



The Science of Archaeostereograms

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BY WAY OF INTRODUCTION

Below we present as an essay what we believe is or could be one of the most important phenomena within the archaeological findings, we intend with this work, to publicize the ideas that have been patented in 2007, as “The Science of Archaeostereography”, we intend to awaken the interest and awareness of different authors, readers of this magazine and / or scientific scholars of the subject, to submit the theories and techniques expressed in these pages to a serious critique, since we do not believe we are speculating with the information, but on the contrary, we believe we are opening the doors to a range of new terms and proposals, to a new great phenomenon that as is common in the Mesoamerican area has not been discussed before, to a new science of knowledge.

ARCHAOSTEREOGRAPHY

To speak of archaeostereography we must first analyze the term in epistemological concept, where we can see that it is a word composed of two distinct phonetic fragments that are: firstly the term *arqueo* which could come from the Latin *arquatus*, which is taken as the arc that founds the knowledge or logic, and refers to everything past or the past, and *stereogram* which is a modern voice that speaks

of a composition or arrangement that gives the dimensional impression, in other words an *archeostereogram* is strictly about archaeological composite images, which in its content subliminally present a hidden dimension when observed with the technique of diverging the eyes or gaze.

This term, which is an evidently new proposal, intends to coin the general concept of the vision of the pre-Hispanic villages, however it is very important to understand that it is simply a conceptual proposal and that much more research is still needed on the subject, but it is important to understand that whether it is a verifiable fact or simply a scientific curiosity, this phenomenon could reform the tourist destination of the entire area of the Yucatan Peninsula and the Mesoamerican area.

THE CULTURAL DIMENSION OF ARCHAOSTEREOGRAMS

There is no doubt that findings as singular as the *archaeostereograms* make us think that in reality culture is a condition or characteristic of man that is really very difficult to understand in its real dimension, even for anthropologists who study the subject; this characteristic can be clearly seen in the condition of the current culture where it is frowned upon to diverge the eyes in open and/or public spaces and is used only in informal and laughable contexts.

Undoubtedly this is associated with the fact that nowadays the loss of control or misalignment of the gaze is unacceptable, whether in emotional or spatial fields, however, although it is in social disuse, the anthropo has not lost the ability, which we could call *primitive-transcendental*, to diverge the gaze.

However, in pre-Hispanic times this was a common and perfectly normal practice, as

Diego de Landa tells us in his *Relación de las Cosas de Yucatán* (1959), where he indicates that for the Maya diverging the eyes was really a practice or characteristic of beauty. However, according to Schwendener (2007), it was actually very difficult for Landa to know the nature of this phenomenon, because according to western history it was not until (1959) when they began to discover the stereographic characteristics of composite images, something that the Mayans had possibly discovered since pre-classical periods, that is, long before the birth of Christ.

So, for the understanding of the stereographic phenomenon, we propose a small exercise that can be done very easily, and it is to hold a pencil or pen in front of us, that we approach slowly towards our eyes, towards the middle of the eyebrows, without looking away from the pen we begin to perceive how suddenly two images are created simultaneously, and this is what we will call diverging the gaze, it is important to realize that it is something that could pronounce the tiredness or stress of the eyes for this reason we must observe it only to perceive and understand the visual principle, we can also perceive it when we focus on different objects in an open space or in a sufficiently wide room.

STEREOTYPED PANELS

At this point we will try to define the conditions that identify the nature of an archaeostereogram in its physical part, for which we will say that a stereotyped panel is really an archaeological image composed in relief and heavily loaded with geometric designs, placed as part of the facade of the structure or in the bodies of the same, as we can see in the structures of preclassic periods, with a strong political and/or ideological message and intimidation for the villages.

One of the most important aspects to point out about the stereotyped panels is that it is something that is designed to be seen at great distances as a public event or cosmovisive discourse, so that to be observed its image effects must be anatomically adequate, that is why its huge size and always balanced in its aesthetic forms and cardinal orientation; which as mentioned by Shele (1999) among other authors, is a common feature or practice within the architecture of the ancient Mayans.

