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## Original Synthetic Report

# Tiwanaku (Titikaka Lake, Bolivia) and Alberite Dolmen (Southern Spain) ritual “ears”

*Celtic, Iberian, Aymara and Basque languages*

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**Abstract** - There are indications of transatlantic cultural contacts in Prehistoric Times: Solutrean artifacts (about 20,000 years ago) are found in United States archeological sites and also cave wall inscriptions which may be a early alphabet and are identical all over the World are abundant in southern France and northern Spain. In the present paper, close similarities of a Tiwanaku (Titikaka Lake, Bolivia) “ritual ear” and another “ritual ears” observed in Alberite Dolmen (southern Spain, 7,000 years ago) are described. Functionality of these stone carved “ears” is related to amplifying voice and communication between shaman/priest and prayers. Thus, a religious role is put forward for these “ears”, but not excluding other functionalities. In addition, Basque language is considered as a remaining of the initial old Iberian-Tartessian language; Celtic Welsh is now being translated by using Iberian-Tartessian. Iberians identification with Atlantic Celts (British Isles and French Brittany) may be feasible. Also, words of an ancient European language (Basque) and Andean languages are similar in phonology and semantics. Our findings further strengthen the existence of transatlantic cultural contacts, which may have occurred in one direction or being also bidirectional during a wide range of prehistoric time.

**Key words:** Alberite, Aymara, Basques, Bolivia, British, Celts, Dolmen, Iberians, Quechua, Spanish, Tiwanaku.

## Introduction

It has been postulated that Southern Europeans reached America during the Pleistocene glaciations because Solutrean (between 20,000 – 17,000 years BC) artifacts have been found in North America East coast (Stanford & Bradley, 2012; Holden, 1999). First European explorers may have come from Iberian Peninsula/southern France since European Solutrean artifacts are found all across Iberia and France (Menéndez et al, 1997). In addition, it has been found that a mitochondrial DNA lineage is shared between Amerindians (First American inhabitants) and Europeans; this lineage may be traced in Europe until 15,000 years ago (Brown et al, 1998)

On the other hand, Basque language which is identified with Old Iberian language spoken in Prehistoric times (Arnaiz-Villena & Alonso-García, 2000; Arnaiz-Villena & Alonso-García, 2012) has been related to the Na Dene Amerindians languages (Ruhlen, 1991) and also to Andean languages (Quechua/Aymara, Arnaiz-Villena, unpublished and present paper). Recently, Celtic Atlantic languages and genes (Irish, Scottish, Welsh and British) have been postulated to coming from the Iberian Peninsula and Welsh is being translated by using old Iberian-Tartessian language (Oppenheimer, 2007; Cunliffe & Koch, 2012).

European genetic input to First American inhabitants has been suggested to come from Asia through Bering Strait, from Pacific Islands, including Australia and from Europe (Arnaiz-Villena et al, 2010).

In addition Tiwanaku (16° 33' S; 68° 40' W) Aymara ruins (Arthur Posnansky, [http://www.bibliotecapleyades.net/esp\\_tiahuanaco.htm#inicio](http://www.bibliotecapleyades.net/esp_tiahuanaco.htm#inicio)) contains a group of walls that are called Kalasasaya Temple (Arthur Posnansky, <http://www.bibliotecapleyades.net/arqueologia/tiahuanaco/posnansky4.htm>) which was constructed about 2,000 – 3,000 years ago (Arthur Posnansky [http://www.bibliotecapleyades.net/esp\\_tiahuanaco.htm#inicio](http://www.bibliotecapleyades.net/esp_tiahuanaco.htm#inicio)).

In a corner of one of these walls there are two holes which go through the thick stones and extraordinarily amplify voices that may be whispered from outside by a person close to the hole; conversely, slight whisperings on the center of the temple 20 meters far away from walls may be listened from the outside hole side by approaching anybody's ear to the hole. This suggests a use for ritual communication (Carpio, 2004; Arnaiz-Villena observation) between an outside listener and ceremony director (i.e.: a priest) and a group of prayers. The holes structure is very similar to the external ear conduct (Carpio, 2004). Surprisingly, a similar structure was noted by us in a dolmen constructed about 6,000 years ago in southern Spain: Alberite dolmen (36° 51' N; 5° 38' W) ([http://es.wikipedia.org/wiki/Dolmen\\_de\\_Alberite](http://es.wikipedia.org/wiki/Dolmen_de_Alberite); <http://druta.wordpress.com/2011/10/15/dolmen-de-alberite-villamartin/>).

