Inca Dice and Board Games / Thierry Depaulis

Very little is known of the games played in Precolumbian Andean cultures. Significantly none is mentioned in H. Murray's History of board games other than chess (Murray 1952) or in R.C. Bell's Board and table-games from many civilizations (Bell 1979) where we find a wide scope of games, ancient and modern, from all over the world. The Aztecs are known to have had ball and dice games, notably the patolli, a race game. Did the Incas really play? Can we use for their games the same sources as we have for other extinct civilisations? It is the object of this paper to present a sketch of the games that were played by the Incas and some other Andean peoples.

It is through folk funerary rites that Americanists like Nordenskiöld, Karsten, or Rivet have encountered games that were still played by the Indians in some remote villages of Peru or Ecuador. There they observed the use of a very typical pyramidal die and the practice of mock gambling for distributing the defunct's possessions. They realised that these games were probably also played in Inca times and they tried to search for more details. Although they have found some interested sources, their enquiries both ethnological and textual are not satisfying.

The first scholar who tried to survey the games of the Incas was Emilia Romero, who published an article in 1941 then a booklet printed in Mexico in 1943 (Romero 1943). She mainly used the so-called Spanish 'chroniclers' to present what she had collected. But she could not explain what the games were. A games expert's eye was necessary. By comparison with other dice and board games from other civilisations, it is nevertheless possible to trace what the games the Incas played looked like. Archaeological finds can be taken into consideration too, although one of them is much discussed and is more probably an abacus. Ethnological surveys can also help understanding how a game was played.

I. Spanish Chroniclers and Others

The Andean civilisations had no writing. So no written record can give us the description of the games that were played before Columbus in South America. And, contrary to Middle America, pictures are missing here too: the Inca culture did not favour representations of its daily life. Therefore we have to rely first on the records the Spanish made of what they had noted. We must keep in mind that their accounts can only deal with the Incas, late-comers who ruled over what is now Peru and Ecuador, and parts of Bolivia and Chile during the 15th century and the beginning of the 16th. They had been preceded by other civilisations like the kingdom of Chimú (10th to 14th century), and previously by the civilisations of Wari and Tiahuanaco (7th to 9th century), Moche and Nasca (100 BC - 600 AD), to name but a few. We know almost nothing of the games these peoples played, except for the Mochicas who have left us many representations of their everyday life on their delicately painted vases.

At the beginning of this century very few Spanish texts related to ancient Peru were available in print. The conquistadors were not interested in Inca culture, and their

accounts deal only with what they did. The only source which gave a comprehensive description of the Incas' daily life was Father Bernabé Cobo's *Historia del Nuevo Mundo*, written in 1653 but printed only in 1890-3, 'the best and most complete description of Inca culture in existence' according to J.H. Rowe. Here we find a chapter (Bk. XIV, ch. 17) entitled 'De los juegos que tenían para entretenerse' ('Of the games they have for entertaining themselves'). Martín de Murúa's *Historia del origen y genealogía real de los reyes incas del Pirú*, our second most important source, was published only in 1922-5 in a poor edition printed at Lima (even the author's name was wrongly given as Morúa!). Waman Puma's (or Guamán Poma's...) extraordinary illustrated manuscript was still lying in the dust of the Danish Royal Library.

Things changed just before World War II. In 1936, Felipe Waman Puma de Ayala's *Nueva crónica y buen gobierno* (written about 1615) was printed at Paris in a facsimile edition, although without notes or index, and, in 1946, C. Bayle gave a correct edition of Murúa's *Historia* from the original manuscript held in the Jesuit Archives. Even Father Cobo's works were published in a better edition in 1956. Soon another, longer version of Martín de Murúa's *Historia* was discovered in the Wellington Papers and published in 1962-4. Unfortunately games are no longer present. At last an annotated (and indexed) edition of Waman Puma's *Nueva crónica* was published at Mexico-City in 1980.

These sources are not very informative. The celebrated half-Inca half-Spanish writer Garcilaso de La Vega has a brief allusion to gaming among the Incas in his *Comentarios reales de las Indias* (1609). Of the already mentioned authors, Waman Puma offers two puzzling lists and an interesting drawing (which we shall examine further). Only Cobo and Murúa (in his shorter earlier version) give broad descriptions of actual games, though their accounts do not tally.

To these texts Emilia Romero had the excellent idea to add the numerous dictionaries of the local languages, Quechua and Aymara, which were compiled in the late 16th and early 17th centuries. Spanish missionaries quickly understood that, if they wanted to convert the Indians, they had to speak their languages. Fortunately the Incas had already imposed one language known as Quechua, that the Spaniards named 'la lenguageneral del Inga'. (Quechua is still living and is today spoken by millions of speakers in Peru and Bolivia.) They rapidly drew up grammars and dictionaries – as early as the mid-16th century, whereas the European languages were not so well treated.

All these dictionaries offer entries to games with short descriptions in Castilian. The earliest of these is Domingo Santo Tomás's Quechua dictionary, entitled *Lexicon o vocabulario de la lengua general del Perú* (Valladolid, 1560). Then came *Arte y vocabulario en la lengua general de Peru llamada quichua*, printed in Lima in 1586, and assigned to Juan Martínez. The most important Quechua dictionary is Diego González Holguín's *Vocabulario de la lengua general de todo el Perú, llamado lengua qqichua o del Inca* (Lima, 1608). It was followed by Diego de Torres Rubio's *Arte de la lengua quichua* (Lima, 1619). Although Quechua was the most widespread language of the former Inca empire, Aymara, a close relative spoken farther south, was not forgotten. The Italian Father Ludovico Bertonio published his *Vocabulario de la lengua aymara* at Lima in 1612. It is

by far the most informative source for some of the games we are looking for.

