

## REMODELING THE POLITICAL ECONOMY OF THE WARI EMPIRE

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### **Abstract**

*Extending Schreiber's mosaic model, we construct a political economy model for how the Wari Empire could have functioned based on available evidence. We argue that Wari administrators sought to create a broadly integrating inter-regional system without the benefit of markets through the creation of a staple-based mobilization of agricultural production in order to support state-managed ceremonies, corvée labor for construction projects, a warrior class, and craft and ritual specialists. The success of this staple-based mobilization, likely a precedent for the Inca imperial economy, was limited because it was a novel experiment in statecraft in a world of marked regionalism. Yet top-down wealth finance and bottom-up globalization managed to further integrate outlying regions by fueling the specialized production of high-end, symbolically charged goods that materialized a popular religious ideology that had coalesced at Huari. Although wealth finance and globalization are often seen as alternative explanations for Middle Horizon dynamics, we argue that they represent complementary, and often linked, strategies pursued by Wari bureaucrats, local leaders, and craftspeople to profit off of the surging interregional interactions of the period. Nothing like Wari had existed previously in the Andes — it was the creation of a state struggling, and ultimately failing, to project itself over a vast region.*

*Keywords:* Wari, Inca, Middle Horizon, imperialism, globalization.

### **Resumen**

#### **REMODELANDO LA ECONOMÍA POLÍTICA DEL IMPERIO WARI**

*Extendiendo el modelo del mosaico de Schreiber, se construye un modelo económico para la manera de como el Imperio wari pudo haber funcionado en base a la evidencia obtenida. Sostenemos que los administradores wari procuraban crear un amplio sistema de integración interregional sin el beneficio de mercados, a través de la creación de una movilización de producción agrícola, que estuviera basada en productos de primera necesidad para poder apoyar las ceremonias gestionadas por el Estado, la labor corvée para proyectos de construcción, una clase guerrera, y especialistas en artesanías y rituales. El éxito de esta movilización basada en productos de primera necesidad, que probablemente fue un antecesor a la economía del Imperio inca, fue limitado por ser un experimento nuevo en la política de un mundo de marcado regionalismo. Aun así, las declinantes riquezas y la ascendiente globalización ayudaron a integrar más aún a las regiones periféricas, incrementando la producción especializada de bienes de lujo cargados de simbología, que materializaron una ideología popular religiosa que se unió en Huari. Aunque la economía de bienes de riqueza y la globalización son vistas con frecuencia como explicaciones alternativas para las dinámicas del Horizonte Medio, sostenemos que representan estrategias complementarias y, con frecuencia, vinculadas seguidas por burócratas wari, líderes locales, y artesanos para sacar provecho de las interacciones interregionales que surgían durante esta era. No ha existido otro grupo igual a los wari anteriormente en los Andes —fueron la creación de un Estado que luchó, y al final falló en su proyección sobre una amplia región —.*

*Palabras clave:* Wari, Inca, Horizonte Medio, imperialismo, globalización.

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## 1. Introduction

Here we develop a model for the political economy of Wari as the first empire in the Andes. This imperial model is based heavily on Katharina Schreiber's comprehensive consideration of the city of Huari, settlement patterns around the urban center, and the proliferation of Wari-related art and architecture across much of the central Andes (Schreiber 1992, this volume; Isbell and Schreiber 1978). Empires are state-like polities that expand by conquest, intimidation, and alliance to exercise sovereignty over diverse environments, economies, and ethnically distinct peoples. In all studies of empires, recent research has emphasized the highly variable nature of expansion and incorporation (Alcock *et al.* 2001), and, as Schreiber noted long ago, the Wari phenomenon should be viewed as a mosaic of different degrees and kinds of regional incorporation (Schreiber 1992). For the Wari, Schreiber uses the Inca Empire as her model empire, rich with historical and archaeological documentation (Rowe 1946; Murra 1980; Hyslop 1984, 1990; D'Altroy 1992, 2002; see also Watanabe this volume).

Since Schreiber's 1992 synthesis, considerable new work has been undertaken on the Wari phenomena. As with the present volume, much of this scholarship has focused on elaborating the local, regional, and interregional dynamics of the Middle Horizon (Jennings 2010a, 2010c). While the findings of some scholars have supported Schreiber's imperial mosaic model, others have argued that Wari art and ideas spread largely outside of Huari control. Arguments against an imperial model are in part a reflection of the contrast between top-down and bottom-up perspectives (Isbell 2010: 248). Yet, we argue that the debates on Middle Horizon Peru also reflect a need to flesh out the mosaic model to understand how a Wari Empire could have operated.

This chapter presents the results of our attempt to develop further a model of Wari political economy based on the extension of power in local, regional, and interregional settings. We seek to understand how the Wari mosaic — a crazy quilt draped across ethnic divides, resource zones, and geographic barriers — could have been sewn together. We might seem like an odd pair to embark on a comparative empires project since one of us has long argued for such work (Earle), while the other (Jennings) remains opposed to the imperial hypothesis for Wari. Yet, the goal is to pair our ideas on how an imperial political economy could have functioned, incorporating critiques of these ideas. The result of our collaboration is a model for imperial political economy representing an earlier form of imperialism distinct from the Incas.

