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## The "Goddess with a Vase" from Mari and Proportions in the Art of the Ancient Near East

In the course of excavations at the palace in Mari (present-day Tell Hariri), the ancient city in the territory of Syria, French archaeologists discovered a fragment of a sculpture portraying a woman (PARROT 1958: 109; 1959: 5-9, figs. 4-8) (Fig. 1). Most fragments were located in one room (no. 64), situated between one of the courtyards and the throne hall, and today referred to as a shrine. The head of the statue was discovered somehow farther off, in the courtyard (no. 106) in front of the shrine. After
the fragments had been put together, a sculpture emerged to the researchers, which they called "The Goddess with a Vase" (La déesse au vase [jaillissant]) (Fig. 2). André Parrot, comparing it with another, slightly earlier sculpture discovered at the palace, which portrays a governor named Ishtup-ilum, and no doubt being impressed by the charm of the former, wrote: ...ici, la nymphe avec son charme aristocratique; là, la face brutale, sinon bestiale, d'un gouverneur. ${ }^{1}$

Fig. 1. "Goddess with a Vase" in the place of discovery (Parrot 1959: figs. 4, 5).
Ryc. 1. „Bogini z Wazą" w miejscu odkrycia.

${ }^{1}$ Parrot 1959: 11. Interestingly, the Ishtup-ilum statue was characterised in a similar way by H. Frankfort (1970: 116). However, he related the severity of the depiction not to the person, but to
the style: The statue (...) shows an almost brutal simplification of forms. This is a provincial trait.


The total height of the sculpture is 1.42 m (Parrot 1959: 11; cf. Orthmann 1975: 292-1.49 m). The woman portrayed in the sculpture was referred to as a goddess, based on her headgear - a tiara with one pair of horns. The eyes of the Goddess were in all probability inlaid, but this inlay did not survive until present. The nose is damaged as well. On the depictions of the sculpture from the rear and the profile (Fig. 2:b), her hair-style can be clearly seen: part of the hair is tied up in a sort of knot, held with a band, and two abundant curls are placed on the shoulders. There is a necklace between them, composed of six rows of massive beads, which completely covers the neck. On the rear, at the back and below, a counter-weight of the necklace can be seen. It is a thick cord with an ornamental boss or knot on the nape, ended with a tassel. The Goddess wears a long robe with engraved depictions of fishes and wavy lines, which possibly imitate flowing water. Toes and part of feet can be seen through a small slit in the front. With her both hands the Goddess holds a globular vessel with a tall neck, which is slightly inclined forwards. There was a canal inside the statue and in the plinth on which it was placed. In all probability it was to lead water to the vessel, and then the water flowed down along the robe (Parrot 1959: 9; cf. also Frankfort 1970: 116; Orthmann 1975: 292; Spycket 1981: 229-231).

Fig. 2. "Goddess with a Vase": a - front view (Parrot 1959: pl. V); b - rear and side views (Parrot 1959: pl. VI).
Ryc. 2. „Bogini z Wazą": a - widok od przodu, b - widoki z boków i od tyłu.



Fig. 3. Goddess from Ischâli (Orthmann 1975: fig. 165:a).
Ryc. 3. Bogini z Ischâli.

It cannot be unequivocally said who the "Goddess with a Vase" is. There are similar sculptures made of bronze, such as the figurine of a goddess from Ischâli (Fig. 3), or the figurine of the goddess Lama from Ur (Fig. 4). The goddess from Ischâli also has a robe ornamented with wavy lines. She sits on a low throne and holds a vessel in her hands. The head with four faces is ornamented with a cylindrical tiara, with one pair of horns for each face (Orthmann 1975: 293; Spycket 1981: 230). The figurine of the goddess Lama found at Ur looks like in a similar way. It comes from the Old Babylonian Period and measures 9.8 cm . The goddess has a long robe, a necklace and a tiara with horns. The hands of the goddess did not survive and it is possible that they were made of different material (ORTHMNANN 1975: 294). These analogies, although they repeat a certain common motif, do not give grounds to call our Goddess with a definite name.

