

## FROM POINT TO CIRCLE IN PRIMEVAL SYMBOLS (*excerpts from the book*)

The studies on graphic forms in relation to their meanings and their perception, along with the studies on conceptual sources of the origin of graphic signs and symbols are necessary for better understanding of the communication processes. That, in turn, is supposed to improve decodification of visual messages.

### Geometric Code, the Perceptual Code

For the needs of visual communication, in order to develop a model for comparative visual analysis, a structuralist approach has been undertaken. Accordingly, it has been claimed that there exists a superior code common to all the codes which are subordinate to it. This postulated primary code is "the most essential mechanism of human mind, reduced to a common denominator with the mechanism governing organic processes."<sup>1</sup> Consequently, it has been claimed (U. Eco) that our culture has worked out relevant elements of any possible representation. These elements are elements of Euclid's geometry. "The possibility of reducing every configuration to the primary elements of geometry makes this geometric code an instrument for analyzing elements of other, more synthetic codes."<sup>2</sup> The structure of the geometric code was described by identifying units of primary and secondary segmentation of space, as it is in natural language, but relative to sounds. Significant units of its primary segmentation are closed geometric figures, named choremes for the purpose of the code. The term has been derived from Greek *choros* (space, area). Consequently, from a circle, square, triangle, ellipse, rectangle, and so forth, all the way to irregular figures are choremes. Any figure is generated by linking points, lines, curves, angles, etc.<sup>3</sup> that is, units of secondary segmentation of space. These units form the structure of choremes and are called stoicheia. The term has been borrowed from Euclid's *Stoicheia Geometrias* (Elements of Geometry). In Greek, *stoicheio* means element, or principle. Stoicheia form more or less complex syntagmatic arrangements. In the geometric code, syntagmatic relationships are represented by scales, proportions, perspectives and intervals. According to Eco, in the architectural mode of the geometric code, stoicheia per se do not have any semantic values, but distinctive features. However, they are

assigned some semantic contents in the graphic (two-dimensional) version of the geometric code. An application of the geometric code in visual analysis is supported by the fact that this code matches both "the internal figurative code regulating perception of elementary shapes" <sup>4</sup> as well as the process of graphic design, in which we use the most primitive elements.

Consequently, the idea of the superior and primary geometric code corresponds with some recent proposals in the psychology of form perception. It has been claimed that perception is "a process that begins with the extraction of basic units called primitives." <sup>5</sup> According to Triesman (1986), the primitives such as curvature, tilt, color, line ends, and movement are extracted from the stimulus at the beginning preattentive stage. The focused attention stage involves processing based upon higher level information such as the meaningful context in which a stimulus is seen, and the observer's prior knowledge. At this stage, also influenced by the Gestalt grouping principle, the components are combined into a whole object. <sup>6</sup> In I. Biederman's (1981) proposal, the primitives are identified as volumetric geometric ions (geons), and are "the building blocks of perception, because it is possible to construct many thousands of objects by various arrangements of these components." <sup>7</sup> The Biederman's system is analogous to Eco's geometric code in its architectural (three-dimensional) mode. For the purpose of the analysis of the one- and two-dimensional graphic signs, it has been proposed (R. Tomaszewski, 1976) to distinguish only three main closed figures such as circle, square and triangle to classify graphic sign and symbols on the basis of family resemblance (Fig.1). This structure is supported by some findings in psycholinguistic research and Gestalt psychology. These three shapes form the best closed Gestalts or "good figures." Moreover, the principles (stoicheia) such as line, curve, and angle are the best open Gestalts. <sup>8</sup> Consequently, the names of these geometrical shapes are the most common one- and two-dimensional shape names in English. It is most likely that these names are the basic shape names in all languages. However, there are languages in which the common shapes do not have basic names. For instance, in Dani language geometrical shapes are named through circumlocutions like *pig-shaped* or *fence-shaped*. On the other hand, the research done on the Dani language supports the theory of the basic shape names. According to E. Rosch (1973), the Dani who learned names for the best figures (circle, square, and triangle) did so much faster than the Dani who were taught less good figures. <sup>9</sup> "People have a predilection for good Gestalt figures perceptually, and these are the

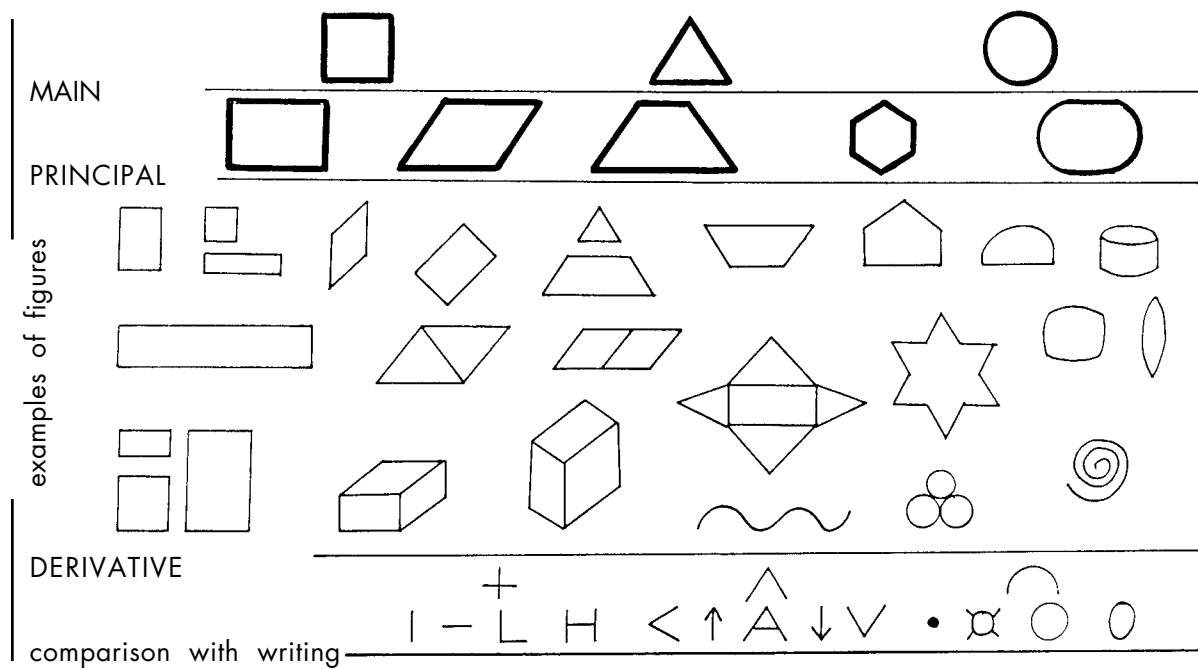


Fig.1.