## 2. The mosaic model of the Wari Empire

By calling Wari an empire, we place it within a typological sequence that includes other societal types like states, chiefdoms, and tribes. Typologies of human societies have severe analytical limitations, but some important uses. As an end unto itself, classifying societies into one social category or another is, we believe, a waste of time, because most variation is continuous and historical conditioned. Although typologies divide variability arbitrarily, analytically typologies allow us to compare societies with certain similar characteristics so as to focus on common process and divergent outcomes. In itself, calling Wari an empire is rather meaningless, but that classification immediately sets Wari in comparison with other analogous societies. To understand empires, research must focus on the processes that allow for political domination of broadly spread and disparate people and places.

Empires are about power — the ability to extend administrative or hegemonic control, or simple some undue influence over a broad region of diverse ethnic and social groups. As they seek to dominate foreign social groups, empires are highly variable in their means of domination and in their successes. The Inca Empire, for example, was able to extend dominance 3000 km along the Andean spine from Colombia to Argentina and to conquer large Late Intermediate Period states on the Peruvian coast, but it was unable to consolidate control eastward even 150 km from Cuzco into the tropical forest. Additionally, we know that empires operated in quite distinct ways (the standard dichotomy being territorial vs. hegemonic empires), and power was harnessed in changing configurations.

When we speak of power in political systems, the three essential sources include warrior might, ideology, and economic control (Earle 1997). All are probably important for every empire, which tactically seeks to consolidate control by any means possible. Power is fashioned dynamically, opportunistically, and creatively by interlocking each power source into a political strategy for conquest, control, and extension of influence. The emphasis on one source of power or another varies considerably from empire to empire, and, within any empire, both across the imperial sphere and through time.

In *Wari Imperialism in Middle Horizon Peru* (1992), Katharina Schreiber noted this variability in the extension of the Wari Empire and suggested that the specific emphasis and strategic employment of various powers were probably sharply different across the empire (also see Coleman-Goldstein 2010). As Schreiber noted, “The resulting mosaic of different levels of political control, ranging from indirect to entirely imposed and direct, is documented in the archaeological record” (1992: 69). Each part of the empire would be incorporated in a different manner, thus forming a mosaic of imperial control.

The effectiveness of power should never be overemphasized, because applications of powers are always problematic, contingent, and costly. Schreiber’s original formulation of the mosaic model considered local contingencies, and in her subsequent work she has more fully developed her thoughts on how local agency sometimes shaped imperial strategies (Conlee and Schreiber 2006; Schreiber 2005). Understanding power in different contexts across the history of the Wari should be an objective for future research, and this volume begins to highlight possible avenues for work.

Schreiber (1992) developed her argument for a Wari Empire in three ways. First, she built on the work of Isbell, Lumbreras, MacNeish, and others to argue that a state was created around the city of Huari (e.g. Lumbreras 1974b; MacNeish 1981; Isbell 1985). Second, she documented sites across Peru with Wari architecture and offering deposits as a proxy measurement of places where ‘direct foreign intervention’ by Wari likely occurred (1992: 95). Finally, she used her fieldwork in the Carhuarazo valley (now called Sondondo) as a case study of how Wari imposed direct control in some areas.

Wari style ceramics are found widely distributed across much of the central Andes, and Schreiber was wary of connecting the spread of the ceramic style with the spread of the empire (1992: 94). She felt that the extension of the Wari Empire was perhaps best documented by its impressive orthogonal, cellular stone architecture that created room compounds, plaza areas, and massive windowless outer walls (Isbell *et al.* 1991). With Isbell, she had raised the possibility that sites with this type of architecture were Wari primary, secondary, and tertiary administrative centers that stretched along the high Andes (Isbell and Schreiber 1978). The primary center was Huari, located in the Ayacucho Basin. It grew rapidly into a city-sized settlement with an architectural core of perhaps 500 ha, several large ceremonial complexes, and a total area up to 10 km<sup>2</sup> populated by several tens of thousands of inhabitants. Viracochapampa in the north and Pikillacta in the south were the two secondary centers. Other sites like El Palacio, Honco Pampa, Wari Wilka, Jargampata, Jincamocco, and Cerro Baúl were tertiary centers. These sites were often the hard nodes of direct control in the imperial mosaic.

*Wari Imperialism in Middle Horizon Peru* put the Wari Empire in a comparative imperial framework, with a special emphasis on the Inca Empire. Schreiber used this framework to try to understand why Wari expanded, its mechanics of conquest, and the sequence of expansion (1992: 6-10). She was most concerned with enumerating the different ways that an area could be consolidated and then with identifying the archaeological correlates for these strategies. Schreiber’s imperial mosaic model has been influential in Wari studies, and much of the Middle Horizon fieldwork has been designed to understand how the empire controlled a particular region. Focusing on individual tiles has provided us with a better understanding of Wari imperialism in different places, but has also led to neglect studying the mosaic as a whole. Broader questions concerning the functioning of the overarching Wari political economy have been left unexamined.

Our understanding of Wari political economy still rests on underdeveloped, often implicit, models that are drawn from the Incas and elsewhere (Jennings 2006a). In this paper, we seek to make the comparisons to other empires explicit. We identify the mechanisms through which other empires extended their power in the ancient world and then attempt to apply these to the data from Middle Horizon Peru.

Through this ‘remodeling’ of Wari, we hope to compare Wari to other empires and also come to a clearer sense of how a Wari Empire could have worked.

