# Etruscan Settlement: Nature, Beliefs and Creation of Space— Comparative Study with Native American Settings and Field Investigations at Vasanello, Italy

ALESSANDRA VERALDI Architect, Rome

## PING XU University of Colorado at Denver

#### INTRODUCTION

When Ping Xu, an American professor in architecture and Alessandra Veraldi, an Italian architect met in 1996, they found that common interests often allow two strangers to dispense with cultural dissimilarities and become immediate friends. During the fall of 1996, the two investigated several ancient Italian sites and an exchange of thoughts and ideas erupted. Intense discussions followed, that centered upon the ways in which their contrasting ancestry each created their distinct built environment. Throughout the experience they had shared a myriad of similarities and differences. Much of the discovery process was based in Central Italy and specifically Vasanello, Alessandra Veraldi's hometown, located near the town Orte — 80 km north of Rome. Therefore, the discussions spotlighted the ancient Etruscan people (7<sup>th</sup> century BC) who settled in the Vasanello region for centuries.

To help us understand the characteristics of the ancient settlement, it is important to comprehend the Etruscan cultural composition. Similar to Native American peoples, the Etruscan developed a belief system that closely tied in with nature. Utilizing comparative study, literary research and field observations, we will explore the Etruscan belief system as well as that of the cultural successor, Roman Paganism, and how such belief systems are reflected in the Etruscan settlement in Vasanello.

The Vasanello region is located between Mount Cimino and the Tiber river, and includes two major ancient settlements: the town of Vasanello and the village of Palazzolo (Figure 1). This area is characterized by typically volcanic landscape with predominantly dark brown-reddish soil, created by the erosion of tufa. This volcanic soil has, since the most remote ages, been ideal for agricultural activities. Today the residents cultivate vineyards, olive groves, and hazel-trees; there are also diffused deciduous woods in which oak trees predominate. The territory is rich in water because of the presence of a thick torrential hydrographic net belonging to the Tiber Basin. The streams that flow towards the Tiber, with a continuous erosive action, engraved the tufaceous table-land and so created platforms delimited by vertical faces. On these tufaceous reliefs rose ancient settlements, providing with strong natural defenses and occupying a commanding position. The architectural expressions still today testify to the deep unity that nature, man and art achieved at that time.



Fig. 1. The location of Vasanello.

## ETRUSCAN BELIEF SYSTEM

In central Italy, beliefs rooted in the Etruscan religion mixed with Hellenic influence have evolved into the paganism that retarded the entry of Christianity into this area until the third century. These local beliefs formed a cultural background that was integrated within the ancient landscape and architecture.

The original religious literature of the Etruscans unfortunately was lost, therefore our knowledge is founded mainly on the literary works of the Latin and Greek authors. in addition to the rare fragments that have reached us directly. The Roman literature on the documentation of the Etruscan religion has been written since the first century B.C., when the Etruscan religious beliefs greatly influenced the Roman cultural ambiance. The ancient authors gave prominence to the intense religiousness of the Etruscans. The famous Latin writer Livy, describes the Etruscans as "...people that. more than anyone else, were devoted to the religious observances and excelled in celebrating these events." (Livy, the first century B.C.)

The basis of the Etruscan religion was a conception of an intimate connection between the world of the gods and the world of men. Etruscans believed that nature depended strictly on divinity, and that every natural phenomenon was an expression of the divine will; humans had to understand the meaning of the signs sent by the divinity and conform themselves to them. At the beginning the divinity was essentially mysterious, coinciding with forces that presided over nature.

#### **Etruscan Religion in Roman Culture**

The Romans, too, as farmers and stockbreeders, had a sacred fear of natural phenomena, as if they were surrounded by mysterious and invisible forces. The Romans were always deeply influenced by the *Etrusca disciplina*, recognizing in the Etruscan religiousness an Italic root that must not be allowed to die. Every time Rome was threatened by dreadful events, until the end of the empire, the Romans always consulted the Sibylline Books, the most famous and important sacred text. According to tradition, these books miraculously appeared in the sixth century B.C. in Rome, when Etruscan cultural and political presence predominated. The ancient legend tells of an old woman, "not Roman," who sold these books of the destiny of Rome to the king Tarquin the Proud. Then the old woman disappeared as mysteriously as she had appeared.

