Most Tiwanaku ceramics were produced in their locales of consumption. At the site of Chen Chen in the Moquegua Valley, 91 percent of the assemblage matched compositional chemistry of local clay sources (Sharratt, Golitko, and Williams 2015). The distribution of Tiwanaku ceramics was also marked by equality of access in mortuary and domestic assemblages. There is little evidence of exclusive use of decorated Tiwanaku ceramics by particular identity or economic groups, and both sexes have decorated ceramics in grave inclusions (Sharratt, Golitko, and Williams 2015). Tiwanaku ceramic production and consumption in its western province was thus marked by decentralized local production and equity in distribution and consumption of decorated ceramic vessels (Figure 8.5).



Figure 8.5. Examples of Tiwanaku ceramics, textiles, and bronzes. Produced by Patrick Ryan Williams.

Wari elite ceramic production, on the other hand, was centralized in regional production centers. At Cerro Baul, Wari potters produced high-quality Wari ceramic styles in a palace workshop that relied on a distinctive clay source (Sharratt et al. 2009; Nash 2018). The vast majority of this material was consumed in elite Wari contexts in the regional provincial center. Other Wari settlements in the region had very little access to this material, and in fact produced their own, primarily undecorated, ceramics from other local clays. In the Wari heartland, regional production centers also flourished. At Conchopata, numerous Wari imperial ceramic styles were produced from local clays, and some of them were exported to the capital city of Wari, twelve kilometers away. The Wari capital also housed a regional production center that produced elite ceramics for local urban consumption (Williams et al. 2019). Wari fineware ceramics were consumed by the urban elite and in imperial rituals (Figure 8.6). Imperial ceramic styles were not ubiquitous in domestic and mortuary contexts as was the case with Tiwanaku. Local peoples



Figure 8.6. Examples of Wari ceramics, textiles, and bronzes. Produced by Patrick Ryan Williams.

around Wari regional centers used distinctive ceramic styles produced from discrete local clays.

During the reign of Wari and Tiwanaku, the Andes experienced an “age of bronze” in which both states and local actors produced and exchanged copper-based alloys in quantities not seen before. Wari settlements are primarily associated with copper-arsenic alloys, representative of the ore sources found up and down the spine of the Andes. Tiwanaku settlements are associated with ternary copper-nickel-arsenic bronze in early years, with tin bronzes becoming predominant in later years of Tiwanaku influence (Lechtman 2003). Nickel- and tin-bearing ores are predominantly located north and south of the Andean altiplano respectively. Gold and silver objects of personal ornamentation were also prevalent, most often being formed by cold hammering. Both groups utilized metal objects as items of personal status and adornment as well as portable tools. In later Inka times, all three alloys were utilized with an adoption of the tin bronze tradition as the preferred metal of the state for elite status goods.

Tiwanaku colonists in the Moquegua Valley had access to *tupu* (shawl pins worn by elite women) and metal knives, primarily of tin bronze origin. In contrast to Lechtman’s findings, however, a large minority of metal objects in the Tiwanaku colonies of Moquegua were of the arsenic bronze type. The density of bronze status objects in Tiwanaku houses, however, was relatively rare as

compared to Wari residences, with an average of only one bronze implement per house (Williams 2013). Likewise, Tiwanaku tended to use metal as objects of adornment, and because the tin ores are found only in the altiplano basin, these objects were almost certainly all imported as objects of elite exchange between colony and capital.

Wari metals were more ubiquitous in their Moquegua colonies than Tiwanaku, with an average of four to seventeen implements per house. Richer houses associated with elites from the capital had higher numbers of implements, with metalworks more skewed to items of personal adornment such as tupu pins. However, even commoner houses had higher concentrations of metal objects than their Tiwanaku counterparts in the valley. Precious metals were more rare, though coastal Wari sites contain evidence of silver and gold earspools inlaid with precious stone or shell, such as the reddish-pink spiny oyster *Spondylus*, purple mussel, and mother-of-pearl (Bergh 2012b). Elite Wari tombs have also contained the remains of silver and gold hammered breast plates, masks, and arm or leg bands. Inlaid mirrors and pendant figurines are also part of the Wari elite composite object repertoire (Bergh 2012b).