All these sources offer words only. And their descriptions, if any, are very confusing. Strangely we get the impression that the Incas had a wide variety of dice and board games: about a dozen of names can be listed. This may be deceptive since, contrary to a general belief, Quechua was in fact - and still is - split into several dialects of which 'la lengua general del Inga' was the dominant one. Obviously there are synonyms owed to the different dialects the Spaniards came in contact with. Enough is said, however, to broadly categorise the games I have collected: clearly there are pure 'dice' games, race games and hunt/war games. I will describe them in this order, giving the different names and different spellings that are to be found. (Unfortunately there is no standardised spelling for Quechua, and every author from the 16th century on has his own spelling!) As far as the Incas are concerned, no iconography can help us (save in one case), and the archaeological finds are so rare that they can hardly be used – but I will further discuss some of them. Ethnology, which was so helpful in understanding the Aztec games, is here very disappointing. However, as we shall see, comparisons with neighbouring cultures, like that of the Mapuches, or Araucanians, offer some clues to understanding how some of the Inca games were played.

II. Inventory of the Inca Games

A.The Inca Die pichqa (pichka, pisca, pichca, pichiqa) wayru (huairu, guayro)

The Incas had a very special six-sided pyramidal die which they used for pure gambling as well as for race games. It is the only game to be mentioned and described by all chroniclers and in all dictionaries, though under two different names: *pichqa* (Quechua 'five') and *wayru*. Inca dice have also been found in archaeological diggings, and ethnologists have collected modern examples. (Fig. 1 and 2)

After López de Gómara (1552), Father Cobo (Cobo 1653) says that 'el llamado *Pichca* era como de dados: jugábanlo con un solo dado de 5 puntos'. Murúa (Murúa 1590, II, 13) describes it as a teetotum ('como una perinola'), adding further 'the Indians play with one die, called *pichca*, with 5 points on one side, 1 on the other, 2 on the other and 3 on the other, plus side 4; the crossed top is 5, and the bottom of the die is 20' (III, 25). For González Holguín (1608), *pichkana* is a 'six-sided piece of wood' ('Ppichca. Un juego como de dados. — Ppichcana. Un palo seizavado con que juegan.'). This is exactly what the ethnologists (Rivet 1925; Karsten 1930; Hartmann & Oberem 1968; Hocquenghem 1979) and the archaeologists (e.g. at Machu Picchu: see Bingham 1915 b, p. 176; 1930, fig. 172, b-h, quoted in Rowe 1946) have found.

The *pichqa* die is played either as a simple dicing game, where the winner must make the maximum score, or as part of a race game (Cobo 1653, XII, 15; Murúa 1590, II, 13).

Another name for the Inca die is wayru, but no satisfactory explanation has been given for this differentiation. González Holguín (1608) presents both names as

synonyms: 'Huayru, Ppichca. Juego de los naturales.' adding: 'Huayru. El mayor punto, o el mejor que gana'. Santo Tomás (1560) has *guayroni* meaning 'jugar juego de fortuna' or 'jugar juegos de dados'. The *Vocabulario* of 1586 defines *huayru* as 'un tanto, o azar al juego de los Yndios' and *pichca, pichcana* as 'un cierto genero de juego de Indios'. In Aymara too the words are roughly the same: Bertonio (Bertonio 1612) offers *huayrusitha* and *piscasitha* for two very similar board games (Romero 1943: 19).

Wayru/pichqa was obviously played in relationship with funerals. Already in the early 17th century Father Arriaga (Arriaga 1621: VI, 60) had noted that 'pisca' was played to keep watch over the body of a dead (with small scoring sticks, palillos con diversas rayas). Juan de Velasco (Velasco 1789: II, 152) states that the five-sided huayru ('gran dado de hueso con cinco puntos') was preferably played in November. This ritual use of the wayru die was noted by many ethnologists (Rivet 1925; Nordenskiöld 1910; Karsten 1930; Roca Wallparimachi 1955; Cavero 1955; Hartmann & Oberem 1968). Rivet thought that pichqa was kept alive in Peru whereas wayru prevailed in Ecuador.

The Inca die is not necessarily very old: the Mochicas, whose games are represented on painted vases, seem to have nothing like this. Instead, they used two-colour beans. It is interesting to note that *wayru* was originally the name of a red-and-black bean (*Erythrina americana*).

Amazingly the dictionaries offer alternative names for the Inca die. According to Bertonio 1612, *chunka* (Quechua 'ten') is its Aymara counterpart: 'Chunca: Tagua de madera para jugar.' The same dictionary has *ccanccallu* (*kankallu*, *kancalla*) for the wooden die; in modern Aymara *kancalla* means 'knucklebone' (De Lucca 1983: 'taba, astrágalo, hueso del pie'). Paul Rivet has pointed out that the die is also called *tawa*, *tahua*, *tagua* (Quechua 'four') in the Cuzco dialect; he saw in this word the origin of the Spanish word *taba* (Rivet 1925). But this is much discussed, since for others the term derives from the Arabic *tâb*, also a game term (see J. Corominas and J.A. Pascual, *Diccionario crítico etimológico castellano e hispánico*, Vol. V, Madrid, 1983).

B. Board Games

From literary evidence, we know the Incas had several board games, most of them of the race game type. Let us first examine the race games.