### 3. Exploring the possibilities of a Wari political economy

Although multi-faceted, all empires depend on their political economy to finance institutional activities that range from conquest to religious ceremonies and public works (Earle and D’Altroy 1989). For an empire to function, it must build foundations for power that allows it to mobilize resources for imperial activities. Yet, there are limits to imperial power, and Wari would never have worked in a void. Instead, political hegemony would have depended on a host of environmental, economic, social, and political factors that were operationally outside of imperial direction. In considering the central powers of an empire, we must also recognize that they are linked inextricably to broader processes that created opportunities for and constraints to imperial action. Power is never only an issue of top-down centralization, because it is counterbalanced by conflicting powers exercised by non-state actors within the empire’s core, by leaders of conquered societies, and by organizations outside imperial control. Empires must consider the separate interests of individuals and groups, who use their connections to the empire for their own purposes. Empires operate in conjunction with processes, which, as far as imperial planners are concerned, are largely uncontrollable, but still offer opportunities for imperial ambitions. Building a model of the Wari political economy needs to balance the centralizing tendencies of imperialism against the atomizing tendencies of long-distance interactions and communities. We look here at the potential elements of markets, staple finance, wealth finance, and globalism under the Inca and antecedent Wari Empires. A strong case can be made for the Wari political economy as marketless, based on staple and especially wealth finance linked to non-administered relationships of globalization.

#### 3.1. Market

In terms of centralization, many associate imperialism with the creation of an integrating market. Market systems, for example, expanded dramatically during the Roman Empire. Markets provide a means to convert wealth received as tribute and used as payment into staple goods needed by a rapidly expanding specialist class (Brumfiel 1980). Yet, the Bronze Age empires of Uruk and early Egypt apparently developed political economies without integrating markets. These are what Michael Smith refers to as “uncommercialized state economies” (2004: 79). As described below, little evidence exists for an integrating market system during either the Middle or Late Horizons in the Andes.

Extensive research on the Inca Empire documents that, in the highland and coastal core of the Empire, no integrating market system existed during the Late Horizon. An argument can also be made that the major centers were distinct from our typical vision of cities. The early Spanish accounts contrast the Aztec, who had markets and typical cities, with the Inca, who did not (Murra 1980). The Inca had a centrally administered economy, what LaLone (1982) called “supply on command.” The documentary description of an economy without integrating markets was supported by large-scale archaeological research in Mantaro Valley, originally formulated to disprove the ethnohistorical, marketless model (Earle 1985, 2001). Archaeological evidence for markets is always problematic, but it cannot be based solely on foreign goods or open areas; all complex societies have traders (both administered and not) and have plaza areas used for group activities that create context for barter. The best archaeological indicators for markets appear to be the development of currencies, crafts industries associated with public spaces, and the shift in household consumption to everyday goods obtained from considerable distances.

Primitive and minted currencies are typical of Old World market systems, but such currencies did not exist in the Andes. Production debris from specialized workshops is often associated with market areas, as seen for example with concentrated obsidian debris associated with market-oriented production at Teotihuacan, but such industrial debris is unknown for the Andes during the Late Horizon. The best evidence for market exchange probably comes from everyday household goods (Earle and Smith 2012). For the pre-Inca period in the Mantaro where no markets existed, almost all (95%) of household

ceramics, lithics, and other everyday consumables were obtained from very short distances (<15 km). Following Inca imperial conquest, the ceramics coming from 15-50 km increased (5 to 15%), but all of that increase involved Inca imperial-style ceramics that were manufactured by state workshops located in the region and probably distributed by the state (Hagstrum 1986). In contrast, in central highland Mexico where marketing systems existed, almost 15% of the ceramics and most of the flaked stone came from greater than 50 km. Markets moved the everyday goods of households much greater distances than did down-the-line or administered trade. The political economy of the Inca Empire did in fact operate without an integrating market system.

The Wari political economy likely also operated without an integrating market system. The lack of a medium of exchange is the first negative bit of evidence. Work needs to be done at Wari sites on the distribution of manufacturing debris to see whether or not it fits an independent or attached production model. Especially the high density of obsidian debris found at Huari (Stone 1983) could be linked to market-based production, but at present it seems more likely that it was linked to administered production of specialty items. The potential of market systems during the Middle Horizon should also be investigated by household consumption data, seeing the distances, from which everyday consumption items were procured. Evidence for the fairly low total volume of obsidian in household contexts (except near to sources or in Wari administrative settlements) and for the regional production of even high-end ceramics (Dussubieux *et al.* 2007) suggest that markets were not a major means to distribute goods. The conclusion that marketing did not exist is bolstered by the logical argument that, since market systems are highly dynamic, once instituted they take on a life of their own, independent of state operations and persisting through time. For example, market systems expanded dramatically during the Roman Empire and were closely associated with its imperial finance, but, when the Empire collapsed, the market systems continued to function just fine and in some cases actually expanded (Greene 1986). If an integrating market system had existed in the central Andes during the Middle Horizon, it would certainly have persisted after the collapse of Wari and then have expanded rapidly with Inca imposed peace.