- 3 shapes that are named....Basic shape names, then, are determined by principles that are built onto the human perceptual system." <sup>10</sup>

### Why Primeval Symbols?

Structuralist analysis of the symbolic structures in the primitive cultures demonstrated their universal repetitiveness regardless of the cultural differences.<sup>11</sup> The analysis of such semiotic systems as mythology, religion, ritual, and primary philosophy is supposed to reveal patterns of symbolization processes and the roots of science which are inherent in the knowledge of the pre-logical period. Owing to centuries-long tradition of using signs and symbols for synthetic visual representation of ideas, contemporary human has inherited a rich collection of symbols which might teach us about archetypes governing the processes of visual symbolization, and improve our visual lexicon. This paper is focused on the semantic values of some primeval symbols in relation to their shapes. The shapes, in turn, are viewed in relation to the inherent dynamics of visual forms and their perception. The symbols have been selected and ordered following the structure of the geometrical code. Thus, the analysis begins from the principles (stoicheia) and apparently ends on the set of symbols within the category, circle. The other two categories, square and triangle, have been omitted in this paper.

The working assumption was that there are some focal meanings commonly associated with a given shape regardless differences among cultures and semiotic systems. In other words,

the perception of form along with conceptual capacities of human mind should have influenced the relationships between concepts developed in the past and forms through which they were visualized.

### From a Point to the Number One

A point is considered as the simplest and the most rudimental element common to all geometric figures. Thus, it is a component of any geometric form. Some of the contemporary lexical descriptions of point are as follows: (1.) a minute mark or dot, (2.) an element in geometry having definite position, but no size, shape or extension.<sup>12</sup> In Euclid's *Elements of Geometry*, a point is defined as "... that, what does not have any part."<sup>13</sup> The ancient thinkers were not satisfied by this

4 definition, because it allowed too many interpretations and does not apply exclusively to geometry. A point, like a straight line and plane, plays the role of a primary concept which, by its very nature is undefined, such as unproven propositions called axioms or postulates which are accepted in logic or mathematics. Failures in defining the primary concepts may suggest that they are understood on the basis of intuitive intrinsic concepts already existing in the human mind. Linguistic research proved a lack of a primary word signifying point. However, Euclid used a term, *semeion* – sign which most likely was related to the process of drawing points. Nevertheless, Ancient commentators claimed that this meaning was represented by a word *stigma* – punch, which could be a source of the Latin *punctum* – punch, point.<sup>14</sup> Among medieval scholastics, who assumed that "does not exist an actual infinity," and that a point is an indivisible, non-extensible unit, Thomas Aquinas asserted that moving in one direction point produces a line.<sup>15</sup> Wassily Kandinsky built up the idea in our times. He claimed, that "the three basic forms of a plane: circle, square and triangle, are natural products of a point moving under a plan."<sup>16</sup> A point is thus, "a proto-element of painting and graphic arts."<sup>17</sup> Symbolically, a point stands for a unit and unity (Fig. 2). For Pythagoreans it represented a "unit in space," and as such, symbolized the figure one. That figure was not considered as a number, because



Fig. 2.  
Point, unity, unification  
Peace  
Number 1 (Arabic)



Fig. 3.  
Triangular number



Fig. 4.  
Rectangular number



Fig. 5.  
Aluminium (alchemy)  
Oxygen, salt (chemistry)  
Zero, beginning, source  
Emptiness, infinity  
Letter "omicron" (Greek)  
Letter "O" (Latin)

within Pythagorean theory only an entity consisting of some units was regarded as a number. Instead, a point played the role of an element joining geometry with arithmetic.<sup>18</sup> It served to create the categories of numbers such as triangular, rectangular, pentagonal, and so forth (Fig. 3, 4).

A concept of a number per se, was not developed before a certain level of abstract thinking was achieved. Since then, arbitrary signs were created to convey concepts of numbers,<sup>19</sup> along with autonomous numerals in the natural language.

Some of the examples of the primitive representations of numerical systems are as follows: notches on wooden sticks, knots on cords, points, lines, and so forth.

Nevertheless, in some languages, independent numerals were never developed. It is noticeable that abstract and universal numbers were linked with symbolic -

5 associative contents. In other words, the numbers were assigned some symbolic meanings and magic properties of astronomic and cosmogonic character. The concepts of numbers were connected with recording the passage of time as determined by astronomic phenomena which were interpreted through mythology.<sup>20</sup> The numbers one and two, were developed at first, and were charged with symbolic values. For example, the number one and a point alike, represented indivisibility, unity, proto-beginning of the universe, and the concept of "a center." The development of these numbers at first is determined by the complexity progression from singular to plural which "very likely derives from the primacy of the individual object in perception. Each object is perceived as an individual with an identity of its own, constant over time." <sup>21</sup> However, early development of these numbers is likely related to family and marriage systems where the two is the smallest unit.

### A Concept of Zero and Interpretation

A notion of zero, with the other numbers and the decimal system was developed in India, where the Arabs transferred them to Europe. The visual symbol of zero followed the creation of the concept of zero which in Hindu system signified an imaginary point surrounded by an oval (Fig. 5). In early Hindu texts numbers



Fig. 6.  
Reclining line, horizon, basi surface of the Earth, surface of water, statics, passivity, neutrality, coldness  
Darkness - blackness  
Blue (color ascribed- herald  
Number 1 (Chinese additive system)  
Sound "e" (runes)  
Minus, subtraction sign, "divided by" (mathematics)



Fig. 7.  
Standing line, activity, elevation warmth  
Shiva as a sun beam, marked with the red hue  
White - hue of perfection and potency  
Number 10 (Chinese additive system)  
Sound "a" (ogames)



Fig. 8.  
Cosmic post  
Original act of creation  
Vertical line, perpendicular (geometry)

were not only substituted by words, but also were associated with symbolic meanings. Consequently, zero was represented by such words as *sunya* – emptiness, *gagana* or *ambara* – sky, and was related to such notions as atmosphere, space, and dot. It is assumed, that the notion of zero was known in India in the mid-fifth century. Zero was also developed in Babylon, however, it differs from the Hindu one. The Hindu zero stands for *nothing*, such as in the equation, 10 minus 10, whereas Babylonian zero signified an empty (omitted) place within a written number. It is supposed that Babylonian zero appeared before the third century B.C.<sup>22</sup> A lexical derivation of the sign, "0," for the notion of zero can be explained through its function. Zero as standing for emptiness or nothing, relates to the Greek *ouden* – nothing, and zero taken as a sign preceding the other numbers, relates to the Latin *origo* – beginning, source.<sup>23</sup> To illustrate the importance of the precise establishing of denotations of symbols, let us take an example from mathematics. I. Newton used the sign, "0," in developing the differential calculus. However, he did not precisely show how that sign should have been interpreted. Thus, the question was, Is it zero? Is it an entity infinitely small? or, Is it a finite number?<sup>24</sup>

### Line and the Number Two

A straight line is the simplest outcome of the moving point. In the *Elements of Geometry*, Euclid called it "a length without width," or defined it as "... a line lying down constantly on its points."<sup>25</sup> Vagueness of the term, "to lie down constantly" evoked many interpretations. The origin of the term *gramma*, which was used by Euclid to name a line, has not been established either. The lack of the explicit definition of line is most likely caused by its nature of being the primary concept. Every interpretation of that notion implies some other more complex notions as: direction, distance, and motion. However, a definition developed by A. M. Legendre has been frequently used: " a straight line is the shortest distance between two points."<sup>26</sup> In another interpretation linking the beginnings of geometry with crafts, the derivation of the name of line was explained as follows: "An



Fig. 9.  
Right angle  
Neutrality, coldness  
Letter "L" (Latin)