Raymond Bloch wrote that neither Greece, nor Rome founded their beliefs and religions on the books of revelations. Only the Etruscan acted in this way. The Sibylline Books appeared during the reign of the Tarquini and were precisely kept until the end of the pagan period, not being, of course, the foundation of the Roman religion. Nevertheless they contained its *arcana imperii*, the secrets, thanks to which, the Roman power could survive.\* (D'Aversa, 1989)

The expansion of Rome also influenced its religion. Trade exchanges, immigration, and wars fostered the introduction of new divinities and the gradual identification of existing divinities with the Greek ones. In 217 B.C. the senate decided that it was possible to receive foreign gods inside the city. Nevertheless in public Romans remained respectful of the cult handed down from their ancestors.

During the Roman empire (the first century - the fourth century A.D.) there developed a spiritual upheaval that would lead to the diffusion of the oriental cults of mystery, to solar syncretism, and to a universal and cosmic vision that would open the way to monotheism and, particularly, to Christian monotheism. The perception of the sacred, however, never failed. Even during the latest empire period, the primitive sense of mystery and horror made the divine presence seem to flutter over every place that remained, especially among the peasant people, so much so that paganism was more difficult to extirpate in the countryside than in the cities. When Christianity did penetrate in the countryside, it could do so only by allowing some ancient rites and pagan festivities of agrarian character to survive and, absorbing them, justified them under a Christian disguise.\* (Pastorino, 1973)

#### Etruscan Setting Method

In particular, Roman people had high respect for the Etruscans' skills of site selection. This respect also was reflected in their ancient literature. Cicero reported that they linked this tradition with the origins of their history. According to tradition, in fact, Romulus founded Rome following the rite used by the Etruscans to found their cities (Cicero, the first century B.C.). Pennik in his book, *Lines on the Landscape*, wrote: <Quote>"According to Varro's Antiquities. written in 47 BC. Roman town foundation was conducted according to Etruscan ritual. This was the famous Etruscan Discipline, a sophisticated geomantic technique with which all surveys, country planning, and road construction commenced." (Pennik, 1989)

The Romans paid great attention to site selection. As Vitruvius in the book "De architectura" wrote during the empire of Augustus:

"Our ancestors, when about to build a town or an army post, sacrificed some of the cattle that were wont to feed on the site proposed and examined their livers. If the livers of the first victims were dark-colored or abnormal, they sacrificed others, to see whether the fault was due to disease or their food. They never began to build defensive works in a place until after they had made many such trials and satisfied themselves that good water and food had made the liver sound and firm. If they continued to find it abnormal, they argued from this that the food and water supply found in such a place would be just as unhealthy for man, and so they moved away and changed to another neighborhood, healthfulness being their chief objective." (Vitruvius, the first century: Morgan, 1914).

The Etruscan priests won great fame in the *haruspicina* (the observation of the animal's liver); they improved this divination technique beyond all other peoples of their time. The Etruscans, following the principle of the correspondence between macrocosm and microcosm, believed that the liver of the sacrificed animals reflected the subdivision of the vault of heaven so that the liver

could be read like the heavens. They had to recognize to which segment of the vault of heaven, corresponded to the anomalies and special peculiarities of the liver, and to interpret these anomalies according to the divinity that occupied the segment concerned. Ancient peoples believed that the liver was the principal seat of human affections and feelings. To examine the liver, the haruspices used models made in bronze or terracotta; it is possible that they also used these as a model for teaching. One such model that has reached us is a bronze liver from Piacenza, from the second century B.C.. On the diaphragmatic face there are two inscriptions: one is dedicated to the sun, Usils, and the other to the moon, Tivr. In the peripheric band there are the names of the sixteen gods: as the celestial space was divided into sixteen sectors, so the sixteen boxes of the liver reflected the eight seats of the favorable divinities and the eight seats of the unfavorable ones. In the visceral area there were other inscriptions.

The art of the haruspices survived during the time. In the fourth century A.D. the Christian emperor Teodosio decreed that if the imperial palace was struck by lightning, the haruspices must be consulted. All the Etruscans, both men and women, could practice divination, but there were highly specialized priests for the official interpretations. The Etruscan priest was essentially a scholar of human nature and of the nature that surrounded him. He drew his conclusions without regard to personal and factious feeling. The practice of divination was beyond nationality and religion: it was only in the service of man, trying to help him survive the risks of the future. There are numerous cases of divination by Etruscan priests who were at the disposal of Romans and Greeks \*(D'Aversa, 1989).

