



10.5281/zenodo.220952

THE IBERIAN URBAN SANCTUARY OF PUENTE TABLAS (JAÉN, SPAIN)

Manuel Pérez Gutiérrez¹, Arturo Ruiz Rodríguez², Manuel Molinos Molinos²

¹ Higher Polytechnic School of Ávila, University of Salamanca.

C/ Hornos caleros, 50. 05003, Ávila, Spain. Tel:+34920353500, Fax: +34920353505

² University Institute of Iberian Archaeology. University of Jaén.

Paraje Las Lagunillas s/n, 23008, Jaén, Spain. Tel: +34953213502, Fax: +34953212287

Received: 01/02/2016

Accepted: 20/04/2016

Corresponding author: Pérez Gutiérrez manolope@usal.es

ABSTRACT

This paper presents a complex Iberian sanctuary from the archaeological diggings realized in the Iberian oppidum of Puente Tablas (Jaén, Spain). The sanctuary, dated from the first half of the sixth century BC, covers an area over 300m² and is divided in three different terraces with elements as significant as a shrine shaping a bull's skin, a set of four caves or a water canal that goes across the sanctuary from north to south. The underlying idea in this sanctuary and the findings that surrounds it, is the representation of an annual cycle from the illumination of the Stela (as a representation of a goddess) along the corridor of the door that gives access to the oppidum in the days of the equinox in the Sunrise, producing a spectacular play the light and shadows. To complete the mentioned play of light during such a particular date, the disposition of the fourth cave, along with its access, allows the entrance of the sunrays only in the dawn of the equinotial days, and just after the Stela, illuminated in the edge of the Sunrise, is cover with the shadows produced by the gate in the wall.

KEYWORDS: Iberian Culture, Puente Tablas, Betatun, calendars, fecundity, fertility, Equinox

1. INTRODUCTION

In the South-East of Iberian Peninsula we can be found a settlement with an extension about five hectares long. It is located in the shore of the Guadalbullón River, nearby the Guadalquivir Valley, and we related to the territories inhabited by the Oretani and Bastetani peoples, and whose capitals were Cástulo (the actual Linares in the province of Jaén) and Basti (the actual Baza, in the province of Granada). This settlement was occupied from the 9th century BC (late Bronze Age) onwards with several phases of occupation. Making reference to the oppidum as La Plaza de Armas de Puente Tablas, three kilometers away from the present city of Jaén (Fig. 1).

According to Ruiz & Molinos (1985a, 1985b, 1988, 1989, 1990) and Fernández (2004), a cultural change occurred in the Iberian territory during the 6th century BC, which is denominated as Orientalizing period, and which concluded with the beginning of the Late Iberian period, around 4th century BC. In this specific time lapse the social relationships were altered, and the new power model was introduced: the lineage clientelism as well as the heroic model type. The dominant elites developed and it allowed that the model princely and the aristocracy were originated.



Figure 1. The oppidum of Puente Tablas, the Guadalbullón valley and behind the actual city of Jaén

Parallel to the development of the relationship of the aristocracy and the clientelism, there was a transformation in the physical structure of the oppidum. Not only a four-hundred-square-meter palace was built by the dominant elites but the fortification was modified, building a new entrance in the defensive wall as well. Before the 4th century BC, an existing defensive wall enclosed the oppidum and there was not a south entrance to the settlement. Inside the defensive wall, and close to this south entrance, especially monumental, a sanctuary with a lot of elements of unequivocally orientaling characteristics was constructed in the first half of the fourth century

BC, according to the Attic red-figure ceramics found in the excavations.

2. THE COMPLEX OF THE SANCTUARY

2.1. *The Sun door and its elements*

The ancient defensive wall that surround the oppidum was removed and two bastions were built to finish it at some point of the 4th century BC. The bastions were connected by an overpass, which closed by a top frame as a door and allows between them. The archaeological interventions aims that access probably was not used for the transit of carriages and therefore for merchandize. This reason, along with the proximity to the palace located in the privileged south zone of the oppidum, shows a special use of this entrance. In addition, the construction incorporates a series of elements which provide to all the set of an exceptional character. Before crossing the door of the oppidum, but inside the corridor, can be found a cist with offerings of seven pregnant pigs and three goats that were sacrificed in successive moments, and closed by a great cubical stone. Furthermore, we can even observe a great central stone which marks the threshold where the door is covered and the passage begins. At both sides of the central stone there are two doorpost attached to the wall.