B.1. Race Games

Our 'chroniclers' offer about six different names for what clearly appear to be race games, *i.e.* board games played with a die. Some of them must have been synonyms. If *chunkana* (from Quechua *chunka* 'ten') is often mentioned, *aukay, takanako, halankola / hunkuña* appear more rarely. *Pichqa* and *wayru* also seem to have designated actual board games. All these games make use of one 'Inca die'.

aukay (awkai, aucai) (Murúa 1590) = takanako? (Romero 1943: 23)

Murúa 1590 (II, 13) presents this game: 'llaman también *aucai*, que en una tabla con fríjoles de diversos colores y dificultoso en jugar, también echando los puntos con la

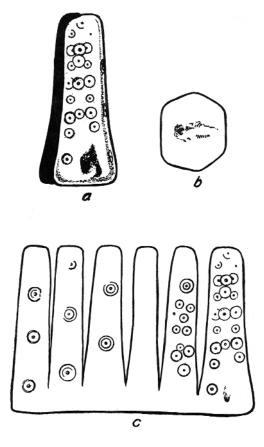
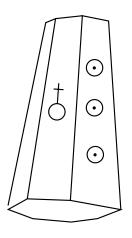


Fig. 1: Pichqa die found at Macchu Pichu by H. Bingham



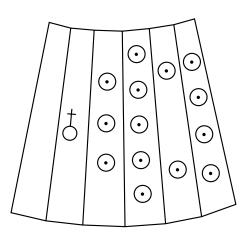


Fig. 2: Drawing of a modern wayru die used at Sigsig (Ecuador) (from Hartmann & Oberem 1968)

pisca como queda ya dicho, el cual es un juego muy gustoso' ('aucai is a board with multicoloured beans; it is difficult to play, points are counted with the pisca die...; it is a very nice game'). In classical Quechua auccay means 'war' (González Holguín 1608). Although Murúa is the only author who mentions this game, his account is very close to that given by Cobo (Cobo 1653) for takanako. In Aymara, according to Bertonio 1612 (s.v. 'Juego'), the word aucattana designates the halankola board.

chungani, chuncani (Santo Tomás 1560; Torres Rubio 1619), chuncana (*Vocabulario* 1586), chuncaycuna, ccullu chuncana (González Holguín 1608), chuncara (Cobo 1653)

(Romero 1943: 22)

A race game played on five squares with multicoloured beans and the *pichqa* die. Scoring is by tens, from 10 to 50. Although a complete description is lacking, it is the best documented race game. In Santo Tomás 1560 we find *chungani* meaning 'juego de fortuna' and 'jugar a... los naypes' (to play at cards). The *Vocabulario* of 1586 gives 'Chuncana. qualquier juego de fortuna', and 'Cullu chuncana. ajedrez, o tablas, &c.' (*i.e.* both chess and backgammon – from *ccullu* = 'wood'). González Holguín (1608) repeats all this (s.v. *chuncaycuna* and *ccullu chuncana*) and adds *chuncana cuna* 'gaming instrument' (Lara 1978: *chunkanakuna* 'instrumentos u objetos que se emplean en un juego').

It is once more Bernabé Cobo (Cobo 1653) who gives the most detailed account of this game: 'chuncara [wrong spelling for chuncana?] was another game with five little holes dug in a flat stone or table: they played with multicoloured beans; when the die was cast, and according to lots, they move them from one square to another until the end; the first square was worth 10 and the others went increasing by tens up to the fifth which was worth 50.' ('Chuncara era otro juego de cinco hoyos pequeños cavados en alguna piedra llana o en tabla: jugábanlo con frisoles de varios colores, echando el dado, y como caía la suerte, los mudaban por sus casas hasta llegar al término: la primera casa valía 10, y las otras iban creciendo un denario hasta la quinta, que valía 50.') Note that Murúa is silent about this game.

Chunka seemed to have had a special meaning for the gamesters. According to Garcilaso de La Vega (1609: II, 62), 'llaman chunca a cualquier juego... (...) Tomaron el número diez por el juego...', they held the numeral 'ten' for gaming. It was also one of the names of the die in Aymara (Bertonio 1612).

halankola, jalankola or hunkuña, juncuña

halancola, halancolatha, halancolasitha (verb) = huncusitha (verb), huncosiña (Bertonio 1612), hilancula (Waman Puma 1615)

(Romero 1943: 22)

According to Bertonio 1612 *halankola* was a race game somewhat resembling backgammon, played with the *pichqa* die on a board called *aucattana* ('se parece algo al de las tablas, y van adelantando las casas con estas palabras: *Halancola*; y a su traza llaman, aucattana, y al dado de madera que usan, pisca; y a los agujeros o hoitos del

juego les dicen *Halancola.*', see under 'Juego'). There are other entries for this game in Bertonio's dictionary:

'Halancola. Los agujeros, o hoytos, de un juego assi llamado que algo se parece al de las tablas.' (s.v. Halancola) [Halancola = the little holes (i.e. squares) of a game so-called which resembles backgammon]

'Huncusitha. Jugar como a la tagua con un dado grande de madera, adelantando unas piedrecitas en sus casas u hoyos; lo mismo que el *halancolatha*' (s.v. Huncusitha) [Huncusitha (verb): To play as with knucklebones with a large wooden die, moving some small stones in the squares or holes]

At the same time Felipe Waman Puma de Ayala offers a list of games that were played by the 'noble lords' in April (Waman Puma 1615: 243). Among these was *hilancula* (which here too seems to need a *pichqa* die). There is another mention further (Waman Puma 1615: 780), in another list of games with cards, dice, chess, then 'hilancula, chalco chima', etc. Again in association with *pichqa, hilancula* is quoted a third time (Waman Puma 1615: 844: 'con la hilancula, pichica').

pasa (from Quechua pachak '100')

(Juan & Ulloa 1748: VI, 6, no. 941 = II, 549; see also Culin 1898: 805)

