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**SHUYUTUMAYKUNATA TARIPASHKA  
WIÑAY KAWSAY KALLARI RURAYTA  
KAMAY INGAPIRKA RIKUNA WASIPI**

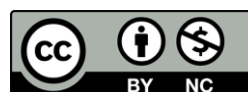
*ELEMENTOS GEOMÉTRICOS  
IDENTIFICADOS EN EL COMPLEJO  
ARQUEOLÓGICO DE INGAPIRCA*

*GEOMETRIC ELEMENTS IDENTIFIED IN  
THE INGAPIRCA ARCHAEOLOGICAL  
COMPLEX*

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## Uchillayachishka Yuyay

Ingapirka wiñay kawsay kallari rurayta kamay wasi rikuchika, Ecuador Mamallaktapakka kanmi maymutsurik. Chaymantami yachaykuna paktarishka awkakunamanta, kamachikmanta, apunchikmanta shinallatak pachawallimanta rikushpa. Kay llankayka nipa shututupukamaymanta kakrikuchishpa pakktana yuyaytami charin, kay wiñay kawsay kallari rurayta kamay rikuymanta, kaytaka chaypi chayashpa rikushkawan shinallatak kimirishka kamukunamanta hapishpa. Chaymantami yuyayrikuchinchik cañari-inca kawsakkunaka riksishkami shututupukamay nipakunata, shinami hatun wasikunata rurankapak hapishka, ashtawankarin kaykunata: Tsikllakunata, rumpakunata, pallakunata, suktuykunata, chuskushkakunata, suni chuskushkakunata, kimsashkakunata, tutupukunata; kaykunataka taripanchikmi purina ñankunapi, wasi ukukunapi, aknakunata rurana pampapi, wasihawaman wichiyan uriyanakunapi shinallatak yaku rina larkakunapi. Mana tariparishkachu shuk katik tupuy; shinapash, rikushkawanmi rikuchinchik yupaykamay yachayhamanta kay shututupukamay hawamanta, chaymanta chimpapuraypakmi kan shuktak precolombinas kawsaykunawan.

*Sapi shimikuna:* Shuyutupukamay, Ingapirca, yupaykamay.

## Resumen

Ingapirca es considerado uno de los complejos arqueológicos más importantes del Ecuador, por esta razón ha sido objeto de análisis desde el punto de vista militar, político, religioso, estratégico y astronómico. Este trabajo tiene como objetivo describir los elementos geométricos presentes en los restos arqueológicos del lugar, a partir de una observación directa del mismo y a través de la revisión bibliográfica de estudios previos. Se ha podido determinar que, la cultura cañari-inca conocía elementos geométricos que utilizaban en la construcción de sus edificaciones, siendo los más frecuentes: rectas, círculos, triángulos, cuadrados, rectángulos, trapecoides, óvalos, cubos, esferas, semiesferas, cilindros; los cuales se pueden encontrar, por ejemplo, en los vestigios de caminos, habitaciones, centros ceremoniales, escalinatas, canales de agua. No se ha encontrado evidencia de un patrón de medida; sin embargo, con lo observado se demuestra que su conocimiento matemático, en el aspecto geométrico, es comparable con el de otras civilizaciones precolombinas.

*Palabras clave:* Geometría, Ingapirca, matemática.

## Abstract

Ingapirca is considered one of the most important archaeological sites in Ecuador; thus, it has been the object of analysis from a military, political, religious, strategic, and astronomical viewpoint. This work aims to describe the geometric elements present in those archaeological remains, from a direct observation thereof and through the bibliographic review of previous studies. It has been determined that the Cañari-Inca culture employed geometric elements in their edifications. The most frequent geometric elements were: lines, circles, triangles, squares, rectangles, trapezoids, ovals, cubes, spheres, semi-spheres, cylinders, which can be found, for example, in the vestiges of roads, rooms, ceremonial centers, stairways, water channels. No evidence of a measurement pattern has been found; however, with what has been observed, it is shown that their mathematical knowledge, in the geometric aspect, is comparable with that of other pre-Columbian civilizations.

*Keywords:* Geometry, Ingapirca, mathematics.

