

THE AYMARA YEAR COUNT: CALENDRIAL TRANSLATIONS IN TIWANAKU, BOLIVIA

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This article considers the Aymara year count that appeared in Bolivian newspapers in 1988 in connection with June solstice celebrations at the pre-Columbian archaeological site of Tiwanaku. The Aymara year communicates politico-temporal meanings; its numbers are evocative, which is why it has gained traction as an accepted part of solstice celebrations in the media and with the Bolivian public. The Aymara year count is a numeric expression of three implicit interrelated political statements. First, it shows that the Aymara have a history that reaches far deeper than their involvement with European conquerors. Second, it links Aymara history to broader pan-indigenous histories. Finally, it demonstrates to non-indigenous audiences that Aymara history, astronomy, and mathematics are rational and sophisticated. This final claim is achieved by using timekeeping to translate very real Tiwanakota accomplishments into an idiom understandable to national and international audiences. The Aymara year count is not used as a method of quantitative timekeeping. Instead, it forms part of the politics that invoke the past. (Bolivia, Tiwanaku, Aymara, indigenous politics, calendars, time, numbers)

Numbers give the appearance of universality, although this is a cultural construction. Numbers are the stuff of math, but they also convey meanings with important political and social ramifications. Numbers and statistics offer the illusion of transcending social divides by appearing to cross linguistic boundaries. “57” may be pronounced differently in English, Spanish, and French, but is written the same and refers to the same quantity. Numbers are assumed to be the universal language in which one can conduct transnational commerce and even extraterrestrial diplomacy. Similarly, calendars may appear to be universal timekeeping devices, but are themselves cultural objects. Calendars use numbers to delineate and quantify time but also convey cultural concepts about historicity (Gell 1992; Munn 1992).

This article examines the Aymara year count published in Bolivian newspapers starting in 1988, in connection with the June solstice celebrations in Tiwanaku, Bolivia. This year count does not serve the same purpose as the Gregorian calendar; it is not used to mark the relative chronology of historical events. Instead, the Aymara year count is a political statement with deep resonance for Aymara peoples and activists within the current Bolivian political climate. It uses numbers to invoke cultural meanings.

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Western calendars are linked to regimes of rational quantification that suggest the precise marking of arbitrary time. Nevertheless, the political dimensions of timekeeping are central to creating this supposed rationality. The history of calendar reforms in the West is fraught with tensions between political interests and the goal of creating “objective” timekeeping that accurately mirrors astronomical and seasonal cycles. Many calendar reforms were promoted by politically dominant or powerful bodies and were resisted by those expected to use them. The Catholic Church instigated the Gregorian calendar—itsself a reform of the Julian calendar—in 1582, although individual nations determined when exactly they would make the switch to the new calendar. Protestant England continued to use the Julian calendar until 1752. In that year, September 3-13 technically did not occur, as those eleven days were removed in order to align with the Gregorian calendar. While in some in England objected to this change on politico-religious grounds, interestingly in colonial America there was little objection to temporal standardization with the rest of Europe (Freiberg 2000; Scott 1999; Smith 1998). The French Revolutionary calendar was imposed by the French government in 1793 in an attempt to secularize and modernize the state, then abandoned in 1805, although the metric system of measurement introduced at the same time continues to be employed (Zerubavel 1977). Calendar reforms in China and other parts of Asia were also promoted through imperial power (Sato 1991). In short, rational calendars always combine questions of temporal legibility with political projects. These tensions also exist in the Aymara year count. Despite disagreements about how it should be calculated, the year count invokes an implicit set of political meanings.