One of the diagnostic aspects that serve to detect the existence of a stereotyped panel is that effectively when we observe it under the technique of diverging the eyes we can observe how its stereographic nature jumps out and creates a floating effect that emerges from the image and that is very easy to identify because at the beginning it gives the sensation of great surprise and deep admiration.

STEREOGRAPHIC CHARACTERISTICS OF NATURE:

To talk about stereograms in their natural or original form, we must think that in nature different species use multiple techniques to survive, among them and according to the Mesoamerican area we can mention for example the butterflies as they mimic or imitate the colors of nature with which they try to confuse their predators. We can also mention the deer that with its great speed and dexterity tries to lose its victimizers; it is not the exception with the reptiles that reflect in their genetics more primitive details than other species, it is here where we can also talk about the serpent that with its geometric designs it not only tries to mimic the surface of the ground but also these designs are the ones that disguise it stereographically when it walks or rests.

This is why when we walk through the jungle many times the serpent surprises us when suddenly our eyes coincide in its image and suddenly gives the impression of jumping at sight, creating a feeling of great fear (panic) and startle, it is the same principle that exists in the stereograms, but in this case it is a totally opposite sensation with the feeling of relaxation and peace that produces the visualization of an archaeostereogram or modern stereogram.

THE FLOATING SERPENT

When speaking in general terms about the serpent we can appreciate how it appears historically in different contexts of different cultures around the globe, so we can see in Asia, in the Hindu imagery, in the Greek civilization, in Western and Eastern Europe and of course in the Hebrew culture where it acquires its main philosophical role as an incarnation of evil, so we can appreciate how it has been an animal-phenomenon, which has always attracted the attention of man and retains a privileged place in myths and legends throughout history.

As far as we are concerned, in the pre-Hispanic Mesoamerican area it is no exception, since the serpent appears continuously since very primitive times and possibly in all the different artistic expressions of which we have evidence, however in this case it presents a floating characteristic, which has been the subject of various interpretations.

Thus, its main protagonism can be seen in the site that today is called Chichen Itz'a, where the history captured in different codices tells us of a character called Quetzalcoatl (which translates as feathered serpent), and that according to Schwendener (1998) with a dual personality of deity and man founded this city that presents as one of its main characteristics the appearance of astronomical observatories as a

public ritual, as well as the appearance of various stereotyped panels in the central hull of the site.

In synthesis, it is in this way that we think that the serpent actually uses its geometric designs as a stereographic strategy to evade its predators and that the Mayan people discovered these mimetic qualities and used them within their political and ideological discourse, from very early periods, including them in the architecture in areas of the Yucatan peninsula, because of its particular calcareous characteristics, they were represented with greater frequency and elaborated in better quality of details, which is what is currently called Mayan baroque, this is how the term of the floating or flying serpent Quetzalcoatl was coined, which crystallizes in its political form and as a public ritual in the archaeological site of Chichen Itz'a.

DYNAMICS OF ARCHAEO-STEREOGRAPHIC KNOWLEDGE

Perhaps the fundamental aspect of archaeology is that its conceptual center is about different gaps, for example those found in ceramics between the different types or characteristics of ceramic fragments or for example regarding the geographic-political distribution of pre-Hispanic villages, but undoubtedly the most representative in this order of ideas is the gap that exists between the past and the present, gap that some cite wrongly called abyss, but that marks one of the central problems on the understanding of the characteristics of pre-Hispanic culture, so it seems to be that the archaeostereographic knowledge has the quality of transcending these two stages of knowledge, which is of great interest to philosophers and different authors interested in the subject.

To punctuate the subject, we can speak of three fundamental moments for the conception of this knowledge, in other words, points or moments where we can appreciate certain characteristics of the anthropo and how knowledge works or transcends in his brain or in the plane of his lucubrations.

