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Research Article

The intellectual and semantic dimensions of the number in the Sumerian ornaments

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Abstract:
Since the fourth millennium BC, the Sumerian artist succeeded in adapting metals to make them attractive forms, as he harnessed them for his customs, ritual traditions, and religious and ideological practices. The scenes are technically in addition to being loaded with intellectual and semantic dimensions of counting and numbers, which had a great impact on the souls, customs and traditions of the inhabitants of Mesopotamia, hence the importance of the research that the researcher touched on, as she devoted her effort to searching for the intellectual and semantic dimensions of the number in the Sumerian ornaments, As an important part of the artistic production, and through the analysis of issues related to the number. This research included four chapters, the first chapter dealt with the research problem and the importance of research and the need for it and its objectives of revealing the intellectual and semantic dimensions of the number in the Sumerian ornaments, starting from the era of the dawn of dynasties and ending with the era of Sumerian resurrection. The first is a study of concepts and beliefs, the second is the conceptual dimensions of numbers and their uses in ancient arts, and the third is Sumerian ornaments and formulas.

chapter one
Research problem:
The problem of the current research is summarized in the following question:
What are the intellectual and semantic dimensions of the number in the Sumerian ornaments?
Importance and need of research:
1- The current research represents a visual analytical reading of the number in the Sumerian jewelry .
2- The current research sheds light on the cultural, intellectual and artistic legacy of the Sumerian civilization and what it possesses
Civilization is one of the components for the development of subsequent civilizations.

The need for research was manifested in the following:

1- Enriching the Iraqi Library with analytical and descriptive research with a historical, artistic and archaeological orientation.
2- It meets the needs of specialists in the field of art and archeology, especially postgraduate students.
3- Contributes to the crystallization of new analytical readings, specialized in researching previously unknown concepts and ideas in the field
Ancient Iraqi Art, Through Academic Studies and Research.
Research objective: The current research aims to reveal the intellectual and semantic dimensions of the number in the Sumerian ornaments.
Research limits: The current research is determined by the following:
1- Objective limits: the intellectual and semantic dimensions of the number in the Sumerian ornaments.
2- Temporal limits: the current research is determined in the ancient Sumerian era, or what is called the "Free Age".
Dynasties" (2800-2370 BC) and the "modern" Sumerian era of resurgence (2112-2004 BC).
3- Spatial boundaries: Iraq archaeological sites dating back to the Sumerian civilization.
Define and define terms:
1- Dimensions:
A- Dimensions Language: Dimension: plural Dimensions: Its source is dimension: the breadth of range or distance (Masoud, B.T., p. 205). It is the opinion and firmness (Al-Bustani, B.T., p. 37).
The distance: the opposite of proximity, and it is distanced by inclusion, so it is far, i.e. divergent, and the farthest away from it, and the distance between it, and the distance apart, and the distance by two openings, the plural of the distance and the bundles. And the dimension is also destruction (Al-Razi, 1983, pg. 57)
b- Dimensions idiomatically: Dimension: a spatial figurative term, borrowed from geometry, and used in all procedural concepts used in semantics. The essential basis of this term, which is related to the data given by the aesthetic work of art. (Alloush, 1985, p. 51)
2- Thought:
A- Thought is a language: it is unanimously agreed upon: the thoughts are hesitating in contemplation and contemplation by seeking meanings. It is said that I have an idea
anything. (Al-Hinai, 1986, p. 25). Thought: the application of the mind in a matter to solve or comprehend (Masoud, 1992, p. 606)
b- Thought idiomatically: thought: defined by (Madkour) in general, as a group of mental activity of thinking, will, conscience and emotion, and this is the meaning that Descartes meant by saying (I think, therefore I am), and in particular the mental actions by which thinking takes place. The highest form of mental work, including its analysis, synthesis, and coordination (Madkour, 1977, p. 137) is known (Al-Jarjani) al-Fikr: arranging known matters to lead to the unknown (Al-Jarjani, 2004, p. 157).
3- Semantics:
A - Denoting language: denotes: If he is given a gift, he indicates a thing, a signifier and a signifier, a gift to him. (Ibn Manzur, D. T., p. 248) So the meaning of the meaning of the word is that if a name is heard in the imagination, a name is drawn in the soul, so the soul knows that this is heard for this concept, so the more the sense mentions it to the soul, it turns to its meaning. (Fakhouri, 1994, p.9)
b- Connotation idiomatically: defined by (Jabal) is "the science that studies meaning" and the semantic field consists of a group of convergent meanings or words that are characterized by the presence of common semantic elements or features (Jabal, 1997, pp. 20-23).
4- The number:

A- The number in the language: number: he counted it, counted it, counted it, that is, it became counted. (Al-Razi, 2007, p. 245), it is the amount of what is counted, and the number is the enumeration of something by way of preference. (Al-Jarjani, 2002, p. 121)

b- Number idiomatically: It is a noun that indicates the quantity of countable things. (Ibn Al-Jurjani, 2004, p. 280)

Theoretical framework: the second chapter

The first topic: a study of concepts and beliefs

Social Dimension:

The ancient Mesopotamian man lived for long periods that took several thousand years before his life was organized into well-defined human societies. After he used to live in caves in the ancient stone ages, and his life was primitive, man began to settle near his agricultural fields and build homes of soft mud and establish his simple settlements and organize his new life. (Abdul Wahid and Amer, 1979, p. 57)

The development and complexity of life and the conflicting interests of classes and social groups required the development of laws and provisions that define relations and transactions between people, prevent aggression against others and organize the life of society. The second millennium BC witnessed the issuance of several Sumerian laws. Including the law of Ur-Nammu, the law of Ishtar, the law of Ashnona, and before all of them the reforms of Urukagina, and finally the issuance of the Code of Hammurabi. Which is considered the oldest codified laws discovered so far in the world. (Al-Mousawi, 2013, p. 99)

The city of Warka is considered one of the first known cities in the world, and the antiquities discovered in it indicate that it has become large cities that included huge public buildings, temples that were built on artificial terraces, and high ziggurats. The city included various groups of people, each of whom specialized in an aspect of the new civil life. Besides the ruler, there were priests, fighters, merchants, owners of various crafts, peasants and others. (Suleiman, 1993, p. 144)

The Sumerian civilization, since its inception in the era of the dawn of dynasties, which is known as (the ancient Sumerian era), has been characterized by the flourishing of the Sumerian culture that prevailed in it, as the Sumerian society was far from primitive. . The integrated organization spread and the Sumerian people knew that they were strict in their work and effort and had a "bureaucratic" mentality behind thousands of records, coupons and contracts. Leaving an open benevolent civilization. (Rasheed, 2004, p. 107)

Economic dimension:

The Iraqi economy in ancient times depended on three main pillars that served as the foundations on which the Sumerian civilization was based. Those components are agriculture, industry, and trade, and these pillars were intertwined with each other and dependent on one another. (Kejji, 2002, p. 16)

As Iraq’s strategic location had a clear impact on the emergence and development of foreign trade, and the absence of basic raw materials such as stone, minerals and wood had an impact on pushing the ancient Iraqis to work to provide them from abroad, which made foreign trade of great importance in the lives of the population. (Edzard, B.T., p. 49)

The rulers of Sumer were able to establish economic relations with the countries from which they imported raw materials necessary for daily life, the needs of the state and its defense, and for the development of urban and artistic life. From Oman (Magan) he imported copper, and gold was brought from Urartu (Armenian) and Molokha. (Maree and Farzat, 1994, p. 98), and their exports to Elam are grain, textiles, leather industries, pottery, oils, dates, wool, and Sumerian manufactures such as furniture, weapons and ornaments. (Sacks, 1979, p. 192)

Industry is also one of the important pillars in the economy of Mesopotamia after agriculture and trade, and crafts and industries occupied a prominent center among the ancient Iraqis in various eras and roles. (Abdul Wahid and Amer, 1979, p. 102)