THE EMERGENCE OF THE AYMARA YEAR COUNT

Bolivians, including rural indigenous Aymara, use the Gregorian calendar to mark days, weeks, months, and years in conversations, newspapers, and historical timekeeping. That does not preclude other concurrent temporalities, however. In the rural Aymara village where I conducted fieldwork, people are well aware of seasonal agricultural cycles and annual ritual dates. They mark the passing of time not only by the calendar but by the age of their children, by major life milestones, and in reference to other local, national, and global events. Individuals in rural Bolivia—and elsewhere—mark life events according to personal temporalities, even as they interact with governmental systems, transportation infrastructure, news media, cell phones, and other technologies that encourage time standardization (Krech 2006; Zerubavel 1982a). In short, most individuals experience overlapping temporalities that simultaneously track the cyclical patterns of seasons and the linear movement of irreversible time, and their historical memories employ these seemingly disparate

Comment [a1]: Need more background here.

I think a footnote about the Julian calendar used in Eng being 11 days off from the Gregorian calendar used by most of their neighbors and the 1750 act of parliament as officially marking the Julian calendar's replacement should do it. I used <http://www.cslib.org/CalendarChange.htm>

Comment [Cas.2]: Is this better?

temporalities simultaneously. Understanding this complexity requires consideration of how multiplicities of time are deployed in particular social contexts (Birth 2008).

The Aymara year count is connected to the winter solstice celebrations at the Tiwanaku archaeological site. Solstice celebrations in their current form emerged in the late 1970s. Since the late 1980s the solstice has been Tiwanaku's most visited event of the year. Solstice celebrations are now performed in many Bolivian cities and major archaeological sites as public rituals (the solstice is not celebrated in private or household contexts). In Tiwanaku, the solstice is clearly aimed at a non-local Bolivian audience. Although foreign tourists attend in small numbers, the vast majority of participants are urban Bolivians from the cities of La Paz and El Alto.

Local Tiwanakeños rarely attend the ritual, but they do engage in the extensive temporary market that caters to pilgrims. They view the solstice as economically important as well as ritually significant. Tiwanakeño indigenous and municipal political leaders and local Aymara religious specialists (and more recently, the president of the nation) participate in the main solstice ritual in the center of the archaeological site, in full view of thousands of pilgrims and national media. In short, the solstice ritual is a performance of Aymara indigeneity aimed at a national audience (Sammells 2012a).

A brief comment is in order about the possible connection of the solstice to the Bolivian celebration of San Juan (St. John) on June 24. Some Bolivian Aymara feel that the chronological proximity of these two events is rooted in pre-Columbian celebrations of the solstice and that the two events share a common history. While that may be true, the contemporary manifestations of these celebrations are quite distinct. San Juan involves bonfires against the cold and the ritual destruction of old objects, and is celebrated by rural and urban households near their homes. San Juan bonfires in the streets of La Paz have been officially discouraged (and sometimes outlawed) for years because of air pollution issues. In contrast, the solstice receives official recognition as a national event by the press and the government and has a single centralized public ritual rather than multiple private ones. Despite their temporal proximity and some shared themes, such as being "the coldest night of the year," the two celebrations are very different in terms of institutional organization and audience.

The Aymara year count was first mentioned in Bolivian newspapers in articles on the 1988 solstice celebrations at the archaeological site of Tiwanaku. The first of these was by astronomer Manuel De la Torre, published on June 20, 1988, the day before the solstice. His poetically written piece discusses how the ancient Aymara *amautas* (religious specialists) and *yatiris* (wise people) studied astronomy and other sciences and how this

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knowledge continues into the present. He wrote, “No one has taught astronomy to the contemporary Aymara, but they know it through innate ideas shared with their ancestors, although no longer with the same depth and precision” (De la Torre 1988). His discussions of the Aymara calendar center on annual festivals that coincide with solar events such as the solstice. The year count of 5496 appears only in the title and the last paragraph of this piece, and it is not a central focus. In fact, on his current webpage, he makes no mention of this year count, although he gives details on the Tiwanakota calendar. After his 1988 article, more articles in *El Diario* repeated the 5496 year count (*El Diario* 1988a,b).