A race game observed c. 1735-44 among the Aymara Indians by Jorge Juan and Antonio de Ulloa, played on a wooden board (or a counter?) in the shape of a double-headed spread eagle of wood with 10 holes on each side, with pegs and a seven-face die, one of the faces being called 'guayro' (= wayru). The game was won by the first player who reached 100. According to Juan & Ulloa, it was 'el único que los Indios del Perú suelen jugar' (Index). Maybe a form of wayrusitha.

pisca (Murúa 1590), piscasitha (Bertonio 1612)

wayrusitha (Bertonio 1612)

(Romero 1943: 19)

Obviously *pichqa* and *wayru* also meant a race game. Murúa (1590) mentions 'another game' played with the *pisca* die and with 'its table and its holes or marks, where they move their men' ('que es muy ordinario questos Indios llaman la *pisca* con su tabla y agujeros o señal, donde iban pasando los tantos.'). Bertonio 1612 gives two verbs *huayrusitha* and *piscasitha* with the meaning 'to play with little stones, by moving them in their holes [squares] according to the score of a kind of large die [*huayru* or *pisca*]; in one of these games, they move the stones all around or in circle; in the other [game], they go winding about like a river.'

('Huayrusitha, Piscasitha. jugar con unas piedrecillas adelantandolas en sus hoytos, segun los puntos de una manera de dado grande; en unos destos juegos van adelantando las piedras alderredor o en círculo; en otros dando buelta como río, &c.')

Such a game may well fit what Roswith Hartmann and Udo Oberem watched in 1965 at Sigsig (Ecuador) under the name of *huairu*. It is a race game played with the *pichqa/wayru* die, on a board with 29 holes arranged in a somewhat triangular circuit divided by a central line (see Fig. 3). An unstated number of men (maize ears, beans,

etc.) are used. The tracks of the two players are not identical: the shorter track (1) has 10 cells, the longer track (2) has 20 cells. The first player who gets the crossed side of the *wayru* die starts. The first who reaches the centre wins. Unfortunately Hartmann and Oberem have forgotten to complete their information so we have no other detail nor do we know what happens when two opponents meet.

We will find a somewhat similar arrangement of the holes in a race game played by the Mapuches (Araucanians), called *kechukawe* (see further). As we shall see, the Mapuche game, which uses the same pyramidal die, may well be a close relative of the Inca game.

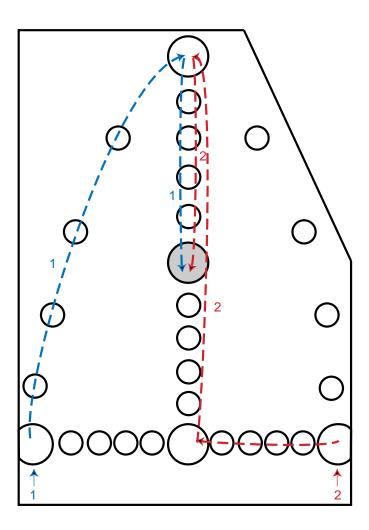


Fig. 3: 'Huairu' board as drawn by Hartmann & Oberem (1968). The two players have different tracks.

takanako (Cobo 1653) = aukay?

(Romero 1943: 22)

A race game 'like backgammon', with multicoloured beans and the pichqa die.

Cobo (1653) writes: 'another kind of game was called *tacanaco*; it was played with the same die and with multicoloured beans, like backgammon (como el juego de tablas)'. Cobo is the only one who mentions this game but his description looks very much like that of aukay mentioned by Murúa. Romero 1943 identified takanako with halancolatha.

B.2. Strategy Games

Besides race games, some sources account for the existence of a 'strategy' game (without dice) under the names of *taptana* or *komina*. These 'Inca chess' are in fact a 'hunt game', played on an 'alquerque' board with a triangle added to one side.

komina, cumi

comina (Santo Tomás 1560), cumisiña (Bertonio 1612)

(Romero 1943: 24)

A hunt game. *Comina* appears in Santo Tomás's dictionary of 1560 as a synonym of *taptana: 'Taptana, o comina:* axedrez, tablas, o alquerque' ('chess, backgammon or alquerque'!) and '*Comina, o taptana:* alquerque'. Bertonio 1612 has an entry under *kumisiña* or *kumisitha:* 'Cumisitha. Jugar a un juego como al que llamamos oca, aunque en muchas cosas diffiere. — Cumisiña. Juego assi.' ('Cumisitha. To play a game like the one we call the game of the goose, although it is different in many things'); he also gives *kumisiña* as an equivalent of Spanish *alquerque* and *ajedrez:* 'Alquerque. Cumisiña, y lo mismo significa Axedrez, porque los Indios no distinguen los juegos, si no miran al modo.' ('and the same means chess, because the Indians make no distinction between games if they do not watch how they are played'). In a modern Quechua dictionary (De Lucca 1983) *cumi* is defined as 'juego que en castellano se llama el león y las ovejas', which is indeed a hunt game equivalent to the English fox and geese. *El león y las ovejas* (literally 'the lion and the sheep') is a popular game in South America where *león* stands for puma (there are no native lions in America!).

puma (González Holguín 1608, Cobo 1653, Torres Rubio 1700) (Romero 1943: 28)

There is also a board game called puma.

Unfortunately the rare accounts we have are quite uninformative. González Holguín (1608) writes: 'Puma. Un juego de Indios. — Pumani. Jugar a este juego.', and Torres Rubio (1700) has: 'Puma. Cierto juego de Indios'. Cobo (1653) mentions it, together with *apaytalla*, at the end of the *ingeniosos* games; for him, *apaytalla* and *puma* are 'less prestigious' *(menos principales)...*

We know *puma* also means the Andean 'lion', and it is tempting to connect the game of *puma* with *el león y las ovejas*, in other words with *komina*. We will see that the Mapuches call their game *komikan*, '*el leoncito*'.