Crossing the door, in the end of the corridor (of 14 meters), and inside the oppidum, there is a square in which is emphasized is an anthropomorphous stela of a meter height, but strongly meteorized. Its anthropomorphous shape shows traces of the veils of the cloak and the belt, but the most important thing is that it shows the hands (with fingers) crossed on your lap, holding and offering something that is not identifiable unfortunately, and watching at the Sunrise in the Equinoctial days. It is clear that this stela represents a goddess of the fecundity/fertility, with similar characteristics of worship to anyone of its Mediterranean equivalents as the Phoenician Astarte, the Punic Tanit, the Greek Demeter, the Roman Ceres, or the Eastern Cybele. According to some findings performed in near periurban sanctuary, in the oppidum of Atalayuelas, it could be Betatun or Betato, as shows in Latin inscription of first century AC found in that sanctuary. This one contains the only known name of an Iberian divinity which the Iberians worshipped at nearby shrine (Corzo et al 2007, Orduña 2009).

The gate (the corridor) is oriented exactly to the Equinox Sunrise. In that moment the Sun, after illuminating the Stela, creates a semi-darkness effect over the goddess due to the projection of the shadow of the door, while all the space that surrounds the Stela receives sunlight.

2.2. The building of sanctuary

The sanctuary is closed by a wall as well as natural rock in three of four sides. The fourth is attached to the defensive wall. It covers an area over 300m² and it is divided into three terraces (Fig. 2).

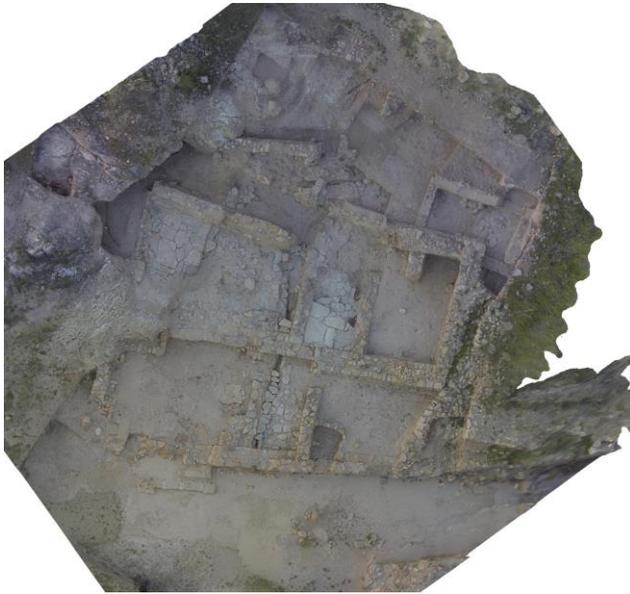


Figure 2. Orthophotograph of the Sanctuary of Puente Tablas

There are two courtyards in the first two terraces, with an antecella and cella to east side of both courtyards. The cella on the second terrace, with thick walls, should have a second floor. It would appear as a great tower towards the interior, but not visibly from the exterior due to being attached to the defensive wall.

In the first terrace, which soil is compact clay, the entrance is by a lateral wall through a portico. In this courtyards can be found a flat stone with a clear bull's skin shape that might be an altar. It is possible that the stone marks out the public space and delimits the access to the restricted area of the sanctuary. The stone is before the entrance to the antecella and cella where the Stela of the goddess is in custody.

Also on the second terrace, but in to the west part, there is an elevated platform with four caves, three of them in front of a platform with three small holes (probably altars for libations) with a possible oracular function (Fig. 4). Each one of the three caves, handmade excavated, was dug by a different technique. From left to right (Fig. 4), each of these caves presents a horizontal floor, a vertical one due to a chimney excavated in the upper rock, and the third cave presents a sloped floor as well but to the down. It is clear that each of them is related to one of the each small holes and their purpose was the deposit of offers.

The fourth cave is separated from the others three by a high wall. That particular wall prevents the vi-

sion of the cave from the second terrace, although it does not make a complete separation and allows the communication between them. Higher and deeper than the others, this cave may allow the presence of a person, perhaps a sibila or fortun-teller, or a representation of one. More about this will be discussed later.

The third terrace only has one room, while the rest of the space is open. In this open space is identified an imprint of a water tank that regulates the water flow. This tank is connected with a small channel crossing the sanctuary in north-south direction. In the visible zone of the channel, a part of it is uncovered (in the entrance of the second antecella) and the other part is covered (and inside of the first antecella).