SHUYUTUMAYKUNATA  
TARIPASHKA WIÑAY  
KAWSAY KALLARI  
RURAYTA KAMAY  
INGAPIRKA RIKUNA  
WASIPI

ELEMENTOS  
GEOMÉTRICOS  
IDENTIFICADOS  
EN EL COMPLEJO  
ARQUEOLÓGICO DE  
INGAPIRCA

GEOMETRIC  
ELEMENTS IDENTIFIED  
IN THE INGAPIRCA  
ARCHAEOLOGICAL  
COMPLEX

## KALLARI YUYAY

Ingapirca wiñay kawsay kallari rurayta kamay wasi, Almeida (2011) killkashkapika nishkami, may sumakmi kay wiñay kawsay kallari rurayta kamay wasika ñukanchik Ecuador mamallaktapak, imamanta kunan punchakunakama yallitak sumak tiyakushkamanta. Paypak wiñaykawsayka rikurishkami ñawpa incakuna allpakunata mirachishpa shamushka pachakunamanta, ashtawankarin cañariskunapak allpakunapi, kay XVI pachaywatakunapi, kay taripaykunaka rikurinmi XVIII pachaywatakunamanta; kipapika shuk waranka iskun patask chunka kanchis pusak (1978) watanmanta, shuk waranka iskun patsak pusak chuna ishkay (1982) watakama, chay watakunapimi rurarishka pampata allaykuna kay wiñay kawsay kallari rurayta kamaykuna tiyakunpi, Comision Castillo de Ingapirca minkashkamanta (Fresco 1984:85). Tawka taripaykunatami kay kuskamanta rurashkakuna, shinami Balboa (2013) watapi rurashka sumak kishkata, ashtawan alliyarichun rikunakuna, shinaka wiñarichun sumak rimaykuna kay wiñay kawsay kallari rurayta kamaykuna, chaywanka ashka rikukkuna shamuchun.

Escalera shinallatak Barriuso (1978) anta imakuna kay kuskapi tarishkamanta shuk taripayta rurashkakakuna.

Quille (2012) mashimi, yachaykunata rurashka ñawpa cañariskunapak kawsay chashnallatak wiñay kawsaymantapish, chaypimi rikuchin shuk mushuk yuyayta wiñaykawsay sinchiyachun, sumay rikunakuna, shuyutukumaykuna kay Ingapirkapi:

May chikanmi kashka kay Cañari-Inca wayruraykamayka, chayka rikurinmi mana pakta imapish incakunamanta Cañariskunapak kawsaypi yatkushka, rikunallami kan Ingapirka rumi wasikunata rikushpa yuyarinapak, ashtawankarin hatun pushaykuna shinallatak yuyaysapa cañarikuna kashkata luwakunawan. (Quille 2012:24).

Shukniki tantanakuypimi, wiñay kawsay kallari rurayta kamakuna Ecuadormanta shinallatak

Perumanta tantanakushpaka nishkakuna: “mana allitak yachanchikchu kay hawaka”: pikunachari kawsarka, imatachari mikukkunakarka, ima yuyaytachari charirkakuna, imapakchari Ingapirkataka rurarkakuna. (Garzón 2010:83).

Kay yuyaywan rikunchikmi, “yupaykamayuk taripashka yachayñanwanka mana taripanchu runakunapak wiñaykawsay imashina yupaykamaypi sinchiyakta” (Blanco-Álvarez 2006). Chaywanka ni tukunchikmi cañari-incakunapak runa kawsaymantaka, tiyanmi kay sumak wiñay kawsay kallari rurayta kamay yupaykamay yachaykunapak hawapi sinchiyashka, shinallatak sumay shuyutukamay, chaymi rikuchin kay runakunaka sumay wayruraykamayta rurashka, chaymantami utkashpa taripana kan alli yuyaykunawan kay sumak wiñay kawsay kallari rurayta kamay taripashkakunamanta.

Chaymanta, kay taripay paktayka rikuchishanin kakrikuchispa, imalla nipa shuyutukamaykunatak hapirirka kay rikuna wasi rurarichunka, chaywanka paktata kamuktarinapak alli yupaykamay yuyayta pikunatak kaypi kawsarkakuna.

Kay willaykillkapakka, mashkarishkami taripaykunata kamuwasipi, shinallatak kay wiñay kawsay kallari rurayta kamay wasimanta taripashkakunaka rikurinmi wiñaykawsay llankaykunalla, mana rikuchinchu yupaykamay yuyayta - shuyutukamay yachaykunamantaka, ashtawanpash awka yachaykunamanta, kamachikmanta, apunchikmanta, kuskayachaymanta, pachawallimanta, ashtawankarin llakichik kawsaymanta, kay kipa rikurika españolkuna chayamushka pachamanta, shinapish; mana yachayta riripayashkachu yupaykamay – shuyutukamay yuyay rikuyamanta, ashtawankarin kayta paktana yuyaymi kan kay llankayka.

## YACHAYÑANA

Kay taripay sinchita paktachunka, kimirishkami kay kuskina yachayñanpi, chaymantami kallari chaypi chayashpa rikushkawan, chayka rikuchirkami wiñay kawsay kallari

rurayta kamay rikuykunata chay pampapi shinallatak tariparirka unanchakunawan. Kipapika, taripay rurarirkami killkakunamanta ashtawan willaykunata kay yachay hawamanta katipanapak.

Kipapika, kukirirkami nipakuna shuyutukamay rikuyanta, chaypak ashkatami yanaparka killkakunamanta taripashkakuna shinallatak taripashka unanchakuna Google maps chaski killaymanta, chaywanka tawka tukuchiynuna kay hawa.

Riksichinimi, pakta yachay willaykunaka mana shuyutupukamay nipakunamanta tiyashkata, shinapash mana alli yuyay unanchata charinchu kunan punchakunashina. Shinapash, kay taripayta rurankapakka mamapachapi tiyashka yachaykunatami sumakta rikurayashpa rurarishka.