Our “megaphone” / “ear trumpet” prehistoric findings in both Atlantic sides are interpreted in a context of genetic, archaeological and linguistic similarities between both prehistoric America and prehistoric Iberia (Stanford D., Bradley B. 2012). It is put forward the hypothesis that the use of this “megaphone”/“ear trumpet” stone ritual holes were culturally carried by people from Iberia to America in undetermined times before history.

## **Materials and Methods**

Photographs were taken by Antonio Arnaiz-Villena at Tiwanaku and Alberite Dolmen sites.

### ***Tiwanaku (First centuries AD)***

Tiwanaku ruins are placed in La Paz Department (Bolivia) at 57 km. North from La Paz close the Titikaka Lake and at 3,830 m. above sea level. One of the most striking structures is the so called Kalasasaya Temple that delimits a yard. This yard is able to gather up to 15,000 people. This construction may have taken place between 1<sup>st</sup> and 7<sup>th</sup> century A.D. In a North side wall (at right hand side, when looking at Sun Door from the Temple yard) there is an hole which measures 14x16 cm. externally and 16x21 cm. internally. It goes through all the thick wall stone. It is placed at 116 cm. height, and it is easy to put an ear on for slightly body built Tiwanaku Amerindians. According to Carpio (2004), its structure is similar to a human ear.

***Alberite Dolmen (6000 years BC, Neolithic Period)******- Dolmen***

In earlier English works this word was used for describing megalithic chamber tombs. However, this term is used by Spanish, French and other archaeologists (Bray & Trump, 1992). The word is derived from French Breton language (dol=stone). They have different forms: from simple chambers to chambers and corridors. They were built during Neolithic and Calcolithic periods, particularly in Atlantic and western Mediterranean countries, although not exclusively (5-6,000 years BC – 1,500 years BC)

***- This is one of the oldest Dolmens of Iberian Peninsula***

([http://es.wikipedia.org/wiki/Dolmen\\_de\\_Alberite](http://es.wikipedia.org/wiki/Dolmen_de_Alberite)). It has been found among other artifacts: more than a thousand collar beads of variscite, bones, shells and amber, a 20 cm quartz prism (foreign to the area and probably coming from Madrid Sierra), polished stone tools (one axe) and two individual human bones. (see Figures).

Alberite Dolmen has 2 chambers. It was inside painted in red, as many other dolmens in southern Spain, but this is the oldest recorded one. Also, a painted sun and anthropomorphs are found in the inside walls

(<http://druta.wordpress.com/2011/10/15/dolmen-de-alberite-villamartin/>;

[http://es.wikipedia.org/wiki/Dolmen\\_de\\_Alberite](http://es.wikipedia.org/wiki/Dolmen_de_Alberite)). The Dolmen entrance is directed to the sunrise. At the beginning of the smaller chamber two holes are found in the second stone at the left handside (see photographs, particularly Fig. 5d). These holes were very similar in size and form to those found in Tiwanaku. Both of them go completely through the thick stone but: 1) the outer side of the stone has been plastered with cement, thus destroying the two holes outer openings, and 2) some small stones have been introduced by uncontrolled visitors.

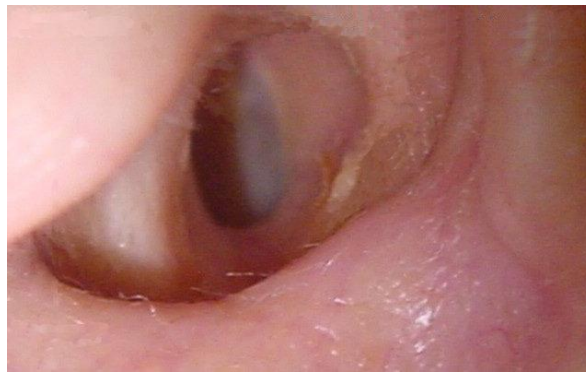
Alberite Dolmen stone in which “ear” holes are placed is 50 cm thick. The upper and lower holes have inner “ear”-like shaped structures. Upper hole corridor has a rising angle of about 35 degrees with horizontal and its length measures 54 cm. (Figs. 5a, 5b). In the back of the thick stone this upper hole has been obstructed (not completely) with a round stone and cement in these recent years. Lower “ear”-like hole has a going down angle of about 30 degrees with horizontal; its length is difficult to calculate since its corridor is obstructed. Both holes are communicated each other. (Fig. 5b1). Both holes are placed at about 150 cm from the floor or the big stone base. (Fig. 5e).

