



SYMBOLS AS UNIVERSAL LANGUAGE

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ABSTRACT - This lecture wants to show how, while studying the world art, a common, uniform and universal denominator could be identified: though there are linguistic differences, we can comprehend that the language of symbols, used since the beginnings for communicating, can be used as a tool of dialogue between individuals and cultures, it is analogous and singular at once in different parts of the world and that all forms of modern language are originated from it.

RIASSUNTO - In questo articolo si vuole mostrare come, studiando l'arte mondiale, si possa trovare un comune, uniforme ed universale denominatore: pur essendoci delle differenzazioni linguistiche, possiamo capire come il linguaggio dei simboli, utilizzato fin dalle origini per comunicare, possa essere strumento di dialogo tra individui e culture, sia analogo ed singolare in diverse parti del mondo e che tutte le forme di linguaggio moderno sono originate da esso.

Margalit Berriet and I have been working together for years. We wrote a book based on works of art of the world, from prehistory to the present days. Our aim was to determine the symbols seemed to be shared by every culture to sketch out the basis of a universal functioning of the human brain observing the world and giving birth to a common universal grammar of symbolic forms, sounds and movements: "languages" that served humanity to produce its infinite cultural and individual diversities.

As the study of symbols is sometimes monopolized by esoteric interpretations, we have tried, at the contrary, to conduct that research academically and in parallel of the neuroscience, through a series of investigation of works, the origin of the symbolic grammar/ language in nature (animals, forms, body parts, space, sounds, etc.), how they were used, which beliefs or myths accompanied them, specific to each culture or individual.

It is out the question for us to bring the framework of symbolic thinking down to a general commonplace, ready to be ingested. The point would rather suggest intuitive and suggestive interpretations and keys for everyone to get to understand the culture of the "other", fight off stereotypes and prejudice related to lack of understanding of cultural diversities or of cultural interpretation of the unfamiliar, and have anyone accustomed to that instinctive human language born from what man saw or could use from his environment in order to produce.

By this work, we mean to reinforce cultural and individual uniqueness and distinctiveness. We also think in parallel to cultural and individual diversities that various forms can convey, each in their own way, the same idea or exactly the opposite concept (black or white as color of mourning or of the beginning of life, etc.), or at other cases expressing the same relationship to the world.

We have often noticed points of convergence between the symbolic forms from artistic traditions of the world. Like Emmanuel Anati, we are trying to understand that phenomenon and to suggest several hypotheses to fuel discussions on the subject.

I would like to start by developing more precisely the process that brought to the elaboration of symbols and then present an example of an intercultural analysis of a symbolic form.

FROM WATCHING NATURE TO DEVELOPING A SYMBOLIC VOCABULARY

How can one define a symbol? According to the Robert dictionary, it is "what represents something else through an analogical connection." Everything can be a symbol: numerals representing numbers, letters transcribing sounds, ideograms standing for concepts. They are a visual code of communication, precise and



efficient. Each codified system is understandable as part of a certain cultural and linguistic field. Sometimes symbols are accessible to a specific only one lecture.

Symbolic forms bear witness to human thinking patterns. Our hypothesis is that they form a language *per se*, that has been built from the transcription of human beings 'natural environment into images'. To access the meanings that are conveyed by symbols we must track them down to understand how they were developed.

Explaining and mastering the world through signs

Human beings have developed their intelligence, techniques and knowledge for the most part through their empirical abilities. Observing, experimenting, drawing conclusions, adjusting and starting over, men have built tools, have learned to master fire, to use plants and have constantly improved those systems. Scientific research is based today on a constant back and forth between experience and analysis.

Hundred thousands years ago, human beings living on the planet have all been confronted to birth and death, to the cycle of seasons and stars, to rains and droughts... Facing those events, they have looked for rational explanations to better their knowledge of them and try to master them or at least to influence their course.

In spite of infinite variations, most ancestral religions have in common their polytheism. Entities, often anthropomorphic ones, are endowed with extraordinary powers; they govern the universe and embody fundamental forces such as the sun, the night, the rain. The will to give a form to those divinities, to mark their sanctuaries, to devote objects to them and to keep worshipping them, is what symbols partly stem from.