This was not the first appearance of an Aymara calendar, however. Long before 1988, the solstice or equinox were both presented as an Aymara (or Andean, or indigenous) “New Year.” Dating back to the 1930s, archaeologists assumed an Aymara calendar existed, believing it to be cyclical and to begin with the spring equinox (Sammells 2012b). The appearance of the Aymara year count in 1988 marks a very different conception of temporal frame and understanding of how an Aymara calendar might work. Winter comes annually, but the year 2013 arrives only once. Similarly, while the solstice might be celebrated every year, the 5496 solstice is a distinct event from the 5512 solstice. Year counts suggest linear time with historically unique units. A year count implicitly rejects the idea that the Aymara are “timeless” and instead places them within the realm of history.

The Aymara year count is never used in any context other than solstice celebrations. Indeed, many Tiwanakeños have to think twice or look up what the Aymara year is. No one marks recent historical events such as the election of President Evo Morales with the Aymara year count. Although the archaeological site of Tiwanaku appears to mark solar and possibly also lunar and stellar events, contemporary solstice and equinox celebrations are timed not through direct astronomical observation but rather with reference to Gregorian calendar dates. June 21 was understood by locals and thousands of pilgrims to be the date of the solstice celebration, regardless of the position of the sun. In fact, Tiwanakeños often referred to the event, especially during local preparations that were not covered by the media, as simply “*el veintiuno*” (the 21st). While the Aymara calendar is presented as an alternative to Western timekeeping, it is also anchored in the Gregorian calendar.

Bolivians do not regard the Aymara year count as a replacement for the Gregorian calendar or as a method for accurate astronomical readings or historical timekeeping. Instead, it communicates politico-temporal meanings; its numbers are evocative. This is why the year count has gained traction as an accepted part of solstice celebrations in the media and with the Bolivian public. The Aymara year count is a numeric expression of three important and

interrelated political statements that resonate with Bolivians, especially with Aymara and other indigenous Bolivians. The first is that the Aymara have a far deeper history than their involvement with European conquerors. The second is that the Aymara are linked to broader indigenous histories. The third is that Aymara history, astronomy, and mathematics are rational and sophisticated. This final claim is achieved by using timekeeping to translate very real Tiwanakota accomplishments into an idiom understandable to national and international audiences who might, unfortunately, doubt them.

POLITICO-TEMPORAL MEANINGS OF THE AYMARA YEAR COUNT

Comment [Cas.3]: How's this? Thank you!

Claim One: Deep Histories

The Aymara year count reinforces claims about Aymara continuity, resistance, and deep history. By claiming a calendar 5000 years older than the arrival of the Spanish in 1492, the period of Spanish colonialism is reduced to a relatively small part of Aymara history. This is a political claim that the pre-Columbian history of the Aymara is longer and more important than what occurred after 1492.

These claims are not new. The antiquity of the Aymara has long formed the basis for nationalist projects to locate the Bolivian nation-state in the pre-Columbian past. Such arguments also appeared in the Bolivian press. For example, during the 1999 winter solstice, *El Diario* published an interview with anthropologist Jorge Miranda discussing the Aymara year count. Although no year count was actually announced in the press that year (although we might extrapolate that it was 5507), Miranda claimed that the year count began with *Pachakuti* (“world turn-around” in Quechua and Aymara). According to his interpretation of archaeological evidence, this occurred in approximately 3000 B.C. with the emergence of the iconic Andean *ayllu* system¹ of social organization (*El Diario* 1999; for a different analysis of the advent of the *ayllu* see Isbell 1997).

Comment [a4]: For this, we really need a brief description of the system in text or an endnote. Could you provide this?

Comment [Cas.5]: I added an endnote. I hope that is sufficient?

The next year, the Aymara year count was suddenly and without comment recalibrated in the Bolivian press. The lack of a response to this presumed error demonstrates that it is the evocation of deep history, rather than the marking of linear history, that was the primary purpose of the year count. Two La Paz newspapers, *El Diario* and *La Presencia*, both declared it to be Aymara year 5008, or 500 years earlier than the year 5506 that was announced two years previously in 1998 (Calso 2000; *El Diario* 1998, 2000; *La Presencia* 1998, 2000a, b). In following years, the same newspapers reset the year count 500 years forward.

