

ASTRONOMICAL MOTIVES IN CHRISTIAN ART

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Abstract. In the Christian iconography, there are motives that point to their astronomical origin (e.g. iconography of St. Elias, Archangel Michail, description of Armageddon and Apocalypse...). According to the motives that are present in stories and iconography of St. Elias, it is possible that this myth originated in much earlier times than the times when the Old Testament was written. Mentioning of the bull sacrificing could mean that it originated in the epoch from fourth to second millennium B. C., and that it is connected to the catastrophic event caused by fall of a celestial body.

Key words: astronomy in culture – history of astronomy – astronomical motives – Christian art.

1. INTRODUCTION

There are a number of motives in Christian art that point to the former astronomical origin. It is often the case that over time they change, so that later they obtain other properties, in spite of the fact that they are stored in the same place in the composition of the picture, and even their shape remind on the original astronomical motif (a star, a comet, etc.).

Frequent astronomical motives are: a comet, a sword representing a comet, stars (one or more), representations of constellations (usually zodiacal, such as symbols of a bull, a lion, a ram, a fish). Another significant part of the motives is connected to the very basis of religion or to religious texts. Also, there are similarities with other Solar religions and cults, so that the main dates of the holidays in Christianity are related to the equinoxes. Moreover, Jesus is frequently shown in the zodiacal circle, and also directly represented with the sign for the constellation of Pisces (and at that time the point of the vernal equinox entered in the constellation Pisces). Jesus' birth was announced by a star in the east, which for example in Giotto's fresco (Fig. 1) from 1302 in the Scrovegni chapel in Padua takes the form of Halley's Comet, which was then seen by the painter.

2. 1.REPRESENTATIONS OF INTRUSION OF OBJECTS FROM THE SKY

In some religious texts appear obvious analogies with descriptions of astronomical events, as for example in the description of the final battle of Armageddon, where it is, to the finest details, very precisely described incursion of an asteroid, how do they say: a large glowing rock called Lucifer (in translation from the Latin - "the one who brings light", although this name is synonymous with Satan, or the Devil), which at the end destroys everything with the accompanying phenomena such as meteor showers (angels who throw red-hot stones from the heavens), earthquakes, uplift of dust clouds which follows.



Fig. 1 – Fresco of Giotto di Bondone from 1302 in Scrovegni Chapel, in Padua, in Italy, with the comet in the upper central part of the picture. The fresco shows the arrival of three Magi, which came to worship the Child Jesus (Schechner , 1997).

Otherwise, he appears and with a different name "Beast" in the same segment of the New Testament, where to him is also connected and the sign 666 ("mark of the beast"). Given that in this chapter of the Bible is in detail described the appearance of the intrusion of a celestial body, and the disaster that follows after such an event, it is interesting that the number "6" in fact could remind a drawing of the comet with the head (lower part of the number) and a tail (its upper part), and that three sixes, could



Fig. 2 – Graphics of Albrecht Dürer "Opening V and VI of the trumpet of the Apocalypse" from 1498 (Schechner , 1997)). Peter Palmer Collection, 1956.960, photography 1996, The Art Institute of Chicago

remained three parts of a comet that were seen in the sky before the disaster, which is described in the story of Armageddon (Fig. 2). It is possible that the comet broke up into three parts because of the tidal effects of the Earth's gravitational field on it (as during the fall of Shoemaker-Levy comet on Jupiter which during intrusion has been broken up into at least 22 parts). If three parts, of a comet fell in different places on Earth, this could maybe explain why this event left an impression on religions around the world.

The presence of a comet one can see on the example of the icon of Archangel Michael, who is often depicted with a comet which he holds in his hand instead of a sword (see Fig. 3). This Syrian icon is one of the typical examples where one can



Fig. 3 – Archangel Michael killing the devil with a sword in the shape of the tail of the comet, represented on the icon from Syria (Athanasiyu , 2002). Also, on the right from Archangel's leg, there are two stars connected with a line, the third is below his heel which is on the devil. From Michael's heel starts red line to the fourth which is on his knee, and the fifth above his left hip. All stars are connected with lines forming a constellation

see how on the icons depicted in the areas closer to those in which Christianity was originally created one can see astronomical motives (the comet in this case), while in later periods and remote areas they are not present (so that it remains just a plain sword instead of a comet).



