# Ploughing up the battlefield; Inca warfare, conquest and resilience

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#### Abstract

Inca warfare has been the subject of scholarly interest since the period of the Spanish conquest. Not only were the land and its peoples exotically different from the Spanish interlopers but so were the many aspects of indigenous warfare. Though the indigenous population proved quick to adapt their methods and strategies to resist these foreign invaders, many of the underlying fundamentals took some time to adjust. This paper seeks to uncover both, aspects of the ideological framework which harnessed indigenous Andean strategies and tactics but also to present some of the more practical considerations with respect to territorial expansion, including how native strategy, tactics and beliefs first developed and then adapted to the Spanish presence in the first few decades of the conquest. Keywords: Inca, Capac Hucha, Moon, Venus, warfare

#### Resumen

ARANDO EL CAMPO DE BATALLA; LA GUERRA INCA, CONQUISTA Y RESILIENCIA

La guerra inca ha sido objeto de interés intelectual desde el período de la conquista española. No solo porque la tierra y su gente eran exóticamente diferentes de los intrusos españoles, sino también sus muchos aspectos de la guerra indígena. Aunque la población indígena rápidamente adapto sus métodos y estrategias para resistir a estos invasores extranjeros, muchos de los fundamentos subyacentes tardaron en adaptarse. Este trabajo presentara algunos aspectos del marco ideológico que sustento las estrategias y tácticas indígenas andinas, mientras que igualmente describe algunas de las cuestiones más prácticas con respecto a la expansión territorial, incluyendo la forma en que las estrategias, tácticas y creencias nativas se desarrollaron y adaptaron a la presencia española en las primer décadas de la conquista. **Palabras clave:** Inca, Capac Hucha, Luna, Venus, guerra

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#### Introduction

Much ink has been expended on discussing the nature of Andean warfare and its ritual aspects. In particular this has focussed on understanding a type of conflict resolution usually referred to as *tinku*. This comprises a regular cyclical encounter between or within Andean communities which takes place at prearranged locations in which usually the male members of opposing parties, following much drinking and posturing, come to blows in a proscribed manner. Such encounters can result in bloodshed and occasionally in fatalities. These ritual battles serve to settle inter- and intra-community tensions, confirm societal limits and boundaries, and function to warn off potential external foes (such as the national or provincial government) by demonstrating the strength and willingness of these communities to defend themselves against any external encroachment (Platt 2009).

The prevalence of this ritual form of conflict in the present-day Andean context as well as its undoubted pre-Hispanic origins have led to discussions of the incidence and nature of a likely generalised ritual type of warfare with circumscribed aggression and limited damage to the opposing sides in the past (Arkush and Tung 2013: 308). For instance, in the ritual confrontations between the upper and lower moieties of Inca Cuzco, it was the lower *Hurin* side which always had to suffer defeat (Pärssinen 1992: 172-3). Platt considers the consolidation of Inca control as it established its empire as resulting in a transformation of intra- and intercommunity warfare (*chajlla*) into formal and ritualised confrontations of *tinku* and competitive games (*pujllay*) (Platt 2009: 34).

In the unbalanced destruction associated with confrontational warfare (chajll'a) warriors were sometimes thought to shapeshift and transform into wild animal forms (*khuru*). In these instances, the boundary between human and animal forms became blurred, and men changed into predatory bears, owls, or pumas (Platt 2009: 39). Pachacuti Yamqui Salcamaygua (1993 [1613]: 231-232; see also, Topic and Topic 2009: 34, 50) illustrates, a form of *tinku* ritual combat which operated at the time of the Incas. He provides an account of the old ruler Pachacuti Inca Yupanqui arranging a battle for his grandson, Huayna Capac. This involved combat between 50,000 Inca troops armed with gold and silver weaponry and a group of other warriors (including Cayambis, Cañares and Chachapoyas). The latter were emplaced in the fortress of Sacsayhuaman. The battle ended in the defeat of those in the fortress, after which decapitated heads taken in battle as trophies were anointed with the blood of llamas (to give them the appearance of having been recently taken in battle), and mounted on lances while the victorious Inca warriors paraded these prizes in a procession that culminated at the Coricancha, while the revellers chanted a haylli (a triumphal war/victory song).

The notion of shamans and warriors shapeshifting into wild animals has considerable antiquity in the Andes (Platt 2009: 40), seen for instance in the depiction of owl warriors in Moche iconography (Donnan 1978: 182, 188). Guaman Poma also illustrates such shifts with his account of Otorongo Achachi Apo Camac Inca, who he says was a son of Inca Roca, the sixth *sapa* Inca, who conquered Andesuyo and while doing so transformed into a jaguar. He further notes that, it was said of warriors that in battle they changed into lions, tigers, foxes, vultures, hawks and mountain cats (Guaman Poma 1980 [1583–1615]: 155/155), 52, 132-3; Platt 2009, 40) (Figure 1). In this context, we should reflect that a Bolivian Spanish Quechua dictionary translates *Maqanakuy* or *Awqanakuy* as: *pelea entre personas o entre animales*, or battle between people or animals (Ajacopa et al: 2007, 65), alluding to the interchangeable nature of human and animal fights.

Indeed, there are many cosmological and ideological aspects to Inca warfare which remain little discussed or notably underappreciated. The Late Intermediate Period (AD 1000-1450) in the Andean highlands was a time of mostly, rather small-scale polities with little social hierarchy characterised by frequent inter-community conflicts typically manifested in raiding and opportunistic attacks. Out of this period and mass of cultures, the Incas eventually emerged as the dominant and most successful group from among the many competing factions. Late Horizon (AD 1450-1532) Inca society was evidently a much more complex construct than most of its erstwhile challengers. Among its imperial aims, the Inca ascribed to the notion of territorial expansion and holding of conquered territory, such objectives required explanation, justification, and legitimising within the ideological framing of its warfare. It is striking that the notion of conquest and claiming of territory was firmly laid out in the Inca origin myths.

In this article, we consider Inca warfare and its cosmological underpinnings, reflecting subsequently on the organisation of warfare and the battleground, before considering the aftermath of battle. Following, we also analyse the impact the arrival of the Spanish had on indigenous warfare, the disjuncture between the two types of war waged, and how the Inca initially endured and then partially adapted to European tactics and strategies, demonstrating admirable resilience for almost half a century up to the 1570's. A resilience that was then taken up by other indigenous groups well into the 19<sup>th</sup> Century.

#### The Ritual of War: blood, soil and sacrifice

Prior to any Inca military engagement, the mayor imperial oracles or *huacas* would be consulted and auguries from animal sacrifices read (Ghezzi 2008: 70). Sacrifices would be made to the *huacas*, or more appropriately 'they would be fed' (Ramirez 2005: 70,100,194, passim). All this was done, while meanwhile supplying the captains and soldiery with food and drink (Pachacuti Yamqui 1993: 250). The preparations for Inca conflict have been detailed by Murua who states:

'Cuando querían ir a la guerra, hacían sacrificio de pájaros de la puna, para con ellos disminuir y abajar las fuerzas de los enemigos y las fuerzas de las huacas e ídolos contrarios. Este sacrificio llamaban cuzco viza, o contiviza, o hualla vica o

copa vica y hacíanle en este forma: tomaban muchos géneros de pájaros de la puna y juntaban en cantidad leña espinosa, que dicen entre ellos yanlli, y encendíanla y luego juntaban los pájaros, y en este junta llamaban quico, y echábanlas en el fuego, y alrededor délandaban los oficiales del sacrificio, con ciertas piedras redondas y esquinadas, donde estaban pintadas, culebras, leones, sapos, tigres y decían, encanto, usachum, que significa suceda nuestra victoria bien, y otras palabras, en que decían piérdanse las fuerzas y ánimo de las huacas de mis enemigos, y sacaban unos carneros negros, que algunos días habían estado en prisión y sin comer, llamados urcu, y matátandolos, decían que así como los corazones de aquellos estaban desmayados, los corazones de sus contrarios desmayasen; y si en estos carneros veían que cierta carne que está tras el corazón no se había consumido con los ayunos y en prisión pasada, lo tenían a mala señal y traían unos perros negros, que en aquel tiempo había, llamados apuurcos, y matábanlos y echábanlos en una llanada y con ciertas ceremonias hacían comer aquella carne a una gente que se entiende ser uros, gente zafia, vil y para poco, del Collao. Estos sacrificios algunas veces los hacían para que el Ynga no fuese ofendido con ponzoña, y para esto ayunaban desde la mañana hasta que salía el estrella y entonces comían hasta hartarse orando a uso de moros.' (Murua 2001 [1590-1609]: XXVII, 408-9).1

Guaman Poma's description of the indigenous warrior or *auca camayoc* (awqa kamayuq / mitimaes) is also revealing. He notes the Inca warriors were between 25 and 50 years of age, and that they were especially selected for battle and warfare. These (married) warriors were also *mitimaes* who were settled in foreign provinces, where they were issued with land. They were also deployed in the mines and in other obligatory labours (Guaman Poma 1980 [1583–1615]: 195 [197], 171). Guaman Poma also confirms the presence of fortress garrisons mentioning *sayapayac* (messengers), *pucara camayoc* (fortress commanders), *aucauan tincoc* (those who confront the enemy) and *pucara uacaychac* (fortress guards) under this remit (Guaman Poma 1980 [1583–1615]: 339 [341], 311-2).