Comment [Cas.6]: No, this is correct. 5008/5508 was the year of the “misprint.” Two years previously it was 5506, and in following years it was 5509. Have attempted to clarify here.

Comment [a7]: Should be 5508? See next paragraph.

In other contexts, being 500 years “off” in a calendrical date would be commented on or corrected, in the surprising event that it eluded copy editors.

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That this “error” was repeated in two newspapers indicates, first, that this calendar count was not intuitive to the newspapers’ staff or audience; it was not a commonly-used method of timekeeping. Newspaper editors or readers did not appear to notice the inconsistency. Second, it highlights that numerical consistency is not the primary purpose of the Aymara year count. The numbers 5008 and 5508 both serve to mark the deep history of the Aymara in relation to the present and to European colonialism.

In fact, while the Aymara year count has become more or less standardized in the press, it is often debated by Aymara intellectuals engaged in (re)creating an Aymara calendar. Manuel De la Torre’s webpage shows one such project (De la Torre 2008). He does not mention the year count there, but describes the major divisions of the calendar, its lunar months, and its historical depth of 20,000 years.

Two conferences held in Tiwanaku just before the June 2010 solstice celebrations also addressed this question. One was held on June 19, organized by Freddy Acarapi, a young Aymara man from Tiwanaku who was active in indigenous politics. It was attended by some foreigners (many of whom were interested in New Age spirituality) and a few Bolivians from La Paz. Most of the audience, however, was local. Tiwanakeños attending included those with political connections to the mayor’s office or to local indigenous leadership, as well as interested residents. The two main speakers spanned the divide in the audience. One was Prof. Inka Waskar Chukiwanka, an established Aymara intellectual and professor of history at UMSA, La Paz’s major public university. The other was Guillermo Lange Loma, a non-indigenous Bolivian from Cochabamba and author of several books about secret messages encoded in the Tiwanaku archaeological site (Lange Loma 2004). Both speakers and other Aymara authors sold books and publications after the conference, which drew a standing room only audience of almost 150 people.

The next day another conference was held in the museum at the archaeological site. It was organized by the national university of La Paz, UMSA (Universidad Mayor de San Andres). Prof. Chukiwanka was again the major speaker. The other speakers were Aymara intellectuals and activists. There were no speakers with New Age, spiritualist, or alternative archaeological perspectives. A handful of UMSA students, professors, and a few foreigners made for a small audience. Very few local Tiwanakeños attended, and the organizers claimed not to know that there had been a conference on similar themes the day before.

At both conferences, Prof. Chukiwanka spoke about an Aymara calendar that he was involved in publishing in 1980, which discussed how the Aymara were living in the “5th Sun.” Chukiwanka outlined an Aymara calendar with 8 months of 45 days, weeks of 9 days, underwritten in a base 40 mathematical

Comment [Cas.8]: Thank you for catching that error – I have corrected it.

system. The eight months of this calendar are marked by four celebrations for the Father Sun (*Tata Inti*, on solstices and equinoxes) alternating with four celebrations to the Earth Mother (*Pachamama*, on or near recognized Aymara celebrations). At the first conference, he sold colorful posters he had designed showing this calendar for June 2010 to June 2011 (Chukiwanka 2010). They included pictures of important indigenous leaders in Andean history, designs from the Tiwanaku archaeological site, and *wiphalas* (the rainbow checkered indigenous flag, closely associated with Aymara politics in Bolivia). The central image of the poster was what archaeologists refer to as the “Staff God” from Tiwanaku’s Gateway of the Sun, rendered in multicolored brilliance. Tiwanaku’s Gateway of the Sun has long been interpreted as a calendar by multiple audiences (Sammells 2012b), and this imagery evokes calendrical meanings for many. Instead of using the press count of 5518, however, Chukiwanka’s calendar equated the Gregorian year 2010 to the Aymara year 63,977.