Fig. 4 – Saint Elias presented on the sky in his fiery chariot like the representation of the sun god Helios, or Phaeton. On the icon can be seen and a fiery mantle, with which, according to tradition, Saint Elias hit the ground (Athanasiyu , 2002).

3. SAINT ELIAS

It is obvious that on the older icons there are more astronomical motives than on the newer ones. Also, on those which are closer to the very emergence of the Christian religion (the Middle East) more of such motives is preserved than in the case of other areas, where in the iconography are often embodied the motives connected with the local myths and folklore. Such an example can be seen in the case of motives related to St. Elijas, which, on the oldest icons, and those closer to the Middle East appears in a fiery chariot like the Greco-Roman god Helios, while for example at the Slavs he is connected to thunder, and also is called Elias the Thunderer (Ilija Gromovnik).

The very name is derived from "Elijah" or "Elias," or Hebrew Eliyahu, Araby

Ilyas, and means Yahweh is my God. Originating from areas of Israel from the 9th century BC, its pronunciation sounds very similar to the Greek sun god Helios. In addition to the Old Testament, it appears also in the Hebrew version of the Bible, the Talmud, Mishnah, and also in the New Testament and the Quran.

According to the Book of Kings, Elijas, raised from the dead, brought fire from the sky, and went to heaven in his chariot. According to legend, he called the 450 priests of the god Baal and 400 priests of Astara, which had been caused to bet over whose God will answer prayer to bring "fire from heaven". The priests agreed, and as a sacrifice for this prayer slaughtered a young bull. After not answered prayers during the day, the fire from the heavens came only in the evening, as predicted St. Elias.

Here one can notice the interesting motives such as fire from heaven (which could refer either to a meteor shower or intrusion of a larger body), and also, that they offered as a sacrifice a young bull, which may indicate that the time from which this story origins is in fact that one, when the vernal equinox was in the constellation of Taurus (from the fourth to the beginning of the second millennium BC). It is important to note the similarity of the other enterprises that St. Elijas did, with actions that were later made by others. So, there is a great similarity with some Moses actions, which subsequently occur and at Jesus. If we take into account that in the case of St. Elijas, the sacrifice was a bull, in the Moses case it was a ram, while at Jesus a fish occurs, what may indicate that the story related to St. Elijas took place at the time when the vernal equinox was in the constellation of Taurus (the time period from the fourth to the beginning of the second millennium BC) and the story of Moses, when the vernal equinox was in the constellation of Aries (from the beginning of the second millennium BC to the beginning of the new era), and in the case of Jesus, this points to the era of the constellation of Pisces (from the beginning of the new era). This may be an indication that the beginnings of this religion were earlier than times when it is considered that the Old Testament was written (which is assumed to have taken place sometime between XVI and VI century BC). Also it indicates that in the beginning this religion was connected to the cult of the Sun, and that later the motives of Solar religion were taken by others, like Moses and Jesus. Some of the motives of Solar religion survived and at Jesus (birth - the winter solstice, the resurrection - about the vernal equinox, etc.). Also it is interesting that the date linked to St. Elijas is nowadays close to the summer solstice.

4. REWRITING OF MOTIVES

The transcription of motives in many ways reminds to other religions, which took over the previous motives, just to attribute them to the current main god.

A good example is the Babylonian god Marduk who has assumed the characteristics of the previous main local deity Bel, which was taken over (copied) from Sumer, where he was called Enlil. Sumerian and Akkadian gods were grouped in triads, so that Enlil (Akkadian - Bel) was the triad with An (Akkadian - Anu) and Enki (Akkadian - Ea), where Enki is in fact Marduk's father, and An is the oldest god and father of all gods, evil spirits and demons, and god of annual calendars and kings. At each of them may be noted that they had the same motives that appear at Marduk, only these motives faded with time and slightly changed form, in order that the current main god has all the most important characteristics.