## Results and Discussion

### *Similarity between Tiwanaku and Alberite Dolmen holes.*

#### *- Tiwanaku (Bolivia)*

Human external auditory canal (Fig. 1) has been compared with Tiwanaku “ritual ear holes” (see below). External auditory canal has a structure that allows sound been received in the best discriminant conditions by inner ear nervous system receptors. (Carpio, 2004).



*Fig 1. Anatomical external auditory canal.*

The Tiwanaku hole amplifies sound, as it may be tested by any visitor to the ruins, even nowadays. Megaphone (Fig. 2) characteristics of this hole are definitively present. Theoretically, a crowd placed in the center of Kalasasaya Temple may be able to hear what hypothetical priest-shaman whispers through the hole from the outside. On the other hand, this shaman may be able to hear from outside what is whispered by the crowd inside the temple, i.e.: prayers which are performed by people in a relatively low voice. This is an “Ear Trumpet” effect as it is shown in Fig. 3.



*Fig 2. Megaphone for making a person voice louder to others.*



*Fig 3. “Ear trumpet” for amplifying external sounds.*

Inner and outer photographs from the Tiwanaku hole are shown in Figs. 4a and 4b. Kalasasaya Temple ruins are shown in Fig. 4c and Sun Door placement is highlighted with a red circle; a red arrow points to the wall stone where the “ritual ear” is placed. One of the authors (AAV) is pointing out to the Tiwanaku Kalasasaya Temple hole (Fig. 4d).



*Fig 4a. Inner aspect of Tiwanaku hearing/amplifying hole.*



*Fig 4b. Outer aspect of Tiwanaku hearing/amplifying hole.*



*Fig 4c. Kalasasaya Temple walls. Red circle showing the Sun Door placement. The ritual “ear” is placed under the red arrow through a thick wall stone (more than 50 cm thick).*



*Fig 4d. One of the authors pointing out to the inner “Ritual Ear” at Tiwanaku Kalasasaya Temple.*

For Tiwanaku construction details see:

<http://www.unexplained-mysteries.com/forum/index.php?showtopic=110144>

<http://en.wikipedia.org/wiki/Pumapunku>

<http://www.intersurf.com/~chalcedony/Tiwanaku.html>

<http://www.bibliotecapleyades.net/arqueologia/tiahuanaco/posnansky4.htm>

#### ***Alberite Dolmen (Southern Spain).***

It has a typical “corridor type” structure; entrance drives to the end of the Dolmen through the corridor (Fig. 5d). At the left hand side, 2 holes (Figs. 5a, 5b) are found in the second stone starting from the corridor end (Figs. 5c, 5d).

Dolmens are thought to be erected for certain society people, probably rulers. Notwithstanding, no human remains have been found in many Dolmens.

In this particular case, the holes seem to go through all the thick stone, however a cover of cement and/or concrete-plaster have been plastered on the outer face of the hole, at the 2<sup>nd</sup> big stone. This was done in the recent reconstruction of the Dolmen. Thus, one hole (the lower one) does not go through all the stone completely. Functionally of Alberite Dolmen holes could have been similar to Tiwanaku function: a non visible outer priest could have easily communicated with putative inner Dolmen prayers following a religious/funerary rite (or other kind of rite/function).





*Fig 5a*



*Fig 5b*

*Fig 5a. Lower “Ear-like” hole at Alberite Dolmen (southern Spain).  
Fig 5b. The two “Ear-like” holes at Alberite Dolmen (southern Spain).*



*Fig 5b1. A wire demonstrating that the 2 dolmenic holes are communicated.*



*Fig 5c.  
Exact placement of Alberite Dolmen ritual “Ear-like” holes.  
(Photograph taken out from above).*



*Fig 5d  
Arrow showing stone where ritual “Ear-like” holes are placed at Alberite Dolmen.*



**Fig 5e.**

**Approximate height of holes compared to a person of 176 cm height. 145 cm holes height.**

In conclusion, the coincidence of these similar stone hearing artifacts in two far away places suggests that European dolmenic culture (starting 5,000 years BC) could have reached South America at Tiwanaku (1<sup>st</sup> century BC). This is in concordance with the spreading of Solutrean artifacts from Western Europe to America (Stanford & Bradley, 2012).