### 3.2. Staple finance

Staple finance is based on the mobilization and distribution of food and goods of everyday life as a means to support the activities of emergent complex political institutions (D'Altroy and Earle 1985). As a specific form of redistribution, staple finance is probably the most common means developed by chiefdoms and many uncommercialized states. As an example, the Inca political economy rested on the mobilization, storage, and distribution of staples (D'Altroy 1992, 2002). Following imperial conquest, the Inca state asserted ownership over all conquered lands. Some lands were then returned to conquered communities for their subsistence uses, and other lands were set aside to generate a surplus for the state. Corvée labor on these state lands was required as rent for using their subsistence lands. Staple goods produced on state lands either within the local communities or on special state farms (irrigated terrace complexes) were collected and stored centrally. The staples were then distributed by the state to support its specialists (warriors, priests, administrators, crafters, and more) and corvée laborers working on state projects. Specially designed irrigation and terrace systems and central storage complexes were spread through the empire in close association with state administrative complexes; these facilities document archaeologically the massive state facilities for its staple finance (D'Altroy 1992). When comparing pre-Inca and Inca production data from households, intensification of agriculture (more hoes) and of textile production (more spindle whorls) further document the enforced production of state-designated surpluses (Russell 1988; Earle *et al.* 1989; Costin 1993; D'Altroy and Hastorf 2001).

Staple finance would also have been important to the Wari polity, although it was less well developed and probably less significant than in the later Inca system. Huari grew by “virtually inhaling” the surrounding populations (Schreiber 2005: 265). With inhabitants involved with a broad range of activities beyond farming and herding, steps needed to be taken to supply the city. The surrounding region was transformed through the construction of terraces, canals, and water storage systems that would have helped to increase both agricultural yields and camelid flock size (Raymond and Isbell 1969; Isbell 1977;



Vivanco and Valdez 1993; Raymond 1992; Browman 1999; Ochatoma Parvicino and Cabrera Romero 2001). Administrative control may have been initially indirect (Anders 1991; Meddens and Branch 2010), but state control seems to have become more formalized in the second half of the Middle Horizon when new Wari-style centers near Huari, like Jargampata and Azángaro, were built and/or expanded (Isbell 1977; Anders 1991; Schreiber 2001: 90).

The evidence for staple finance farther afield remains more equivocal. The extension of a staple finance system outside the heartland could be behind the constructions of irrigated-terrace complexes in many places across Peru (Williams 2002), and, in a few places, agricultural intensification is closely coupled with the introduction of Wari centers like at Pikillaqta and Huaró (Glowacki, this volume), the Carhuarazo Valley associated with the Wari center of Jincamocco (Schreiber 1992), and in the Moquegua Valley associated with Cerro Baúl (Williams and Nash 2002). The number of Wari administrative sites, however, may be fewer than suggested by Schreiber and others since excavations at reported Wari sites have often revealed that the sites were either local emulations or date to other periods (Jennings 2006a; 2010a, this volume). It is therefore likely that dependent personnel directed staple production in nearby agricultural facilities in those few places where Wari state facilities existed (e.g. Goldstein *et al.* 2009; Williams 2002), but a staple finance system would have been more difficult to sustain in the rest of Peru where Wari administrative infrastructure was absent. For staple finance to work, the empire would have needed to depend upon a myriad of local leaders to routinely generate a surplus of goods for export with little to no imperial oversight.

A paucity of storage further weakens the argument for the widespread use of staple finance. A staple finance system requires ample storage facilities, and Schreiber (1987: 94) and others have suggested that warehousing large volumes of material was needed to support the state bureaucracy during the Middle Horizon. To sustain Huari, a system of staple finance was likely put into place within the Wari heartland by at least the second half of the Middle Horizon. A similar system may have also been used to organize production in outlying Wari centers — the massive blocks of small rooms with raised doorways at Pikillaqta and Viracochapampa have long been taken as evidence for state storage facilities (Rowe 1963: 14; Menzel 1964; Sanders 1973: 399; Lumbreras 1974a: 168; MacNeish, Patterson, and Browman 1975: 57; Schreiber 1978: 160, 1987: 94, 2001: 89-91; Isbell 1986: 195). Although the rooms at these sites may have been initially designed as storage facilities, it is now evident that they could not have been the cornerstones of an extensive staple finance system. Viracochapampa was abandoned before it was occupied, and the few rooms used at Pikillaqta were employed for a variety of functions. With present evidence, the amount of storage is unknown (Topic 1991:151; McEwan 1996: 183). There is no evidence for extensive off-site storage facilities, and provincial Wari sites, like Cerro Baúl, were built with only enough to meet the needs of those living in and around the center (Williams 2001).

### 3.3. *Wealth finance*

In wealth finance, high-end consumer items used for prestige display, status marking, and warrior weaponry were produced under direct control of ruling elites and then distributed to individuals in the ruling hierarchy in compensation for and recognition of their political roles (D'Altroy and Earle 1985). Wealth finance depends on choke points in the commodity chains of high-end items, by which the ruling segment controlled either production or distribution. By selectively controlling the commodity chains for wealth item, the ruling sector controls key social and political processes including the display of status, the creation of ideologies, and the arming of a warrior class. Wealth finance was a secondary sector of the Inca political economy, but may have been of primary importance in the Wari political economy.