Fig. 10.  
Diagonal line  
Falling down line



Fig. 11.  
Diagonal line  
Moving upward line



Fig. 12.  
Diagonal line  
45° angle - half way  
between the vertical  
and the horizontal

English *straight* is derived from *stretch* which is tied to the usage of rope, *line* is derived from *linen* - yarn, thread, or cloth made of flax.<sup>27</sup> According to G. W. Leibniz, a German philosopher and mathematician, a straight line divides the plane into two even parts, as space is divided into two even parts by the plane.<sup>28</sup>

In Pythagorean numerology, a line per se, signifies the number two, and vice versa, with the number two representing the line.<sup>29</sup> Such a relationship was derived from a long lasting tradition of the ancient symbology of numbers which

"remained elements of the magic rituals from Neolithic or even from Paleolithic times."<sup>30</sup> Symbolically, the two activates a prime unity, introducing a notion of duality. Consequently, it relates to such bipolar notions of spatial dimensions as up - down, high - low, right - left, and so forth. To other pairs of English terms that

7 describe spatial dimensions belong wide - narrow, far - near, and thick - thin. In

each pair, the first term describes "having extent," and the other one describes

"lacking extent." In all languages (Greenberg, 1966) the terms for "having extent" are always positive, and those for "lacking extent" are always negative.<sup>31</sup> For

example, there are languages in which "lacking extent" is described in such a way that the terms are equivalent to the English phrases *not long*, *not deep*, or *not far*.

The explanation of that fact comes from perception. For example, a line increases its length infinitely, thus, it still remains a line, but while it decreases its length,

the line becomes a point and eventually, disappears. The disappearance is evaluated negatively. The research on language acquisition proved that children

learn words for "having extent" before they learn terms for "lacking extent." That is because they "attend more to objects that have extent."<sup>32</sup>

### Binary Oppositions

The symbolic function of a straight line is intrinsically tied with the inherent structure of the human mind which processes perceptual data, following the

paradigm of binary oppositions. The perceptual data are organized and conceptualized in terms of binary oppositions. The paradigm of binary oppositions

manifests in the relative character of all notions. For example, bipolar adjectives



Fig. 13.  
Diagonal line  
(upward motion)



Fig. 14.  
Diagonal line  
(downward motion)



Fig. 15.  
Cornerwise line  
Irrationality, mystery  
Supernatural power

describing visual forces in communication design: balance - instability, unity - fragmentation, transparency - opacity.<sup>33</sup> To say this another way, languages lack absolute notions, the notions without their semantic counterparts. For example, in philosophy: at the ontological level (being - non-being), at the axiological level (good - bad), and at the epistemological level (cognizing subject - cognized object).

Bipolar notions are hierarchical subject to their importance to a cultural group. B. Malinowski, an anthropologist functionalist, claimed that the opposition of life and death which relates to the self-survival instinct, is the primary one. On one hand, the opposition is derived from the biological nature of human being as an animal; the superior animal self-survival instinct determines such other instincts as reproduction, hunger, and so forth. On the other hand, the life-death opposition is the factor determining the development and the structure of the pre-logical, mytho-magical thought. For example, the binary oppositions underly the deep structure of all myths.<sup>34</sup> The feeling of helplessness attached to the difficulties of coping with everyday life implies an opposition of man and environment, also known as the dichotomy of nature and culture.<sup>35</sup>

### Horizontal Line

A horizontal line is a primeval symbol of horizon and earth (Fig. 6). It relates to an imaginary line or plane on which humans move, and represents a static basis of all matter or the ground level. The horizontal line is associated with passive movement into infinity or with relaxation. Humans move on the horizontal plane, therefore the horizontal direction is perceived as a familiar, "concrete dimension which can be dominated, controlled and paced out."<sup>36</sup> Thus, any distance in a horizontal direction always seems to be shorter than the same distance in a vertical direction. The range of human vision "is much more extensive in horizontal direction than in the vertical."<sup>37</sup> The passive horizontal line was linked with the female principle and with coldness. Depending on the mythology female principle was related either to the Mother Earth (Tellus Mater), or to the fertility

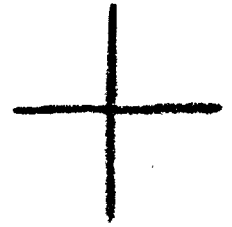


Fig. 16.  
 Four basic directions  
 Number 10 (Arabic)  
 Vinegar (alchemy)  
 North (astrology)  
 Greek cross (religion)  
 North dimension (magic)  
 Logical sum  
 Plus (mathematics)  
 Ceramic sign - Bristol (China)



Fig. 17.  
 Letter "X" (Latin)  
 Vinegar (alchemy)  
 Cartesian product,  
 "Multiplied by" (mathematics)



Fig. 18.  
 Principal symbol of sun  
 Source, genesis, universe  
 Eternity, silence, isolation  
 Center of rotation  
 Fire (element; 1 of 4)  
 Eternal circulation of the wheel  
 (Christianity)  
 Chakra - discus of God Vishnu  
 (Hindu mythology)

of water. In telluric beliefs, the earth was the prime matter of the world. In aquatic beliefs, the world emerged from water. Whenever the fertility of earth was associated with the fertility of woman, ploughing was considered as sexual intercourse with earth. Some of the archaic beliefs in the fertility of earth remained until now: a newborn is placed on the ground, to be picked up by the father, who in this way, acknowledges the baby as his own; sick or dying people are put directly on the ground to seek the support from the earth's power; walking barefoot is believed to increase the person's connection with mother earth and strengthen a person; the bodies are symbolically returned while being buried; promises and swears are given for the sake of the earth. To the aquatic beliefs which actuality remained until now, belongs the belief in the revitalizing and purifying power of water, this is demonstrated in: the symbolic function of baptism; drinking water from the sources of everlasting life; and the symbolic ablutions preceding important activities.<sup>38</sup>

The given examples in the prior paragraph illustrate only the positive aspect of female principle. Like every concept or symbol, it also has a negative dimension. For example, in Hindu mythology, the female element is called *Kali* (dark). Kali is a dangerous power of the night time of destruction, "because in the darkness of time, colors and shapes disappear."<sup>39</sup>

### Vertical Lines, Dichotomies, and Right Angles

A vertical line opposes a horizontal line visually and semantically (Fig. 7). While the horizontal is *given* like the ground, the vertical has *to be made*. A vertical line is comparable with human posture, with "living existence which grows upward"<sup>40</sup> It suggests an active upward motion associated with an active female element. Yet the vertical is associated with the divine domain, because an experience proves that whatever falls onto the ground happens without human participation. For example, the vertical is related to the solar cults, and represents sunbeams or lightning. It is assigned warm colors.<sup>41</sup> These include the warm white, for these colors relate to sunlight. For example, in Hindu mythology, a red vertical line



Fig. 19.  
Black discus - shield of the army of Kusado family (Japanese heraldry)



Fig. 20.  
"Ja no me" - eye of snake - shield of the army of So family (Japanese heraldry)



Fig. 21.  
Passive female principle  
Water  
Nitre, potassium, Saltpetre, nitration (alchemy)



Fig. 22.  
Active male principle  
Salt (alchemy)

symbolized Shiva, the god of creation and destruction. Linga, the phallic post representing the manifestation of divine energy, was visualized either in realistic form, or in synthetic form as a vertical line. In the Veda period, linga was assigned red hue as the color of blood, birth, and life.<sup>42</sup>