## TARIPASHKAKUNA SHINALLATAK RIMANAKUY

### ALLPAMAMAYACHAY RIKUCHI SHINALLATAK SAPSIKUNA

Ingapirka wiñay kawsay kallari rurayta kamay wasi sakirinmi 2°32'26.21» S 78°52'26.43» O, chay shuti llakta kuchullapi, kimsa karanka ishkay patsak (3.200nm) tatki hatun kucha hawapi, Cañar markapi, Cuenca hatunkitimantaka kanchis pusak waranka tupullapi (78km). Paypak millkaka kanmi chusku hectarias, shinatapak Qhapaq Ñan ukupi kashkami rikurin (Antipak antawañan) Cañari kawsaypimi sakirin (500 D.C.), kay kuskaka may anchayupay aknaymi kan, shinallatak Inca waki unanchami kan, Peru mamallaktapi Macchu Picchushina anchayupaymi kan (Shuyu 1).

Kallariy: *Google maps*



Shuyu 1: Ingapirca

Ingapirca llakta kallariyipi karkami samarina wasi shinallatak wallpayta paktana, paykunaka inkakuna purunchishkami kashkakunakarka, chaymantami paykunaka yachashkakarka akna raymikunanata ruradata; iñinchikmi kay ruraykunaka shuk waranka chusku patsak kanchis (1470) watakunapi rurarishkata, inkakuna cañari llaktaman chayashkapi (Cárdenas y Quinteros 2011:34).

Garzón (2010:84), kaytami nin; kunan puncha imashinami kay shutipi riksinchik, mana kallari shutichu kanakashka, shinaka rikuchinmi Incakunapak rumishinalla, kay shutitaka purunchik Españolkunami churashka yachin harkarinamanta iñishpa, kipa shitipika rikurinmi Castillo de Ingapirca shutiwan. Kallari shutika shuktakmikana kan, cañari kawsaywan tantarishpa, kimatami yankishka españolkuna paykuna hatun hawaman kawsayta rikuchinapak. Yachac Tomas Cungachi runaka kashnami nin, Hatun Samay shutimi kanakarka, Hatun aknanay wasi unanchami kana kashka.

Juan Salazar de Villasante runaka shinami kaymantaka nishka, Hatun Cañar shutika shuk waranka pichka patsak sukta chunka kimka watan shinallatak shuk waranka pichka patsak sukta chunka pichka (1563-1565) watakunapimi



riksishka kashka, kipapika shuk waranka pichka patsak sukta chunka ishkay (1582) watapi, Cuenca llakta shinallatak paypak markawan tantachikpi, kashnami willan: Hatun Cañar shuti llaktami kaypi kan, kaywanka nishaninmi, Cañaris Hatun markapashmi kan (Alcina 1978:31).

Fresco (1984:100) shinami nin, Huayna Capac runaka kaypimi Tawantisuyu markapak kamachik wasitaka shayachishka, apunchikpak anchayupay paktachiwan churashka, kayka Gran Elipse shinallatak Castillo chawpipimi kan (Inti Apunchikpak Wasi – Templo del Sol).

Yuyaymanta rurashka chaypi yuyashpa wayruraykamaymanta José Ricardo Morales kashnami nin, kay wayruraykamay ruraykunaka, rikuchinmi chay pacha kawsak runakunata:

Kay Wasi rurashka millkapika pachatami rikuchin, wayruraykamay pakta karpika sumak rurashkatami rikuchin, shinallatak pi runakuna chay pachakunapi kawsashkatapash riksichin, shinaka chaypi kawsakkuna allpapi muhunkunata churashpa kallari pi tantachishka, llakta allpa chaypitak kashka rikurin, chaymantami rikunchik mamallaktapak aspik runakunata. (Morales 1984:191)

(Idrovo 1992) mashi shinami nin, wayruraykamay ukupika, rumpata shina aspishkaka shukllami kan tukuy Tahuantisuyupi, kay wasi rurashkaka kanmi kimsa kanchis tatikuna (37m) suniman, chunka ishkay tatikuna (12m) patakman, chashnallatak kimsa tatki pichka wawa tatki shinallatak chusku tatki hawaman (altura variable de 3.5 m. y 4m.) rumikuna pirkawan muyuchishka, chay hawapika ishkay ukukunami tiyan kuntisuyo antisuyu chimpaman, rumikunawan muyukta hawaman pirkashka kashkamanta, rikuy tukunchikmi achikta tayta inti wacharikta shinallatak washikuktapash, chaymantami kay kuskataka aknanay kashkata yachankuna, ashtawan awkayachaymanta yallimi kan. (Cárdenas y Quinteros 2011:25)

Kawsana ukukunaka chuskushka suytuk wallpaykunatami charishka rikurin shinallatak aknaypak kuchullapi kashkamanta, rikurinmi, kay wasikunaka aknata paktachik runakunapak kashkata, chashnallatak chaypi aknanay

imakunata wakichinkapak rurarishka.