The pottery industry is one of the first industries known to man in the Neolithic era, which was simple, naive and cumbersome, until it became in the Metal Stone Age, one of the most accurate and elegant industries. Among the ancient crafts was the manufacture of textiles and furnishings. Leather and tanning, and the manufacture of bricks for the construction of houses and city walls. Ornaments and utensils were made of gold and silver. (Ismail, 1997, p. 104)

Religious dimension:

Religion occupied a great place in the life of ancient peoples, but rather it is one of the most important factors affecting the course of their lives and the way their civilizations develop. Religious beliefs and ideas determine the general framework of human behavior and life, his customs and traditions, his customs and laws, and it is the reference that influences his social, intellectual and political life. An act done by the ancient man or any trace he left, except that religion had a great influence on it. (Solomon et al., 1983, p. 208)

Religion at every time and place consists of four main components that form the basis of religion: (beliefs, myths, rituals, and eschatology). There are components, which form the basis of religiosity, and are related to the historical, social and psychological manifestations of religion, namely (ethics, laws, sacred walks, community, spirituality, and secrets), and they correspond to and correspond to the basic components of religion, and their social and cultural parallels. (Al-Majidi, 2016, p. 32)

The temple was the first of the institutions that appeared among the Sumerians, as the oldest buildings that were discovered in Eridoa, which is the oldest Sumerian settlement, were for temples and not palaces for rulers. A center of urban life since the emergence of the first settlements in the sedimentary plain in the fifth millennium BC. The greatest civilized invention appeared in the stone of the temple, which is the emergence of writing in the last phases of the Warka era, as there was a need to find a way to record the temple's imports and possessions. (Baqer, 2009, p. 367)

Some of the material remnants of the ancient Mesopotamian civilization, such as graves and their contents, included furniture, remains of food, urns, and coffins of a variety of materials and shapes, as well as necklaces, ornaments and various tools, and some drawings engraved on obelisks and border stones that are related to burial, rituals, and funeral practices, which have their meanings, ideas, and perceptions. Which the ancient inhabitants of Mesopotamia believed about death and after death is the key to our understanding and knowledge of all kinds of rituals and worship of the goddess. (Hanoun, 1986, p. 13)

political dimension:

Mesopotamia civilization was characterized by the first appearance of the city-state system, which represented the first form of government in human history, where the idea of the citizen and citizenship grew in the city. The city was greater than being a population or tribal gathering, as there are no traces of the tribal system since the late prehistoric times, and perhaps the factor in that is the population unity in the civilization of Mesopotamia. (Baqer, 2009, p. 36)

The inhabitants of Mesopotamia believed that the kingship as a political system fell from the sky, as the tables of evidence of the Sumerian kings mention that (the kingship) first settled in the city of Eridua, the largest of the Sumerian cities in the south, then the flood came and swept everything, and after the flood ended, the kingship fell from heaven for the second time It settled in the city of Kish (Tell al-Ahmar) near

Babylon, and this belief gave the kings a sacred position that was employed politically (Abd al-Wahed, 1999, p. 164)

The ruler of the city-state is the chief priest of the various temples, as he is the (patron) appointed by the city gods, and responsible for serving and supervising its properties and dwellings on the land. Although it contains a higher sacred meaning in reality. And because "Alan" was considered the supreme priest of the city's god and the head of the temple around which the Sumerian city grew in prehistoric times, and in the midst of the dawn of the dynasties, the ruler was called "Ansi" or "Lukal meaning (the king)" (Ru, 1984, p. 186-187).