While ceramics are often considered the primary marker of political identity, lithics are often more mobile within social strata and may be better markers of political and economic relationships between imperial actors. Certainly, monolithic stone sculpture may be used to make public statements about relationships between imperial leaders and the communities they interact with. Semi-precious stone and imported stone lapidary materials are also materials that can represent imperial relationships within households and within communities. In the Andes, these stones include a range of blue and green stones such as serpentine, chrysacolla, sodalite, and volcanic glass or obsidian, among others.

Tiwanaku focused on monolithic stone carving as a primary means of expression in its capital. In the provincial setting in Moquegua, monolithic carving is nonexistent. While small quantities of obsidian are present in Tiwanaku provincial domestic contexts, it is not a strong focus of craft activity. Of eight Tiwanaku houses excavated on the slopes of Cerro Baul, only one had obsidian implements, although retouch flakes were present in small quantities in others. Obsidian sourcing studies on this material revealed it came from volcanic locales associated with Wari rather than Tiwanaku influence (Williams, Dussubieux, and Nash 2012).

Although Wari monolithic sculpture has received little attention, fine sets of

figurines made from chrysacolla demonstrate that Wari society had fine lapidary skills (Cook 1992). Other lapidary preciocities were also produced and consumed in the capital and provinces. At Cerro Baul, elite households produced colored beads from chrysacolla and sodalite in large quantities. Wari provincial households in Moquegua also utilized large amounts of imported obsidian. Elite houses had dozens of obsidian tools and even commoner houses had several imported obsidian implements (Williams, Dussubieux, and Nash 2012; Nash 2015).

Textiles may have been one of the most distinctive identifying features of ethnicity in the Andes. Tiwanaku textile traditions reflect both imperial elite and institutional identities by ethnic actors within the state. Tiwanaku males wore polychrome striped tunics, loincloths, and four-pointed hats in mortuary assemblages, and women wore plain tunics accompanied by decorative garments such as *llicllas*, the Andean shawl (Baitzel 2016). Rodman (1992) suggests that certain Tiwanaku tunics and four-pointed hats from San Pedro de Atacama may have been trade items produced in centralized altiplano workshops. While Tiwanaku textiles follow certain patterns, there is plenty of room for localized production of Tiwanaku garments. Yet Tiwanaku garments are clearly distinguishable in provincial settings from the textiles worn by local peoples (in both San Pedro de Atacama and Moquegua), suggesting a colonial identity marked by broad classes of textile traditions. Different garment types, with distinctive decorative motifs and technologies of production, characterize Tiwanaku, San Pedro, and local Formative Moquegua textile traditions.

Wari textiles are similar to the items worn in the Tiwanaku corpus (e.g., tunics and four-cornered hats). However, more can be said about Wari textiles, because many examples have survived the ravages of time, thanks to the arid coastal provinces of the empire, and because many face neck jars depict individuals of both genders wearing elaborate costumes or simple garments. Tunics were worn by men like the later Inka, for example, and known examples represent a relatively confined set of motifs, which suggests that the Wari state likely controlled the production and distribution of fine textiles (Bergh 2012a).

Researchers have found artifacts related to textile production that support this supposition. Pataraya, a modest Wari outpost in the Nasca drainage, is located in a prime cotton-growing zone and had numerous small spindle whorls appropriate for spinning fine cotton fiber, which suggests that yarn rather than unfinished fiber moved through imperial networks (Edwards, Parodi, and Ocaña 2008). More spectacular is the recent find of fifty-eight women

buried in a subterranean chamber at the site of Castillo de Huarmey. Many were wearing matching textiles, had elaborate earspools denoting their elite status, and were buried with baskets of weaving implements, which included spindle whorls made from gold, silver, and bronze (Giersz 2016). This find is particularly important because it suggests that the Inka institution devoted to creating fine textiles, the *aqllawasi*, may have had its foundation in the earlier practices of the Wari Empire.

