

MARYSE WAEGEMAN

AMULET AND ALPHABET



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**CIAL SCIENCES AND HISTORY DIVISION**

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MARYSE WAEGEMAN

AMULET AND ALPHABET  
MAGICAL AMULETS IN THE FIRST BOOK OF  
CYRANIDES

J.C. GIEBEN, PUBLISHER  
AMSTERDAM 1987

**SOCIAL SCIENCE & HISTORY DIVISION**  
**EDUCATION & PHILOSOPHY SECTION**

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Love, golden Aphrodite,  
Sun, mighty strength, golden happiness,  
And all the elements in sympathy,  
Homonyms engraved in a cosmic jewel.

SOCIAL SCIENCE & HISTORY DIVISION  
EDUCATION & PHILOSOPHY SECTION



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## INTRODUCTION

It is a well-known fact that the interest in magic and occultism gets through more and more in the Hellenistic period. It is consequently in this period that a new literary genre, the so-called Physica develops, mainly in Egypt (1). In the light of the Hellenistic meaning of the word φυσικός - which denotes everything that belongs to the occult laws of nature, the magical (2) - we know that by Physica a series of writings is meant, in which the secret forces of nature, its φύσει or δυνάμεις, are brought to light. These forces are used to make men healthy, rich and prosperous. Accordingly, the theory of sympathy and antipathy between men, animals, plants and stones is here of great importance (3).

Cyranides can be situated in the whole of this literary genre. It is a compilation work, consisting of six books, in which the magical properties of animals, plants and stones are dealt with. The work is ascribed to the legendary Hermes Trismegistos who gave his name to hermetism. Generally it is dated in the first or second century A.D., but large parts of it are to be traced back to the Hellenistic period and include undoubtedly matter which was current in oral tradition for centuries. Through the Latin and Arabic translations of the text it reached the mediaeval lapidaria and bestiaria and thus it had a considerable influence on medico-magical thinking in Western Europe (4).

The First Book of Cyranides is indeed a medico-magical treatise based on the magic of letters and words. Its prologue says it was composed out of two books : the First book of Cyranides written by the Persian king Cyranos - hence the name - and a book written by Harpocraton of Alexandria for his

daughter (5). Although Egyptian and oriental influences are clear, origins and date of the work however remain quite obscure (6).

The First Book of Cyranides contains twenty-four chapters, corresponding with the twenty-four letters of the Greek alphabet. As materia medica a plant, a bird, a fish and a stone are used in each chapter. Their names begin with the same letter. Sometimes they are even completely homonymous. Thus for the first chapter Alpha: ἄμπελος λευκή white vine, ἀετός eagle, ἀετίνης eagle-stone, ἀετός eagle-ray. In each case the four elements of nature are symbolized : the bird represents the air, the plant the earth, the fish water and the stone fire (7). In this way the sympathetic forces of the entire universe are evoked and the link, that keeps the distinct ingredients together, is confirmed by the magic of the letters and names. The ancients indeed attached a lot of value to letters and words. They really believed that the term defining an object held the essence, the etymon, of this object and that so homonyms and objects with a more or less homonymous name or beginning with the same letter should absolutely be in sympathy with each other. Consequently an identity or similarity of name also meant an identity or similarity in function or magical power (8).

This principle dominates the first book of Cyranides. In each chapter a short definition of the four terms is given at the beginning. Often only a more current synonym is mentioned here. The fact is we must bear in mind that the author, in order to be able to respect the alphabetical principle, frequently found difficulty in bringing together four elements beginning with the same letter. That is why he sometimes makes do with neologisms or self-invented periphrases and these certainly require some explanation.

Then different medico-magical remedies are dealt with : they are distilled from one of the four elements or from the combination of them. Each chapter also includes a description of an amulet. The general pattern is the following one : the stone is engraved with the picture of the bird and the fish, while underneath a small part of the living

plant is hidden. Now and then however one of the four basic elements has been left out or another element has been added. We will examine these amulet descriptions one by one. We will check if there is comparable iconographical material available, in other words we will see whether the descriptions rest on real amulets which the author envisaged or whether he invented fictive amulets. Moreover it is interesting to know whether all elements of the amulet were really functional, separately or in combination with each other, or whether one single element determined its effectiveness, whereas the others were merely added to complete the strict scheme of four. In this way we likewise get an idea of medico-magical thinking in antiquity and the pattern of expectations of those who wore amulets.

This study follows the pattern of the First Book of Cyranides. Thuswise it is divided in twenty-four chapters, one chapter for each of the letters of the Greek alphabet. Per chapter the four elements of the materia medica are summed up for a start, with, as far as an identification is possible, the current English and the scientific Latin translation. Then the description of the amulet and its effect on the wearer and his environment are quoted in Greek after the critical edition of Cyranides by Kaimakis. An English translation is added, followed by a commentary on the amulet description.

NOTES

- (1) On this literary genre see primarily the studies by M. WELLMANN : Die Georgika des Demokritos, Abh. d. Pr. Akad. d. Wiss., Phil.-hist. Kl. 4 (1921); Die Φυσικά des Bolos Demokritos und der Magier Anaxilaos aus Larissa, Abh. d. Pr. Akad. d. Wiss., Phil.-Hist. Kl. 7 (1928); Der Physiologos. Eine religionsgeschichtlich-naturwissenschaftliche Untersuchung, Philologus, Suppl. Bd. 22, 1 (1930); Marcellus von Side als Arzt und die Koiraniden des Hermes Trismegistos, Philologus Suppl. Bd. 27, 2 (1934).
- (2) Cf. J. ROEHR, Der okkulte Kraftbegriff im Altertum, pp. 77-86.
- (3) Cf. J. ROEHR, o.c., pp. 34-76.
- (4) A bibliographical survey of the studies published on Cyranides is to be found in R. HALLEUX - J. SCHAMP, Les lapidaires grecs, p. XXVII, n. 1. A.J. FESTUGIERE, La révélation d'Hermès Trismégiste I, pp. 201-216 gives a good analysis of the first four books as they were published for the first time by C.E. RUELLE for F. de MELY, Les lapidaires II, pp. 1-124. D. KAIMAKIS, Die Kyraniden, included books V and VI in his new critical edition of the Greek text, but R. HALLEUX - J. SCHAMP, Les lapidaires grecs, p. XXVIII, n. 1 doubt if they really belong there. The Latin translation of Cyranides dating from the XIIth century was edited by L. DELATTE, Textes latins, pp. 1-206. For the Arabic tradition see M. ULMANN, Die arabische Ueberlieferung der Kyranis des Hermes Trismegistos, Proceed. Vith Congress of Arabic and Islamic Studies, Stockholm 1972 (1975), pp. 196-200.
- (5) Cyran., Prol. 1-5 (Kaimakis p. 14) : Βιβλος αὐτῆ Κυρανοῦ <καὶ> "Ερμεῖα ἐπικλητῆ " τὰ τρία", ἐξ ἀμφοτέρων βιβλος φυσικῶν δυνάμεων συμπαθειῶν καὶ ἀντιπαθειῶν, συνταχθεῖσα {ἐκ ὄσῳ βιβλῶν}, ἕκ τε τοῦ Κυρανοῦ βασιλέως Περσῶν τῆς πρώτης βιβλίου τῶν Κυρανίδων, καὶ ἐκ τοῦ Ἀρποκρατίωνος τοῦ Ἀλεξανδρέως πρὸς τὴν οἰκετὴν θυγατέραν.

- (6) Cyranos possibly lived in the first century A.D., Harpocration is even more difficult to date. Cf. R. HALLEUX - J. SCHAMP, Les lapidaires grecs, p. XXVII.
- (7) This type of association is not peculiar to Cyranides. It also occurs in magical papyri, e.g. PGM III, 511-529. F. de MELY, Les lapidaires III, p. LXIII remarks that this division corresponds exactly to that of Olympiodorus.
- (8) Hence the importance of the so-called verbal homeopathy in folk-medicine where disease or diseased parts of the body often bear a name identical with or closely resembling that of the remedy. Several examples of this in E.S. McCARTNEY, Verbal homeopathy and the etymological story, APh 48 (1927), pp. 326-343.



Eagle.  
Paris, Bibl. Nat. Cab. des Médailles 2192A  
(=Delatte - Derchain nr.369).  
jasper, 12 x 18mm.

ἄμπελος λευκή	white vine (Bryonia Cretica)
ἀετὸς πτηνόν	eagle (Aquila)
ἀετίνης λίθος	eagle-stone
ἀετὸς ἰχθύς	eagle-ray (Myliobatis aquila)

## I, 1, 170-175

λαβὼν οὖν ἀετίνην λίθον γλύψον ἀετὸν καὶ ὑπὸ τὸν  
λίθον ὑπόθεε γίγαρτον σταφυλῆς καὶ τὸ ἄκρον τοῦ  
πτεροῦ τοῦ ἀετοῦ εἴτε ἰέρακος καὶ κατακλείσας φόρει.  
διαφυλάξει σε γὰρ ἀπὸ πάντων τῶν προειρημένων παθῶν.  
ἔτι μὴν καὶ ἀξιόλογον καὶ προσφιλεῖν συντυχίαις δυνατῶν  
καὶ μεγάλων ἀνδρῶν καὶ ὑπερεχόντων χάριν παρέξει  
καὶ ἐπὶ ἐτέρων πολλῶν ἄλλων ὧν οὐ χρεῖα ἐστὶ λέγειν  
ποιήσει.

"Take thus an eagle-stone and engrave an eagle in it, put a grape-stone and the wing tip of the eagle or of a hawk under the stone and wear it after setting. For it will protect you from all complaints mentioned above. Moreover it will gain you the goodwill of mighty, highly placed and superior people, which is very valuable and favours success. It will be effective too for many other things about which one should not talk."

The complaints summed up in the text are: asthma, epilepsy, dysentery and similar affections, drunkenness, impotence, fractures, nails that fall out, warts, abscesses and tooth decay, tumours, baldness, dysuria, affections of head and skin, dizziness, snake-bites, etc.. In short, all diseases can be fought by wearing this amulet. Before the description of the amulet, the text mentioned several recipes for these purposes. They all include wine or the root or leaves of the vine. The amulet with the grape-stone enclosed thus replaces all previous recipes and brings the wearer in a state of complete happiness.

Iconographically we are facing a first problem: is the eagle represented on the stone a bird or a fish? F. de Mély decided determinedly in favour of the fish. He even added a drawing of a fish he identified with an eagle-ray. It is pictured on an intaglio of the Paris Cabinet des Médailles (1). If we identify the eagle with the bird, the element fish in the amulet is missing, whereas, if the picture shows a fish, the bird is still represented by its wing tip enclosed under the stone. The first book of Cyranides however gives more descriptions of amulets where one of the four elements is missing. This is consequently not an insurmountable objection. Furthermore the intaglio to which de Mély refers, is not an amulet, but a fragment of a vase of rock-crystal, and the fish figure probably is a christian symbol (2). It also remains an open question whether the fish which de Mély sees as an eagle-ray really is an eagle-ray. In Cyranides it is described as a sea-fish without scales, resembling a ἰέραξ but darker, in almost every respect similar to the τρύγων save for its sting (3). According to Thompson the identification of the ἰέραξ is quite obscure, while the τρύγων is clearly the sting-ray (Trygon pastinaca) (4). Thompson calls the eagle-ray (Myliobatis aquila) (5) and Strömberg explicitly referring to Cyranides comes to the same conclusion: the fish resembles an eagle with outstretched wings and therefore it was named after the bird (6). The identification of the ἀετός with the eagle-ray (Myliobatis aquila) thus can be taken for granted.

Of course the symbolism of the fish not only plays an important part in christianity but also in pagan

culture. Fish are therefore often pictured, also on gems (7). I was not able to find one representing an eagle-ray. Yet it is not impossible that one comes to light some day, since the eagle-ray was considered as a sacred fish (8). Anyway, the eagle-ray shares its name with the bird eagle and by that their magical identity can be seen as quite similar.

Gems showing the picture of an eagle - the bird - are very common. In the most important study on magical amulets by Delatte and Derchain three amulets of the kind have been photographed. Their inscriptions for certain prove their magical character (9). Pliny tells us in his Natural History that such amulets could serve to make audiences with kings proceed well (10). And there we do have a clear parallel with the text of Cyranides which recommends eagle amulets to find favour with highly placed persons! On this ground I think it is right to interpret the ἀετός engraved on the amulet of Cyranides as a bird too.

Delatte and Derchain don't give a precise explanation of the magical symbolism of the eagle on these amulets: the eagle appears too frequently in various mythologies. The eagle is for example emblem of Zeus but also of Semitic gods as Malakbel of Palmyra. Its solar character is practically certain (11).

Likewise it is certain that parts of the eagle - the tongue, gall, feathers, etc. - were used in popular medicine as remedies against various diseases. The connection between the eagle's part of the body and the disease is not always of the same clearness (12). The tip of the eagle's wing under the stone of Cyranides clearly bears the curative function of the whole eagle. That the eagle's wing can be replaced by a hawk's wing is not surprising, since eagle and hawk were considered as mutually interchangeable (13).

The etymological relation between ἀετός and ἀετότης accounts for the fact that the eagle has to be engraved on an eagle-stone. An eagle-stone is a hollow stone, a kind of ferruginous limonite nodule with loose matter, with on the inside a smaller stone or sand, in such a way that the stone rattles when shaken. In antiquity it is called λίθος ἔγκυρος, pregnant stone (14). From etymological speculations in Akkadian can be elucidated why such

stones are associated with eagles (15). ABAN ERU means "pregnant stone". Yet the word ERU does not only mean "pregnant", but also "eagle" and "bronze". Thuswise ABAN ERU was later understood as "eagle-stone" and at the same time it was connected with the eagle. As a matter of fact it was said that the eagle kept such stones in its nest in order to make laying eggs and breeding easier and to protect the chicks. It is consequently obvious that they also served as εἰσόχιοι λίθοι for human beings and were used for many centuries as pregnancy-amulets. Several of these eagle-stones have been preserved, usually set in gold or silver to be worn as a jewel (16).

In this chapter of Cyranides the eagle-stone is also called λίθος ἔγκυος, but it does not seem to serve specifically as a pregnancy-stone. Moreover it is impossible that an engraving could be applied on a hollow limonite nodule. Nevertheless in the sixteenth century Erasmus in the colloquy on The Pilgrimage talks about an aetites showing the figure of an eagle with a white tail. So again not a fish but a bird! The humanist scholar De Laet mentions the same stone in the year 1647, but he adds that it must be distinguished from the real aetites, which was never a gem. Bromehead supposes "this to have been a peculiar banded agate, or possibly a septarian nodule, like a Victorian beetle-stone" (17). But because the eagles in the book of Delatte and Derchain are engraved on various kinds of stones - nr.396 is jasper, 397 quartz and 398 a black stone (18) - I think that the eagle-stone meant by Erasmus and Cyranides can be any kind of stone as long as it shows the figure of an eagle. In other words, the stone takes its name from the engraving. Cyranides I,1,6-7 defined the aetites as a hollow rattling stone; in the above quoted description of the engraved amulet on the other hand another kind of stone must be meant. In all probability this is also the reason why the specific function of the real eagle-stone - assistance in pregnancy and childbirth - is not mentioned in this chapter of Cyranides. Only the magical and healing properties of the eagle itself are ascribed to the stone (19).

The fourth element of the amulet is the grape-stone. According to de Mély the amulet owes its pharmaceutical properties to it (20). de Mély's

assertion leans on Pliny who prescribed the grape-stone as a remedy against epilepsy (21). But de Mély adds laconically: "Ce n'est au fond qu'un purgatif énergique". The curative power which Pliny attributes to grapes, grape-stones, but above all to the white vine itself or its root, is however a lot more extensive than de Mély points out. All the diseases prevented or cured with this amulet of Cyranides, are treated with the white vine in Pliny's Natural History. And Pliny adds a lot of others (22)! de Mély is therefore probably right when he asserts that the white vine is the basic element of this amulet, but we should not forget that the eagle too plays a very great part in popular medicine. The accumulation of both their properties will strengthen the power of the amulet.

NOTES

- (1) Nr.2165. F. de MELY, Le poisson, p. 322. H. LECLERCQ, ΙΧΘΥΣ, DACL 7, 2 (1925), col. 1991-1992 has borrowed his argument about the magical meaning of the fish completely from de Mély's article.
- (2) M. CHABOUILLET, Catalogue général et raisonné des camées et des pierres gravées de la bibliothèque impériale, Paris 1858, p. 282.
- (3) Cyran., IV, 1, 3-4.
- (4) D'Arcy W. THOMPSON, A Glossary of Greek Fishes, p. 90 and p. 270. R. STROEMBERG, Griechische Fischnamen, p. 113 supposes the ἰέραξ is the Excoetus volitans mentioned by Epaenetus (Athen., VII, 329A) together with the χελιδόν.
- (5) D'Arcy W. THOMPSON, A Glossary of Greek Fishes, p. 3.
- (6) R. STROEMBERG, Griechische Fischnamen, pp. 112-113.
- (7) A list of gems can be found in H. LECLERCQ, ΙΧΘΥΣ, DACL 7, 2 (1925), col. 2068-2073. See also F.J. DOELGER, ΙΧΘΥΣ V, pp. 234-253. Naturally, these lists are far from complete, since many collections haven't been published yet and new discoveries still come to light. For a survey of the actual situation of publications about magical amulets, see P. ZAZOFF, Die antiken Gemmen, pp. 352-355.
- (8) F.J. DOELGER, ΙΧΘΥΣ II, pp. 93-94 refers to Porphyry, De abstinencia, IV, 14 where is mentioned that the Essenes were not allowed to eat fish without scales, called σελάχια by the Greek. Aristotle, De anim. hist., V, 5 reckons the αἰτόν among the σελάχια and also in Cyranides it is emphasized that the αἰτόν doesn't have scales (ἀλέπιδος).
- (9) A. DELATTE - Ph. DERCHAIN, Les intailles magiques, pp. 278-279, nrs. 396, 397, 398.
- (10) Pliny, N.H., XXXVII, 124 : iam vero quoquo modo adesse reges adituris ... si aquilae scalperentur aut scarabaei. The scarab is a sun-emblem too!

- (11) Th. SCHNEIDER, Adler, RLAC 1 (1950), col. 89-90.
- (12) E. STEPLINGER, Adler, RLAC 1 (1950), col. 91 gives several examples.
- (13) Pliny, N.H., XXIX, 123 mentions that the hawk as well as the eagle constitutes in medicine a remedy for diseases of the eye. Probably their interchangeability has something to do with the fact that both birds were considered as solar emblems.
- (14) The aetites is extensively discussed by Damigeron - Evax I (ed. R. HALLEUX - J. SCHAMP, pp. 234-236, with excellent notes and references to other ancient authors mentioning this stone pp. 336-337). By Damigeron - Evax the aetites is said to be veluti praegnans (= ἔγκυος). Besides helping pregnant women it has a lot of other functions, some of them similar to those mentioned in Cyranides. See also D'Arcy W THOMPSON, A Glossary of Birds, p. 14.
- (15) See A.A. BARB, Birds and medical magic, pp. 317-318; R.C. THOMPSON, A Dictionary of Assyrian Chemistry and Geology, Oxford 1936, pp. 104-108; G. DOSSIN, L'Euphrate au secours des parturientes, Annuaire de l'Institut de Philologie et d'Histoire Orientales et Slaves 20 (1973), pp. 213-221.
- (16) Illustrations in C.N. BROMEHEAD, Aetites, pll. I-II at p. 20.
- (17) C.N. BROMEHEAD, Aetites, pp. 17-18.
- (18) The eagle mentioned by Pliny., N.H., XXXVII, 124 has been engraved in an emerald.
- (19) Also in the later lapidaria from the middle ages and the renaissance the eagle-stone is not only an excellent pregnancy-amulet, but it has in addition a great number of other functions that are also mentioned in Cyranides. See about this C.N. BROMEHEAD, Aetites, pp. 19-21 (Aetites for human beings). Influence of Cyranides on these later lapidaria is not excluded.
- (20) F. de MELY, Le poisson, p. 322.
- (21) Pliny, N.H., XXIII, 23. Not the grape-stone but the white vine itself or its root is used in a potion against epilepsy.

- (22) Pliny, N.H., XXIII, 21-26. Compare Dioscorides, Mater. Med., IV, 182.

βράθυ βοτάνη	savine (Juniperus Sabina)
βρύσις ὄρνεον	crow
βήρυλλος λίθος	beryl
βύσσα	langouste (Palinurus vulgaris L. astrol.:Cancer

## I, 2, 20-26

Λαβὼν οὖν βήρυλλον λίθον γλύψον κορώνην καὶ ὑπὸ τοὺς πόδας αὐτῆς κάραβον καὶ κατακλείσας βράθυος βραχὺ καὶ ὀλίγον τῆς καρδίας τοῦ πτηνοῦ καὶ τὴν λεγομένην ἀφροδίτην τοῦ καράβου, καὶ φέρει ὡς βούλει. ποιεῖ γὰρ πρὸς δυσκνοτικούς, ἥπατικούς, καὶ νεφριτικούς. ἔστι γὰρ Διὸς ὁ λίθος. τὸν δὲ φοροῦντα ποιῆσει ἐπίχαριν, ἐπιτευκτικὸν εἰς ὃ ἂν ἐπιβάληται. ποιεῖ δὲ καὶ εὐνοίαν εἰς τοὺς γαμοῦντας καὶ ὁμόνοιαν εἰς τὰ ἀνδρόγυνα ὡς λίαν κάλλιτον.

"Take thus a beryl and engrave a crow in it and under its feet a langouste; enclose a little savine and a bit of the bird's heart and the so-called aphrodite of the langouste, and wear it as you like. For it will work for those who are short of breath and for liver and kidney patients. For it is the stone of Zeus. It will make the wearer charming and successful in whatever he attempts. Moreover it provides mutual love and a harmonious sex life for wedded couples, the best as can be."

This amulet must be explained in terms of astrological medicine. As the zodiac signs and their decans were thought to dominate the different parts of the body and thuswise were held responsible for the diseases of the corresponding organ, one had only to find a plant and a stone sympathetic with the decan, engrave in the stone the decan's figure, put a little bit of the plant underneath the stone and wear this amulet set in a ring. All this according to the Holy Book of Hermes Trismegistos (1). The similarity with the amulet descriptions in Cyranides is striking, also with regard to the terminology: the words *κατάκλειστον ἐν ᾧ βούλει*, returning time after time in the Holy Book are also to be found in Cyranides, slightly altered. However, no amulet described in the Holy Book has its exact copy in Cyranides. Nevertheless the Holy Book helps us to explain this one. Indeed, in the Holy Book the second decan of the Cancer is associated with the lungs (2). The intaglio of Cyranides represents a *βύσσα* or *κάραβος θαλάσσιος* and the amulet is said to be effective against breathing problems. Whatever kind of crustacean the *βύσσα* might be - crab, langouste or lobster - (3), it certainly is to be interpreted as the zodiac sign Cancer. The symbol for Cancer in use today is a crab, but on many ancient amulets it is portrayed as a lobster, while langouste and lobster are often mixed up. The Cancer is very popular on magical gems. Two of the three examples shown by Delatte and Derchain are engraved in jasper as prescribed in the Holy Book (4). Cyranides on the other hand suggest to use beryl. Could it be that the distinction between jasper and beryl was rather vague by that time? This opinion was advanced by Kalt, who put forward that the Vulgate translated the Hebrew word *jaspeh* (jasper) by beryl (5). This however is wrong: in Ez. 28, 13 the order of enumeration of the twelve stones in the Hebrew text is not the same as the one in the LXX and in the Vulgate. Hence it is almost impossible to determine which translation goes with which Hebrew name (6). I therefore suggest to leave aside this kind of speculation. I prefer to consider, along with Delatte and Derchain, that the alliance zodiac sign - stone - plant often varies from one lapidarium to another. There may even be divergences between the different versions of one and the same

astrological text (7). Furthermore it is impossible to know which geological species Cyranides meant by the name βήρυλλος. Therefore its description is too vague: "a well-known white stone, very valuable" (8). Possibly it was a variety of the modern beryl, which sometimes was confused in antiquity and in the middle ages with rock crystal (9). Anyway, the beryl of Cyranides owes its power to the fact that it is the stone of Zeus. No other text but Cyranides, as far as I know, makes this association. It seems clear though that Zeus must here be interpreted as the planet Jupiter. Indeed, the astrologist Ptolemaeus says that Jupiter has its ascendancy ( ὕψωμα ) in the sign of the Cancer (10). On that very moment the planet is the most influential. According to Ptolemaeus, Jupiter rules the lungs (11). It is thus obvious why the sign of the Cancer that also dominates the lungs, has to be engraved particularly in a beryl, the stone of Zeus, to protect the amulet wearer from breathing problems.

The crow on the other hand was in antiquity the symbol of matrimonial love (12). So it is clear why this bird shows on an amulet that should provide mutual love for wedded couples. The so-called aphrodite of the langouste of course is to contribute to the harmony of their sex life.

As for the savine, it is said to be diuretic, not only in Cyranides but also in the Materia Medica of Dioscorides (13). According to Cyranides it also cures shortness of breath and asthma (14). Its presence in an amulet for lung and kidney patients is therefore obvious.

It is not clear which of the four elements is supposed to work on the liver. However, a similar amulet also curing liver patients is to be found in the lapidary of Damigeron - Evax (15). The text runs as follows:

1. Berillus lapis, hic magnus lapis est et lucidus, subserenus, clarus, similis oleo apollinis.
2. Sculpis in eo locustam marinam et sub pedes eius corniculam, et sub gemma ponis herbam sauinam modicum auro inclusam.
3. Consecratus gestatus amorem coniungit et maiorem omnium facit.
4. Praeterea facit hic lapis ad oculos uitia et ad omnem ualitudinem si eum in aquam miseris et

ipsam aquam potui dederis. 5. Rupto spiritu et suspiriis et epatis dolore liberat.

If we compare this amulet description with that of Cyranides we remark that the position of the crow and the langouste are reverted. The parts of the bird and the crustacean are omitted and replaced by modicum auro ("a bit of gold"). R. Halleux and J. Schamp refer to the twelfth century translation of Cyranides where the part of the bird's heart is still there, but the langouste's aphrodite is missing (16). The functions ascribed to the amulet are enlarged in the lapidary of Damigeron - Evax: it is also useful for the eyes (17). It was this enlarged version that found its way to the lapidaria of the middle ages (18).

NOTES

- (1) Cf. A.J. FESTUGIERE, La révélation d'Hermès Trismégiste, pp. 128-129 and 139-140. The Holy Book is summarized on pp. 140-143. The bibliography concerning the manuscripts and the various editions can be found there as well.
- (2) C.-E. RUELLE, Hermès Trismégiste, p.258, 15:  
 δεύτερος δεκανός. Οὗτος ὄνομα ἔχει Οὐφικίτ.  
 μορφήν δὲ γυναικός, τὸ δὲ ὅλον σῶμα πτηνοῦ  
 καὶ τὰ πτερὰ ἄνω ἠπλωμένα ὡσανεὶ πετόμενος,  
 ἐπὶ δὲ τῆς κεφαλῆς αὐτοῦ ἐπικεῖμενον πλέγμα.  
 Οὗτος κυριεύει τῶν περὶ τὸν πνεύμονα παθῶν.  
 Γλαύψον οὖν τοῦτον ἐν λίθῳ λάκπειδι χλωρίζοντι  
 καὶ ὑποθεῖς βοτάνην σεληνόγονον κατὰ κλεισον  
 ἐν ᾧ βούλει καὶ φέρει ἀπεχόμενος ὧν ἂν κῶν  
 ἄψηται.
- (3) D'Arcy W. THOMPSON, A Glossary of Greek Fishes, pp. 102-103 identifies κάραβος with the spiny lobster, crawfish or langouste (Palinurus vulgaris L.); H.J. COTTE, Poissons, pp. 221-223 is not sure about the meaning of carabus in Pliny's Natural History: he thinks it may be a langoustine, Penaeus caramote Risso. E. de SAINT-DENIS, Le vocabulaire des animaux marins, pp. 18-19 notes the fact that Pliny erroneously classified the carabi amongst the cancrorum genera, so that modern translators made a mistake by identifying carabus with a crab.
- (4) A. DELATTE - Ph. DERCHAIN, Les intailles magiques, pp. 270-271.
- (5) E.KALT, Biblisches Reallexicon, Paderborn - Vienna - Zürich 1938 (2th ed.), p. 242, s.v. Beryll.
- (6) Cf. G.R. CARDONA, I nomi del berillo, pp. 65-67.
- (7) A. DELATTE - Ph. DERCHAIN, Les intailles magiques, p.269.
- (8) Cyranid., I, 2, 6.
- (9) Cf. the extensive semasiological study of G.R. CARDONA, I nomi del berillo.

- (10) Ptolemaeus, Tetrabiblos, I, 19, 42 :  
ὁ μὲν τοῦ Διδος τῶν βορείων καὶ τῶν γονίμων  
πνευμάτων ἀποτελεστικὸς ὢν ἐν Καρκίνῳ μάλιστα  
βορειότατος γινόμενος αὔξεται πάλιν καὶ πληροῦ  
τὴν δύναμιν.
- (11) Ptolemaeus, Tetrabiblos, III, 13, 148 :  
ὁ δὲ τοῦ Διδος ἀφῆς τε καὶ πνεύμονος καὶ ἀρτη-  
ριῶν καὶ σπέρματος.
- (12) Cf. D'Arcy W. THOMPSON, A Glossary of Greek  
Birds, pp. 170-171 with references to Aelian,  
Horapollo, etc..
- (13) Cyranid., I, 2, 10 ; Dioscor., Mat. Med., I,  
76, 7-8; also in later latin medical texts,  
e.g. Antidotarium Bruxellense 39.
- (14) Cyranid. I, 2, 11 : πρὸς οὖν δυσπνοιχοὺς καὶ  
ἀσθματικούς, βράθυρος οὖγ. β'.
- (15) Damigeron - Evax XXXV (ed. R. HALLEUX - J.  
SCHAMP, p. 276).
- (16) L. DELATTE, Textes latins, p. 32: reclude et  
modicum sauinae et modicum cordis uolucris sub  
lapide, et porta ut uis. Could it be that the  
sexual organ was deleted under christian  
influence?
- (17) Cf. Psellos, Lap. VII (ed. de MELY - RUELLE, p.  
202). The use of the beryl against eye diseases  
probably explains the etymology of the german  
name for spectacles (Germ. Brille, Dutch bril),  
cf. E. ROSEN, The Invention of Eyeglasses, JHM  
11 (1956), pp. 13-46.
- (18) A.o. Marbode of Rennes and Vincent of Beauvais,  
cf. J.M. RIDDLE, Marbode of Rennes' De  
lapidibus, pp. 49-50 and 103.