Figure 3. The three first caves. Left is horizontal, middle is to up and right is to down. In front of each one, three holes (with different shape) for libations.

2.3. The oriental horizon

The position (and orientation) of the sanctuary complex (building and gate in defensive wall) indicates that the eastward horizon is the most important for the rituals that, we suppose, is verified in it. Through the door and corridor, the near hill shows two elevations with small (and shallow) saddle between them. The Sun position at rise in those points is important because the disposition of the corridor and the elements of the sanctuary have correspondence with the determined dates that we will indicate. We essentially speak about the nearness of the equinoxes, moments in which the impressiveness of the process is the highest.

Table I. Positions and declinations of the Sun

Pos.	1 (WS)	2	3	4	5 (Eq.)	6	7(SS)
Az.	123°	109°	102°	99°	93°	90°	62°
Alt.	3° 00'	3° 30'	4° 15'	4° 00'	4° 15'	4° 30'	2° 30'
Dec.	-23° 45'	-12° 45'	-7° 15'	-4° 30'	0° 00'	2° 50'	23° 45'
Aprox. Date	XII-25	II-20 X-31	III-7 X-17	III-14 X-9	III-25 IX-28	IV-2 IX-21	VI-28

3. THE ANNUAL CYCLES IN THE SANCTUARY

The astronomical complex works as follows. According to the position of the Sun rise can be seen the play of light and shadow on the sanctuary which is generated by the sunlight, always at dawn.

The annual cycle begins when the Sun has the minimum declination. At this time, the Sunrise happens on Sierra Mágina Mountains (Position 1 in Table I, about December 25), the southern point of the path of the Sun on the horizon, and that acts as astronomical marker. Here, the Sun is born at the Winter Solstice and the entrance of sunbeams at the oppidum is limited by the north doorpost, just where the offering bank, in the right side of the corridor, finished. At time passes, the Sunrise takes place in more-northward points of the horizon, and the Sunlight begins to enter by the door covered with the overpass.

About February 20 (Pos. 2), the Sun arrives at the near hill and the sunbeam lights the window of the chapel where is supposed that the goddess (the Stela) was in custody. This is a special moment because, probably, it shows us when the goddess was moved outside and placed at the end of the corridor, in a placed marked with a worked stone.

After fifteen days, about March 7 (Pos. 3), the goddess receives the first sunlight of the year at dawn. During several days, the stela is illuminated in the dawn until the Sun rises on the point of the horizon aligned with the goddess, the cist and the offerings just when the Sun is in the saddle of the near horizon, just about March 14 (Pos. 4). Probably, this moment is the most important one of the cycle, in which the hierogamy happens and the Spring Equinox is announced. The situations remembers the image of the Sun on the horns of the bull, which is also typical of many oriental cultures, and can be found in the bulls of Porcuna (Chapa & Vallejo 2012) and Torredelcampo (Romero de Torres 1915) in province of Jaén for example, in which both present a lotus flower on their fore-heads, symbol of Tanit (Kukahn 1962). The relation between the bull and the pair Baal-Tanit is due to the keftiu (Cypriot ingot or bull's skin), which was put in the forehead of many ancient representations of bulls in the Iberian Peninsula (Chapa 1985).

This hierophany happens until the spring equinox begins, about March 25 (Pos. 5), just when the corri-

dor axis is aligned with the palace, cist and astronomical marker leftward of the saddle. This is the time in which the fertilization happens, because the goddess spills light on the offerings, which we remember are animal pregnant females. This situation is verified until the goddess stops being illuminated by the sunbeam, on April 2 (Pos. 6).

Without the slightest doubt, this moment of the Spring Equinox is the most important time in the ritual of the sanctuary, like it happens in a great majority of Iberian sanctuaries (Esteban 2002, Esteban & Moret 2006). But in our case, the above mentioned affirmation receives a special sense because the special illumination of the Stela is complemented with other success. The disposition of the fourth cave and the high wall that separates the public (visible) area of the private one, together with the orientation of the access of this cave allows, in the equinoctial days, that the sunrays illuminates inside the cave just after the sunlight leaves the goddess. The sensation for a ceremonial observer or participant is that the goddess transfers her light (the light of the solar god) to the cave or to whom or that was in it.