<sup>&#</sup>x27;When they wanted to go to war, they made a sacrifice of birds from the puna, to by doing this diminish, the power of their enemies and their huacas. They called this cizco viza, conttivisa (kunti = west), hualla vica or copa vica (viza or vica = wizard) They gathered many birds of the puna as well as spiney wood called yanlli which they burnt after which they gathered the birds, and this gathering they called quico and they put it on the fire. The officiants of the offering walked around the fires with round and angled stones on which were painted images of snakes, lions (pumas), frogs, tigers (jaguars) chanting usachum which means grant us a good victory (uchha is herd dung, dung from the corral, uma chief, head; usa louse, food, tasteless), and other words with which they said to take away the power and energy of the huacas of their enemies, and they sacrificed some black camelids called urcu (courageous, brave, male), which had been fettered and not fed for some days. They said that so as the hearts of these (camelids) were diminished and (grew) faint, so would the hearts of their opponents be; and if they ascertained that a certain flesh which is behind the heart (of the animal) had not been reduced as a result of the fasting and confinement that this was a bad omen. They would then fetch some black dogs called apuurcos (courageous, brave, male lord), which there were at that time. They would despatch these and put them on a plain (level ground) and made some Uros, a coarse vile good for nothing people from Collao (people from around lake Tititicaca who were marginalised and considered inferior) eat them. These sacrifices were effected several times so that the Inca would not be offended, and for this they fasted from the morning until the rise of Venus, after which they ate their fill while praying in the manner of the Muslims' (Murua 2001 [1590–1609]: XXVII, 408-9) (translation by the authors).

The Inca army was accompanied by ancestral deities such as *huanacauri*, the transformed-to-stone representation of one of Manco Capac's – the first *sapa* Inca– mythical brothers called Ayar Ucho, and by the ruling *sapa* Inca's effigy double known as a *huauque*. Both were glossed as '*bultos*', meaning packages or sculptures in the form of a body, by the early colonial authors. Huanacauri was represented by a stone item or figure , while the *huauque* or brother of the ruling Inca would be a bundle which could comprise a stone or a constructed bundle which included hair and nails of the ruling Inca. Furthermore, each *huauque* had its own particular name, and therefore identity, separate but linked to that of its ruling Inca. Furthermore, the reigning *sapa* Inca was also considered *huanacauri* or *wana kawri* in his own right, descendent in this case from Manco Capac.

These deity-objects were regarded as being fully animated and were accompanied by servants who attended to, and expressed, the wishes of these sacred objects (Meddens 2020). The magnitude of some of the Inca rulers conquests detailed in the documentary source material, particularly those of Pachacuti, appears unlikely as to their extent and range. However, as it was the tradition of Inca rulers to have *huauque* duplicates representing them on the battlefield, this would have allowed there to be a Pachacuti replica, known as Chuqui Illa or Indi Illapa, operating in parallel to its human counterpart. This would clearly multiply the number of concurrent conquests that could be attributed to the same individual significantly. For instance, when Atahuallpa's forces took Cuzco from his half-brother, Huascar, in 1532 it was his *huauque*, Ticci Capac, that had the honour of parading through the streets in victory, while he was about to receive the Spanish at Cajamarca, a distance of one thousand kilometres away.

In fact, a ruling Inca would rarely engage personally in military campaigns, Guascar's partaking was an exception, and occurred only at the very end of his fratricidal conflict –the Inca Civil War (1529-1532) – with Atahuallpa, and only when Guascar was left with little choice but to intervene in person. The direct participation of the Inca in war would engage and expose his relationship with the huacas and deities. Through his potential participation, a *sapa* Inca's relationship with the supernatural or *atao*, his fortune in warfare and *camac* or spirit would literally be tried under these conditions. Such engagements entailed a level of risk which would normally be best avoided (Lamana 2008: 57). Such confrontation could also serve to validate the strength of supernatural support and endorsement of the superior *camac* of a rival, usurper, or competitor when they emerged as the victor in a battle with the *sapa* Inca (Ramirez 2005: 97-8; 2005, Ziólkowski 1997: 217). Nevertheless, there was also a direct imperial need for the sovereign to at times test and reaffirm his superior *camac* by successfully conducting a battle.

This practical need to periodically confirm the *sapa* Inca's personal power base with the *huacas* in a battle royal, may have had a cycle of circa 20 years (Ziólkowski 1997: 213-23), noticeably close to the lunar metonic cycle of 19 years which was of fundamental importance to the Inca calendar (Moyano 2016; Ziółkowski 2015: 325-337; Ziółkowski, Kościuk, and Astete 2014). This periodicity is also supported by the importance given to the lunar phases in the Inca agricultural calendar, including the Incas eagerness to engage in battle at the time of the full moon (Lamana 2008: 128-32, 136; Ziółkowski 2015: 335). Unfortunately, this cultural tradition gave a certain predictability to the timing of Inca attacks at the time of Manco Inca's siege of Cuzco; a predictability that was gratefully exploited by the encircled Spaniards.

Indeed, there was a further episodic relationship with respect to the presence of the Inca himself on the field of battle relating to the appearance of Venus as the evening star and his absence at the times of Venus's manifestation as the morning star Ziółkowski (2015). Among possible interpretations of Venus for the Inca was that of the planet as Chuqui-Illay (dazzling lance) representing the lightning and thunder deity. Its position in the sky was linked to the presence and non-presence on the battlefield of Atahuallpa with respect to Huascar, and subsequently Manco Inca's confrontations with Quisquiz, and his encounters with the Spaniards during the siege of Cuzco and in his battle against Captain Villadiego (Ziółkowski 2015: 335-337). Furthermore, in all cases the outcome of a battle would be perceived as a measure of the relative strengths of the opposing sides' *huacas* and *camac* (Ghezzi 2008: 70; Ziółkowski 2015).

Similarly, child sacrifices known generically as *Capac Hucha* constituted a fundamental element in Inca proprietary rites (Gonzalez 1992, 242), by which sacrifices on special geographical locations such as mountaintops translated into spatial markers of ownership and suzerainty. This fact leads to the association of *Capac Hucha* with territorial claims in the context of war. In this sense, to legitimize territorial conquest, it was necessary to establish an ancestral presence in the newly acquired lands. In certain cases, this was achieved by the act of a *Capac Hucha* and the establishing of a *huanca*, a stone ancestor and boundary marker, within the seized domains. Obviously, the *Capac Hucha* had other significance in different contexts, both at the local indigenous and Inca level, encapsulating the ultimate sacrifice between people and deities (Duviols 1976).

The *Capac Cocha* or *Capac Hucha* ritual involving the sacrifice of children or adolescents has been studied and investigated by a range of scholars, including Besom (2009: 25-43), Duvoils (1976: 40-41), Farrington (1998: 55), McEwan and van de Guchte (1992: 359), Reinhard and Ceruti (2000; 2010), Rostworowski (1988), Sallnow (1987: 39), Schobinger (1999: 17), Urbano and Duvoils (1988), and Zuidema (1982: 426-427; 1989, 149). The pre-Hispanic population of the Andes, specifically the Inca population designated ancestors as *mallqui*, a reference to a tree or plant. In 1656 in San Francisco de Otuco in Cajatambo a colonial period inspection identified the case of a molle tree remaining so worshiped by the local population (Sherbondy 1988). In a possible throwback to this tradition, in the mod-



Figure 1. Otorongo Achachi Apo Camac Inca transformed into a jaguar (from the Nueva Coronica y Buen Gobierno of Felipe Guaman Poma de Ayala).

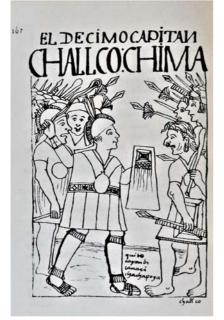


Figure 3. Inca warriors equipped with pectoral disks. Note feather decorated warrior helmets (from the Nueva Coronica y Buen Gobierno of Felipe Guaman Poma de Ayala).



Figure 2. The sapa Inca initiating the farming round 'disembowelling the earth' singing haylli (from the Nueva Coronica y Buen Gobierno of Felipe Guaman Poma de Ayala).



Figure 4. The inca battling the Soras and Andamarcas at a Pucara. Note feather decorated warrior helmets (from the Nueva Coronica y Buen Gobierno of Felipe Guaman Poma de Ayala).

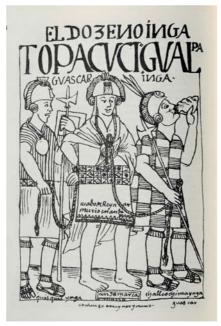


Figure 5. Guascar taken prisoner by troops of Atahuallpa. Note feather decorated warrior helmets (from the Nueva Coronica y Buen Gobierno of Felipe Guaman Poma de Ayala).

ern-day Ancash community of Chaclancayo the revered local saint, St. Apushino, is a Christ and Cross made from the molle tree (*Schinus molle*) known as the tree of life for its medicinal properties. St Apushino is not a catholic saint and the local informant in trying to describe him identified him as originating from a tree (Don Pancho Villar, Pers. Comm. February 2022)

Similarly, ancestor mummies were thought of as hard seedpods or freeze-dried potatoes which ensured ongoing agricultural and societal fertility. In this regard, children when sacrificed as *Capac Hucha* offerings ensured proprietary ownership over and productivity of territory. In essence, children were seen as resulting in newly sprouted life, as young plants and ancestor granted fertility (Salomon 1998: 11-12; Steele 2004: 84). They were conceptually close to the signifier represented by the ancestor mummy seedpod / plant. When sacrificed, they were thought

of as transforming and hardening into *chuñu* (freeze dried potatoes) or a seedpod in which form they were once more ancestral, and full of potential fertility which could then be dispensed and used by the community.