Fig. 4: The Inca emperor Atahualpa playing taptana in jail with his guard (from Waman Puma 1615).

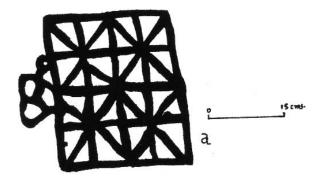
taptana (Santo Tomás 1560; González Holguín 1608; Waman Puma 1615), tapta (*Vocabulario* 1586), probably also atapta (Murúa 1613: II, 89°, p. 323)

The game of *taptana* must be a war or a hunt game, if we trust the equivalents offered by the Spanish lexicographers. In modern Quechua *taptana* means 'chess'.

Santo Tomás 1560, the *Vocabulario* of 1586 and González Holguín 1608 all have an entry for a game called *taptana* that they render as 'alquerque' or 'ajedrez'. The *Vocabulario* of 1586 adds that *taptana* means 'chess-board', using *tapta* for the game itself. More interestingly Santo Tomás 1560 gives to *taptana* the synonym *comina*. In his 'long' and later version, Martín de Murúa mentions only one game that he calls *atapta* 'que es como a las tablas reales' ('like backgammon'); it was played by the Inca Tupac Amaru.

Olaf Holm (Holm 1958) has rightly remarked that Waman Puma alludes to the game played by the last Inca emperor Atahualpa in the Cajamarca jail, before his death in 1533. According to the *Nueva crónica*, Atahualpa 'played chess [ajedrez] that they [the Indians] called *taptana*'. A drawing shows the scene (Waman Puma 1615: 388 [390]), with Atahualpa in chains in front of his guard. What is at first sight an alquerque board lies between them (Fig. 4).

We now know that *taptana* is also called *komina* (and perhaps *puma* too...), and that it is a hunt game known today as *el león y las ovejas*. As we shall see, the same game is played by the Mapuches under the name of *komikan*, probably a cognate to Quechua



Figs. 5a-b: Taptana boards scratched on Pre-Hispanic walls at Chinchero (near Cuzco) (from Alcina Franch 1980).

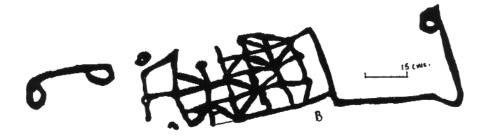
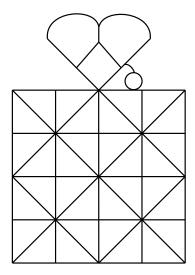
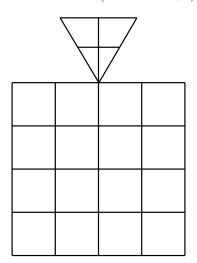


Fig. 6 (left): Schematic drawing of a **taptana** board (from Alcina Franch 1980).

Fig. 7 (right): Board game for solitario, Peru, late 19th century (after Culin 1898).





komina and Aymara *kumisiña*. The Mapuche *komikan* has the same latticed board as alquerque with a triangle added on one side. It is possible to imagine that it was the game intended by Waman Puma in his drawing.

Archaeologists have been fortunate enough to find the same design scratched on the Pre-Hispanic walls of the square of the church at Chinchero (near Cuzco). These graffiti were discovered and analysed by J. Alcina Franch (Alcina Franch 1980). One of them (no. 32 – Fig. 5a & Fig. 6) is without doubt a *taptanalkomina* board; another one (no. 37 – Fig. 5b) looks like a 'spoiled' board. Although the author dates these graffiti in the 17th century, he demonstrates that they are related to Precolumbian traditions. Stewart Culin too reports a Peruvian game called *solitario* (Culin 1898: 876, fig. 183; also Murray 1952: 100, no. 5.2.1) which shows the same triangular appendix (Fig. 7).

Is taptana/komina an indigenous game? The board illustrated by Waman Puma de Ayala is nothing but an ordinary Spanish alquerque board, either used for a war game (alquerque de doze) or for hunt games (cercar la liebre, castro). Moreover all our sources are later than Columbus. Other such war games are known in Europe and in Asia, as well as in Mexico and in the South-West culture of the United-States (Keres, Zuñi, Pima, Papago, and Hopi Indians: see Culin 1907: 794-5; Murray 1952: 67). However, triangular appendices only appear in Southern Asia. Hunt games on the same board also exist, but added triangles are known only in China and Japan (Murray 1952: 100-101). These triangles, always in pairs, one on each opposite side, are definitely different: the

South-American game cannot derive from these Asiatic forms. Since they cannot have borrowed their appendix from Europe, it is reasonable to think this game is Precolumbian.

C. Apaytalla: The Game with Beans

In his celebrated *Comentarios reales* Garcilaso de La Vega (La Vega 1609) says that besides edible beans, the Incas knew other kinds of beans called *chuy*, 'que no son de comer' ('not edible'), round, of different coulours and of small size ('del tamaño de los garbanzos', *i.e.* like chickpeas), to which they gave ridiculous or 'well suited' names and which they used for many children and adult games. Garcilaso remembered that he himself used to play with these beans (Romero 1943: 14).

apaytalla (Murúa 1590; Cobo 1653) (Romero 1943: 23)

Murúa 1590 mentions a game called *apaitalla*, using beans 'of different kinds and appellations', cast on the ground from the top ('con la cabacera alta'), with lines and arches like furrows ('rayas y arcos a manera de surcos'); the winner was the player who 'went ahead and was the noisiest [!]'... A legend attributed the invention of the game to



Queen Anahuarque.