Incorporation of Local Communities in Imperial Networks

Understanding the different ways local settlements are integrated or failed to be incorporated into state networks is key to assessing affiliation with imperial initiatives (see Parker, this volume). Integration may take the form of community leaders adopting imperial status symbols within their households or through their social networks without the use of public architecture as is seen in provincial centers. Settlement pattern shifts may also reflect new imperial production demands, even in the absence of changes in household composition or access to prestige goods by members of a community. Finally, the assumption that cultural assimilation is a necessary component of community integration needs to be addressed if we are to embrace a definition of empire as multiethnic, expansive states.

One of the likeliest ways in which local communities were involved in imperial relationships was through the exchange of prestige goods. Local leaders may have obtained valuable commodities, such as special ceramics, metals, lithics, or textiles, as mentioned in the previous section. Prestige goods may not have been present in all communities under imperial influence and may have involved complex chains of production and distribution. The existence of these prestige goods within certain households or within the possession of certain individuals in a community was significant, however. Even the limited existence of prestige goods may demonstrate the ways a community was integrated in the imperial sphere of interaction, even if large numbers of the community did not have access to these goods.

Tiwanaku prestige goods in provincial settings may include imported garments and textile headgear in places such as San Pedro de Atacama and Moquegua. Imported Tiwanaku ceramics make up a minority of the decorated assemblage in the Moquegua Valley, but the 5 to 8 percent of the assemblage that was imported may in some cases have been prestige gifts to prominent

leaders (Sharratt, Golitko, and Williams 2015). Likewise, in Tiwanaku communities located within Wari economic zones, the use of Wari obsidian may represent a Wari prestige good given to draw Tiwanaku communities into the Wari economy. The use of Wari arsenic bronze pins in Tiwanaku contexts may also represent a prestige gift meant to curry favor of local Tiwanaku elites.

Wari preciocities include fine tapestry textiles (Bergh 2012a), feathered garments (King 2012), ornaments of shell or metal such as the silver pectoral found with the lord of Vilcabamba (Knobloch 2016), ear spools of metal or inlaid with polished stones (Bergh 2012b), ceremonial weapons (Isbell 2016), and elaborate headdresses festooned with plumes of gold, silver, or bronze (Bergh 2012b). Many of these items may have represented regalia or insignia of office (Knobloch 2016) rather than wealth items that could be freely exchanged among elites or re-gifted to subordinates. The highest quality ceramics may also have been very limited in their distribution; however, goods of an intermediate quality, particularly ceramics, seem to have had a greater distribution. It is possible that prestige goods in the Wari Empire, like dress in the Inka Empire, were made for particular types of consumers, and the display of certain goods was dictated by sumptuary laws.

In some cases, intermediaries may forge relationships between communities and imperial elites; local residents may not have direct links with imperial authorities. Even without prestige goods, if community livelihoods are significantly altered because they shift their productive activities to serve new demands of the state, archaeologists may still assess how these communities are integrated in the imperial enterprise.

In the Moquegua Valley, Tiwanaku settlements were established on the plains south of the river at Chen Chen, adjacent to freshly constructed agricultural fields fed by contemporary irrigation canals created by the Tiwanaku. This settlement pattern establishing towns on the high river terraces to the south of the valley broke with the preexisting structure established by Formative farmers consisting of small villages adjacent to the river floodplain. The new Tiwanaku towns were established in strategic locations to control transit with the altiplano and to produce surplus agricultural goods for export to the homeland (Williams 2002).

Wari changed settlement patterns in several regions. In Sondondo, Schreiber (1987, 1992) describes a major shift. Wari intrusion saw the valley terraced for the first time, which allowed people to move from the tuber-puna ecotone, where production relied on rainfall, to the lower grain-tuber ecotone, where

irrigation came into use. Wari also transformed the landscape in Moquegua, but little is known about Formative Period highland groups. Wari's irrigation technology allowed them to exploit an underutilized eco-niche in the areas between 1,800 and 3,200 meters above sea level, a prime zone for the cultivation of maize, which contributed to the diet of those living in the heartland (Finucane, Agurto, and Isbell 2006).