First, we can talk about the bifurcation of the eyes, this technique as we said before is frowned upon in today's culture and is associated with misalignment and madness, however for the Mayan people it was something completely different, we also mentioned that this ability exists naturally in the muscular complexion of man, so that it is something innate in the anthropo. It is important to mention that this technique is also used in the field of meditation that some mystics use to achieve physical and mental dexterity, however in this field the technique is used with the eyelids closed and for the Mayan people it is done with the eyes wide open, and the brain has the ability to read what happens with the images that we could call transluminal-bipartite.

In a second plane we can talk about the transluminic coincidence, which is achieved through the proper focus of the images, where to understand it we delineate the movements of our head in an axis between shoulder and shoulder that passes circularly over our head, this movement when performed in conventional contexts gives the impression of reading or perceiving certain important image features so when we perform this movement with our eyes bifurcated we can make the images coincide in their transluminiscence, but without losing the lead of the same image, that is to say that the images rotate between themselves and not in themselves.

Subsequently and finally, we will analyze the effect of bouncing or sprouting of the

image, since when the composite images coincide there is a strong impression of surprise and later when the image is sustained for a long time and at different distances, it gives a sensation of peace and inner relaxation. According to Smith (2005), there are two types of stereograms, firstly the stereogram that we will call modern, which is the one that uses computer technology and specialized image processors that hide and distort the image in a more practical and stylized way, then we have the so-called floating particles that have a simpler or more primitive design and that is what we can perceive in the context of pre-Hispanic villages, where they are composite images very loaded with geometric designs that when observed with a diverted gaze give the impression of floating or flying, as is the case of the floating serpent.

GENERAL JUSTIFICATIONS

Given the importance of archeostereography for the Mesoamerican area, we can talk about some issues that not only justify our research but also present the reader with a real range of ideas that could create a careful analysis.

In the first place we will talk about the feathered serpent, where we can observe that the same nature of this mythical animal could be referring to the archaeostereograms, according to the floating or flying effect that these monuments produce, such as the stereotyped panels, so we could be in front of a new type, so to speak, of astronomical observatories, which could revolutionize the way in which these sites are currently appreciated, besides adding to the astronomical observatories and structures already discovered a series of new characteristics that contain great curiosity and possibly a series of different effects.

However, it is always important to understand that this is possibly only a theory and that there is still a lot of research to be done regarding the social content, the scope of archaeostereography and the fact that it was discovered by the pre-Hispanic peoples, among other things, as well as the effects and the true symbolic content of the images, since it is possible to observe a third hidden dimension.

Other questions that justify our work, is that Diego de Landa, comments in his *Relación de las Cosas de Yucatán* (1959), that one of the practices of the Mayan people is to bifurcate the eyes or the look, Landa explains that this was stimulated from very early stages in the child almost after the birth of the child, Landa mentions that they placed in addition a series of structures with which they intended to deform

the skull, a small ball of wax that called the child's attention, possibly with its scent and movements, this pronounced the ability to diverge the gaze, possibly so that the child from an early age would rehearse his entrance to a city or cities, with strong social and ideological messages, embodied in their stereotyped panels.