The creation of symbolic signs and writings indeed derives from a need to render things tangible, to neutralize and tame them but also to identify and organize them. We know for instance that Sumerian writing was created around 3300 BC to resolve the need to account for agricultural production in order to determine the amount of taxes.

Whether it originally stemmed from an administrative or a religious necessity, symbolic vocabulary was deeply marked by the imprint of its natural environment. We had the intuition that the construction of symbolic forms – including abstract ones – happened in accordance with natural forms. That was confirmed by various researches in neurosciences. Chaingizi (2009) has shown that every alphabetical or ideogrammatic sign has been elaborated in response to natural forms. Interestingly, the area of the brain triggered by reading is the same as the one enabling us to identify natural forms. Dehaene (2007) has shown that the shapes of letters do not stem only from arbitrary cultural choices, but have been oriented by our capacity to recognize the natural forms that surround us. If it leans on preexisting neuronal competences, reading is all the more efficient.

The construction of symbols

The oldest known traces of symbols date back 40 000 years, just like the first works of art. Ernst Cassirer has studied language, myth, sciences and art as "symbolic forms". He has defined three types of such forms: "Every symbolic form can be traced back according to a process that goes from the "mimetic" stage to the "analogical" stage to eventually rise to a purely symbolic form. That process starts with an inclination towards the object, then moves on to the subject and eventually to the symbol." (Krois, 1995)

It is what we observe in the evolution of writings throughout the world. They are firstly pictogrammatic, they move on to becoming ideograms and eventually end up being formed of "purely abstract signs". For instance, in Egyptian hieroglyph water was made by one undulating line ~~~~ : a mimetic form. Borrowed by the Phoenician alphabet, the sign evolved in  *mem*, a term meaning "water". It's an analogical approach in that letter/word/sound corresponds perfectly. The *mem* then became μ (mu) in the Greek alphabet, written M in capital letters, which is part of the symbolic order according to Cassirer.

The evolution from drawing to symbolizing happens through the evolution from a "literal" sense to a more abstract one. This explains how, through epigraphy, we can trace down a semantic connection – that we've lost through time – between a geometric sign and its initial form.

To make this epigraphic investigation more thorough, we have followed the path of various modern artists like Wassily Kandinsky, Paul Klee or Joan Miro, whose researches on the stylization of form up to the point of abstraction have been fundamentally inspired by ancient cultures. We studied this artistic process in parallel to that of the creation of symbols. Combining both approaches, we have been able to come up with certain keys of interpretation.

The convenience of a completely abstract form lays in its capacity to convey complex or even metaphysical ideas. From what we have observed, it would seem a geometrical symbol often derives from several natural forms that gradual stylizations have allowed to converge and unite in a single abstract sign. Those initial forms complete each other, each bringing its specific tonality to be part of a larger meta-signification that the geometrical sign then conveys as a whole.

TOWARDS DEFINING THE VARIOUS SYMBOLIC MEANINGS OF THE CIRCLE

A circle is held to be a geometrical shape, but it is also present in nature. Stars, human pupils and irises, some fruits and vegetables have a round outline. Drops create concentric circles when they fall into water. This mathematical symbol is in fact an image of natural forms.

An image of the sun

The sun, a crucial element to life on Earth, is often represented by a circle. To study the links between sun and circle, research in iconography and epigraphy is extremely valuable. In ancient Egypt, solar divinities such as Ra-Horakhty were always easy to identify through the disc crowning their head (Fig. 1).

This code is also found in vexillology. Japan's national flag for instance is marked with a red circle representing the sun, drawn on a white background. It can be found on works of art dating back to the 15th century. The flag itself is called "Hi-no-maru", meaning "solar disc" in Japanese. In some military flags, rays shine around the circle, asserting ever more evidently the association of that shape with the sun.

