Session: Architectural Anthropology

Different uses of the Space during the Formative (750 b.c.-100 a.c.) and Epiclassic (650-900 a.c.) : Xochitécatl, Tlaxcala, México.

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During the course of this lecture we shall explain how the architectural space was used by the inhabitants of Xochitécatl during the two greatest periods of occupation of the site. We define the character of the architectural complex depending on the predominant type of activities which took place in each; whether it were a ceremonial centre, a palace or a residential complex. The importance of these complexes as archaeological references, resides in the fact that they allow for the retrieval of information on the social relations which united the inhabitants or users of each individual architectural structure. So we shall see that the same space was used in different ways due to different religious concepts.

The space to which we refer is basically the ceremonial centre. However, we think it important to talk also about the different settlements in the neighbouring valleys which were part of the political and economic system of the area studied.

We also define as the space used, not only the architectural but also the geographical surroundings. For, as we shall see later on, the layout and building of the structures in the ceremonial centre was designed around the orientation of each structure, which in turn depended on a sacred geography combining the great volcanoes (Popocatépetl, Iztaccíhuatl and the Malinche) with astronomical phenomena.

THE USE OF SPACE IN XOCHITECATL DURING THE FORMATIVE PERIOD.

During this period (750 B.C.-100 A.D.), the ceremonial centre underwent several constructional modifications.

BEGINNING OF CONSTRUCTION. (750 - 350 B.C.)

The architectural plan and the orientation of the ceremonial centre, built on top of an extinct volcano, was conceived from the outset as a complex made up of a central plaza closed off on three of its sides, East, West, and South and open on its North side. The central axis of the plaza ends up at the Pirámide de las Flores, Pyramid of the Flowers, to the East and at the Edificio de la Espiral, the Spiral Building to the West. During this first phase of construction, there is evidence of building activity in at least three of the four structures which make up the existing architectural complex of Xochitécatl: the Spiral and Serpent Buildings, and the Pyramid of the Flowers.

During the site's initial period of occupation, we know for certain of the presence of the Edificio de la Espiral, the Spiral Building. It already presented the architectural features which were to characterize it throughout the development of the settlement. These features are the circular base, and its tiers, as well as the absence of any traditional access (stairway or ramp). This last characteristic suggests that the way to access this building was to ascend it in a spiral, walking along the top of the tiers. The position of the Spiral Building on the main East-West axis of the layout of

Xochitécatl, shows it to be a point of reference linked with the presence of the volcano Popocatépetl; both its shape, its size and its dimensions all suggest a replica of this volcano.

The materials used during this first period of construction of the building, both for the fill and the covering of the structure, are rounded stones cemented together with mud. Great quantities of volcanic ash were also used in the fill.

During this phase, the Edificio de la Serpiente, the Serpent Building, was very different to what it was to be in later phases. Square at the base, the dimensions of the structure were originally rather small: 22 metres on each side. Excavations on the building show that the facing on the original structure was practically vertical, and was built with small slabs of white volcanic tuff, without any kind of covering. Excavations have not uncovered any access to the top part of the platform, though it is very probable that at least one stairway did exist on one of its fronts. The Edificio de la Serpiente, the Serpent Building, during this first phase is oriented North-South reflecting the intention of closing the plaza on the south side, with formal architectural ends in mind.

From the outset, the Pirámide de las Flores, the Pyramid of the Flowers, was designed to be the main structure in the ceremonial centre, not only because of its dimensions but also because it is aligned with the volcano La Malinche. This building is rectangular at the base, 120 m. North-South, and 165 m. East-West, with a height of between 30 and 37 m.

In the Pirámide de las Flores, the Pyramid of the Flowers, the substructures were revealed thanks to a test-pit made in the top part of the building. This pit uncovered floors and raised benches of mud which apparently correspond to a small room located on top of the platform.

THE FIRST CONSTRUCTION (350 B.C.-100 A.D.)

During the period between the years 350 B.C. and 100 A.D., Xochitécatl experienced a rapid increase in population. This is apparent in the complex hierarchization of the sites which takes place throughout the region, as well as in constant and growing building activity, expressed in the creation of ever more complex architectural spaces.

The Edificio de la Espiral, the Spiral Building, grows considerably in volume, while maintaining its morphological characteristics. Its building materials change, as now white slabs and a covering of mud are used. This substructure has been dated by radiocarbon to approximately 350 B.C., which places it at the beginning of the Late Formative Period.