Chukiwanka disagreed with the Aymara year count as presented in the national press. While he believed that the Aymara had lived through five “suns,” Chukiwanka felt that translating each sun (*sol*) as merely 1000 years suggested that the Aymara people are less ancient than they actually were. At stake was not an agreed-upon way of marking historical chronology, but a political statement concerning the antiquity of the Aymara people.

During the conference, Prof. Chukiwanka marked events within his own lifetime with years from the Gregorian calendar, but this does not detract from the meaning of his Aymara calendar. Each calendar communicates different forms of information: the Gregorian calendar organizes the chronology of recent events, while the Aymara year count historicizes indigenous experience on a larger historical scale. While Prof. Chukiwanka disagrees with the Bolivian press about the details of the year count, he seems to agree that the Aymara calendar illuminates the historical depth of the Aymara.

Claim Two: Pan-indigenous time

The second claim of the Aymara year count is that the Aymara are linked to other indigenous American groups through the shared historical experience of European colonialization. This is achieved by linking the Aymara year count to an event that is widely recognized as being a crucial turning point in indigenous histories of the Americas as a whole: the 1492 journey of Christopher Columbus to the Americas. When the Bolivian press declared 1988 to be Aymara year 5496, this linked the Aymara year of 5000 to the Gregorian year of 1492. At that time, the 500th anniversary of Columbus’s journey and the protests against acclaiming this event as a “discovery” were still four years in the future. These remembrances of 1492 created pan-

Comment [a9]: How are Aymara years written? Here we have a comma, at other times there is no comma, and at others there is a period (see bibliography)

Comment [Cas.10]: There is no standard in terms of comma or no comma, so I have removed commas throughout for year dates of four digits, except in the bibliography where I maintained the original from the publication.

In Europe and sometimes in Bolivia, periods and commas are reversed in relationship to how they are used in American numeric notation. The bibliographies reflect the sources, but I have used American notation in the text to avoid confusion. Since this is not a quote, hopefully that is ok.

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indigenous political connections through shared protest. In a similar way, the calendrical equivalence between Aymara and Gregorian year counts connected the history of the Aymara to the histories of indigenous peoples throughout the continent.

The Inca Empire and the *señorios* Aymara (Aymara kingdoms, which included Tiwanaku) were not invaded by the Spanish until the 1530s, a full generation after Columbus arrived in the Caribbean. Bolivians know this and are proud of the region's history of resistance to both European and Incan conquest. When Aymara officials, intellectuals, and the national press talk about 500 years of conquest, either implicitly or explicitly dating this back to 1492, they are certainly not denying this local history. Instead, they are linking themselves to broader pan-American indigenous experiences of European invasion and colonialism.

The links between the Aymara year count and the Gregorian calendar make these political meanings clearer. Such links between calendars are not unprecedented. For example, the early Christian church rejected the Jewish method for determining the date of Passover/Easter, creating a system where Easter and Passover would never coincide. Nevertheless, the Christian church maintained a lunar method derived from the Jewish calendar for determining the date of Easter (Zerubavel 1982b). Calendars can create social divisions and group identities, and those divisions sometimes become visible precisely through how calendrical systems are linked.

The linkage between Aymara and Gregorian calendars in the year 1492 manifested itself in how the solstice was celebrated in 1992, the 500th anniversary of the Columbus voyage. Indigenous groups united to protest against continent-wide political oppression, economic exploitation, and genocide. Tiwanaku's solstice was part of this movement. The international delegation that attended the 1992 solstice solidified the idea that this was a pan-indigenous, even global, celebration. According to press accounts, indigenous groups made pilgrimages on foot to Tiwanaku from more than 250 km away. There were representatives from Panama, South Africa, Sri Lanka, Japan, Tibet, India, Ecuador, Peru, El Salvador, Guatemala, and the Amazon, from the religions of several indigenous American groups (Aymara, Quechua, Cuna, Maya), as well as Hindus, Catholics, Buddhists, Muslims, Jews, and Shintos (*La Presencia* 1992a, b, c; *La Razon* 1992a, b, c, d). These celebrations promoted world peace and environmental conservation while protesting the claim that the Americas had been "discovered" by Columbus.