Al-Ansi was the leader in the war, the judge, the hierarch of religious authority, the person who ran the property of the city god and was responsible for public business, and the enormity of the royal tombs discovered in Ur shows the high status of the king. (Al-Ahmad, 1985, p. 19)

As for the era of the third dynasty of Ur, whose rule lasted for nearly one century (2112_2004 BC), the political life witnessed a great development, and five kings ruled, during their reign, the political unity of the country was restored after the dark period of the Kuttan rule, and it became a large and vast empire that controlled most of the The regions of the ancient Near East from the Persian Gulf in the south to the Mediterranean in the west and Asia Minor in the north before their state was destroyed by the Elamites and Amorites. (Baqir, 2009, p. 416)

The second topic

Conceptual dimensions of numbers and their uses in ancient arts

All civilizations and human societies of all kinds, even very primitive ones, needed the idea of number, and the oldest idea of arithmetic began with what is known as the duality of "night and day, male and female." Man was able to distinguish between the decrease and the increase in the groups of his needs when he was taking from them or adding to them instinctively. (Aswad, 2007, p. 10)

We cannot determine the time in which the ancient man restricted numbers, because he realized the necessity of counting before the discovery of writing. Apparently, all human societies, of all kinds, even primitive ones, needed the idea of counting and a method for recording numbers. Evolutionists mention that every human society has names for numbers of its own, and they do not exceed two or three in primitive societies. (Al-Humaida, 1975, p. 21) Since ancient times, man has known numbers and used them for number, because number is a basic element in the speech of any language in the world as a whole, and more than that, some consider this phenomenon as something that man has instincts of instincts, which is the "number instinct." (Aswad, 2007, p. 10)

If man needs to count before he needs to speak, counting with numbers is very old, and man has spent long generations before language was born, counting with signs. The counting was based on the fingers, and the effect of that remains to this day. (Zidane, 1904, p. 112)

It was the beginnings of counting and the use of numbers in Mesopotamia in the primitive or advanced stages (that is, about the year 4000 BC. AD) using blocks of clay or clay - in which small holes or cavities are carved.

Small balls in the form of calculiforms of spherical or conical shape are placed in it, commensurate with the size and shape of the cavities in the clay blocks. (Internet - the Internet)

Since ancient times, the writing of numbers and arithmetic with numbers began in the civilization of Mesopotamia, that is, since the emergence of writing for the first time in human history in the range of 3700 BC. In mathematics and other knowledge since the end of the third millennium BC, and perhaps the oldest of these works is the Tell Harmal tablet. However, the maturity of what is in this number of mathematical knowledge leads the researcher to imagine that this phase was preceded by other phases of

codification and research in mathematics, but none of them have come yet. Perhaps the future will show that. (Baqir, 1950, p. 18) It seems certain that the ancient Iraqis had come up with the idea of numbers before they discovered a way to record numbers. The idea of abstracting the number from the countable, i.e. conceiving numbers in isolation from the countable material thing, was the first stage in the emergence of mathematics, meaning that they conceived the number "10" as an abstract example, regardless of whether it was meant to be ten men or ten children or otherwise. This was followed by the invention of writing and notation of numbers. (Suleiman, 1993, p. 298)

The Sumerians used sexagesimal arithmetic and wrote the number (10) ten in the form of an angle. And they wrote sixty by writing six angles. They used multiples of sixty in their calculations, and Dr. Muhammad Shutb stated that the Sumerians built their system on what they saw in bee houses. As these houses are built on hexagonal shapes. They adopted the decimal number from the number of fingers 10 and the six 6 from the hexagonal of bee houses. The Sumerians did not know zero. (Zaatir, 2017, p. 235)

They also used the decimal scale in counting, as we use it nowadays to write numbers, but they also used the sexagesimal basis, especially when writing down numbers. Some scholars believe that the decimal system was used before the sexagesimal system and that the Sumerians began writing their numbers with it. The ancient Iraqis used two types of signs in writing numbers: an oval and a circular one. After the stability of the notation and the development of the cuneiform script, the Iraqis used two signs, one for one and the other for ten (Al-Rawi, 1985, p. 298).