The role of the Capac Hucha sacrifice in Inca warfare can be best understood in the context of the Inca's early conquest of their Cuzco homeland. Their royal ancestral claim to this territory was often expressed in an Inca origin myth of the arrival of three of the four Ayar brothers and their sister-wives at the end of their journey from Paucariqtambo to Cuzco. The claiming of the territory of Cuzco and its legitimizing aspect was achieved in this account by the transformation of one of the brothers, Ayar Auca, into a bird who then flies to Cuzco to Guanaypata where he lands and upon landing transmogrifies from a bird into a stone pillar boundary marker named Ayar Auca cuzco guanca (Sarmiento de Gamboa 2018 [1572]: 157-9; Crickmay 2006: 73). This myth was embodied in stone at the Temple of the Condor at Macchu Pichu, where the head and body of a condor have been sculpted in stone as if merging with the ground, while behind it, its wings rise skyward. These wings consist of two natural rock features. The whole construct mimics a condor in the process of landing and transforming into a lithified marker (Meddens 2016). This sculpted and natural rock imagery at Macchu Pichu served to visibly, and permanently, manifest the legitimacy of the Inca claim to these Cuzco lands.

It is worth mentioning that in Quechua the terms *auca* can have various meanings among which are traitor, warrior, soldier, and captain (Ortega 2018: 145, note 8). The term *ayar* references wild quinoa (González Holguín 1989 [1608]: 39) and the dead (Lane 2022, 45), thus incorporating a *mallqui* simile. With the use of 'Ayar' the Inca would have established from their mythological onset, the connection between the living and the dead, in this case mummified ancestors or Inca hereditary rulers. Sarmiento de Gamboa notes that Manco Capac, the only surviving brother, at the end of the mythical journey to establish the Inca at Cuzco instituted the *Capac Hucha* sacrifice. This sacrifice comprised two children one male, the other female, who were offered to Huanacauri, when young Inca men were initiated as adults and entered the ranks of warriors (the text reference is to *armar caballeros*<sup>2</sup> or 'make knights') and after this was done the company marched to where Ayar Auca had transmogrified into stone (e.g., Guanaypata) (2018 [1572]: 159).

Following this, Manco Cápac and Mama Guaco had a battle with the Guallas (the original inhabitants of Cuzco) and massacred them. Mama Guaco was particularly fierce during this engagement, she hacked a Guaylla Indian in pieces, ripped out his entrails, gripped his heart and lungs between her lips (as if she were dealing with a sacrificed llama used for prophesying) and using a *haywintu*, a rock attached to a rope, she gave battle, and went for the Guayllas with a diabolical determination. One mile southeast of Cuzco a further mêlée ensued with the Sauaseray who they (eventually) also defeated. Later they likewise subdued the Alcabizas (Sarmiento de Gamboa 2018 [1572]: 159-162). Mama Guaco can be seen as a woman with certain male and thereby phallic features. Women at times of crisis could assume a male role by taking on masculine attributes such as the wearing of male dress and use of weapons (Hernández Astete 2002: 64).

The accounts of the legitimising of a territorial claim by a group of *mitimaes* on coca fields in the lower Chillón valley, who were moved into the area following its conquest by the Incas are particularly useful in this respect. A study on this published by Maria Rostworowski (1967-8) is particularly revealing as to the importance of *Capac Hucha* sacrifice in this context. Rostworowski confirms in her analysis that the period prior to the Inca conquest of the mid- and lower Chillón valley was characterised by frequent moments of warfare between the resident polities with lower order kurakas allying with more powerful ones against common enemies (Rostworowski 1967–8: 11-2).

Francisco Yauri or Yaui kuraka of the of Cullique was a *yanacona* of the Inca and likely became kuraka following the defeat of his predecessor in that position in the battle between the Inca troops and the local Yungas (1967–8: 18). One hundred tributary Chacalla *mitimaes* from Collatamarca, pertaining to the Yauyos polity, were installed in Quivi (in the lower Chillón) by Tupa Yupanqui (Tenth *sapa* 

<sup>2</sup> A reference to the medieval concept of men being knighted by their king.

Inca) following a supposed plot of the Yungas against him, consequently his punishment of the local Yungas included a cautionary slaughter of the whole male portion of the Yungas population (1967–8: 11, 19-20).

Yauyos warriors had been allied to the Incas during their conquest of the Chillón, and they were apparently very bellicose and frequently deployed by the Incas in their wars. They were there to work the local fields for the Inca and his wife, the *Coya*. They carried out *cocacamayoc* and *chasquis* duties as well as collecting tribute for the Inca. They also remained under the jurisdiction of their original (non-local) kurakas (Rostworowski 1967–8: 20-1). The coca fields which were subject of an ownership dispute in the early colonial period were used for the cultivation of maize and coca. Various witness statements describe the use of *Capac Hucha* in relation to the land use rights in these documents resulting from attempts by the rival claimants to legitimise their land entitlements in the eyes of the early Spanish colonial courts.

The witness statement accounts explain that during the Inca period, offerings and *Capac Hucha* were as relevant as the Christian laws of the colonial period, one witness testifying:

> 'este dicho testigo de lo que este prejunta sabe es que antes se muriese su padre de este testigo, que se llamaba Panan Quibi, le oyó decir e lo mismo a otros muchos yndios viejos e ancianos que son muertos e de cuyos nombres no se acuerda, que en tiempo de Guascar Ynga, que fue el postrero señor de los indios de los dichos yndios Yauyos, se habián entrado desde el dicho mojón donde Huaynacapac le habiá puesto, hacienda la dicha capacocha, con indios de Guascaringa, orejones con la dicha sangre, hasta mas adelante, de este pueblo de Quibi, donde están los dichos yndios de Canta e iban con la dicha sangre como dice la prejunta e que los dichos yndios Yauyos y orejones iban diciendo; parte parte, no derrame la sangre, que morirás, que el ofrecimiento de Ynga para el Diablo para que le de una buena vejes y le haga gran señor e le dé muchos yndios y riquezas y comidas y guarda sus yndios e que los dichos yndios de Canta de miedo de la dicha capacocha e por no derramar la sangre por que no los matasen, que los dejaban entrar e appoderarse en la tierra y no se los resistián e que desta manera iban ganando tierra e apoderándose en ella lo cual, todo lo oyó decir este dicho testigo muchas veces, tratándo sobre dicho capacocha (Rostworowski de Diez Canseco 1967-8: 58-59)'3

<sup>3 &#</sup>x27;that he heard this from his father Panan Quibi prior to his death and the same from many other elders ..... that at the time of Guascar Inca the last Inca ruler of the Yauyos Indians in this area, that they arrived here (Yauyos and Incas) from a boundary marker as it had been erected by Huayna Capac and where the Capac Hucha had been placed by Indians of Guascar Inca. Incas with the blood (of the sacrifice), advanced onward from the village of Quibi where the Canta Indians were, and the Yauyos and Incas pressed on stating 'make way make way so the blood is not spilled as you will die', so that the sacrifice of the Inca for the devil (Supay Apu) is made, so he will grant you a long life, make you big men, grant you many Indians and riches and food and keep your retainers. And the Indians of Canta out of fear of the Capac Hucha and for fear of spilling blood and so they would not be killed, let them enter the land and take control of it as they advanced and gained the land, and that is what this witness heard tell many times of this Capac Hucha.' (Rostworowski 1967–8: 54-61) (translation the authors).

Meanwhile, other witnesses confirmed that the Indians from Chacalla and the Incas arrived, and that the locals (from Canta) came out to defend their lands from the Yauyos who came with their rituals to take over the land (Rostworowski 1967–8: 59-61). The presence of a *Capac Hucha* from a different bloodline than the resident group and accompanied by members of its *ayllu*, could therefore be used to usurp the ancestral territorial rights of a native group over their own territory (Rostworowski 1967-8: 54-61) and therefore help redefine and legitimise boundary delimitations. Tom Zuidema has accurately interpreted this data as signifying that a *Capac Hucha* when conducted by a group travelling through lands which were not held by their *ayllu*, meant that the rights to this territory would revert to the *ayllu* that had carried out the *Capac Hucha* there (Zuidema 1982: 429). This would occur unless accompanied by representatives of local people who made claim to these lands.

This data has other additional implications, we know that when an Inca died, his successor needed to build up his own relationships with the kurakas of previously conquered territory (Conrad and Demarest 1984). For instance, the 1559 Canta document stated that Tupa Yupanqui had originally conquered this area. Following his death, Guayna Capac initially had to re-establish his sovereignty through reconquest, further moments of re-establishing sovereignty occurred before, and during, the civil war between Huascar and Atahuallpa. In Canta, Huascar, according to the evidence in the documentary source, decided that in order to assert his claims, it was necessary to consolidate the position of his Yauyos yanacona. To secure their rights a ritual was needed which involved the placing of *Capac Hucha*(s), underscoring the aggressive intervention of Incas, under the circumstances it seems likely that these intrusions were by warriors. This intervention on the part of the Incas with its deployment of Capac Hucha sacrifice can be conceptualised as using sacrificial ritual to extend a *ceque* line from a provincial Cuzco, possibly Pumpu (Matos Mendieta 1994), into marginal territory, thereby securing its link to the centre at Cuzco by establishing a conduit of sacred essence through the same Capac Hucha (Meddens et al 2008). In this sense, it mimics the conquest of Cuzco by Manco Capac and Ayar Auca preceded by the Capac Hucha sacrifice as detailed by Sarmiento de Gamboa (2018). It should also be noted that Acosta (1987 [1589]: XIX, 351) states that children from the ages of 4 to 10 were sacrificed at times of war to ensure an Inca's victory. This age range equates with the ages of the Capac Hucha children excavated at Llullaillaco and elsewhere (Reinhard and Ceruti 2010; 2015) and likely for the Chillón Capac Hucha sacrifice.