When admiring the Goddess, although not necessarily sharing the enthusiasm expressed by A. Parrot, as well as in the light of already initiated research on sculpture and


Fig. 4. Goddess Lama (Orthmann 1975: fig. 166:b).
Ryc. 4. Bogini Lama.
other figural representations of the Near East, which focus on their proportions (see below), we can ask a question whether a peculiar division can also be seen in this case. After a closer look at the "Goddess with a Vase" and some attempted measurements, it can be seen that the relation between the height of the head and the height of the entire body is $1: 5$ (Fig. 5). Limits of the five parts marked by this proportion go near characteristic points of the sculpture:

1. the distance from the top of the head to the end of the chin and the beginning of the necklace;
2. from the beginning of the necklace to the waistline;
3. from the waistline to the first fold of the robe;
4. from the first to the third fold;
5. from the third (last) fold of the robe to the bottom of the feet.

These "units" ("modules"?) are not ideally equal, and in the case of some of them there is a certain deviation, especially in the lower part of the statue. This can be attributed to, e.g., errors in workmanship or calculations made

by the craftsman. It must be noted that the division does not take the base of the statue into consideration.

A similar question may be asked concerning the face itself. Do its regular, subtle features fit into any aesthetic model? M.C. Ghyka (2001: 66, 68-70) has worked out a scheme based on the principle of the golden section (Fig. 6), which demonstrates ideal proportions of the human face (Fig. 7). If we lay this scheme over the face of the "Goddess with a Vase" (Fig. 8), we will notice significant convergences, but also some differences. The second horizontal line from the bottom marks the height of the mouth and the mouth of the Goddess is situated in a proper place. The next lines which mark the point of the nose, the height of the eyes, the upper edge of the eyebrows, the line of the

Fig. 5. Putative proportions of the "Goddess with a Vase" (Parrot 1959: pl. V; drawing S. Betcher).
Ryc. 5. Przypuszczalne proporcje „Bogini z Wazą".


$$
\begin{aligned}
& \frac{\mathrm{AB}}{\mathrm{BC}}=\frac{\mathrm{AD}}{\mathrm{FD}}=\frac{\mathrm{DB}}{\mathrm{~EB}}=\phi=\frac{\sqrt{5}+1}{2} \\
& \frac{\mathrm{FD}}{\mathrm{DE}}=\frac{\mathrm{DH}}{\mathrm{DE}}=\frac{\mathrm{EB}}{\mathrm{HB}}=\phi \\
& \mathrm{CB} \\
& \mathrm{aB} \mathrm{a}^{\prime}=\frac{\mathrm{a} \mathrm{a}^{\prime}}{\mathrm{b} \mathrm{~b}^{\prime}}=\frac{\mathrm{bb} \mathrm{~b}^{\prime}}{\mathrm{cc}^{\prime}}=\phi
\end{aligned}
$$

Fig. 6. Scheme of ideal proportions of the face according to M.C. Ghyka (2001: fig. 20).

Ryc. 6. Schemat idealnych proporcji twarzy wg M.C. Ghyki.
hair and the top of the head are already slightly moved. The nose of the Goddess is in all probability situated somehow higher than it is suggested by the scheme of Ghyka, which is pointed out by the point of intersection of oblique lines. The line which marks the height of the eyes is situated near the lower edge of the eyes in the case of the Goddess, and near the upper edge there is a line which marks the end of the eyebrows. The horizontal line which is supposed to mark the beginning of the hair marks the beginning of the headgear in the case of the Goddess. Due to the presence of the tiara with horns on the head of the Goddess it is not possible to localise the top of her head. Vertical lines mark the width of the mouth and the eyes. The eyes of the Goddess are significantly larger than in the case of the woman


Fig. 7. Scheme of ideal proportions laid over the face of a woman (GhYкa 2001: fig. 19).
Ryc. 7. Schemat idealnych proporcji nałożony na twarz kobiety.
portrayed on Fig. 7. They go beyond the lines which delimit them; the mouth, however, corresponds to the width of the scheme. The central vertical line runs precisely through the centre of the face and it shows an ideal symmetry axis of the face of the Goddess. It goes through the space between the horns, the middle part of the forelock, the point where the eyebrows meet and the dimple in the upper lip. One can therefore consider the face of the Goddess as being very close to some ideal premise. It is worth adding that the scheme proposed by M.C. Ghyka was also applied to the face of the Lady of Uruk, the sculpture being much earlier than our Goddess (ca. 3000 BC) (TUŹNí 2011). Convergences pointed out in this comparison (the contour


Fig. 8. Scheme of ideal proportions laid over the face of the "Goddess with a Vase" (Рarrot 1959: frontispiece; elaborated by S. Betcher).
Ryc. 8. Schemat idealnych proporcji nałożony na twarz „Bogini z Wazą".
of the oval of the face, "the line of the mouth," the location of the point of the nose and the edges of the lower eyelids, the upper edge of the entire sculpture), ${ }^{2}$ seem to support the purposefulness of such comparisons on the one hand, and on the other hand they may suggest a common longlasting pattern of female beauty in the art of ancient Mesopotamia.