γλυκισβόη βοτάνη	peony ( <i>Paeonia officinalis</i> , corallina)
γλαυκος πτηνόν	owl
γνάθιος λίθος	gnathios (?)
γλαυκος ἰχθύς	glaucus (?)

I, 3, 32-38

Ἐὰν δέ τις εἰς γνάθιον λίθον γλύψῃ γλαυκα τὸ ὄρνεον καὶ ὑπὸ τοῦς πόδας αὐτοῦ γλαυκὸν τὸν ἰχθύον, τούτου δὲ τοῦς ὀφθαλμοῦς ὑποκατακλείσας φορέσῃ ἀπεχόμενος χοιρέου κρέατος καὶ πάσης βυκαρίας, σκοτίας δὲ γενομένης φανήσεται γενναῖος τοῖς ἀνθρώποις. δόξουσι γὰρ οἱ ὄρωντες ἐνθεὸν σε εἶναι. εἰς δὲ τὴν ἡμέραν δ' ἂν εἴπῃ πιστευθήσεται. εἰς κοίτην δὲ φορούμενον ὀράματα ἀληθῆ δείκνυσιν.

"If you engrave in a gnathios stone an owl and under its feet the fish glaucus, you enclose the latter's eyes and you wear it abstaining from pork and any kind of filth, you will seem noble to the people when darkness has come. For those who see you will think that you are inspired by the god. When daylight comes they will trust everything you say. If you wear it in bed it will show you unerring dreams."

The figure of the bird with a fish under its feet is wide-spread, not only on gems but also on ceramics of diverse origin. Fig. 86 in the book of Delatte and Derchain for example, is an intaglio showing a phoenix and a fish as an emblem of regeneration (1). In christian iconography the combination of a dove and a fish often occurs, the fish obviously being the symbol of Christ, whereas the dove may stand for the human soul or symbolizes Christ as well (2). Furthermore fish and dove play an important part in the Punic cult of Atargatis, so that their figures are also to be found together in this context (3). Anna Roes published an interesting article on this iconographical topic (4). She gives several examples of a bird with a fish under its feet on prehistorical painted ware, on Palestinian vases of the bronze age and also in Greek geometric art. In her view this combination represents a sun emblem, especially for the cases where the bird is an eagle. She suggests that "the fish may stand for the nightly phase of the sun, for the sun sunk into the sea, whereas the eagle symbolizes the sun in the sky" (5). In most of the cases the fish cannot be identified. On the other hand, the owl does not seem to occur in this combination.

The owl on its own however certainly does appear on magical gems. A beautiful example is to be found in the collection of the National Museum of Copenhagen. It is a greenish stone showing an owl with spread wings. On either side of its head a Ⓞ is engraved. The reverse side of the gem has an inscription ΣΑΒΑΩⓄ ΑΛΟΝΑΙ ΕΙΣΕΦΥΛΑ ΙΑΩ (6). To Eitrem, who described this amulet, the meaning is not clear, but in my view the comparison with a series of Tunesian amulets described by Merlin, solves his problem quite well. The pictures on these amulets are very much alike and the inscriptions clearly prove that they were to give protection against Invidia, i.e. envy symbolised by the owl (7). Indeed, the reputation of the owl in antiquity was rather bad. The owl was considered as the bearer of the evil eye, the incarnation of Invidia, a bird of evil omen that often brings death along. On the other hand the owl also has good qualities: as a bearer of the evil eye it is likewise in a position to avert evil. Hence its figure on prophylactic amulets (8)! Moreover, the flight of the owl can

predict victory and the bird is said to be an excellent weather prophet (9). The owl's gift of prophecy is emphasized in Cyranides. As it is sacred to Athena (10), it also shares her wisdom. It is therefore obvious that the wearer of an amulet showing its figure will be considered as divinely inspired. The fact that the importance of darkness is emphasized of course can be explained by the owl's reputation as a nightbird: on the Tunesian amulets against Invidia the owl is called "ruler of the sky in the night" (11). Thompson suggests that the association of the owl with Athena perhaps is to be connected with her character as goddess of the night. The epithet of Athena, γλαυκῶπις, was indeed also applied to the moon (12). On the other hand however, the amulet doesn't lose its power in daylight, since in Egypt the owl was considered as a sun emblem (13)!

We all know that the common Greek word for owl is γλαυξ. In Cyranides however it is called γλαυκος. Γλαυκος is also the name of a fish, often mentioned in texts but impossible to identify (14). In popular medicine this fish is used against γλαυκοφθαλμία, obviously in accordance with the rule of the "Signaturlehre" (15), but this seems of no importance for the amulet in Cyranides. The representation of this fish and its eyes enclosed in the amulet must in the first place be explained by mythology. There is indeed a sea divinity called Glaucus. The legends concerning Glaucus are rather intricate. I will therefore not go further into this matter (16). But certain details must retain our attention. Glaucus was famous for his art of prophecy which he taught to Apollo (17). Virgil even made him the father of the Sibylla of Cumae (18). Nicander also says that he was seized with divine madness after tasting some herb. The word used by Nicander is ἔνθεος (19). A comparison with the words of Cyranides concerning the amulet wearer - ὁδξουσι γὰρ οἱ ὄραντες ἔνθεόν σε εἶναι ("those who see you will think that you are inspired by the god") - is quite relevant. So it is clear that γλαυκος the fish as well as γλαυκος the owl were adopted in the amulet for the same reason, i.e. prophecy and divination. Furthermore their exact homonymity was surely meant to increase their power. The owl and the fish are so to speak one and the

same. It is therefore not important whether one should enclose the eyes of the fish or those of the bird (20). We know that the owl's large eyes with their fixed and piercing look that can fathom the darkness of the night as well as bright daylight, symbolize visual acuity, spiritual and material in a similar way (21). The symbolism attached to the eyes of the fish should be quite the same.

The stone gnathios used for this amulet is unknown. Its description in Cyranides is too vague for any identification : "The stone gnathios is hard as a millstone, like jaw(bone)" (22).

The lapidary of Damigeron - Evax adopted this amulet description of Cyranides, although slightly altered (23). The stone is called there epignathion (24). The bird glaucius is wrongly identified with a hoopoe (25). Instead of the eyes of the fish the wearer has to enclose the right eye of both, bird and fish (26). Also the prescriptions for the amulet's use are slightly changed. But all this doesn't have much impact on the whole of the text nor does it contribute to its understanding.

Participation in divine power - the gift of prophecy and divination, to become εὐθεός - obviously requires certain prescriptions of purity. Purity indeed is a precaution one must take to participate in magical actions, regardless of the culture one belongs to. The special emphasis of the purity requirement for this amulet is to be explained by the direct contact of the amulet wearer with divinity : he becomes εὐθεός (27). The consumption of pork prohibited by the levitic alimentary laws but at the same time a taboo in all the Near East, must be regarded here as the limit of pollution. As no special purity prescriptions are required for the other amulets of Cyranides, I do not think that this abstinence from pork must be seen in terms of sympathy and antipathy as it is in the Holy Book of Hermes Trismegistos. There indeed the wearer of the relevant amulet should abstain from the food that is in antipathy with the decan ruling it (28).

NOTES

- (1) A. DELATTE - Ph. DERCHAIN, Les intailles magiques, p. 70.
- (2) Anna ROES, Birds and fishes, p. 465; F.J. DOELGER, IXΘΥΣ V, pp. 320-322.
- (3) F.J. DOELGER, IXΘΥΣ I, p. 439.
- (4) Anna ROES, Birds and Fishes, pp. 461-472.
- (5) Anna ROES, Birds and Fishes, p. 465.
- (6) No inventory number. Description S. EITREM, Die magischen Gemmen und ihre Weihe, p. 77.
- (7) A. MERLIN, Amulettes contre l'Invidia provenant de Tunisie, REA 42 (1940) (Mélanges Radet), pp. 486-493.
- (8) A beautiful figure of the owl as an opponent of the evil eye is also shown on an antique Roman mosaic (Conservat. Alinari 27 190); cf. F.J. DOELGER, IXΘΥΣ IV, pl.290. Could it be that the ☉ engraved on the Copenhagen amulet is not the letter but represents the evil eye? The inscription IAΩ☉ ΣΑΒΑΩ☉ on the reverse side of a bronze amulet against the evil eye in the Rockefeller Museum of Jerusalem (North Gallery IV nr.1566) tells for this interpretation: it seems improbable that the ☉ after IAΩ should be a mere engraver's error.
- (9) About superstition on owls see M. WELLMANN, Eule, RE 11.Hb. (1907), col.1069-1070. About the owl as a bird of death see R. LAFFINEUR, Le symbolisme funéraire de la chouette, AC 50 (1981), pp. 432-444.
- (10) Cyran., I, 3, 6: τοῦτο τῆ Ἀθηνᾶ ἀναγράφεται.
- (11) A. MERLIN, Amulettes contre l'Invidia, pp. 491-492.
- (12) D'Arcy W. THOMPSON, A Glossary of Greek Birds, p. 80. For the text of Cyranides it is of no importance that γλαυκῶπις probably is derived from the colour adjective γλαυκός rather than from the name of the owl γλαβέ; cf. C. MEILLER, La chouette d'Athéna, REA 72 (1970), pp. 5-6. P. CHANTRAINE, Grec γλαυκός, Γλαυκος et mycénien Karauko, Mélanges d'archéologie, d'épigraphie et d'histoire, offerts à J. CARCOPINO, Paris 1966, pp. 201-202 offers no opinion on the subject. P.G. MAXWELL-

- STUART, Studies in Greek Colour Terminology, vol. I Γλαυκός, Leyde 1981, p. 143 thinks that the connection γλαύξ - γλαυκός is unlikely, but pp. 169-170 (The Image of γλαυκῶπις) he is sure that "the link between fear and light-blue is no accident but a part of the history of the Evil Eye in the Mediterranean area." The association of the owl with Athena maybe from a later date (cf. F. BROMMER, Eine frühe attische Amphora mit Greifen, Jahrbuch der Berliner Museen 4 (1962), p. 10 and M.H. GROOTHAND, The Owl on Athena's Hand, B.A.Besch. 43 (1968), p. 35-36), but at the time of Cyranides it cannot be denied. According to P.G. MAXWELL-STUART, o.c., pp. 32-33 the name of the owl may be derived from the colour adjective, whereas the glazed, dull appearance of the moon seen during daylight hours made it to be called γλαυκῆ. A word-play of this kind may also provide a clue to the link between γλαύξ and Athena's epithet γλαυκῶπις.
- (13) O. KELLER, Die Antike Tierwelt II, pp. 39-40.
- (14) Cf. D'Arcy W. THOMPSON, A Glossary of Greek Fishes, p. 48. H.J. COTTE, Poissons, p. 116 is inclined to follow Cuvier who identified the γλαυκός with Sciaena aquila Risso. See also E. de SAINT-DENIS, Le vocabulaire des animaux marins, pp. 42-43.
- (15) Cf. R. STROEMBERG, Griechische Fischnamen, p. 90, referring to Cyran., IV, 9, 5. Other medicinal properties in this chapter IV, 9.
- (16) Cf. WEICKER, Γλαυκός, RE 13.Hb. (1910), col. 1408-1413; B. DEFORGE, Le destin de Glaucos ou l'immortalité par les plantes, Visages du destin dans les mythologies, Mélanges Jacqueline Duchemin, Travaux et mémoires, Actes du colloque de Chantilly 1er - 2 mai 1980, Paris 1983, pp. 21-39.
- (17) Nicander ap. Athen., VII, 296f :  
ὁ δ' αὐτὸς Νίκανδρος ἐν πρώτῳ Αἰτωλικῶν τὴν μαντικὴν φησὶν Ἀπόλλωνα ὑπὸ Γλαυκοῦ διδάσθηναι.
- (18) Virgil, Aen., VI, 36. Other references to his art of prophecy in WEICKER, a.c., col. 1410.
- (19) Nicander ap. Athen., VII, 297a.

- (20) The reading adopted by Kaimakis in Cyran., I, 3, 33 is τούτου referring to the fish, but other mss. offer the reading τούτων referring to the bird as well as to the fish.
- (21) Cf. W. DEONNA, Le symbolisme de l'oeil, pp. 84-85.
- (22) Cyran., I, 3, 9 : γνάθειος λίθος ἐστὶ ἐκλήρηδος ὡς μύλιτης , ὁμοῖος γνάθῳ.
- (23) Damigeron - Evax LXVI (ed. HALLEUX - SCHAMP, p. 288) : "Epignathion lapis, sculpis glaucium auem, idest upupa, et sub pedes eius piscem glaucium et oculis eorum animalium dextris sublatis (idest tultis) et include eum in auro, et munditer gestatus facit quasi in tenebris terribilia daemonia apparere interdiu. Si autem quidquid dixerit, creditur eidem. In dormitione autem si quis usus fuerit eo, aliqua fantasmata uera uidebit. Nocte eo non uteris". R. HALLEUX - J. SCHAMP, Les lapidaires grecs, p. 342 compare with the XIIth century latin translation of Cyranides (L. DELATTE, Textes latins, p. 34). The alterations by Damigeron - Evax however seem to be of another provenance.
- (24) "Epignathion" is a conjecture by Halleux - Schamp, based on Cyranides. The original readings are "epheignation C : epheignacion T".
- (25) Halleux - Schamp conjectured "glaucium" out of "gradium C: gladium T". Γλαύκιον indeed is a kind of wild duck (Anas leucophthalmos) as they stated, but the bird on the amulet of Cyranides on which text the conjecture is based, is called γλαύκος or γλαύξ, which for sure is Athena's owl (cf. Cyran., I, 3, 6-8). The identification by Damigeron - Evax with the hoopoe may be based on the fact that the hoopoe's art of prophecy was very famous (cf. M. WAEGEMAN, The gecko, p. 221).
- (26) Cf. n. 20.
- (27) The purity prescriptions for the consecrating and wearing of amulets are discussed by S. EITREM, Die magischen Gemmen, esp. pp. 62-63. The Tunesian owl amulets against Invidia often bear the inscription "Nihil tibi ad anima(m) pura(m) et munda(m)", which also means that purity is required for those wearing it (cf. A. MERLIN, Amulettes contre l'Invidia, pp. 489-491).

- (28) Cf. A.J. FESTUGIERE, La révélation d'Hermès Trismégiste I, pp. 140-143.

δρακόντιος βοτάνη	dragon arum ( <i>Dracunculus vulgaris</i> )
δενδροκολάπτης πτηνόν	woodpecker ( <i>Picus</i> )
δράκων ἰχθύς	weever-fish ( <i>Trachinus draco</i> L.)
δενδρίτης λίθος	dendrites

I, 4, 45-51

Ἐὰν οὖν τις γλύψῃ εἰς δενδρίτην λίθον τὸν δενδροκολάπτην, ὑπὸ δὲ τοῦς πόδας αὐτοῦ δράκοντα θαλάσσιον καὶ ὑποκατακλείσας τὴν εὐρισκομένην βοτάνην ὑπὸ τοῦ δενδροκολάπτου καὶ φορέσῃ, πάντα θύρα αὐτῷ ἀνοιγήσεται καὶ δεσμοὶς καὶ κλειθρα λύσει, ἄγρια θηρία αὐτῷ ὑποταγήσεται καὶ ἡμερωθήσεται, θεοὶς τε καὶ ἀνθρώποις πάντιν ἔσται ἡγαπημένος καὶ εὐάκουστος. καὶ ὅπερ αὖν θελήσῃ ἐπιτεύξεται, καὶ ὃ βούλεται περιγενήσεται.

"If one thus engraves in a dendrites stone the woodpecker and under its feet the weever-fish and if one encloses the herb found by the woodpecker and wears it, every door will go open for him and he will unfasten bonds and bars, wild beasts will be obedient to him and they will grow tame, he will be loved by gods and men all together and they will be inclined to give ear to him. And he will be successful in whatever he wants, and all his desires will be fulfilled."

The woodpecker is the principal character in the well-known Shamir-legend (1). Allusions on this legend are to be found not only in Cyranides but also in several other ancient Greek and Latin texts (2). The woodpecker makes its nest in a hollow tree. When the entrance is blocked up with hard material as stone or mud, this bird is able to remove it by using a certain herb. This herb can be useful for human beings too, since it opens every door for its owner. It is obvious that the concept of this amulet in Cyranides is based on this legend: the woodpecker's figure engraved in the stone along with the herb enclosed underneath will arrange for all doors to open for the wearer, in literal as in figurative sense, so that he will get anything he wants: animals, human beings and gods ready to serve his wishes. The herb meant here is not the dragon arum, the plant of this chapter, but the specific herb used by woodpeckers which was said to grow under the tree they live in (3). This herb was identified with the peony (Paeonia corallina Retz.) on the ground of Theophrastus' statement that "the peony, which some call glykyside, should be dug out at night, for, if a man does it in day-time and is seen by a woodpecker while picking the fruit, he risks the loss of his eyesight; and if he is cutting the root, his posteriors will fall down" (4).

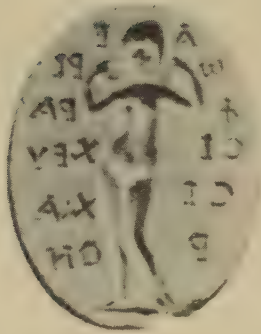
The identification of the woodpecker's herb with Paeonia corallina makes it clear why the stone used for this amulet should be a dendrites. In Cyranides it is said that this stone resembles coral and that it can be found in India along rocky seashores, its size being about six fingers (5). That the dendrites of Cyranides is a kind of coral is also attested by other witnesses (6). It is no coincidence that the size of the dendrites is expressed in fingers: another name for the peony indeed is Ἰδαῖοι δάκτυλοι, probably because of its finger-shaped appearance (7). The association of the coral with the coral red peony is thuswise obvious. On the other hand Cyranides preferred the name δενδρίτης to κοράλλιον, not only because of the initial letter, but certainly also because of the partial homonymity with the woodpecker's name which is called here δενδροκολάπτης, its more common name being δρυοκολάπτης.

The fish is the most enigmatic element of this amulet. Its figure is part of the iconographic type that already appeared in the previous chapter, i.e. the fish and the bird combination which may have had a solar character. The δράκων was identified with the Trachinus draco L., the weever-fish (8). Although this fish with its venomous dorsal fin was used as materia medica in popular medicine and magic (9), no specific connection with the other elements of this amulet can be perceived. It is of course related with the δράκόντιος by its homonymity and by the fact that both occur together in certain recipes prescribed in Cyranides. Since however the Dracunculus vulgaris doesn't play any part in the amulet, this seems quite unimportant.

## NOTES

- (1) A survey of the different forms of the legend and bibliography in L. BLAU, Shamir, The Jewish Encyclopedia XI, New-York London 1905, pp.229-230.
- (2) Cyran., I, 4, 36-44; III, 12, 1-8; Aelian, N.A., I, 45; Dionys., Ixeut., I, 14; Pliny, N.H., X, 40; XXV, 14. See also D'Arcy W. THOMPSON, A Glossary of Greek Birds, pp. 92-93; STEIER, Specht, RE 6. Hb (1929), col. 1550.
- (3) There is a variant of the amulet mentioned in Cyran., I, 4, 64-70: in case one shouldn't find the woodpecker's herb, one is also allowed to enclose the tip of the bird's wing, the heart and one seed of the dragon arum and a stone or fat of the fish. This variant is but a second choice and its working seems to be rather in function of the medical properties ascribed to the different elements. F. de MELY, Le poisson, p. 323 only refers to this variant.
- (4) Theophr., Hist. plant., IX, 8, 6 : τὴν καιωνίαν, οἱ δὲ γλυκυκίδην καλοῦσι, νύκτωρ κελεύουσιν ὀρύττειν· ἔάν γὰρ ἡμέρας καὶ ὀφθῆ τις ὑπὸ ὀρνυκολάπτου τὸν μὲν καρπὸν ἀπολέγων κινδυνεύειν τοὺς ὀφθαλμοὺς, τὴν δὲ ῥίζαν τέμνων ἐκπίπτειν τὴν ἕδραν.  
Cf. Pliny, N.H., XXV, 29 : praecipiant eruere noctu, quoniam si picus Martius uideat tuendo in oculos impetum faciat. Neither Theophrastus nor Pliny do believe this. See also STEIER, Specht, col. 1550.
- (5) Cyran., I, 4, 21-23 : Δενδρότης λίθος, ὃς γινώσκειται ὑπὸ πολλῶν παρόμοιος κοραλλίῳ. οὗτος φύεται ἐν τῇ Ἰνδικῇ παρὰ τοὺς πετρώδεις τόπους τῆς θαλάσσης, ἔχων ὕψος ὡσεὶ δακτύλων ἕξ.
- (6) Cf. H. STEPHANUS, Thesaurus graecae linguae, s.v. δενδρότης : "Δ. λίθος, Corallium, in Lex. Ms. Nicomedis Iatrosophistae DUCANG. Lex. Botan. ex cod. Reg. 1847 : Δενδρότης θαλάσσια, ἥτοι κοράλλην. Idem App. c.54"; Ps. Hippocrates, ed. F. de MELY, Les lapidaires II, p. 190. The dendrites mentioned by Martianus Capella, I, 75 and Pliny, N.H., XXXVII, 192 clearly is another stone.

- (7) Dioscorides, Mat. Med., III, 140.
- (8) D'Arcy W. THOMPSON, A Glossary of Greek Fishes, pp. 56-57; R. STROEMBERG, Griechische Fischnamen, pp. 121-122; H.J. COTTE, Poissons et animaux aquatiques, pp. 77-79.
- (9) Cf. D'Arcy W. THOMPSON, A Glossary of Greek Fishes, p. 57; also Cyran., IV, 14; I, 4, 16-18; I, 4, 32-35.



Aphrodite.

Paris, Bibl. Nat. Cab. des Méailles 2238bis  
(=Delatte - Derchain nr.241)

lapis lazuli, 31 x 24mm.

εὐζωμος βοτάνη	rocket (Eruca Sativa L.)
εὐβοή πτηνόν	nightingale (Daulias Luscinia)
ἐχτινος ἰχθυοειδής	sea-urchin (Classis Echinoidea)
εὐανθος λίθος	euanthos

I, 5, 27-31

Εἰς δὲ τὸν εὐανθη λίθον τὸν πάγχρυσον γλύφεται Ἀφροδίτη τὰς τρίχας καὶ τοὺς πλοκάμους τῆς κεφαλῆς ἀναδεσμονυμένη καὶ ὑποβάλλεται ῥίζα τῆς βοτάνης καὶ ἀηδόνας γλῶσσαν καὶ κατακλείσας φέρει. καὶ ἔση πᾶσιν ἀνθρώποις φιλητὸς καὶ γνωστὸς καὶ ἠδύλαος οὐ μόνον ἀνθρώποις, ἀλλὰ καὶ θεοῖς καὶ δαίμοσι, πᾶν δὲ θηρίον φεύξεται σε .

"In the euanthes stone, the all-golden, Aphrodite is engraved binding up her hair and the locks on her head, and a root of the plant and a nightingale's tongue are put underneath. Wear it after setting. And you will be loved by everybody and you will be well-known and seem sweet-voiced not only to human beings but also to gods and demons. Every wild animal will flee you."

The figure of Aphrodite, nude, standing to front and holding a tress of her long hair out in each hand, is a current iconographical type. Numerous gems showing this figure bear the inscription  $\alpha\rho\rho\iota\tau\phi\rho\alpha\kappa\iota\varsigma$ , which apparently is a magical name for Aphrodite (1). Barb was the first scholar dealing with this subject. He connected this iconographical type with Aphrodite's birth and explained her gesture as one of fecundity (2). Delatte and Derchain called this goddess "Aphrodite se lissant les cheveux". They also took into consideration the inscriptions on the reverse side and compared them with similar texts in magical papyri. According to Delatte and Derchain the allusion on fecundity is possible though not clear. They pointed out that these gems are in the first place love amulets (3).

The amulet described in this chapter of Cyranides indeed has nothing to do with fecundity, but is meant as a love spell working on gods and demons as well as on human beings. This spell is illustrated by the goddess's gesture. The verb used in the text is very enlightening. The idea of "binding" is expressed in several languages by a word that also means "to put a spell on". In Greek  $\kappa\alpha\tau\alpha\delta\acute{\epsilon}\omega$  and  $\kappa\alpha\tau\acute{\alpha}\delta\epsilon\sigma\mu\omicron\varsigma$  are actually used for the simple act of tying, but also for the binding by a magical spell (4). The verb  $\acute{\alpha}\nu\alpha\delta\epsilon\sigma\mu\acute{\epsilon}\omega$  which appears in this amulet description also has this metaphorical sense referring to religious scruples or taboos (5). Knots and binding thuswise play an important part in magic all over the world. Their function is very well explained by Annequin: "Le lien est l'incarnation même de la force magique puisque, seul il assure la permanence du Cosmos et rappelle les longues chaînes de correspondances qui expriment la sympathie" (6).

This sympathetic power of binding is also to be found in the Aphrodite amulets. The wearer of an amulet with the figure of the goddess making the gesture of binding will likewise bind the love of the entire cosmos to his person through the transferability of the magical gesture depicted on the gem (7). The binding is supposed to protect him in the same way against wild animals (8).

It is not surprising that the gesture concerns especially the hair of Aphrodite, since the use of hair was very common in love magic (9), while on the other hand love magic regularly employed the device of binding (10).

The other elements of this amulet are to be explained as attributes of the love goddess Aphrodite.

The εὐζωμοσ or εὐζωμων , Eruca sativa L., is a kind of wild cabbage which does not occur in northern Europe while it is a very popular vegetable on mediterranean tables. In antiquity it was considered as an aphrodisiac (11). Strangely enough Cyranides mentioned the fact that priests often eat εὐζωμων to keep chaste (12). On the other hand however its seeds are used in a recipe against impotence (13). In my view this apparent contradiction can be explained by the ambivalent potency ascribed to most magical elements, seeing that magical logic just does not correspond with scientific logic. Anyway, the ,rocket's root enclosed in the Aphrodite amulet is there to make the wearer beloved. Its relationship with the goddess is obvious when we bear in mind the name of Venus Erucina which is derived from Eruca through popular etymology (14).

The nightingale's tongue enclosed in the amulet obviously symbolizes the sweet song of this bird. By wearing it one will become as sweet-voiced as its original owner (15).

The stone εὐανθοσ is said to be dedicated to Aphrodite while its name as well as the descriptive adjective refer to the goddess (16). No other text mentions a stone named εὐανθοσ , but there are good reasons to believe that the εὐανθοσ of Cyranides can be identified with the πάγχροσ or πάγχρουσ which appears in the lapidary of Damigeron - Evax and in Pliny's Natural History (17). First of all there are three manuscripts of Cyranides showing the reading πάγχροσ instead of πάγχρουσ, thuswise interpreting πάγχροσ as a substantive, name of the stone, and εὐανθησ as the descriptive adjective (18). One should then translate : "the panchrus is a bloomy, gay-coloured stone". This reading however does not match in the general pattern of the text which requires a stone beginning with the letter epsilon. On the other

hand it is very reliable that the adjective πάγχρως was chosen by the author of Cyranides not only in function of its reference to Aphrodite but also because of its similarity with the word πάγχρως. Furthermore the word πολύχρωμος describing the εὐανθός of Cyranides corresponds very well with the meaning of the word πάγχρως, "of all colours", and with its description in the lapidary of Damigeron - Evax: "Panchrus lapis habet colorem omnem, purpureum, nigrum, pallidum, roseum, uiridem, omnes diuersos colores habens".

Another remarkable fact is that some manuscripts of the lapidary of Damigeron - Evax add a few lines to the chapter on the panchrus, mentioning that the stone is also called pantheros because of its various colours (19), while the last words of the amulet description in Cyranides are: πάν ὁὐ θηρῶν φεῖξεται σοῦ. It is likely that this specific function of the amulet was added because of the verbal magic expressed by the homophony of the words πάν θηρῶν and the name of the stone pantheros.

If the identification of the εὐανθός with the panchrus can be accepted, this stone probably is a kind of opal (20). A preference for the bluish variety of the stone may be supposed, since most of the gems showing this picture of Aphrodite are of that colour (21), while the description of the stone in Cyranides also mentions that it can be "like dark-blue with golden veins" (22).