Some artists have also taken hold of that shape. In a 1949 picture by Joan Miró, a large circle sits on top of various figures. As we would facing a child's drawing, we immediately associate the circular shape to the sun. It is such a common visual code that one does not even need to think about it. The picture's title, *Figures and dog in front of the sun* confirms the understanding of the red circle as the sun. That quick comparison shows the interest of a cross-ways approach in the understanding of forms. We could have shown numerous examples confirming that the sun has been represented in a circle shape frequently, through various cultures and times. According to Cassirer's typology, it is a "mimetic" symbolic form.

An image of space and time

The Mayan character representing the sun (Fig. 2) falls within a shape between the circle and the square, to which are added four lobes and a central dot. It is enlightening to compare that sign to the sun ideograms (around 1500 BC) in ancient Egypt (Fig. 3) and China (Fig. 4): a central dot within a circle. The three signs closely resemble another one, except for the semi-square shape of the first one.

For thousands of years, the Chinese character has been evolved (Fig. 4), its dot stretching out until crossing the circle that had, on its part, evolved into a vertical rectangle. The Mayan sign for the sun might be the result of a similar process of stylization.

But how should one interpret the diagonal lobes? "*Kin*", which means "sun" in the Mayan language, also conveys the idea of day, time and periods of time (Davoust, 1995). These four parts could therefore refer to the shifting of the sun or to the four cardinal points, both very present aspects of the way Mayas considered life (Hopkins and Jossierand). The myth of the sun – leaving his house in the morning and returning there at night – is significant to such an extent that in most idioms deriving from the Mayan language, the East is called "exit" and the West, "entrance". In fact, it shouldn't come as a surprise that Mayan characters describing those two points should be partly made using the solar sign (Fig. 5).

There are other interesting solar typologies. Shamash, the Mesopotamian Sun God (Iraq, towards 1750 BC), is symbolized by a circle embellished with a stylized cross with four rays diagonally undulating towards the outside of the circle (Fig. 6 and 7). In its center also stands a dot. That symbol is very close to Danish circular signs (Fig. 8), which are marked with a cross that has both vertical and horizontal axles (around 1500 BC). As a cult was certified to exist during Danish Bronze age, they are called "sun wheels". Since human beings have used the shifting of the sun to define the time, seasons and the cardinal points, that cross pattern may have been used to represent this very same solar phenomenon, uniting in a single form space, time and the sky. Mayan lobes could be understood in the same way.

But we have to underline another aspect. Making a cross fall within a circle or marking it with a central dot stems from a similar intention: representing the center of the sun. We may suggest that the sun being such a powerful element, this would have been a way to identify the source of its power all the while associating it to the idea of radiating as it is made evident in the Shamash symbol. It could be seen as the image of an inner energy spreading towards the outside.

The circle, a symbol of time, has even become a decorative object: the circular shape of watches and clocks dials is no coincidence, and neither is the shape of the wedding ring symbolizing eternal love.

An ambivalent symbolism, between life and death

The solar symbolism is also found in architecture, in particular in constructions built according to circular plans such as Celtic princely tombs, solar sanctuaries/observatories such as Stonehenge, Hindu stupas and so on. All of them are places of power and distinction.



It can be a surprise that the sun, a strong symbol of life as we have seen, should be found in a mortuary context. Since it borns every morning after its nightly disappearance, it has been associated with a possibility of life after death. That idea is made evident in ancient Egyptian mythology.

Natural elements are endowed with both beneficial and destructive powers, hence the frequently ambivalent nature of symbols. Depending on which culture they pertain to, they can mean one thing or its complete opposite. Those approaches are not contradictory: they only express two aspects of a single reality.

The Ouroboros, a snake biting its own tail, is also symbolized with a circle. It conveys the idea of eternity and the eternal resumption of things. Its shape and meaning thus meet those of the sun.

A cosmic symbol

Circles are the sign of an extraordinary power, astral shape and image of the life cycle.

In the representations of Shiva Nataraja (Fig. 9), the Hindu divinity makes his dance to destroy the world in a circle of fire. The circle there is not only a representation of the universe, put in motion by godly powers but also an image of life and of universal energy, that the divinity can conjure at any given time. This scene is not referring to the annihilation of the world, but it has to be seen as the necessary prelude to the creation of a new one.