It is interesting that the "Goddess with a Vase" appears once again at the palace of Mari, in the courtyard on the facade of the room where the sculpture was located. A painting portraying "The Investiture of Zimri-Lim" was discovered there (Fig. 9). Below the main scene, which depicts Zimri-Lim, the ruler of Mari, and Ishtar, two goddesses

[^0]of a composite cult statue, or, being decorated with jewellery and with a wig on, it was attached directly to a wall (HANSEN 1975: 162; SPYCKET 1981: 36-38).
which face each other are portrayed. Analogously to the sculpture, they have long robes ornamented with depictions of fishes and water, they hold the same vessels from which water spurts, and they also have tiaras with horns on their heads. Reproductions of this painting are not very


Fig. 9. Division of the "Goddess with a Vase" from the painting of "The Investiture of Zimri-Lim" (Śliwa 1997: fig. 309 on p. 326, drawing S. Betcher).

Ryc. 9. Podział „Bogini z Wazą" z malowidła „Inwestytura Zimri--Lima".
accurate and the original image is partially destroyed. This is why in this case it is difficult to check whether the proportion of $1: 5$, that is, the division into five parts, occurs here, as in the case of the sculpture portraying the "Goddess with a Vase". It seems that this proportion may have also been applied in this depiction of the Goddess. It is, however, less accurate, perhaps due to a smaller scale.
J.-C. Margueron carried out a precise analysis of this painting and demonstrated how its composition was designed. This is demonstrated by diagonals of the rectangle into which the painting fits (Fig. 10) - they intersect immediately below the chin or at the base of the neck of the goddess Ishtar, thus clearly demonstrating the geometric and symbolic centre of the composition. Margueron also noticed a dependence between the shorter edge of the frame of the painting (marked as A), and the longer one (Fig. 11). The length of the longer edge is $A \sqrt{ } 3$; based on these calculations, he marked the subsequent suggested lines of composition of the painting. He noticed a similar dependence also in the plan of the palace. It concerns three rooms - the courtyard (no. 106) (also called "The Court of the Palms," from which "The Investiture of Zimri-Lim" could be seen), the shrine (no. 64 - the statue of the "Goddess with a Vase" was located here) and the throne hall (no. 65). In this case the proportion is based on the A $\sqrt{ } 2$ coefficient, with A being the diagonal of the courtyard (Margueron 1992: 105, pl. 45).

A comparison of the sculpture of the "Goddess with a Vase" with the Egyptian canon of proportions (Fig. 12) is also of interest. In Egypt, the figure was divided into 18 units, from the line of the hair on the forehead to the bottom of the feet. Part of the lines of the grid go through characteristic points of our depiction, such as the bottom of the nose, the beginning of the neck, the end


Fig. 11. Putative composition of the painting of "The Investiture of Zimri-Lim" (Margueron 1992: pl. 44). Ryc. 11. Przypuszczalna kompozycja malowidła „Inwestytura Zimri-Lima".

of the hair, the elbow, the bottom of the vessel and the beginning of the fold of the robe above the feet. According to Egyptian principles, a given line of the grid should go through a specific point of the body of a portrayed figure. In the case of the Goddess, this concurs only in two cases: the end of the nose is on Line 17, and one of the elbows is at the height of Line 12. A statement, however, that the artists of Mari referred to the Egyptian canon, seems unsupported, as Mari, although it was a trade city, did not have direct contacts with Egypt. A similarity to the Egyptian canon is rather to be considered as accidental, all the more so as it is insignificant.

A depiction which is similar to the "Goddess with a Vase" can be seen on the facade of the temple of Innin at Uruk (Azarpay 1987: 201; Fig. 13). It is a Kassite temple built during the rule of Karaindash, ca. 1415 BC. The facade portraits male and female deities alternately, who hold vessels with spurting water in their both hands. These deities, analogously to the "Goddess with a Vase," have a single pair of horns. Portraits of figures were placed in niches. During the excavations 36 bricks with male faces and 6 with female faces were found. It is assumed, however, that it is a matter of incident and that the number of male and female deities was the same (Heinrich 1982: 222). The facade is made of bricks, which divide the depiction into horizontal rows. Each deity is built of 15 rows of bricks, with 2 rows being used for the depiction of the head with the headgear, and 1 - for the face itself (AZARPAY 1987: 198-200; Fig. 14).