Shukniki wasiruraykamay shuyutaka Carlos Condamini rurashka shuk waranka kanchis patsak iskun chunka kimsa watakunapi (1793), kay rurashkami kallari hutkuta rurankapakka yanapashka shuk waranka iskun patsak kanchis chunka shuk (1971) warakunamanta, Jaramillo nishpaka (citado por Cárdenas y Quinteros 2011).

## WASIRURAY KAMAY YACHAY NIPAKUNA SUMAK KUSKAKAMAY WASIPI TIYASHKA KUSKIKUNA

Shukniki allaykunapika mulukunatami uku sikimanka tarishkakuna, shinallatak rikurinmi imakunata wakichina ukushina, chusku tatki patak (4m) ñan huchupi, kay ñanka yuyayman apashka rikuchinmi Qhapac Ñanchari nishpa hamuktarinkapak, yaku rina larkapish kuchullapimi, chay larkami tukuy wasi ukukunaman apan yakuta, kay rurashkaka rikurinmi Macchu Pinchupi rurashkashina Peru Mamallaktapi.

Wasikunaka hatun, uchillami kashka imakunata wakichina rikuri huchupi. Wasikunaka rumpalla muruwanmi chikanyan, shinallatak rumpalla wasikunami tiyan, kay ukukunapi mikuna murukunata wakichina kashkashina rikurin, kay wasikuna chaypipimi katuna rantina pampa tiyashka.

Ashtawanpash shuk rumipimi amaru muyurishkata shuyushkami tiyakun, chaypimi incakuna armak kashkanka yuyanchik, aknay armayta rurashpa, kaypika kimsa chuskushka yaku millkami tiyan, chaypimi yaku llukshina larkakuna hapitukushka. Shuk yankachishka rumpashina rumimi inti shutita shutishka tiyakun.

Almeida (2011), Calle shinallatak Delgado (2015), mashikuna ninkunami: kay wiñay kawsay kallari rurayta kamay wasi ruray kamay yachayka kay katik nipakunatami charin:

- ☉ Pilaloma: suytuk tantarishka wasi ukukuna, hatun chawpi kancha muyuntikpi, kayka ashtawan ñawpa pachakunapimi rurashka kan.
- ☉ Collocas: rumpashina rurashka ukukunaka rikurinmi mikuna murukunata tukuy runakunapak wakichina.
- ☉ Aya pampana: shuk rumpalla tantarika pampashka, shuk rumika rikurinmi pachawalli yupaywan chakrurishkashina (Almeida 2011) shinami nin.
- ☉ Atipak ñawpa wasi uku kutinrurashka: shuk waranka iskun patsak iskun chunka sukta (1996) watapimi rurashka, wiñay kawsay kallari rurayta kamakkunamanta, imashina chay pachakunapi wasikuna kashkata rikuchina yuyaywan.
- ☉ Aknay armay: iñinmi kay armayka runakunapak aychata chuyayachinkapak shinallatak pachakamakkunapak aknay kashkata.
- ☉ May hatun kancha: chawpi pampa muyuntik may hatun kanchis wasikuna, iñinchikmi hatuna wasikuna tiyashkata, imallakunata rurashpa llankana wasikuna.
- ☉ Cañaris wasikuna: Kay wasikunaka incakuna ñawpaman kawsana wasikuna kashka rikurin.
- ☉ Wakichiyukuna: tarishkakuna turumanta rurashka hatun Incaica mulukunata, rikurinmi huchulla kawsak llaktakunawan rantinpayta paktachinapak charishkashina.
- ☉ Rumiwan rurashka ñan: shuk may uchilla sumakyashka rumikunawan rurashka ñan, Qhapac Ñan samipishchari kan, aynay aymata rurashpa purinapak mutsurishka.
- ☉ Watapacha killa: ishkay chunka pusak hutkuyuk rumi, watapacha killa kashkashina, shuktak taripakkunaka turuwan llankankapak ima kashkata yuyankuna.
- ☉ Kanchay kapakwasi: Kunan pachapika Condamine shutiwan riksinchik, kaytaka kallarik taripayta rurak runakunapak shutita hatunyachinkapak, paykuna apunchikpak wasita rurashkamanta. Shina riksinchikmi, kay wasipika hatun pushakkunalla kawsak kashkata, shinallatak sumak kuytsa warmikuna pachakamak intipak kurishkakuna, kaytaka (Ayala 2008) Shina nin.
- ☉ Akllawasi: pichka tantarishka wasikuna shinallatak kimsapi chikanyashka kanchakuna, shukka kunankama may allimi kan, kay wasika hatun allpayukpak wasichari karka, Cuenca curiakunapak shina (Almeida 2011). Kayka akllawarmikunapak wasimi kashka nin, kay warmikunaka incakakunapak churanakunatami awakkuna kashka, shinallatak apunchikpa akllashkakunapash, chashnallatak mikunakunata yakukunata alliyachinkapakmi kashka.
- ☉ Aknay kancha: Putukuk wallpayuk hatun pampa, apunchikta mañankapakmi kashka yuyanchik, chaymanka achka runakunami rik kashka. kaytaka (Ayala 2008) shinami nin.
- ☉ Inti apunchikpak wasi: Rumpa wallpayuk sinchi rumi, antisuyu kuntinsuyuta rikuchik, rumpalla wallpayuk inti allpata muyuk shina.
- ☉ Wayku patapata: shuk patsak iskun chunka shuk (191) patapatakuna mayu rumimanta rurashka, apunchikta mañawasiwan tantalla, cañarikuna rurashkashina rikurin.
- ☉ Ingachungana: Incakunapak pukllanata riksishka, inkapak armana imapash, shuk wakichina shinami, rumimanta rurashka, tayta intita aknayta rurankapakmi kashka. Kaytaka (Almeida 2011) shinami nin.
- ☉ Zoomorfa rumi – Charapa: Charapata rurashka shina rumi, kawsay llaktakunawan imakunata katunkapakmi charishkakuna.