During the next fifty days the sunbeams fall inside the oppidum but the Stela is not illuminated when the Sun rises on the horizon. On May 21, the solar light returns to be, always at dawn, outside the sanctuary, illuminating for the last time in this cycle to the south doorpost. The offering bank in the left of the corridor is lost, reason for that there is not marker for the Summer Solstice (Pos. 7), approximately in June 28.

Between this one and August 4 the Sunlight does not come in through the door, inside the oppidum.

From this day, the cycle is repeated in the other way round. Gradually, the interior of the oppidum starts to be illuminated. Firstly, the Stela is illuminated by the sunlight, and later, the Autumn Equinox happens and soon the alignment of the stela, the cist and the saddle is produced, on October 9. After a period of twenty days, on October 28, the window of the chapel is illuminated again, this might have been the expected sign from the Sun to make them collect the goddess and take her to custody inside the chapel until the following cycle. And finally, the Sunrise takes place on the Mágina Mountain, the highest peak of all this territory, and as we wrote earlier, where the Sun reaches the winter Solstice. At this point, a new cycle of the life begins.

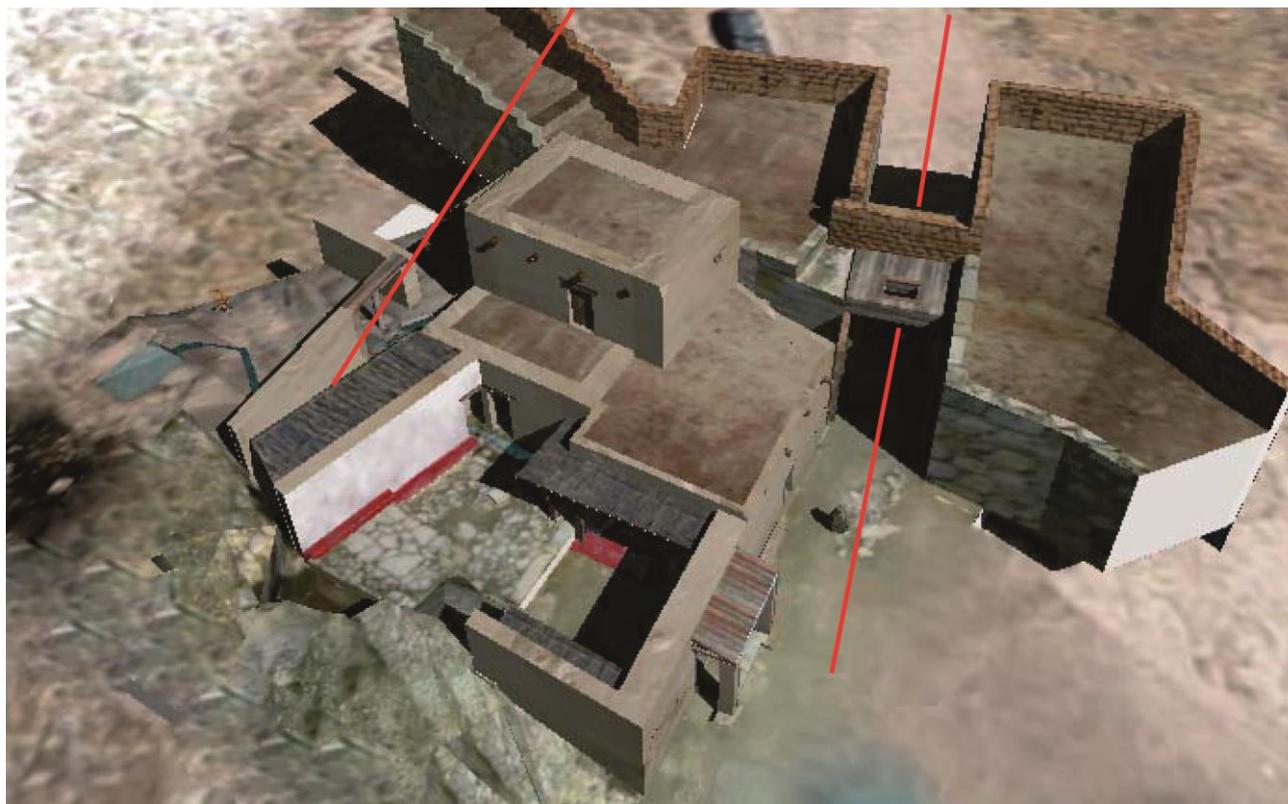


Figure 4. Elevated view (SW) of sanctuary. The red lines represent the Sunrays of Equinoctial days when the Sun rising