For the Inca model, crafters attached to the state produced specialty items for dress and ceremonial performance that the state then distributed to control access to the paraphernalia of local status and office and of special ceremonies (DeMarras *et al.* 1996). Because of the high value of wealth items, they could be transported more easily across distances, thus allowing for more centralized control than could ever have been possible for staple goods. To support specialists producing high-end items,

the Inca allocated mobilized raw materials and staples to support specialists at administrative centers or alternatively allocated lands to specialist communities to support themselves directly. D'Altroy (2002: 287-310) describes in detail how the production and distribution of wealth items supported Inca wealth finance. Specialty materials or products were required from areas known for their supplies or special craftsmanship.

Imperial expansion into northwest Argentina, for example, may well have been an attempt to gain access to the region's ore sources. Evidence from the Calchaqui suggests that the Inca did not exert direct control over mining, but rather left mining and preliminary processing up to local communities, probably requiring them only to produce ingots as tribute (Earle 1994). The point of control was not the primary resources themselves, but rather military domination of or threats of retaliation against communities, which were required to pay tribute in particular materials. Direct control over the wealth commodity chains focused on manufacture by attached specialists. As in the Calchaqui, high-end craft specialists (metallurgists and mica cutters) lived at the administrative settlement, where they would have worked under direct state supervision. Sometimes this involved the movement of entire craft producing communities to locales where production could be monitored.

The primary wealth items of the Inca were cloth, metals, and ceramics. The choke points of control varied for each commodity, but the repeating patterns were mobilization of raw materials from regions of control, attached specialist production, and regionally administered distribution. For cloth, for example, massive amounts of fibers or tread had to be mobilized from local communities, probably especially targeting productive lands for high quality wool and cotton, which were delivered to the state as tribute. The increase in spindle whorls in the highland Mantaro would be an example of such mobilization. Then the state distributed materials to attached specialists. These weavers either lived at state administrative facilities or in separate communities. The resulting cloth would be gifted to state administrators, local leaders, and others tied into state operations. Metal wealth was also controlled by tribute demand for ores from regions with metal deposits and by attached specialists. By demanding the use of tin to create a distinctive bronze alloy, the Inca could control the commodity chain for copper-based metals objects used commonly for personal adornment (Owen 2001).

Although probably of less importance for wealth finance, Inca ceramics were also produced regionally throughout the empire and used in special ceremonial events and more general elite consumption (D'Altroy and Hastorf 2001). Although produced by highly skilled labor according to standardized state cannon (Hagstrum 1986), virtually all Inca ceramics were produced within the regions of their consumption, probably by potting communities directly attached to the state (D'Altroy and Bishop 1990). By controlling the production of the ceramics, the state could have furthered the adoption of ceremonies and associated belief systems tied to state religious ideologies. The Inca pattern shows highly selective administrative control over the production and distribution of the wealth; to understand the nature of imperial administration requires a full analysis of the commodity chains for the major wealth items.

With staple finance poorly developed in most places, wealth finance would probably have been the primary economic means for finance and extension of hegemony in the Wari Empire. The items produced and traded during the Middle Horizon were the same high-end consumer items that the Inca state used — elaborate textiles, exquisite polychrome vessels, and metal items suggesting the possibility of a separate sphere of tribute collection and trade not integrated into a broader market system. A 'surge' in the movement of goods during the Middle Horizon (Lau this volume) involved a bundle of specialty goods and associated ideas. This was not a general increase in trade, but a rather low-volume increase in high-end items that appear to have been produced by a number of regions. The Wari thus could have capitalized on a general trend towards increasing wealth exchanges that must have been increasingly involved in the legitimation of stratified societies.

Wealth finance only works by controlling choke points in the commodity chains of high-end items. In the following section, we provide some preliminary thoughts on how a wealth finance system could have worked, but it is important to stress that the empire's role in the production and distribution of high-end goods remains unclear. A common chokepoint is the control of craft specialists. Future work

needs to focus on the contexts of manufacture and the nature of distribution of metals, textiles, and ceramics. These high-end items must have been extraordinarily important in the presentation of social identity and the performance of politically charged ceremonies. The recently discovered Wari style gold and silver body suit and associated paraphernalia recovered from an elite burial in Vilcabamba vividly documents the reach of iconographically charged items that offered a clear channel for wealth finance (Ministerio de Cultura 2011), but where were the metals mined, where were the dramatic metal pieces made, and how were they exchanged, eventually to be used in such an elaborate high status burial outside of the Wari core? At the present time, these are simply research questions.

At Huari, archaeologists have identified possible areas of elite residence and craft specialization from surface scatter (Gonzalez Carre 1981: 94; Isbell 1997: 206; Spickard 1983:153-154; von Hagen and Morris 1998: 130). Yet, the relationship between craft specialists and Huari's ruling elite remains unclear. Little excavation has been done at Huari, and Isbell's excavations of the elite patio groups at Moraduchayoq failed to reveal evidence for craft production there (Isbell *et al.* 1991: 44). Metal production may have been tightly controlled and thus very localized, so that identifying production areas will require much more extensive excavation than presently exists. State-sponsored specialization was likely associated with specialized settlements of potters or textile workers, similar to the Inca pattern. The settlement of Conchopata near Huari has long been seen as a center of fine-ware Wari ceramic production; Tschauer and Isbell in this volume suggest that the artifact clustering observed at the site resulted from refuse disposal practices. We suggest that such a pattern represents a community of specialists involved in ceramic production, probably like that described from the Inca. Martha Anders excavated a ceramics workshop for Wari polychrome ceramics at Maymi, but the relationship of these potters to resident elites and the Wari Empire remains unknown (Anders *et al.* 1994). The production context of high-end goods from other parts of Peru is similarly unclear. The state's role in the distribution of high-end items is also unclear. Spondylus shell, turquoise, precious metals, and other wealth items are found at Wari centers, and these objects are often bundled together with Wari style goods in local contexts (Lau, this volume). In the immediate vicinity of Wari provincial centers, imperial administrators could have easily redistributed high-end items to local elites. As one moved away from the centers, however, it would have been more difficult to control both who received these items and the contexts in which they were used.