('es un género de fríjoles redondos de diversos géneros y nombres, e hizo en el suelo con la cabacera alta de donde sueltan los tales fríjoles, y el que de ellos pasa adelante y hace ruido más, gana a los otros, está con sus rayas y arcos a manera de surcos')

For Cobo (1653), it was just a 'less prestigious game'. The lexicographers (Santo Tomás, González Holguín, Bertonio) have no entry for that word or for any similar game. González Holguín (1608) only has 'Chuui o chuy. Unos frisoles muy pintados como garvanzos y otros menores larguillos.' ('multicoloured beans, like chickpeas and other smaller beans').

It is very tempting to identify this Inca game of *apaytalla* with the game shown on many Mochica potteries (c. 100 BC-c. 600 AD). On these gaming scenes players are shown handling multicoloured beans and waving sticks which were more probably used for keeping the score than as dice, since each player has his own set (Fig. 8). The undulating ground seems to be made of sand; beans are put in hollows as well as on ridges. The Mapuches have such a game, called *lligues* (*llüqn*) or *awarkuden* (see further). Although these Mochica scenes have been interpreted as 'writing workshops' by R. Larco Hoyle (who tried to demonstrate that writing was known in Precolumbian South-America), they are now understood as gaming scenes (Vivante 1942; Romero 1943: fig. 1; lastly Hocquenghem 1979).

This implies that prior to the using of the rather sophisticated Inca die, the peoples who lived in the Andean area used beans as dice, like the Aztecs.

D. Unidentified Games

Waman Puma 1615 offers two lists of games played by the 'noble lords'. Some of these names are unknown elsewhere and cannot be explained. I have nevertheless decided to publish them here.

- p. 243 [245]: 'todo el mes [abril] juegan los señores principales al juego de riui, choca, al uayro de ynaca, pichica de hilancula y de challco chima' (1987 edition).
- p. 766 [780]: 'y se enseñan a jugar con naypes y dados como españoles, al axedres, hilancula, chalco chima, uayro, ynaca, riui, pampayruna, yspital, uayro ynaca [sic]' (1987 ed.).

riuichoca (riwichuqa) (Waman Puma 1615: 243 [245])

A throwing game, today known as *riwi* or *lliwi* (Lara 1978) and, in Spanish, as *boleadoras*. It is an old hunting weapon made of three stone or lead balls *(bolas)*, tied with a cord. The balls are thrown as far as possible.

ynaca (iñaka?) (Waman Puma 1615: 243 [245]; 766 [780])

The meaning is unclear. In Quechua *iñaqa* (or *iñaka*) means 'mantilla' (González Holguín 1608); but in Aymara it means 'noble woman from the Inca caste' (Bertonio 1612). It is possible to understand 'al uayro de ynaca' (= wayru [de] *iñaqa*) as 'to the wayru game of the noble Inca women'... In the second list, Waman Puma repeats 'uayro ynaca' twice.

cha[l]lco chima, challkuchima (Waman Puma 1615: 243 [245]; 766 [780])

'Challcochima' is the name of an Inca war lord (Challcochima, Challicuchima, Challkuchimaq, Challkuchima...), supporter of Atahuallpa, victorious of Huascar, and finally killed by the Spaniards. In Aymara *kallko* (now extinct) meant 'five' (De Lucca 1983).

pampayruna (Waman Puma 1615: 766 [780])

There is only one meaning for *pampayruna*: 'prostitute'! González Holguín 1608 has: 'Pampayruna. Muger pública comun a todos'; and Torres Rubio 1619: 'Panpayruna. Ramera'. In modern Quechua the meaning has not changed: 'Panparuna. Prostituta' (Lara 1978)! Is that also the name of a game?

yspital (Waman Puma 1615: 766 [780])

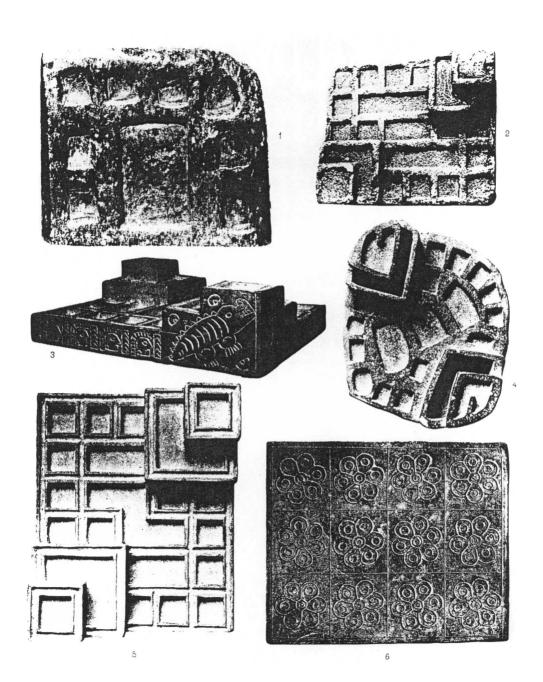
Another puzzling word whose exact meaning is unknown (hospital?).

E. Game Board or Abacus?

Another artifact has sometimes been presented as 'Inca chess': this puzzling object, which sometimes looks very much like a miniature castle, has alternately been interpreted as an abacus, a model fortress, or a game board (Fig. 9). It is Nordenskiöld who made the hypothesis it was a board game. His demonstration was attractive: the Chaco Indians have a very simple race game called *tsuka, chukanta,* or *shuke* (from Quechua *chunka*, 'ten') which they play with throwing sticks as dice. (Actually this was reported in the early 20th century.) Nordenskiöld inferred from this that this game was borrowed from the Incas. Cobo's reference to *chunkara* appeared as a good justification for Nordenskiöld's theory. Moreover when transposed on the Inca artifact the Chacoan rules work!