4. THE OTHER CYCLES INCORPORATED IN THE SANCTUARY: CONCLUSIONS

We might say that is possible to connect the astronomical cycle, explain earlier, which we found in this sanctuary, with the agricultural cycles of the cereal and the grapevine. These cycles are very important in the Iberian culture of the fourth century BC as is demonstrates in the studies on the ears, fruits and coals found in the archaeological sites (Ruiz y Rodriguez 2003), and also a characteristic in the Iberian society is the intensification in the cereal productions (Buxo 1997). In reference to grapevine, also we have to add the presence of dishes dedicated to the consumption of wine and imported of ancient Greece in a massive way from ends of the 5th century BC and beginning of the 4th century BC (Blanquez 2000).

The agrarian cycle of the grapevine is also very important in the life of the Iberian people and it is adjusted to the astronomical sequence of the incidence of the sunrays on the door as we are relating earlier. The Winter Solstice initiates the first grape works: the pruning. The wine bleeding begins at the same time as the Spring Equinox. This phase concludes when the sunlight is outside the oppidum in the Sunrise. The next phase in the cycle of the grapevine is the verasion, which is coincident with the drought period, and which is determined by the

lack of entrance of the sunlight at dawn. We remember to the reader that the period between May 25 and August 4 corresponds to the time of drought in the Mediterranean area in general (approximately) and our zone (Jaén) in particular (more exactly). Later, a more important period in which the grape is filled with sugar and the acidity is removed. The ripening starts and the heat, the sunlight and the dry weather are essential to obtain a good wine. The last phase of the grapevine begins right with the Autumn Equinox: the grape harvest. This phase must conclude when the sunbeam at dawn is lighting the chapel again, and is coincident with the custody of the goddess inside the tiny chapel, till the next cycle.

In relation of the agrarian cycle of the cereal and according to the studies performed in the pollen sequence of Puente Tablas we can follow the process of the vegetal production. The cycle begins with the rains of the Autumn Equinox: the sowing. During the next six months, the cereal is in the vegetative period until the Spring Equinox, when is produced the time of the pipe and ripe, which continues until May 25 as well as the grapevine cycle. The ripening is produced between this date and the Summer Solstice, and shortly after, there is the harvest of the cereal. The phase has not equivalent in the general sequence unless we take into consideration the

process of the threshing which will be forced to wait longer.

The difference between the two cycles (agrarian and grapevine ones) is in two ways: the temporal structure and the social relationship. The first shows a social collectivism because the commemoration of the cereal celebrates the basic food production while the second can relate to the aristocratic world which uses the wine production and its consumption as a symbol of political power, typical of clientelism models. At the moment is not possible to determine which of them is true or if the two cycles (or none) are represented in our door.

There exists a last cycle: the mythical cycle (Escacena 2009) or heroic cycle too, associated with the astronomical one and in which we value three characteristics. There is a unique scenario: the Sun door and the landscape sight through the door. Besides, there are two important actors: a solar god and a goddess represented in the Stela. Her presence or absence configures the mythical sequence along the sunrise on the horizon. Lastly, there is a temporal sequence with particular moments in the astronomical cycle.

The principal sequence was previously defined with the path of the Sun on the horizon and the play of light and shadow on the door and its elements. It evokes the basic structure of the god-hero of eastern origin, which incorporates actors as Baal, Melkart, Adonis o Eshmun (Xella 2004). In all cases the cycle starts in the Summer Solstice, with the Death of god which we can identify with the distance of the sunbeam at dawn between May 25 and August 4.

The cycle continues with the Katabasis (descent to hell). This one is equivalent to the burial rituals,

which is coincident with the period of the Autumn Equinox. At that period in the year the seed is sowed (buried) for the posterior resurrection as ear and the grapevine is growing. The third phase is the Resurrection of the god at the time on Winter Solstice which takes place with the sunrise on the Sierra Mágina Mountains, the highest mountains in the surroundings scenery. The sequence ends with the Hierogamy (divine marriage) or the encounter between the god and the goddess in the nearness of the Spring Equinox. The classical sources states that the king or prince could replace the god and a priestess replaces the goddess (Xella, 2004). The presence of a ritual of fertility indicates that the Spring Equinox might be the most important date in the annual cycle, like it is demonstrated by the spectacular play of light and shadow between the Stela and the fourth cave.