NOTES

- (1) Cf. A. DELATTE - Ph. DERCHAIN, Les intailles magiques, pp.183-189, figg. 241-251.
- (2) A.A. BARB, Diva Matrix, a faked gnostic intaglio in the possession of P.P. Rubens and the iconology of the symbol, JWCJ 16 (1953), pp.193-238, pll. 27-33.
- (3) A. DELATTE - Ph. DERCHAIN, Les intailles magiques, pp.183-184.
- (4) Cf. M. ELIADE, Les dieux lieux, pp.26-27 with examples in other languages.
- (5) Johannes Lydus, De ostentis, 6.
- (6) J. ANNEQUIN, Recherches sur l'action magique, p.19. See also S. EITREM, Bindezauber, RLAC II (1954), col. 380-385 with bibliography gathered by H. HERTER; S. GANDZ, The Knot in Hebrew Literature, reprint from Isis 14 (1930).
- (7) Binding is frequently employed in love magic, e.g. Virgil, Bucol., VIII, 77-78. S. EITREM, Bindezauber, col.383 refers to different papyri.
- (8) M. ELIADE, Les dieux lieux, pp. 22-24 gives examples of the ambivalent power of binding : it can be practiced in a negative way to destroy adversaries, but also in a positive way against death, disease, etc.. M. Eliade also mentions the practice of binding as a protection against wild animals.
- (9) E.g. Lucian, Dial. meretr., IV, 4-5; Apuleius, Metam., III, 16. Cf. B.KOETTING, Haar, RLAC 98 (1984), col. 179-180; L. SOMMER, Das Haar in Religion und Aberglauben der Griechen, Münster (Westf.) 1912, p. 84; P. SCHREDELSEKER, De superstitionibus graecorum quae ad crines pertinent, Heidelberg 1913, pp. 73-77.
- (10) See n. 7 supra.
- (11) J. MURR, Die Pflanzenwelt, p. 180 refers to Macer Floridus 1033. P.T. EDEN, Venus and the cabbage, p. 458 refers to several Latin authors.

- (12) Cyran., I, 5, 9-14 : τὸ οὖν εὐζωμον θερμαίνει. ἐπεὶ πλάνη ἐστὶ παρὰ πολλοῖς μὴ εἰδότες τὰς φύσεις μίας ἐκάστης βοτάνης. τὸ οὖν εὐζωμον καὶ τὸ πηγανον καὶ τὸ ἄγνον οἱ ἱερεῖς ἐθέλουσιν ἀγνεύειν χάριν· τὸ μὲν γὰρ χλωρὸν εὐζωμον ψύχει τὰς συνουσίας καὶ οὐκ ἐᾷ πολλὰ συνουσιάζειν, οὔτε πυκνῶς ὀρεῖαν οὔτε ὄνειριάζειν· διὸ καὶ συνεχῶς ἐθέλεται παρὰ τῶν ἐν τοῖς ἱεροῖς διατριβόντων.
- (13) Cyran., I, 5, 15-20.
- (14) Cf. P.T. EDEN, Venus and the cabbage, p. 458 : the adjective Erucina can be a derivation from Eruca as well as from Eryx, a mountain in N.W Sicily from where this specific cult of Aphrodite was brought to Rome in 217 B.C.. P.T. EDEN, o.c., pp. 448-459 throws a light on Venus' character as a goddess of vegetation.
- (15) In Greek literature the nightingale often appears as a symbol for poets and their poetry, cf. STEIER, Luscinia, RE 26 (1926), col. 1864-1865.
- (16) Cyran. I, 5, 7 : εὐανθος λίθος ἐστὶ πάγχρυσος· οὗτος ἀνήκειν τῇ Ἀφροδίτῃ, ὅτι πολυχρωμὸς ἐστὶ καὶ ἀερῶδης, ἢ ὡς κυανὸς ἔχων χρυσὰς ἴvac.
- (17) Damigeron - Evax XXXVII (ed. HALLEUX - SCHAMP, pp. 277-278); Pliny, N.H., XXXVII, 178.
- (18) ICO app. crit. KAIMAKIS, p. 44.
- (19) Damigeron - Evax XXXVII add. (ed. HALLEUX - SCHAMP, p. 293) : "Qui ad similitudinem panthere que omnibus coloribus est picta, dictus est pantheros propter colores plurimas".
- (20) Cf. J.M. RIDDLE, Marbode of Rennes' De lapidibus, p. 85; EICHHOLZ ad Pliny, N.H., XXXVII, 178.
- (21) A. DELATTE - Ph. DERCHAIN, Les intailles magiques, p. 184.
- (22) Cyran., I, 5, 8 : ἢ ὡς κυανὸς ἔχων χρυσὰς ἴvac. This remark however occurs but in one single manuscript (R).

ζμιτλαξ βοτάνη	bindweed (Convolvulus sepium L.)
ζώκος πτηνόν	harpè, vulture
ζμύρνα θαλασσεύα	murry (Muraena Helena L.)
ζμάραγδος λίθος	emerald

I, 6, 19-24

Ὁ δὲ ζμάραγδος, λίθος ἐστὶ χλωρὸς βαρῦτιμος. Γλύψον οὖν ἐν αὐτῷ τὴν ἄρπην καὶ ὑπὸ τοὺς πόδας αὐτῆς τὴν ζμύραιναν καὶ ὑπὸ τὸν λίθον κατακλιεὶον ῥίζαν τῆς βοτάνης, καὶ φόρει πρὸς ταραχώδη ἐνόπνια καὶ θάμβει καὶ ὄσα σεληνιαζομένοις ἀνήκει· παθεὶ δὲ καὶ κωλικούς. κάλλιον δὲ, εἰ καὶ στέαρ ζμυραίνης ὑποβληθεῖη. τοῦτο ἔνθεόν ἐστιν.

"The emerald is a green stone of high value. Thus engrave in it the harpè and under its feet the murry and enclose under the stone a root of the plant, and wear it against delirious dreams, terror and everything that comes up to the moonstrucked. It also stops colic. It is better if a murry's fat is put underneath. That is divine."

The alphabetical order of the chapters required that the initial of the four elements of this amulet should be a zeta. Therefore an orthographical adaptation was sometimes necessary. As thus the author of Cyranides preferred ζμτλαξ to μτλαξ or μτλαξ, and ζμάραγδοc to μάραγδοc (1). The name of the fish ζμϋρνα appears only in the lemma. It is a double for the middle greek μϋρνα, designating the well-known μύραινα or μύραινα, the murre. Furtheron in the text of Cyranides the name ζμύραινα θαλασσεα is used.

So, only the bird ζῶκος or ζῶδι is bearing a name that originally begins with a zeta. In Cyranides it is identified with the ἄρπη and described as a kind of white, corpse-devouring vulture (2). Ἄρπη is a well-known name for a bird of prey but the description of it is mostly too vague to permit any identification (3). Only Dionysius in his Ixeuticon unmistakably describes a lammergeyer (4). The description in Cyranides however is rather that of another species of vulture, the white pharao's hen or Egyptian vulture (Neophron percnopteros) (5), but it is more likely that the text of Cyranides refers to a fabulous bird with characteristics of different species of vultures, as Aristotle does when he describes the περκνόπτεροc (6). The symbolic or mythological significance of its picture on the amulet is therefore to be focused.

Once more we notice the bird-fish combination which probably is a solar symbol. As the solar character of the vulture is well-known, it is quite understandable that it makes part of it. Furthermore the ἄρπη was said to protect its nest against charms with ivy, in Greek κίccoc (7), this precisely being the plant with which the ζμτλαξ, one of the other elements of the amulet, is compared. Ζμτλαξ, μτλαξ or μτλαξ λεία, extensively described by Dioscorides (8), is to be identified with hedge bindweed, Convolvulus sepium L. In our gardens the combination of ivy and hedge bindweed is quite frequent, while in Cyranides as well as in Dioscorides' Materia Medica the two plants are compared with one another (9). Thuswise there is a certain relationship between the bird ἄρπη and the plant ζμτλαξ.

The plant ζυτλαξ however is surely the central element of the amulet. Dioscorides indeed writes that the fruit of the hedge bindweed is said to cause delirious dreams (10). We notice that in Cyranides the same words ἐνύπνια παραχώδη are employed, but that the amulet on the contrary is meant to protect the wearer from this kind of dreams. This contradiction however is not surprising when we bear in mind the rule of homoeopathy : similia similibus curantur.

Hedge bindweed as well as ivy is associated with Dionysos (11). Furthetmore it is said to be under the planetary influence of the moon (12). Probably people linked the delirious dreams and other symptoms of lunacy with this influence. Hedge bindweed however really is poisonous and can procure hallucinations (13).

The healing of gripes, another purpose of the amulet, is also to be ascribed to the enclosed root of the hedge bindweed : in homoeopathy this plant is used as a strong laxative (14).

The function of this amulet thus can be explained entirely by one of its elements. This however does not mean that the other elements are superfluous. I already mentioned the relationship between the bird ἄρπη and ivy, κίττος, with which hedge bindweed is compared in Cyranides. This bird certainly is a - fabulous ? - kind of vulture. In antiquity the legend was told that the vulture was killed by the odour of myrrh (15). Myrrh is called μύρρα or μύρον in Greek, but also μύρνα and in papyri often occurs the form ζμύρνα (16). The complete homonymity with the name of the fish ζμύρνα, apart from the accent (17), is striking. It can't be pure coincidence. Again a play upon words, with magico-symbolical significance, must be perceived. Indeed, by this homonymity ζμύρνα, myrrh, the vulture's enemy, is identified with ζμύρνα, the notorious murre. The picture on the amulet gets thereby a complex symbolic explanation : the vulture, emblem of the pharao's power and well-respected in the Near East as a symbol of good (18), holds under its feet the ill-reputed muraena, symbol of evil (19). By dominating the muraena the vulture also gains the victory over its natural enemy, the homonymous myrrh. The bird is able to overcome all evil - also the delirious dreams and the colics -

thanks to the support of the κίττος , the ivy with which it is supposed to preserve its nest. The κίττος however was replaced by the comparable ζυτλαξ , the initial zeta being required by the alphabetical pattern of the text.

Now on the virtues of the emerald Cyranides remains silent nor is there anything to be found in the lapidaria of antiquity that could be helpful to explain why this stone should be used for this amulet. The mediaeval stone books turned out to be more useful.

First there is Pseudo-Aristotle's lapidary preserved in Latin, Hebrew and Arabic, probably composed in Syria in the middle of the ninth century A.D. (20). Pseudo-Aristotle prescribes a smaragdus set in a ring, against epilepsy (21). If we now have in mind that epileptics were thought of as moonstruck (22), the use of an emerald against "delirious dreams, terror and everything that comes up to the moonstruck" is clear.

Arnold of Saxony (13th century) gives us the same information "in libro de lapidibus Ar(istoteles) translator Dioscorides" (23).

Vincent of Beauvais and Bartholomew the Englishman (13th century encyclopedists) also referring to Dioscorides or Dyascorides likewise prescribe an emerald against falling sickness. Furthermore Bartholomew adds that the emerald "valet etiam contra illusiones et fantasmata demonum" while Vincent of Beauvais speaks of "demoniacas illusiones" (24). Immediately we think of the "delirious dreams and terror", the hallucinations mentioned in Cyranides !

But who is this Dioscorides, source of Arnold, Bartholomew and Vincent ? Certainly not the Dioscorides of the De materia medica where nothing of the kind is to be found. Riddle pointed out that Arnold of Saxony "seems to be citing Damigeron whenever he refers to Aristotle's lapidary translated by Dioscorides". Riddle supposes that Bartholomew, Vincent and also Marbode of Rennes (1035-1123), who gives similar information on the smaragdus, "were using a more complete text of Damigeron, now lost, which they mistook for Dioscorides" (25). The new edition of the Latin version of Damigeron - Evax by R. Halleux and J. Schamp in 1985 did not bring to light a more

extensive account of the emerald (26). They stated that this version consists of two levels, one of them being the Greek text of Damigeron. Damigeron's date however is quite uncertain. Pitra situated him anterior to Pliny (first century A.D.), while Rose chose for the second century. According to Halleux and Schamp "rien n'exclut que l'original grec soit alexandrin" (27).

I will not go further into the complex matter of the sources and the transmission of mediaeval lapidaria. Important for the present purpose is only to know that by the time Cyranides was composed a certain tradition existed which ascribed to the emerald the medicinal virtue of curing lunacy, i.e. epilepsy.

The figure on this amulet is a variant of the well-known iconographical type of the bird and fish combination. As the muraena's form is quite similar to that of the serpent, with which it was even supposed to mate (28), we can see in it a reference to the representations of birds attacking snakes or other reptiles. The latter were widely accepted as symbols of the victory of good over evil of every kind (29).

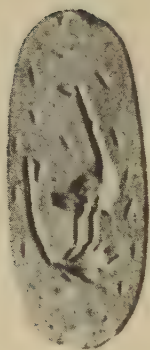
NOTES

- (1) Forms with sigma and without are coexistent, cf. R. KUEHNER - F. BLASS, Ausführliche Grammatik der griechischen Sprache I, 1, Hannover 1966, p. 76. The spelling ζμ mostly at the beginning of a word is widespread in the hellenistic period, cf. R. KUEHNER - F. BLASS, o.c., p. 256e.
- (2) Cyran. I, 6, 9 : ζαρκός ἐστὶ πτηνόν. οἱ μὲν ζώδι καλοῦσιν, οἱ δὲ ἄρκην. ἐστὶ δὲ εἶδος λευκοῦ γυπόο, νεχροβόρον.
- (3) According to Aelian, N.A., XII, 4 the ἄρκη belongs to the ἰέρακεο, the hawks, while in II, 47 it is said to live in the mountains : ὄρειοο ἄρκη. As it is an enemy of the seagull (Aelian, N.A., IV, 5), living on the shores (Aristotle, H.A., IX, 609a23) it possibly is a shearwater. Modern identification : Aubert and Wimmer, ap. D'Arcy W. THOMPSON, A Glossary of Greek Birds, p. 56 take the ἄρκη to be a large gull (Larus); H.GOSSEN, Die Tiernamen, p. 172 thinks the ἄρκη is a seagull of prey (Hydroprogne caspia ?) while the ὄρειοο ἄρκη is the Sterna media Horsp.; O. KELLER, Die Antike Tierwelt II, p. 27 and J.R.T. POLLARD, Birds, p. 79 identify the ἄρκη with the lammergeyer. M. LAMMERTIJN, Capita selecta I, p.234, suggests that ἄρκη was a poetical word for "bird of prey" in general and that it could be employed for different kinds of birds.
- (4) Dionys., Ixeuticon, I, 4.
- (5) Cf. D'Arcy W. THOMPSON, A Glossary of Greek Birds, p. 86 and O. KELLER, Die Antike Tierwelt, II, p. 31.
- (6) Aristotle, H.A., IX, 618b32. Commentary in D'Arcy W. THOMPSON, A Glossary of Greek Birds, pp. 247-248.
- (7) Dionysius, Ixeuticon, I, 4; Aelian, N.A., I, 35; Geoponica, XV, 1, 19.
- (8) Dioscorides, Mat.Med., IV, 143.
- (9) Cyran. I, 6, 3 : ζμῆλάξ ἐστὶ βοτάνη ἰσχυροτάτη ὡο κισσόφυτον.  
Dioscorides, Mat. Med., IV, 143 : ὁμοιο κιστῶ τὰ φύλλα ἔχει.

- (10) Dioscorides, Mat. Med. IV, 143 : τοῦτου ὁ καρ-  
πὸς μετὰ δορυκνίον κινόμενος τριῶβολον Ἀπτικὸν  
ἑκατέρου ποιεῖν ἐνύκνια πολλὰ καὶ ταραχώδη  
ὄραν ἱστορεῖται .
- (11) Cf. J. MURR, Die Pflanzenwelt, p. 236.
- (12) J.C. VAN WAGENINGEN, Astrologische Geneeskunde,  
Rotterdam 1976, p. 342.
- (13) Ph. VAN WERSCH, Folklore van wilde planten in  
België en Nederland, Baarn 1979, p. 137 says in  
Friesland it was believed that ghosts would  
haunt your house at night, if you had gathered  
hedge bindweed in the day. Therefore it was  
called "spoekeblom" or "spokeblom", while in  
the isle of Schiermonnikoog it was called  
"tsjeunsterblome", which means "witch's  
flower", and around Ghent "kankerblomme", i.e.  
"cancer flower". All these nick-names point to  
the venomousness of the plant.
- (14) Ph. VAN WERSCH, o.c., pp. 136-137 refers to the  
materia medica of Dodonaeus who recommends  
hedge bindweed for abdominal complaints.
- (15) Cf. D'Arcy W. THOMPSON, A Glossary of Greek  
Birds, p. 84; W. SPEYER, Geier, RLAC IX (1976),  
col. 444.
- (16) Cf. LSJ s.v. μύρνα.
- (17) In the Physiologus the fish is called ἡ μύραι-  
να ἧρουν ἢ μύρνα (sic) (ed. A. DELATTE,  
Anecdota I, p. 372).
- (18) Cf. W. SPEYER, Geier, RLAC IX (1976), col. 435.
- (19) Cf. D'Arcy W. THOMPSON, A glossary of Greek  
Fishes, p. 162.
- (20) The Latin text was published by V. ROSE,  
Aristoteles de lapidibus und Arnoldus Saxo,  
Zeitschr. f. deutsches Altertum, NF VI (1874),  
pp. 321-455; the Arabic text with translation  
and commentary by J. RUSKA, Das Steinbuch des  
Aristoteles mit literargeschichtlichen  
Untersuchungen nach der arabischen Handschrift  
der Bibliothèque Nationale, Heidelberg 1912.  
See also M. WELLMANN, Aristoteles de lapidibus,  
Sitzungsberichte der Preuss. Akad. der  
Wissensch. 1924, pp. 79-82. On the Hebrew  
manuscripts, see KLEIN-FRANKE, Knowledge of  
Aristotle's lapidary, Ambix 17 (1970), p. 138  
and M. STEINSCHNEIDER, Die hebraischen  
Uebersetzungen des Mittelalters und die Juden  
als Dolmetscher, 1893, repr. Graz 1956, p. 240.

- (21) The Montpellier text fol. 127b (ed. ROSE p. 385) : "et si reclusus in anulo deferatur in digito uel collo, ualet contra epilepsiam".
- (22) Σεληνιακός means "epileptic" in Alex. Trall., I, 15; σεληνιαζομαι means "to be epileptic" in Evang. Matth., 4, 24; 17, 15.
- (23) Arnold of Saxony, ed. ROSE, p. 427 : "In eodem Dy(= in libro de lapidibus Ar. translator Dioscorides). lapis smaragdus visum sanat, et si ponitur ad caput epilentici iuvat".
- (24) Vincent of Beauvais, Speculum naturale 8, 202 : "(D)iascorides. Smaragdus collo suspensus hemitricheum et morbum caducum curat ... et contra demoniacas illusiones ualet"; Bartholomew the Englishman, De proprietatibus rerum, 16, 88: Nam secundum dyas(coriden) ... collo vero suspensus curat enutriteum et morbum caducum ... ualet etiam contra illusiones et fantasmata demonum.
- (25) J.M. RIDDLE, Marbode of Rennes' de lapidibus, p. 99.
- (26) R. HALLEUX - J. SCHAMP, Les lapidaires grecs, pp. 241-242.
- (27) R. HALLEUX - J. SCHAMP, Les lapidaires grecs, pp. 226-227.
- (28) Cf. D'Arcy W. THOMPSON, A Glossary of Greek Fishes, p. 163 with references to antique authors.
- (29) Cf. C. BONNER, Studies in magical amulets, p. 214.





Long-necked bird, probably meant for a phoenix,  
standing on a scorpion.  
Coll. Seyrig 6 (=Bonner nr.106)  
haematite, 25 x 11mm.

ἡρύγγιος βοτάνη	eryngo (Eryngium)
ἡλίου ζῶον ἢ φοινικόπτερος	flamingo (Phoenicopterus antiquorum)
ἡφαιστίτης λίθος	pyrite ?
ἡδονίς θαλάσσιος	?

## I, 7, 17-21

Εἰς δὲ τὸν ἡφαιστίτην λίθον τὸν καὶ κυρίτην λεγόμενον εἰς γλῶσσης φοινικόπτερον, παρὰ δὲ τοῦς πόδας αὐτοῦ σκορπίον, καὶ ὑποβάλλῃ τῷ λίθῳ ῥίζιον τοῦ φυτοῦ μικρὸν, εἴσεις φυλακτήριον ἐκ πάντων ζῴων ἰοβόλων. ἀποστρέφει δὲ καὶ ἰνδαλμοὺς νυκτερινούς . ποιεῖ δὲ καὶ ἐπὶ λιθιώτων. βασκανίαν δὲ πᾶσαν ἀποστρέφει.

"If you engrave in the stone hephaestites, also called pyrites, a flamingo and at its feet a scorpion, and you put a root of the small plant under the stone, you will have a good phylacterion against all venomous animals. It also keeps off nightly appearances. It is also effective for those who suffer from the stone. It averts every malign influence."

The otherwise unidentified fish ἰσοϋίς does not play any part in this amulet (1). It is replaced by the scorpion. As the scorpion does not represent one of the four regular elements and as its initial is not the required one, I thought that its figure on the stone probably had a very special significance. My presumption indeed turned out to be good. Lots of gems showing the picture of a scorpion are preserved. Apart from the fact that the zodiac sign Scorpio can be meant, the scorpion design is well-known as an apotropaion to ward off the evil eye (2). Precisely this fact is one of the purposes of this amulet of Cyranides: it averts βακχαιία, i.e. malign influence, the evil eye.

But to understand the strength of the scorpion design as an apotropaion against the evil eye, we have to analyse the mythological significance of the scorpion and the Orion myth. The different versions of this myth are rather confusing (3). I shall only try to extract the elements necessary for our purpose.

The giant Orion, a famous hunter, came to the isle of Chios in order to help king Oenopion to get rid of the wild animals that infested the country. Orion however tried to rape Oenopion's wife - or was it his daughter? - and the king blinded him as a punishment. Orion then went to the forge of Hephaestus. The god, having pity on him, granted him the dwarf Kedalion as a guide. Orion put Kedalion on his shoulders and asked to turn him towards the light of the rising sun. His helper did so and immediately Orion regained his eye-sight. Afterwards Orion attempted another rape. This time he waylaid the nymph Opis, companion of Artemis, or the goddess herself. But Artemis sent a scorpion that bit him in the heel. The scorpion became a constellation and so did Orion.

Eitrem stated that the blinding of Orion stands for castration. According to him this blinding is the basic idea behind the belief that the scorpion can avert the evil eye (4). This statement is supported by the fact that the scorpion or the corresponding constellation was associated with the eyes and with blindness (5).

The scorpion, its ashes or its picture was also believed to work against scorpion bites. This belief is clearly to be explained by the rule of the similia similibus : ὁ τρώσας καὶ λάσεται . As a phylacterion against all venomous animals the amulet of Cyranides thus is another example of the homoeopathic function of the scorpion (6).

The other elements of this amulet however are also connected with the Orion myth.

After his blinding Orion goes to the forge of Hephaestus. The stone needed for the amulet therefore is a ἡφαίστειος , stone of Hephaestus. In Cyranides no further description of this stone is given. It is only said that the ἡφαίστειος is also called κυρβίτης .

In antiquity, different varieties of stones beared the name κυρβίτης (7). Most of them are described in Pliny's Natural History (8). Pliny also mentions a hephaestitis which he describes as a red stone reflecting like a mirror (9). Pliny however doesn't identify the hephaestitis with one of the "fire-stones". The stone further occurs in the lapidary of Damigeron - Evax, but the properties ascribed to it are different from those of the amulet in Cyranides (10). Riddle thinks it is probably our pyrite (11). Obviously the colour of fire explains the association of this stone with the god Hephaestus and its two names ἡφαίστειος and κυρβίτης . Its power lays in this association with Hephaestus, fire and light. (12).

The κυρβίτης is also prescribed as an amulet stone in the Holy Book of Hermes Trismegistos (13). Here the stone is associated with the second decan of the constellation of the Scorpion. The engraved picture shows a man standing above a scorpion. The relationship between the ἡφαίστειος or κυρβίτης and the scorpion is thus obvious. The properties ascribed to the amulet in the Holy Book however are different from those of the amulet in Cyranides: in the Holy Book they are based on the fact that the constellation of the Scorpion was thought to dominate the male sexual organs, while this influence is not emphasized in Cyranides.

Let us now return to the Orion myth. Hephaestus' companion Kedalion (14) turned the blind hunter towards the light of the rising sun. The cathartic action of the first sunbeams cured him. This part of

the myth calls attention to the picture of the bird on the amulet of Cyranides. The ἡλίου ζῷον or φοινικόπτερος is generally identified with the flamingo (Phoenicopterus antiquorum) (15), which is often considered as a substitute for the legendary phoenix (16). It needs no argument that the phoenix is a sun emblem. The representation of the flamingo on the amulet can therefore be explained by its solar character.

Yet there is more. A bird called ὄρῳν is mentioned in several Greek texts. Aelian describes it as an Indian bird with strongly amorous propensities. "This ὄρῳν is the same size as the birds they call herons, its legs are like those of the bird they call phoenix, and it has dark blue eyes" (17). In Greek literature the ὄρῳν often appears together with the κατρεῦς. Although both birds certainly have their place in mythology (18), an identification of the ὄρῳν with a real bird is not impossible. The birds corresponding the best with the description are the phoenicopterus ruber roseus or European flamingo and the phoeniconaias minor. Both species of the flamingo have red legs and their neck is like that of the swan (19). Nonnus also compared the ὄρῳν with a swan: ὄρῳν (sic), γλυκὺς ὄρνις, ἁμοσίος ἔμφρονι κόκκῳ (20). Aelian and Strabo, along with Cleitarchus (4th - 3th c. B.C.) as their common source, mention the very sweet voice of the ὄρῳν (21). If the bird indeed is to be identified with a flamingo, this is fantasy, probably based on the comparison with the swan but also referring to Egyptian mythology. We must bear in mind that Cleitarchus was an Alexandrian and therefore influenced by astrological symbolism which was very much in vogue in Egypt by that time. In Egyptian astrology Orion indeed stands for the soul of Horus, the sun-god (22). Hubaux and Leroy remarked that it is therefore evident that Cleitarchus gave the name of Orion to a bird that sings to the rising sun (23). Moreover the hawk of Horus, identified with Horus himself, corresponds with the Arabian bird Hôl that stands for the legendary phoenix. Hubaux and Leroy thus conclude as follows: "Il semble donc que le souvenir du portrait traditionnel du phénix plane sur les descriptions de l'orion et du catreus" (24). I'd like to extend this conclusion to the φοινικόπτερος of Cyranides.

Indeed, this bird not only is a substitute for the phoenix, but its portrait on the amulet with a scorpion at its feet also represents Orion, the blind hunter who got his eye-sight back by looking at the rising sun, but who was bitten by a scorpion as a punishment for his rape attempt (25).

The root of the eryngo enclosed in the amulet doesn't seem to be connected with the Orion myth. In Cyranides this plant is described as follows: "It grows as reed, it is thorny and it is also called γοργόντιοc ". Its magical and medical properties are numerous. In Cyranides we read that its root can be worn to keep off demons and that a potion made of the plant and its roots can help those who suffer from nephritic stones or other likewise diseases (26). Pliny recommends eryngo against snakes and other venomous animals (27). Dioscorides says it is diuretic (28). The efficacy of the amulet in all these cases is therefore guaranteed by the eryngo's root.

The relationship of the eryngo with the other elements of the amulet however remains mysterious. The scorpion amulet of the Holy Book of Hermes Trismegistos I already mentioned above, has another plant enclosed. The there mentioned χορρίλουροc or heliotrope is easier to explain in the context (29). Another example of an eryngo root enclosed in an amulet can be found in the description of a love talisman given in the Parisinus gr. 2419 f. 159v. This amulet however is not comparable with that of Cyranides (30).

NOTES

- (1) In Cyranides it is also called ἀμφέβριον (Cyran., I,7,2). Hence an identification with the unknown fish ἄδωνις or ἐξώκοιτος, said to sleep out of the water could be possible. About the ἄδωνις see d'Arcy W. THOMPSON, A Glossary of Greek fishes, p.3 and pp.63-64. In Cyranides I,7,15 another synonym is given: ἀφείδις. This name doesn't occur elsewhere, but it resembles ἀφείδιον, diminutive of ἀφύη, which generally is a collective noun, like whitebeat, including the young of various fishes. Cf. D'Arcy W. THOMPSON, o.c., pp. 21-23. F de MELY, Les lapidaires, p. 45 translates ἡδονίς by "anchois", i.e. anchovy, while in his article Le poisson dans les pierres gravées, p. 324 he calls it "loche de mer", i.e. groundling.
- (2) See C. BONNER, Studies in magical amulets, pp. 77-78 and A. DELATTE - Ph. DERCHAIN, Les intailles magiques, pp. 268-273 with illustrations.
- (3) Treated at length by S. EITREM, Der Skorpion in Mythologie und Religionsgeschichte, SO 7 (1928), pp. 53-82 and by J. FONTENROSE, Orion: The Myth of the Hunter and the Huntress, Univ. of California Publ. Classical Studies 23, Berkeley - Los Angeles - London 1981, pp. 5-32.
- (4) S. EITREM, Der Skorpion, pp. 66-67.
- (5) S. EITREM, Der Skorpion, p. 67 : "Aus abergläubischer arabischen Medizin erfahren wir nämlich dass die Assche des Skorpions gegen Augenschwäche gut ist (S. HELL, art. Akrab in Enzykl. des Islam I 255) was mit der sonstigen Verwendung des Skorpions gegen Skorpionstiche übereinstimmt". Firmicus Maternus, VI, 31, 88 : "Si uero in his signis et in his in quibus diximus locis (i.e. Luna in fronte Scorpionis) aliquem geniturae cardinem teneat, omni oculorum substantia dissipata miserum discrimen caecitatis affertur".