The central plaza of the site, around which the architectural complex was built,

was raised with fill which goes from the base of the Pirámide de las Flores, the Pyramid of the Flowers, to the <u>East</u>, to the middle of the esplanade. In comparison to the <u>western</u> most end, the height of the plaza was raised almost three metres on average, leaving the Edificio de la Espiral, the Spiral Building, at a noticeably lower level to the rest of the structures.

It is probable that the extension of the Plaza included the construction work on the first substructure of the Basamento de los Volcanes, Platform of the Volcanes, whose materials and method of construction are very similar to those of the Serpent Building.

In the Serpent Building a substructure corresponding to this period has been identified. It consists of a building with a quadrangular base, made with blocks of tepetate and rounded stones, covered with a thick layer of mud. The access to the building which corresponds to this phase is a stairway built into the tiers of the building, linking the top part of the structure to the central plaza.

The great change in the use of space which occurs during this phase is that of the placing of monolithic basins in the Pyramid of the Flowers, and the Serpent Building. This must be related to the worship of primeval waters. Not only the monumental dimensions of the basins but also their association with sculptures that represent mythical animals such as the serpent, the jaguar and batrichia (frogs and toads), show how important rituals which took place in its precincts had become to the ceremonial centre and its builders.

In the Pirámide de las Flores, Pyramid of the Flowers, a monumental basin was placed at the foot of a wide stairway built of rectangular blocks, some of which are reused tripod grinding stones. The use of this type of elements was to continue in Xochitécatl until the site was abandoned for the first time as can be seen by the placing of another basin which corresponds to the last renovation of the façade of the Pirámide de las Flores, Pyramid of the Flowers, a façade which was in use when the site was abandoned for the first time.

During the successive renovations made to the western face while this ceremonial centre was in use, a second basin was placed, also at the foot of the main access to the top of the building. The third basin was found in the Serpent Building and, like that which we described before, a stelae depicting a serpent was found inside it. It is important to point out that the placing of this basin meant building a platform on top of the existing structure which was oriented East-West, in the same way as the Pyramid of the Flowers.

In accordance with the results of the Xochitécatl Project, we can say that this type of basin is an archaeological feature characteristic of the Valley of Puebla-Tlaxcala. These basins form part of a ceremonial architectural complex along with other features such as the stairways and the sculptures in association with the orientation of

the architectural spaces and the surrounding countryside. All of these features constitute an area of ceremonial activity in which rituals took place with the participation of the public.

Between the years 100 B.C. and 100 A.D., Xochitécatl is at a high point in its development. During this period, we can see activities which go beyond the religious and ceremonial to the spheres of economic and political influence in the region.

In the same time period, the main plaza was raised once again, this time by approximately 0.70m. The change is visible at the base of the Serpent Building which is at a different level. During this phase of construction, the building is enlarged, to the South as well as to the East, and a large platform of 30 by 15 metres is annexed.

The most important change to the building is the construction of a room built onto the West face. Within this room, an area was found where obsidian knives were made, artifacts which were used right there. The presence of this area of activity, as well as the concentration of animal bone and a hearth, lead us to believe that non-ceremonial activities took place in this architectural complex.

THE FIRST ABANDONMENT: CAUSES AND CONSEQUENCES.

The development of the Valley of Tlaxcala, as represented in Xochitécatl was interrupted in an unforeseen way. Archaeological evidence shows us materials and objects that must have been left in a hurry; here a pot abandoned on the stove; there the flakes from the production of obsidian objects found in the same place in which they were made. Other objects seem to have been prepared for abandonment; this is possibly the case with the sculptures deposited inside the basins, both in the Serpent Building and in the second basin of the Pyramid of the Flowers.

In the past, this process of abandonment had been attributed to large urban centres, such as Cholula and Teotihuacan, supposedly attracting the population of the Valley of Tlaxcala within their spheres of influence, as happened in the "Teotihuacan corridor" in the area of Calpulalpan, to the North of the Valley of Puebla-Tlaxcala. However, recent evidence found has brought to light data that have made us rethink these hypothesis.

The 21st of December 1994, the volcano Popocatépetl erupted, covering the City of Puebla and its surroundings in a cloud of volcanic ash. This greatly alarmed its inhabitants and the authorities, and led to the beginning of an interdisciplinary programme of prevention which included a reconstruction of the history of the volcano's activity. From this study we know that the volcano was active around the time that Xochitécatl was abandoned for the first time.