Although our data do not allow us to detail confidently what the chokepoints in a wealth finance system could have been, our evidence for wealth finance in the Wari Empire is still much stronger than it is for staple finance. We know that high-end items circulated widely in the Middle Horizon, and we know that Wari material culture was coveted by local elites in many places. The incredible state investment in the arts suggests that these objects were central to Wari rule (Cook 1994). Much more work needs to be done in order to investigate how a Wari wealth finance system would have worked.

### 3.4. Globalism

Globalization models attempt to explain how suddenly increasing flows of goods, ideas, and people can cause widespread social changes that link societies across great distances without empires (Jennings 2010b, 2010c, this volume). But globalization also acts in conjunction with imperial aspirations as joint processes creating large-scale integrated systems both with and without commercialization. Empires attempt to project their powers to bind disparate groups together into a single political economy. Globalizing processes act to strengthen, modify, and even destroy these binds. As empires grow, administrators find it increasingly difficult to manage state affairs. Some difficulties are based strictly on the greater distances involved — supply chains lengthen and the likelihood of distant rebellions increases, but many result from difficulties projecting a political economy across a dynamic social landscape.

Empires tend to expand rapidly (Alcock *et al.* 2001), and the Incas were no exception. Pachakuti and Thupa Inka Yupanqui's conquests in the second half of the fifteenth century created the empire. In less than two generations, a group from the mountains of southern Peru had come to dominate a region of incredible cultural, linguistic, and environmental diversity that stretched from modern day



Quito to Santiago (D'Altroy 2002). The Late Intermediate Period had been a period of balkanization in Peruvian prehistory and the empire allowed for increasing interactions across regions and emergent processes of globalization (Conlee *et al.* 2004).

The creation of a wealth and staple finance system in the Inca Empire increased the exchange of goods throughout the empire and beyond its border (D'Altroy and Earle 1985). The Incas also forcibly resettled people in new lands, and people moved to new regions for military posts and to provide labor on state estates (D'Altroy 2002). Ideas foundational to the political economy, from the iconography seen on textiles to the decimal system used to organize heads of households, also spread across the empire. Much of the period's flow of ideas, people, and goods went through the extensive state apparatus of roads, administrative centers, and storage facilities (Jenkins 2001). But the extension of the Inca political economy also occurred more informally as people adapted Inca ways of doing things to meet their own interests. Local leaders, for example, would have found the decimal system useful for organizing their own affairs, and goods found prestigious by the Inca emperor would have swiftly gained cachet. Schreiber's "mosaic of control" captures the idea that many regions of the Inca empire were under some kind of indirect control (1992), but one should also stress that this mosaic was united by a degree of homogenization as many people chose to embrace Inca practices (e.g. Inda and Rosaldo 2008).

As with globalization today, the homogenization that occurred with the extension of the Inca Empire did not create a uniform culture. In part, the lack of homogeneity was a result of Inca administrators' attempts to maintain local differences in dress, language, and religious practices (D'Altroy 2002). Yet, the flows between cultures always involve, "interpretation, translation, mutation, adaptation, and 'indigenization' as the receiving culture brings its own cultural resources to bear, in dialectical fashion, upon 'cultural imports'" (Tomlinson 1999: 84). The Inca ceramic style, for example, was transformed as disparate groups adopted it such that the Inca influenced styles of Lake Titicaca look radically different from those used on the North Coast. Features of the incipient market economy in Ecuador were incorporated into Inca rule over that region (Salomon 1986). The Inca Empire was created through the mixture of ideas, products, and practices from different places. Inca metallurgy, for instance, could not have developed without combining the North Coast's rich tradition of metalwork and the tin-bronze technologies of Bolivia and Chile (Lechtman 2003). The creation of the empire therefore led to novel mixtures of foreign elements. This heterogeneity made it difficult to govern the empire because what was 'Inca' varied from place to place — the dynastic battle between Waskhar and Atawallpa that almost destroyed the empire was in part based on the growing differences between life in Quito and Cuzco.

Globalist tendencies would have also been seen in a Wari Empire. We see the dual homogeneity/heterogeneity trend during the Middle Horizon, and it is difficult to separate out the state's wealth finance system from aspects of globalism that would have left similar archaeological signatures (Jennings 2010b, 2010c, this volume). In wealth finance, one expects the circulation of high-end consumer items like textiles, feather work, and precious metals. These items would often use symbols and/or be used in a manner that would signal the user's affiliation with the state. These items, however, can potentially circulate beyond state control and can be widely emulated. The boundaries of wealth system finance would therefore tend to bleed as people attempt to take advantage of the goods being circulated. The Inca Empire's more extensive infrastructure could have been used to regulate exchanges, but Wari rule was probably less direct. With goods, ideas, and practices circulating far beyond the boundaries of the formal wealth finance system, parts of Peru may have been embracing Wari material culture with only weak, or even non-existing, ties to the empire (e.g. Bélisle and Covey 2010; Jennings 2010b; Marcone 2010). The widespread circulation of Wari goods may have presented new opportunities for the empire, which wrestled to find the means to expand its hegemony beyond the boundaries of its more formal relationships.