Fig. 12. Comparison of the "Goddess with a Vase" with the lines of Egyptian proportions (ParRot 1959: pl. V; drawing S. Betcher). Ryc. 12. Zestawienie „Bogini z Wazą" z liniami proporcji egipskich.



Fig. 13. Fragment of the facade of the temple of Innin at Uruk (Azarpay 1987: fig. 13).
Ryc. 13. Fragment fasady świątyni Innin w Uruk.

The facade of this temple may have been a pattern for the artist who built the facade of the Elamite temple of Inshushinak of the $12^{\text {th }}$ c. BC (Azarpay 1987: 199; Fig. 15). The ornament made of bricks has 14 rows, out of which 1 row is used for the face of the figure and 2 for its headgear. In this case, male (man-bull) and female figures are depicted alternately, and there is a tree of life between them (Azarpay 1987: 198, 199; Orthmann 1975: 386).

Archers belonging to the Royal Guard on the brick frieze at Susa were depicted in a similar manner (Fig. 16). It is a depiction of a procession of men armed with spears and bows. The frieze consists of 17 rows of bricks, with each being 8.5 cm thick. The height of one archer is ca. 146 cm , which is about $4 / 5$ of the average natural height. In this depiction the proportion between the head and the entire body is $1: 9$. As in the case of the temples of Innin (Fig. 14) and Inshushinak (Fig. 15), the face of the archer fits into the thickness of one brick. According to G. Azarpay, the proportion of 1:9 can also be seen in the Kassite and the Elamite art, as well as in other examples of Achaemenid art (Azarpay 1987: 190-192, 198, 199).

Fig. 14. Bricks from the facade of the temple of Innin at Uruk depictions of faces of deities; Vorderasiatisches Museum, Berlin (Photo F. Stępniowski).

Ryc. 14. Cegły z fasady świątyni Innin w Uruk - przedstawienia twarzy bóstw.



Fig. 15. Fragment of the facade of the temple of Inshushinak at Susa (Azarpay 1987: fig. 11).
Ryc. 15. Fragment fasady świątyni Inszuszinaka w Suzie.


Fig. 16. Frieze of the archers from Susa, $6^{\text {th }} \mathrm{c} . \mathrm{BC}$ (http://en.wikipedia.org/wiki/File:Archers_frieze_Darius_pala ce_Louvre_AOD487.jpg).
Ryc. 16. Fryz łuczników z Suzy, VI w. p.n.e.


Fig. 17. Statue of Darius from Susa, $6^{\text {th }} / 5^{\text {th }}$ c. BC; Archaeological Museum, Tehran (Photo Ł. Robakowski).
Ryc. 17. Posąg Dariusza z Suzy, VI/V w. p.n.e.
In all these three cases the head is unnaturally small in relation to the entire body and such an elongation of the body of the figure is due to standard sizes of bricks the facades were made of (Azarpay 1987: 198, 199). The figures made of rows of horizontal bricks are divided into units of equal height. This division facilitates an understanding of their proportions, as the elements of the bodies are often shown in one such unit, e.g., hands or the face in the facade of the temple of Inshushinak (Fig. 15).

The Achaemenid art was a courtly art, which was to serve the royal propaganda and demonstrate the power of the ruler and the empire. It was created upon the order of the king, and this is probably why it was based on similar principles and proportions. The best example of the cohesion of the Achaemenid art are decorations from the capitals of the empire, i.e., Persepolis and Susa. The artwork where the $1: 9$ proportions as the relation between the head and the rest of the body were applied is the statue portraying Darius I (Fig. 17). The sculpture was found at Susa in 1972, but it was made in Egypt. This is pointed out by a hieroglyphic inscription which can be seen on the base of the statue. It is in all probability one of two identical sculptures standing in the main gate leading to the royal complex. Its original height was 3 m , and the sculpture is