- (6) Other examples of this homoeopathic function of the scorpion in Dioscorides, Mat. Med., II, 11: σκόρπιος χερσατος ὡμοδς ἐπιταθεῖς βοήθημα της ἰδίας πληγῆς γίνεται ; Pliny, N.H., XI, 90; XXIX, 91; Celsus, V, 27, 5A, etc..
- (7) Cf. K.SCHNEIDER, κυρῖτης, RE XXIV/1 (1963), col. 54.
- (8) Pliny, N.H., XXXVI, 137-138.
- (9) Pliny, N.H., XXXVI, 166 : Hephaestitis quoque speculi naturam habet in reddendis imaginibus, quamquam rutila. Cf. Isidor., XVI, 15, 15.
- (10) Damigeron - Evax XV (ed. HALLEUX - SCHAMP, pp. 252-253).
- (11) J.M. RIDDLE, Marbode of Rennes' de lapidibus, p. 69. Marbode's source for this stone was Damigeron.
- (12) Hephaestus is sometimes identified with the sun-god Helios (Hesychius s.v. Ἡφαῖστος ; Joh. Lydus, De mens., IV, 88; Orph. Hymn. 66, 3, 6; Servius, comm. Aen. III, 35). To J. FONTENROSE, Orion, pp. 9-11 this explains why Orion calls for help in Hephaestus' forge to regain his eyesight.
- (13) See C.-E. RUELLE, Hermès Trismégiste, p. 266.
- (14) Kedalion himself does not play any part in the amulet of Cyranides, although he is not unimportant as for warding off the evil eye. According to S. EITREM, Der Skorpion, p. 68 his name is derived from κήδαλον, synonym of αἰδοτον (cf. Hesychius s.v. κήδαλον), sexual organ. Therefore he is to be considered as a phallic demon protecting blacksmiths from malign influences. The apotropaic function of the phallus and phallic figures in forges is well-known.
- (15) Cf. D'Arcy W. THOMPSON, A Glossary of Greek Birds, pp. 304-306.
- (16) J. HUBAUX - M. LEROY, Le mythe du phénix, pp. 121-122 refer to Heliogabalus' predilection for flamingo brains, probably dictated by his worshipping of the sun.
- (17) Aelian, N.A., XVII, 22 : λέγει δὲ Κλεῖταρχος ἐν Ἰνδοῖς γίνεσθαι ὄρνιν, καὶ εἶναι σφόδρα ἐρωτικόν, καὶ τὸ ὄνομα αὐτοῦ λέγει ὡρίωνα εἶναι. φέρει δὲ καὶ διαγράψωμεν αὐτὸν τῷ λόγῳ, ὡς ἔκεῖνος διδάσκει. τοῖς μὲν καλουμένοις ἐρωδιοῖς ὁμοίος τὸ μέγεθος ὅδε <ὁ> ὡρίων ἐστίν, ἔστι δὲ καὶ τὰ σκέλη ὡς ἔκεῖνοι φοίνιξ, ὀφθαλμοῦς δὲ κυανοῦς ἔχει.

- (18) D'Arcy W. THOMPSON, A Glossary of Greek Birds, p.338 doesn't doubt its legendary character : "This bird, always associated with the equally mysterious κατρεύς is evidently a poetic and allegorical creation, but what it signifies is unknown". Cf. J. HUBAUX - M. LEROY, Le mythe du phénix, p. 32 : "Ce ne sont point là des noms d'oiseaux, mais bien des noms de héros mythologiques". According to Hyginus, Fab., 195 Katreus was a Theban with fertility problems, who arranged it that Zeus, Hermes and Poseidon procreated a son for him. That was Orion.
- (19) Identification by M. LAMMERTIJN, Capita Selecta I, p. 300.
- (20) Nonnus, Dionys., XXVI, 201.
- (21) Aelian, N.A., XVII, 22 and Strabo, Geogr., XV, 1, 69.
- (22) Cf. Plutarch, De Is. et Os., 21.
- (23) J. HUBAUX - M. LEROY, Le mythe du phénix, p. 33.
- (24) J. HUBAUX - M. LEROY, Le mythe du phénix, p. 37.
- (25) The rape attempts by Orion the hunter clearly correspond with the strongly amorous propensities which Aelian (N.A., XVII, 22) ascribes to ὄρβων the bird.
- (26) Cyran., I, 7, 3-12.
- (27) Pliny, N.H., XXII, 18.
- (28) Dioscorid., Mat. Med., III, 21.
- (29) C.-E. RUELLE, Hermès Trismégiste, p. 266.
- (30) Ed. A. DELATTE, Anecdota Atheniensi I, p. 466. In order to procure love Aphrodite is to be engraved in a magnet stone and the root or seeds of the eryngo are to be enclosed (l. 8-9: ἄποκατακλείσας ἠρυγγίου βοτάνης ρίζον ἢ ἐκ τοῦ σπέρματος ) .

θύρσις βοτάνη	hypocist (Cytinus Hypocisthis)?
θῦρ πτηνόν	?
θυρσίτης λίθος	thyrsites
θύννος ἰχθύς	tunny (Thynnus thynnus)
θαλάσσιος	

I. 8, 25-28

Εἰς δὲ τὸν θυρσίτην λίθον γλύψον θῦρα τὸ πτηνόν  
καὶ Διόνυσον κρατοῦντα τὸ πτηνόν καὶ ὑπὸ τὸν λίθον  
ρίζαν τῆς βοτάνης, καὶ κατακλείσας φόρει. καὶ ἔσῃ  
ἀμέθυστος, πρὸς πάντας χάριν ἔχων. ἔσῃ δὲ καὶ  
ἀκύνδυνος καὶ ἐπὶ κριτηρίων ἀήττητος.

"Engrave in the thyrsites stone the bird thyr and  
Dionysos holding the bird in his hand, and under the  
stone a root of the plant, and wear it after setting.  
And you will not get drunken and you will please  
everyone. And you will be out of danger and you will  
be unbeatable in court."

This amulet is completely dominated by Dionysus. This doesn't make on the other hand our explanation of it easier. Bonner even claimed that "allusions to Dionysus, whether verbal or artistic, seem to be completely absent from the amulets" (1). Delatte and Derchain present two gems showing the picture of Dionysus, but none of them show any correspondences with the description in Cyranides (2).

The names of the three elements of this amulet - the tunny does not play any part in it (3) - are all neologisms derived from the word θύρσιος, the wand wreathed in ivy and vine-leaves which is carried by the devotees of Dionysus or by Dionysus himself.

According to Kaimakis the θύρσιος βοτάνη is to be identified with the ὑποκισθίς, the hypocist (Cytinus Hypocisthis) which was also called

Διονυσιάς or θύρσιον (4). It is a parasitic herb growing on the roots of the Cistus. Its medicinal properties are described in Pliny's Natural History (5), but they do not seem to be connected with the use of the hypocist's root in the amulet. The vague description of the θύρσιος βοτάνη however leaves room for other identifications. Dioscorides mentions that θύρσιον is another name for θύμος i.e. thyme. This can be explained by the resemblance between the thyme's inflorescence and the thyrsus-top (6). de Mély's identifications seem to be pure fabrications: in his French translation of Cyranides he identified θύρσιος with sage, while in his article on the same subject he translated θύρσιος (sic) by rue (7). I presume that an exact identification is not important for the function of the root in the amulet, the only thing that counts being the name and the connection with Dionysus.

There is another example of enclosing θύρσιον in an amulet stone. In the Holy Book of Hermes Trismegistos it is put under a λίθος μηδικός showing the picture of Chonoumous, the third decan of Aquarius (8). Apparently there is no further relationship between this amulet and the one described in Cyranides, unless the θύρσιος of Cyranides and the μηδικός of the Holy Book can be proved to be one and the same stone.

The name θυρσίτης doesn't occur but in Cyranides. There the stone is described as resembling coral (9). The word θυρσίτης however clearly refers to Dionysus. This made me think that this stone possibly could be identified with the dionysias mentioned by Pliny. Pliny says that "the dionysias, a hard stone, the colour of which is black intermingled with red spots, produces the flavour of wine when it is ground to powder and mixed with water, and is supposed to be an antidote to drunkenness"(10). Although the description of this mineral is not quite comparable with that of coral - an identification is uncertain - the property of chasing away drunkenness is ascribed to the amulet in Cyranides too. Pliny also talks about a stone called media that reproduces the flavour of wine (11). Therefore Wyckoff suggested that dionysias is the same as media, though the rest of the descriptions do not correspond (12). The least we can say is that the spirit of Dionysus, the wine god, moves upon all these stones, even if they are not identical.

The archaeological remains are of no use for the identification of the θυρσίτης. One of the Dionysus gems presented by Delatte and Derchain is an amethyst and the other is black jasper. The amethyst is clearly magical, as shown by the characteres on the obverse (13). The use of this kind of stone is to be explained by popular etymology which derived its name from ἄ-μεθύω ("not to get drunken"). It was therefore worn to prevent drunkenness (14). The θυρσίτης however resembling coral, is not an amethyst, this stone being described in Cyranides as κορφυροῦς τῆ ἰδέῃ (15). The medico-magical properties ascribed to coral on the other hand are totally different from those required for this amulet (16).

Θόρ , the bird held by Dionysus, is unknown. In Cyranides it is said that it looks like a sea-hawk and that it is active and full of the god (17). The sea-hawk with which it is compared, probably is the osprey, Pandion haliaëtus (18). The bird however does not seem to have any connection with Dionysus (19).

NOTES

- (1) C. BONNER, Studies in Magical Amulets, p.4.
- (2) A. DELATTE - Ph. DERCHAIN, Les intailles magiques, p.214, nrs.292 and 293.
- (3) The translation adopted by de MELY, Les lapidaires III, p.49 "l'oiseau tenant un thon" for Διόνυσον κρατοῦντα τὸ πτηνόν (text adopted by de MELY, Les lapidaires II, p.23, 13-14) is utterly impossible.
- (4) Ps.-Dioscor., Mat. Med., I, 97. Cf. D. KAIMAKIS, Die Kyraniden, p.60 ad l.3.
- (5) Pliny, N.H., XXVI, 49.
- (6) Cf. R. STROEMBERG, Griechische Pflanzennamen, p.50.
- (7) F. de MELY, Les lapidaires III, p.48: "grande sauge"; de MELY, Le poisson, p.325: "θύρρος", la rue, appelée par les médecins grecs πῆγαρον ὄρεινόν".
- (8) C.-E. RUELLE, Hermès Trismégiste, p.274.
- (9) Cyran. I, 8, 5: θυρρότης λίθος ὁμοιος κοραλλίῳ.
- (10) Pliny, N.H., XXXVII, 157 : Dionysias, nigra ac dura, mixtis rubentibus maculis, ex aqua trita saporem uini facit et ebrietati resistere putatur.
- (11) Pliny, N.H., XXXVII, 173 : Media nigra est, ab Media illa fabulosa inuenta; habet uenas aurei coloris, sudorem reddit croci, saporem uini.
- (12) D. WYCKOFF, Albertus Magnus, Book of Minerals, Oxford 1967, p. 86.
- (13) A. DELATTE - Ph. DERCHAIN, Les intailles magiques, p. 214, nr. 292.
- (14) Pliny, N.H., XXXVII, 124.
- (15) Cyran., VI, 3, 2.
- (16) For the properties of coral see BLUEMNER and GOSSENSTEIER, Koralle, RE XXII (1921), col. 1373-1377.
- (17) Cyran. I, 8, 4 : Θύρ ἐστι πτηνὸν ὁμοιον ἰέρακι τῷ πελαγίῳ, ὄρακτικόν, ἔνθεον.

- (18) Cf. M. LAMMERTIJN, Capita Selecta I, p. 150.
- (19) D'Arcy W. THOMPSON, A Glossary of Greek Birds, pp. 44-46 deals with the legendary or symbolic meaning of passages relating to the osprey.



Obv. Ibis tied to an altar, worm (?) in field at each side.

Rev. Chnubis.

Coll. Newell 55 (=Bonner nr.82).

Serpentine, 29 x 24,5mm.

ἰτέα δένδρον	willow ( <i>Salix alba</i> )
ἴασις λίθος χλωρός	green jasper
ἰκτίς πτηνόν	kite ( <i>Milvus milvus</i> )
ἰουλις ἰχθύς	rainbow wrasse ( <i>Coris iulis</i> )

I, 9, 12-16

Ἐἰς δὲ τὸν ἴασιν λίθον γλύψον ἰκτίνα διασπαράσσοντα ὄφιν, καὶ ὑπὸ τὸν λίθον ἐκ τῆς κεφαλῆς τοῦ ἰουλου λίθον, καὶ κατακλείσας ὀίδου φορεῖν ἐπὶ τοῦ στήθους· πάντα δὲ πόνον στομάχου παύει καὶ πολλὰ ἐσθίειν ποιεῖ εὐπέπτως. ἔχει δὲ καὶ ἑτέρας δυνάμεις· τοῦτο φόρει ἐπὶ τοῦ στήθους καὶ ὄψει.

"Engrave in the jasper a kite rending a snake to pieces, and under the stone a stone out of the head of the rainbow wrasse, set it and give it to wear on the chest: it stops every stomach complaint and it permits to eat a lot with a good digestion. Moreover it has other powers: wear it on your chest and you will see."

This is a digestive amulet of a very special kind. Bonner remarked that the most common of all healing amulets are those intended for ailments of the stomach. He therefore dealt with them extensively (1). Bonner distinguished different types revealing their character by an inscription  $\kappa\acute{\epsilon}\sigma\sigma\epsilon$  "digest" or, less commonly,  $\epsilon\upsilon\lambda\acute{\epsilon}\pi\tau\epsilon\iota$  "good digestion!".

A first type shows a long-billed bird, probably an ibis, tied by the neck to an altar. Bonner suggested that the digestive power of these amulets might lay in the ibis's well-known reputation of voracity. Its aptitude to devour even serpents and other reptiles was supposed to be transmitted to the wearer of an amulet showing its figure (2). According to Galen these amulets were hung from the neck in such a way as to rest over the stomach (3). In that position the amulet came in direct contact with the uneasy organ so as to facilitate the healing. The prescription in Cyranides to wear the amulet on the chest clearly has the same foundation.

Bonner also mentions some bronze pendants of a kind common in Syria, showing an ibislike bird, tied to a pillar or an altar, and about to devour a snake. These pendants bear no inscription referring to the stomach. Bonner therefore thought that "it may well be that on them the bird is an amulet against reptiles, or against evil in general typified by a snake" (4). However, the comparison of the amulet description in Cyranides with this kind of pendants makes their function quite clear: the digestive amulet of Cyranides also shows a bird devouring a snake, no explanatory inscription being required.

Furthermore there is a second type of digestive amulets showing snakes and bearing an explanatory inscription. The type is represented by only a few specimens. Bonner pointed out that they all come from Syria, though the subjects are Egyptian (5). Bonner described a very well preserved specimen of his own collection: "It has in its central design a crane with seven rays round the head (the phoenix) looking to the left, and standing on an ovoid object possibly meant for a globe; but one thinks also of the egg shaped from myrrh in which, according to Herodotus, the young phoenix placed the body of his dead father". Around the bird scorpions, a

crocodile, worms and snakes are pictured. This amulet has *κέκτηε* "digest" on the reverse. According to Bonner "the small worms or snakes that are barely suggested in the field of the ibis amulets are here more distinctly indicated, and other hints of the wading bird's value as a destroyer of vermin are here present in the forms of the scorpions and the larger snakes. Here, as in the ibis amulets, the voracity of the bird is taken as a good magic for a week digestion."

By all this the function of the snake devoured by a bird pictured on the amulet in *Cyranides* is quite clear. The iconographical material however doesn't explain why the bird has to be a kite. Indeed, the preserved digestive amulets only show an ibis, a crane or a phoenix. Yet there was no objection to adopting the ibis (*ἴβις*) in this chapter, since its name begins with a iota. Moreover, certain species of the ibis really do eat reptiles (6).

A look at the above mentioned text of Galen is quite enlightening. Exactly like *Cyranides* Galen prescribes green jasper as a digestive amulet. It ought to be worn as a necklace in such way that the stone touches the opening of the belly. Galen continues as follows : *ἐνίοι καὶ γλύφουσιν ἐν αὐτῷ τὸν τὰς ἀκτινῶν ἔχοντα δράκοντα, καθάπερ καὶ ὁ βασιλεὺς Νεχεψῶς ἔγραψεν ἐν τῇ τεσσαρακαίδεκάτῃ βίβλῳ* (7).

A green jasper was thus supposed to be a good phylacterion on its own, the green colour possibly referring to the secretion of bile and gastric juice, but on the authority of king Nechepso some engrave in the stone a radiate serpent (8). Galen's testimony thus proves that this kind of digestive amulets were used as early as Ptolemaic times! The radiate serpent pictured on the jasper probably is the Egyptian god Chnubis, represented as a thick-bodied snake with a lion-head surrounded by rays.

This leads us to the third type of digestive amulets studied by Bonner, the so-called Chnubis stones (9). Lots of them are preserved, mostly engraved in jasper or another green stone as prescribed by Nechepso, Galen and *Cyranides* (10). Their digestive character is asserted not only by antique textual testimonies (11), but also by the inscriptions on the amulets themselves : *κέκτηε*,

φίλαξον ύγειη στόμαχον Πρόκλου , ἀπάλλαξον  
τὸ(ν) στόμαχον πάθος ,  
etc. (12).

Let us now return to Galen's text and compare the words ἀκτινας ἔχοντα ὄραχοντα with λκιτνα δια-  
σπαράσσοντα ὄφιν in Cyranides. On this ground I'd like to suggest a tempting hypothesis. It runs as follows. The author of Cyranides knew the type of digestive amulets representing an ibis about to devour a snake. It is also probable that he had seen some Chnubis stones, since they are very common. He knew for sure their description in the book of Nechepso (13). We may assume that Galen quoted this description almost literally. As the author of Cyranides was not able to describe a Chnubis amulet with the regular four elements - a bird, a fish, a plant and a stone - he started from Nechepso's description and altered it slightly: ἀκτινας

(rays) thus became λκιτνα , accusative of λκις , kite. It is even possible that he had at his disposal a copy of Nechepso's work with the reading λκιτνα instead of τὰς ἀκτινας , λκιτνα being a copist's error. Anyway, the altered passage ἐνίοι καὶ γλῶφουσιν ἐν αὐτῷ τὸν λκιτνα ἔχοντα ὄραχοντα certainly required a different interpretation, i.e. "some engrave in the stone the kite holding a snake". In fact, λκιτνα ἔχοντα ὄραχοντα is broadly the same as λκιτνα διασπαράσσοντα ὄφιν!

So, if my hypothesis corresponds with reality, the author of Cyranides composed in an easy way a new type of stomach amulet combining the characteristics of the diverse types: there is the voracious bird and there is also the spirit of Chnubis, the decan god ruling the digestive tract (14). By this combination the power of the amulet surely was thought to be strengthened. Furthermore the text of Cyranides suggests that this amulet has other additional powers. Possibly the curing of women diseases is meant. The Chnubis snake indeed is frequently seen on uterine amulets. Bonner suggests: "It is possible that in amulets intended for women the makers pretended to provide in one magical stone a remedy for various pains and disorders located in the abdomen" (15). Similar virtues are also ascribed to jasper: Dioscorides e.g. says it makes childbirth easy (16).

A final problem haunts this amulet description: what is meant by "the stone out of the head of a rainbow wrasse"? This stone replaces the part of the plant usually enclosed in the amulet, the willow ( *λίεα* ) having no function.

The *λουλῆ* or *λουλο*, identified by Thompson with the rainbow wrasse (17), in fact is a harmless fish, but popular etymology deriving its name from *λόσ*, poison, made it ill-reputed. So it was told that this fish carried poison in its mouth, which was very dangerous for divers and fishermen, and that other fishes bitten by the *λουλῆ* became unfit for consumption (18). Moreover *λουλοῖδες* were said to be gluttonous (19). In Cyranides the *λουλῆ* and its mouth or head carrying the poison, thus probably represent bad food impeding a good digestion. The stone in the head of this fish might be interpreted that way. It is not clear what is meant by this stone. I only ascertained that Cyranides prescribes stones out of the head of other fishes too as materia medica against other ailments (20). Digestive stones are to be found in the stomach of the ostrich. These pebbles, Aelian says, are an aid to human digestion (21). It is not impossible that the author of Cyranides thought of this kind of stones, while writing the passage on the stones in the head of the *λουλῆ*, for he also asserts Aelian's remark (22).

NOTES

- (1) C. BONNER, Studies in Magical Amulets, pp.51-62.
- (2) C. BONNER, Studies in Magical Amulets, p.53.
- (3) Galen, De simpl., 10, 9.
- (4) C. BONNER, Studies in Magical Amulets, p.53.
- (5) C. BONNER, Studies in Magical Amulets, pp.60-61. Illustrations ibid., figg.103, 104, 105.
- (6) Cf. M. LAMMERTIJN, Capita selecta I, pp.126-127.
- (7) Galen, De simpl., 10, 19.
- (8) The apocryph magical and astrological texts attributed to the Egyptian king Nechepso are apparently to be dated about 150 B.C.. Edition of the fragments by E. RIESS, Nechepsonis et Petosiridis fragmenta magica, Philologus Suppl. 6 (1891-93), pp.325-394. Galen, De simpl., 10, 19 = fr.29, p.379.
- (9) C. BONNER, Studies in Magical Amulets, pp.54-60.
- (10) Descriptions and illustrations of diverse Chnubis amulets in A. DELATTE - Ph. DERCHAIN, Les intailles magiques, pp.54-73.
- (11) Galen, De simpl., 10, 19; Hephaestio, Apotelesm., I, 1, 79; Aetius, Tetr., I, 2, 36 showing a description similar to Galen's: quidam annulis iaspidem uiridem includunt et draconem radios habentem in ipsa sculptunt ex praecepto Necepsi regis, qui prosit uenticulo; also Marcellus Empir. 20, 98 (draco radiatus); Socrates - Dionysius, De lap. 35 (onyx).
- (12) Cf. the description by A. DELATTE - Ph. DERCHAIN, Les intailles magiques, pp.54-73.
- (13) The works attributed to Nechepso were well-known in Greek speaking circles appealing to the authority of Hermes Trismegistos. The Egyptian theory of the decans was adopted by the Greek astrologists via these works. Cf. O. NEUGEBAUER - PARKER, Egyptian Astronomical Texts, I The Early Decans, p. 95 sq..

- (14) According to Hephaestio, Apotelesm., I, 1, 69 Chnumis or Chnubis is the third decan of the Cancer. In modern astrological literature the stomach is still said to be ruled by the constellation of the Cancer, cf. J.C. VAN WAGENINGEN, Astrologie en geneeskunde, Rotterdam 1976, p.180.
- (15) C. BONNER, Studies in Magical Amulets, p.57.
- (16) Dioscorid., Mat. Med. V, 142. For other virtues ascribed to jasper see J.M. RIDDLE, Marbode of Rennes' De lapidibus, pp.40-41; 95-96.
- (17) D'Arcy W. THOMPSON, A Glossary of Greek Fishes, p.91.
- (18) Cf. Aelian, N.A., II, 44; Oppian, Halieut., II, 434-453. Modern scholarship derives its name from ΐουλος, a kind of worm, cf. R. STROEMBERG, Griechische Fischnamen, p.125.
- (19) Numenius ap. Athen., Deipn., VII, 304 sq..
- (20) E.g. Cyran. IV, 1, 5 ( ἀετός ); IV, 2, 5 ( ἀνθρακ ); IV, 9, 4 ( γλαύχος ); IV, 12, 3 ( γναφήςτιος ); IV, 14, 5 ( ὄρακων ); IV, 49, 5 ( ὄρφως ); IV, 58, 2 ( κάλλη ); IV, 65, 4 ( ἴδρος ); IV, 66, 3 ( φάγρος ); IV, 74, 3 ( χρύσαφος ).
- (21) Aelian, N.A., XIV, 7. The ostrich indeed swallows stones as an aid for its own digestion. Cf. I. KRUMBIEGEL, Die Straussenvögel, Wittenberg - Lutherstadt 1966, p. 126.
- (22) Cyran. I, 18, 47-48: αὐτὸς δὲ ὁ λίθος (ἐκ τοῦ ἔχλινου) περιπατῶμενος μεγίστην ἐδπεψίαν παρέχει.



Aphrodite.  
Staatliche Kunstsammlungen Kassel 244.  
Lapis lazuli.

κιναλδιος βοτάνη	holy vervain ( <i>Verbena supina</i> )
κιναλδιος λιχθός	Class. <i>Blennoidae</i>
κιναλδιος λίθος	obsidian
κιναλδιος πτηνόν	wryneck ( <i>Lynx torquilla</i> L.)

I, 10, 39-42

Τὸν δὲ δεξιὸν ὀφθαλμὸν εἴαν τις φορέσῃ ὑπὸ λίθον  
 κάππειρον ἄσπιλον, ἐν ᾧ ἔστιν γεγλυμμένη Ἀφροδίτη,  
 ὃ τοῦτο φορῶν ἐπίχαρις ἔσται καὶ παρὰ ἀνθρώποις  
 ἐξάκουστος καὶ ἐπὶ πάσης δίκης νίκην ἔξει. τὸ  
 δ' αὐτὸ ποιεῖ καὶ ὁ εὐώνυμος ὀφθαλμὸς ὑπὸ θηλείας  
 φορούμενος.

"If someone bears the right eye (of the bird) under a  
 stainless sapphire, in which Aphrodite is engraved,  
 the bearer will be charming, he will be famous  
 amongst people and he will gain every lawsuit. The  
 left eye has the same effect if borne by women."

Although the amulet does not form part of the  $\kappa\epsilon\tau\iota\delta\omicron\varsigma$   $\iota\mu\acute{\alpha}\varsigma$  of Aphrodite (1), it is clearly sacred to the goddess.

The  $\kappa\iota\nu\alpha\lambda\delta\iota\omicron\varsigma$  or  $\tau\upsilon\gamma\acute{\epsilon}$  is an outstanding example of a magic bird. An accurate description of this species is given by Aristotle (2). The characteristics of the wryneck are very peculiar : "it can extend its tongue for a distance of four fingerbreadths and then draw it again; further it can turn its neck right round back while keeping the rest of its body unmoved, like a serpent." Ornithological observations showed that these movements are not erotical, but that they are meant to scare enemies and to feed. It is clear however that in antiquity they were interpreted in an erotic way. The phallic symbolism of the wryneck is apparent from its name :  $\kappa\iota\nu\alpha\lambda\delta\iota\omicron\varsigma$  is derived from  $\kappa\iota\nu\alpha\lambda\delta\omicron\varsigma$ , which means "lewd fellow" (3). The bird was very frequently used in love magic : it was bound on a four-spoked wheel and spun round to bring back a stayed lover. The word  $\tau\upsilon\gamma\acute{\epsilon}$  thuswise came early to mean the magic wheel itself and even got the metaphorical sense of "love", "seduction" and "desire" (4). The relationship of the bird and the wheel with the love goddess Aphrodite is thus obvious, the more so as Aphrodite herself used it for the first time, in connection with Iason and Medea (5).

It is not peculiar that the eye of the wryneck is to be enclosed in the amulet. The eyes of diverse animals were borne in antiquity as phylacteria against ailments of all sorts (6). Pliny often specifies it has to be the animal's right eye (7). The symbolism of the right side as an expression of dignity and authority, of everything that is good and can give protection, seems to be universal (8). It is therefore natural, in view of the most common cultural pattern, that right is associated with the male part of the population, representing strength and protection, while left suits better to the "weak" women. This symbolism of right and left, associated with the opposition between male and female, thus explains why the man will use the wryneck's right eye, while the woman will use the left one.

It is possible that the symbolism of the eye here is to be seen in connection with the theory of microcosm and macrocosm attributed to Hermes Trismegistos (9). In this astrological theory the sun and the moon are considered as the eyes of the macrocosm, the left eye of man - the microcosm - corresponding with the moon, the right eye with the sun. A certain solar magic haunts this amulet anyway : Cook's theory that the Ἰνυξ is a sun emblem probably is right (10).

Magical amulets showing the picture of Aphrodite are very common. The stone used for the engraving mostly is lapis lazuli or another blue stone (11). Cyranides indeed don't prescribe a κίναβδιος for this amulet, the κίναβδιος stone or obsidian being used in the κεκτοῦ ἱμάς (12). The picture of Aphrodite is to be engraved in a κάφειρος, a blue stone. This κάφειρος however is not our sapphire. The description of the κάφειρος in Cyranides rather corresponds to lapis lazuli as often is the case in antiquity (13). The stone is sacred to Aphrodite as said in Cyranides and also by Ps. Callisthenes (14).

It is evident that an amulet totally sacred to Aphrodite will make its wearer charming and loved by everyone, as it gives him Aphrodite's χάρτις.

Χάρτις however always goes with κειθῶ, persuasiveness (15). Therefore the wearer of the amulet will be ἐξάκουστος, which means that he will be famous, but also that he will be heard, understood and convincing. The sexual connotation of χάρτις and κειθῶ is left behind in our text : the persuasiveness of the amulet wearer will assist him especially in court. Philostratus' description of the court-room in Babylon is very significative in this matter (16). The ceiling is entirely covered with sapphires - i.e. lapis lazuli - and represents the celestial vault. Four golden Ἰνυγες are suspended from it, reminding the king of Adrasteia and of his being but human. According to Philostratus the Magi claim that they have suspended the Ἰνυγες there themselves calling them "the voices of the gods".

Cook (17) compared this passage of Philostratus with a stone tablet found in Abû-Habbah, the site of the old Babylonian city Sippar. The sculpture preserved in the British Museum is officially described as follows :

"Tablet sculptured with a scene representing the worship of the Sun-god in the Temple of Sippar, and inscribed with a record of the restoration of the temple by Nabû-apal-iddina, king of Babylonia, about B.C. 870. In the upper part of the tablet the Sun-god is seen seated within a shrine upon a throne. ... Above his head are the three symbols of the moon and the sun and the planet Venus. ... Before the shrine upon an altar or table stands the disk of the sun, which is held in position by means of ropes tightly drawn in the hands of two divine beings who form part of the celestial canopy. ... The shrine of the god stands upon the Celestial Ocean, and the four small disks upon which it rests, seem to indicate the four cardinal points. The text describes the restoration of the Temple of the Sun-god by two kings called Simmash-Shikku (about B.C. 1050) and E-ulbar-shakin-shum (about B.C. 1020). It then goes on to say that Nabû-apal-iddina, king of Babylonia, found and restored the ancient figure of the Sun-god with gold and lapis-lazuli. ... This tablet was made by Nabû-apal-iddina in the ninth century before Christ, but he probably copied the sculptured scene at the top from a relief of a very much older period"(18).