One of the important achievements of the Sumerians in the field of mathematics is the establishment of the positional system in which the meaning of numbers changes according to their position in the complex numbers. The vertical wedge generally symbolizes the number one. But if it falls in front of the number ten, it symbolizes the number (60). And in other compounds, the number is symbolized by (3600). (Farah, 1972, p. 53)

The third topic

Sumerian ornaments and jewelry

Ornaments are one of the arts in which the people of Mesopotamia excelled, like other arts, and it was directly linked to the community, religiously and economically. (Ali, 2018, p. 180)

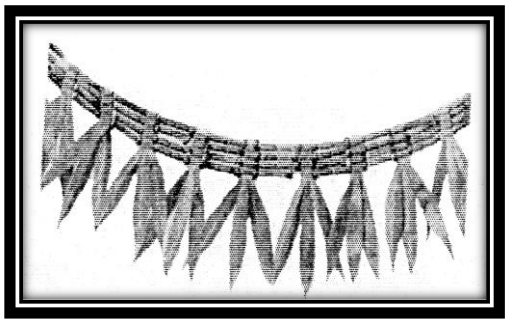
Sumerian antiquities revealed that the Sumerians were pioneers in the manufacture of jewelry and ornaments, and the findings proved their skill in crafting ornaments and adornment tools from gold and silver, whose use spread in the era of the dawn of dynasties and which was distinguished by its ingenuity in crafting and inlaying metals with colored stones and its association with religious and worldly themes, especially in the era of the dawn of the second and third dynasties , as the ancient Iraqis classified goldsmiths and the professions associated with them, there were metal casters, gem and metal workers, silver and goldsmiths, and jewelry makers (Yusuf, 2017, pp. 645-656)

The applied arts were characterized by great skill and material and aesthetic value, such as inlay, inlays, metal industries and ivory artifacts. A piece of jewelry made of gold inlaid with precious gemstones, silver and electrum was found in the tomb of Ur, in addition to pots and glasses for drinking made of gold that indicate a high artistic beauty and capabilities. Effective magic indicates that the Sumerian artist was skilled in his tools, and the crafting of golden weapons, some of which were infused with precious stones, indicates the presence of a skill layer of goldsmiths who also excelled in the manufacture of the golden military helmet that dates back to the Sumerian king (Mis Kalam Doc), which was found in one The royal tombs, which indicate the prestigious position reached by the Sumerian artist

in writing down the minute details of the shape of the warhead cover for the Sumerians, (Al-Bayati, B.T., pp. 36-37).

Among the most important archaeological tombs is the tomb of Queen Shabaad in Ur, which included many important monuments, which this famous queen enjoyed, due to the high taste and careful selection of tools that appeared in her tomb such as ornaments, necklaces, crowns, precious stones, as well as golden ribbons and flowers that are considered adornments. The attractive head, and it is one of the unique treasures found in the cemetery, and it reflects the fine art reached by the Sumerians, and this is the culmination of what women reached in the Sumerian era in civilization and development. (Abu Talib, 2014, p. 95)

In general, we can say that jewelry, with its many types and cultural touches, and its presence from one city to another and from one site to another, is one of the references that can be resorted to in clarifying many historical data related to social life, the nature of the minerals used, the areas of their trade and the progress of their industry, whether they are local or imported. And the attendant growth in trade relations. (Saltania, 2013, p. 73)



Sample Analysis: Sample (1)
Model: 1 head wreath
Material: gold, blue lapis lazuli and red agate.
The finder: was found in the royal cemetery of Ur.
Its history: the middle of the third millennium BC (the dawn of the third dynasties)
Source: Leonard Woolley, M.A.D.LiH. Ur Excavations, Volume II, The royal cemetery, between 1926, and 1931.

Description: It is 28 cm long. It is in the form of a group of triangular plant leaves with a group of cylindrical azure (blue) beads, and it consists of (116 beads) that follow with (108) beads of red agate disc-shaped, arranged with four threads and in groups, in addition to (13) pendants It is made of gold with a plant shape (the three-leafed leaf), where each leaf is (5.5 cm in length, 0.4 in width) and it is longitudinal in shape with a pointed end and the three leafs are attached to one neck. 4) Cylinders to be organized and assembled by the four threads. As for the vein of a single leaf, it was executed in the form of a central vertical line, with almost symmetrical side lines connected to it.