Perhaps one of the most misunderstood aspects of imperial integration is the role of assimilation of local communities into a dominant cultural paradigm. Many archaeologists assume cultural assimilation must accompany imperial hegemony and argue the use of imperial material goods must accompany hegemonic influence. In fact, assimilation is a rarity in local-imperial interactions, and the opposite may often be true: that empires may require local communities to maintain their distinctive dress, customs, and material culture, or local communities may choose to express their own identities, even while participating in imperial politics and economies. The Tiwanaku, Wari, and Inka polities had distinctive ways of addressing the integration of local communities, but in no case was cultural assimilation the primary strategy of state expansion.

Tiwanaku colonization of the Moquegua drainage reflects a strategy of basically ignoring the local population (Figure 8.4). Here, Tiwanaku formed its towns with large migrations from its altiplano heartland. These towns were contemporary with local communities that inhabited villages a couple kilometers away across the river. Tiwanaku material culture is largely absent from these contemporary villages, and the villagers who inhabit them do not demonstrate a change in lifeways adopted from Tiwanaku norms. Likewise, the Tiwanaku townsfolk have very little cultural material reflective of the local Huaracane traditions (Goldstein 2005). Pottery, lithics, domestic architecture, and textile traditions remain distinctive between the Tiwanaku and Huaracane communities and fail to reflect any cultural assimilation or even exchange of culturally significant material culture.

In contrast to the Tiwanaku colonization, Wari interactions with local communities and even with Tiwanaku settlers themselves is much more significant. There is still no evidence for wholesale assimilation of local or Tiwanaku communities in the Wari communities. In fact, the cosmopolitan existence of various identity groups marks the Wari settlements in Moquegua in contrast to the puritanism of Tiwanaku towns. Huaracane settlements located downstream of the Wari colony contain small quantities of Wari ceramics and obsidian and metal goods, likely obtained through exchange (Costion 2009).

Local Huaracane leaders may even have hosted Wari style feasting events at the site of Trapiche, complete with a Wari brewery and feasting vessels on the edge of the Huaracane cemetery (Green and Goldstein 2010). During the latter half of Wari's settlement of Moquegua, several Tiwanaku villages were established within the irrigation system that the Wari built, and Tiwanaku religious structures were erected both alongside the Tiwanaku towns and on the monumental summit of Wari's provincial center at Cerro Baul (Williams and Nash 2016). Even within Wari elite households, evidence of Tiwanaku-influenced objects may represent alliances formed between distinctive ethnicities, perhaps through intermarriage (Nash 2015).

Thus, while assimilation was not the Wari way, Wari did incorporate distinct ethnicities into its colonial enterprises. Through the exchange of prestige goods, Wari incorporated ethnic elites into its networks of political power. These ethnic elites maintained much of their material culture and continued to identify with their ethnic groups. They were, however, inextricably connected to Wari political and economic frameworks. Tiwanaku colonies do not appear to have contained non-altiplano ethnic groups, or at least not in the numbers that were present in Wari spheres. This lack may reflect a colonizing effort of indoctrination rather than an effort to incorporate ethnic others into their political power structures.

Discussion and Conclusions

We have demonstrated that a variety of approaches must be undertaken in order to elucidate the nature and extent of strategies of incorporation in imperial governance models. Among those approaches, we highlight the expressions of provincial military and political power, the creation of imperial landscapes reflecting ideological power, imperial investments in productive infrastructure, the role of a variety of prestige goods, and the different ways of incorporating local communities in imperial networks as applied to the Andean states of Wari and Tiwanaku. Each polity employed strategies of coercion and reward in each of the broad areas of influence, but they did so in distinct ways.