Cook notes the following analogies : the throne-room with a ceiling vaulted like the sky, lapis lazuli and gold, and above all, the solar disk suspended by cords and the emblems of the sun, moon and star seen beneath the ceiling which are analogous to the four *inyges* mentioned by Philostratus. The principal heavenly bodies are indeed represented by golden disks which were known as "the voices of the gods" (19). From this comparison we can conclude that the *ἄγγες* mentioned by Philostratus are no birds, but the magic wheels (20).

Cook however does not enter into the differences between Philostratus' description and the Babylonian stone tablet. It is remarkable that nothing in the tablet seems to refer to *Adrasteia* or *judicature*, while Philostratus on the other hand does not mention the planet Venus which occupies an important place on the stone tablet, above the sun-god's head.

Babylonian astrology assigned the several planets to different divinities. In this system the planet Venus is Ishtar, the Assyro-babylonian fertility and love goddess, later identified with the Greek Aphrodite. So the gap between Philostratus and the Babylonian stone-tablet is bridged by the Aphrodite amulet in Cyranides : here Aphrodite replaces Adrasteia as an aid in the court-room !

I don't think we can go as far as identifying Aphrodite with Adrasteia. There is no evidence for this in literature nor in archaeology. Adrasteia however has been identified with Nemesis, goddess of right and vengeance (21). Since the hellenistic period Nemesis also plays an important part in eroticism : she is pictured on love amulets, while in literature her name is often associated with Eros. Nemesis though remains a vengeress of hybris, also in erotic matters, rather than a love goddess. We therefore cannot completely identify her with Aphrodite (22). We can only assume that she represents this typical aspect of the all-embracing love goddess Aphrodite, bearing in mind the religious syncretism characteristic for this period.

Let us now have a look at the iconographical representations of Nemesis. One of her principal attributes is the wheel, mostly four-spoked. In literature the allusions to this wheel are few, but in plastic art it is well known (23). The similarity between the wheel of Nemesis and the  $\tau\upsilon\gamma\xi$  of Aphrodite is striking. I am therefore inclined to interpret the bird  $\tau\upsilon\gamma\xi$ , whose eye is to be enclosed in the Aphrodite amulet of Cyranides, as a substitute for the magical wheel of Aphrodite and Nemesis/Adrasteia likewise. This interpretation makes clear how the amulet will assist its wearer in the court-room. The wheel of Nemesis with four spokes in the shape of a cross, like probably the  $\tau\upsilon\gamma\xi$  of Aphrodite, is a solar emblem (24).

NOTES

- (1) The chapter Kappa deals extensively with the κερτοῖς ἰμάς of Aphrodite. This matter will be treated in appendix.
- (2) Aristotle, H.A., II, 12, 504a 11 sqq.
- (3) The Etymologicum Guduanum 322, 13 explains the word καρὰ τὸ κινεῖσθαι τὴν αἰδῶ ἢ καρὰ τὸ κινεῖσθαι τὰ αἰδοῖα. According to F. Capponi, Avifauna e magia, Latomus 40 (1981), p. 296 the peculiar movement of the wryneck was regarded as erotic because of its resemblance with the uninterrupted phrenetic rhythm typical for the adepts of the mystery cult of the Magna Mater. For this statement he refers to Dionysius, Ixeut. I, 23.
- (4) On the iynx and its magical function see A.S.F. GOW, IYΓΞ, POMBOΣ, rhombus, turbo, JHS 54 (1934), pp. 1-13; D'Arcy W. THOMPSON, A Glossary of Greek Birds, pp. 124-128 with references to ancient authors and illustrations from Gow; O. KELLER, Antike Tierwelt II, pp. 52-54; E. TAVENNER, Iunx and rhombus, TAPhA 64 (1933), pp. 109-127; M. DETIENNE, Les jardins d'Adonis, pp. 160-172; S.S. INGALLINA, Orazio e la magia, Palermo 1974, pp. 158-165; A.M. TUPET, La magie dans la poésie latine, Paris 1976, pp. 50-52; J. POLLARD, Birds in Greek Life and Myth, pp. 130-131. A.B. COOK, Zeus I, pp. 197-198 and 253-254, thinks that the wheel behind the wryneck might represent the sun disk, the iynx thuswise being a sun emblem.
- (5) Cf. Pindarus, Pyth., 214-217.
- (6) A lot of examples in W. DEONNA, Le symbolisme de l'oeil, pp. 192-194.
- (7) Pliny, N.H. XXVIII, 66 (the right eye of the wolf against fever); XXVIII, 29 (the right eye of a living animal against eye spots); XXIX, 38 (the right eye against running eyes); XXX, 30 (the right eye of a living lizard against quartan fever).

- (8) M. GOURGES, A la droite de Dieu, Anthropos 75 (1980), pp. 278-279 asserts this for the whole ancient near east. See also A. GERNATOWSKY, Rechts und Links im antiken Aberglauben, diss. Breslau 1936.
- (9) Cf. M. BERTHELOT, Collection des alchimistes grecs, Paris 1888, pp. 100-101. Commentary in FESTUGIERE, La révélation d'Hermès Trismégiste I, pp. 126 sqq.. In modern astrology a difference is made between the sexes: the sun is said to rule the right eye of men and the left eye of women, the moon the right eye of women and the left eye of men, cf. J.C. VAN WAGENINGEN, Astrologie en geneeskunde, Rotterdam 1976, p.197.
- (10) A.B. COOK, Zeus I, pp. 197-198; 253-254.
- (11) Many examples in A. DELATTE - Ph. DERCHAIN, Les intailles magiques, pp. 183-189 with illustrations and descriptions.
- (12) See appendix.
- (13) Cyran. I, 18, 8-11: Σάπφειρος λίθος, ἡ κυάνεος ἀνήκεν τῇ Ἀφροδίτῃ, ἄσπιλος, ἔχων καὶ φλεβία χρυσᾶ διὰ τοῦτο καὶ χρυσοσάπφειρος παρὰ τισὶν ὀνομάζεται ἄφ' οὗ ποιοῦσιν οἱ ζωγράφοι τὸ λαζούριον τὸ ἄριστον, ὃ καλοῦσιν φυσικόν.
- R. HALLEUX - J. SCHAMP, Les lapidaires grecs, p. 250 n.1 refer to Theophr., Lap. 42-50; Pliny, N.H., XXXVII, 119-120; Dion. Per. 1105; Schol. Dion. Per. 714, p. 453, 3 Müller; Isidor., Orig., XVI, 9, 2 for similar descriptions. G. HOELSCHER, Das Buch Hiob, Tübingen 1952, p. 71 likewise remarks that the stone ἰάσο or σάπφειρος in Job 28, 6 is to be identified with lapis lazuli, since the real sapphire was practically unknown before the the Roman period. See also J.M. RIDDLE, Marbode of Rennes' de lapidibus, p. 41.
- (14) Cyran. I, 18, 8; Callisthenes, Alex. I, 4 (ed. LAUENSTEIN p. 12, 25: ἡ δὲ Ἀφροδίτῃ σαπφείριος ; p. 14, 11-12: τὴν Ἀφροδίτῃν σαπφείρου λίθου).
- (15) Iynx is sometimes personified as a magician, daughter of Peitho! About the connection between iynx, charis and peitho see M. DETIENNE, Les jardins d'Adonis, pp. 162-172.

- (16) Philostratus, Vita Apoll. I, 25.
- (17) A.B. COOK, Zeus I, pp. 262-265.
- (18) E.A. WALLIS BUDGE, British Museum. A Guide to the Babylonian and Assyrian Antiquities, London 1900, p. 128 sq., pl.22, nr.91,000 ap. A.B. COOK, Zeus I, p. 263, fig.190.
- (19) A.B. COOK, Zeus I, p. 264.
- (20) Philostratus, Vita Apoll., VI, 11 also speaks of the golden ἰνγες that hung from the delphic temple as 'echoing the persuasive notes of siren voices'. A.B. COOK, Zeus I, pp. 259-261 refers to Apulian vases depicting a pair of four-spoked wheels hanging from the roof of a temple or palace or chieftain's hut. He interpretes them as magic wheels of a prophylactic sort, in a word, as iynges.
- (21) H. POSNANSKY, Nemesis und Adrasteia, p. 79 refers to Ammianus Marcellinus 14, 11, 25 (Adrasteia quam uocabulo duplici etiam Nemesis appellamus), to Nonnus who uses indifferently the two names for the same goddess, and to Martianus Capella I, 64. In the 4th - 5th century A.D. the identification is thus certain.
- (22) Cf. H. POSNANSKY, Nemesis und Adrasteia, pp. 6-23 : Beziehungen der Nemesis zu Aphrodite; pp. 36-40. A. DELATTE - Ph. DERCHAIN, Les intailles magiques, p. 190 remark that in the Roman period Nemesis has the same attributes as Tyche, a.o. the wheel and the griffin : "Si Tyché est peut-être plus fréquente dans les papyrus magiques, il semble que dans la magie érotique, Némésis ait joué un rôle plus marqué". They refer to the description of the κεστός ἰμάς of Aphrodite in Cyran. I, 10, 85-87 including two Nemesis stones with the picture of a griffin, one of its paws resting on a wheel : this picture is to illustrate the punishment of Eros.
- (23) A.B. COOK, Zeus I, p. 269 refers to Mesomedes, H. Nemes., 1 sqq. ; Nonnus, Dionys., 48, 375 sqq. ; Ammianus Marcellinus, 14, 11, 25 sq. ; Claud., De bello Getico, 631 sq.. For Nemesis in plastic art see A.B. COOK, o.c., p. 269 and H. POSNANSKY, Nemesis und Adrasteia, pp. 92-172.

- (24) Cf. Le comte du MESNIL du BUISSON, Le sautoir d'Atargatis, p. 11.



λίβανος βοτάνη	frankincense (Olibanum)
λύγγουρος λίθος	amber
λώβηξ πτηνόν	vulture
λάβραξ ἰχθύς	sea-basse (Perca labrax L.)

I, 11, 20-22

Εἰς δὲ τὸν λύγγουρον λίθον γλύψον γύπα, καὶ ὑπό-  
θεοσ δλίγον λίβανον καὶ ἀκρόπτερον τοῦ πτηνοῦ καὶ  
φόρει. ὠφελεῖ γὰρ πρὸς ἀμβλυωπίαν καὶ ὑποχύσεις  
ὀφθαλμῶν.

"Engrave a vulture in the amber stone and put a bit  
of frankincense underneath and the wing tip of the  
bird and wear it. For it will help against dim-  
sightedness and cataract."

As frankincense was a well-known medicine for eye-diseases in antiquity its use in this amulet does not need any further explanation (1). The vulture's picture on the stone and its wing tip underneath are also to improve the wearer's eyesight. The vulture indeed was said to have very sharp eyes (2).

It is uncertain if a closer relationship between the vulture and frankincense is to be noticed in this amulet. No allusion is made on the fact that vultures are said to be very sensitive to strong perfumes, so that they can get killed by them (3). This is caused by the antipathetical force of both their natures. The authors mentioning this particularity of the vulture however never use the word  $\lambda\acute{\upsilon}\beta\alpha\nu\omicron\varsigma$ , frankincense, but prefer the more general terms for perfume  $\epsilon\delta\omega\delta\epsilon\alpha$  or  $\mu\acute{\upsilon}\rho\omicron\nu$ . The relationship between the vulture and frankincense, if it exists, anyway is a negative one.

Possibly the vulture on the amulet is a substitute for the phoenix. The vulture indeed is a sun-bird, especially in Egypt where it was worshipped as a divinity (4). The legends attached to the phoenix and those of the vulture are quite similar, so that a certain interchangeability of both birds may be accepted (5). In the myth of the phoenix perfume plays an important part. Herodotus already mentioned that the phoenix put the corpse of its dead father in an egg of myrrh (6). Later variants of this legend speak of other aromatic herbs, always connected with the death - and the resurrection - of the phoenix (7). The phoenix thus dies surrounded by perfume. The step from this "dying surrounded by perfume" to "die by perfume" is very small. It is therefore not impossible that the death of the vulture caused by a strong perfume in fact is a variant of the legend of the phoenix dying surrounded by aromatic herbs. For the vulture though the perfume is simply destructive, while the phoenix's death is sublimated by its rebirth.

Let us now return to the amulet of Cyranides. The stone used for the engraving is lyngurium. Lyngurium is identified with amber (8). By popular etymology the name is explained as "lynx-urine". This definition also occurs in Cyranides (9). Lyngurium is nowhere else attested as a talisman protecting the eyes (10). In view of the popular etymology

however it is obvious that the stone was associated with the sharp eyes of the lynx (11). Other derivations from λύγξ also refer to the eyes : λυγχεύς is the name of a collyrium (12) and Λυγχεύς is the famous Argonaut with the sharp eyes.

Another name for lyngurium is ἀγέρον δάκρυ , poplar tear (13). This of course is another reference to the eyes. Moreover it proves that λύγγουρος indeed is amber. Dioscorides actually tells us the following story about the black poplars: "It is said that their tears which are shed in the river Eridanus get solid and become the so-called amber" (14). This is an allusion on the Phaeton myth. After his disastrous ride in the solar chariot Phaeton, son of Helios, was killed by Zeus with a thunderbolt. He fell into the Eridanus. His sisters, the Heliads, mourning for him on the river-bank turned into black poplars and their tears became amber-drops. This myth clearly shows the association of amber with the sun. The Greek name of amber, ἤλεκτρον , is also connected with ἠλέκτωρ , the beaming sun (15). The golden colour of amber indeed reminds us of sunbeams.

Each of the three elements constituting this amulet thus can be considered as salutary for the eyes. As above-said there possibly also is a certain relationship between the vulture and the frankincense. The connection between amber and frankincense on the other hand is certain. Indeed, Aristotle remarks : "For both amber and substances called tears are formed by cooling, for example myrrh, frankincense and gum " (16). According to Aristotle's theory of the homoeomerous bodies amber and frankincense are formed in the same manner : they both are "tears" solidified by cold. Therefore it bears no wonder that popular medicine ascribed to these "tears" a curing virtue for the eyes (17).

NOTES

- (1) W.W.MUELLER, Weihrauch, RE Suppl. XV (1978), col. 769-771 refers to the materia medica of Celsus, Dioscorides, Galenus, Geoponica etc..
- (2) Cf. O. KELLER, Antike Tierwelt II, p. 34; J.R.T. POLLARD, Birds in Greek Life and Myth, p. 34. D'Arcy W. THOMPSON, A Glossary of Greek Birds, p. 85 notes that the vulture's liver was used against cataract.
- (3) Cf. Theophrastus, de odor. II, 4 : κονεῖν δ' ἔνια φαίνεται ταῖς ὀσμάτῃς καὶ ταῖς εὐωδίαις, εἴπερ ἀληθὲς τὸ ἐπὶ τῶν γυπῶν καὶ τῶν κανθάρων. τοῦτο δὲ ὀηλον ὡς δι' ἐναντιώσειν τῆς ἐν αὐτοῖς φύσεως.  
Aelian, N.A. III, 7 : εὐωδία δὲ καὶ μύρον γυψῖν αἴτια θανάτου ; IV, 18 : γυπῶν γε μὴν τὸ μύρον ὀλεθρὸς ἔστιν ;  
Ps.-Aristotle, de mirab. ausc. 147 : λέγεται καὶ τοῦδε γυπακῆ ὑπὸ τῆς τῶν μύρων ὀσμῆς ὀποθνήσκειν, ἔάν τις αὐτοῦδε χρῆσθῃ ἢ δῶ τὲ μεμυρισμένον φαγεῖν ; Pliny, N.H., XI, 279 : necantur, uultures unguento (qui fugat alios appetunt odorem) ; Geop. XII, 16 ; XV, 1, 14 ; etc..
- (4) For the assimilation of the vulture with different divinities, see W. SPEYER, Geier, RLAC IX (1976), col. 433-435.
- (5) An example of their interchangeability : Basil, Hom. VIII in Hexaemeron 6 (180 A-B) and Origen, Contra Cels. I, 37 support Mary's partus virginalis with the story of the vulture impregnated by the wind, while other church fathers tell the same story about the phoenix (Rufinus, Comm. in Symbol. Apostol., PL XXI, 11; Peter Damasc. 52, 11; Epiphanius, Ancor. 84). Cf. W. SPEYER, Geier, col. 461-462; J. HUBAUX - M. LEROY, Le mythe du phénix, p. 175.
- (6) Herodotus, Hist., II, 73.
- (7) See J. HUBAUX - M. LEROY, Le mythe du phénix, pp. 68-97.

- (8) Cf. Strabo, Geogr. 4, 6, 2; Theophrastus, De lapid. V, 28; Dioscorides, Mat. med., II, 81; Hesychius s.v. λυγκούριον. See also STEIER, Lynx, RE XXVI (1927), col. 2475-2476.
- (9) Cyran. I, 11, 5 : λύγγουρος δὲ λίθος ἐστὶν ἐκ τοῦ ὄρουσ τῆς λυγγῶς ὀνομαζόμενος, ;  
cf. Strabo, Geogr., 4, 6, 2; Theophrastus, De lapid. V, 28; Pliny, N.H., XXXVII, 52; etc. According to J. WHATMOUGH in his recension of H. FRISK, Griechisches etymologisches Wörterbuch, Classical Philology 57 (1962), p. 243 there was a confusion between ligurium, "Ligurian amber" traded by the Ligurians to the Greeks, and λυγγούριον, which he identifies with zircon or tourmaline.
- (10) Amber ( ἤλεκτρον ) is a medicine for the eyes in Mich. Psellos, De virtute lapid., 9 : τοῖς ὀφθαλμοῖς δὲ ἐγγριόμενον ὀξυδορκίαν χαρίζεται, but here not the stone is meant but the weak material.
- (11) About the proverbial expression λυγκικὸν βλέπειν see STEIER, Lynx, col. 2475.
- (12) Galen. XII, 778; Paul. Aegin., VII, 16.
- (13) Cyran. I, 11, 6.
- (14) Dioscorides, Mat. med. I, 83 : λέγεται ὅ' ὅτι τὸ ἐξ αὐτῶν δάκρυον κατὰ τὸν Ἡριδανὸν πόταμον καταχεόμενον πήγνυσθαι καὶ γίνεσθαι τὸ καλούμενον ἤλεκτρον.
- (15) Cf. Pliny., N.H. XXXVII, 31. Homer, Od., XVIII, 296 compares an amber necklace with the sun. On the association of amber with the sun see F.M. AHL, Amber, Avallon and Apollo's singing Swan, AJPh 103 (1982), pp. 394-398.
- (16) Aristotle, Meteor., IV, 10 (388b); also 389a : ἤλεκτρον, μύρρα, λίβανος καὶ πάντα τὰ δάκρυα λεγόμενα .
- (17) It is probably not a coincidence that Aelian, N.A. IV, 17-18 put the passage on the vulture and perfume together with the passage on the lynx and the lyngurium.



μορέα φυτόν	mulberry-tree ( <i>Morus nigra</i> L.)
μυγερὸς πτηνόν	night-heron ( <i>Ardea nycticorax</i> L.)
μηδικὸς λίθος	Median stone
μόρμυρος ἰχθὺς	sea-bream ( <i>Pagellus mormyrus</i> CV.)
θαλάσσιος	

I, 12, 38-44

Εἰς δὲ τὸν μηδικὸν λίθον γλύφεται μόρμυρος ἰχθὺς καὶ κατακλείσας εἰς σιδηρᾶν πυξίδα, καὶ ὑποβάλλεται καρδίδιον ἀνωβλεπὸς τῆς μορέας, καὶ φορεῖται πρὸς τὰς αἱμορροΐδας καὶ τὰ περὶ τὴν ἔδραν πάθη.

Εἰ δὲ τὴν κάτω βλέπουσαν καρδίαν ὑποκλείσῃς, ἔσται φυλακτήριον πρὸς αἱμορροΐκοις καὶ τὰς ἐκ ῥινῶν αἱμορραγίας, καὶ ὅσα πάθη αἱμορραγίας αἱμορροϊκὰ ἄνωθεν .

"In the Median stone a sea-bream is engraved and enclosed in an iron box, and underneath a bud (1) of the mulberry-tree is put turned upwards, and it is worn against haemorrhoids and ailments of the seat.

If you enclose the bud turned downwards, it will be a phylacterion against blood spitting and bleeding from the nose and against any form of bleeding from the upper part of the body."

This amulet description has been used as a source for the collection of magical recipes gathered in the Parisinus gr. 2419. On f.264v of this fifteenth century manuscript (2) the lemma περὶ αἱμορραγίας παντοίας - "on all kinds of haemorrhages" - is followed by a recipe against haemorrhoids copied on Cyranides I, 12, 31-37 and the following amulet description:

εἶτα λαβὼν λίθον μηδικὸν γλῶψον ἐν αὐτῷ ἐν ἀποκρούσει Σελήνης ἄνθρωπον περιεσφιγμένον πτερὰ ἔχοντα καὶ ἀκέφαλον καὶ ὑπὸ τοὺς πόδας ταῦτα α. ρ. μ. γ. α. ε. λ' καὶ γύρωθεν ταῦτα (signa magica septem) ὄπισθεν δὲ τὰ προρρηθέντα ὀνόματα. ὑποκατάκλεισον δὲ καὶ καρῦδιον ἐν τῆς μορέας ἄνω βλέπον καὶ κάτω βλέπον ἕτερον, ὅπερ τεχνικῶς ἐν τῇ πρὸ αὐτῆς βίβλῳ Κυρανίδι πλατύτερον εἴρηται, καὶ περιεσφιγξας ἐν χρυσοῦ ὠληναρίῳ φόρει ἄγνος ἀπεχόμενος ὕδρου κρέατος ὅποτεν φορῆς αὐτό .

It is said to be helpful against all kinds of haemorrhages as the amulet in Cyranides is. The mineralogical material is the same, but the engraving is different: instead of the sea-bream the picture shows a headless winged man. A bud (3) of the mulberry-tree is enclosed as in Cyranides, but a golden box is used instead of an iron one.

The Median stone is mentioned by Pliny in his Natural History (4). Median stones, Pliny says, show a great variety of tints and on occasions are even blended to some extent with lapis lazuli. Modern scholars identified this stone with malachite, green copper carbonate, intergrown with azurite, blue copper carbonate (5). Its resemblance in colour with lapis lazuli elucidates its dedication to Aphrodite in Cyranides: as above mentioned, sapphire, lapis lazuli and any other blue stone were sacred to the love goddess (6). Pliny only describes the stone classifying it as a variety of the smaragdus, without ascribing any medicinal virtues to it. Further useful information on this stone is missing (7).

Medicinal virtues of the μόρμυρος , a kind of sea-bream, are unknown (8). Its picture on the amulet indeed was replaced by another one in the amulet description of Parisinus gr. 2419, probably because the sea-bream's function was no longer understood.

The function of the bud of the mulberry-tree on the other hand is quite clear. The dark red colour of the black mulberry was often compared with that of blood (9). The legend was told that the white mulberry turned red by the blood of Pyramus as he killed himself mourning for Thisbe (10). It is therefore obvious that the mulberry was associated with all kinds of haemorrhages. Athenaeus and his source Demetrius Ixion even saw an etymological relationship between μόρα and αἱμόρα , "flowing blood" (11). Once more the homoeopathic principle of the similia similibus is to be found in this amulet of Cyranides: popular medicine, seeing blood in the mulberry's colour, believed it would be helpful against haemorrhages (12). If the haemorrhages are localised in the upper part of the body, the bud is to be turned downwards, if they are localised in the lower part it is to be turned upwards. According to magical logic the bud points at the opposite side so as to make the blood flows take another direction which will stop them.

As the Median stone is not known as styptic by itself, its use for this amulet might be associated with the origin of the mulberry-tree. The black mulberry-tree indeed was imported from the north of Persia and Media (13). The love drama of Pyramus and Thisbe situated under a mulberry-tree in Babylon also refers to the eastern origin of the tree (14). This love drama makes the tree in a way sacred to Aphrodite as is the Median stone.

The iron box needed for the amulet also refers to the mulberry-tree. To let the fruit ripen, the ancients used to make an incision with iron in it. It was said that the mulberries would be ready for consumption within the three or four days following (15). The iron box thus probably is to help the enclosed mulberry bud, the fruit-to-be, to ripen and to get its effectiveness. Moreover, iron is frequently used in magic and medicine (16). Among the diverse medicinal uses of iron rust Pliny notes that "applied on wool it arrests women's discharges

and for recent wounds it is useful diluted with wine and kneaded with myrrh, and for swellings round the anus dipped in vinegar" (17). Concerning scale of iron he mentions the following virtues: "it arrests haemorrhage, though it is with iron that wounds are chiefly made! And it also arrests female discharges. It is also applied against troubles of the spleen, and it checks haemorrhoidal swellings and creeping ulcers" (18). The iron box therefore is an essential part of the amulet. Replacing it by a golden box, as was done in the Parisinus gr. 2419, shows a lack of comprehension of its curative function.

NOTES

- (1) καρδίδιον seems to be a hapax eiremenon. The translation in LSJ is "twig of a mulberry-tree". It clearly is a diminutive of καρδία, which is used as a synonym for καρδίδιον in Cyran. I, 12, 42. The Latin translation of Cyranides has 'oculum vel corculum', the eye or the heart of the mulberry (L. DELATTE, Textes latins, p. 65). In Theophrastus, H.P., III, 14, 1 καρδία is "pith". In my view καρδίδιον and καρδία in Cyranides refer to the bud of the fruit-to-be, which Pliny, N.H., XXIII, 137 calls ricinos with an unattested Greek name. According to Pliny this part of the plant indeed was worn as an amulet against the flow of blood.
- (2) A. DELATTE, Anecdota Atheniensia I, pp. 485-486 edited the text presented in Paris. gr. 2419 and Bononiensis 3632. The Paris. gr. 2419, also containing the text of Cyranides, has the siglum R in the edition of Kaimakis.
- (3) The word used in the text is καρδίδιον, which means "small nut". It possibly is a fault for καρδίδιον. Cf. n.1.
- (4) Pliny, N.H., XXXVII, 71. This Medicus has nothing to do with the Medius lapis treated by Damigeron-Evax XXI (ed. HALLEUX-SCHAMP, p. 259-261) which according to Pliny, N.H., XXXVII, 173 was found by Medea or Media.
- (5) D.E. EICHHOLZ, Pliny, Natural History, vol. X (Loeb), p. 220. E. de SAINT-DENIS, Pline l'Ancien, Histoire Naturelle, livre XXXVII (Budé), p. 152.
- (6) Cyranid. I, 12, 5. Cf. the treatise De lapidibus et eorum generibus, K.W. WIRBELAUER, Antike Lapidarien, p. 22, l.10 : Lapis quintus qui dicitur medicos, <veneris>, tauri <et librae>; l.25 : Lapis medicos : sculpis venerem.

- (7) The  $\mu\eta\delta\iota\chi\acute{o}\varsigma$  is the stone of the third decan of Aquarius in the Holy Book of Hermes Trismegistos (ed. C.-E. RUELLE, p. 274) but there is no relationship with the amulet of Cyranides. Possibly the  $\mu\eta\delta\iota\chi\acute{o}\varsigma$  of the Holy Book is to be identified with the media mentioned by Pliny, N.H., XXXVII, 173.
- (8) For the identification and the characteristics of this fish see D'Arcy W. THOMPSON, A Glossary of Greek Fishes, p. 161; E. de SAINT-DENIS, Le vocabulaire des animaux marins, pp. 65-66; H.J. COTTE, Poissons et animaux aquatiques, pp. 105-107.
- (9) Virgil, Ecl., VI, 22 : sanguineis frontem moris; Columella, De agr., X, 401 : cumulatque moris / candida sanguineo manat fiscella cruore.
- (10) Ovid, Metam., IV, 55-166.
- (11) Athenaeus, Deipn., II, 51.
- (12) A. DE GUBERNATIS, La mythologie des plantes, p. 231, refers to PORTA, Phytognomica who prescribes the mulberry against haemorrhages. This prescription goes back to Pliny N.H., XXIII, 137-138 : "There are besides marvels related of the mulberry. When it begins to bud, but before the leaves unfold, the fruit-to-be is plucked with the left hand. The Greeks call them ricini. These, if they have not touched the ground, when worn as an amulet, stay a flow of blood, whether it flows from a wound, the mouth, the nostrils or from haemorrhoids. For this purpose they are stored away and kept. The same effect is said to be produced if there be broken off at a full moon a branch beginning to bear; it must not touch the ground, and is specially useful when tied on the upper arm of a woman to prevent excessive menstruation. It is thought that the same result is obtained if the woman herself breaks off a branch at any time, provided that it does not touch the ground before it is used as an amulet." Cf. Marcellus, Med. XXXI, 33.
- (13) Cf. J. MURR. Die griechische Pflanzenwelt, p. 68.
- (14) Cf. V. HEHN, Kulturpflanzen, p. 340.

- (15) Theophrastus, H.P., IV, 2, 1 :  
 ἔχοντες ὄνυχας σιδηροῦς ἐπικνίζουσιν· ἃ δ' ἂν  
 ἐπικνισθῆ τεταρταῖα πέτταται ;  
 Theophrastus, De causis plant., I, 17, 9;  
 Dioscorides, Mat. Med., I, 127: μηδὲ πεκαίνόμενον  
 ὄλγα τοῦ ἐπικνισθῆναι ὄνυχι ἢ σιδηρῷ ;  
 Athenaeus, Deipn., II, 51b:  
 ἄπερ οἱ ἐπιχώριοι ἐπὶ βραχὺ κνίσαντες σιδηρῷ  
 ἔωσιν ἐπὶ τοῦ φυτοῦ· καὶ ὑπὸ τοῦ ἀνέμου  
 κινούμενα ἐντὸς ἡμερῶν τριῶν οὕτω  
 πέπωνα καὶ εἰώδη γίνονται ; Pliny, N.H.,  
 XIII, 56-57. A rational explanation for this is  
 given by V. REICHMANN, Feige II (Sykomore),  
 RLAC VII (1966), col. 684 : "es ist offen ob  
 die Ursache dafür das Ausschliessen des  
 Milchsaftes oder das Absterben der in den  
 Rezeptakeln nistenden Gallwespen ist." He  
 refers to O. WARBURG, Die Pflanzenwelt I, 1923,  
 p. 485.
- (16) Cf. I. MUNDLE, Erz, RLAC VI (1966), col. 475-  
 491.
- (17) Pliny, N.H., XXXIV, 153.
- (18) Pliny, N.H., XXXIV, 154-155.