However, Cobo's description does not fit the Chacoan game at all, and it is hard to believe that such a complicated multi-level object was used for a board game. More recent investigations, undertaken by Carlos Radicati di Primeglio (Radicati di Primeglio 1979) have shown that it is in fact a *yupana*, the Inca abacus. Other objects, which have been sometimes presented as board games, are clear relatives of this abacus (e.g. Holm 1958; Figge 1987). Although some scholars have tried to support Nordenskiöld's theory (Smith 1977; Pratesi 1994), there are good reasons to accept Radicati di Primeglio's well-documented demonstration.

(facing page) Fig. 9:
Abacus or game
board?
Plate from P. Rivet &
R. Verneau,
Ethnographie
ancienne de
l'Équateur,
Paris, 1912.



III. The games of the Mapuches (Araucanians)

Because the study of neighbouring cultures can throw some light on the Inca games, I have studied too the games of the Mapuches. The former Araucanians lived to the south of the Inca empire and were partially conquered by them. Today they call themselves Mapuches and live in the north of Chile. The Mapuches were influenced by the Inca culture: it is no surprise if their games show strong similarities with the Inca games. By chance, early descriptions of the Araucanians are very informative (e.g. De Ovalle 1646) and all give detailed accounts on their games. Alonso De Ovalle has even illustrations showing two games in action (Fig. 10).

kechukawe (quechucayu, quechucague)

According to De Ovalle's description (De Ovalle 1646), *quechucague* is a race game played on a semi-circular board, with segments of five squares each (see picture 'Ludus quechucague' in Fig. 10 and my Fig. 11); the sole die looks like an elongated pyramid; men are little stones. Rosales (*post* 1674, in: Pereira Salas 1947) says it is a gambling game, but does not mention any circuit; he nevertheless describes a perched ring through which this 'triangular' die was cast. Comparison with De Ovalle's engraved plate shows strong similarities between *quechucague* and the race game which Hartmann and Oberem observed in the 1960's in Southern Ecuador (Hartmann & Oberem 1968). There the game was called *huayru* (*wayru*), which, as we know, is a synonym of *pichqa*. Like *pichqa*, *kechukawe* is derived from the Mapuche word *kechu* meaning 'five'!

There was in Francisco Fonck's collection a 'gaming stone' with five little holes on each side, which was found in the Group IV of El Retiro (Fonck 1912: 5). Unfortunately the drawings that Fonck had prepared were not printed.

M. de Olivares's Historia militar, civil y sagrada ... del reino de Chile (written c. 1758, quoted in Medina 1952) gives more detail about the Araucanian die: it is an 'isoceles triangle' with faces bearing 1, 2, 3, 5 (?) and 0; the game of quechuncague or quechucan is a race game 'al modo de la oca' (like the game of the goose) were pieces (tantos) are moved according to the throw of the die. More interestingly we learn that every man which encounters another man 'eats' it 'al modo del ajedrez'. So kechukawe, as a board game, seems to have been a race game with capture, a class of games not unknown in other civilisations (e.g. the Arabo-Muslim tâb wa-dukk and its many relatives). Whether the perched ring, known as chúgudhue according to Fébres's Araucanian dictionary of 1765 (in Medina 1952), was used or not is unclear.

J.I. Molina (Molina 1787: II, x) explains that 'quechu, que [los Indios] aprecian infinito, tiene una grande analogía con el juego de tablas, pero en lugar de dados se sirven de triángulo de hueso señalado con puntos que echan por un arillo sostenido de dos palillos, como era quizá el fritillo de los antiguos romanos.' (see also Murray 1952: 147-8, no. 6.7.3.).

('quechu, which the Indians liked very much, is very similar to backgammon, but instead of dice they use a wooden triangle marked with dots that they cast through a circle



Fig. 10: (facing page) Two Araucanian games in action (plate from De Ovalle 1646).

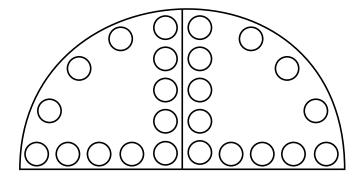


Fig. 11: Schematic drawing of 'Ludus quechucague' (from De Ovalle 1646).

perched on two sticks, as was perhaps the *fritillus* [dice cup] of the ancient Romans') Modern scholars have described a game called *kechukawe*, but it is a simple dice game. Manquilef 1914 (§ 5. 'El kechukawe') reports that the die is a five-sided prism cast through a 'funnel' in a circle on the ground. The score is kept with sticks *(palitos)*. This is roughly what De Ovalle's picture 'Modi ludendi Indorum' (De Ovalle 1646) shows (Fig. 10). In the early 19th century Luis de La Cruz (La Cruz 1835: 66) observed the same game among the Peguenches under the name *guaro [wayru!]* played with a *quechu* die, *palitos* and a perched ring.