And they were all set with four threads and in groups, and their arrangement was consecutively (8) beads of lapis lazuli (cylindrical shape) in each thread two beads and then alternated with four beads of red agate (disc shape) in each thread one bead and then a leaf-shaped gold pendant , then (4) beads of red agate (disc), followed by (8) beads of blue lapis lazuli, then (4) beads of red agate (disc), then gold leaf

pendant, and so on until you complete (13) gold pendants, which act as spacers for these The aggregates (bead aggregates) are thus composed of (12) groups in a recursive and symmetrical manner.

Analysis: The Sumerian goldsmith was able to clearly show the principle of repetition and symmetry in the ornament, and he distinguished between the pairwise symmetry as it is found in the cylindrical beads (azure) and the disc beads (red agate), and between the individual symmetry that occurs in the golden pendants in the form of (a triangular leaf). Where the goldsmith relied on placing one middle shape, then repeating the same shape on both sides, and the minimum number of repetitions was (3) as in the one pendant consisting of three leaves, and the number of golden pendants reached (13) and it is in the form of a three-leaf plant, where They were symmetrically distributed on both sides, (6) pendants on the right side, and (6) on the left, with one gold pendant remaining in the middle. Despite all this repetition and symmetry in the plant units and groups of cylindrical and disc beads, the Sumerian goldsmith managed to: Through the overlapping of the plant leaves with each other, adding the principle of movement to this ornament, the Sumerian artist succeeded in creating a diversity of sizes and overlapping spaces. An aesthetic and artistic formation, although the sovereignty was for the intellectual contents, represented by the use of plant units (triangular leaves), which in turn carry intellectual implications related to fertility and reproduction, as the number three is specialized in the sky because it is the number of divinity. And sanctity, which is an ideal and poetic symbol that benefits abundance and knowledge, as the number (3) was associated with magical intellectual meanings among the inhabitants of Mesopotamia, by using it in amulets that work in the form of arrows, as the number (3) was associated with the divine trinity (Enki, Enlil, Anu), and this was symbolizing To worship the mountain or the strange peoples coming from the north (the mountains) with three triangles or three oval shapes. It symbolized abundance and fertility. It is noticeable that the plant units (such as the eight-shaped rosettes and leaves) were only made in the form of head wreaths and different clamps used to hold hair tufts, that is. It was not used as a neck ornament, earring, bracelet or ring, except in the form of simple plant decoration, such as the shape of a ten-leaf rose, representing the sunflower that was influenced by the Sumerians because of its direction towards the sun's rays.

Sample: Sample (2)

Necklace as shown

Material: gold, lapis lazuli and red carnelian

Finder: Found in the Royal Cemetery of Ur

Its history dates back to the dawn of the third dynasties (2600 _ 2400 BC).

Description: The length of the necklace is (21) cm, and it consists of a group of beads, including (336) spherical gold beads, as well as disc-shaped beads of lapis lazuli and red agate. It is a group of opposite triangles, as the first thread near the neck begins with one golden bead, while the second thread begins with two beads, the third begins with three beads, and so on the sixth thread in a numerical sequence, until a form of an isosceles triangle is formed, its base far from the neck is formed It consists of six golden beads (spherical in shape) and its head near and directed and its head near and directed towards the neck consists of one golden bead, and so for the disc-shaped beads consisting of lapis lazuli and red garnet, and in reverse. The first consists of golden beads, and thus the geometric decoration continues, as the number of triangles consisting of golden beads reaches (16) symmetrically triangles, (8) of them on the right side and (8) on the left side, as for the two triangles There are 15 opposite groups of disc beads (azure and onyx), which are divided symmetrically (7) triangles from the right side and (7) from the left side. It is made of gold with a circular shape by means of a thin wire that is connected to the circle by welding, after it has been passed inside the last thread of the necklace. As for the circular pendant, a flower with ten leaves is centered inside it, inlaid with blue lapis lazuli in a way (taqweet), while the background is inlaid with red onyx, and in this ornament we can see the repetition of the decoration Geometrical triangles that include intellectual connotations common to the inhabitants of Mesopotamia.