Nemesis.  
Coll. Seyrig 12 (=Bonner nr.57).  
Haematite, 14 x 9mm.

νεκύα βοτάνη	mullein (Verbascum)
ναυκράτης λίθος	shipholder (Echeneis naucrates L.)
νησσα πτηνόν	duck (Class. Anatidae)
νεμεσίτης λίθος	Nemesis stone

I, 13, 16-29

Νεμεσίτης ἐστὶ λίθος αἰρόμενος ἀπὸ βωμοῦ Νεμέ-  
σεως.  
Γλύφεται οὖν ἐπὶ τὸν λίθον Νέμεσις ἔχουσα τὸν κό-  
δα ἐπὶ τροχοῦ ἐστῶτα. τὸ δὲ εἶδος αὐτῆς ὡσεὶ παρ-  
θένου, τῇ εὐωνύμῳ χειρὶ κρατοῦσα πῆχυν, τῇ δεξιᾷ  
δὲ ῥάβδον. ὑποκατακλείσεις δὲ τῷ λίθῳ ἀκρόπτερον  
νήσσης καὶ βραχὺ τῆς βοτάνης.  
'Ἐὰν οὖν τὸν δακτύλιον τοῦτον προσενέγκῃς δαιμο-  
νιζομένῳ, πάραυτα ὁ δαίμων ἐξομολογησάμενος  
ἑαυτὸν φεύξεται. ἀφυγιάζει δὲ καὶ σεληνιαζομέ-  
νους περὶ τὸν τράχηλον φοροῦμενος. ἀποτρέπει δὲ  
καὶ φαντασίας δαιμόνων ἐπὶ τῶν ἐνυπνίων, καὶ βρε-  
φῶν ἐξαλλομένων καὶ νυκτερινῶν συναντημάτων.  
δέον οὖν τὸν φοροῦντα ἀπέχεσθαι ἀπὸ παντὸς μυ-  
σεροῦ πράγματος.  
Οὗτος οὖν ὁ δακτύλιος φοροῦμενος μηνύει τὴν πο-  
σότητα τῶν ἐτῶν τοῦ ζῆν χρόνου καὶ τὴν ποιότητα  
τοῦ θανάτου καὶ τὸν τόπον. δέον οὖν τὸν φοροῦν-  
τα ἀπέχεσθαι ἀπὸ παντὸς πονηροῦ πράγματος.

"The Nemesis stone is a stone removed from a Nemesis altar. In the stone Nemesis is engraved standing with her foot on a wheel. She is pictured as a maiden, holding a cubit-rule in her left hand and a wand in her right hand. You will enclose under the stone a duck's wing tip and a bit of the plant.

If you then present this ring to a possessed, the demon will immediately admit his presence and flee. It also cures moonstruck if worn around the neck. It also averts demonic phantasies in dreams, children's frightfulness and nightmares. The wearer must desist from every foul thing.

If this ring is worn it reveals the number of years of your life and the nature and place of your death. The wearer must desist from every bad thing."

Gems showing the picture of Nemesis are widespread. One of the amulets presented in Bonner's study corresponds quite well with the description in Cyranides : Nemesis is standing to the right in a long tunic reaching to the ground; a small wheel on the ground is partly concealed by her drapery; in her right hand she holds a wand. The inscription Νέμεσι βοήθει makes the identification of the goddess certain (1). Two of the three attributes of Nemesis mentioned in Cyranides are present : the wheel and the wand. It is supposed that Nemesis borrowed the wheel of Tyche, the goddess of (good) fortune and destiny. Anyway since hellenistic times it is a common attribute of both the goddesses (2). The other attributes are also very typical for Nemesis. On gems she is often pictured with a cubit-rule in her left hand (3). Two epigrams of the Greek Anthology clearly explain its significance :

XVI, 223 :

"Nemesis warns us by her cubit-rule and bridle neither to do anything without measure nor to be unbridled in our speech."

XVI, 224 :

"I, Nemesis, hold a cubit-rule. 'Why?' you will say. I proclaim to all men: 'Nothing beyond due measure'."

Because she punishes everything that is beyond due measure, she often holds a wand or a bridle in her right hand. By this she fulfils her mission as a goddess of vengeance (4).

The picture of Nemesis on an amulet meant to drive away evil demons of any kind, is easy to understand: just like Hecate and Osiris, Nemesis is a goddess who conquers the evil (5). It is likewise very acceptable that this amulet was believed to reveal to its wearer the number of years to live and the circumstances of his death, when we have in mind the existence of a Νέμεσις θανόντων (Nemesis of the dead), apart from a Νέμεσις θεῶν (Nemesis of the gods). The connection of Nemesis with death is not all that much due to her chthonic character. It is rather to be explained by the etymology of her name, νέμεσις meaning properly "distribution of what is due, retribution". In antiquity death actually was regarded as the culmination point of destiny.

Nemesis' picture should be engraved in a Nemesis stone. According to Cyranides this is a stone removed from a Nemesis altar. The stones used for the preserved Nemesis gems are of various mineralogical types (6). I therefore presume that the Nemesis stone is not a specific mineralogical variety, but that it is any kind of stone "removed from a Nemesis altar" or any kind of stone showing the picture of Nemesis (7).

The third element of the amulet is the νεχθα , which is given as a synonym for φλόμος , mullein (verbascum). In Cyranides it is said that there are seven different varieties of this plant (8), but it seems that the ancients did not make a very clear distinction amongst them (9). The name νεχθα clearly refers to death. The adjective νεχθς indeed means "dead". Mullein thus was used in necromancy (10). The association of the deceased with evil demons is quite obvious. So mullein was also used as an amulet against them. According to Ps. - Apuleius (4th - 5th c. A.D.) a stalk of

mullein should be borne as a protection. He also says this was the herb which Hermes gave to Odysseus before he went to Circe (11).

The belief that mullein could chase away evil spirits remains in later times. In France on St.-John's day (midsummer) burned stalks of plants were laid on the ground and people walked over them. Afterwards the stalks were hung up in the house to protect it from evil spirits (12).

From of old the tall leaves of the verbascum were used for lamp wicks. Therefore the plant is also called λυχνετις (13). Perhaps this luminous property made people believe it could lay ghosts and evil spirits. Marzell however found an explanation of this belief in the mullein's abundant yellow flowering in midsummer, which made the plant a "Sonnwendblume" and by that gave it apotropaic qualities (14).

Pliny says that superficial abscess is cured "by verbascum pounded with its root, sprinkled with wine, wrapped round with its leaves, and heated, thus prepared, on embers, so that it may be applied hot." But he adds: "Those with experience have assured us that it makes all the difference if, while the patient is fasting, the poultice is laid upon him by a maiden, herself fasting and naked, who must touch him with the back of her hand and say: 'Apollo tells us that a plague cannot grow more fiery in a patient if a naked maiden quench the fire'; and with her hand so reversed she must repeat the formula three times, and both must spit on the ground three times." (15). This magical cure performed by a maiden reminds us of the picture on the amulet of Cyranides showing Nemesis as a maiden. The picture of the maiden is there to help the plant enclosed in the amulet work more efficiently. Indeed, in primitive cultures as well as among various civilised nations a maiden was regarded as a mysterious person having a supernatural power in heaven and on earth. Therefore she was supposed to bring good fortune and to have magical as well as healing powers (16). A good example of a virgin curing epilepsy - i.e. moonstruckness mentioned in the text of Cyranides - is given by Pliny :

"Some say that a virgin should touch a patient fainted in an epileptic fit with her right thumb; hence their conclusion that epileptics should eat virgin meat." (17).

As a symbol of purity the virgin is the direct opposite of evil and by that she is a very likely person to fight it. The fasting of the patient cured by a virgin in the text of Pliny, the required abstinence from all evil for the wearer of the Nemesis amulet in Cyranides, all this can be reduced to one thing : purity as a weapon against evil.

The connection of the mullein with a maiden remained till the present : in French it is called "cierge-de-Notre-Dame", in German "Marienkerzen" and in various Flemish dialects "maagdekeerse". All these names meaning "maiden's candle" remind us likewise of the ancient use of the plant as a wick and of its connection with a maiden, christianized as the Virgin Mary. Dodonaeus on the other hand mentions an astrological relationship between the mullein and the maiden. According to him the root of the plant was used as an amulet against epilepsy, when the sun was in the sign of Virgo and the moon in the sign of Aries, but he has doubts about the efficacy of the remedy, which he regards as superstition.

The revealing of the number of years to live and the circumstances of his death to the wearer of an amulet containing a bit of mullein has a parallel in Prussia. There virgins used to hang the stalk of the plant above their bed. The one whose stalk was withered first, would die first (18).

The different functions of this amulet of Cyranides thus are based on the cooperation of two of its elements, the Nemesis stone with the picture of the goddess represented as a maiden and the enclosed part of the mullein. The purpose of the duck's wing tip is not clear.

NOTES

- (1) C. BONNER, Studies in Magical Amulets, fig. 57.
- (2) Cf. H. POSNANSKY, Nemesis und Adrasteia, p. 53; A.B. COOK, Zeus I, p. 271. For other gems picturing Nemesis with the wheel, see A. DELATTE - Ph. DERCHAIN, Les intailles magiques, pp. 189-194; H. POSNANSKY, o.c., pp. 162 sqq.
- (3) A. DELATTE - Ph. DERCHAIN, Les intailles magiques, p. 194, fig. 257; H. POSNANSKY, Nemesis und Adrasteia, pp. 162-163.
- (4) Cf. A. DELATTE - Ph. DERCHAIN, Les intailles magiques, p. 190.
- (5) Cf. A. DELATTE - Ph. DERCHAIN, Les intailles magiques, p. 193.
- (6) Fig. 57 in C. BONNER, Studies in Magical Amulets hematite; fig. 255 in A. DELATTE - Ph. DERCHAIN, Les intailles magiques yellow and brown jasper; fig. 256 cornelian; fig. 257 hematite; various other kinds are mentioned in H. POSNANSKY, Nemesis und Adrasteia, pp. 162 sqq.
- (7) The Nemesis stone also occurs in an eighteenth century lapidary : C. LEONARD, Speculum lapidum, Hamburg 1717, p. 104 : 'Nemesitis lapis est optimus quem de ara Nemesiae deae dicunt Athenienses eleuari'. This goes back to the Latin translation of Cyranides : 'Nemesitis est lapis eleuatus de ara Nemesiae deae optimi lapidis' (A. DELATTE, Textes latins, p. 67).
- (8) Cyran. I, 13, 3 : νεκθα βοτάνη ἐστὶ ἡ λεγομένη φλόμος. ταύτης τῆς βοτάνης εἶδη εἰς τὸν ἑπτὰ. Dioscorides, Mat. med., IV, 103 does not discern but two varieties, the black one and the white one. Pliny, N.H. XXV, 120-121 also mentions a third kind that is found only in woods.
- (9) Cf. M. SCHUSTER, Verbascum, RE 2.R, 15.Hb. (1955), col. 971.
- (10) Cyran. I, 13, 5-8. Cf. F. CARNOY, Dictionnaire étymologique, p. 186; R. STROEMBERG, Griechische Pflanzennamen, p. 107.

- (11) Ps.-Apuleius, in Corpus Medicorum Latinorum IV (1927), p. 129 sq. : 'Herbae uerbasci uirgulam qui secum portauerit, nullo metu terrebitur, neque occursum mali molestabunt eum ... Hanc herbam dicitur Mercurius Ulixi dedisse, cum aduenisset ad Circem, ut nulla mala facta eius timeret.'
- (12) Ph. VAN WERSCH, Folklore van wilde planten, p. 157. For other references see H. MARZELL, Königskerze, Handwörterbuch des deutschen Aberglaubens V, 1 (1932), col. 182-187.
- (13) Dioscorides, Mat. med. IV, 103; Pliny, N.H., XXV, 121.
- (14) H. MARZELL, Königskerze, col. 184.
- (15) Pliny, N.H., XXVI, 92-93.
- (16) Many examples mentioned in KUMMER, Jungfrau, Jungfraulichkeit, jungfräulich, Handwörterbuch des deutschen Aberglaubens IV, 1 (1931), col. 841-854.
- (17) Pliny, N.H., XXVIII, 43.
- (18) Cf. Ph. VAN WERSCH, Folklore van wilde planten, p.157.



Ξίφιος βοτάνη	sword-lily ( <i>Gladiolus segetum</i> )
Ξίφιος λίθος	sword-stone
Ξίφιος πτηνόν	hawk
Ξίφιος ἰχθὺς θαλάσσιος	swordfish ( <i>Xiphias gladius</i> L.)

I, 14, 23-28

Ἰαψὼν οὖν ἐν τῷ λίθῳ ἰέρακα καὶ ὑπὸ τοῦς πόδας αὐτοῦ τὸν ἰχθύν. ὑποκατάκλεισον δὲ ἐν τῷ λίθῳ τὴν ῥίζαν τῆς βοτάνης καὶ ἔχε. οὗτος ὁ δακτύλιός ἐστιν ἄγιός, ὡς καὶ ὁ κρὸς αὐτοῦ. εἰς οὖν ἔχης αὐτὸν παρὰ σεαυτῷ, χρηματισθήσῃ περὶ οὗ θέλεις. καὶ εἰς θῆς αὐτὸ ἐν ζῴῳ ἢ ἐν εἰδώλῳ θεοῦ τινος τῶν λατρευομένων, χρηματισθήσῃ δ' αὖ θέλῃς παρ' αὐτοῦ μαθεῖν.

"Engrave thus in the stone a hawk and under its feet the fish. Enclose in the stone the root of the plant and keep it. That ring is hallowed, just like the precedent. If you thus keep it with you, you will receive an answer about whatever you want. And if you put it on an animal or on an image of a god who is served, you will get an answer to whatever you want to learn from him."

The amulet description again shows a bird and fish combination of which we saw other examples before.

The central element clearly is the bird  $\xi\lambda\phi\iota\omicron\varsigma$  which is identified in Cyranides with the so-called  $\kappa\acute{\epsilon}\rho\kappa\omicron\varsigma$ , the sacred hawk of Apollo (1). By that it obviously is an augural bird. According to Porphyry "those who wished to receive into themselves the souls of prophetic animals swallowed the most principal parts of them such as the hearts of crows, or of moles, or of hawks" (2). The amulet of Cyranides showing the hawk's picture has exactly the same purpose. Moreover the hawk is also a solar emblem, certainly in Egypt (3). This fact tells in favour of the theory put forward by Anna Roes. As I mentioned before she relates the iconographical type of the bird and the fish to a solar religion.

The hawk is flanked by three other elements which are all homonymous to it: the word-magic of the name  $\xi\lambda\phi\iota\omicron\varsigma$  will strengthen the hawk's power. The swordfish is not known for its prophetic gifts. However, a synonym for  $\xi\lambda\phi\iota\omicron\varsigma$  is  $\gamma\alpha\lambda\epsilon\acute{\omega}\tau\eta\varsigma$  (4), which is also the name of two other animals that play an important part in divination.  $\Gamma\alpha\lambda\epsilon\acute{\omega}\tau\eta\varsigma$  is the weasel, a most notorious animal in popular superstition (5).  $\Gamma\alpha\lambda\epsilon\acute{\omega}\tau\eta\varsigma$  is also the gecko, personified in mythology by Galeotes, the son of Apollo and ancestor of a race of seers in Sicily, who practised their art with the help of geckoes (6). If the swordfish bears a homonymous name, this means to my opinion that its supernatural powers were believed to be quite similar. The presence of the swordfish's picture on an amulet used for divination certainly tells for it.

About the sword-stone, unattested elsewhere, Cyranides inform us as follows: 'The sword stone is known to everyone. It abounds all over the world like pebbles, but especially in Cappadocia and in Nazianze. It has a black colour. In Assyria they break it to pieces and when they fumigate their mountain-bred animals they send it out and keep them unharmed by the wild beasts' (7). The description of the stone does not answer to any particular mineral typical for Cappadocia. It seems that its use for the amulet in Cyranides is attached only to the homonymity of its name with those of the other elements.

The sword-lily was a typical grave adornment in antiquity. According to Murr the austere beauty of the plant and the dark blue and violet colour of its flower possibly related the sword-lily with the under-world (8). Nothing is known about its use in divination but its association with the infernal world makes it presumable. Anyway, the homonymity of its name with that of the hawk makes the sword-lily suitable for the purpose.

Divination by putting an amulet on an animal or on an image of a god is not attested elsewhere, but it might be a special kind of lithomancy. It is quite obvious that an amulet to which divinatory power was ascribed, was believed to be more effective when in contact with a holy animal or a divine image (9).

NOTES

- (1) Cyran. 1, 14, 13: Ἐφίος πτηνόν ἐστιν, ἰέραξ, ὁ καλούμενος κίρκος. Κίρκος is a poetic name for a hawk, not identifiable as a separate species. Cf. D'Arcy W. THOMPSON, A Glossary of Greek Birds, pp.144-146.
- (2) Porphyry, De abstinencia, II, 48.
- (3) Cf. D'Arcy W. THOMPSON, A Glossary of Greek Birds, p.117; O. KELLER, Die Antike Tierwelt II, p.21.
- (4) Polybius XXXIV, 2, 12 quoted by Strabo I, 2, 15.
- (5) Cf. Th. Sh. DUNCAN, The weasel in religion, myth and superstition, Washington University Studies 12 (1924), pp.33-66.
- (6) Cicero, De divinatione I, 10; Aelian, V.H., XII, 46. The name of the hoopoe γέλακος or \* γάλεκος (conjectured by Thompson), another animal used in divination, probably is also etymologically related to γαλεώτης. See about this M. WAEGEMAN, The gecko, pp.220-222.
- (7) Cyran., I, 14, 8-12.
- (8) J. Murr, Die Pflanzenwelt, p.245.
- (9) Cf. A. BOUCHE-LECLERCQ, Histoire de la divination I, p.184.

ὄνθηρσις βοτάνη	oleander (Nerium Oleander)
ὄρτυξ πτηνόν	quail (Coturnix vulgaris)
ὄρφος ἰχθύς	seaperch (Polyprion cernium CV.)
ὄνυχίτης λίθος	onyx or sardonyx

I, 15, 33-37

Εἰς δὲ τὸν ὄνυχίτην λίθον γλύψον ὄρτυγα καὶ ὑπὸ  
 τοὺς πόδας αὐτοῦ τὸν ὄρφον τὸν ἰχθύν, ἐκ δὲ τοῦ  
 συνθέματος τοῦ εἰς τὸν λύχνον ὑπὸ τὸν λίθον βάλε,  
 καὶ οὐδεὶς σε ὄψεται, οὐδὲ εἰάν βασιτάξης τι τῶν  
 ὄντων· τὴν δὲ ὄψιν σου χρεῶν ἐκ τοῦ συνθέματος  
 καὶ τὸν δακτύλιον φόρει, καὶ οὐδεὶς σε ὄψεται ἢ  
 τίς ἂν ᾔης {καὶ} ἢ τί καὶ ἂν ποιῆς.

"Engrave in the onyx a quail and under its feet the  
 seaperch, put under the stone some of the mixture  
 for the lamp, and nobody will see you, even if you  
 take away one of the things present. Anoint your  
 face with some of the mixture and wear the ring, and  
 nobody will see who you are or what you are doing."

The mixture mentioned in this amulet description is a magical recipe produced as follows : "Triturate the eyes of the quail or of the seaperch with a bit of water and keep it for seven days in a glass vessel. Then add a bit of olive oil and put it in the lamp or just anoint the lamp-wick" (1). The purpose of this mixture was to scare people by making them look like fiery-eyed demons.

The amulet however is meant for the wearer to become invisible. The power of invisibility has always fascinated people. It is therefore obvious that in various civilisations amulets, charms, magic formulas or magic actions were used to obtain this faculty (2). Very often a ring is worn for the purpose (3). In Cyranides a ring is likewise prescribed but its components are not usual. Onyx or sardonyx is a well-known ring stone in antiquity. The famous ring of Polycrates was also set with an onyx (4). As he estimated this ring the most valuable of his possessions, he certainly believed in its special - magical ? - power. No source however relates the power of invisibility with the onyx stone (5). As the onyx was used to cure eye-diseases (6), it is possible that the author of Cyranides saw a certain resemblance between the onyx and the eye, whence he used this stone for this amulet. This however isn't but a mere hypothesis.

The engraving in the stone shows the typical bird and fish combination, probably a solar emblem.

The fish on the amulet can easily be explained. Indeed, the seaperch's name ὀρρῶς or ὀρρῶς is etymologically related with ὀρρῆνη (7). As ὀρρῆνη means "darkness" and as the word is sometimes used in connection with the underworld and the night (8), it seems logical to engrave the picture of the fish ὀρρῶς on an amulet procuring invisibility. The eyes of the fish put in the mixture under the stone and on the face of the amulet wearer have the same function.

The quail's picture is more problematic. No relationship between this bird and invisibility or darkness seems to exist. On the contrary, the quail probably is a sun bird (9). One could therefore interpret the picture on the stone as a symbol of light gaining victory over darkness, which in fact is the opposite of the real purpose of this amulet.

According to the irrational logic of magic however a compatibility of opposites is not out of the point. This amulet description of Cyranides indeed shows that a solar symbol along with eyes in a translucent glass vessel was supposed to cause invisibility.

The magical significance of the seven days needed for the mixture to rest doesn't need an explanation.

NOTES

- (1) Cyran., I, 15, 28-30.
- (2) Many examples from graeco-roman antiquity and Old Testament in A.S. PEASE, Some Aspects of Invisibility, Harvard Stud. Class. Philol. 53 (1942), pp. 21-26. See also S. THOMPSON, Motif Index of Folk-Literature, Bloomington 1956, D 1361 - D 1361.44; ZEPF, Unsichtbar, Handwörterbuch des deutschen Aberglaubens VIII (1936), col. 1453-1465.
- (3) Many examples in S. THOMPSON, o.c., D 1361.17. Also ZEPF, Unsichtbar, col. 1454 with references to graeco-roman authors.
- (4) Cf. A. SCHRAMM, Onyx, RE XVIII, 1 (1939), col. 536-537.
- (5) Different types of engraved onyx stones are described in the lapidary of Socrates and Dionysius 32-36 (ed. HALLEUX - SCHAMP, pp. 169-171). None of them are comparable with the amulet in Cyranides.
- (6) Cf. OLBRICH, Onyx, Handwörterbuch des deutschen Aberglaubens VI (1934), col. 1252-1253 : "Diese Wirkung des Onyx bei Augenleiden ist wahrscheinlich darauf zurück zu führen, dass auf seiner Fläche Adern in Gestalt eines Auges herumlaufen und durch dies Auge sich wiederum Querlinien hinziehen".
- (7) CHANTRAINE, Histoire des mots, p. 830 : 'sans pouvoir affiner le détail de l'étymologie, le mot est apparenté à ὄρνις , ὄρνις , "le mériau" ayant une couleur brun foncé'.
- (8) CHANTRAINE, Histoire des mots, p. 829.
- (9) Cf. D'Arcy W. THOMPSON, A Glossary of Greek Birds, p. 219 : "I suspect that in the superstitions regarding the quail and in the sacred reputation of Ortygia the main point is with reference to the solar tropic".

πολύγονος βοτάνη	knot-grass ( <i>Polygonum aviculare</i> )
πορφυρέων πτηνόν	purple gallinule ( <i>Porphyrio</i> porphyrio)
πορφύρα θαλασσία	purple shellfish ( <i>Murex</i> trunculus)
πορφυρίτης λίθος	porphyrites

I, 16, 38-42

Εἰς δὲ τὸν πορφυρίτην λίθον γλύψον τὸ πτηνόν,  
καὶ παρὰ τοὺς πόδας τὸ κηρύκιον· ὑπὸ δὲ τὸν λίθον  
ἀκρόπτερον τοῦ πτηνοῦ· καὶ κατακλείσας φόρει πρὸς  
τὰς περιωδύνας τῆς κεφαλῆς καὶ ἡμικρανίου πόνον.  
ποιεῖ δὲ ἐπὶ τῶν ρευματιζομένων τοὺς ὀφθαλμοὺς.  
ἐν ἀποκρούσει σκεύαζε τῆς σελήνης καὶ τὸν δακτύλιον  
καὶ τὸ κολλοῦριον .

"Engrave in the porphyrites the bird and at its feet the purple shellfish; under the stone the bird's wing tip; and after setting wear it against headaches and migraine. It also works against eye fluxes. Prepare the ring as well as the collyrium when the moon is waning."

Under the heading "About all kinds of headaches and migraine and against all kinds of eye-diseases" we find in Parisinus gr. 2419 f. 264 and in Bononiensis 3632 f. 353 a magical recipe containing two of the four elements of this chapter of Cyranides: knot-grass and the porphyrites (1). Unfortunately the text cannot be dated (2), but its source unmistakably is Cyranides (3). The text begins with a few synonyms for knot-grass. Just like in Cyranides it is said that its root is to be removed while the moon is waning. Then the other ingredients of the recipe against eye-diseases are summed up. They are about the same as in Cyranides (4). Most of them are also to be found in the collyrium of Hermolaos, the composition of which is indicated by the sixth century physicians Alexander of Tralles and Aetius (5). In this collyrium knot-grass is missing, but it is clear that the recipe of Cyranides in its whole remained current in later Greek medicine.

In Parisinus gr. 2419 f. 264 and in Bononiensis 3632 f. 353 then follows the description of an engraved porphyrites having the same function as the porphyrites in Cyranides: it is supposed to be an amulet against migraine, headache and all kinds of eye-diseases (6). The engraving however is different. Instead of the purple gallinule and the purple shellfish the picture shows a bald human skull with large eyes clearly referring to the complaints it has to cure. Round the skull five chaldaic signs are depicted and the reverse side of the stone bears the inscription  $\Sigma\alpha\lambda\alpha\mu\acute{\alpha}$ ,  $\text{'I}\alpha\acute{\omega}$ ,  $\text{'E}\lambda\omega\acute{\iota}$ ,  $\text{K}\omega$  bespeaking a syncretic jewish-christian influence (7). The amulet maker has to enclose a bit of the root of knot-grass, while in Cyranides the wing top of the purple gallinule was prescribed for the same purpose (8).

As in Cyranides no explanation is give why the stone has to be a porphyrites. The stone is also called  $\kappa\alpha\iota\rho\omega\mu\alpha\acute{\iota}\omicron\nu$  (9). The word is unknown and Delatte thinks it possibly is to be conjectured in  $\kappa\epsilon\rho\alpha\delta\nu\epsilon\iota\omicron\nu$ . In Cyranides it is said that the porphyrites is best known  $\acute{\epsilon}\nu\ \tau\eta\ \mu\epsilon\lambda\alpha\nu\acute{\iota}\tau\iota\delta\iota\ \gamma\eta$  (10). It is unclear however which country is defined by that name. The word  $\mu\epsilon\lambda\alpha\nu\acute{\iota}\tau\iota\omicron\varsigma$  as far as I know is not attested in other texts, but it is obviously

related with μέλας , "black". I therefore suggest that καίρωμαλος may be a corruption of Καρμάνιος , the adjective derived from the country name Καρμανία . Καρμανία is the modern Kerman, bordered by Ariana in the north, the Persian Gulf and the Erythrean Sea in the south, Persia in the west and Gedrosia in the east. Probably this is the habitat of the Ethiopians of Asia mentioned by Herodotus who describes them as a black people (11). The name ἡ μελανότις γῆ , "the black country", thus suits very well to Carmania.

Carmania is very rich in minerals. One of the stones Pliny situates in this country is the ceraunia (12). We remember that κεραυνεῖον was Delatte's conjecture for καίρωμαλος . Pliny describes this "thunder-stone" as a colourless stone with a brilliant blue sheen. The Latin word for this shade of colour is caeruleus, which means sky-blue. Eichholz identified the ceraunia with the moonstone and Halleux and Schamp think of the sapphire (13). There is no indication however that one of these stones was also called porphyrites. According to Pliny "Sotacus distinguishes also two other varieties of the stone, a black and a red, resembling axe-heads. According to him, those among them that are black and round are supernatural objects; and he states that thanks to them cities and fleets are attacked and overcome, their name being baetuli, while the elongated stones are cerauniae. These writers distinguish yet another kind of ceraunia which is quite rare. According to them, the Magi hunt for it zealously because it is found only in a place that has been struck by a thunderbolt" (14). Eichholz presumes meteorites are meant (15). Damigeron-Evax however say that this variety of the ceraunius is called emerald by the Egyptians. They assure that it protects against lightning, that it gives power and victory and that it can be used in divination (16). Halleux and Schamp suggest that the κεράμιος mentioned by Meliteniotes possibly is this ceraunius (17). The word κεράμιος certainly is very like καίρωμαλος in Parisinus gr. 2419, but all this does not explain why this stone should also be called porphyrites and why it should be used as an amulet against headaches

and eye-diseases. The other stones of Carmania mentioned by Pliny seem not to answer to this purpose either (18).

After all the function of the prophyrites in the amulet in Cyranides would have remained unclear if there had not been an Arabic treatise to help us. The fourteenth chapter of the Kitāb al-Muršid of Muḥammad ibn Aḥmad at-Tamīmī, dated in the tenth century, is treating a stone used for collyria. Follows paragraph B XVIII in the German translation of Jutta Schönfeld who also edited and commented the text (19) :

"<1> Muhammad sagt : Der Šanğ ist die grosse Meeresschnecke, die mit Hörnern an den Seiten versehen ist. Das ist eine Art grosser Schnecke, die in der Mitte dick und an den beiden Enden dünn ist. Die Seiten sind voller fester Hörner, aber ihr Inneres ist leer. <2> Sie wird aus Indien und aus dem äthiopischen und dem jemenitischen Meer geholt. <3> In ihrem Inneren ist sie von weisser Farbe und dickem Körper; und manchmal ist aussen auf ihr ein Gelb und ein Muster. <4> Man behauptet, dass das Meer sie zusammen mit den Zalafa-Muscheln auswerfe und dass in ihr ein klebriges Tier in Gestalt von Speichel sei, und das heisst Schnecke. <5> Dieser Stein ähnelt dem Šanğ.