For example, Tiwanaku did not invest heavily in defensive architecture and fortifications in marking the landscape. Rather, the focus on religious architecture in core area provincial centers created an imprimatur on the landscape to convince followers of the ideological power of the state. Wari inserted provincial centers into the landscape not only in the core, but also throughout its

realm. Religious architecture was embedded in these centers, as was the attempt to relate these centers to places of supernatural power in the landscape. In some cases, defensive works proclaimed the coercive power of the state. Wari melded militaristic and religious power in an attempt to demonstrate its influence across its realm, focusing on a few dozen provincial installments across the empire.

The Inka, an expansive polity specialized in siege warfare, were masters of logistics that allowed them to concentrate forces at some points and set long blockades where they needed (Arkush 2011, 217). Instead of building defense garrisons, they had great armies formed by many nonprofessional soldiers who could be deployed for long periods. Like the Wari, Inka investment in fortifications and concern for defense reflects the potential siege warfare that played out in Andean imperial militarism. Although Inka provincial centers lasted for a relatively short period of time (from fifty to a maximum of seventy years), they were found across the empire with several truly monumental centers such as Huanuco Pampa, Pumpu, and Cochabamba. Like the Wari provincial centers, Inka administrative centers not only replicated the imperial spaces from the core where elites and officials executed their administrative functions, they also held spaces designed to articulate the empire with local groups, elites, and even deities (see Alconini, this volume). These centers controlled tribute, local labor, storage, and economic redistribution (Alconini 2008, 67). Nonetheless, in order to perform their political and economic intentions in the provinces, the Inka administration had to transform the regional sociopolitical landscape that included the construction of massive storage systems, the local settlement of colonists (*mitimaes*) from other regions of the empire, and the proclamation of ownership of the surrounding lands in order to intensify agricultural production to sustain their purposes, characteristics also seen in Wari provinces. Despite the rapid expansion and short-lived character of Inka provincial imperialism, the nature of both defensive and religious architecture is ubiquitous in the Inka realm, and the distribution of provincial centers of various scales permeates the Inka territory. The Inka replicated an ideological reorganization of space in each of its provincial settings based on the organization of *ceques* around the Inka capital, and in doing so, they rewrote the history of every region it conquered.

All three states invested in productive infrastructure, from road networks to agrarian transformations to raw material extraction. Tiwanaku's focus on raised-field agriculture and pastoral intensification in its heartland contrasts with Wari and Inka foci on mountainous canal irrigation and extensive

highland terracing efforts that were productive in times of drought. Tiwanaku's roads were extensive, but not intensive in terms of state infrastructure. They connected vastly different ecologies, but they did not invest heavily in urbanization along those routes. Wari roads started significant investment in network infrastructure along a principal route that also led to urbanization of communities along those networks. It was the Inka, however, who created the most integrated system of productive infrastructure in the Andes, easily tripling the size of the Wari and Tiwanaku endeavors.

Inka roads are extensive and well documented, with *tambos* located at every day's travel distance and larger towns at every few days' travel. The *Qhapaq Ñan* is an extensive and integrated network of roads both through the highlands and along the coast, with several transverse routes connecting the main latitudinal territory. This system of transportation was designed over roads previously built by the Wari and Tiwanaku states, but it was also based on local routes. The monumentality of the *Qhapaq Ñan*, with more than fifty thousand kilometers of recognized roads, shows the scale of the territory managed by the Inka administration, establishing in some cases a more intense interaction, and in other cases a more formalized connectivity of the pre-Hispanic Andean world. In general, roads allowed for the transit of a greater number of people and goods, creating a more globalized Andean social landscape, a pattern that was established by Wari roads and incipient urbanism centuries before.