Fig. 19. Fragment of the relief from Naqsh-e Rustam (Photo S. Betcher). Ryc. 19. Fragment reliefu z Naqsz-e Rustam.
only partially preserved (the head is missing). Its appearance, however, can be reconstructed (Azarpay 1987: 187; Fig. 18) based on rock reliefs from Naqsh-e Rustam (Fig. 19), which ornamented the facades of the royal tombs, as well as based on the relief from Bisutun (Fig. 20), which portrays Darius standing before the representatives of rebellious provinces of the kingdom (Azarpay 1987).
G. Azarpay (1987: 202) points out that the same relation between the head and the height of the body can be seen on the depiction of Shalmaneser III of Nimrud ( $858-824$ BC), the ruler of Assyria (Fig. 21). It is also composed of rows of bricks; however, as opposed to the depictions from the temple of Innin, the temple of Inshushinak and the frieze of the archers, the face does not take the entire thickness of the brick, but only its part. On the other hand, it seems that also here the horizontal edges of the bricks go through significant points: the front edges of the royal tiara and the hair (on the back, and the beard on the front).

Depictions situated on brick walls have a sort of a grid, made by bonding of bricks. Thanks to this grid, it is easy to analyse the image of the figure with regard to its
proportions. On the other hand, the bricks also influence the appearance of the depiction. Their thickness often defines the height of individual parts of the body, thanks to which the figures on the friezes are elongated. Depictions with no visible indications concerning their proportions are carefully measured and analysed in order to gather data with regard to that.

Such an analysis was carried out for the reliefs from the palace of Ashurnasirpal II at Nimrud. It was conducted by Gay Robins. She took into consideration the figures of humans and of genies with eagles' heads and one exposed knee - the latter was an indispensable element to determine the proportion. Initially, she based her analysis on the Egyptian grid, consisting of eighteen units, but with no result. Only when a grid of fifteen units was laid over, which extended from the bottom of the feet to the level of the eyes, it demonstrated coherences between depictions of figures (Robins 1990: 118; Fig. 22). She also defined 9 characteristic sections on the relief and examined their length on individual sculptures. These were the distances: between the line of the base and the neck-shoulder junction, the distance between the line of the base and the


Fig. 20. Relief from Bisutun, 520-519 BC (Photo S. Betcher).
Ryc. 20. Relief z Bisutun, 520-519 p.n.e.


Fig. 21. Depiction of Shalmaneser III from Nimrud, $9^{\text {th }}$ c. BC (Azarpay 1987: fig. 14).
Ryc. 21. Przedstawienie Salmanasara III z Nimrud, IX w. p.n.e.


Fig. 22. Depiction of a genie from the palace at Nimrud, $9^{\text {th }}$ c. BC, according to the division by G. Robins (1990: fig. 6).
Ryc. 22. Przedstawienie geniusza z pałacu w Nimrud, IX w. p.n.e., wg podziału G . Robins.


Fig. 23. Depiction of a genie from the palace at Nimrud, $9^{\text {th }} \mathrm{c}$. BC , according to the division by N. Gillmann (2010: fig. 4).

Ryc. 23. Przedstawienie geniusza z pałacu w Nimrud, IX w. p.n.e., wg podziału N. Gillmanna.
lower line of the hair, or the length of feet. In numerous depictions these distances have similar values; these, however, are not equal, as in most cases there are certain deviations. For instance, in the depictions of humans the junction of the shoulders and the chin is located at the level between $123 / 4$ and $131 / 2$ units, with the average of these two values being $131 / 4$ and the standard deviation being 0.2 unit in this case. Apart from the grid of proportions, G. Robins also paid attention to stressing the male character of the figures by shortening the legs and elongating the torso, as well as to differences between depictions in individual rooms of the palace (Robins 1990: 119). ${ }^{3}$

Research on the reliefs from the palace at Nimrud was also carried out by Nicolas Gillmann. He analysed around thirty depictions. In order to identify the canon of proportions, he applied mathematical principles, such as the principle of the golden section or, e.g., the Fibonacci sequence. He sketched the figures of the genies and of the king
into a square or the golden rectangle (Gillmann 2010: 79; Fig. 23). Thanks to this method, he managed to state that precise geometric principles were applied when creating the relief. He also assumes that a majority of reliefs was created by one person or one workshop. It is possible that auxiliary lines were present on the depictions, and then they were erased. Out of thirty examined reliefs, only six diverge from the postulated principles.