<6> Wenn man ihn verbrannt hat, dann tut man ihn in viele Reinigungs-Kollyrien des Auges, in ihre Heilmittel und ihre Pulver. Denn wenn er verbrannt und fein pulverisiert und damit die Augen bestrichen werden, so nimmt er das Leukom im Auge fort und reinigt es. <7> Man kann ihn auch, verbrannt oder unverbrannt, zerkleinern, waschen und damit die Augen bestreichen, dann nimmt er das Leukom auf der Hornhaut fort. <8> Wenn man damit, ohne dass er verbrannt ist, die Augen bestreicht, so wirkt er kräftiger reinigend; und wenn man damit die Augen bestreicht, nachdem er verbrannt wurde, so wirkt er kräftiger aufsaugend und trocknend. <9> Und wenn er nach dem Verbrennen gewaschen wird, so geschieht sein Aufsaugen ohne Brennen. <10> Er verstärkt den Gesichtssinn und absorbiert die Feuchtigkeiten, die zu ihm (dem

Auge) fließen. <11> Seine Substanz ist wie die Substanz der Zalafa-Muscheln des Meeres. <12> In ihm sind zwei Kräfte, eine absorbierende und eine reinigende Kraft."

Jutta Schönfeld wrongly transcribed the unvocalised word šnǝ on the first line by šanǝ. It is the Persian word šunǝ that answers to the Greek κόγχη and the latin concha, meaning shell. The vocalisation is important for a good understanding of '<5> Dieser Stein ähnelt dem Sang'. Šnǝ vocalised as šanǝ indeed means "stone" in persian (20). So we should understand : 'The stone šanǝ resembles, regarding its name, to the shell šunǝ'.

In the Arabic text it is said that the šunǝ is a big sea-snail. The description however does not allow a strict identification. It might as well be the purple shellfish. The text speaks of the white colour of the šunǝ's inner body, while the purple colour of the purple shellfish indeed isn't brought out but under the influence of sunlight, its basic colour being white (21). It is also a fact that Greek and Latin authors regularly use more general names as κογχύλη, κάλχη, concha, conchylum to designate the purple shellfish (22).

Šunǝ could also be the trumpet-shell (Tritonium nodiferum) which was not clearly distinguished from the πορφύρα. Even in Cyranides their names are said to be synonymous (23). An identification with the κοχλίαι θαλάσσιαι, situated by Aelian in the Red Sea, is likewise possible. According to him it is "of great beauty and very large, its shell is purple and its spiral has been decorated and made gay by nature" (24). Gossen identified the κοχλίαι θαλάσσιαι with the Mitra papalis (25). The size of this species however reaches but 125 mm, which does not answer very well to the Kitāb al-Muršid's description "big". The purple shellfish (Murex trunculus) on the other hand, grows to about 70 mm, which is even smaller. Aelian's statement that "the trumpet-shells and purple shellfish of the Indian Ocean are large enough to contain easily six pints" (26), is very exaggerated, since the Charonia tritonis L. or Triton charoniatritonis only attains 400 mm. Let me remind that the Kitāb al-Muršid also situates the large sea-snail in the Indian Ocean.

In my view the various species of testaceans were not yet well distinguished in antiquity. The only conclusion we can make out of all this is the fact that šunġ and κορφύρα both are names likely to cover the same shellfish.

Šanġ, the stone, is not described in the Kitāb al-Muršid. When burnt, it can be used in many collyria. In fact the description of the stone is not important as it gets its curative power only from its resemblance, or the resemblance of its name, with the shell. A shell indeed reminds of an eye. The Greeks noticed this resemblance very well, as they called the socket of the eye κόγχος, derived from κόγχη shell.

Curative magic always makes use of objects showing a certain resemblance with the sick part of the body. This is a universal principle. A good illustration of this belief can be found nowadays in Burundi where an association is made between the shell, the eye and the vulva. In this oral society the nature, the evocatory form and even the name of certain things make them predestinated for special powers. This kind of magic is purely associative and has an important linguistic and symbolic support. Thus a shell is regarded as a good amulet against diseases of the eye (27). The magical logic in Kitāb al-Muršid is the same, though elaborated on a superior level : on the first level there is a resemblance in form between the shell (šunġ) and the eye, on the second level there is a resemblance in name between the stone (šanġ) and the shell (šunġ), so that the stone can be used as materia medica against eye-diseases.

The nature of the stone seems of no importance, šanġ being in Persian a general term for stone. It is however impossible that one might think a stone of any kind can be suitable for the purpose.

That šanġ in this particular case is a special kind of stone can indeed be stated out of Pliny's Natural History. Talking about the opal he says: 'Owing to its exceptional beauty, this stone is commonly known by the Greek term paederos or Favourite, but those who regard the paederos as a separate variety say that the Indian name for it is sangenon. The paederos is said to be found in Egypt and Arabia, in Pontus, where the quality is very poor, and also in

Galatia, Thasos and Cyprus. Exceptional specimens of the latter stones have the charm of an opal, but they shine more softly and they rarely lack roughness. The dominant colour of the paederos is a mixture of sky-blue and purple, and the green of the smaragdus is absent. Those in which the brilliance is darkened by the colour of wine are superior to those in which it is deluted with a watery tint' (28).

Elsewhere Pliny continues about the paederos: 'However, the species which the name claims as its very own likewise fulfils our great expectations. Here, indeed, with the transparency of the rock-crystal are associated a characteristic sky-green tint, along with a brilliant glint of purple and of golden wine, of which the last colour is always the last to be seen, but always has a purple halo. All these colours, both individually and collectively, seem to pervade the stone; and there is no gemstone that can match its clarity, which is delightfully agreeable to the eye. The most highly valued kind is found in India, where it is known as sangenon' (29).

As Eichholz states, Pliny seems uncertain whether the paederos was identical with the opal or not. For Pliny the question was complicated by the fact that there was also an amethyst called paederos. Eichholz thinks that the list of places given in ch.84 and 130 may in Pliny's source have referred to the amethyst, which is very likely. But at the one hand the name sangenon is said to be Indian and the most valuable kind of this stone is said to be found in India; at the other hand Pliny states in ch.80 that opals come only from India. So in my view the stone designed by the name sangenon can be nothing else but a purple-coloured variety of the opal. As it was an Indian stone it was called by the indian word for 'stone', i.e. sang, which is a Persian loanword (30).

It is evident that Pliny's sangenon is identical with the ṣanḡ in Kitāb al-Murṣid and there can be no doubts about the identification of the ṣanḡ with the porphyrites. There is the same word magic in the homophony of πορφύρετης and πορφύρα (purple shellfish) as there is in that of ṣanḡ and ṣunḡ (purple shellfish). The colour is purple: Pliny told this about the sangenon and we can derive it from the name porphyrites. The ṣanḡ as well as the porphyrites are used against eye-diseases. Their

finding place is India. This we know from Pliny for the sangenon, but also from Cyranides and the magical text in Parisinus gr. 2419 and Bononiensis 3632, where the porphyrites is situated in Carmania. Indeed, according to Claudius Ptolemaeus Carmania is bounded in the south by the Indian Sea (31) and Stephanus Byzantinus defines the country simply as χώρα της Ἰνδικῆς (32).

A passage from the lapidary of Socrates and Dionysius about the stone paederos is also significative (33). Paederos there is said to be another name for opal, just as in Pliny's Natural History. Some other call it καλιζηνός, i.e. trompet-stone. The step towards trompet-shell, ἄνθ or κόγχη is easily made!

Let us now return to the amulet in Cyranides.

Obviously the purple shellfish is a very important element in it. Instead of κορφύρα we have got to use the synonym κόγχη or κοχλία. As the shell reminds of the eye-socket, the name κόγχος was given to it (34). Thuswise, by associative magic the purple shellfish is used against eye-diseases.

The stone κοφφύρης and the bird κοφφύρων are adopted for the homophony of their names with that of the purple shellfish κορφύρα. The colour fits in the pattern too. For the stone there is a supplementary magical value to notice in the Persian translation ḫnđ corresponding exactly with the name of the purple shellfish, not to mention the vocalization (35).

The bird κοφφύρων on the other hand, with its beautiful purple blue feathers, is an ideal substitute for the legendary phoenix. We must not forget that φορνίξ also means "purple". The identification of the κοφφύρων with the φορνίξ suits quite well to the solar symbolism in the general picture on the amulet: once again the typical bird and fish combination is represented, although the fish is replaced by a shell. The phoenix makes an excellent curative element against eye-diseases: growing old this bird is said to lose its eye-sight and to regain it at its regeneration (36).

The fourth element, the herb κόλυγονοσ , knot-grass, isn't used in the amulet of Cyranides but it is in that of Parisinus gr. 2419 and Bononiensis 3632 and it is also a part of the collyrium mentioned in Cyranides. Therefore it is convenient to explain the presence of the herb in this context.

Knot-grass is of a very frequent use in the ancient materia medica, helpful against the most different kinds of diseases. Pliny says the juice is also to be dropped into purulent ears and painful eyes (37). According to him herbalists use another kind of polygonum, the so-called polygonum silvestre for headache : "They make a chaplet of it which they place on the head; while to cure eye fluxes they put one round the neck" (38). A similar kind of magical use is mentioned by Ps.-Apuleius . In cases of eye-diseases or aches one should, by dawn or sunset, border by a golden ring the area where knot-grass is growing. Then one should say : 'I lift up this remedy of the sore eye'. On the third day then the herb should be taken up and put around the neck.

Most interesting is the statement of Theodorus Priscianus, Roman physician of the fourth century A.D. : "The person who wears a crown of knot-grass, gathered at the decline of the moon will be free from headache" (39).

Why it should be this particular herb that ought to cure headaches or eye-diseases is unclear. But the influence of the decline of the moon, postulated as well by Priscianus as in Cyranides and in the magical text of Parisinus gr. 2419 and Bononiensis 3632, is easy to explain. According to the rules of imitative sympathy by which macro- and microcosmos are thought to be governed, it is exactly during that particular phase of the moon resembling the purpose one pursues that magical actions have to come about (40). So to drive away headaches or eye-diseases, one will count on the cooperation of the moon in decline: one will therefore gather herbs, prepare a collyrium or make the magical ring that might help, while the moon is waning. It is not a coincidence that the Greek word for the waning of the moon ἀπόκρουσις , ἀποκρούειν also means "to expell a disease" and that Alexander of Tralles

precisely uses the word in connection with the collyrium of Hermolaos mentioned above : θαυμαστῶς ἀποκροῦει καὶ λεπτύνει φλεγμονάς (41).

The importance of the moon in decline is also clear in the series of gems functioning as amulets against eye-diseases, representing a lizard with the moon over its head. The tips of the moon are turned downwards, marking it as a waning moon, not an increasing one (42).

The influence of the moon is really important in this chapter of Cyranides : the knot-grass is to be gathered as the moon wanes, the collyrium and the ring are to be made during that very period and on the amulet a purple shellfish is engraved. The latter is also related with the moon. The story goes that purple shellfish, like all other testaceans, are in the habit of somehow become both emptier and lighter as the moon wanes. This isn't told in Cyranides but the belief is widespread (43). It is a good example for the popular conviction that everything that grows or perishes is ruled by the corresponding phases of the moon (44).

The sun on the other hand is also playing a certain part in the amulet, i.e. in the figure of the purple gallinule, substitute for the phoenix.

As the sun and the moon are considered as the eyes of the sky (45), their united forces must provide a wonderful amulet against eye-diseases.

## NOTES

- (1) Ed. A. DELATTE, Anecdota Atheniensia I, pp. 482-483.
- (2) The Parisinus gr. 2419 is a manuscript of the fifteenth century. It also contains the text of Cyranides (= ms. R in Kaimakis's edition).
- (3) Cyranides is mentioned as the source of this text in A. DELATTE, Anecdota Atheniensia I, p. 486 : the recipe against haemorrhages goes back to Cyran. I, 12 ( ἐν τῇ πρὸ αὐτῆς βίβλῳ Κυρανίδει ).
- (4) A. DELATTE, Anecdota Atheniensia I, p. 482, l. 12-21 : ἡ οὖν σκευασία τῆς βοτάνης ἐστὶν αὕτη· χυλῶσας τὴν κολύγονον, ἔχε τοῦ χυλοῦ τῆς βοτάνης ὡς ἡμίλιτρον· καὶ ἐξ αὐτοῦ δὲ βάλει οὐγγίαι ε'· λυκίου Ἰνδικοῦ οὐγγίαι γ'· ἀλόης ἡπατίτιδος οὐγγίαι δ'· σμύρνης τραυλίτιδος οὐγγίαι δ'· ὀπίου θηβαϊκοῦ οὐγγίαι δ'· ἀκακίας μελαβνῆς λίτραν α'. εἰ δὲ ὁ χυλὸς καχθὸς ἐστίν, ἀναλάμβανε ὕδωρ ὀμβρινόν, καὶ ἀνελεόμενον κλάσων κολουρία καὶ ψῆξον ἐν σκιᾷ, καὶ ὠφελεῖ εἰς πᾶν πάθος ὀφθαλμῶν, ῥεῦμα ἀποκρούεται καὶ ἀμβλυωπίας καὶ ῥεῦματος ἐπιφορᾶς καὶ περιουσίας ἐγχερίδμενον ἐν βαλανέλῳ, τοῦτο μέγιστόν ἐστιν βοήθημαν .

Cf. Cyran. I, 16, 27-35 chiefly the manuscripts G H F. There may be differences in the quantities used; there is no uniformity in the manuscripts either.

- (5) Alexander Trall. II, ed. Th. PUSCHMANN, p. 21 : Κολουρίον ὁ μέγας Ἑρμόλαος. Χαλκοῦ κεκαμμένου οὐγγ. η'. καδμίας οὐγγ. η'. ναρδοστάχυος οὐγγ. α' ζ''. κρόκου οὐγγ. δ'· ἐν ἄλλῳ οὐγγ. α'. σμύρνης οὐγγ. δ'. ἀλόης οὐγγ. η'. λυκίου Ἰνδικοῦ β'. ἀκακίας οὐγγ. κ'. ὀπίου οὐγγ. δ'. ὕδωρ ὀμβρινόν .

- Cf. Aetius VII, 9, 102 and the thirteenth century prescription-book of Nicolaus Myrepsus, Dynameron, XXIV, 23.
- (6) This is said in almost the same words in both texts : A. DELATTE, Anecdota Atheniensia I, p. 483, l. 4-5 : καὶ ἔστιν ἀνώτερον πόσης ἡμικρανίας καὶ κεφαλαγίας καὶ παντὸς πάθους ὀφθαλμῶν.  
and Cyran. I, 16, 40-41: πρὸς τὰς περιωδυνίας τῆς κεφαλῆς καὶ ἡμικρανίου πόνον. ποιεῖ δὲ ἐπὶ τῶν ρευματιζομένων τοῦς ὀφθαλμοῦς .
- (7) A. DELATTE, Anecdota Atheniensia I, p.483, l. 1-3 : γλύψον ἐν ἀπῶ κρανίον ἀνθρώπου μεγάλους ὀφθαλμοὺς ἔχον καὶ φαλακρὸν τριχῶν ἦγουν ψιλόν· καὶ γύρωθεν δὲ γράψον τὰ χαλδαϊκὰ σημεῖα ταῦτα (quinque signa) καὶ ὀπισθεν τὰ προειρημένα ὀνόματα .
- (8) A. DELATTE, Anecdota Atheniensia I, p. 483, l. 6-7 : ὑποκατάκλεισον δὲ καὶ ὀλίγον ῥιζίον τῆς βοτάνης ἔχον ἐντετυπωμένα τὰ ἀνωθεν εἰρημένα σημεῖα .
- (9) A. DELATTE, Anecdota Atheniensia I, p. 482, l. 25.
- (10) Cyran., I, 16, 6.
- (11) Herodot., Hist., VII, 70 says that the Ethiopians of the east don't differ in appearance from the others. They do however only in speech and hair, for the Ethiopians of the east are straight-haired, but the ones of Libya have the woolliest hair of all people. Herodotus, Hist., III, 94 situates the Ethiopians of Asia in the seventeenth satrapy of the Persian Empire. According to E.H. BUNBURY, A History of Ancient Geography among the Greeks and Romans from the Earliest Ages till the Fall of the Roman Empire I, New-York 1959/2, p.244 "there is no doubt that these last - i.e. the Asiatic Ethiopians - were the inhabitants of the south coast of Beloochistan,

extending along the Erythrean Sea from the mouths of the Indus to the entrance of the Persian Gulf, where to this day a people is found that are almost black, and as backward in civilization as they could have been in the days of Herodotus."

- 12) Pliny, N.H., XXXVII, 134 : Est inter candidas et quae ceraunia vocatur, fulgorem siderum rapiens, ipsa crystallina, splendoris caerulei, in Carmania nascens.
- (13) D.E. EICHHOLZ, Pliny Natural History, vol. X, London 1962, p. 273 n. f; R. HALLEUX - J. SCHAMP, Les lapidaires grecs, p. 338.
- (14) Pliny, N.H., XXXVII, 135. Translation D.E. EICHHOLZ.
- (15) D.E. EICHHOLZ, Pliny Natural History, vol. X, p. 274, n. b.
- (16) Damigeron - Evax XII (ed. HALLEUX - SCHAMP, p. 249).
- (17) R. HALLEUX - SCHAMP, Les lapidaires grecs, p. 338.
- (18) Pliny, N.H., XXXVII, 21 myrrhina; XXXVII, 110 cellaina.
- (19) J. SCHOENFELD, Ueber die Steine. Das 14. Kapitel aus dem Kitāb al-Muršid des Muhammad ibn Ahmad at-Tamīmī, nach dem Pariser Manuskript herausgegeben, übersetzt und kommentiert, Freiburg 1976, pp. 85-86.
- (20) Cf. J.A. VULLERS, Lexicon Persico-Latinum Etymologicum II, Bonn 1864, pp. 469-470.
- (21) Cf. D'Arcy W. THOMPSON, A Glossary of Greek Fishes, p. 215.
- (22) Cf. O. KELLER, Antike Tierwelt II, p. 526.
- (23) Cyran, I, 16, 5 : κορφύρα θαλασσία, οἱ δὲ κηρύκιον, ὄμοια κοχλίφα.
- (24) Aelian, N.A., XI, 21.
- (25) H. GOSSEN, Die Tiernamen, nr. 20.
- (26) Aelian, N.A., XVI, 12.
- (27) I refer to the paper Amulettes, charmes et talismans africains presented by F. RODEGEM at the "Colloque international Sorcellerie, magie, croyances populaires en Wallonie et dans les régions avoisinantes. Discours et pratiques", in Liège on the 8th, 9th, 10th and 11th may 1985, which is not yet published.

- (28) Pliny, N.H., XXXVII, 84 : hanc gemmam propter eximiam gratiam plerique appellauere paederota. Qui priuatum genus eius faciunt, sangenon ab Indis uocari tradunt. Nasci dicitur in Aegypto et in Arabia, et uilissima in Ponto, item in Galatia ac Thaso et Cypro. Qui praecellit ex his, opali quidem gratiam habet sed mollius nitet, raro non scaber. Summa illi coloris ex aëre et purpura constat, uiriditas smaragdi deest. Melior ille cuius fulgor uini colore fuscatur quam qui diluitur aquae. English translation by D.E. EICHHOLZ, Loeb edition.
- (29) Pliny, N.H., XXXVII, 129-130 : Sed tamen et suum genus expectatione tanta dignum. Coeunt quippe in tralucidam crystallum uiridis suo modo aër simulque purpurae et quidem uini aurei nitor semper extremus in uisu, sed purpura semper coronatus. Madere uidetur et singulis his et pariter omnibus, nec gemmarum esse ulla liquidior potest iucunda suauitate oculis. Haec laudatissima est in Indis, apud quos sangenon uocatur. English translation by D.E. EICHHOLZ, Loeb edition.
- (30) In Hindi there is still the adj. "sangina", i.e. "stony, hard" and the substantive "sāngar", i.e. "whetstone". Both are loan words derived from the Persian "sang", i.e. "stone". Cf. F. STEINGASS, A Comprehensive Persian - English Dictionary, London 1947/3, p. 701.
- (31) Ptolemaeus, Geogr., VI, 8, 6 : ἀπὸ δὲ τῆς μεσημβρίας μέρος τοῦ Ἰνδοικοῦ πελάγους τῷ μέχρι τοῦ εἰρημένου κέρατος (2nd cent. A.D.).
- (32) Stephanus s.v. Καρμανία . Stephanus Byzantinus is an author from the 6th century A.D.. Possibly his definition of Καρμανία can be of an earlier date.
- (33) Socrates and Dionysius 38 (HALLEUX - SCHAMP, p. 171). On the παιδέρως see also H.R. KAHANE, Romano-Aegyptiaca, Romance Philology 14 (1960-1961), pp. 287-289.
- (34) Κόγχη matches exactly the Sanskrit word śāṅkha and the Persian šng.

- (35) The magical text of Parisinus gr. 2419 and Bononiensis 3632 doesn't employ the purple fish in the amulet. The first step - the association κορφύρα - κορφυρίτης - is passed over so that the curative function of the stone is not clear. This is often the case in magical objects or actions : the missing of some links in the associative thinking makes them more then once very difficult to explain.
- (36) The name φοῖνιξ given to a certain collyrium (Aetius VII, 116) is also to be explained in connection with the bird.
- (37) Pliny, N.H., XXVII, 114 : sucus et auribus purulentis instillatur et oculorum dolori.
- (38) Pliny, N.H., XXVII, 117 : in capitis dolore coronam ex ea imponunt et contra epiphoras collo circumdant. Polygonum silvestre should be identified with Polygonatum officinale All., Solomon's seal (cf. A. ERNOUT, Pline l'Ancien Histoire Naturelle, Livre XXVII, Paris 1959, p. 107). Is this the reason why the first magical name inscribed on the amulet of Parisinus gr. 2419 is Σαλαμιά ?
- (39) Theodorus Priscianus, Phys., 4 : Herba polygono coronatus quam quis luna descescente sustulerit dolore capitis caret.
- (40) Cf. C. PREAUX, La lune dans la pensée grecque, Académie Royale de Belgique. Mémoires de la classe des lettres, 2e série, t. LXI, fasc. 4, Brussels 1973, pp. 41-50 on the mimesis in the different levels of universal order and pp. 119-123 on the influence of the moon on the gathering of the herbs and magical operations. L. DELATTE, Herbarius, pp. 46-47 mentions several herbs that should be gathered during the decline of the moon according to different herbaria.
- (41) Alex. Trall. II, ed. Th. PUSCHMANN, p. 21.
- (42) Cf. C. BONNER, Studies in magical amulets, p. 71. A list of this kind of amulets is given by him pp. 69-70. The purpose of these amulets is evident from Pliny, N.H., XXIX, 129-130, Aelian, N.A., V, 47 and Cyranides II, 14, 23-31. BONNER, p. 71, explained the presence of the moon over the lizard's head from Marcellus, De medicamentis, 8, 49 : 'After describing the

- procedure that we already know from Pliny and Aelian, Marcellus adds: "Observandum etiam ut luna uetere, id est a luna decima in uicesimam quintam, die Iouis Septembri mense capiatur lacerta atque ita remedium fiat, sed ab homine maxime puro atque casto". 'Note that the lizard must be caught and the remedy thus prepared in the old moon, that is, from the nineteenth to the twenty-fifth, on a Thursday in the month of September; and that he who catches it must be entirely pure and chaste.'"
- (43) Aelian, N.A., IX, 6; Cicero, De diuinatione II, 33-34; Pliny, N.H., II, 109 and 221 etc.
- (44) Cf. C. PREAUX, La lune, p. 94: 'Les phases de la lune régissent ce qui croît et décroît. Cette conviction est répandue chez beaucoup de peuples et subsiste de nos jours en Europe et dans tout le bassin de la Méditerranée'. In the following pages (Croissances et déperissements, pp. 94-103) she gives many more examples of this belief in Greek literature and literature about the phenomenon elsewhere. An analogical idea is to be found in Chinese symbolism where a relation is seen between oysters, seashells, snails, pearls and the watercosmology.
- (45) In Egyptian mythology the moon is the left eye of Horus, while the sun is his right eye. Cf. Ph. DERCHAIN, Mythes et dieux lunaires en Egypte, in: La lune, mythes et rites, Paris 1962, pp. 20-21, with bibliography in n. 14. Also in Greek poetry since Aeschylus, the moon is regarded as the eye of the sky, cf. W.H. ROSCHER, Ueber Selene und Verwandtes, Studien zur griechischen Mythologie und Kulturgeschichte vom vergleichenden Standpunkte, H. IV, Leipzig 1890, pp. 21-22.

ῥάμνος βοτάνη	buckthorn ( <i>Rhamnus catharticus</i> )
ρομφαία πτηνόν	bat (class. Chiroptera)
ῥαφίς ἰχθύς	garfish ( <i>Belone acus</i> )
θαλάσσιος	
ῥινοκέρωσ λίθος	rhinoceros stone

I. 17, 15-18

Γλύφεται οὖν ἡ νυκτερίς ἐπὶ τὸν λίθον καὶ παρὰ τοὺς πόδας αὐτῆς ἡ ῥαφίς, ὑπὸ δὲ τὸν λίθον ῥίζιον τῆς βοτάνης. τοῦτο φορούμενον δαίμονας ἀποδιώκει. εἰάν δὲ θῆῃς αὐτὸ πρὸς κεφαλὴν τινος λάθρα, οὐ κοιμηθήσεται.

"The bat is thus engraved in the stone and by its paws the garfish, underneath the stone a rootlet of the plant. The wearing of it drives demons away. If you put it secretly under one's pillow, he won't sleep."

Bats are specific night-animals. On this ground is built in all probability the belief that they can expel sleep (1). Examples of this popular belief cannot only be found in this chapter of Cyranides (2) but also in magical papyri (3) and in Pliny's Natural History (4). It is further obvious that gruesome animals like these were used to avert demonic influences which were thought to operate principally at night (5). Here too Pliny shows us some fine examples (6). As for the church fathers, they compared bats with demons (7).

Buckthorn was commonly used in the Greek world against illness and bewitchment: one fastened it at doors and windows to stop evil (8) and when a child was born a salve made of buckthorn was smeared on different places in the house to keep demons away (9). The third day of the Anthesteria one chewed leafs of buckthorn to preserve oneself from all danger, while on that day the souls of the dead were believed to return on earth (10). In mythology too ῥάμνος averts evil powers: Athena used it in the battle against the Giants and Nemesis cleaned the temple of the gods with it (11).

Why this amulet should be made of the rhinoceros's horn is more difficult to explain. In the second book of Cyranides it is said that the stone found in the nose or the horn of the rhinoceros drives demons away, but no further explanation is given (12). I didn't find any parallel text concerning this belief. The horn of the rhinoceros was considered as a very good antidotum against all kinds of poison and according to Ctesias it was therefore used as a cup in India. Ctesias who calls this animal ῥυνοσ 'Ἰνδικός also says that its horn gives protection against diseases, especially epilepsy (13). Ctesias' description of the animal however is somewhat unrealistic. It lays the foundation of the legend of the unicorn (14). The enormous strength ascribed to the unicorn and its horn makes it a symbol of power in general, i.e. the Greek δυνάμεις, or even of evil powers (15). Could it be that on the ground of this symbolism the horn of the rhinoceros was used as an amulet to drive demons, i.e. evil powers, away?

Moreover there is a very interesting yet very enigmatic passage in Pliny's Natural History about the transport of the Indian drug lycion. It runs as follows: "Indi in utribus camelorum aut rhinocerotum id (i.e. lycion) mittunt", "this is imported from India in leather bottles made of camel skin or rhinoceros hide" (16). There is no good commentary on this text and Steier is rather sceptical about the true existence of this kind of transport (17). The drug lycion was brewed of the juice from the root, stem and berries of the plant named πύξανθα which possibly can be identified with the Rhamnus infectiora L. (18). The plant meant by Pliny is thus an Indian variety of the ῥάμνος, the buckthorn, that plays an important part in this amulet of Cyranides.

As we can deduce from Pliny and from Cyranides a certain link does exist between the rhinoceros and the buckthorn, but the nature of this link remains obscure. Anyway, the use of the rhinoceros's horn in the amulet is to be explained in its connection with the plant.

The presence of the garfish engraved on the amulet is also a matter of associative magic. It is the long, sharp snout of the fish that gives it the power to avert demons, at least this is said in Cyranides but as far as I know, it isn't confirmed by any other text (19). So I think this statement of Cyranides is uniquely based on the resemblance of the garfish - mutatis mutandis of course - with the rhinoceros. Indeed, the belone acus is called Hornhecht in German and Xenocrates talks of its horny beak, ῥάμνος κερατῶδες (20). The comparison with the κέρας, the horn of the rhinoceros goes without saying.