## LANDSCAPE SETTING OF THE TOWN OF VASANELLO

The town of Vasanello (whose name was Bassanello up to 1949), is surrounded on the horizon by a frame of mountains arranged in a semicircle: the mountains of Sabina to the east, those of Umbria to the north, and the Cimini mountains to the west. The town rises on a triangular tufaceous plateau, at the confluence of two streams that flow towards the Tiber. Both the east and the west side of the plateau are naturally defended by cliffs that rise from the floor of the valley. General characteristics correspond to the principles of site selection appearing in the "De Architectura":

"For fortified towns the following general principles are to be observed. First comes the choice of a very healthy site. Such a site will be high, neither misty nor frosty, and in a climate neither hot nor cold, but temperate; further, without marshes in the neighborhood." (Vitruvius, the first century B.C.: Morgan, 1914)

The natural defenses of the site limited the built-up area, and a town wall built in the Middle Ages on the south side —that is, the only side unprovided with natural defenses— transformed it into an almost impregnable fortress (Figure 2). The effect was to intensify a normal historical tendency toward urban stratification.

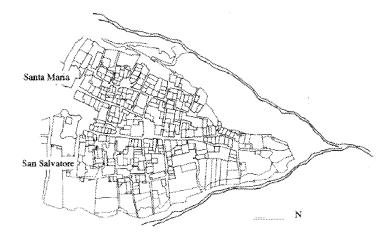


Fig. 2. The plan of the town Vasanello (by Alessandra Veraldi)

#### **CONTINUITY OF SACRED SITES**

In many cultures, sacred sites have been used over the years by different creeds, and shrines of one religion have frequently been converted into the service of another (Pennick, 1987). In the United States, an Anasazi (ancient Native American) ruin site, Site 16 on the top of mesa at Mesa Verde, was reused and rebuilt over three different periods (Figure 3). According to archaeological excavation, when Anasazi residents of the second house in 1000's A.D. dug the pit for their kiva, they deposited their dirt back into the older kiva built in Early 900's A.D. In the Southwest there are numerous Anasazi sites that had been reused and re-constructed over time. This phenomenon also occurred in the ancient town of Vasanello. In addition to converting the worship of pagan gods to the service of the True God, and the reuse of building material, one significant motive may have been respect to the original selection of a sacred site.

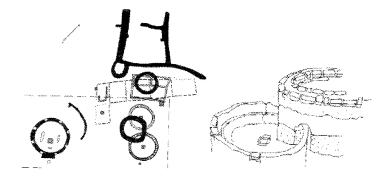


Fig. 3. Site 16. an Anasazi ruin site on the top of the mesa at Mesa Verde. was reused and rebuilt over three different periods. (Original source: Ferguson. 1987)

In 1925, during the restoration of Santa Maria's church, a big travertine fragment of a pagan altar was found under the pavement of the crypt; on the fragment is sculptured the head of a ram from whose horns start two festoons of flowers on which some birds perch. Also, found in the crypt was a travertine pagan stele. These discoveries strengthen the hypothesis that the central cell of Santa Maria's apse was a pagan temple. Also, the south facade of the Santa Maria's church, even today, shows its foundation is based on a pagan temple (Figure 4).

Another pagan stele was found in a wall of Santa Maria della Stella, a church situated just out of the historical center of Vasanello. Today this stele is preserved inside the church of Madonna delle Grazie. According to the description of the scholar S.Mariani, it was possible to read on the stele these words:

M L FELICIS

DEO SILVANO

SACRUM VOTUM

The words DEO SILVANO referred to the god Silvan, who protected agriculture. Probably Vasanello had a cult of this divinity from the most remote times.

A tower could function as an omphalos. Pennick indicates that omphalos were a link between the earth and the heavens. Its precincts afforded protection, literally a sanctuary (Pennick, 1989). In the eleventh century, on the ancient Christian basilica of Santa Maria, rose the Romanesque church, which we can still see today. The bell-tower that rises in front of the facade was built on a Roman tower that was part of the defensive system. Moreover, in the thirteenth century, another bell-tower rose in front of the facade of San Salvatore - the other Romanesque church of Vasanello. This belltower was built of the stones that had paved the Amerina road running through this territory, a Roman road of the third century B.C.. According to a local tradition, the bell-tower was built on a pre-existent sepulchral monument erected for the last Etruscan king Elio, who was killed nearby the Vadimon lake, only a few kilometers from Vasanello, at the final battle between the Etruscans and the Romans in the 3<sup>rd</sup> century BC. When exploring the belltower's foundations, a basalt sarcophagus was found, but it was not ever possible to ascertain if it was the tomb of Elio\*(Mariani, 1957).