Ayar Auca represents an Inca founding warrior ancestor, and was either the immediate or second sibling of Manco Capac, whose sacrifice formed the lithified boundary marker, in which this deified ancestor was commemorated through lithification (Lau 2016) thus legitimising Inca claim to the lands around Cuzco. Likewise, the ancestor *Capac Hucha* child sacrifice at the boundary marker in Canta

territory legitimised Huascar's and the Yauyos' claim to the coca lands of Canta, with the child sacrifice mirroring the events around the culture hero ancestor Ayar Auca taking of Cuzco.

In their definition of the term Capac Hucha, Urbano and Duvoils (1988), perhaps fancifully postulate that this form of sacrifice incorporated an element of obligation and the proxy presence of the Inca himself contained in the gesture of sacrifice of the victim as a substitute subject of the sacrifice of the Inca himself. They particularly reference Cristóbal de Molina who used two Quechua terms to designate the ritual, comprising capacocha and cachaguaes or cachguaco. They interpret this use of the terminology as being purer and less influenced by Christianisation. Urbano and Duvoils (1988: 120-121, note 143) make a connection between the term Hucha with a messenger. Furthermore, Cristóbal de Albornoz equates the word ceque with cachauis (1988). Considering that Quechua was not a written language and the overlap and running on of words from one to the other frequently occurred in sixteenth and seventeenth century Spanish texts (Rowe 1979), the terms cachaguaes and cachauis are likely to be one and the same, including the same vocalisation of the same word. On some level therefore, Capac Hucha and ceque have an overlapping meaning (Zuidema, 1982: 431), insofar as both terms incorporate the process of movement or pilgrimage along a designated path or strip of land towards a given goal or location.

It is Santo Thomás's reference to boundary or limit as *ceque* which is particularly noteworthy because of its association with *Capac Hucha* as referenced by Molina. *Capac Hucha* has also been translated as 'great sin' or 'sin of the Inka' (Rostworowski 1967-8; Zuidema 1989). Urbano and Duvoil argue ponderously that the meaning of *hucha* as sin is a colonial change to the term's original pre-conquest meaning and that it is related to terms such as *cachagues, cachaguaco* which has a meaning of messenger and confidant (Urbano and Duvoils 1988: 120-121, note 134).

What may be an archaeological example of the deployment of *Capac Hucha* in conquest is presented by evidence for conflict identified at Kuelap in Chachapoyas. This site was established during the Late Intermediate Period (AD 1000-1400) and associated with the Chachapoya culture of this eponymous area of Peru. The place was included in the region under direct control of the Inca empire during the later prehistoric period. The site has produced significant evidence for violence of an apparently genocidal nature on a group of at least 106 individuals. The remains have been dated to the later pre-Hispanic or early Spanish colonial period with a Late Horizon date being deemed most likely. The group was composed of a third (30.3%) being new-borns to older children (0-10 years of age) and 56.6% being young adolescent to young adults with the remainder being middle adult or older. Where gender could be established (56 of the total) 87.5% were male and 12.5% female. Virtually all the dead exhibited evidence of blunt force trauma, almost certainly the result of impacts from star-shaped mace-type weapons, with most of the adults having such impacts to the front of the skull and most of the children having these to the back of the head. This assemblage derived from the '*plataforma circular*' area of the site, possibly comprising a temple locale, representing one of two elite sectors associated with Kuelap. The bodies had not received any form of formal burial, but the walls of the buildings in this part of the site had been brought down on top of them and the sector showed evidence of having suffered a violent death were uncovered from house floors in the vicinity of the principal entrance to the site. The second elite part of Kuelap the 'Pueblo Alto' area has no such evidence for violence from the bodies found there, although there are indications for this part of the site also having been burnt. It is at this location that the remains of an Inca *Capac Hucha* type child burial have been identified (Marla Toyne and Narváez Vargas 2014: 341-358).

Additionally, it should also be noted that several of the surviving native Andean warriors who were present at the events at Cajamarca, which led to the capture of Atahuallpa, in their witness statements in a *pobranza*, described the Spaniards who had landed on the coast as 'capacochas' (Guillén 1974: 7, 20 62-3). While this might be down simply to Spanish misinterpretation of what was being said to them, especially around the significance of the word 'capac', it may also be a reference which in this context signifies the qualities of threat, menace, conquest and appropriation revealed in the unfolding of the Spanish arrival.

Finally, the economic and social foundation of the Inca state was based on the agricultural cycle. Symbolically this could be seen at the start of the agricultural cycle in the role of the *sapa* Inca, the Inca ruler, who was at the apex of Inca society and its subject groups. In this position, the Inca stood as a son of the Sun, and a semi-divine mediator between the people and the *huacas* and deities. In the month of August, *chacra yapuy quilla*, the Inca personally initiated the farming round on a field in Collcampata or Sausero by commencing the yearly ploughing with a gold tipped foot-plough, correspondingly 'disembowelling the earth so that it could give fruit'. The royal party sung *haylli* throughout this ceremony, a song of triumph reserved for warfare and agriculture (Figure 2).

The Inca conceptualised agriculture as waging war on the earth (Bauer 1996: 327-332; D'altroy 2015: 405; Garcilasco de la Vega 1723 [1609]: II, 133; Platt 2009, 43; Guaman Poma 1980 [1583–1615]: 250 [252]). In this sense, warfare can appear as gendered with both the earth and the enemy epitomised by the female other (Classen 1993: 57). In the Andes, the earth as the Pachamama was and is itself female. Andean mythology in its accounts of agricultural soil fertility, abounds with stories in which children are rent apart and in which agriculturally important plants rise to flourish from their remains (Gonzalez 1992: 242). Likewise, defeated

enemies could play a similar role as shown by Atahuallpa who had Cañari warriors planted on the battlefield on which they had been defeated as if they were plants and trees '*puestas a manera de plantas y arboles*' to see what fruit they would bear (Niles 1999: 64). There is also the aspect of mallki to be considered in this context where we have an equivalence between ancestral mummy and plant or tree (Sherbondy 1988). That said, it seems unlikely that Atahuallpa will have wanted to encourage the emergence of Cañari ancestors here, although the link between planting and fertility is still enticing.

The link between the agricultural cycle and warfare is further reflected in the timing of Inca warfare. The campaigning season tended to be limited to the agriculturally quiet times of the season. It has often been remarked upon that Manco Inca's troops during the siege of Cuzco dwindled away as the seasonal cycles to work the fields arrived. This has been interpreted as being the result of most of the professional Inca soldiery having been decimated in earlier encounters and Manco by now being dependent on a subscripted farmer militia (Hemming 1970, 205). In fact, this farming militia formed the backbone of Inca armies, and warfare would have been unusual to have taken precedence over agriculture in a society where the latter was considered critical to the functioning of society and the endurance of the state .

For the Andean farmer agriculture is anchored in a range of different, more or less distant ecozones with varying agricultural cycles and demands for labour input, resulting in a multi-cyclical system. The dispersed agricultural field patterns result in interdomestic unit collaboration in which labour was shared by various families as an when the diverse agricultural cycles across the fields demand such (Golte 1980, 25-9). Therefore in pre-Hispanic times during periods of low labour demand with respect to agricultural and animal husbandry cycles, there would have been time to devote oneself to tasks such as warfare (Golte 1980, 64). Seasonality associated with campaigning would not have appeared unexpected to the Spanish soldiery as it was similarly a characteristic of warfare in contemporary Spain and indeed Europe (White 2002: 5-6) albeit there based on a more generally monocyclical agriculture system.

Finally, and as previously mentioned, the common scheduling of Inca assaults to coincide with the advent of the full moon and personal participation of the Inca himself in combat at the rise of Venus as the evening star further connects Inca combat with the periodicity marked out by agricultural labour (Lamana 2008, 128-32; Ziółkowski 2015, 335-337).

#### The organisation of war and battlefield

The logistics of planning for war for the Inca included the acquisition of intelligence, which if the subject area following this and diplomatic overtures proved reluctant to be subsumed by the Inca would be followed by the construction of roads and bridges as necessary to expediate access for the Inca soldiery. Storage facilities for supporting troops with weapons and food as well as prestige goods were constructed and filled.

All these actions required divinations, rituals and sacrifices which had to be carried out, including the drafting of troops as well as arrangements being made to cover their agricultural duties. The route from the communities from which the troops were mobilized to the staging area for the planned attack would need to be prepared with rest and supply points. The communities responsible for provisioning the troops along their line of advance would also need to be marshalled. All of these arrangements were managed by Inca administrators known as *yupanakuy*, with the accounts so prepared, of duties fulfilled and owed being recorded by designated khipucamayoc. (Szemiński 2021, 11-12, 162-65).

Planning for war for larger campaigns could be a long and arduous process. Particularly the replacement of the labouring portion of troops in agriculture could be a complicated and lengthy affair. The agricultural communities managed large numbers of crops across multiple microenvironments. It is estimated that in the Andes in pre-industrial times on a five-year agricultural cycle two years produced a surplus, whereas the other three required making use of reserves produced in the two good years (Szemiński 2021, 10). The substitute workforce to work the fields now abandoned by the soldiery as well as the supplying of the troops while campaigning, and the replenishing of the reserves used for this purpose all had to be carefully organised and recorded.

In the main, Inca troops comprised a militia army and for Inca subjects often the only option for social mobility was through joining the ranks of this militia (Cobo 1895: 192). Capoche in his account on Early Spanish colonial mining practices in Bolivia states that the Hanan or upper moiety served as soldiers in war, while the members of the lower Hurin moiety were retainers responsible for logistics (Bauer 1992: 125-6; Capoche 1959 [1585]: 140). There are however no other documented references to such an operational division deriving from Andean dual social structure.