- ☉ Pushak Inca tiyarina: Sumak allichishka rumi, amarushina, iñinchikmi incapak tiyarina kashkata, kunan punchakunapika ña mana maypi kallariپی tiyakuhkapika tiyakunchu.
- ☉ Inti wayku: shuk rumpa shuyumi, pachamamamanta llukshishpa antawan chakruchishpa rurashkami rikurin. Kaytaka (Almeida 2011) Shina nin.
- ☉ Incapak ñawi: rumiyashka sinchi rumi, runapak ñawishina, runallatak rurashkashina, manakashpaka mamapachallatak rurashka shina.

Washington Francis Ching hatun yachanawasipi yachachik, tawka wasi ruraykamaymanta killkashkakunapi: ruranmikaypachata shinallatak nikitapish, ishkaniki killkapika rikuchinmi may sumak wallpay shuyutupukamaykunata. Ching (2002:73) kashna nin: “Paktaypakmi kan shuk hawalla tantachitarurana, maypika chikan chinkancharikanka shuyutupukamaykunapi shinallatak ñanta rikuchikunapi”.

### **SHUYUTUPUKAMAY NIPAKUNA SUMAK KUSKAKAMAY WASIPI TIYASHKA KUSKIY**

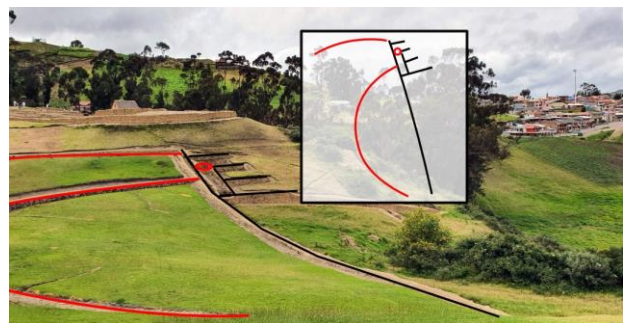
Rikushpa kuskiska kipa, shinallatak allpashuyukunapi yanapashkawan kay yachaykunamanta hatarishishka yachyata shuk waranka kanchis patsak iskun chunka kimsa (1793) watapi, chaymi yanapashka rikchayta allichinapak kunankama allita charinkapak, kaytaka *google maps* shuyumanta surkushpami, hawalla chikanyachispa rikuytukunchik shuyutupukamay nipakunata;

- ☉ Tiklla aspiy: Shukka tiklla larkapimi rikurin, kayka tukuy suni pampata yallishka, antisuyu chinchaysuyuman rikurayasha (Fresco 1984: 86) shina nin. Ñankunata ruraypika, wiñay kawsay kallari rirayta kamay wasika rikuchinmi tawka tikllakuna tiyaska; patapatakunata rurashkapi, allaypi tarishkata, rikuchinmi

shinallatak, tikllamanta aspik yachaypak hawapi, paktachikunaka kashka ishkilaya aspik tikllakuna yachayta, kaykunataka wasi rurashkakunapi rikuytukunchik, shinapash aspikkunaka pirka manyapimi rikurin (shuyu 2). Fresco (1984), kashna nin: kay kakka uriyashka shina antisuyu hatun kanchakama uriyak shinallatak puñuna wasi ukukunapapimi, paktachiskakuna tawka larkakunapi rikushka, chaymi incakuna kay uri patata allichishpa shuk hatun uriyana wichiyana patapatakunata rurashka rikurin. Chaypakka rurashkakunami tawka kishki purinakuna ñankunata, hatun patakunata rumiwan chay kakka uripi.

- ☉ Pallkakuna: Kay hawa Fresco(1984:87) kashnami nin. 80° pallkakunata rikuytukunchik, kawsana wasipipash shinallatak pirka chimpapi muyuk pirkapipash. Chashnallatak suni pampapimi 90° pallkakunata pirkapi riksinchik (shuyu 2).