The event solidified the Tiwanaku solstice's national importance. After 1992, the solstice—always referred to afterwards as "*Año Nuevo Aymara*" or "*Machaq Mara*" ("New Year" in Spanish and Aymara, respectively)—was faithfully reported in newspapers, usually with mention of the year count first

announced in 1988. At the solstice, offerings were burned for Pachamama by Tiwanakeño political leaders and Aymara religious specialists wearing ethnically marked black and red striped ponchos and other Aymara clothing (Sammells 2012a). June 21 was made a national holiday in 2010 by Morales, Bolivia’s first Aymara president. Solstice celebrations in the cities of La Paz and El Alto have grown and now rival celebrations in Tiwanaku. This event is no longer a subversive Aymara ritual but a national Aymara-Bolivian celebration linked to the larger pan-indigenous community.

In recent years it has become commonplace for the solstice to be “launched” ceremonially in the Plaza Murillo of La Paz. This plaza honors Pedro Domingo Murillo, the first martyr of the Bolivian nation-state, and is the location of the Presidential palace and Parliament. Choosing the Plaza for launching the solstice celebration marks the importance of the Aymara—and by extension, Bolivia’s other indigenous peoples—to the nation-state. On June 16, 2010, a few days before the June 21 celebrations in Tiwanaku, this ceremonial “Launch” (*Lanzamiento*) of the solstice was conducted by Tiwanakeño officials and religious specialists, joined by national officials. The event did not have a large audience, but it was widely reported in the media (radio, television, and print) to encourage Bolivians to travel to Tiwanaku for June 21.

Many of the *Lanzamiento* speakers discussed the June 21 New Year celebrations as ancient, emphasizing continuity between pre-Columbian Tiwanaku and the Aymara present. At the same time, they linked Tiwanaku’s solstice to wider indigenous practice. For example, Lucas Choque, a representative from Tiwanaku’s Consejo de Amautas (Council of Aymara Religious Specialists) who has led Tiwanaku’s solstice ceremonies for over a decade, called the event “the new Andean-Amazonian Year” and referred to Tiwanaku as “the light of humanity.” Cesar Cocarico Yana, Governor of the Province of La Paz, ended his speech with “May this be an opportune moment for all of us who are part of the Andean-Amazonian world, and also for all of us who are Bolivians.” David Choquehuanca, the Minister of Exterior Relations, called the event “The New Year of the Southern Hemisphere.” All of these phrases extend Tiwanaku’s solstice from being particular to the Aymara to being symbolic of the indigenous peoples of the Andes and Amazon, Bolivians, and the Southern Hemisphere more generally.

In this context, 1492 does not represent the date of a single battle or conquest in Aymara history, but rather the start of a continent-wide social upheaval. Indigenous peoples are unified through their historical experience of European conquest and oppression, a point made explicit during the 2010 *Lanzamiento* by David Choquehuanca in both Aymara and Spanish. In the Spanish portion of his speech, he declared:

Comment [a11]: Pedro Domingo Murillo? The full name of the first martyr here would be nice

Comment [Cas.12]: Thank you!

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Brothers, during 500 years they tried to eliminate our history, our culture, our music, our knowledge, our codes, our customs, our Aymara New Year. They didn't give importance to our culture. They didn't give importance to our whips [an Aymara symbol of political authority worn by indigenous leaders]. They didn't give importance to our wiphala. They didn't give importance to our Aymara New Year. But this process of recuperation isn't just about our natural resources, but about recuperating our identity. Our spirituality. Our historic dates.