## NORTH-SOUTH AXIS

According to Etruscan legends, after the primordial chaos, Tinia, the most important celestial god who inhabited the north part of Heaven, determined the cosmic order. The sky and the earth were divided into four sectors by an invisible cross. The half on his left, from which the sun and the stars rose, was considered as a messenger of happiness; the other on his right, as ruinous. The first axis is the north-south axis. Perpendicular to the north-south axis, the east-west axis was determined by the positions of the sunrise and the sunset. The north-south axis was invariable, while the axis pointing to the sunrise and the sunset varied with the seasons \* (D'Aversa, 1989).

Corresponding to this legend, in the Roman tradition, the alignment of the first straight line for a main road of a town was northsouth, which was achieved by observation of the sunrise (Pennik, 1989). In the town of Vasanello there is a main street running from north to south, crossing through the irregular matrix of its urban fabric. This road starts from the castle, crosses the town, and ends at the extreme point of the plateau, where some kitchen gardens are today cultivated. This north-south axis seems to reflect the hypothetical layout of the *cardo* during the Roman age (*cardo* is the Latin name of the main north-south road).

The importance of the north-south axis is commonly found in other cultures. In Chaco Canyon, New Mexico, USA, Pueblo Bonito is the largest single Anazazi building. It could have housed perhaps 1000 people in some 600 rooms in A.D. 1050 - 1100. Pueblo Bonito is a spectacular architectural achievement for Anasazi, who had no metal tools, no wheel, and no beast of burden (Ferguson, 1987). In the center of Pueblo Bonito there is a wall running northsouth, which serves as the main axis in the random composition of rooms and kivas (Figure 5).

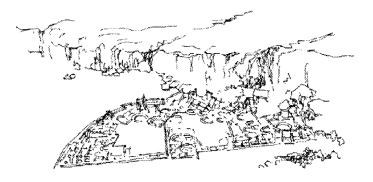


Fig. 5. In the center of Pueblo Bonito. an Anazazi ruin in Chaco Canyon. New Mexico. USA. there is a wall running north-south. which serves as the main axis in the random composition of rooms and kivas. (by Ping Xu)



Fig. 4. Santa Maria's church was built on a pagan temple. (by Ping Xu)

## SUNRISES AND STRAIGHT TRACK ALIGNMENT

As in other ancient cultures, sun worship and significance of sunrise were strongly reflected in ancient Italian life. The east and southeast were especially favorable orientations, symbolizing the power of luck. Morini wrote that according to the Etruscan rite, the foundation of a town was decided in the morning, and the main roads were oriented with the point where the sun rose\*(Morini, 1963).

## Facing East at the Various Scales

The urban plan of Vasanello is structured along a main road axis, on which the secondary roads are grafted, that crosses the whole center lengthwise to the extreme point of the plateau. This north-south axis created great opportunities for public ritual buildings to face east. A peculiarity of the churches of Vasanello is that their facades are oriented to the east; this is the case both in Santa Maria and in San Salvatore. On a small scale, the sun worship was especially reflected in the east orientation of the altar. As Vitruvius mentioned:

"Altars should face the east, and should always be placed on a lower level than are the statues in the temples, so that those who are praying and sacrificing may look upwards towards the divinity. They are of different heights, being each regulated so as to be appropriate to its own god. ...In accordance with these rules will altars be adjusted when one is preparing his plans." (Vitruvius, the first century; Morgan, 1914)

#### Straight Track Alignment

Straight lines in landscape are a common phenomenon throughout the world. Research on a variety of landscape lines is all related to the thread of thinking on 'ley' that was effectively commenced when Alfred Watkins coined the term in the 1920s, after discovering a linear pattern in his native Herefordshire landscape (Pennik, 1989).