Their soldiery was apportioned into groups armed with the same equipment, such as troops of archers and troops with slings. They used musical instruments such as flutes, trumpets, and drums to encourage the warriors and intimidate the opposition, while their leaders and captains would join battle carried on litters from where they would direct the clash of arms and encourage their warriors (Cobo 1895: 196-7). A soldier's reimbursement comprised food, drink, and clothing as well as a supply of arms, with the added advantage that while they served the army, their home, fields, and kin would be looked after by the Inca state and in practice by the remaining population in their area of origin (Cobo 1895: 192-3).

Similarly, the role of women in Inca warfare appears to have been primarily related to logistics, with both women and children known to have been present in large numbers in Inca army complements. On campaign, married women carried the food and chicha for their men and prepared their meals (Pizarro 1978 [1571]: 239). The role

of Mama Guaco in the Inca battle referenced in the legends around their settlement and taking of Cuzco (see above) flags up the possibility of female Inca warriors. There is also a reference to chañan cori coca, a widow who is said to have heroically fought the *Chankas* as a soldier in Inca Yupanqui's *Chanka* war (Pachacuti Yamqui 1993: 220). As a rule, women and the feminine role in Andean thinking reflect the social order in complimentary opposition to the male element mirroring the antisocial order as in warfare (Martínez 1995: 172-3), albeit that an inversion of such roles at times of conflict would fit Andean thinking in such matters. There is one elite female Moche burial from El Brujo of the 'Señora de Cao', which was accompanied by warclubs. Though the latter could be interpreted as an elite female warrior interment a variety of alternative explanations not necessarily related to a role in warfare are possible. It must be noted that evidence for the existence of female warriors in a pre-Hispanic Andean context remains very limited, although there is recent evidence for women hunting (Haas et al. 2020).

While the role of women in providing victuals and assisting with transport for the troops on campaign duty has been flagged above, the transport of supplies was primarily carried out by llamas. As a beast of burden these can carry burdens of up to 30 kg over maximum distances of circa 15-20 km and at a push up to 30 km per day. Llamas can go without feeding or water up to 3 to 5 days. It is possible that at the time of the Inca's more robust breeds of llamas existed which could have carried somewhat larger loads over longer distances based on some of the data provided on this topic by early Spanish sources (Bonavia 2008: 416-24) and archaeologically by the discovery of a 'super' llama (Wheeler et al, 1995). To manage and lead one handler or *llamero* per fifteen to twenty animals would be required (Bonavia 2008: 424; Bram 1941).

The most effective operational advantages of the Inca armies over their adversaries comprised the outstanding road network (Capac Ñan) with its associated bridges and roadside lodgings or support structures (Hyslop 1984) as well as the extensive storage facilities available to supply troops on the move (Bram 1941). This road and storage network not only facilitated the deployment of Inca troops in the areas they were required, but it also symbolised Inca military supremacy across the conquered territories to those who resided there (DeMarrais et. al 1996: 29). Nevertheless, Inca armies were slow, averaging between 15 to 20 kilometres per day, in comparison foot soldiers of the Third Century AD Roman army averaged 30 kilometres per day, attaining between 40-45 kilometres on forced marches. Guaman Poma lists the weaponry and equipment used by native troops comprising lances, clubs, slings, axes, pectorals, helmets, shell trumpets and pan flutes (Guaman Poma 1980 [1583–1615]: 64 [64]). These paraphernalia of war would have been perceived as possessing their own agency (Nielsen 2009: 233; Quilter 1990).

That said, most conflict in the Andes was at relatively close quarters. Melee weapons were short and usually blunt, most pre-Hispanic weapons injuries were

blunt trauma ones, as noted bioarchaeologically (Kurin, 2016). Even range weapons had short ranges (see Table 1). This meant that battle very quickly settled into hand-to-hand melee, it also explains why indigenous and Inca battles tended to be mass attacks in which close-set formations first discharged all their range weapons and then enjoined in mostly one-to-one fights (Hemming: 187-188). The short range of indigenous weapons might also partwise explain why women and children were so often close to battles and thereby captured, given that it was possibly relatively safe to be within 100 m of battle since the weapons used did not have that sort of range. For instance, during what the Spanish termed the Second Inca Rebellion (AD 1537-1539) against Pizarro's men, Manco Inca's principal wife or *coya*, Cura Ocllo, was captured following a skirmish (Hemming 1970: 244)

Table 1: Effective range of diverse indigenous weapons From, Chamussy 2012 and Churchill 1993

Range Weapon	Effective Range [m]
Thrown spear	4-8
Atlatl	35-45
Bola	12-15
Slingshot	7-17
Short bow	17-45
Blowpipe	30-40

Therefore, it is hardly surprising that before battle the army leaders would extol that in the coming fight women and children would be taken as booty (Guaman Poma 1980 [1583–1615]: 78 [78], 61). The capture of women and children, who were subsequently absorbed into the ranks of the victor's group, would frequently be the principal objective in conflict among small-scale decentralised non-western societies (Keeley 1996).

The use of pectorals has been interpreted as alluding to the Andean sun god (Rex González 1992), thereby confirming a link between this deity and warfare (Nielsen 2009, 228). Pachacuti Yamqui (1993: 216; Nielsen 2009: 226-8) describing the warriors of Inca Yabar Uaca asserted that these were dressed and embellished with feather plumes, pectorals on their chests and back armour of gold, silver and copper for protection against arrows and spears. Likewise, Guaman Poma in his work illustrates many warriors equipped with such pectoral disks (Guaman Poma 1980 [1583–1615]) (Figure 3). Estete (quoted in Guillén 1974: 155) notes that not one of the 50,000 Inca troops at Cajamarca (in 1532) was without a copper, gold or silver paten (pectoral) on their chests.

These brightly arrayed militia troops were organised according to the Inca decimal system in incremental groups of 10, 100, 1,000 and 10,000, each subdivided into two and led by their respective leaders. This last point is important. Andean so-

cial organisation was highly dualistic (Yaya 2012), and this translated into all facets of society including the army. This is why there are usually two leaders named at all levels of military organisation within the Inca army. For instance, during the Inca Civil War, Atahuallpa called on the services of his father's successful northern campaign generals, Chalcochima, Quizquiz, Rumiñavi and Ucumari, while his brother, Huascar, relied initially on Atoc and Hongo. After these last two were captured and executed by Atahuallpa, Huascar raised a new quadrumvirate of generals, Guanca Auqui, Ahuapanti, Urco Guaranca and Inca Roca (Lane 2022: 144, 147-148). They were also executed following Huascar's defeat.

Identity formed an important motivating aspect towards rallying the troops. When general Inca Yupanqui prepared his forces for battle against the Wanka, he appeared before each of his varied native troop contingents attired in their specific ethnic dress to share a feast and drink with them. This ritualised sharing of food and beverages as well as appearing as kin served to reaffirm his affinal status with them and their joint reciprocal duties and obligations (Kolata 2013: 221). This was read by the different parties as a literal kin association (Kolata 2013: 222) and implied a transference of status which would be taken as a very serious offence indeed if carried out by someone not entitled to this shift. The wearing of traditional clothes or donning a hairstyle not of the ethnic group an individual belonged to, was punishable by death in a pre-Hispanic Andean ethnic context.

The *sapa* Inca also used to dress in the native clothes of a given district when he visited them. The importance of dress in this context emerges from Zarate's account of the conquest, which notes that when Quizquiz had to withdraw suddenly, he left behind 15,000 llamas and 4,000 prisoners, but burned all of the cloth which he could not carry, while one of Atahuallpa's captains, Rumiñahui retreating before Sebastian de Benalcazar, burned a room-full of fine cloth to keep it from being captured. (Murra 1962: 718; Zarate [1555], bk. 2, ch. 12; Garcilaso 1723 [1617], bk. 2, ch. 14; 19). Prisoners when represented in Moche pottery are consistently shown naked, with a rope around the neck. Though not portrayed in the nude, Guaman Poma in his depictions of prisoners displays these consistently with a rope around the neck. Cloth is known to have been used to cover, receive and move the sacred essence of huacas from one place to another (Albornoz 1988: 196). It seems therefore that cloth and clothing was perceived as containing of the essence of the wearer and that it would therefore be of importance to avoid it falling into the hands of an enemy as it could then be manipulated to the detriment of the original owner.

The chronicler Cieza de Leon notes that the use of noise by native troops and the baiting of Spaniards and their native auxiliaries with derogatory comments was a prelude to giving battle (Cieza 1998 [1554]: LXXXIV). Trumpets, panpipes and drums were used, the trumpets, which were made of shell, bone or metal, were believed to represent and symbolize the sound of the huacas themselves and thereby to constitute a powerful weapon in their own right (Nielsen 2009: 229-31). The slingshot used to launch stone projectiles could also be used to make a loud cracking noise, similar to a whip. The Spanish, in their early encounter with Inca troops, experienced these aggressive, theatrical exhibitions, for instance during Atahuallpa's entrance into the plaza at Cajamarca in 1532 (Anonymous, Miguel de Estete? 1534, 294–95):

"...ansí comenzaron a entrar por la plaza hasta trecientos hombres, como mozos de espuelas, con sus arcos y flechas en las manos, cantando un cantar no nada gracioso para los que lo oíamos, antes espantoso porque parecía cosa infernal"...<sup>4</sup>

Further, the importance of sound comes to the fore in an account by Pachacuti Yamqui Salca Maygua of the final battle between Atahuallpa's captains and Huascar and their respective troops, where during a night attack, while Huascar was asleep and his soldiers were dreaming, the vanguard of Atahuallpa's troops comprised 40 mute warriors (Nielsen 2009: 230; Pachacuti Yamqui Salca Maygua 1993: 264-5). Their deployment has been interpreted as resulting from these warriors having a natural protection against the hazardous and mighty sound of war trumpets that accompanied the attack (Nielsen 2009: 230), albeit that alternatively one ensuring that the attack took place in silence is perhaps more likely.