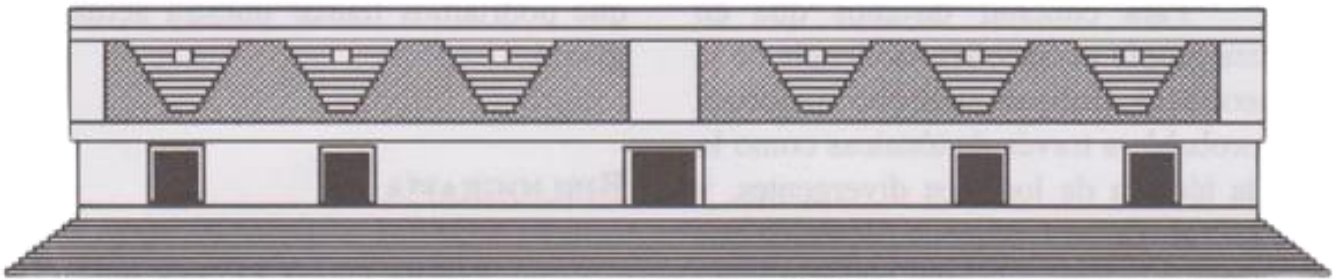
And finally we can say that if we appreciate a photograph of one of these stereotyped panels (as we can see below), with the bifurcated view we will see that in reality many of the images coincide, perhaps not in all its dimensions, as we can see in modern stereograms but some of them allow us to have the floating effect and experience the phenomenon of archaeostereographic knowledge that we mentioned before.



In this image of the palace structure popularly called Monjas, located in the archaeological site of Uxmal, we can observe the state of conservation of the buildings and understand the appropriate proportion for archeostereographic visualization.

At this point it is important to mention that these are not the ideal conditions to appreciate the phenomenon, the important thing is that we can make the transluminal images coincide and thus we can realize that they can indeed be appreciated under this technique and that a third floating dimension is created that could be referring to the term flying or floating serpent.

To exemplify more adequately the phenomenon, we create a hypothetical reconstruction, with the help of a computerized image processor that will help us to understand what we are talking about, it is recommended after its appreciation to observe the photograph again to appreciate more reliably the characteristics of the archaeostereography.



In this hypothetical reconstruction we recommend the appreciation with divergent eyes holding the paper in front of our face and making (by means of the oscillation of our head), that the images coincide creating small foci of images in third dimension.

PRELIMINARY ANALYSIS OF IMAGES AND DETAILS

There are several details that we can appreciate at this time prior to a more formal work of interpretation, one of them is that the stereotyped panels that we show, firstly present characteristics that we can see from preclassic periods, such as the geometric-orphidic designs that imitate the lines and complexion of the serpent as well as the masks, which as it is well known are a kind of psychological weapon, which intimidates the people in their imperiousness and symbolism.

In addition we can see how some hidden images begin to appear, for example when we diverge our gaze making their lines coincide, it gives the impression of growing structures sometimes also coinciding the dimensions of their doors or small details found in the images, as for example we can see how there is a larger picture containing a superimposed succession of masks that seems to coincide with details that are embodied in the geometric shapes that are on their sides, this could be strongly loaded with a phonetic and cosmovisive content.

In synthesis, we will point out again that this is a first approach or essay and that a much more serious research is really missing, covering all the necessary details in the conceptualization of this new science of the cognitive past.

GENERAL CONCLUSIONS AND RECOMMENDATIONS

To conclude we will say that in our own perspective the science of archaeostereography is a scientific fact, verifiable through techniques such as the divergent eyes technique, and that it is a philosophical phenomenon that proves the capacity of knowledge to transcend and that in gnoseological terms could revolutionize the philosophical theory of years of work of many scholars and scientists.

Therefore, it is necessary to call the attention of the authorities for the restoration and conservation of the structures so that the appreciation of this phenomenon is pronounced, through restoration projects with an archeosteographic approach, or at least that adequate areas are indicated to be seen, because if it is not appreciated in complete symmetry with the structure it makes its perception more complex and could create fatigue in the eyes and confusion, since it can be thought that it is not possible to observe the phenomenon.

However, we recommend serious studies in this regard as well as the clear idea that although it is only a scientific curiosity, it could reform the tourist destination of the Mesoamerican sites. For which we recommend to all the entities that this phenomenon be treated with great moderation and that we be in a more united cultural context, creating the adequate legislation that supports and politically promotes archaeological and anthropological findings of all kinds, in a more mature and conscious way, recognizing the great millenary legacy that either

by chance or by order we have had to live and share in this, what we could call our global present time.

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