A modern form of examination of sculptures is to make photogrammetric images. This method was used by Guitty Azarpay in the analysis of statues of Gudea, the ruler of Lagash (ca. 2100 BC ). She analysed three sculptures: Statues A and E from the Louvre and BM 122910 from the British Museum (Statues A and B have no heads and the sculpture from the British Museum has no legs). Based on the photos, it was possible to find out that the sculpture consisted of six parts (AZARpay 1990; 1995: 25102513; Fig. 24), whose height corresponded to the length of

[^1]several variants of these modules. This was supposed to provide the long courses of reliefs with a value of harmony and rhythm.


Fig. 24. Putative proportions of the statues of Gudea (Azarpay 1995: fig. 3:A).
Ryc. 24. Przypuszczalne proporcje posągów Gudei.
the forearm (from the elbow pit to the wrist). Each part begins and ends in a characteristic point: the base of the neck and the beginning of the shoulders, the hips, the knees and the ankles.

The (perhaps) identified principle of the composition of the statue of the "Goddess with a Vase" and the mentioned (hypothetical) remaining examples of rules and proportions in the art of the ancient Near East make us consider the aesthetics of this art. Today we see it via our own ideas and experiences, and attempts at understanding the way it was seen in the cultures which created this art are extremely difficult - first of all, there are no relevant source texts (Winter 1995: 2572). This first of all concerns figural representations, which are discussed in this paper.

One can mention here, e.g., a fragment of the text from the so-called "Banquet Stela" of Ashurnasirpal II from Nimrud, which says: I created my royal monument with a likeness of my countenance (Grayson 1991: A:0.101.30: 76-77). The term "likeness" was used here (tamšilu) (CAD $\mathrm{T}:$ 147), which suggests a "portrait depiction," if read literally and according to our categories of mimetic art. On the other hand, if numerous depictions of Ashurnasirpal II


Fig. 25. Points on the body defining the Egyptian canon of proportions (BARTA 1970: fig. 6).
Ryc. 25. Punkty na ciele wyznaczające egipski kanon proporcji.
are compared with other depictions of Assyrian rulers, which rule out an individualisation of features and posture of the figure, such a depiction is to be excluded (cf. also WINTER 1995: 2572-2573, concerning other ways of identification of the portrayed figure, such as costume, headgear, weapons and attributes).

In other ancient cultures it is much easier to identify the principles which governed the figural art. This is influenced by availability of written sources, as well as visible indications concerning the way of composition which were left on the works of art. These indications enable one to identify the canon of proportions and portraying of figures.

In Egypt, the first examples of using a grid of proportions are already known from the period of the Old Kingdom. Preserved unfinished reliefs on which auxiliary lines were left are evidence for the existence of the canon of proportions. One can notice vertical and horizontal lines which were to facilitate drawing of an outline of a figure (Barta 1970: 96; Fig. 25). Since the rule of the XI ${ }^{\text {th }}$ Dynasty, the human figure in representations was placed within a grid, which was a more precise way to determine the proportions. Such a grid of proportions can be seen on
an unfinished relief from the period of the Middle Kingdom (Azarpay 1995: 2508; Fig. 26). The human body was divided into 18 units (from the bottom of the feet to the line marking the end of the forehead and the beginning of the hair), with borders between units being located close to specific points of the body, such as the elbow or the upper edge of the knee. A sitting figure was dealt with in a different way, as it was divided into 14 parts. What was defined was not only the length of individual parts of the body, but also their width, e.g., the width of the shoulders was 6 units. In the course of time the division into 18 and 14 units transformed into 21 and 17 units respectively (AZARPAY 1995: 2508-2510).

Eleanor Guralnick $(1978 ; 1981)$ carried out research on statues of Greek korai and kouroi. She searched for the relation between their proportions and the Egyptian canon. A greatest similarity with regard to that was shown by the stature of the Kore of Nikandre of ca. 660 BC
(Fig. 27), which is related to the Egyptian Canon II, i.e., the division into 21 and 17 units. Her body possesses some male features, such as broad shoulders and the chest. Proportions of a few other kouroi also resemble Egyptian proportions, i.a., the Athens 12 Kouros (Guralnick 1978: 469). This author suggests that the sculptor was aware of the existence of the rules of this canon, and he may have even used some kind of book with patterns of proportions. This would mean that the Egyptian canon was known and used by Greek sculptors. It is also possible that it was transformed and refined. Greek-Egyptian trade contacts, initiated at the end of the $8^{\text {th }} \mathrm{c} . \mathrm{BC}$, during the rule of the $X X V^{\text {th }}$ Dynasty provided a perfect opportunity for such inspirations (Guralnick 1981: 280).