A vertical line symbolized a mythological dichotomy of the lower world of humans, and the upper world of deities. The sky, the world of deities to which humans directed their prayers, became a mytho-religious value per se, and symbolized sacrum and transcendency.<sup>43</sup> In Christianity, a vertical line on a

plane symbolizes Christ, whose left side signifies hell, and whose right one signifies heaven.<sup>44</sup> The pre-logical distinction between left and right corresponds

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to the current theory of the brain lateralization. Accordingly, "the left hemisphere is specialized for propositional, analytic, and serial processing of incoming information, while the right hemisphere is more adapted for perception of appositional, holistic, and synthetic relations."<sup>45</sup> In the other words, the left side

corresponds to logic and science, and the right side corresponds to intuition, emotions, and creativity. In psycholinguistic research, it was proved that the

word *right* is processed faster than *the term left* by both right- and left-handers. The result supports the assumption that the word *right* is perceived to be

linguistically positive since most people are right-handed. For instance, *dexterous* is derived from the Latin word for right, and *sinister* – from the word for left.<sup>46</sup>

That in turn, implies that the right-side dimension is perceptually more salient than the left-side dimension. However, this could be a frequency effect, since *right* is more common than left.

To the pre-logical dichotomy of the mythological world correspond many philosophical concepts. For example, the Platonian concept of the dichotomy between the world of ideas, which is describable in the language of geometry, and the empirical world, the world of matter, which is describable only qualitatively.

Aristotle, a pupil of Plato, developed an analogous theory; the dichotomy of being and knowledge, which implies such bipolar notions as logical order – from the general to the particular, versus the order of the human mind – from the

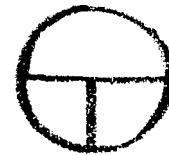


Fig. 23.  
Non-organic world (alchemy)



Fig. 24.  
Organic world (alchemy)



Fig. 25.  
Sun and four directions  
Earth (astrology)  
Sulphur (alchemy)  
Cross of Christ in the world



Fig. 26.  
Clockwise swastika - sun sign of life, prosperity, happiness  
Consciousness, psyche  
(C. G. Jung)

particular to the general; form as energy, versus matter as potentiality; the celestial circle; eternal, and unchangeable, versus the terrestrial circle; ceasing, and changeable.<sup>47</sup>

When the two lines, vertical and horizontal, meet at a common point, they create a right angle (Fig. 9). The conjunction of the *warm* and positive vertical with the *cold* and negative horizontal determined the symbolic character of the angle. Thus, the right angle symbolized neutrality, stability, and restraint. Moreover, the definite character of the right angle, that is, the fact that it always is an angle of 90 degrees, has its impact on the impression of its stability.<sup>48</sup>

### Cosmic Axis and the Center

11 The archaic, cosmogonical axiology demonstrates itself in semantics of directions and space. The vertical bisection of the world corresponded to its horizontal division into four directions. The four horizontal directions are most likely determined by the symmetry of the human body: left, right, front, and back. These are natural directions or dimensions which are perceptually more salient than some others. Yet, front and right dominate and have stronger positive connotations than left and back.<sup>49</sup> For example, the north and left side were identified with the down, that is, the chthonian world of dead and demonic forces. According to mythological interpretation, collision of the vertical and horizontal line symbolized both incompatibility of the two worlds, and the possibility of their connection (Fig. 8). For example, the vertical post, similar to the cut out of Shiva's penis, grew from the earth symbolizing the prime creation. The connection between male and female principles was adored as the axis designating the center of the world (axis mundi). The axis mediated between earth and heaven to make the contact with deities possible.<sup>50</sup> Thus, it was introducing a divine principle to be followed while ordering the earthy world. Everything beyond the influence of the axis, that is, beyond the border of the created world, was chaos. The world of the archaic man was created around the axis and according to the transcendental matrix. The placement of the axis was designated by the epiphany. For



Fig. 27.  
Counterclockwise swastika -  
misfortune  
Unconsciousness (C.G.Jung)



Fig. 28.  
Sun rotating the earth  
Wheel of winds



Fig. 29.  
Psyche and its functions  
(C.G.Jung)

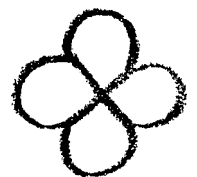


Fig. 30.  
Lotus - image of the world  
with the four directions  
(Hindu mythology)

example, the place for the holy post of Australian Achilpas was designated by the epiphany of their holy pra-ancestor.<sup>51</sup> The familiar own world was sacred by the divine powers supporting the man. Beyond the influence of those powers, the archaic man was unable to live. From those believes the notion of the sacred circle was derived. The sacred or magic circle was the place of activity of some concentrated powers related to the axis mundi. The center marked in any mythological symbol represented the axis of the world, the cosmic axis, that is, the place of the ultimate importance.

### Diagonal Line

The position of vertical and horizontal lines at the plane is recognized and described precisely and assertively whereas the position of a diagonal line is judged with some difficulties. Only the diagonal of 45 degrees is precisely judged as an independent line lying halfway between vertical and horizontal (Fig. 15). Other obliques are always recognized and judged in relation to the closest either vertical or horizontal. The more the diagonal falls into the horizontal, the stronger the impression of upward motion (Fig. 11). The more the diagonal falls into the vertical, the stronger the impression of a downward motion (Fig. 10). In the Western culture, such a recognition is most likely determined by the method of reading it uses, reading from the upper left corner to the lower right corner. For example, a diagonal from the upper left to the lower right is always perceived as a line which definitely falls down<sup>33</sup> (Fig. 14). The vagueness of diagonal contrasting with univocal character and stability of the vertical, horizontal line and right angle, influenced the symbology of the oblique. The diagonal line, especially one positioned cornerwise, symbolized irrationality and the world of supernatural forces (Fig. 15). It was also an equivalent of the mythological mediators, diminishing the tension between bipolar principles. According to the gestalt theory of perception, the diagonal line is perceived as an unbalanced line, the line which, because of gravity, has to finally fall. The same can be stated by virtue of analogy with the human body: it cannot be maintained in the diagonal position without



Fig. 31.  
Lotus - image of the world  
Sign of Vishnu  
(Hindu mythology)



Fig. 32.  
Image of the world with  
four nations maintaining it  
in equilibrium (Hopi)

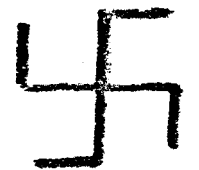


Fig. 33.  
Swastika - rectangular versio

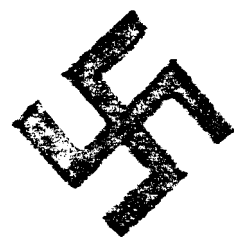


Fig. 34.  
Swastika - Sign of the Nazi

falling down. Thus, oblique lines are not considered as natural directions. In studies by Rudel and Teuber (1963), children learned contrast between horizontal and vertical lines easier than between the obliques.<sup>53</sup>

### Circle in Definition

A circle is one of the three basic figures which, beside a square and triangle, are the result of a moving point (Kandinsky). Thus, point rotating in a dimension around the center, defines a circle. These three basic figures of plane were distinguished in the geometrical code as main closed figures (choremes), and classifiers of graphic signs and symbols. Euclid defined circle as “a plane figure limited by a line called periphery, in which all straight lines drawn from one point called center are even.”<sup>54</sup> According to a contemporary definition of circle, it is

13 (1.) a plane figure bounded by a single curved line, every point of which is equally distant from the point at the center of the figure, (2.) the line bounding such a figure; circumference.<sup>55</sup>

### Concept of Sun and Interpretation of Decontextualized Symbols

The primitive societies strongly depend on the sun power, thus, majority of the primeval signs and symbols are related to the sun, which is given a divine personality. The comparative analysis of primeval symbols shows that a circle has been used, whenever sun or concepts related to it, were visually represented. Primarily, sun was identified with sensually perceived features, such as light, warmth, and movement. With the development of abstract thinking, the sun was associated with abstract notions, such as source, beginning, genesis, and fertility (Fig.18).