***Stone age writing (cave wall scripts).***

There is no doubt that the same twenty three cave wall signs from Paleolithic age have been found throughout the World (Von Petzinger in Ravilious, 2010). This is a direct evidence that a generalized identical World culture existed at least 25,000 years ago. It shows that man moved easier and faster than it was thought in Paleolithic age.

***Basque, Iberian-Tartessians, Celts.***

On the other hand, it has been confusion about the meaning of the word “Celtic”. According to classic authors, they seemed to refer to westernmost Mediterranean people: Iberian Peninsula inhabitants. However, Hallstatt and La Tene Central European “Celtic” artifacts have been barely found in Iberia. It is believed that Celtic is a word originated from old Iberian-Tartessian/Basque language (K(h)elder = soot) which is a generic term to indicating that Celts painted or “tattooed” their bodies with soot (Arnaiz-Villena & Alonso-García, 2011, pp: LXII-LXIII). Thus, we put forward that Atlantic Celts might be assimilated to Iberians. In fact, there is an Iberian-Tartessian/Basque old European substratum in toponymy and hydronymy (Vennemann, 2009).

***Similarities between Basque, Iberian-Tartessian and Andean languages terms (Aymara/Quechua) (Table 1)***

Ancient Basque is probably one of the most primitive languages in European/Mediterranean area, which apparently was much more widespread, forming a part of the NaDene-Caucasian group of languages (Ruhlen, 1991). We have named Mediterranean languages as Usko-Mediterranean languages (Arnaiz-Villena et al., 2001) and Untermann has named a probably similar concept as “languages with Mediterranean Stratum” (Untermann, 2006, pp. 197). American NaDene, Navajo and Apache languages in North America belong to this type of languages. In addition, results are shown in Table 1 of Andean (Aymara/Quechua) words which are similar in phonology and semantics to Basque. These terms have been analyzed by using a methodology described in <http://chopo.pntic.mec.es/~biolmol/publicaciones/Usko.pdf> supported on phonology and semantics of the same words, which is also pointed to be fruitful by Untermann (2006, pp. 198), (Arnaiz-Villena & Rey, 2012).

*Iberian-Andean similar writing (Table 1\*).*

\* <http://chopo.pntic.mec.es/biolmol/publicaciones/Usko.pdf>

<b>Aymara/ /Quechua</b>	<b>English</b>	<b>Basque (Iberian- Tartessian)</b>	<b>English</b>
Titi	(1 <sup>st</sup> part of Titikaka)	Tita*	Sin, freckle *
Kaka	(2nd part of Titikaka)	Kaka	Human remains, deads *
Viracocha	Deity who created everything	Bira	Two by two
		Kotxa	Fertile
Mitimaes	Almost all people living in Cuzco at the Spanish Conquest timing (according to Cieza de León)	Miti	Servant
		Maes	Corn (Corn harvesters)
Curaca	Religious-administrative authority	Kur	Adorer
		Aka	Dead
Ilapa	Thunder's God	Il	Dead
		Apa	Father (Dead's Father)
Ceque	Earth paths related with ritual sacrifices	S(Z)equiri	Crowd following deads to be buried.
Huaka	Sacred place	Gu(ne)aka	Our deads (cemetery?)
Ekeko	Beneficial man wondering on "Altiplano"	Ekei	Much grown up person
		Ko	Function
Panakas	Dead King's family	Banako	Special, chosen people.
Urko	Viracocha's son	Urk(h)o	Close relative
Kipu	Andean rope with knots for writing and calculations	Kipustun	Knot's lace.

## Conclusions

1. Carved stones rituals “ears” are found in both Atlantic European Dolmens (5,000 BP) and a Tiwanaku Temple at Bolivia (about 2,000 year BP).
2. Functions may be related to funeral and/or religious rites and are useful for amplifying sounds both for outer and inner people at both Alberite Dolmen and Tiwanaku Temple. Probably these holes were used for ritual priest-shaman/prayers communication.
3. Some Basque words and concepts are similar to the Andean languages studied by phonetics and semantics.
4. These findings together with the discovery of:
  - a) Same cave wall Paleolithic (17,000 year BC) scripts extended all over the World.
  - b) Solutrean artifacts at both sides of Atlantic (15,000 BC), suggest that cultural and probably genetic exchange occurred between America and far away places much earlier than nowadays thought.
5. Identification of Atlantic Celts with Iberians-Tartessians may be considered

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