Kallariy: Killkakkunapa rikchay

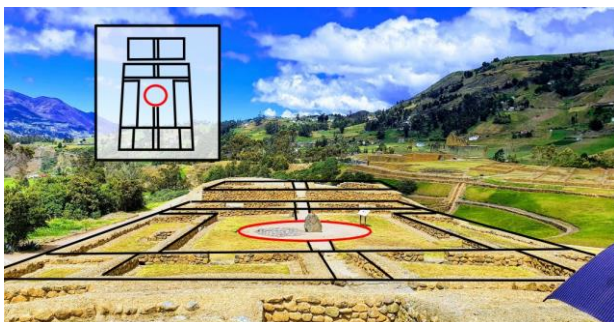


**Shuyu 2:** Tiklla aspiy, pallkakuna

- ☉ Suktuykuna: Kaymantaka Fresco (1984) shinami nin, paypak Ingapirka allaymanta killkashkapi: rikurishkami kay hatun incaico wasika shuk wallpaymushina, ashtawanka kay wasi ukukunaka (9.80 ashtawan 18.70 tatkikunatami charin) shukka suni millka hatun pampaman, kayshukka antisuyu kinkrayman sakirik. Kay hapishkawanka riksinchikmi shinallatak kay wasi punkukunapi,

kaypi nishkashina: kay chushkushka wasikunaka (1,45 ashtawan 1.50 tatki charin) pishka chunka wawa tatki patakwan (50cm) kishki punkumanta patapatawanmi tantarin. Antisuyu kichki ñanpika uchilla sunichuskupallka hatun wasikunami rikurin, kaymantaka (Alcina Franch 1978:133) shinami nishka (shuyu 3).

Kallariy: Killkakkunapa rikchay



**Shuyu 3:** Suktuykuna, chuskushkakuna, rumpakuna.

- ☉ Chuskushkakuna: Kay chuskushkakunataka wasi suyukunata rurankapakmi hapik kashka, kaymantaka Alcina (1978:133), shinami nin: antisuyu kichki ñanka chuskushka wasi ukumi, shuktak ishka chuskushka suktuykunapika paskashka pachatami tarin, chayka continsuyumanmi llukshin. Chawpi pampapimi chapak ukku rikurin, kayka chuskushka wasi rurashkashinami rikurin, ishka suni pirkawan chikanyashka kawsana wasikuna, sapan wasi ukukuna ishka sumakyachishka imakunata charin, shukka antisuyuman shuktak kuntasuyuman (shuyu 3).
- ☉ Kimsamanyachi: Uray pampapi tantarishka wasikunaka kimsamanyachiktami charin, shinallatak Castillo charik wasika chikanmi kan, kaymantaka (Alcina 1978:133) shinami nin. Castillo pimi shuk kawsana wasimi tiyan, pirkaka suktuykunatami

charin, kimsamanyachiktashina, kayka rikuchinmi shuyutukamay yachayta, shinallatak paypak rurashpa paktanakunatapish.

- ☉ Pichkamanyachi ñallapaktay: rikuchunmi chikan chikan wasi ukuta, kay wasikunaka chunka pishka tatki (15m) ashtawan chunka pusak tatki (18m) charin, shinallatak chunka shuk tatki (11m) ashtawan pishka tatki (5m), chashnallatak ishka uchilla sukta tatki pishka wawa tatki (6,50cm) ashtawan chusku tatki (4m) wasikunami kan.
- ☉ Rumpalla winkupash: kallariya rikunallami, Inti apunchikpak rurashka wasipi, shinallatak kayka hatun rumpallashinami kan. Kayka shuktak incaicas wasikunamanta chikanyachinmi. Winku unanchaka ishka shuyukunapi rikunchik, shuk llawtu wikrutami charin hawaman, chashnallatak muhunkunanata kanchis shinallatak chusku wasikunawan.
- ☉ Muyuntitakkuna, rumpallakuna: Kaymantaka Fresco (1984) kashnami nin, amuklla hawa kinkray kuskapi wakichina ukukunapi sakirin shinallatak incaicas hatun pampapash, rumiwan rurashka ñan hanantinman, tariparishkami pampa ukumanta shayachiska patakuna shuk hatun muyuntikkuna shinallatak rumpallakuna chashna shinalla rurashkakuna, karuyachishkapi ukunam rumikunawan rurashkamanta; Canari Hatun pushakkunapak wasika hatun pampa hawapimi, shuktak rumpalla wasikunaka antisuyuman llukshina kuskapimi kan, kaykunaka ingapirka wakllirishka kuskapimi kan. Kaymantaka Ziolkowski chashnallatak Sadowaki shinami nishka:

Kay yaykuna wasika <<rumpalla, shuntur wallpaktami charin, shuntur kashkaka antisuyumanmi rikurin, shinami kinkrayman kashka, ashtawan rikunchikmi kimsa ñankunata kaykunaka mana



allita tukuchishka uku tukuy pampakunapi. >>. (Ziolkowski y Sadowaki 1984:104)