Inka governors built upon and enhanced Wari agrarian technology, taking it to new heights. Interestingly, there is not much evidence that the Inka adopted Tiwanaku raised-field agriculture to any significant scale. The Inka transformed the landscape as the Wari did by constructing agricultural terraces and hydraulic systems across the Andes, including both highland and coastal regimes (Netherly 1984; Williams 2006; Chacaltana and Cogorno 2017). Intensifying agricultural production for imperial purposes required construction of a system of terraces across the landscape incorporating Inka canons and aesthetics such as the ones built in the Colca Canyon, Moquegua, Huancavelica, and many other provinces. The Inka, like the Wari, not only designed new agricultural systems, but also dominated water sources and inserted themselves into their "intimate" symbolic landscape, controlling the flow of water, fertility, and life itself.

Some of the most telling differences in how imperial reward strategies played out are reflected in the materiality of prestige goods. An interesting distinction appears, for example, in the access to imperial ceramics in the Wari and Tiwanaku cases. Wari imperial ceramics, produced in regional centers, were

primarily consumed by the Wari elites in those regional centers or in the capital. Other communities in the Wari sphere participated in Wari exchange networks to obtain obsidian bifaces or metal implements and adornments, but they made their own ceramics in styles that may only have been loosely affiliated with Wari canons. Tiwanaku-decorated ceramics, on the other hand, were ubiquitous in all Tiwanaku household contexts. They, too, were locally but not centrally produced, and the iconography and style of Tiwanaku ceramics were consumed broadly by Tiwanaku colonists in the provinces. On the other hand, contemporary adjacent Wari and local communities did not participate in the consumption of Tiwanaku ceramics. They did, however, use obsidian and metal objects imported from both Tiwanaku and Wari sources.

Inka metallurgical tradition was based on the use of gold, silver, and copper alloys. These characteristics of Inka statecraft certainly drew heavily on Tiwanaku antecedents in tin bronze metallurgy and cut-stone masonry. The empire controlled many steps of the manufacture, production, and distribution of metals. For example, in the altiplano, it has been suggested that the Inkas monopolized the use of tin bronze (Lechtman and Macfarlane 2005). Tin bronze was a tradition initiated in the altiplano, specifically expanded by Tiwanaku metallurgists (see Dussubieux and Williams 2007). Inka metallurgical analyses from the Colesuyo and altiplano regions show that during the Inka period, state workshops produced a standardized composition of tin, which was very different from local traditions (Chacaltana 2015).

Likewise, provincial Inka ceramic production embodied messages of political Inka affiliation (Costin 2011). The state might have controlled different steps of ceramic production and distribution depending on local relationships with the empire. In the provinces, state-sponsored workshops produced Inka-style ceramics, which in many cases monopolized the best clay sources (Julien 1983), as was also done by the Wari (Sharratt et al. 2009). However, local populations continued manufacturing their own ceramics and emulated imperial designs and forms (Hayashida 1995, 1998). Like the Wari, the Inka did not impose a ceramic identity on all subjects of the empire, but rather utilized imperial ceramics for explicit imperial purposes. Locally made ceramics and imperial imitations continued under both Wari and Inka regimes.

Textiles were also a crucial element of the Inka political economy, as they were for Tiwanaku and Wari. In particular, the production of fine items of clothing worn by Inka royalty and gifted to high-ranking elites was tightly controlled. Sumptuary laws dictated that people in the empire would be punished

by death if they wore clothing that misrepresented the region of origin, office, or rank. It seems that elements of one's costume were "tailor-made" statements about one's identity. The Inka had an institution called the *aqllawasi* to train young women in the techniques and iconography of Inka textiles (see Alconini, this volume). These complexes were located in all provinces, and some have been identified archaeologically (e.g., Huanuco Pampa, Pachacamac). Women in these compounds produced textiles for state use, such as those distributed as gifts or burned as offerings. *Mamaconas* (elite women chosen for the *aqllawasi*) were often given to elite men as wives, which means their valuable weaving abilities and productive labor were also distributed. Chronicles report that palaces often had many *mamaconas*, bestowed as a gift from the emperor, as part of a royal household (Gose 2000). This practice may be related to what we see at Castillo de Huarmey in the Wari period. In both these expansive states, the production of fine textiles was the charge of elite women, who were affiliated with palatial households as part of the political economy (Costin 1998).