Francisco de Xerez describes the battle order of Inca troops in detail:

'Las armas que se hallaron con que hacen la guerra y su manera de pelear es la siguiente. En la delantera vienen honderos que tiran con hondas piedras guijeñas lisas y hechas a mano, de hechura de huevos; estos honderos traen rodelas que ellos mesmos hacen de tablillas angostas y muy fuertes; asimismo traen jubones colchados de algodón- tras destos vienen otros con porras y hachas de armas; las porras son de braza y media de largo, y tan gruesas como una lanza jineta; la porra que está al cabo engastonada es de metal tan grande como el puño, con cinco o seis puntas agudas, tan gruesa cada punta como el dedo pulgar; juegan con ellas a dos manos; las hachas son del mesma tamaño y con ellas de dos manos, de un palmo como mayores; la cuchilla de metal de anchor de un palmo como alabarda. Algunas hachas y porras hay de oro y plata, que traen los principales; tras estos vienen otros con lanzas pequeñas arrojadizas, como dardo; en la retaguarda vienen piqueros con lanzas largas de treinta palmos; en el brazo izquierdo traen una manga con mucho algodón, sobre el que juegan con la porra. Todos vienen repartidos en sus escuadras con sus banderas y capitanes que los mandan, con tanto concierto como turcos. Algunos dellos traen Capacetes grandes, que les cubren hasta los ojos, hechos de madera, y en ellos mucho algodón, que de hiero no pueden ser más fuertes' ((Xeres 2003 [1534]: 33-34).<sup>5</sup>

<sup>4 &#</sup>x27;...and therefore, they started entering the plaza up to three hundred men, like pages, with bows and arrows in their hands, singing a song that was not good to those that heard it, it was horrible and seemed like an infernal thing...' (authors translation).

<sup>5 &</sup>quot;The weapons with which they make war and their way of fighting is as follows. Up front come slingers who discharge smooth, hand-made pebbles with their slingshots, the size of eggs; These slingers bring shields that they themselves make of narrow and very strong boards; and they wear cotton quilted doublets. – these are followed

Bernardo de Vargas Machuca notes that night attacks by native warriors were a common tactic as was the use of ambushes, commonly in ravines or at rivers, or in (agricultural) fields where Spanish troops might wander to collect food (de Vargas Machuca 2008 [1599], 121) or any place where there were heights (from which boulders could be rolled down slope) or arduous terrain or near water supplies (for the troops and their horses). De Vargas Machuca advised sending servants out to gather provisions rather than soldiers. The native contingents often set fire to grassland or reed beds to drive the Spaniards out, against this tactic de Vargas Machuca (2008 [1599]: 111-126) suggested the use of counter fires to flush out the natives themselves.

According to De Vargas Machuca the natives were led into combat by their captains, in attack they engaged making considerable noise both vocally and using instruments such as trumpets, horns and drums, their formations (contrary to some of the details given by Xeres in his relation of the order of battle of the natives) were led by warriors with lances and shields which were followed with those with darts and slings, the first lines crouching down to allow the latter to launch their projectiles. Perhaps the difference in deployment of men armed with lances in the front files as reported in later writings of De Vargas Machuca, was in response to the Spanish use of cavalry to resist their charges and also the need to protect missilethrowers. Their formations tended to be crescent shaped, given the proclivity to constantly seek to either encircle or outflank their foe. For instance, at the Battle of Quipaipán (April 1532), during the Inca Civil War, Huascar's troops attack led by Topa Atao, his brother, were lured by the Atahualpan general Chaclochima into an attack on his flanks causing a mini-Cannae in which the Huascar's troops were defeated. Warriors armed with bows and arrows would also carry clubs for close quarter engagement. When facing the Spanish, they would aim to capture Spaniards dead or alive prior to carrying them off (de Vargas Machuca 2008 [1599]: 124-130).

Their tactics on the field of battle comprised of charging in a throng while making much noise and uproar to intimidate the opposition, with little or no order being maintained in their squadrons (Cobo 1895: XIV, chap IX, 192-8). It seems that though coherence and organisation of groups of warriors prior to any engage-

by others armed with maces and axes; the maces are a foot and a half long, and as thick as a short lance; the head is stuck to the top of the handle and is made of metal and is as big as the fist, with five or six sharp points, each point is as thick as a thumb; they fight with these two-handed; the axes are of the same size and with these too they fight two-handed; they are of a span of a hand, with the metal blade being the width of halberd. Some axes and maces are made of gold and silver which are those caried by their captains; behind these come others with small throwing spears (spear throwers), like darts; in the rear come pikemen with thirty-foot long spears; on the left arm these have a sleeve covered with a lot of cotton, in which hand they carry maces. They all come divided up into their squads with their banners and captains who command them, with as much noise as the Turks make. Some of them wear large helmets, which cover their heads up to their eyes, made of wood and with within them a lot of cotton, those of iron could not be any stronger' (Xeres 2003 [1534]: 33-34) (translation the authors).

ment would be observed this would soon break down once battle was joined, with melee fighting becoming essentially combat between individual warriors (Bram 1941; Cobo 1895: XIV, chap IX, 192-8; de Vargas Machuca 2008 [1599], 129-131; Garcilaso de la Vega 1723 [1609]).

Albeit attempts at coordination were certainly made as is evident from the Inca army at Cajamarca, which deployed smoke signals to manoeuvre troop elements (Betanzos 1987 [1551-7]: Cap X, 44). Relatively complex messaging may have been possible using smoke signals during the day and flares at night, as is indicated by Garcilaso de la Vega in his description of messaging between *chasqui* posts when conveying information on local unrest and rebellions over long distances (Garcilaso de la Vega 1723 [1609]: book 6, chap VII, 181). During assaults on fixed enemy positions, installations or fortresses, Cobo (1895: XIV, chap IX, 192-8) notes that native troops used shields, some of which were large enough to protect up to 100 warriors, a native variant on the Old World Roman testudo. Therefore, some limited tactics specific to siege warfare were available and utilised by Inca warriors. Attacks under the cover of night could sometimes occur as confirmed by Francisco Conapariaguana, cacique of Guarapa in a statement dating to 1562. Here he notes that among the duties of warriors provided for guard duties in Inca fortifications it was expected from these that they provide firewood to facilitate the keeping watch over the defences at night (Szemiński 2021, 279). Whether in day or night attacks, shield tactics such as that flagged above enabled large numbers of troops to approach a fortified position and overwhelm resistance through direct assault and sheer weight of numbers.

On the subject of fortifications, Guaman Poma identifies an epoch of warfare (*auca runa*) when many fortresses were built and there was much bloodshed (Figure 4), this would seem to be a reference to the turbulent Late Intermediate Period (Platt 2009: 40), especially the second half of this period between AD 1250 and 1400, as defined by Arkush (2011), when there was an incremental rise in the construction of fortified hilltop settlements (known as *pukaras* across the Andean highlands. Though garrisons were maintained along the frontiers in *pukara* or fortresses and in fortified settlements in troublesome provinces, with the Incas maintaining a standing army (Cobo 1895: 192-3), this standing army mostly comprised a *mitimae* peasant militia as much engaged in food production as fulfilling the role of warriors as part of their provincial tribute duties.

A small cadre of professional troops were available to the Inca, these were usually composed of Inca nobles (Rostworowski 1999: 91). Siege warfare in the Andes appears to have been a relatively rare occurrence (Arkush and Stanish 2005: 9), and native fortified settlements were not suited to long-lasting sieges. Their defensive walling often restricted access only along the sides of a site where entry otherwise would have been easy, impeding ingress but not rendering it impossible for a determined foe, frequently these defensive walls were associated with chullpas, tower like structures for placement of the ancestral dead apparently to ensure their protection against any assault by men as well as the antagonists ancestors, huacas and deities (Nielsen 2009: 233). Facilities to store or procure water were often lacking at such sites. Fortified positions tended to be taken by storm or subterfuge.

Indeed, the pattern of Inca attack during the Siege of Cuzco (1536-1537) belies the effective extent of the investiture of the city by native troops. Throughout the whole siege, Spanish horsemen were able to sortie out for provisions in the area adjacent to the city, capture prisoners and return (Hemming 1970:197-199, 210-211). This shows that effective encirclement was not part of Inca siege core strategies, rather a loose area of interdiction was maintained by the native troops, while these same troops were amassed in sporadic assaults on the city itself, none of these succeeded in breaking down Spanish and Spanish-allied native resistance.

That said, regional differences between defensive installations existed, which besides temporal origins also manifest the choices made by different ethnic groups. For example, the upper Chicha Soras valley was on the boundary of three such ethnic entities, the Soras, Chanka and Aymara, who each opted for distinct forms of *pukara* or fortresses. The distribution of these high-altitude mountain and ridgetop fortified sites is focussed on the east side of the Chicha Soras River, comprising Aquimarca, Puyca, Chuntaya / Jasinchilla and Qasinchilla; all fortified agglutinated settlements effectively along what was the southwestern boundary of the Chanka's territory, during the Late Horizon & early Spanish colonial period. While Uchuy Umay and Ccanchu were more open settlements on defensive mountaintop mesa locations along the western side of Ayamara lands at this same time. These differences in *pukara* construction and the boundaries they represent likely extended back well into the Late Intermediate Period.