The symbol of the sun as it appears in many semiotic systems, illustrates that adequate interpretation of the symbol taken out of its original context requires not only a recognition of a code from which the symbol has been derived, but also a knowledge about the system. An access to other than pictographic resources, such as linguistic materials describing the mind-set determining the structure of symbolic code, is of extreme importance to the interpretation of



Fig. 35.  
Sun rotating the earth



Fig. 36.  
Holy Trinity  
(Middle Ages)



Fig. 37.  
Sun in the limited world



Fig. 38.  
Sun and the four directions  
Wax, paraffin,  
becoming (alchemy)

graphic symbols. For instance, the sense of the sun symbol in astrology, differs from the sense of the same symbol in mythology, religion, or early philosophy. Accordingly, the astrological sun denotes a superior planet that influences human activities and personal development depending on its position in relation to the other planets. To establish the meaning, an interpreter has to know that in an astrological system, the planets symbolize the organic functions of eternal forms of life.<sup>56</sup> On the contrary, the sun in mythological and religious systems represents divinity, and in early philosophical ones – an abstract mover of the world.

An adequate interpretative attitude must also be considered, especially when founded on a semantic analogy among symbolic systems. For example, the circlets above heads of Greek sculptures have been misinterpreted as auras symbolizing divinity by virtue of analogy, with auras appearing around saints' heads on religious paintings. Instead, these circlets were supposed to protect the monuments from birds sitting on them.<sup>57</sup> In this case, the semiotic approach that occurred was unnecessary; a symbolic function was imposed on the object of asemiotic function.

14

### Meaning-Form Relationship

The signifiers vary in their nature in relation to what is signified. Depending on the character of visual representation, different patterns in relationships between meaning development and form development can be observed. The pictographic representations show a proportional development of the meaning and the form. Consequently, the more complex the form, the more specific information is given. For example, the plain circle denotes sun, but the circle juxtaposed with a horizontal line informs one about position of the sun either above or below the horizon, as well as about the time of day (Fig. 67, 68). The pictograph of radiating sun with straight beams ending in arrows reveals the destructive power of sunlight, for the arrows illustrate harpoons. The plain straight lines do not specify radiation as such. Yet, the curved beams inform one not only about radiation, but also about its rotation (Fig. 53, 57, 59). For symbolic representa-



Fig. 39.  
Shou - sign of happiness



Fig. 40.  
Shou with five bats



Fig. 41.  
Shou - rectangular version

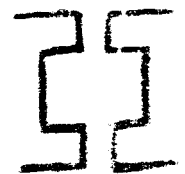


Fig. 42.  
Fu - two bats - sign of happiness

tions, and for universal symbol in particular, the proportion remains the same, if one introduces the notion of graphic geometrization, which is equivalent to geometrical simplification and purity. Thus, the more complex the meaning, the higher the degree of graphic geometrization. Symbolic representation and graphic geometrization apply forms on the basis of their perceptual values and their immanent dynamics, therefore a symbol becomes a carrier of universal meanings. For example, when a circle appears in the Yin-Yang symbol, it no longer refers to the sensual features of the sun, it now refers to the abstract notion of a circle, to its concentrated, unifying features, and to the dichotomy of black and white. Therefore, the Yin-Yang symbol becomes a universal one and can be decoded regardless of cultural background, only by the virtue of visual elements (Fig.89, 15 90). On one hand, the lack of primary context disables a thorough-going interpretation of a symbol. On the other hand, the knowledge on the grammar of the visual language enables an interpretation of a universal symbol anyway.

### Visual Codes and Bisection of Circle

Subject to the kind of code, an interpretation may or may not be based on the mere analysis of visual elements that create a symbol. Some codes, which I call nonarbitrary codes, are based on immanent perceptual values of the elements of the geometric code at both levels: at the level of principles and at the level of closed figures. The dictionary developed for the nonarbitrary codes is of universal character, and can be applied to different semiotic systems. For example, figures 23 and 24 reveal their meanings through the mere analogy to the horizontal and vertical lines. Thus, they represent the passive basis associated with the female element, and the vertical, moving upward, and associated with the active male element. Alternatively, the same graphic forms no longer carry the same meanings while appearing within the other type of code which I call arbitrary code. The rules of arbitrary code are created arbitrarily, regardless of perceptual values of forms, and the applicability of such code is restricted exclusively to a designated system. Therefore, its decodification requires familiarity with a specific lexicon



Fig. 43.  
Snake - sign of eternity  
Perpetual rebirth of the wor  
(Hindu)



Fig. 44.  
Crown of thorns  
(naturalistic)

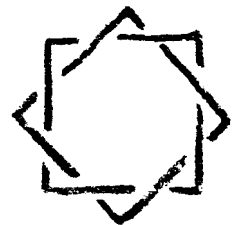


Fig. 45.  
Crown of thorns (stylized)



Fig. 46.  
Radiating sun  
Wheel of Gypsy's cart  
Eternal voyage  
Monogram of Christ  
("I"- Jesus, "X"- Christ)

of symbols created for a given system. For example, without access to the alchemic lexicon, the alchemic meaning of figures 23 and 24 would be inaccessible. In practice, many codes are of mixed nature, that is, they are partially nonarbitrary and arbitrary.

### Symbolism of Tri-, and Four-Section of Circle

Trisection of a circle relates to the symbolism of the number three, which in turn, symbolizes any triadic relationship. Such relationships appear in many primeval symbolic systems. For example, the mythical world in Hindu cosmology is divided into three spheres; earth, air, and heaven. Accordingly, the number three symbolizes dynamic equilibrium and creation. The triadic division of a circle appears in every mythological or religious systems which depends upon the concept of the trifocal nature of god. For example, figure 36 represents a medieval version of the circular mode of the Christian Holy Trinity. A circle divided by three arcs, as shown in the figure 35, represents an early mythological symbol of the sun rotating the earth. The Hindu tradition specifies the meaning to the god Wishnu crossing the earth in three steps. The primary function of Wishnu is to “penetrate the three spheres of the world in three steps and give the humankind the place to live at the earth.”<sup>58</sup>