Analysis: The circular shape and the triangle were connected to magical meanings related to the indentations and the prevention of dangers, as these units became abundantly clear in jewelry and in various artworks since prehistoric times. The Sumerian artist was able to balance this ornament in a symmetrical vertical balance, as is the result of the geometric decoration consisting of a group of opposite triangles, as well as a symmetrical radial balance, which is clear in the flower centered inside the golden (circular) pendant.) symbolizes the woman or the goddess Inanna (Ishtar), and the triangle (with its base down) symbolized the mountain or the strange peoples coming from the mountain. 3) Intellectual and magical connotations for the inhabitants of Mesopotamia, as it is associated with the divine trinity (Enki, Enlil, Anu), in addition to its reference to abundance, blessing and fertility, in addition to the presence of the number seven of triangles on both ends of the necklace, which symbolized abundance, collection and sanctity. And the presence of eight triangles on each end of the necklace. The number eight was associated with the world. Perhaps these numbers were used and repeated to obtain protection and their association with magical rituals to send good, happiness and blessing.

Sample: Sample (3)

Material: silver, gold, mother-of-pearl and lapis lazuli

The finder: was found in the royal cemetery of Ur

History: It dates back to the dawn of the third dynasties (2600_ 2400 BC)

Description: A hairpin for the head, a silver pin found in the tomb of Queen (Bo Abi). Some of its parts were damaged. It was used to tie hair. Its length is (28) cm, and it is in the form of a triangle with its base to the top and connected to it from the top by three branches to end With eight-leafed petals inlaid with gold, mother-of-pearl and lapis lazuli, the lower end was in the form of a thin pin to be fixed inside the hair.

Analysis: The triangle symbolizes many connotations, including one symbolizing fertility and reproduction, as the triangle symbolizes the number (3), which represents every aspect of creation from birth, life and death, as well as the mind, body and soul, and it is the number of divinity. Enlil and Anki) The Sumerian artist excelled in the artistic composition of this clip or pin, as he was able to diversify between the building units, such as the eight symmetrically radially balanced rose, and the inverted triangle, which is one of the geometric shapes, which the Sumerian artist used extensively in the manufacture of jewelry because of its luster In addition to the highness of the intellectual contents related to rituals, this clasp was one of the ornaments that had its place among Sumerian women because of its importance in religious beliefs and rituals. To the comprehensive, and some of them adhered to the clip with three veins eight papers, the numbers seven and eight had intellectual and ideological connotations. And the number seven is a sacred number for many peoples, as the number seven represents the largest unit of time and refers to the week, while the number eight refers to the main and sub-trends, as this pin accounted for many symbols and meanings indicating abundance, fertility and goodness and its connection to the religious rituals of sacred marriage ceremonies and wearing it. By the bride-to-be for the sake of goodness, fertility and blessing on the country.

Results:

1- Most of the Sumerian formulations were associated with intellectual dimensions related to ritual concepts, practices, religion and belief.

2- The Sumerian artist relied on geometric shapes such as the triangle and the circle in his artistic composition of the ornaments in a successive manner and with a numerical relationship that symbolizes intellectual, ritual, religious and aesthetic connotations related to fertility and protection from danger.

3- The Sumerian artist used plant shapes in ornaments and metal jewelry because of their intellectual connotations to me

The inhabitants of Mesopotamia, the eight rose was referring to the goddess Ishtar, the goddess of fertility and reproduction, and a relationship ,Preparation for these religious rituals.

Conclusions:

1- The numbers (3_7_8) had certain connotations and symbols related to Mesopotamia and related to beliefs and rituals. Religious practices that bring goodness, abundance and blessing.

2_ The Sumerian artist used the principle of repetition and symmetry mainly in expressing his artistic works, especially Jewelry industry.

3- Every religious ritual practice had some kind of ornament.

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