Globalism could be thought to muddy the waters of divination by archaeologists, making it often difficult to distinguish the boundaries of a polity, let alone detail the relationships that people had with the state. The problems of interpretation, however, should be seen perhaps as simply recognizing the ambiguities of power and identity as complex societies develop. The heterogeneity of Wari impact across Peru can be used to argue for a weak or even non-existent empire, but a mosaic of control model

demonstrates that we should also expect such heterogeneity in ancient empires, and Schreiber (1992) shows how imperial rule can adjust to significantly different local conditions. Globalizing processes created considerable problems for Inca rulers, but these played only a small part in the empire's collapse at the hands of the Conquistadores. The Roman Empire, after all, flourished for five hundred years, while it managed considerable heterogeneity across its realm (Hitchner 2008). Roman and Inca administrators invested heavily in administrative infrastructure to minimize those local differences that interfered with the workings of their overarching political economy (e.g. Scott 1998). Wari leaders would have needed to find other ways to organize the financing of the empire.

#### 4. Remodeling Wari political economy

Although scholars often highlight how empires project power over great distances, these polities were just as much opportunistic and tattered affairs that were in constant danger of breaking apart. The Incas were the culmination of centuries of political development in the Ancient Andes, and yet the Conquistadores quickly exposed the empire's vulnerabilities. The Inca's successful expansion was built in no small part on the insights gleaned from earlier polities (McEwan 1990; McEwan *et al.* 2002). The scattered villages of Early Intermediate Period Ayacucho provided no such legacy upon which Wari administrators could build. Starting without an imperial template, the Wari political economy was a novel creation likely based on an absence of markets, limited use of staple finance, a rather remarkable elaboration of wealth finance, and creative efforts to project its influence further afield.

Staple finance provided the basis for the Inca strategy, but it depended heavily on a strong imperial presence and substantial capital improvement projects that would seem unlikely for the novel conditions experienced by a first highland empire. In contrast to the Inca, the footprint of Wari administrative settlements in the hinterland was quite limited, probably reflecting a hegemonic strategy more like the Aztec, but lacking their market integration. Staple finance, identified by new irrigation-agricultural complexes associated with imperial sites, would have been critical primarily for the core region around Huari and in those few more distant regions controlled directly by the state. In most of Peru, however, Wari imperial control would have been organized differently.

Without the market systems of the Aztec, a Wari Empire could have elaborated wealth finance based on precedence set by the expanding Moche, Lima, and Nasca states and chiefdoms. Rule in these polities was based in part on common ideology and by exchanges of related high-end symbolic and signaling objects. As valley chiefdoms expanded through conquest and incorporation, the scale and significance of wealth items probably were critical (e.g. Vaughn 2009 Marcone 2010; Castillo *et al.* this volume). Ayacucho developed a strong relationship with Nasca at the end of the Early Intermediate Period (Knobloch 1983), and, when Huari urbanized soon after, administrators may have sought to elaborate and centralize the high-end commodity chains that were critical to the wealth finance of the polities that had been expanding during the previous period.

Wari likely pursued various strategies in an attempt to control flows of raw materials and high-end commodities. Like the Aztecs (Hassig 1988), Wari may have relied in part on military conquest and threats typical of expanding hegemonic empires. Warriors may have been deployed to protect from waiting bandits the commodities moving along major routes. Wari's initial expansion may have been geared towards gaining access to raw materials, capturing gifted specialists, and establishing the networks for distribution of textiles, metals, and pottery that represented status and carried the state-sponsored ideology. The targeted construction of administrative sites, and possibly roads (Schreiber 1991), could then have been used to channel commodity chains that would amass raw resources, produce high-end specialty item, and then organize their movement across the empire and beyond.

Extending wealth finance over such a wide area would have been difficult, however, and Pikillacta's and Viracochapampa's unfinished storehouses likely reflect a curbing of imperial ambition after the heady days of early expansion. As time wore on, Wari administrators likely limited their ambitions for wealth finance. Instead of seeking to control many links in the commodity chain, they may have identified primary choke points that were least costly to control. One of these choke points would certainly

have been the production of high-status goods. In some cases, the state could have moved craftspeople to locations where production could be closely monitored. Some of the skilled potters of Nasca polychrome ceramics, for example, may well have been moved up to the Ayacucho Basin to produce state ceramics. Most specialists, however, would have lived outside of the heartland and Wari centers, and thus have been much more tenuously attached to the state.

An example of these more tenuously attached specialists may come from producers of Wari textiles. As in the Inca Empire, textiles were most probably critical to the Wari political economy since they carried key iconographic and symbolic information that was essential for integrating regions within the state hegemon. Little work has been done on the commodity chains of textiles, with perhaps the best analysis found in Coleman-Goldstein's (2010) dissertation. She argues that textiles were particularly important to the Wari state because of the network of dependencies needed to collect diverse raw materials, produce the high-end weaving, and distribute them strategically. In terms of the materials, the cotton for the warp, the high quality wool for the weft, and the dyes for colors came from different locations that were distributed throughout the empire and so required a broad network to assemble the ingredients. Because of the fineness of threads for the high-end textiles, the amounts of required yarn, for example, would have been staggering.