Any four-section of a circle relates to the four cardinal directions, and the number four regardless of the further development of graphic representations (Fig. 25, 28, 32). Since the number four is a doubled two, its symbolism is implicit to the primary rule of binary oppositions. The number four in any cosmology stands for the material world, and the stability of the earth. The four-section at the iconic or pictographic level, represents the horizontal division of the world. Thus, the majority of the primeval representations is linked with the images of earth and the earthy world. For example, the Hopi Indians developed the image of the world which is maintained in balance by four nations or tribes (Fig. 32). In the Hindu tradition, the earth is represented in form of lotus with four leaves (Fig. 30). When the lotus carries many leaves instead they represent continents. The



Fig. 47.  
Radiating sun  
Monogram of Christ  
(cross and "X"- Christ)



Fig. 48.  
Sign of Christ

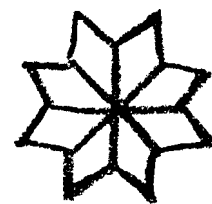


Fig. 49.  
Fertility (folk art)  
Flower star



Fig. 50.  
Sun radiating on the earth

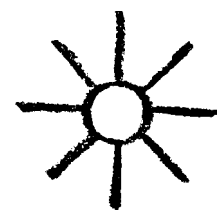


Fig. 51.  
Sign of fertility, vital power,  
associated with female womb

middle stands for the place of gods, the holy mount named Meru and surrounding it India (Fig. 31). Lotus is also a symbol of Vishnu who carries the features of a solar god. He luminesces like the sun, and his life giving power and fertility is comparable with the sunlight. Vishnu, like the sun, changes colors depending on the time of day; white, yellow, red, or dark blue when he is hidden below the horizon.<sup>59</sup>

In relation to the four-section of circle, such a commonly known symbol as the swastika cannot be omitted. The swastika was developed in many cultures independently. The oldest one, the circulating clockwise swastika, a solar symbol of life, fertility, happiness, and good wishes, appeared in India (Fig. 26). There exist many graphic versions of that symbol, but the most popular one is rectangular.

The swastika is a striking example of a primeval symbol which was deprived of its primary meaning during the process of decontextualization. Nowadays, not many people are familiar with the solar origin of swastika which, because of its primary meaning, was so willingly incorporated into the system of Nazi iconography. The longlasting tradition of the swastika vanished under the horrifying context of the Second World War. The symbol has fallen into the process of degradation and desemantization. The internationally forbidden (Organization of United Nations, 1946) propagation of the swastika as an emblem of the Nazi party completed the opus. For instance, the plastic models of the Luftwaffe carriers must appear without the sign of their identity, that is, without a swastika.<sup>60</sup>

Carl Gustav Jung assigned the clockwise swastika a symbolic function of representation of psyche with its four functions such as perception, intuition, reason, and emotion (Fig. 29). The anticlockwise swastika as a countersign to the clockwise swastika, symbolized misfortune in India, and in Jung's symbolic system, by virtue of analogy, was assigned to the unconsciousness<sup>61</sup> (Fig. 27).

### Signs of Good Wishes and the Symbolism of a Bat



Fig. 52.  
Ideogram of star  
Ideogram of god



Fig. 53.  
Sun as destructive power

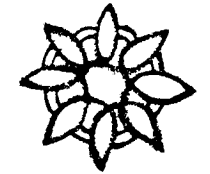


Fig. 54.  
Margerite - sign of love (Spa  
book illustrations)  
Flower star

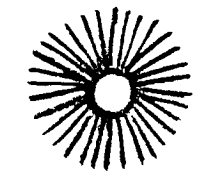


Fig. 55.  
Radiating sun



Fig. 56.  
Sign of the power of nature

Swastika belongs to the group of “sign of good wishes.” Graphically, it resembles the sign *shou* which is one of the oldest symbols within that group (Fig. 39). *Shou* with its graphic version known as the sign, *fu*, appears in Mongolian-Chinese rugs and tapestry (Fig. 41, 42). It was believed that signs of good wishes have a protective power and make happy wishes to come true. For example, *shou*, placed in the center of a circle formed by silhouettes of five bats it was to guarantee realization of the wishes of “the group of five” (Fig. 40). To “the group of five” belong neverending happiness, and five blessings such as peace, richness, appreciation, long lasting life, and life in virtue. Another sign of happiness, very popular in China, is called *Wu-Fu*. It also contains five bat-like silhouettes, that, for change, surround a symbol of the tree of life.<sup>62</sup>

18

The symbolic function of a bat is tied to the signs of good wishes, for in the Far East tradition, a bat symbolizes good fortune and happiness. The shape of the sign *fu* stands for visual representation of a bat. The Chinese name of that sign, *bian-fu* means not only *bat*, but also *happiness*. Let us add, the circular version of the sign *fu* was designated exclusively for textile decorating those of high aristocratic inheritance.<sup>63</sup> Until now, the bat motif is commonly used in applied arts in China. For instance, the silhouettes of five graphically stylized bats painted cobalt appear on rice china. In mythology, in “almost all America a bat was one of the most important gods.”<sup>64</sup> For the Aztecs, it was a god of corn and fertility, for the Mayas – a god of darkness and death. In the Middle Ages bats were called birds of witches. However, in heraldry they symbolized alertness.<sup>65</sup>

### Symbols of Perpetual Regeneration

In some mythological, religious, and philosophic systems, the modality of the universe was seen in cyclic changes leading to rebirth (Fig.43, 46, 59). Let us quote the Early Greek philosopher, Empedocles who among others, developed the concept of the world in perpetual flux and returns: “Nor anything that is mortal was created, nor the death is an end. There is only a mixing and exchange of that that is already mixed.”<sup>66</sup> Accordingly, Stoics has developed a concept of



Fig. 57.  
Circulating sun



Fig. 58.  
Spiral - sign of sun (Celtic)  
Fertility of water



Fig. 59.  
Pictogram of sun (Early Spa  
Gold (alchemy)  
Eternal rebirth (Christian)

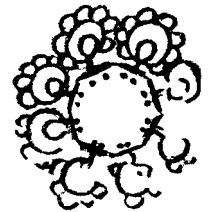


Fig. 60.  
Plan of octagonal baptistery

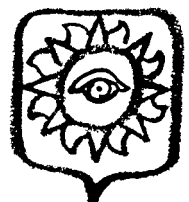


Fig. 61.  
Sign of Thomas Aquinas

the “fire of the world” from which the universe emerges and in which it vanishes perpetually, following the same laws and the same order.<sup>67</sup> The concept of the universe in perpetual rebirth implies the concept of time in circular motion. For time regenerates in cycles, the beginning and the regeneration belong to the same phase which was called by the Greeks "the golden age." In the golden age, time reaches its culmination point. The farther the time from its beginning the greater its decadency and destruction until it reaches the critical phase of the crisis in the iron age. For example, according to the Hindu concept of the four epochs called *juga*, we are living in an age of darkness (*kalijuga*)<sup>68</sup> which is equivalent to the Greek iron age.

19 The most of the symbolic representations of the cyclic rebirth, say, through fertility is supported by images of water, woman, and snake. The snake appeared because of the analogy with the cyclic changes of the skin. The symbols representing the idea of cyclic changes, through, say, the never ending voyage, are derived from the concept of sun. The six-section of a circle represents eternal, perpetual motion or voyage (Fig. 46). The division by six is related symbolically to the 360 days of a solar year.<sup>69</sup> Let us add, that the first Early Assyrian and Egyptian wheels were of six spokes and appeared about 3500 B.C. The Early Greek wheels had four of them, instead.