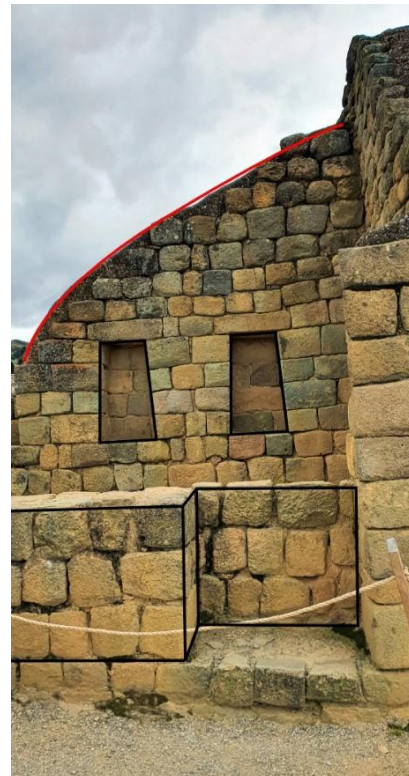
- Rumpakuna: allpaturuwan rurashka imakunatami rikuytukunchik, ashtawanpash machaykuypak shimikunapi. Chawpi pampa samipika hatun pampashka imakuna tiyashkatami rikuchin. Kay pampashkaka kimsa tatki chunka pichka wawa tatki (3,25 cm) rumpalla wallpaktami charin, kay allpa muyuntikka hatun takiykunatami rurankuna, ashtawanpash sukta chunka tatki kanchis chunka tatki kunawan (60-70) ashtawanpash shuk tatki chunka wawa tatki kunawan (1,10) uraymanmi allashka kan. Kaypika kimsa ñawishina wasi muyuntin kashkami rikurin, kaypimi chunka shuk runa tullukuna rikurishka, chakikunaka chawpi hutkumanmi rikurik kashka umakunapash kanchamami rikurin. Kaymantaka (Alcina 1978:142) shinami nishka (shuyu 3).

Sirik Castillo wasika, rumpallami kashka, kayka kimsa chunka kanchis tatki, chunka wawa tatki kunawan (37,10cm) suni, chunka ishkay tatki, kimsa chunka pichka wawa tatki kunawan (12,35cm) patak, Graziano Gasparini runataka yuyachinmi kimsa rumpa shuktak aspikman chayakta chunka ishkay tatki, kimsa chunka pishka wawa tatki kunawa (12,35cm), tatki chawpirumpa wasirurashka shinami kipukamayuk yupaykunata surkuk kashka, kaymantaka (Gasparini y Margolies 1977; Alcina 1978:135) kashna ninkuna. Shinallatak kaypika sirik rumpa rumi wasitami tarinata ushanchik, mayu rumiwan usnuyashkami kashka.

- Putukuk: Kay hatun wasika suytuk wallpaytami charin, shinapash putukuk wallpaytami charin, kay wasika allpaman katik kinkraymi kashka, ashtawanka chinchasuyumanta antisuyumanmi uriyan (Alcina 1978:136). Ziolkowski shinallatak Sadowaki (1984:105) shinami willankuna: kay wasika ishkay

wasi ukutami charin chikan wasi yaykuytapash, kay wasikunaka chikanmi kashka, sinchi pirkawan chikanyachishka. Ishkantinmi sumak imakunata charin, wasi ukupish wasi kanchapash, putukukkuna sumakyashkami chikan chikan llatukunata. Condamine runaka kashnami nin, Castillo wasika antisuyu kuskamanmi sakirin, kay “Castillo” wasika hatun putukuk pampawanmi chikanyan, shinapash shuk hatun suytukmi tiyan kay shuktak wasi ukukunapi (p. 107) shinapash Castillo wasiman yaykunkapak punkutami charin (shuyu 4).

Kallariy: Killkakkunapa richay



Shuyu 4: Putukuk, putikuna

- Shuntur: kaymantaka Alcina (1978) wasimanta rimashpaka kashnami nin: kay tantarishka hatun wasika Castillo shutitami charin, shinapash shuntur wallpaytami charin, kashkami nin (Gasparini y Margolies 1977: 303). Shuntur wallpayka antisuyuman rikurikllami kan, shinapash asha

ariyaytami charin, shinallatak kimsa mana tukurishka kichka purina ñantami charin, chashnallatak kay tantarik wasika sirik hawapimi rurashka kan.

- ☉ Tutullukuna: kay kuskataka allpaturumanta rurashka taripashkapimi riksinchik.
- ☉ Putikuna: Wasi pirkakunata rurankapakka puti sinchi rumiwanmi rurakkuna kashka, chaymantami kay rurashkakunaka kimsa rikunalla manyakunata charinkuna, kaymantaka paykuna riksik kashka shinallatak wasichinkapak kimsa rikunalla pachata hapikkuna kashka.
- ☉ Paktasirikyashpikkuna: kay wallpaykunataka Castillo wasiman yaykuna punkukuna llawtupimi tarina, shinallatak shuyutupukamay nipakunatami riksik hapikkunakashka. Shinapash yachayñan llankana imakunawan llankakkuna kashkataka mana riksik chayarinchu, shinapash Macchu Picchu wasikunata rurashka shinami rurak kashka, chaymantami pakta pakta imapash rurarishka.