For cotton, wool, and special dyes like cochineal, and for access to trained weavers, imperial conquest may have initially targeted specific regions in the highlands and coast. Some textile production was likely overseen directly by Wari administrators (e.g. Edwards *et al.* 2008), yet most specialists probably worked far from Wari centers. Spindle whorls, for example, are prevalent at sites in the Majes Valley, and Wari-style textiles are a common find in the cemeteries there. Coleman-Goldstein's work demonstrates that spindle whorl diameters became more standardized as the Middle Horizon wore on. Although no Wari facility is found in the region (also see Jennings, this volume), it is possible that Wari was behind the expansion of the valley's agricultural terracing or worked in other ways to support the talented spinners and weavers of the region.

Without an extensive infrastructure, Wari control over many craft specialists would often have been limited and sporadic. Globalist tendencies would break apart the iconographic message of textiles and other goods, and craft specialists would likely be attempting to meet overlapping and sometimes conflicting demands placed on them by local, regional, and state power brokers. To project its influence beyond the administrative core, the empire would have needed to demonstrate the importance of state connections to specialists and local elite. The military would have played the small, although significant, role of maintaining Wari control over choke points in the commodity chain. More importantly, Wari administrators had to struggle to signal this control across a diverse cultural landscape, where the material culture for this signaling was often fractured, reinterpreted, and even co-opted by local elites to meet their own needs. The changing suite of Wari iconography that linked power to fecundity, descent, feasting, and long-distance exchange would have likely been the primary means by which Wari singled its pivotal positions in Middle Horizon interactions. Even when iconography was repurposed by others, its roots were Wari and signaled the empire's domination.

In our remodeling of the Wari political economy, we suggest that the first attempt at imperial finance in the Andes would have been based on existing traditions of staple production, distribution, and use in Ayacucho. This appears to have been only a partially successful model to create an administered system of commodity production and distribution. Wari thus co-opted, adjusted, and expanded the wealth finance systems previously developed by coastal and highland chiefdoms and states. The adoption and elaboration of wealth finance allowed the empire to articulate with both conquered and neighboring societies. When initial imperial aspirations could not be met, Wari administrators were able to alter their system of wealth finance to manage commodity chains that were largely, and at times entirely, outside of direct state control. The success of the Wari would have been based on feeding existing demands for prestige goods tied to long-term trends in the use of material culture to expand a religious based ideology that girded emerging complexity.

## 5. Conclusions

If a Wari Empire existed, then the data available suggest a Wari political economy that apparently contained four elements. Wari would be uncommercialized, creating distinctive problems for imperial functioning. Staple finance, although certainly utilized, would have been probably much less elaborated than during the subsequent Inca Empire. Wealth finance, in contrast, was probably highly developed, and much of imperial strategies could have involved elaborating the strategic use of high-end textiles, metals, and ceramics as a means to materialize a ruling ideology. This ideological system probably structured the political system of dependencies and alliances. In the use of wealth finance as the defining nature of the political economy, control over the imperial system would have been problematic as it became increasingly engaged with the dynamic processes of globalization.

What can we learn from possible Wari imperial strategies to consolidate and extend power? Empires were built with central planning certainly, but imperial expansion was often rather an ad hoc experiment based on pre-existing conditions, emergent possibilities and evident miscalculations and failures. The history of Wari represents a centralizing polity attempting to expand its power and gain prestige for its rulers. The first imperial expansion of Wari may well have been before a mature state formed, and the halting attempts to expand for greatness may have failed, causing an implosion that ultimately solidified the state structure in Ayacucho. As the Wari expanded, consolidated, and ultimately collapsed, experiments to fashion the political economy illustrates the limits and possibilities for imperial order in an uncommercialized setting. Archaeologists have made many assumptions about how the Wari political economy would have worked based often on what we know of the Inca Empire. Yet, the differences in built infrastructure suggest that Wari could not have relied heavily on staple finance, and, if an empire existed, the rule would have relied on more informal, hegemonic relationships. The Wari political economy apparently relied much more on wealth finance than the Inca, and thus the role of ideology as a means to extend hegemony was probably of greater importance. It could conceivably have eclipsed the usual role taken by the sharp edge of military might. Such a political economy, with reduced demands for a large imperial military, would have been much less costly to finance and thus desirable in an age of first empires when financial systems were poorly developed. It would have been, however, more vulnerable to the globalizing processes that we have outlined. Although much of what we proposed needs extensive new research in order to be evaluated adequately, we feel that the composite and rather eclectic nature of our model may well come close to the realities of this and other early empires.

Our understanding of empires is often based on documentations from the central powers that may lie and misunderstand real central power as something more aspired to than fully realized. Archaeology can provide the balanced view, recognizing the meeting of bottom-up and top-down processes in the imperial endeavor. Wari and Tiwanaku together provide critical examples of uncommercialized empire-like polities that developed without establish precedent in their regions. Future studies of the Middle Horizon have extraordinary opportunities both to understand trajectories for emerging complex political institutions in the Andes and to enrich our comparative understanding of the real processes of empires' first growth.

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