### Monograms of Christ and Symbolism of the Number Eight

Dogmas of Christianity were established relatively late, that is, in the Middle Ages. Like in many other religions, the Christian symbology was derived from older religious and mythological systems. The Early Christians incorporated the archaic symbols, enriching them with new meanings suitable to their religion.<sup>70</sup> For example, a primeval solar symbol of a neverending voyage became the monogram of Christ (Fig.46), and the belief in recollection of the holy time during recitation of myths can be found in the name of Christian God (Jahve). Thus, it is believed that the name of God is identical with His essence, and therefore the mere utterance of this name reinforces manifestation of God’s power (epiphany).<sup>71</sup>



Fig. 62.  
Sun (Early Summeric)  
Pictogram of eye  
Eye of Horus (Egyptian)



Fig. 63.  
Ideogram of sun (Summeric)



Fig. 64.  
Moon (Egyptian hieroglyph)



Fig. 65.  
Ideogram of sky



Fig. 66.  
Ideogram of sky



Fig. 67.  
Sun above the horizon (Siuk)



Fig. 68.  
Sun below the horizon (Siuk  
Cardinal number 10 000 000  
(Eevntian hieroglyph))

In fact, the name of God is self-referential and tautological, since *Jahve* means *I am who I am*. Another monogram of Christ is also derived from a primeval symbol of radiating sun (Fig.47). In this Figure, the eight-section of the circle corresponds to the longlasting tradition of the identical representation of star and god<sup>72</sup> (Fig. 52) which, in turn, symbolized fertility and love, so did the number eight (Fig. 49, 51, 54). On the other hand, the monogram of Christ consists of two overlapping figures, such as the Greek letter *chi* “X,” and a cross. The letter *chi* symbolizes a divine nature and the cross symbolizes Christ’s suffering. From the same origin the geometrical representation of the crown of thorns was derived. Two superimposed squares form the shape of octagonal star (Fig.45). This version of the crown was preferred in the Middle Ages. Nevertheless, the realistic representation of the crown was, and still is, the most common one (Fig. 44). The symbolism of the number eight is directly related to the symbolic function of Christian baptistery. Yet, an archaic sense was modified to the symbolic rebirth through baptism, for the sake of Christianity. That is why the baptisteries usually were of the octagonal shape<sup>73</sup> (Fig. 60). As we see, the two monograms of Christ are of the solar origin. What made the early Christians develop the third one, which is nothing else but an image of fish? (Fig. 48) The answer is hidden in the Greek language. The Greek “*ichtys*” denotes not only *fish*, but also an abbreviated phrase which in English stands for: Jesus Christ the Sun of God, Redeemer.<sup>74</sup>

The conviction of the divine nature of the philosophical inspiration of Thomas Aquinas, the creator of the theoretical basis of the Roman-Catholic Church, is embodied in his sign of identity<sup>75</sup> (Fig. 61). The subtle emphasis of the eight-section of the image of sun, corresponds with the monogram of Christ. The schematic image of an eye relates to the Christian symbol of Providence which in turn, was derived from an ancient representation of the eye of Horus symbolizing God’s omniscience, and omnipresence (Fig. 62). Let us add that the anthropomorphic representation of sun, appeared in Europe as late as in the Middle Ages.

### Sun and Moon, and the Great Alchemic Opus



Fig. 69.  
Libra (Astrology)



Fig. 70.  
Venus, female element (astro)  
Copper (alchemy)



Fig. 71.  
Venus, female element (astro)  
Female inflorescence (botany)



Fig. 72.  
Male inflorescence (botany)

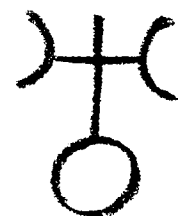


Fig. 73.  
Uranus (alchemy, astrology)

According to the alchemic philosophy, the nonorganic world originated from the two “seeds of metals,” that is, from the Sun and the Moon. The Sun was identified with gold, and the Moon - with silver<sup>76</sup> (Fig. 85). Subject to the nature of the relationship between the seed, different metal emerged. It was believed that the Moon activates the mental processes governed by subconsciousness, emotions, and moods. The influence of the Moon on mental activity is of an ambiguous nature. The positive power supports adaptation and introspection, the negative one enhances hypersensitivity, submissiveness, and indecisiveness. In the alchemic system, like in many others, symbols were of a polarized, ambiguous nature. The Moon was a dark side of Sun. So the Moon was identified with the dark and passive female element, and the Sun, with the light and active male

21 one.<sup>77</sup> The longing for the completeness, for the unity of opposite elements appeared in many semiotic systems. For instance, the Mystic Knowledge was to lead to the complete knowledge of the universe (Fig. 87). In alchemy, the same figure stands for Putrefaction, a phase within the Great Opus, which symbolized the destruction of a substance. Putrefaction was also represented in the form of black and white eagles on the tree of life. The spiritual goal of the alchemic processes, which together were named the Great Alchemic Opus, was to find an ultimate unity of psyche, through the projection of spiritual qualities on chemical substances. Thus, it was believed that through the Great Alchemic Opus the *Philosophical Stone* or the *Golden Flower* would be obtained.<sup>78</sup> According to the fundamental alchemic tractates, the Great Opus consists of seven or twelve phases. The theoretical foundation of alchemy was of mythological nature, therefore, it was believed that the alchemic texts were created by the mythical Hermes Trismegistus. The alchemic Hermes Trismegistus is identified with such mythological gods of wisdom and sciences as Greek, Hermes, Roman, Mercury, Babilonian, Nabu, or Egyptian, and Toth. The phases of the Great Alchemic Opus were represented either by seven planets or by twelve zodiac signs. Each phase, however, was assigned autonomous symbols.<sup>79</sup> Many alchemic symbols of gold were identical with, or derived from the symbols of sun, most likely because



Fig. 74.  
Rising sun



Fig. 75.  
Sunset



Fig. 76.  
Arrow - direction  
Mars, iron, fire, Tuesday  
(astrology, alchemy)



Fig. 77.  
Uranus (alchemy, astrology)

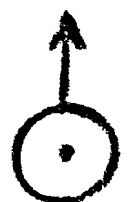


Fig. 78.  
Uranus (alchemy, astrology)

that planet symbolized Exaltation, that is, the phase during which the Philosophical Stone or the Red Tincture was to be obtained (Fig. 59, 80, 81, 92). Every alchemic experimentation was focused on development of the Philosophical Stone, because it was the only mean to change metals into gold.<sup>80</sup>

In alchemy, the Sun was related to the concept of “the middle.” It was explained through the position of Sun among other planets in relation to the metals assigned to them. The configuration of planets in relation to the electric potential of the metals was developed by ancient thinkers and was fully incorporated into the alchemic system. There were two distinguished groups of metals: the group of the positive potential, and the group of the negative potential. To the first group belong such metals with planets representing them as: silver–Moon, quicksilver–Mercury, and copper–Venus (Fig. 70, 71). The group of negative potential consists of iron–Mars (Fig.76), tin–Jovis, and lead–Saturn. Gold, with Sun representing it, is positioned between the two groups, because it is a metal of neutral potential.<sup>81</sup>