In the historical context of the 4th century BC, the Iberian princes needed to consolidate the model power. This allows to understand the situation in which the prince of Puente Tablas builds a palace for him and also a door in the ancient wall, which is an astronomic and agrarian calendar simultaneously. This one defines the respective festivals which reinforces the relation between gods and heroes and legitimizes the new aristocratic power.

Besides, we can connect this one with the mythical cycle. The days of the year determined in the calendar of Puente Tablas are fully consistent with the phases of such cycles in the south of the Iberian Peninsula, the Iberian territory.

ACKNOWLEDGEMENTS

The works of excavations have been realised within framework of the reaches projects "Viaje al tiempo de los Iberos" (www.viajealtiempodelosiberos.com), financed for the Diputación de Jaén.

REFERENCES

- Blanquez, J. (2000) Conjunto de vasos áticos del Silicernio de los Villares (Albacete) in *Los griegos en España tras las huellas de Heracles*. Cabrera, P. y Sanchez, Ed. Ministerio de Educación y Cultura. Madrid pp 411-412.
- Buxo, R. (1997) *Arqueología de las plantas*. Ed. Crítica. Barcelona
- Chapa, T, Vallejo, L. (2012) El toro orientalizante de Porcuna (Jaén). *Complutum*, 2012, Vol. 23 (1): 121-143. ISSN: 1131-6993
- Corzo, S, Pastor, M, Stylow, A U, Untermann, J. (2007) Betatun, la primera divinidad ibérica identificada. *Palaeohispanica* 7: 251-262.
- Escacena, J.L. (2009) La Égersis de Melqart. Hipótesis sobre una teología solar cananea. *Complutum* 20-2: 95-120. ISSN: 1131-6993
- Esteban, C. (2002) Elementos astronómicos en el mundo religioso y funerario ibérico. *Trabajos de prehistoria*, 59-2: 81-100
- Esteban, C., Moret, S. (2006) Ciclos de tiempo en la cultura ibérica: la orientación astronómica en el templo del Tossal de sant Miquel de Lliria. *Trabajos de prehistoria*, 63-1: 167-178

- Fernández, R. (2004) La fortificación de la Plaza de Armas de Puente Tablas (Jaén, campaña de 1988. Corte B1. Análisis estratigráfico. Trabajo de Investigación. Universidad de Jaén
- Kukah, V. (1962) Los símbolos de la Gran Diosa en la pintura de los vasos ibéricos levantinos. *Cesaraugusta* 19-20 Zaragoza pp. 75-85
- Llull, J. (Coord.). (2006) Trabajos de arqueoastronomía. Gandía: Agrupación astronómica La Safor.
- Orduña, E (2009) Nueva interpretación de la inscripción de Betatun. *Veleia*, 26: 359-362. ISSN 0213 – 2095
- Romero de Torres, E. (1915) Catálogo Monumental de Monumentos históricos y artísticos de la provincia de Jaén. UNPUBLISHED. It can be consulted in http://biblioteca.cchs.csic.es/digitalizacion_tnt/index_interior_jaen.html
- Ruiz, A., Molinos M. (1985a) Los iberos. Análisis arqueológico de un proceso histórico. Ed. Crítica. Barcelona
- Ruiz, A., Molinos M. (1985b) Informe preliminar de la campaña de excavación sistemática de 1988 en el Cerro de la Plaza de Armas de Puente Tablas (Jaén). *Anuario Arqueológico de Andalucía* 1988, II. Sevilla.
- Ruiz, A., Molinos M. (1988) Informe de la campaña de excavación sistemática de 1985 en el Cerro de la Plaza de Armas de Puente Tablas (Jaén). *Anuario Arqueológico de Andalucía* 1988, II. Sevilla.
- Ruiz, A., Molinos M. (1989) Informe de la campaña de 1989 en el Cerro de la Plaza de Armas de Puente Tablas (Jaén). *Estudio de Materiales. Anuario Arqueológico de Andalucía* 1989, II. Sevilla.
- Ruiz, A., Molinos M. (1990) Informe de la campaña de 1990 en el Cerro de la Plaza de Armas de Puente Tablas (Jaén). *Anuario Arqueológico de Andalucía* 1990, II. Sevilla.
- Xella, P. (2004): Una cuestión de vida o muerte: Baal de Ugarit y los dioses fenicios, en *Estudios Orientales*, 5-6, El mundo púnico. Religión, antropología y cultura material, *Actas II Congreso Internacional del Mundo Púnico*. Cartagena, 6-9 de abril de 2000, Murcia: 33-45.