Similarly, the west side of the Chicha Soras River, along what would have been the eastern margin of the Soras domain, did not require this type of site. That is not to say that defensive aspects were totally lacking from these Soras polity sites. Both mid-valley Chiqnajota and Qasapampa / Qasamarca have undefended lower lying settlement as well as defended hilltops, while Apuraccay, Cupo, Aputaycca and Montaccahua further north are all mid-valley sites strategically emplaced on hilltops. However, all these Soras topographic features with the exception of Qasamarca are comparatively small and none are large altiplano mountaintop fortified agglutinated settlements. What distinguishes the Chanka from the Aymara fortified settlements further south is that the former exhibit denser agglutinated house structures and more noticeable defensive walling than the Aymara equivalents. Some of the defended Chanka mountaintop sites further to the northeast, such as Achanchi identified near Andahuaylas show a similar fortified agglutinated settlement pattern (Bauer, Kellett and Aráoz Silva 2010: 77, Fig 6.3, 81-3, Fig 6.6; Meddens et al in prep).

The spoils of war

The Inca treatment of prisoners captured in warfare varied immensely, depending also in what type of warfare the prisoners had been captured, for instance through conquest or rebellion. An apparently common practice was the release of those captured and conquered with the expectation that such people would in turn become subservient and productive tribute payers. Common war prisoners, but especially captured enemy captains and war leaders, were initially taken to Cusco where they would be paraded in triumph (Figure 5). Such captives could also be executed with their skins taken and used as drum covers with their skulls converted into drinking vessels (Guillen Guillen and Lopez Mendoza 1980: 286-7).

In the Andes, the taking of trophy heads had a long pedigree, being practiced among the Paracas, Moche, Wari, Tiwanaku, Nasca, as well as in other cultural settings (Nielsen 2009: 228-9; Tung 2012: 156). During the war with the Chanka, Juan de Betanzos reflects that Ynga Yupangue took prisoners, tied them to stakes and then decapitated them, with their heads then impaled on top of the stakes. Their bodies were burnt, and their ashes thrown to the wind from mountain tops. This burning was crucial, as by this process it would be impossible for the dead person to become an honoured ancestor or *mallqui* and thereby continue in this new form to present a threat to their conqueror. Some of the enemy fallen appear to have been left on the field of battle to be scavenged by birds and foxes (Betanzos 1987 [1555-7]: cap X, 45), which similarly appears to have precluded these dead from becoming *mallqui*. Albeit that, these fighters probably represented the non-elite warriors who would have been less likely to take the role of revered ancestors or *mallqui*. Furthermore, it may be that the specific punishment applied was subject to the perceived transgression of the prisoner.

There are hints in some of the early chronicles as to the nature of the expectations among defeated native warriors in what they anticipated in terms of their revised status following defeat. Garscilaso de la Vega notes that Indigenous warriors would dedicate their service to the Spanish invaders when defeated on the battlefield. The loyalty of such warriors would be to the individual Spaniards who had vanquished them. In his account, Garscilaso de la Vega demonstrates this by stating that when captured warriors were distributed among the Spaniards for personal service following a battle, that such warriors would be very reluctant to serve Spaniards other than the one(s) who captured them. They would only go willingly to serve another once agreement was reached that following capture of further warriors to replace them in service, they could return to the service of their original captor. He further illustrates this by telling the story of servants of his father among whom was one who had entered his father's service following a battle. This warrior had been hiding among the dead on the battlefield and Garcilaso de la Vega's (father) had been looking at some of the fallen on the field of battle, when he had perceived some movement among them. He had then touched the individual (he saw moving) with his lance, who then emerged from among the dead and who then dedicated

his life in service to Garcilaso de la Vega's father (Garcilaso de la Vega 1723 [1609]: book I, chap XLI, 55). In this regard, touching or being touched, in particular on the leg of the victor, with the foot placed on the neck appears to have been linked with submission and an expression of allegiance by the vanquished to the victor.

This personalised form of loyalty seems to have translated itself to higher order organisation such that a conquered *ayllu*, *llacta*, chiefdom or even provinces subsequently owed its loyalty to the specific *sapa* Inca that had conquered them. The veracity of this seems to be borne out by the numerous rebellions and reconquests of recalcitrate groups and provinces that inevitably flared up following the death of an Inca and the ascension of his heir (Pärssinen 2003, 71–73).

The Indians captured during previous battles showed great loyalty to their Spanish masters during the Siege of Cuzco, including carrying out re-supply missions of foodstuffs and spying during the battle (Garcilaso de la Vega 1723 [1609]: book II, chap XV, 99). During surrender the native soldiers would kiss the right leg of their vanquisher, thereby demonstrating their submission, their dedication and further loyalty to their captor (Garcilaso de la Vega 1723 [1609]: book II, chap XVII, 104). It is highly likely that this tradition had pre-Hispanic roots and that this was a way in which the Inca swelled their ranks with faithful servants. The personal link between victor and vanquished may derive from the individualised aspect of Inca confrontations on the battlefield, where troop coherence appears to have been quickly lost in melee as opposing forces clashed. Battle (as noted above) would then unfold in mostly discrete encounters between individual warriors. The battlefield was a place where kin and others could potentially be transferred to the realm of the dead, and therefore where an individual warrior could experience proximity to this liminal threshold, and with it to the ultimate state-of-becoming an ancestor (Nielsen 2009: 242).

Following the Chanka conflict, the Inca troops made a triumphal entry into Cuzco arranged in their squadrons, excellently kitted out and accompanied by dancers and musicians, parading their captive prisoners with their eyes cast on the ground, dressed in large robes with numerous tassels (to make them look ridiculous). In front of the Temple of the Sun the triumphant troops arranged the spoils and prisoners on the ground. The Inca passed over them stating, 'I have walked on these prisoners,' while the prisoners remained silent without razing their eyes (Sarmiento de Gamboa 2018 [1572]: XXXII, 216-7), this ceremony served to reinforce their subjugation. These symbols of surrender and submission in the Inca context therefore appear to include acceptance of service and obligation on the part of the vanquished. In this context, hair appears to have been a significant attribute of all Indigenous warriors, with its loss presaging loss of prestige. Betanzos notes that vanquished warrior had their heads shorn following defeat (Betanzos 1987 [1555-7]: Cap X, 44).

## Spanish colonial warfare

What is clear from the various early accounts is that while initially overwhelmed, the Indigenous population rapidly attempted to adapt to the new Spanish foe and his unfamiliar weapons and tactics. Indeed, according to de Vargas Machuca, indigenous forces would seek to attain significant numerical superiority at the point of contact. In open battle the Spaniards tended to gain the upper hand, his reasons for this were that Spanish soldiers were aware that for them once battle was joined there was little chance of either relief or retreat. The Spaniards would often secure victory by being able to choose the battle site, and then by their superiority of arms, use of cavalry and their esprit de corps prevail. In this case, esprit de corps refers to their discipline, order and battle tactics (Vargas Machuca 2008 [1599]: 124-130). This is a critical distinction, while the indigenous army were mostly lightly trained peasant militia, many of the Spanish troops tended to be hardened veterans, mercenaries and adventurers, often with crucial knowledge of European warfare or experience of the Conquest of Mexico (Lockhart 1972).

Nevertheless, indigenous tactics adapted to compensate for their shortfalls. For instance, after first equating cannon and arquebuses as earthly manifestations of the lightning deity (Hernández Lefranc 2007), the indigenous quickly learned to be wary of them, especially the cannon and their propensity to use *langrel* or canister shot. A type of shot common in ships and used to great effect to bring down sails. *Langrel* shot was a primitive type of shrapnel shot made from horse's iron horse-shoes and odd pieces of metal, while it had a much shorter range than cannonballs it could inflict heavy casualties at close range. It is possible that the two falconets employed at Cajamarca (1532) used *langrel* given the tightly packed Inca soldiery, and the reported numbers of native casualties.

Other examples include the use of staked pits against cavalry in the battles around Quito (Cieza1998 [1554]: LIX,f75v, 77v, 78, 278-281), the deployment of fire against Spanish troops and their auxiliaries in Chachapoyas (Cieza 1998 [1554]), as well as use of captured horses and muskets at Tambo against Gabriel de Rojas and his men when he had set out to Jaquijahuana to seek provisions for the besieged Spaniards in Cusco, at the time of Manco Inca's struggle to drive them from the Inca capital (Cieza 1998 [1554]: C, Herrera V, 8 VI/ VII, 458). This last innovation was taken to its logical conclusion at the Battle of Ollantaytambo were a horse-bestrided Manco Inca led his men armed with captured swords, bucklers and even arquebuses against the Spanish (Hemming 1970: 208-209).

Cieza states that during the encounter at Jaquijahuana the native troops acted more disciplined than was the norm previously, advancing in closer order using their projectile weapons (darts, slings and arrow) in a coordinated manner. The Incas during this encounter also replaced worn-out troops with fresh warriors and retreated in fighting order when this became necessary (Cieza 1998 [1554]: C, Herrera V, 8 VI/ VII, 458). It was only when Rojas succeeded in outflanking the native troops and attacked them in a pincer movement that the Spaniards succeeded in

overcoming their opponents on this occasion. Armed native resistance to the Spanish dominance rapidly evolved into forms of asymmetrical warfare with ambushes, night attacks where the element of surprise was essential, becoming the most commonly used approaches. An oft-used tactic was rolling boulders onto Spanish troops advancing on narrow paths through the mountains. During what the Spanish termed the first Inca Rebellion (1536-1537), two separate columns of Spanish soldiers, respectively 70 and 60 horsemen were ambushed and destroyed by the Inca general Quizo Yupanqui as these troops marched to relieve the Siege of Cuzco (Lane 2022: 153) using a combination of this innovative tactic combined with assault of the disorganised and disoriented survivors.