Linking the Aymara calendar to 1492 is a statement both about the Aymara experience with the colonial European presence and how this experience has been shared with other indigenous groups in the Americas.

Claim Three: The Tiwanakota as Rational Timekeepers

The third politico-temporal claim of the Aymara year count is that the ancient Tiwanakota were equal or superior to their counterparts in Western scientific and engineering spheres. Even briefly considering the construction of the archaeological site itself, it seems obvious to me—and many other Andeanists would agree—that this claim is largely true. The Tiwanakota unquestionably achieved engineering feats that rivaled any of their contemporaries in the Andes and elsewhere in the world. But too often Tiwanakota technical achievements, including the expertly constructed walls and buildings built with stones weighing tons and brought 17 km inland from Lake Titicaca, are underappreciated. Arguments defending Tiwanakota achievements are still necessary.

Indigenous groups in Bolivia have long suffered class and ethnic discrimination. As noted in the speech of David Choquehuanca quoted above, their histories and accomplishments are often marginalized (Orlove 1998; Gill 2000; Weismantel 2001). Some fanciful writers claim that Tiwanaku must have been built by extraterrestrials, Atlantians, Egyptians, or lost groups of Europeans, either implicitly suggesting or explicitly stating that local people were incapable of doing so.

On the other hand, many tourists assume that the Tiwanakota must have had writing simply because the archaeological site is so impressive. Since the Tiwanakota were amazing engineers, they assume that, therefore, they also had the technology that Westerners associate with such achievements (i.e., writing and quantitative timekeeping), following an evolutionary idea of cultural progress. Writing did exist in other parts of the pre-Columbian Americas. The Maya are the most famous example, and Incans used *quipus*, knotted strings that recorded quantitative information and may have also served as mnemonic devices (Salomon 2004; Urton 2003). While the Tiwanakota may not have had a writing system like our own, they did have

ways of recording information and conveying meanings through stone carvings, painted ceramics, textiles, and other media.

The Aymara year count transforms claims about Tiwanakota achievements into a numeric idiom, explaining this technical sophistication in an implicit way that can be recognized by those who use the Gregorian calendar. Quantitative calendars fit into larger narratives that connect literacy to technical sophistication and cultural achievement. Following this logic, the perceived ability of the Tiwanakota to write calendars is linked to the undeniable evidence of their architecture to make claims for their technical sophistication.

Such arguments connecting Tiwanaku achievements to their calendrical prowess are not new. Self-styled archaeologist and “Tiwanakologo” Arthur Posnansky (1912, 1930a, b) claimed in the early twentieth century that the Gateway of the Sun was a written calendar. While he never proposed a year count, he believed that the ancient Tiwanakota were rational timekeepers who accurately quantified months, weeks, and days within consistent solar years. His interest in this was linked to his involvement with the World Calendar Movement, an international but ultimately unsuccessful attempt to reform and rationalize the Gregorian calendar in the 1920s and 1930s (Sammells 2012b). Posnansky’s ideas about Tiwanakota calendars have taken on a life of their own and contributed to how the Aymara year count is invoked today. It is now commonly accepted by most Bolivians that the Gateway of the Sun is a calendar, even though many say they are unable to read it. These claims were often linked with the belief that the Tiwanakota had writing, albeit in a script that has yet to be deciphered by researchers.

The Aymara year count is an alternative way of imagining how the ancient Tiwanakota could have been “modern” and how their Aymara descendants might connect themselves to that history. Calendars link present, past, and future into both linear progression and repeating annual cycles. With all that they imply about the fetishization of numbers, mathematics, and capitalist time discipline in Western contexts, the Aymara year count is used here to bolster the claim of the ancient technical sophistication of the Tiwanakota. This equation relies on an evolutionary narrative of scientific and technical sophistication, one where certain achievements are seen as requiring literacy, either phonetic or numeric.