The *bi* (China, 3000 BC) is as type of circular jade disc with a hole in its centre. It is a prestigious object that was placed on the deceased's body in the Neolithic times. The *bi* could be a symbol of the sky, as the firmament is round in Chinese cosmology.

The sun and the circle thus unite in a purely symbolic form, that of the cycle of life, of the eternal resumption of seasons and of astral movement: it is the sign of the world around us, the cosmos in all its mystery. The idea blends in with the shape, hence the extraordinary efficiency of that sign.

That example – though incompletely and quickly analyzed – is a good summary of the process we have tried to implement. We wish to go beyond formal appearances to grasp the core of the matter, its essence, to give a new meaning and a common basis to notions shared by every human being.

Working and studying around art and its meanings allows us to fight stereotypes by developing a balanced and sensitive way of looking at ourselves and at others. It allows each and every one of us to express our inner identity, to understand and respect that of others within the boundaries of a shared culture. Art happens to be a crucial and inspiring way to convey meaning, as it provides us with both personal and universal tools to reflect on the world and our relationship with others.

Thanks to that process, the deep intellectual and spiritual links bringing every human being together are made so obvious they cannot possibly be denied. They bring us to see, beyond appearances and the diversity of forms, the inner coherence of human cultural heritage.

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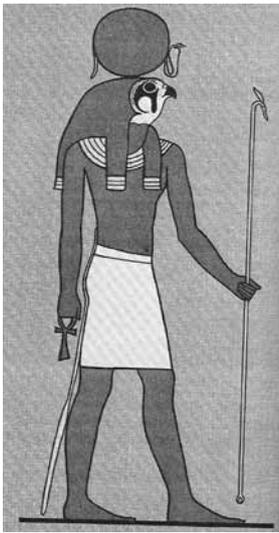


Fig. 1. Depiction of Ra-Horakhty, published in *The Gods of the Egyptians Volume 1* by E. A. Wallis Budge, circa 1904. Source http://en.wikipedia.org/wiki/Image:Amen_Ra.JPG, Author E. A. Wallis Budge, Public domain.

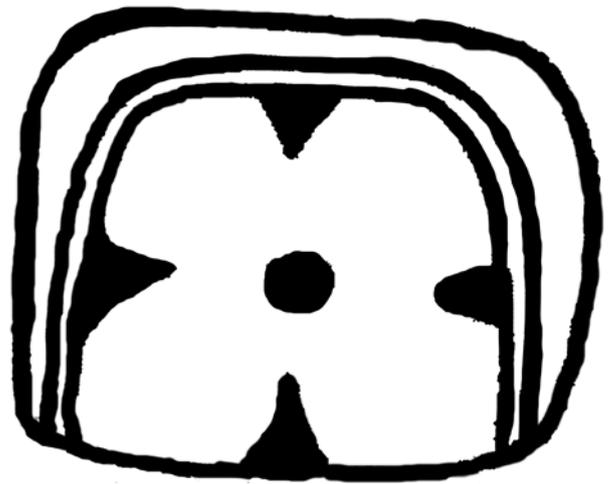


Fig. 2. Representation of the Mayan sun (designed by the author).

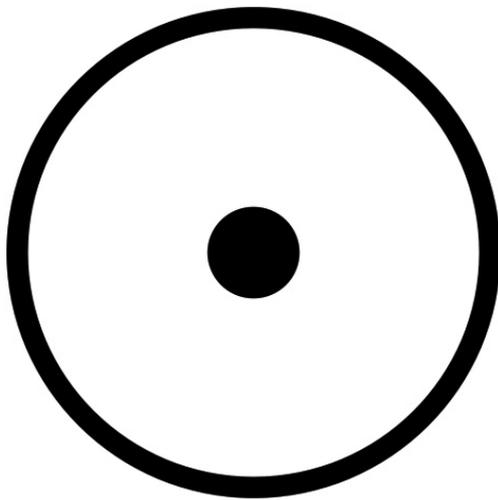


Fig. 3. Sun hieroglyph, Egypt (designed by the author).



Fig. 4. Chinese Sun ideogram : evolution of the sign from -1500 to the present day (designed by the author).