The changes have occurred at the end of domination of one civilization or nation and the beginning of a new domination. Sumerian excavations related to the oldest of these gods An, are dating back at least 3000 years BC. He was worshiped as the "big bull" which was later separated into its own mythological entity: Heavenly Taurus (Hori, Carlay and Mendelson, 1995). This somehow reminds to the motives that exist at St. Elias, as well as to the similar time positioning within the era when the point of the vernal equinox was in the constellation Taurus.

5. CONCLUSION

As occurs and in other myths and religions, the dominance of the new religion deletes or changes the characteristics of the previous one, usually so that the most important motives are incorporated in the new religion or attributed to the current god. Also the new religion takes the important dates to celebrate something related to it and the connections with the earlier religion are obscured since they are included in the new one (which can be seen from the example of religions formed around the ancient Sumerians, Akkadians, Babylonians, or in the case of many solar cults and religions).

It may be noted that such motives are present and in the Christian religion. In addition to many inclusions from previous religions, in Christianity is noticed and that this religion evolved from several Jewish religious stories, from different periods, which are themselves embedded within the Old Testament, starting perhaps from those related to St. Elias (Elie - Helios), Moses and other prophets, up to Jesus.

This indicates that in the basis of religion, related to the history of the Jewish people, is probably an old solar cult, which eventually kept some motives that we can still see, in somewhat altered form or meaning. Also, besides the similarities of St. Elias with Helios, one can see and the similarity with the representation of Phaeton, with reference to the fiery chariot from which he strikes with fiery mantle on the water, as well as the prediction on the arrival of fire from heaven.

This may refer on a connection with the intrusion of comets or asteroids, which eventually occurred at the time when the point of the vernal equinox was in the

constellation Taurus, if one takes into account the reference to the sacrifice of this animal at the predicting of the arrival of fire from heaven. This is consistent with other researches that suggests the presence of intrusions of object from outer space, or causes of a disaster from the time older than 5000 years (Clube , 1995; Clube and Napier , 1984, 1990; Steel , 1993; Bon, Ćirković and Milosavljević , 2002; Masse et al. , 2006; Masse , 2007; Scheffers et al. , 2008).

REFERENCES

- Athnasiyu, M.H.: 2002, *Encyclopedia of Syrian icons*, Damascus.
- Bon, E., Ćirković, M.M, Milosavljević, I.: 2002, *Astronomische Nachrichten* **323**, 579.
- Clube, S.V.M.: 1995, *Vistas in Astronomy* **39**, 673.
- Clube, S.V.M., Napier, W.M.: 1984, *Mon. Not. R. Astron. Soc.* **211**, 953.
- Clube, S.V.M. and Napier, W.M.: 1990, *The Cosmic Winter*, Basil Blackwell Ltd, Oxford.
- Courtillot, V.: 1999, *Evolutionary Catastrophes*, Cambridge University Press, Cambridge.
- Ćirković, M.M.: 2007, *International Journal of Astrobiology* **6**, 325.
- Hori Y., Carlay R., Mendelson P. (eds.): 1995, *Britannica CD 2.0* , Encyclopedia Britannica, Inc.
- Krupp E.C.: 1997, *Sky and Telescope* **93**, 64.
- Masse, W.B.: 2007, *The archeology and anthropology of Quaternary period cosmic impact In Comet/asteroid impacts and human society: An interdisciplinary approach*, edited by Bobrowsky P. T. and Rickman H. Berlin: Springer, 25.
- Masse, W., Bryant, E., Gusiakov, V., Abbott, D., Rambolamana, G., Raza, H., Courty, M., Breger, D., Gerard-Little, P., Burckle, L.: 2006, *Holocene Indian Ocean Cosmic Impacts: The Megatsunami Chevron Evidence From Madagascar*, American Geophysical Union, Fall Meeting 2006, abstract PP43B-1244.
- Schechner S.: 1997, *Comets, Popular Culture and the Birth of Modern Cosmology*, Princeton University Press.
- Scheffers, A., Kelletat, D., Scheffers, S. R., Abbott, D. H., Bryant, E. A.: 2008, *Zeitschrift für Geomorphologie* **52**, 375.
- Steel, D.: 1993, *Rogue Asteroids and Doomsday Comets*, Wiley, New York.

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