The Romans not only used the alignment for setting a main road of a town, but also for orienting their sacred places. They celebrated the cult in the open air, where they felt the gods would present themselves: in the woods, near springs, and on the shores of watercourses. The sacred place was delimited, and there an altar was erected to receive offerings brought to the divinity. This sacred enclosure was oriented to the east, by following a line that the priest drew on the ground.\* (Pastorino, 1973). We also discovered a straight-track alignment at Palazzolo, a subdivision of Vasanello. The archaeological area of Palazzolo is situated northwest about 2 km from the town of Vasanello. The ancient route that linked up the two centers was excavated in the tufaceous rock and wound on the tableland at the edge of the present-day road. In ancient times the Palazzolo village of Etruscan-Roman origin seemed to occupy an important territorial junction.

On October 18, 1996, we visited Palazzolo. Along an ancient road running west of the Palazzolo ruins, in front of a necropolis, is a hill at whose foot there is a cave. The tracks on the wall of the cave imply that people may have once collected water that seeped from the hill. On the top of the hill there is a shelter created by a huge rock overhanging. This shelter looks very similar to rock shelters with petroglyphs in New Mexico, USA (Figure 6). Also, the top of the rock (at the hill west of Palazzolo) bears traces implying that there was once a structure. This hill may once have been used as a place to watch the sunrise, since the sunrise has ritual importance as well as technical use in determining the axis for ancient settlements. It would not be surprising to find that this hill was a sacred place for the ancient people. As Pennik indicated, ancient literature provides us with numerous instances of heroes or religious figures ascending holy hills in order to communicate with the gods (Pennik, 1989).



Fig. 6. On the top of a hill west of Palazzolo there is a huge rock shelter (left) which looks very similar to a rock shelter (right) of petroglyph site in Albuquerque. New Mexico. USA. (by Ping Xu)

Standing atop the hill, Ping Xu noticed an alignment from the top of the hill, passing through the ruin of the ancient church located at the west end of the Palazzolo hill, and pointing directly at the peak of the San Pancrazio mountain to the east (Figure 7). Alessandra Veraldi watched the sunrise at the winter solstice (12/21/96) and the equinox (3/21/1997). During the equinox of 1997, Alessandra Veraldi proved Ping Xu's hypothesis that the sunrise position on the profile of the San Pancrazio Mountain aligns with the church ruin and the top of this hill. Later, Alessandra Veraldi went to the top of San Pancrazio Mountain, from which there is a view to Vasanello. On the top of San Pancrazio mountain is a Roman pagan temple ruin near a little church.



Fig. 7. A straight line passing through the top of a hill, the church ruin. and the peak of the San Pancrazio Mountain, where the sun rises during the equinox and where a Roman pagan temple ruin remains. (by the authors)

The thought of finding the straight tract alignment to the sunrise in Vasanello also came from Ping Xu's experience in watching the sunrises at Anasazi settlement, the Far View ruins at Mesa Verde during the autumnal equinox of 1995 (Xu, 1998). She discovered that as the first rays shone directly on the ruin, the north wall of the ruin pointed straight at the sun, appearing on the mountain profile of the eastern horizon (Figure 8).

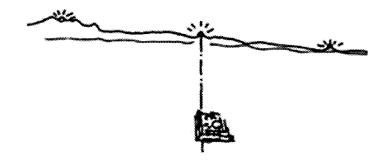


Fig. 8. The north wall of the Far View ruin pointed straight at the sun appearing on the mountain profile of the eastern horizon. (by Ping Xu)

#### CONCLUSIONS

The study of the deep cultural roots of Etruscan and Roman paganism in central Italy may help us to better understand the ancient creativity, the results of which still somehow remain as a ghostly landscape overlapping the contemporary land. Nature was a resource for the ancient people, and it is also a resource for us to understand our ancestors' creation on the land. When we research the settlement of an ancient people whose culture and techniques have been mostly lost, field investigations of phenomena on the landscape are appropriate. Also, cross-cultural and comparative studies may provide clues to stimulate our thinking. Moreover, identifying both similarities and differences between cultures could help us understand some essential issues of ancient built environments. This research at Vasanello provides a case study of the Etruscan settlements that was the creation integrating a functional space with nature and beliefs. Integrating spiritual aspects with physical concerns, the ancient approach provided models for integrative design in the built environment.