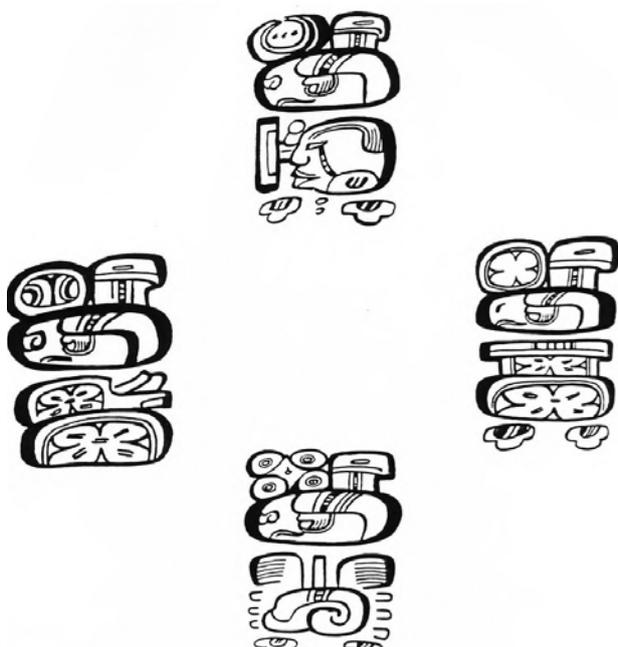


Fig. 5. The Classic Maya hieroglyphs that represent the “four directions” in Rio Azul Tomb 12 (after a drawing by David Stuart, Stuart 1987b:162, Fig. 41): North (top), West (left), East (right), and South (bottom). The directions are accompanied by undeciphered glyphs (above each direction) referencing the Moon (north), Night (west), Venus (south), and Day or Sun (east). In HOPKINS N.A. and JOSSERAND J.K. s.d. « Directions and Partitions in Maya World View ». [On line]. 27 p. <http://www.famsi.org/research/hopkins/directions.html>



Fig. 6. Tablet of Shamash. Found in Sippar (Tell Abu Habbah), in Ancient Babylonia (9th century BC) and shows the sun god Shamash on the throne, in front of the Babylonian king Nabu-apla-iddina (888-855 BC) between two interceding deities. The text tells how the king made a new cultic statue for the god (represented at the centre of the tablet). Date 22 January 2012 Author Prioryman Licensed Under creative commons 2, Attribution-ShareAlike 2.5 Generic (CC BY-SA 2.5) http://commons.wikimedia.org/wiki/File:Tablet_of_Shamash_relief.jpg

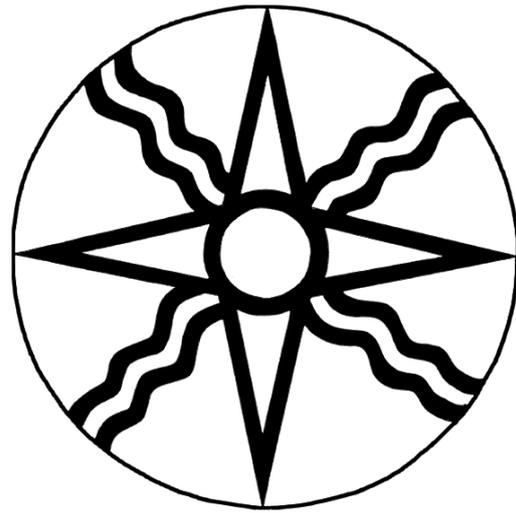


Fig. 7. Emblem of Shamash designed by the author



Fig. 8. Rock-carvings near Blåholt Author : Suhajdabys photostream <http://www.flickr.com/photos/suhajdab/4497843502/in/photostream/> Licensed Under creative commons 2.0 Attribution-NonCommercial 2.0 Generic (CC BY-NC 2.0)



Fig. 9. Shiva Nataraja Author : Marjon This file is licensed under the Creative Commons Attribution-Share Alike 2.0 Generic http://commons.wikimedia.org/wiki/File:WLANL_-_M.arjon_-_Tropenmuseum_-_Shiva_Nataraja.jpg