In the end - in order to complete the background of the discussion on rules and dispositions of creation of ancient figural representations - it is worth to briefly mention the principles applied in the Classical art, as these are


Fig. 26. Unfinished relief from the period of the Middle Kingdom (Azarpay 1995: fig. 1).
Ryc. 26. Niedokończony relief z okresu Średniego Państwa.


Fig. 27. Kore of Nikandre, $7^{\text {th }}$ c. BC (http://www.mlahanas.de/Greeks/Arts/ Kore.htm).
Ryc. 27. Kora Nikandre, VII w. p.n.e.


Fig. 28. Polycleitus, Doryphoros, $5^{\text {th }}$ c. BC (Ramotowska 2004: fig. 36, drawing S. Betcher).
Ryc. 28. Poliklet, Doryforos, V w. p.n.e.
better identified and more widely known. It is Polycleitus, the sculptor who lived in the $5^{\text {th }} \mathrm{c}$. BC who is considered the creator of the ideal canon of proportions. According to his principles, the head was divided into 3 equal parts and constituted $1 / 7$ of the height of the entire body. The length of the shank is $2 / 7$, as is the height and the width of the torso. The palm is $1 / 10$ and the foot $-1 / 6$ of the height of the body (Fig. 28). The principles of Polycleitus were followed by another Greek sculptor, Praxiteles, who lived in the $4^{\text {th }} c$. BC. He kept the proportions established by Polycleitus, but he additionally provided his sculptures with lightness and easiness (Charbonneaux 1945: 3653, 250-257; Fig. 29).

Vitruvius, who lived four centuries thereafter in ancient Rome, also referred to Greek artists. He was the author of the ten volume work De architectura. In Book III he explained that when constructing the buildings the architects should follow the pattern of the human body. He


Fig. 29. Praxiteles, Aphrodite of Cnidus, $4^{\text {th }}$ c. BC (http://pl. wikipedia.org/w/index.php?title=Plik:Knidos_capitolian01_pu shkin.jpg\&filetimestamp $=20071118150655$, drawing S. Betcher). Ryc. 29. Praksyteles, Afrodyta Knidyjska, IV w. p.n.e.
also explained what the proportion was (Greek: $\alpha v \alpha \lambda \circ \gamma 1 \alpha$; Liddel, Scott 1940: 111):

Proportion is a correspondence among the measures of the members of an entire work, and of the whole to a certain part selected as standard. From this result the principles of symmetry. Without symmetry and proportion there can be no principles in the design of any temple; that is, if there is no precise relation between its members, as in the case of those of a well shaped man (III:1,2; Translated by M.H. Morgan, The Ten Books on Architecture, Harvard 1914).

In the Near East, as opposed to Rome, Greece and Egypt, no indications concerning the creation of the artwork survived, which is why it is more difficult to understand the process of creation of sculptures, reliefs etc. in the Near Eastern art. In order to identify principles followed by ancient artists, depictions are analysed and undergo
photogrammetric examinations today, in order to find out the system of proportion or the layout of the composition. Nevertheless, in the case of such examination there is no visible evidence that the application of given proportions was intentional (STĘPNIOWSKI 2003: 42).

I base my research on the sculpture of the Goddess with a Vase exclusively on the analysis of its photos. This is why any conclusions concerning its proportions are not definite, and they are merely an indication that it is worth carrying out further research on this depiction. Compared with the analysis of the painting of "The Investiture of

Zimri-Lim," it demonstrates the sense of composition of ancient artists of Mari and the principles they may have followed when creating their sculptures or paintings.

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Abbreviations<br>CAD T The Assyrian Dictionary of the University of Chicago, vol. 18 (T), Chicago 2006.

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## Sylwia Betcher

## „Bogini Z Wazą" Z Mari i proporcje w sztuce starożytnego Bliskiego Wschodu

Pr
Prezentowany artykul referuje dotychczasowe badania nad kanonami proporcji, uchwyconymi, czy raczej hipotetycznie rekonstruowanymi, w rzeźbie i reliefie starożytnego Bliskiego Wschodu. Podejmuje też próbę podobnego ujęcia w przypadku kolejnego zabytku - „Bogini z Wazą" z Mari (XVIII w. p.n.e.) (Ryc. 1, 2).