The significance of the sunrise was strongly reflected in the Etruscan built environment. The sunrise position also often related to a straight track alignment on land. At Palazzolo we discovered a straight line passing through the top of a hill, the church ruin, and the peak of the San Pancrazio Mountain, where the sun rises during the equinox and where a Roman pagan temple ruin remains. Orienting their built structures to sunrises, Etruscan settings stressed the horizontally spatial relationship between site and landscape, from large scale to small scale, from town selection to the arrangement of an altar. Their sacred sites have been used over the years by different creeds.

Ancient Italian landscape and architecture reflected a belief system and activities that have many similarities to other ancient cultures, such as Native American cultural heritages. The ancient holistic thinking patterns have been reflected in their designs, some of which still remain as readable phenomena in the world, in the West as well as the East. However, there are different levels of continuity with those heritages. Some cultures have kept their ancient system, thinking patterns, and practice until the last century. And the cultural continuity has never completely stopped even in the present time. But most of the West has largely lost its ancient track through religious persecutions, through modern, mechanist, scientific thinking, and through the use of advanced techniques over a much longer time period. Moreover, there are differences in attitudes toward the ancient ways of shaping a built environment, and toward the way in which we rethink and re-find these ancient disciplines and their resultant settlements. To understand how ancient people designed we must try to understand what they were thinking and why they were doing what they did.

Respect for the awareness of early peoples, their different perceptions of the environment, and their consciousness and spirituality will lead more and more people into the integrative investigations of ancient settlements throughout the world, in the West as well as the East. Such research certainly will enhance our insight into the essential contents of landscape, architecture and beliefs, and their significant roles in creating the built environment. Eventually, we believe, a new approach— integrative, systematic, rooted in the ancient tradition and utilizing modern techniques— will appear and grow in this century.

#### NOTE

\*translation from Italian by Alessandra Veraldi.

#### REFERENCES

- Brown, Hanbury. Man and the Stars. Oxford: Oxford University Press, 1978.
- Livy ( the first century). Ab urbe condita Book IX with an English translation by B.O. Foster

(1926). New York: G. P. Putnam's Sons.

Ferguson, William M. and Arthur H Rohn. Anasazi Ruins of the Southwest in Color.

Albuquerque: University of New Mexico Press, 1987.

- Pennick, Nigel. The Ancient Science of Geomancy, Living in Harmony with the Earth.
- London: Thames & Husdson, 1979.
- Pennick, Nigel and Paul Devreux. Lines on the landscape: Leys and other linear Enigmas. London: R. Hale, 1989.
- Marcus, Clare. "Alternative Landscape: Ley-lines, Feng-shui and Gaia Hypothesis," Landscape.

- Seneca (the first century). Naturales Quaestiones with an English translation by Thomas H.
- Corcoran, Cambridge, Massachusetts: Harvard University Press, 1971.
- Vitruvius (the first century). De Architectura The Ten Books on Architecture translated by Morris
- Hicky Morgan, London: Humphrey Milford, Oxford University Press, 1914.
- Xu, Ping. "Feng-shui as Clue: Identifying Prehistoric Landscape Setting Patterns in the Southwest." Landscape Journal, Volume 16 (1998):2, pp. 174-190.

#### in Italian:

- D'Aversa, Arnaldo. La divinazione nella cultura etrusca e romana. Brescia: Paideia Editrice
- Gamurrini, G.F. Cozza A. Pasqui A. Mengarelli R. (1972). Carta archeologica d'Italia. Materiali per l'Etruria e per la Sabina. Firenze, 1989.
- Mariani, Salvatore. Il Cavaliere di Cristo S.Lando M. Protettore di Bassanello. Civita

Castellana: Ed. Pian Paradisi, 1957.

- Morini, Mario. Atlante di storia dell'urbanistica. Milano, 1963.
- Nardi, Giuliana. Le antichita' di Orte. Roma: Consiglio Nazionale delle Ricerche, 1980.
- Pallottino, Massimo. Etruscologia. Milano: Hoepli, 1984.
- Pastorino, Agostino. La religione romana. Milano: U. Mursia & C., 1973.
- Raspi Serra, Joselita (1980). Vasanello-Palazzolo: un territorio, ambito di lotta fra Romani e
- Barbari. Roma: Herder Libreria Editrice
- Staccioli, Romolo A. (1981). Storia e civilta' degli Etruschi. Roma: Newton Compton.

<sup>29 (1987): 1-10.</sup>