### Yin-Yang Symbol and Spiral

The Yin-Yang symbol with the concept of bipolarity of the universe was described in *I Ching* (Fig. 89, 90). In China, most likely before the Chou Period (1112-256 B. C.) there were fundamental mathematical and astrological texts developed. The most important group was gathered within *I Ching (Book of Changes)*. Yin symbolized the passive female element, and was associated with Earth, Moon, the lunar symbology, water, North, coldness, and darkness. Yin was symbolized by a mare which represented a creature requiring external inspiration, that is, an inspiration from Yang. Contrarily, Yang was assigned the active male element identified with Sun, for it is an enlightening and spiritual principle. The things of the world emerged from the connection and also symbolized a sexual relationship, that of Yin and Yang. The Yin-Yang symbol, thus, illustrates a dualistic concept of the world which lasts in perpetual flux. The dynamics of the curve separating two areas symbolizes the changes within the world. The idea of the opposite



Fig. 79.  
Number 8 (Arabic numeral)



Fig. 80.  
Gold (alchemy)



Fig. 81.  
Gold (alchemy)



Fig. 82.  
Sublimation (alchemy)



Fig. 83.  
Quarters of Moon -  
disappearing Moon

principles perpetually joining with each other (*complexio oppositorum*) implies their coexistence (*coegzistentio oppositorum*). Yet, the principles are not unfold, they are of mixed nature.<sup>82</sup> In the other words, in every principle there is a trace of the opposite element. It is symbolized by two dots of the value reversed to their backgrounds. The Yin-Yang symbol is octagonally surrounded by linear trigons which are assigned meaning. For example, the sky is represented by three long yang lines (☰), the earth by three pairs of short yan lines (☷). The trigrams make sixtyfour combinations which are believed to exhaust the range of human experience.

Adversely, the spiral, a Celtic solar symbol of fertility, is a symbol representing the concept of the world emerging from one principle of unfold nature (Fig. 58).

23 Moreover, the spiral connotes an openness of circle. It *grows* constantly, because it does not have any ending but a beginning.

### Mandala - Symbol of Meditation

*Mandala* is a Sanskrit term denoting a circle. The symbol Mandala appears in a variety of its graphic representations. The oldest one consists of a circle with a square or a cross in the middle (Fig. 93). This symbol always has a strongly marked center, for it stands for a cosmic post determining a center of the mythical world. Mandala represents a structural model of the organization of the universe in the form of the cosmic mountain.<sup>83</sup> This symbol is one of the most common representations of the cosmic mountain in the religions of the Far East. Mandala is a good example of a symbol rich in meanings and in interpretational potential. Let us analyze Mandala in the context of contemplation and meditation first, since the spiritual development is an ultimate goal in such religions of the Far East as Hinduism and Buddhism. Thus, Mandala is an image of psyche being a center of the universe. The figures concentrically inscribed into the primary form of a circle, represent regions of activity of different powers or the immanent structure of psyche. Concentration of thoughts and attention on Mandala, is believed to harmonize psyche and to reinforce development of different types of personality.



Fig. 84.  
Virginity (cabala)



Fig. 85.  
Moon, silver (alchemy)



Fig. 86.  
Symbol of Islam



Fig. 87.  
Symbol of the Mystic Knowl



Fig. 88.  
Symbol of water  
Wave or Monad

Accordingly, the search for hyperconsciousness is the way to cognize a deeper sense of life. Yet, hyperconsciousness is inaccessible to psyche without a special esoteric knowledge and techniques such as for example, Buddhistic and Tantric yoga or the Alchemic Opus.<sup>84</sup> Astrologers considered Mandala a diagram of a horoscope of an individual represented by the center. Carl Gustav Jung identified Mandala with an archetype of *wholeness* which in such a form was interpretable without any mythological personifications.<sup>85</sup> Mandala was also given a function of a mythological magic circle with its protecting power.

### Gestalt and Semantics of a Circle

24 In comparison with a square and a triangle, that is, with the other best Gestalts, a circle is the least active figure. For example, from the angles of a triangle, tension is emerging in three directions. The lack of angles makes a circle *softly* coexisting with the plane and with its surrounding. The eye focuses on the center of the figure, even if it is the imaginary one.<sup>86</sup> The tension evenly spreads out at the peripheral, and concentrates in the center of the figure. That point of the strong visual attraction turned a circle into a sign of concentration. The circle is structurally alien or remote to the plane, and evokes the feeling of isolation, because the plane is imagined or usually appears in the form of a rectangle. Thus, a circle is semantically related to deities or substances of spiritual nature. Also an observation of the natural world, which emerged without the human performance, supports the remoteness of a circle from the human beings. For example, an oval appears in steams of plants or trunks of animals and humans. The meanings of the circular symbols reduced to the general ones show the following pattern: those related to values symbolize *perfection*; those related to conditions symbolize *equilibrium*; those related to features symbolize *harmony* and *wholeness*. The analysis has shown that there are some common meanings most frequently assigned to circular forms. Those focal meanings are as follows: *sun, warmth, beginning, source, center, god, perfection, universe, concentration, wholeness, psyche, homogeny*. On the contrary, a square was assigned such focal

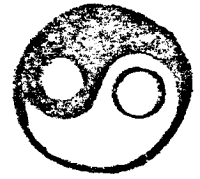


Fig. 89.  
Yin-Yang symbol (Chinese)  
Sign of monad

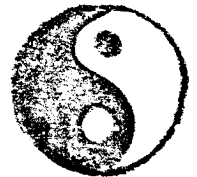


Fig. 90.  
Yin-Yang symbol (Chinese)  
Sign of monad

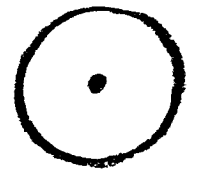


Fig. 91.  
Sun, power  
Gold (alchemy)  
Sun (astrology, astronomy)  
God Sun (Egiptian hieroglyp  
Air (element; 1 of 4)

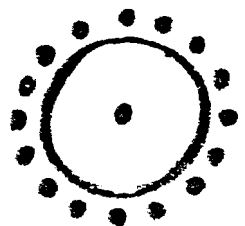


Fig. 92.  
Gold (alchemy)

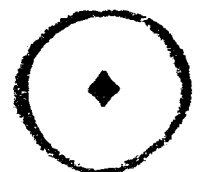


Fig. 93.  
Mandala (Hindu)

meanings as: *earth, surface, four principal directions, material world, neutrality, basis, matter, stability, and durability*. Those assigned to a triangle are: *family, mediation, dynamics, activity, sharpness, volatility, and wedge*.

#### ENDNOTES

- <sup>1</sup> U. Eco, *Pejzaz Semiotyczny (La Struttura Assenta)*, Warsaw: PIW, 1972, p. 75.
- <sup>2</sup> Ibid. pp. 70-78.
- <sup>3</sup> Ibid. p. 208.
- <sup>4</sup> Ibid. pp. 311-312.
- <sup>5</sup> Bruce E. Goldstein, *Sensation and Perception*, 3rd. ed. Belmont, California: Wadsworth Publishing Company, 1989, p. 224.
- <sup>6</sup> Ibid. pp. 217, 224.
- 25 <sup>7</sup> Ibid. p. 218.
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