The effects of the phenomenon must have been felt for several years, and changed the natural habitat of the valley. This forced the population to move to areas

which hadn't been affected, the areas most attractive being that of Cholula and the North of the Valley of Mexico where at the same time large urban centres happened to be developing.

THE USE OF SPACE IN XOCHITECATL DURING THE EPICLASSIC

The epiclassic period is characterized by great movements of population. After the rise of Teotihuacan, there is a reshuffle of the population, both in the Valley of Mexico and the surrounding regions, which gives rise to centres of power like Xochicalco in Morelos, Xochitécatl-Cacaxtla in Tlaxcala, Tenango in the Valley of Toluca, etc. Thus begins the Epiclassic, a period of transition singular in its importance, which layed the foundations and the norms which were to characterize the Post classic Period. (Webb, in Sugiura:1990)

Until recently, the study of archaeology in the Altiplano, had given little importance to the Epiclassic. Therefore, to understand this period it is first necessary to analyze the historical processes which take place in the Central Altiplano, so that later we can try to shed some light on the fate of the Teotihuacanos after the disintegration of their society. (Sugiura:1990) The period of time covered by the Epiclassic shows social changes which, from our perspective, have a quantitative character, in form and expression, in which secondary state societies, vie for a place in the new economic and social panorama left in Teotihuacan's wake. (Lazcano:1997)

In the Valley of Puebla-Tlaxcala and specifically in the case of the settlements of this period which surround Xochitécatl and Cacaxtla, there is a very clear settlement pattern. These settlements are found in high up places in close relation to the main sites (Serra and Lazcano:1997). In this pattern there are two populational tendencies which are typical of the Epiclassic: centralization and ruralization (Sugiura:1990) The first is represented by Xochitécatl-Cacaxtla and we would add the site of Mixco Viejo. These sites are located at the top of the area which is known morphologically and geographically as the Xochitécatl-Nopalucan-Nativitas Block. The second populational tendency can be seen in groups of sites of smaller size, with small buildings and clusters of residential units. (Fig.2)

After remaining abandoned for 500 years, the area which surrounds Xochitécatl was once again occupied. New settlements were built, some on the foundations of the old sites dating from the Formative Period.

This new population concentrated its building activity on other sites, amongst which Mixco and Cacaxtla stand out because of their size.

Unlike what happened with other structures, the Spiral and Serpent Buildings were not reoccupied in later periods. During the course of excavation, we were able to observe in these buildings, evidence of deterioration typical of a lengthy abandonment, resulting from sudden disuse. No evidence of any sort of violence or destruction were

found, except for the apparently intentional mutilation of some of the sculptures which were later deposited next to buildings of worship.

The new constructions were built of adobes which were later covered with stucco and in some very special cases, were painted with murals to decorate both public and private spaces. The most outstanding example of this is without a doubt the only one which has been excavated extensively: the Great Platform of Cacaxtla. But we know that these characteristics are present in other places, such as Santa Isabel Tetlatlahuca and Mixco, and were reproduced in the new constructions built in Xochitécatl.

Whereas in Cacaxtla we find the spaces reserved for the ruling and religious elite, in Xochitécatl the Pirámide de las Flores, Pyramid of the Flowers, is rehabilitated and this, added to the fact that it is aligned with the Malinche, means that it is retrieved as a sacred space dedicated to a religious cult which is reflected in the deposit of offerings and burials (these latter possibly the result of sacrifice.) The changes made to the Pirámide de las Flores, Pyramid of the Flowers, were mostly done to the West face, these being the building of a new façade and the construction of a stairway made with great blocks of bedrock, following the same type of building method which can be seen in the Gran Basamento, the Great Platform and the Plaza de los Tres Cerritos, Plaza of the Three Hills, in Cacaxtla. On the East face, which faces Cacaxtla, a stepped access was probably also built similar to the one which we have already described.

The orientation of the Pirámide de las Flores, Pyramid of the Flowers, towards the Volcano of La Malinche, which from the top of the building looks like the profile of a female face, and the coincidence of the Sun rising precisely from the point which represents the mouth of the woman's profile on the 29th of September, which is during harvest time and according to Sahagún coincides with the feast day in which they sacrificed women to the Hills, leads us to back the interpretation of the use of space with female characteristics. (Serra, M. C. 1996-1997).