There is a strong parallel between the Inca *pichqa* and the Mapuche *kechu:* not only have they roughly the same shape (see Mátus Z. 1918-19: fig. 49 et 50 for two dice from the Museo nacional de Chile [Fig. 12]; Cooper 1949 states that the 'pyramidal' die – either with 5 or 7 sides – is common to all Andean cultures), not only both words mean 'five', but they were both used for two related games, a simple dice game and a race game. So *kechukawe* is the exact equivalent of the Inca *pichqa*, and it is reasonable to think the race game *kechukawe* is a likely cousin of the Inca *huayrusithalpiscasitha*.

komikan, comican

According to J.I. Molina (Molina 1787: II, x) the Araucanians knew 'el artificioso juego del ajedrez, al cual dan el nombre de *comican*' ('the ingenious game of chess, to which they give the name *comican*). *Komikan* was still played in the early 20th century and was described by Manquilef (Manquilef 1914: § 3, 'Komikan') and by Mátus (Mátus Z. 1918-19): it is a hunt game played on a latticed board with a triangle added to one side (see Fig. 12). It is also called *leoncito*. There are 38 points (25 on the main board + 13 on the added triangle). One side has 12 men (Spanish *perros* 'dogs' or *perritos* 'little dogs') and the other has one bigger and more powerful piece called *komikelu* or *leon*. The *perritos* move one step ahead; they try to hem the lion in. The *leon* alone has the power to capture by leaping over a *perrito*. Multiple short leaps are possible. What exactly happens on the triangle is not revealed by our sources. Mátus reports he had seen the game played 'among the Indians of inner Valdivia; but I could not clarify this subject

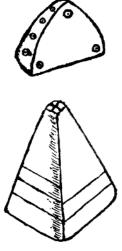
[the rules of the game] with them because they refused to give me details' (Mátus Z. 1918-19: 169).

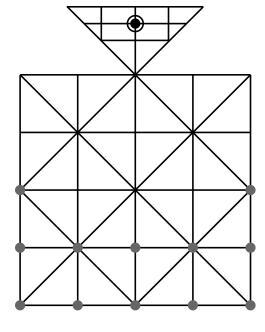
Because he had too little information, Murray 1952 classified *comican* ('said to resemble chess', after Molina) with his 'War-games of which we have no certain knowledge' (Murray 1952: 97). Instead the Mapuche game would rather belong to what Murray called 'tiger games' (Murray 1952: 107-12). However, although *komikan* somewhat resembles any hunt game played on the alquerque board, it has its own features: no European game has any added triangle; and it is dubious that the Mapuche game came from Malaysia or Indonesia! Even in these countries the rules and initial position of the men are different.

The Mapuche game of *komikan* is no doubt the equivalent of the Inca *komina* also known as *taptana* (Santo Tomás 1560: 'alquerque'). *Komikan* must be a cognate to Quechua *komina* and to Aymara *kumi*. The similarity between the games have already been noted. Although *komikan* is not described before the late 18th century (it is not mentioned by De Ovalle, Rosales, or Olivares), it is hard to suppose that it would be just a slightly modified European import.

Fig. 12 (left): Two Mapuche dice from the Museo nacional de Chile (from Mátus Z. 1918-19: fig. 49 et 50).

Fig. 13 (right): Komikan board (from Mátus Z. 1918-19): opening positions.





llügün, lüqn, lüq, llique, lliques (Mapuche *lüq, liq,* 'white' according to Vivante 1946: 33); modern Mapuche **awarkuden** 'beans game' (Vivante 1942; Vivante 1946) Andean people also played 'beans' games, where half-blackened beans were used instead of dice. This tradition can be traced back to the Mochicas (c. 100 BC-c. 600 AD); the Mapuches used to call it *llügün* (or *lligues*), and call it now *awarkuden*.

The game needs 8 beans, peeled and blackened on one side, spotted with dots; the beans are cast on a mat *(pontro)*, and 40 'counters' *(kob, kou)* – sticks, seeds or beans – for keeping the score (20 for each player). The games are supported with incantations. The score is won or lost according to the number of faces up: 4 black and 4 white = 1 point; all black or all white = 2 pts. (Manquilef 1918-19: § 6, 'Awarkuden').

De Ovalle 1646 describes, without naming it, a game of 'porotos o habas' (beans): 'they choose for that the white and they paint them black on one side (...); they drop them on the ground through a suspended circle or a large ring; the player whose beans fall with painted faces up wins the highest score.' Moreover, the players blow themselves on their breasts! (see Fig. 10 De Ovalle's picture 'Modi ludendi indorum' with the perched ring). In the late 17th century Rosales (post 1674) described a game called uies said to resemble dice. The player shout at the beans (in Pereira Salas 1947: 219). According to Carvallo's Descripción ... del reino de Chile, c. 1796 (in Medina 1952), lligues are '12 halves of beans, the ones black, the others white'.

Armando Vivante suggested that the Auracanian *awarkuden* was the same game as the Inca *apaytalla* and as the game represented on Mochica potteries (Vivante 1942, 1946; cf. Hocquenghem 1979 and Hocquenghem 1987). However, there are some differences: 'palitos' are never mentioned by the early sources. On the Mochica vases there is no trace of any throwing ring, but an undulating sandy ground is depicted with beans placed in hollows and ridges.

Conclusion

It is not easy to get a precise picture of the games the Incas played. However, from the scarce and confusing sources I have presented it is possible to go further than the scholars who had studied these games previously. One wonders why the Spanish chronicles and dictionaries are so poor, compared to the good accounts we have about the Aztec *patolli*. Expected sources are silent, and there is no useful iconography. After all, it seems that games and gaming had little importance in the Inca world, at least less than in Mesoamerica where all the chroniclers were impressed by the Indians' addiction to gambling (and this was true too for European travellers in North America, who observed the same phenomenon).

Contrary to this, the Incas seem to have had a large variety of games, but no specific enthousiasm for one of them. Did they prefer 'thinking' games? This is what Father Cobo inferred when remarking: 'Although they were barbaric, these Indians invented some ingenious games that correspond to our dice and to other games of ours; but they used them more for entertainment than for the lure of gain.'

'Aunque bárbaros, inventaron estos Indios algunos juegos ingeniosos que corresponden á el de los dados y á otros de los nuestros; pero usábanlos más por entretenimiento que por codicia de la ganancia' (Cobo (1653: XIV, ch. 17).

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