Mana tiyanchu pakta rikuchikuna wiñay kawsay kallari rurayta kamaymanta, shinaka mana achikllata rikuchinapak kay pampapi tiyashakata rikunchik, chashnapash, rumiwan rurashka rumpata shina rikunchik, shinallatak ashka rumikunawan huntachishkatapish, shinaka yuyayta tukuchitukunchik, tiyashkatakmi kaypitak kashka yuyay nishpa. Ashtawan riksitukunchikmi, wasikunata rurashkapi, pata kinrikuna sumak lluchuklla llutashkata rikushpa, kaymi riksinchin imashina hillaykunata hapishpa rurashkata.

Ashtawanpash, asha riksinchiwan rikuchinata ushanchik, paykunaka riksinkunami kashka wasichinkapakka imallata hapina kashkata, chaymantami pakta kashka yachaykunata yachankuna, chaymanta pakta kashka yachayta charinkuna, shinallatak Pilaloma kuskapi rikunata ushanchik.

Puchukaypika, wiñay kawsay kallari rurayta kamay wasita rurankapakka, riksinkunami

kashkanka tupuykunata; shinapash, mana taripaytukushkanchikchu ima tupuykunawan paykunaka rurashkata, shinapash mayhan tupuykunata hapishpami rurashkakunakanka, shinallatak sumakta rurashkamanta kay yuyaymanmi chayanchik, tukuymi kan pakta pakta illitak rurashka, kunan punchakamami shayakun pichka patsak (500 años) watakunata washawan rurashka kashpapash. Chaymantami kay wasichimanta yachaykunata charishkata yuyanchik, kay yachaykuna kaykunami: tupu, tupuyachay, aspik, kay yachaykunawanmi sumak sinchi wasita rurashkakuna. Shinami imashina tupuyachaywan, chuskushkata tupukkuna kashka, shinallatak tukuy tupuyta rurashkakuna, shinapash mana yachanchikchu imashina rurashkata.

## TUKURIPIY CHURASHKA YUYAYKUNA

Kuskiyta rurashka kipaka, ni tukunchikmi uchillachishka yuyaypi, kay sumak shuyutupukamay nipakuna hapitukushkata kay Ingapirka wiñay kawsay kallari rurayta kamay wasipi, kaykunami kan: tiklla aspik, ishkiyashka aspikuna, kinkrayashka aspikuna, suytuk, kimsamanyachi, sunichuskupallakuna, putukukkuna, paktasirikyaspikkuna, muyuntik, rumpa, rumpalla, shuyutupukamay. Shina tupukunatami paktachishkakuna, shinami kay shuyutupukamaykunata riksinaman chayashkanchik: paktasirikaspikkuna, tutullu, chuskushka, suytuk, utukukkuna, kimsamanyachi, shuntur, muyuntitak, suni, aspik, putikuna, wikru, patak, hawayarik paktasirikyashpikkuna yachaykunata yachashkanchik. Kaywanmi Cañari-inca kawsaypacha yachaykunata riksinchik, paykuna imashina shuyutupukamay yachaykuna yachashkata, shinallatak kay yachaykunata imashina wasichiy pachapi churashkatapash, shinami kipukamayuk yachaykunata paktachishkakuna.

Cañari-inca wiñay kawsay kallari rurayta kamay wasita rurankapakka, hapishkakunami

kanka mayhan tupuykunata, yachayta ushashpami kashna tupuykunawanka rurashkanka, shinapish kay yachaypika mana taripaytukushkanchikchu ima tukuytachari hapishpa rurarkakuna. Shinapash rikurinmi shuk ñan tupuyta katishpa rurashka, mana shina rurasha mana kashna sumak wasikuna rurarinmanchu karka imapish pakta, chashna kashpami kunan punchakunakama tiyanku unay watakunapi rurashka kashpash.

Kay nishkakunawan, ashtawan taripashpa katina, kamashpa rikurayana, shinaka shuktak runakunaman willana hashtawan taripashpa katichun, chaymanta kay yachaykunaka may anchayupay kan, shinami kay yachaykunaka ashtawan sinchiyashpa katinka. Shinallatak precolombina kawsaymanta runakunapak yachaykuna sinchiyarishpa katichun, chaymantami kay rikuna wasikumanta ashtawan taripashpa katina kan, shinami ima mana kaypi killkashkata ashtawan yachashun, shinallami apunchik wasi mashna pakta tupu charishkata pakta yachashun riksishunpash.

### DECLARACIÓN DE CONFLICTO DE INTERESES:

Kayta killkakkunami willankuna mana ima shukpaklla mashkashpa makanakuyta charinchikchu nishpa.

### DECLARACIÓN DE CONTRIBUCIÓN DE LOS AUTORES:

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