Also, in the centre of the Plaza, a new building is built: the Basamento de los Volcanes, the Platform of the Volcanoes, whose architectural characteristics show how intimately related it is to Cacaxtla. The state of conservation of this structure has impeded any definition of the type of activities which took place in it. However, a hollow was found in which there were three skulls and some long bones, and in previous excavations there are reports of having found offerings of jade pieces and figurines, very similar to those found in the Pirámide de las Flores, Pyramid of the Flowers.

CONCLUSIONS.

The ceremonial centre of Xochitécatl and the surrounding rural and civic settlements are an example of how, in one same space, conceived from its beginning

as a place of worship, the changes in the ways its inhabitants viewed the World are reflected.

The builders of the Ceremonial centre, between the years 750-350 B.C., created ritual spaces dedicated to the forces of Nature, especially water, the volcanoes and the Earth. The way the buildings were oriented was decided according to the sacred geography resulting from their knowledge of astronomy and observation of their surroundings. The volcanoes were the inspirational force of their architectural conception, but also the destroyers of their work. The return, during the years 650-850 A.D., may have been the result of a return to their origins. The new inhabitants must have known of the existence of the ceremonial centre as a point from which their ancestors may have come. But the existing structures were adapted to new lifestyles and religious ideas. In this case, an obvious example is the Pirámide de las Flores, Pyramid of the Flowers, which remains oriented in the same direction as before, but is used for different types of rituals, becoming a space feminine in character dedicated to the cult of goddesses associated with fertility represented by the Volcano of La Malinche.



Centro Universitario de Ciencias Sociales y Humanidades

Departamento de Estudios de la Cultura Regional

July 27, 1997

Dear Mari Carmen Serra,

This is an invitation to participate with a paper in the Session on Architectural Anthropology, that we are organizing for the 14th International Congress of Anthropological and Ethnological Sciences. The College of William and Mary in Williamsburg, Virginia, will host this Congress from July 26-August 1, 1998, with the theme "The 21st Century: the Century of Anthropology."

We feel that Architectural anthropology should figure in anthropology's centennial. Some scholars that turned anthropology into a professional discipline, like Morgan. were most interested in architecture as related to social organization. This theoretical interest faded away and was lost in material culture for many decades. However, a growing interest in the study of built forms as related to evolutionary processes is developing and expanding in many ways. The importance of architectural antrhopology will only increase in the future.

In the Session we want to discuss theoretical and methodological issues related to the cross fertilization and cooperation between anthropology and architecture on the one hand, and to the anthropological study of the spatial dimension of human culture, on the other. Since architectural anthropology is interdisciplinary in scope, we wish to emphasize an architectural, constructive approach to the case studies of buildings, settlements, spaces and places. We do hope that you will be able to contribute to the session with your ideas on these and related subjects.

The deadline for paper abstracts is September 15, 1997. Please email or fax us your response to this invitation and your abstracts too.

You may find more information on the 14th ICAES by consulting http://www.wm.edu/ICAES or warthog.cc.wm.edu/ICAES.

Sincerely,			
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P.S. The success of the session on architectural anthropology that we organized for the 13th ICAES in Mexico City in 1994, has encouraged us to continue this tradition. The papers for that session have been published by the Universidad de Guadalajara in the book *IIacía una antropología arquitectónica* (1995, reissued in 1997).

	Sección
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Asunto:

resumen Diferencias de uso del espacio

Envio a Uds. el abstract para participar el 14th International Congress of Anthropological and Ethnological Sciences.:

DIFERENCIAS DE USO DEL ESPACIO DURANTE EL FORMATIVO Y EL EPICLASICO,UN CASO XOCHITECATL, TLAXCALA

Se presentaran los resultados de la excavación del Centro Ceremonial y de las areas habitacionales de Xochitecatl y sitios vecinos en el Sur del Valle de Tlaxcala. Las evidencias hasta ahora localizadas nos señalan una fuerte ocupación del periodo Formativo(600 ac-100dc) seguidas de un abandono durante el Clásico y una reocupación de los mismos espacios durante el Epiclásico (600-850dc). Sin embargo la utilización de los mismos espacios presenta enormes diferencias en cuanto a las tecnicas constructivas y actividades que en ellos se realizaban.

Dra. Mari Carmen Serra Puche Instituto de Investigaciones Antropológicas,