Dokładny ogląd rzézby, wraz z pomiarami i przykładaniem rozmaitych podziałów, zdaje się wskazywać, iz̀ dzieli się ona na 5 części, o zbliżonej wysokości (Ryc. 5). Najważniejsze jest tu zapewne stwierdzenie, że wysokość głowy stanowi właśnie $1 / 5$ wysokości całej postaci. Można przypuszczáć, że mamy tu do czynienia z celowym dziataniem artysty/rzemieślnika wykonującego rzé̇be, gdyż granice poszczególnych czę́ci znajdują się w pobližu charakterystycznych punktów na ciele, jak: dół podbródka, wcięcie w talii, fałdy na sukni.

Twarz „Bogini z Wazą" została porównana ze schematem twarzy opracowanym przez M.C. Ghyke, opartym na idealnych proporcjach, stworzonym na podstawie złotego cięcia (Ryc. 6-8). Co ciekawe, czę̧ść elementów pasuje do schematu. Jej usta znajdują się na odpowiedniej wysokości, mają również wlaściwą szerokość. Pionowa linia dzieląca twarz na pół jest idealną osią symetrii.

Artykul przywołuje też rozważania J.-C. Marguerona dotyczące kompozycji malowidła „Inwestytura Zimri--Lima" (Ryc. 9), współczesnego omawianej rzeźbie. Jako że ukazana jest tam także „Bogini z Wazą", dokonano próby zanalizowania proporcji tego przedstawienia. Możliwe, że powtarza się tu stosunek 1:5, jednak malowidło jest zbyt uszkodzone, by potwierdzić to przypuszczenie.

Oprócz analizy rzé́by „Bogini z Wazą,", w artykule zebrane są informacje dotyczące innych dziet, przebadanych pod względem wzajemnych proporcji czę̧́ci ciała. Przedstawieniami, które niejako same ukazują zasady, na
podstawie których zostały stworzone, są fryzy ceglane. Fasada świątyni Innin z Uruk (Ryc. 13, 14), elamicka świątynia Inszuszinaka (Ryc. 15) oraz fryz przedstawiający łuczników z Suzy (Ryc. 16), stworzone zostały według tych samych zasad. Ciała postaci są wydłużone, a ich twarze mieszczą się w wysokości jednej cegły. Inny podział stosowano w sztuce achemenidzkiej, „dworskiej" i bardzo spójnej stylistycznie. Na przykładzie rzeźby Dariusza I, reliefów skalnych z Naqsz-e Rustam oraz reliefu z Bisutun (Ryc. 17-20), G. Azarpay ustaliła stosunek proporcji głowy do całej postaci jako 1:9.

Wspomniane są także badania G. Robins i N. Gillmanna nad reliefami z pałacu w Nimrud, które wykazują, iż także te przedstawienia były oparte na obliczeniach matematycznych (Ryc. 22, 23), oraz badania G. Azarpay nad posągami Gudei. W tym przypadku zdjęcia fotogrametryczne pomogly w ustaleniu, iż stosunek wysokości głowy do całej postaci w posągach Gudei naturalnej wielkości to 1:6 (Ryc. 24).

Tłem dla tych rozważań jest kanon egipski i grecki, znany ze źródeł pisanych oraz wskazówek pozostawionych na niedokończonych dziełach. Do tych kanonów sztuki nawiązują badania E. Guralnick nad posągami kor i kurosów, oraz ich podobieństwem do kanonu egipskiego (Ryc. 25-29).

Dokładne badania nad bliskowschodnimi przedstawieniami ukazują zasady, którymi kierowali się ich twórcy, często oparte na skomplikowanych obliczeniach matematycznych. Jest to jedyna droga do poznania techniki tworzenia przedstawień figuralnych tego obszaru, gdyż w przeciwienstwie do Grecji, czy Egiptu, nie odkryto dotychczas źródeł pisanych mówiących o kanonie w sztuce ani niedokończonych dzieł z zaznaczonymi wskazówkami dla rzemieślnika.


[^0]:    2 "The Lady of Uruk" is not a complete figural sculpture or even a head/bust, but a depiction of the face up to the rear edge of the base of the ears. It is therefore rather a mask. It was perhaps part

[^1]:    ${ }^{3}$ The paper of E. Guralnick (1997) completes the considerations of proportions in the Neo-Assyrian art. It suggests using the units of measures of length: the finger, the foot and the cubit, but in