Nevertheless, aside from isolated triumphs, the first few decades of indigenous-Spanish warfare were an uneven affair in which invariably the natives suffered. This was compounded by the propensity for the Inca and their generals to lead from the front. This was a fateful error against the steel and horse-armed Spaniards. At the Battle of Lima (1536), after strategically occupying the high ground around Cerro San Cristobal, the Inca leadership decided to offer Andean style pitched battle against the Spanish ensconced in the town. In this assault the Inca general and his forty captains charged at the head of their troops the Spanish positions, once decimated, the rudderless native troops fled the field leading to a complete Spanish victory (Hemming 1970: 203-206). On this particular issue the Inca were slow on the uptake with Manco Inca himself narrowly escaping capture a number of times. Indeed, his son – Tupac Amaru – the final Vilcabamba *sapa* Inca embraced the past in a ruinous recidivist mindset that revindicated Inca beliefs and battle tactics leading to his eventual defeat and capture at the hands of Martín Hurtado de Arbieto in 1572 (Lane 2022: 172-173).

That said, across parts of Argentina and Chile it was the rapid adoption of the horse by non-Inca natives and their light cavalry tactics which proved most effective in keeping the Spanish forces at bay well into the colonial and republican period. In some cases, such as with the Mapuche of Chile their submission to central political control had to await the introduction of the gatling gun and the repeating rifle in the late nineteenth century, being finally vanquished between 1885 and 1886 respectively in Argentina and Chile. The 18<sup>th</sup> century native Andean uprisings against colonial oppression such as the Juan Santos Athahualpa insurrection of 1742 and 1752, the Tupac Katari and the Tupac Amaru II rebellions of the 1780's and later unrest (Andrien 2001: 199-226) continued this tradition of irregular warfare, now fully aware of the advantages and limitations of native bush warfare. Ultimately, all these native resistance and uprisings were unsuccessful, but the salient fact that it took such a considerable amount of time to finally subdue all these recalcitrant groups speaks to their adaptability and versatility.

#### **Discussion and conclusions**

The authors who witnessed the conquest described native forms of combat and warfare in terms they could interpret in the light of their experiences of late medieval European military norms. They expected the actions they observed to be meaningful in the framing of their European understanding of such behaviour. There are occasional hints of the dissimilarities they observed in their reality of native warfare. What emerges from reading these early sources is that both the native Andean peoples and the conquering Spaniards with their native allies adapted their respective approaches to take into account the new realities they faced on the battlefield (Lamana 2008). The occidental framing of Andean warfare ignored much of the Andean experience, in particularly in historical readings of the conquest and the protohistoric period which continued to be fashionable until relatively recently (for example see, Guillen Guillen and Lopez Mendoza 1980).

That said, an understanding of modern scholarship of classical, medieval, and early medieval warfare can tease out aspects of Inca battle tactics and strategy. Rather than an unruly militia mass engaged in dance, display and somewhat confusing melee; a close reading of the ethnohistoric sources reveals complex strategies, tactics and especially logistics behind Inca warfare. On the latter, at the 1536 Siege of Cuzco, Manco Inca was able to amass a huge army of between 100,000 and 200,000 warriors, and during the Inca Civil War both Huascar and Atahuallpa regularly fielded armies of more than 100,000 men, even if their usual strength at the point of battle was between 30,000 and 50,000 effectives. The rest were part of the large retinue that accompanied the slow-moving Inca armies (D'Altroy 2015: 334-335).

In considering Prehispanic strategies and tactics -the performance of warthese were forced to change rapidly with the coming of the Spanish and the introduction to the Andes of their early post-medieval European style of fighting. Indeed, it is a credit to their bellic nous that the various post-conquest Inca generals and especially Manco Inca (Cuzco and Vilcabamba sapa Inca, r. AD 1533-1544) managed to adapt and continue the struggle against the Spanish even given their disparity in technology, especially in horses, firearms, and steel. In the face of these inequities, the Inca relied on asymmetrical and guerrilla engagements, effectively bush warfare, where an intimate knowledge of the landscape, stratagem and subterfuge went some way towards offsetting their disadvantages. It is also obvious, that the more overt signs of Inca warfare, the music, dancing and accompanying paraphernalia disappeared as war against the Spanish became more a matter of deception and ambuscade than of performance followed by melee. In this same context, where they could, Manco Inca's troops rapidly incorporated captured weaponry and horses into their inventory and even managed to produce their own gunpowder in the first years following the arrival of the Spaniards.

The considerable losses suffered by indigenous troops in the face of Spanish co-ordinated late medieval European tactics, often feel exaggerated and, to some extent, were likely so. The contemporary Spanish sources saw no benefit in underplaying the enormity of their achievement. It is instructive to compare the loss of life in European confrontations between trained soldiery and peasant militias of the period, where the farmers untutored in warfare when faced with experienced soldiery would often suffer disproportionate fatalities in engagements. It would not be unfair to compare such European peasant armies with the Bronze Age technology equipped Inca troops of their day. Paul Dolnstein for example claims that in a battle between German mercenaries and Swedish peasantry in the siege of Älvsborg in 1503 the 1800 Landsknechte mercenaries put most of the 15,000 farmers there to the sword (Dihle and Closs 1929), while forty knights are said to have comprehensively defeated a 9,000 strong peasant army during the Jacquerie at Meaux in 1358 (de Vericour 1872).

Reference to cosmological beginnings as the ideological basis for conducting successful warfare validated the implied support by supernatural agency (Helms 1998: 74). Therefore, the establishment of ancestral priority claims by means of combat and the conducting of a *Capac Hucha* ritual and its human sacrifice on land taken by its accompanying conquest validated and anchored the territorial claim unshakably in the here and now by its ancestral referent embedded in the *Capac Hucha* ritual.

To understand the thinking behind this it is necessary to understand Inca ideals concerning the nature and terminology of space and time. Space and time are jointly expressed in the single word *pacha*. The past is *ñawpa pacha*, the now *kunan pacha*, and the future *qhipa pacha*. Ñawpa includes a sense of anticipation; it is positioned ahead, whereas qhipa is at the back or behind (D'Altroy 2015: 139). Further, fundamental to this reading of time and space is its cyclical nature in Andean believe systems rather than the linear understanding of it as given in the occidental perception of time (*sensu* Todorov 1984).

The *Capac Hucha* by its use of children in the sacrifice expressed future potential, when in Quechua thinking the future is unrevealed behind the here and now. The sacrifice by its fashioning of a dead 'ancestor', originating from the community establishing the territorial title, set the ancestral claim in the mutable past (D'Altroy 2002: 171; 2015, 138-143). The relational emphasis here is that placed on the legitimacy of lineage (D'Altroy 2015: 278), in the use of *Capac Hucha* in this context on the lineage of the conqueror. The sacrificed child or children therefore besides originating from the victorious polity, likely would have been symbolically, immediate or legitimate kin of the successful *kuraka*. Such a relationship is confirmed by Hernández Príncipe (1923 [1621]: 60-61) albeit in this particular case not concerning a military context.

Children of nine to ten and younger designated *apupanaca*, included those who were sacrificed at times of conflict when the Inca personally went to war (Cobo 1892: 12, XXXIV, 274-8). This personal engagement is unsurprisingly confirmed by

Polo de Ondegardo (1916: 92), who Cobo copied. This suggests that Huascar would have been personally involved in the events surrounding the Canta Yauyos conflict and begs the question whether it occurred at the time of the full moon and the appearance of Venus as the evening star.

Where organic cultural material has survived with identified Capac Hucha burials, these all include bird feather associations. This is of note, as Murra (1962: 718) has pointed out that bird feathers used to decorate textiles had a particular association with warfare and warriors. Indeed, from one of the female Capac Hucha sacrifices, from the north tomb at Llullaillaco a feathered cap was recovered (Reinhard and Ceruti 2000: 60, 113, 163, photo 46). This type of white feather covered headgear represents a warrior helmet (as detailed by Xerez above), as corroborated in Guaman Poma's depictions of this variety of headdress, where it was exclusively worn by elite males, warriors and Inca captains or rulers (Guaman Poma 1980 [1583–1615]: 106, 110, 112, 115, 147, 149, 151, 153, 155, 157, 161, 194, 252, 333, 379, 383, 384, 393, 398, 400, 402, 404, 460) (Figures 3 - 5). The importance of birds in the context of native warfare is further confirmed in Murua's description of the quico ritual which preceded war, which included the burning of birds and spiney woods (2001 [1590-1609]: 408-9). It is tempting to relate this significance of birds in the context of war with the transformation of and proprietary aspects of Ayar Auca, into a bird at the mythical time of the Incas capture of Cuzco.

Ethnicity was expressed in dress and hair style with loyalty and affinal duties (such as service as soldier and mitimae) being confirmed in their wearing. Cloth and clothes contained the warrior's essence and their capture by the opposition was to be avoided, while capture and defeat resulted in transfer of personal and group loyalty to the victor. Furthermore, as with the *Capac Hucha*, the battlefield was also a setting where warriors occupied a potentially transformational liminal space, suspended between the world of the living and that of the dead. All action in this scenario took place in a space and time where both the landscape the combatants moved in and the weaponry they used, contained agency (*sensu* Gell 1998). In this context, the *sapa* Inca largely avoided personal risk by appearing on the battlefield, usually only being represented by a personal double or *huauque*, or when the power of his personal relationship with the huacas or *ataw* was to be confirmed as required by the relevant lunar cycles, or else when there was no other alternative to demonstrate his power.

Finally, Inca society was economically and socially rooted in agriculture and sought to access its resource base by maximising its community presence across the maximum numbers of possible ecozones (Murra 1980). Its ideological framing of conquest justified and legitimised its aggression and conquests based on the power and *camac* of it huacas and ancestors. It was its relationship with the land, the ploughing of the *chakra* and the wresting of a crop from its soil which ultimately confirmed the successful outcome of farming, battle, and conquest. Warfare like the

agricultural cycle had its seasons and likewise it had its shorter rotations as well as its longer generational episodes, all of which were related to the phases of the moon, where it included the intervention of the *sapa* Inca himself and the evening rising of Venus.

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101

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