The Aymara year count serves to link the Aymara of the present -- in their liminal position as both contemporary Bolivians and indigenous Americans with roots deeper than the nation-state -- with the ancient Tiwanakota. It is a direct response to the idea that the Tiwanakota are a people without history, trapped in a primitive past. With the progression of this year count, the

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Tiwanakota come to be reinterpreted as a people with history, even if their temporalities continue to mark them as “Other” (Fabian 2002 [1983]).

CONCLUSION

The Aymara year count raises questions of how political power creates standardization in timekeeping, how social bonds create consensus about measuring time, and about the kinds of historical consciousness that these processes produce. Such politics are evident in the emergence of the Aymara year count, which has become part of the alternative modernity of the Bolivian state. The year count emerged as indigenous politics were becoming more powerful in Bolivia, in connection with an event that celebrated this increase in the political influence of the Aymara. Since the 1970s, the Aymara have been an important political force in Bolivia, especially in the highlands, and this position consolidated in 2006 with the election of Morales to the presidency (Albro 2006; Canessa 2000; Himpele 2007; Kohl and Bresnahan 2010; Postero 2007, 2010). It is no coincidence that President Morales attends the Tiwanaku solstice celebration every year.

The Aymara year count makes a political statement about the historical trajectory of the Aymara people that strategically connects contemporary Aymara citizens of the Bolivian state to an idealized, pre-Columbian Aymara free of European oppression. By downplaying colonial history and its many ruptures for indigenous peoples, the Aymara year count creates a new kind of historicity. Public celebrations such as the solstice highlight the solidarity of the contemporary Aymara people, despite their many differences. That solidarity uses the Aymara year count not for chronological timekeeping, but to inform the politics that invoke the past.

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- 1988b. Nuevo Año Aymara. 22 June. 10.

Comment [Cas.13]: Ref Added.

Comment [Cas.14]: Day added.

Comment [Cas.15]: Days added to all Diario articles.

Comment [a16]: Years listing?

Comment [Cas.17]: Thank you – I checked the original and there was no period. I have corrected it.

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- 1998. Ayer se recordó el año aymara 5.506. 22 June.
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- 2000. Fiesta Aymara Del Wilka Kuti Por El Ingreso Al Año 5008. 21 June. Pg. 1.
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- 1992b. Emotivo Encuentro De Dos Culturas Semejantes En Tiahuanacu. 23 June. 6.
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- 2000a. Machaq Mara o Año Nuevo Aymara 5008. 21 June. Cultural:C1.
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- La Razón* [La Paz, Bolivia]

Comment [Cas.18]: Yes, this is the title as published. “1” refers to the page of the newspaper.

Comment [a19]: Year listing

Comment [Cas.20]: This, however, is the correct title, with period in the date – I checked the original.

Comment [Cas.21]: Day added

Comment [Cas.22]: Day added.

Comment [Cas.23]: Day added.

Comment [Cas.24]: Thank you! This is the correct information.

Comment [Cas.25]: Days added to all Presencia articles.

Comment [Cas.26]: Days added to all Razon articles.

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- 1992a. Año Nuevo Aymara En Tiahuanaco. 22 June. A1.
1992b. Flores De Diferentes Jardines Formarán Un Ramo En Tiahuanaco. 21 June. Nacional:A12.
1992c. Indígenas Celebrarán “Año Nuevo Aymara”. 17 June. Política:A10.
1992d. Ritos Andinos Revividos Y Floreciente Turismo Escoltaron El Año Nuevo Aymara. 22 June. Enfoque:A16.
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Comment [Cas.27]: Ref added

¹ In pre-Columbian times, the *ayllu* referred to a form of social organization based on extended and adoptive kinship, community land holdings, religious practice centered on a particular *huaca* (earth shrine), and shared responsibilities for communal labor. The term is also used today in the context of contemporary urban indigenous politics (see Archondo 1991).