Settlement pattern shifts and how local communities were incorporated into imperial networks varied greatly in the cases of early Andean imperialism. Tiwanaku's colonization efforts in the Pacific watersheds resulted in the formation of new agricultural zones and large new settlements on river terraces that had not been previously occupied. Wari's introduction of new agrarian technologies taming the upper mountain slopes shifted settlement to the *quichua* zone and the interface between maize and tuber cultivation. Inka resettlement is well documented not only ethnohistorically, but also archaeologically. The expansion of terrace systems in prime maize growing areas is accompanied by forced resettlement of entire communities as well as the creation of new provincial centers and the relocation of homesteads out of defensive settlements and into the agricultural systems created by Inka engineers.

In the Inka empire, the policy of *mitmaq* forced the resettlement of extended families or entire communities into new regions. This policy served to disrupt the relationship between communities and their land, to discourage rebellion, and to bring new labor forces to engage Inka infrastructure works. Early manifestations of the *mitmaq* may be present in Wari imperial practices as argued by Nash at Cerro Mejia (2017), and while Tiwanaku colonization may not follow the same state-directed pattern, community self-resettlement may be part of a folk tradition with deep roots. The establishment of new regional political centers by Inka expansion also resettled local populations as these new centers grew in economic importance, much as the Wari provincial centers did in

their day. Finally, the expansion of agricultural terrain through public irrigation works projects encouraged the establishment of new homesteads in areas that were previously underpopulated. In the Moquegua region, for example, coastal settlements like Tambo Tacahuay and highland settlements around the provincial center of Sabaya and the road station at Camata Tambo attracted settlement concentration (Chacaltana 2015), while the expansion of the Inka agricultural systems at Camata and Botiflaca opened new lands for agrarian cultivation and encouraged new settlement at Torata Alta (Williams 2009). This expansion parallels Wari agrarian reclamations ten centuries earlier on the same landscape. The palimpsest of Wari and Inka settlement patterns are palpable in these regions.

Inka interaction with local communities in coastal Colesuyo provides an interesting corollary to the direct imperial rule model, one that parallels under-theorized examples from the Wari occupations of the south coast away from the principal administrative centers. At Tacahuay, mortuary structures in the altiplano style, as well as ceramic styles, suggest that a regionally based highland elite established a foothold on the coast. They used regionally produced Inka provincial ceramics, but they buried their dead in *chullpa* funerary structures associated with the Lupaqa and Colla polities in the high plains. It appears that this arrangement formed as a result of highland elites taking over the coastal community at Tacahuay, perhaps with the blessing of the Inka state. This take-over may have been a result of intermarriage with local spouses and clearly illustrates that regional actors played a significant role in Inka settlement and cultural identity formation in the Inka provinces, a role that was clearly not one of assimilation (Chacaltana 2015).

Assessing the strategies of imperial expansion requires a multiscalar and multivariable framework, encompassing landscape studies, a focus on prestige good economies, and settlement analyses. We must also be cognizant that different material types may be treated differentially in distinctive imperial systems. Ceramics may not play the same role in one society as in a peer or successor, as is clearly evidenced in the case of the Andean highland states. Examining imperial strategies across material indices in broad categories illuminates the ways in which ancient empires incorporated and governed diverse communities within their realm. In some instances, it is clear that certain expansive states essentially ignored neighboring communities, as was the case with Tiwanaku. In others, like the Wari, engagements with local communities were substantial but are not necessarily evident when only one material indicator

such as ceramics is examined. The lives and afterlives of the Wari and Tiwanaku empires demonstrate that imperialism is largely played out in different ways through distinct media. Yet when taken as a whole, these media can illuminate the types of power each polity focused on. Wari seems to have largely monopolized political, economic, and military power and utilized ideological power flexibly. Tiwanaku seems to have focused heavily on ideological power, especially in its heartland, with lesser exertion of military, political, and economic power over provincial settings. The Inka case highlights how quickly a secondary imperial state can integrate a vast territory by building on the legacy of its predecessors.