## NOTES

- (1) Cf. I. MUNDLE, Fledermaus, RLAC VII(1966), col. 1099.
- (2) Cyran., I, 17, 18-23 : ὁμοίως καὶ τῆς νυκτερίδος τὴν κεφαλὴν ἐὰν κόψῃς ζώσης καὶ ἐνδύσης μελανῷ δέρματι καὶ περιάψῃς λαίῳ βραχίονι τινος, οὐδόλωσ κοιμηθήσεται ἕως ἂν ἄρῃς αὐτὸ ἐξ αὐτοῦ. ἀλλὰ καὶ τὰς τρίχας, ἃς ἔχει περὶ τὸν τράχηλον ἢ νυκτερίδς ἐὰν περιάψῃς ἱματίῳ ἢ κλίνῃ, οὐδόλωσ κοιμηθήσεται ὁ φορῶν ἢ ὁ ἀνακειμένος ἐν κλίνῃ ἄνθρωπος .
- "Likewise, if you chop off the bat's head and you envelop it in a black skin and you fasten it to one's left arm, he won't sleep at all until you take it away from him. But even if you fasten the hairs that a bat has around its neck to some cloth or bed, the person who wears it or who lies on the bed won't sleep at all".
- (3) PGM VII, 652-660; PGM XII, 376-397; PGM IV, 2943-2948; etc.
- (4) Pliny, N.H., XXX, 140 : somnum arcet uespertilionis caput aridum adalligatum.
- (5) Cf. O. KELLER, Antike Tierwelt I, p. 12.
- (6) Pliny, N.H., XXIX, 83 : si ter circumlatus domui uiuus per fenestram inuerso capite infigatur, amuletum esse, priuatimque ouilibus circumlatum totiens et pedibus suspensum susum super limine. "If carried alive three times round the house and then fastened head downwards through the window, it acts as a talisman, and is specifically such to sheepfolds if carried round them three times and hung up by the feet over the treshold."
- (7) E.g. Ps.-Basil, In Is. proph. 2, 97 (PG XXX, col 277); John Chrysost., In Is., 2, 9; Jerome, In Is., 1, 2, 19.
- (8) Cyran. I, 17, 8-9 : τῆς οὖν βοτάνης κλάδον ἐὰν καταθῆς ἐν οἰκίᾳ, πάντα τὰ πνεύματα ἀποδιώκει.

Dioscorides, Mat. med., I, 90 : λέγεται δὲ καὶ κλώνας αὐτῆς (= ῥάμνου) θύραις ἢ θυρσίς προτεθέντας ἀποκρούειν τὰς τῶν φαρμάκων κακουργίας.

Diogenes Laertius says that Bion did this when he fell ill of a lingering disease and feared death : (IV, 57: ῥάμνον τε καὶ κλάδον δάφνης ὑπὲρ θύρην ἔθηκεν )

- (9) Photius, Lex., s.v. ῥάμνος : φυτόν ὃ ἐν τοῖς χουσίς ὡς ἀλεξιφάρμακον ἐμασῶντο ἔωθεν· καὶ κίττη ἐχρίοντο τὰ σώματα· ἀμλιαντος γὰρ αὐτῆ· διὸ καὶ ἐν ταῖς γενέσεσι τῶν παιδῶν χρίουσι τὰς οἰκίας εἰς ἀπέλασιν τῶν δαιμόνων.
- (10) Cf. J. MURR, Die Pflanzenwelt, p. 105.
- (11) J. MURR, Die Pflanzenwelt, p. 106 refers to an anonymous Greek didactic poem about it.
- (12) Cyran., II, 34, 5-6 : Τοῦτου ὁ εὐρισκόμενος ἔνδον τῆς ῥίνδος ἢ τοῦ κέρατος λίθος φοροῦμενος δαιμονας ἀποδιώκει.
- (13) Ctesias, Indica, FrGH 688, F 45 : ἐκ τούτων οἱ πιόντες - κατασκευάζουσι γὰρ ἐκπώματα - σκαμῶ (φασίν) οὐ λαμβάνονται οὔτε τῆι ἱερᾷ νόσῳ· ἀλλ' οὐδὲ φαρμάκοις ἀλίσκονται οὔτ' ἂν προκίωσιν οὔτ' ἂν τῶ φαρμάκῳ ἐπιπίωσιν ἢ οἶνον ἢ ὕδωρ ἢ ἄλλο τι ἐκ τῶν ἐκπωμάτων.
- Cf. Aelian, N.A., IV, 52. STEIER, Nashorn, RE XXXII(1935), col. 1781 remarks that this belief still exists nowadays in India and China.
- (14) STEIER, Nashorn, col. 1781. See also H. BRANDENBURG, Einhorn, RLAC IV (1959), col. 840-862.
- (15) Examples of this symbolism are all christian : Basil, Hom. in Ps. 28 (PG XXIX, col. 297); Cassiodor., Exp. in B., 21, 22 (CCL 97, p. 203) α ο. for the power of the horn; H. BRANDENBURGER, Einhorn, col. 849-851 gives several examples of the unicorn as symbol of evil powers.
- (16) Pliny, N.H., XII, 31.

- (17) STEIER, Nashorn, col. 1787-1788 : 'Ob die lycion genannte indische Droge wirklich. wie Plin. N.H., XII, 31 berichtet, in utribus camelorum aut rhinocerotum versandt wurde, mag dahingestellt sein'.
- (18) Cf. J. MURR, Die pflanzenwelt, p. 110. LSJ s.v. λύχιον translates "dyer's buckthorn" and identifies the Cappadocian and Lycian variety mentioned by Dioscorides, Mat. med., I, 100 with the Rhamnus petiolaris, probably on the ground of A. CARNOY, Dictionnaire étymologique des noms grecs des plantes, Louvain 1959, p. 165. H. RACKHAM, Pliny Natural History, vol. IV, London Loeb coll. 1945, p. 22 n. c thinks the drug λύχιον could be made of several species of raisin-barberry. Further specifications are in my view impossible.
- (19) Cyran., IV, 55, 3 : ταύτης τὸ στόμα φοροῦμενον ἢ θυμιάμενον δαίμονα διώκει.
- (20) Cf. D'Arcy W. THOMPSON, A Glossary of Greek Fishes, p. 31.





Ostrich about to attack a large snake.  
Coll. Bonner 64 (=Bonner nr.304).  
Bronze, 51 x 35mm.

κατύριος βοτάνη	man orchis (Acera anthropophora)
στρουθοκάμηλος πτηνόν	ostrich (Struthio Camelus)
σάλπη λχθς	saupe (Box salpa CV.)
σάφειρος λίθος	sapphire

I, 18, 54-59

Γλύφεται οὖν ἐν τῷ σαφείρῳ λίθῳ στρουθοκάμηλος ἐν τῷ στόματι ἔχων τὴν σάλπη, καὶ ὑπόθεσ ὑπὸ τὸν λίθον κόκκον σατυρίου καὶ βραχὺ τοῦ ἐρίνου τοῦ ἐν τῇ κοιλίᾳ τοῦ στρουθοκαμήλου, καὶ κατακλείσας φέρει πρὸς πᾶσαν εὐψίαν . καὶ ἔντασιν ποιεῖται καὶ ἐρωτικᾶς συμπαθείας· μάλιστα τὴν ἔντασιν παρέχει τοῖς ἤδη γηρῶσιν τοῖς τε θέλουσιν πολλὰ συνουσιάζειν. ποιεῖ δὲ καὶ ἐπίχαριν τὸν φοροῦντα.

"In the sapphire an ostrich is engraved holding the saupe in its bill; place under the stone a grain of man orchis and a bit of the gizzard in the stomach of the ostrich. Close the amulet and wear it for a good digestion. Also erection is brought about and erotic affinities. Above all it procures the erection to those who are already old and want to have much sexual intercourse. It also makes the wearer charming."

Amulets showing a large bird with long legs and neck but a short bill, almost certainly referring to an ostrich, as Bonner determined, are well known (1). The inscription  $\pi\iota\nu\omega$  which usually accompanies the design, gives away some indication on the nature of this kind of amulets. Since the meaning of  $\pi\iota\nu\omega$  "I drink" seemed inappropriate, Eitrem proposed to take it as equivalent to  $\kappa\alpha\tau\alpha\pi\iota\nu\omega$  "I devour" (2). Seyrig however, followed by Bonner, pointed out that  $\pi\iota\nu\omega$  is meant for  $\kappa\epsilon\iota\nu\omega$  "I am hungry" (3). The consistency of the itacism can be explained, according to Bonner, by the fact that perhaps the error occurred on the first specimen manufactured in some important workshop and was slavishly copied. Anyway, it is beyond doubt that these amulets are digestive amulets. They show a good resemblance with the popular Egyptian type of stomach amulets, the type with the ibis tied to an altar (4).

The amulet here described in Cyranides, also a digestive amulet, is certainly a variant of them although the snake beneath the bill of the ostrich is replaced by a fish in its bill.

The digestive power is due to the ostrich. Indeed, in Aelian's De natura animalium the following facts are mentioned: "If you kill an ostrich and wash out its stomach, it will be found to contain pebbles which the bird has swallowed and keeps in its gizzard and in time digests. And these pebbles are an aid to the human digestion" (5). Pebbles are found in the stomach of a dead ostrich. This observation is correct. Modern science has pointed out that the ostrich swallows stones to help the food being crushed between the walls of the gizzard (6). The presence of these stones in the ostrich's stomach is obviously the origin of the popular belief that this bird can digest everything, even stones and iron (7). The transference of the ostrich's digestive power to human digestion by means of its picture on an amulet is obvious. The bit of the gizzard in the stomach of the ostrich placed under the stone should contribute to a good digestion in the same way (8).

It is quite possible that the saupe in the ostrich's bill is also to be explained in a similar way. Indeed, the saupe, common in the Mediterranean, was disliked as food in antiquity (9), although this

beautiful fish is eatable (10). Still nowadays it is dispised on mediterranean markets (11). Perhaps the bad name of the saupe is due to Aristotle's statement that this fish is foul-feeding (12). This is a persistent story, for it is still called "mangeo-merdo" in Provence (13).

If the ostrich on the amulet can eat - and digest - such an ill reputed fish, it is obviously supposed to have an excellent digestion. And this digestion is transmitted to the wearer of the amulet, as we saw above.

But the saupe is adopted in this amulet not only for its negative qualities, i.e. as bad food devored by the ostrich. Moreover it shows a powerful positive influence as an aphrodisiac. This influence is explained in Cyranides a few lines above the description of the amulet: "The wearing of the right stone of the saupe's head brings about erection, the wearing of the left one impotence. The fish fat smoothed with honey procures the greatest pleasures when smeared over the genital parts of both sexes" (14).

In the fourth book of Cyranides both stones are prescribed to bring about erection, the right one fastened to the right testicle, the left one fastened to the left testicle; the fish fat smoothed with honey is said to be effective in the same way as told above (15). The erotic function of this amulet is therefore partly explained by the presence of the saupe's picture, although the aphrodisiac power of the fish is, as far as I know, attested nowhere else nor is it clear why the saupe should have such a power.

The ostrich too may contribute to the erotic function of the amulet. The erotic symbolism of the ostrich is probably based on its polygamy: the cock usually lives with three hens, each of them laying its eggs in the same nest (16). However, examples of the use of the ostrich, parts of it or the picture of the bird in erotic magic cannot be found but in the text of Cyranides: "The gizzard of ostriches called siphoukion smoothed and secretly given is a philtre procuring pleasure in love to the girl that drinks it" (17). "A stone out of the gizzard with one grain of the man orchis grinded down and given in drink or food brings about an enormous erection,

especially to those who cannot have sexual intercourse nor procreate. The stone itself if worn round the neck procures a very good digestion and an erection to those who fail to have sexual intercourse "(18).

The presence of the man orchis in the constitution of an erotic amulet is obvious. The name *κατύριον* or *κατύριος* is derived from *Σάτυρος*. The name of this lewd fellow was given to the plant because of the resemblance of its roots with the male sexual organs. According to the rule of the similia similibus or "Signaturlehre" the man orchis was therefore well known as an aphrodisiac (19). The real medicinal quality of the plant however, is a digestive one. Still nowadays the dried tubers of orchis are employed in the Near East to prepare salep, a nerve tonic and demulcent (20).

The double function of the amulet, the digestive one and the erotic one, thus recurs in the properties ascribed to the plant that forms part of it. The fact that precisely the grain of the man orchis should be placed under the stone, probably has a particular significance. Indeed the Greek word for grain, *κάκκος*, can be used in plural meaning "testicles" and in singular meaning "female sexual organ" (21). One may therefore suppose that the presence of this peculiar part of the plant might increase the aphrodisiac value of the amulet.

The fourth element finally, the stone *κάπειρος* isn't exactly what we designate with the word sapphire, as we saw in a precedent chapter (22). The word *κάπειρος* is used for a kind of lapis lazuli, a blue stone dedicated to Aphrodite and described in Cyranides as "stainless and having golden nerves; that is why some call it *χρυσόκάπειρος* (goldsapphire); the painters make the best azure out of it, which they call natural" (23).

It is obvious that the dedication to Aphrodite procures the stone aphrodisiac powers. I don't think the digestive power of the amulet has anything to do with the sapphire. The cooperation of the other three elements surely is sufficient to obtain the desired result in that matter.

NOTES

- (1) C. BONNER, Studies in magical amulets, pp. 212-214, discusses this kind of amulets. A well preserved one is D 304 of his collection, descr. p. 303, fig. pl. XV.
- (2) S. EITREM, Ein christliches Amulett auf Papyrus, Forhandlinger i Videnskapselskapet i Kristiana 1921, p. 18.
- (3) C. BONNER, o.c., p. 213 referring to H. SEYRIG in Berytus 1 (1934), 1-5.
- (4) See above in chapter Iota. According to Seyrig these ostrich amulets are probably derived from the common Egyptian type with the ibis, cf. C. BONNER, o.c., p. 213.
- (5) Aelian, H.A., XIV. 7 : ἡ γαστήρ αὐτῆς ἀνηρημένης εὐρίσκεται καθαίρομένη λίθους ἔχουσα, οὐκ περ οὖν καταπιούσα ἡ στρουθοῦς ἐν τῷ ἐχίνῳ φυλάττει καὶ πέττει τῷ χρόνῳ . εἶεν δ' ἂν οὗτοι καὶ ἀνθρώπων πέψεως ἀγαθόν .

I borrowed the translation from A.F. SCHOLFIELD in the Loeb edition.

- (6) Cf. I. KRUMBIEGEL, Die Straussenvögel, Wittenberg-Lutherstadt 1966, p. 126.
- (7) For this belief in antiquity O. KELLER, Die antike Tierwelt II, p. 175 refers to Pliny, Aelian, Timotheus, Alexander Aphrodisiensis.
- (8) Here we might wonder if the varia lectio βραχὺ τοῦ λίθου τοῦ ἐν τῷ ἐχίνῳ εὐρίσκομένου τῆς κοιλίας τοῦ στρουθοκαμήλου proposed by the mss. ICOBP isn't preferable, in view of Aelian's statement that the pebbles found in the ostrich's gizzard are an aid to human digestion.
- (9) Archestratus ap. Athenaeus, Deipn., VII, 321e : σάλπην δὲ κακὸν μὲν ἔγωγε | λίθον εἰς αἰεὶ κρῖν' βρωτῆ δὲ μάλιστα | ἔστι θεριζομένου σίτου .  
Ovid, Hal., 121 : merito uilissima salpa;  
Pliny, N.H., IX, 68 : circa Ebusum salpa, obscenus alibi et qui nusquam per coqui possit nisi ferula uerberatus.

- (10) In Cyran., I, 18, 7 the κάλη is described as  
 ἰχθύς θαλάσσιος, εὐανθής, γνωστός,  
 ἐσώδιμος. Cf. Cyran. IV, 58, 2.
- (11) Cf. D'Arcy W. THOMPSON, A Glossary of Greek  
 Fishes, p. 225; E. de SAINT-DENIS, Le  
 vocabulaire des animaux marins, p. 97.
- (12) Aristotle, H.A., 534a16 : ἡ κάλη τῷ κόπρω  
 ( δελεάζεται ).
- (13) Cf. D'Arcy W. THOMPSON, A Glossary of Greek  
 Fishes, p. 225.
- (14) Cyran., I, 18, 50-53 : Τῆς δὲ κάλης τοῦ ἰχθύος  
 ὁ δεξιὸς τοῦ κρανίου λίθος περιαιπτόμενος ἔν-  
 τασιν ποιεῖ, ὁ δὲ εὐάνυμος ἀνεπτάτους τὸ δὲ  
 στέαρ τοῦ ἰχθύος μετὰ μέλιτος λειούμενον ἡδο-  
 νὰς μεγίστας ποιεῖ περιχρίμενον εἰς  
 τὸ αἰδοτόν ἀμφοτέρων .
- (15) Cyran., IV, 58, 2-6 : τοῦτου οἱ ἐν τῇ κεφαλῇ  
 λίθοι περιαιπτόμενοι ἔντασιν μεγίστην ποιοῦ-  
 σιν, ὁ μὲν δεξιὸς περὶ τὸν δεξιὸν ὄρχιν, ὁ  
 δὲ εὐάνυμος περὶ τὸν εὐάνυμον. τὸ δὲ στέαρ  
 αὐτοῦ λειούμενον σὺν μέλιτι καὶ χρίμενον  
 περὶ τὸ αἰδοτόν, ἡδονικὸν ἔστι κἀλ-  
 λιστον ἐν συνουσίαις πάνυ.
- (16) The belief that ostriches lay a very large  
 number of eggs - more than eighty according to  
 Aelian, H.A., XIV, 7 - is partially based on  
 these polygamous nest habits. Cf. I.  
 KRUMBIEGEL, Die Straussenvögel, p. 108.
- (17) Cyran., I, 18, 42-44: Τῶν δὲ στρουθοκαμήλων  
 ὁ ἔχθνος τὸ λεγόμενον σιφύκιον ξηρὸν λειω-  
 θὲν καὶ διδόμενον λάθρα φιλτροπόσιμόν  
 ἔστιν ἡδονικὸν παρασκευάζον εἰς ἔρωτα  
 τὴν κίνουσαν αὐτὸ κόρην .
- (18) Cyran., I, 18, 45-49: Λίθος δὲ ἐκ τοῦ ἔχθνου  
 μετὰ ἐνὸς κόκκου σатурίου κεκλασμένος καὶ  
 διδόμενος ἐν πόσει ἢ βρώσει μεγίστην ἔντα-  
 σιν ποιεῖται, μάλιστα τῶν μὴ δυναμένων  
 συνουσιάζειν, μήτε ψυχὴν ἀντὶ ψυχῆς κτερίζει.  
 αὐτὸς δὲ ὁ λίθος καθ' ἑαυτὸν περιαιπτόμενος  
 μεγίστην εὐπεψίαν παρέχει καὶ ἔντασιν τοῖς  
 μὴ δυναμένοις συνουσιάζειν .

- (19) Cf. J. MURR, Die Pflanzenwelt, p. 203, who refers to Plutarch, De tuenda sanitate praecepta 126b where καύρια (n.pl.) is a general name for any kind of aphrodisiac. F. CARNOY, Dictionnaire étymologique, p. 235 refers to Dioscorides, Mat. med., III, 128. The "Signaturlehre" is mentioned in this context by H. BAUMANN, Die griechische Pflanzenwelt, p. 210.
- (20) Cf. H. BAUMANN, Die griechische Pflanzenwelt, p. 210. See also Encyclopaedia Britannica, s.v. Orchid.
- (21) Hesychius s.v. κόκκος : καὶ τὸ γυναι-  
κεῖον μόνιον . Anthol. Pal., XII, 222  
(Straton) τῆ χειρὶ τοῦ κόκκου  
ἐπαφόμενος .
- (22) Chapter Καρρα.
- (23) Cf. Cyran., I, 18, 8: Σάφειρος λίθος , ἡ  
κυάνεος ἄνηκεν τῆ Ἀφροδίτῃ , ἄσπιλος ,  
ἔχων καὶ φλεβία χρυσᾶ ὁδὸν τοῦτο καὶ χρυ-  
σοσάφειρος παρά τισιν ὀνομάζεται ἄφ'  
οὔ ποιοῦσιν οἱ ζωγράφοι τὸ λαζοῦριν τὸ  
ἄριστον , ὁ καλοῦσιν φυσικόν .



τριφύλλιος βοτάνη	clover ( <i>Trifolium pratense</i> L.)
ταῶς ὄρνεον	peacock ( <i>Pavo cristatus</i> )
τρυγῶν θαλασσεῖα	sting-ray ( <i>Trygon pastinaca</i> )
ταίτης λίθος	taites
εὐανθή	

I. 19. 9-19

Γλύφεται οὖν ἐπὶ τοῦ λίθου ταῶς πατῶν τρυγῶνα θαλασσεῖαν, καὶ ὑπὸ τὸν λίθον ἢ φωνὴ τοῦ ταῶνος ὡς ἐστὶ αἰω. καὶ ῥίζιον τῆς βοτάνης ὑπόθεσ καὶ ὑποκατακλείσας φέρει. τοῦτό ἐστὶν μέγα καὶ θαυμαστὸν φοροῦμενον ἐπὶ τε νίκης καὶ φιλίας καὶ συστάσεως πρὸς πάντας καὶ πάσας, ὥστε πάντας εὐηκόους ἔχειν. δηλοῦ δὲ καὶ καθ' ἕκαστον περὶ οὗ ἂν τις βούλοιοτο. εἰ γὰρ πρὸς τῇ κεφαλῇ ὑποτεθῆ τοῦ ὑπνοῦντος πλὴν ἀγνοῦ ὄντος, εἰάν τις βούληται τι κατὰ σοῦ ἢ ὑπὲρ σοῦ, γινώσκει τοῦτο καθ' ἕκαστον. ποιεῖ δὲ καὶ ἐπιληπτικοῖς ἄκρω, περιεπιτόμενος ἐρπετῶ βαμβακίνω εἰς τὸν τράχηλον, καὶ ἐστὶν παραχρημα ὑγιῆς ὁ πάσχων. τοῦτον δὲ τὸν δακτύλιον μηδενὶ παραδώσεις ἐτέρω, ὅτι μέγιστος ὑπάρχει, καὶ ἄλλου τοιοῦτου οὐκ εὐμοιρήσεις.

"In the stone a peacock is engraved walking on a sting-ray and under the stone the cry of the peacock which is ατω . And put a rootlet of the plant underneath, enclose it and wear it. That is a great and wonderful amulet if worn to procure victory and love and alliance to all, men and women, so that everyone is hearing willingly. While one is asleep it gives information about anything one likes to know. Indeed, if you have put it hard by your head while asleep and also pure, you will be informed in your sleep about it, if someone wants to do something against you or for you. It also works efficiently for epileptics, if hung around the neck it works against snake-venom and the victim is cured immediately. That ring you shall give to no one else, because it is very powerful, and you will never find by good fortune another one like this."

Taites as a name of a stone isn't attested but in Cyranides. There it is described as a multicoloured stone, bright, resembling a peacock. It is also called πάγχρου (1). Pliny knows a stone named panchrus but his description is very brief : 'Panchrus fere ex omnibus coloribus constat' (2). The description by Isidorus of Sevilla goes back to Pliny and by this doesn't help us any further (3). More complete descriptions are given by Socrates and Dionysius who call it πάγχρου or ταννίτης and by Damigeron - Evax, where it is engraved with the figure of Lato and Harpocrates (4). The descriptions of the stone are comparable with that of Cyranides but there is no similarity in the engraving nor in the use. Eichholz proposed an identification with the opal, but he added a question mark (5). His presumption is probably based on Pliny's description of opals : "They display the more subtle fires of the 'carbunculus', the flashing purple of the amethyst and the sea-green tint of the 'smaragdus', all combined together in incredible brilliance" (6). Halleux and Schamp think of a variety of agate (7).

Anyhow, the reason for the adoption of this stone, named *ταίτης*, cannot be but the resemblance of its colours with those of the peacock's plumage. This bird indeed is represented on the amulet walking on a sting-ray: it is the well known iconographical type of the bird on the fish, that almost certainly is a solar emblem as we saw above.

For the first time in this collection the amulet is bearing an inscription: the cry of the peacock *AIΩ* is engraved under the stone, i.e. on the reverse side. There is a certain number of preserved stones bearing the inscription *AIΩ*. These letters were often misinterpreted as an engraver's error for the consecrated *IAΩ*, the Greek translation of the Hebrew tetragrammaton (8). Here Cyranides certainly give the right interpretation saying *AIΩ* is the cry of the peacock. But the inscription *AIΩ* is not only referring to the bird on the obverse. *AIΩ* also stands for the verb *ἀίω* that means "I listen to, I give hear to, I obey". Indeed the purpose of the amulet is to make everyone listening willingly: *ὥστε πάντας εὐηκόους ἔχειν*. All this doesn't mean that the primary idea of the inscription wasn't the divine name *IAΩ*. After all *AIΩ* isn't but an anagram of *IAΩ*. What's more, the Physiologus in the Parisinus gr. 1008 mentions that the peacock calls upon God with a loud voice (9). The peacock's cry has thus been interpreted as the name of God.

So the interpretation of the inscription *AIΩ* is to be made on three levels: the first one, the simplest, refers to the cry of the peacock; the second translates *AIΩ* to the Greek verb *ἀίω* and by that way cooperates to the magical purpose of the amulet, i.e. to make people obedient; the superior level is a transcendant one calling upon God for help.

Let us now return to the obverse of the amulet and try to explain the figure of the peacock itself. The symbolism of the peacock in ancient times is not very clear, although the bird is very often depicted. Of course this is for the major part due to its beautiful plumage. The peacock is from Indian origin. In Greece it appeared for the first time in Samos, particularly around the temple of Hera. The bird was sacred to Hera as queen of heaven because of its starry tail (10). Its consecration to Hera,

the Roman Juno, certainly is the reason why the peacock often figures on coins representing the apotheosis of Roman empresses, just as the eagle, the bird of Jupiter, figures on coins of Roman emperors. Now Hera, queen of heaven, also symbolizes matrimonial alliance. A peacock on coins of the empress Domitia with the inscription Concordia August(orum) obviously is an emblem of this alliance (11). It therefore is no wonder that an amulet with the picture of a peacock is supposed to guarantee  $\phi\iota\lambda\alpha$  and  $\kappa\upsilon\sigma\tau\alpha\sigma\iota\varsigma$ , love and alliance.

As for the  $\nu\acute{\iota}\kappa\eta$ , the victory, the amulet might bring, could it be that a passage of Aelian's De natura animalium shows us the right explanation? About the peacock Aelian mentions the following peculiarity: "If, for instance, it wants to scare somebody it raises its tail-feathers and shakes them and emits a scream, and the bystanders are terrified, as though scared by the clang of a hoplite's armour" (12).

In fact the cry of a peacock is a mating-call, but Aelian clearly shows that the ancients sometimes interpreted it as a kind of war- or victory-cry (13). Here of course we remember the inscription  $\text{A}\Omega$  on the reverse of the amulet.

Thus far the symbolic value of the peacock's picture on this amulet.

The third book of Cyranides also makes mention of a more magical use of the peacock or parts of it (14). Among other things it is said that the peacock's brains are a good love-potion (15), which saying corresponds with the  $\phi\iota\lambda\alpha$  the amulet promises to procure. Drinking its excrements is said to cure epilepsy (16). It is unfortunate that there are, as far as I know, no parallel texts attesting these magical functions of the peacock.

Let me further quote a peculiar passage of this third book of Cyranides: "If the peacock is dead, its body doesn't rot nor does it smell badly, but it remains as if it was flavoured with myrrh" (17). The identification of the peacock with the phoenix, the outstanding solar emblem, couldn't be clearer.

There now remains a last purpose for which the amulet in Cyranides is used: divination. Put it under your pillow at night and you will know everything you want to know. Here too the peacock is

the very element on which this belief is based. Indeed, the peacock is counted among the augurial birds by Pliny, more particularly among the alites, i.e. birds of which the flight was observed for augurial purpose or perhaps rather, in the case of the peacock, the plumage (18). Unfortunately we are not documented any further on the use of peacocks in taking auguries.

The purity or ἀγνεῖα required in divination is well known.

Although the peacock obviously is the most important element of this amulet, the two remaining ones also collaborate to strengthen its magical powers. About the sting-ray we already noticed the solar symbolism in the bird - fish combination. The spine of the sting-ray carries a powerful narcotoxic venom (19). But, because it is said to cast away its sting after attack, it is used in Egypt to symbolize a repentant murderer (20). It isn't quite impossible that the sting-ray plays that same role in this amulet of Cyranides : we might say that the peacock, the sun-bird, conquers evil, symbolized by the fish (21). But the sting-ray being repentant grows obeying, so that the result of the battle may be φιλία and εὐστασία . This is precisely what the amulet is good for.

On the other hand the Greek name of the sting-ray τρυγών also means turtle-dove. The question why the fish was named after this bird is irrelevant for its function in the amulet (22), but for certain the fact that it was called by the name of the symbol of amiability, sweetness and peace, is quite important: just like the turtle-dove the sting-ray is supposed to bring φιλία and εὐστασία to the wearer of an amulet showing its figure.

The presence of the fourth element, the clover, is easy to explain. Clover was used in antiquity against epilepsy and snake-bites as Dioscorides says (23). Pliny also writes that clover was believed to be an antidote for bites of snakes and scorpions and he adds a naive explanation for that belief : snakes are never seen in trefoil (24).

Besides the medicinal use of the plant, trefoil was furthermore mixed in love-potions. Evidence for this is found in a magical treatise of Parisinus gr. 1265 (25). So by procuring  $\phi\iota\lambda\alpha$  and by being helpful against epilepsy and snake-bites trefoil suits very well in this amulet.

As a parallel for this amulet F. de Mély mentions an engraved stone brought to light by Chaël. It is a black stone with a sting-ray. If you wear it you couldn't be hurt and it is most appreciated by masters and land-owners : "Turturis marini imago si in lapide nigro, de quo parangones fiunt, reperta fuerit, et in annulo plumbeo legata feratur, non poterit laedi ab aliquo, et a senioribus ac dominis terrarum deligetur" (27). Save for the figure of the sting-ray there is no resemblance with the amulet of Cyranides.

NOTES

- (1) Cyran., I, 19, 6-8 : Ταύτης λίθος ἐστὶ ποι-  
κίλος , εὐανθής, ὁμοίος τῷ ταῶνι , ὁ καὶ  
πάγχρους καλούμενος . οὗτος ἀνήκει τῷ  
ταῶνι διὰ τὸ πολέχρωμον , καθὼς καὶ  
ὁ ταῶς .
- Pliny, N.H., XXXVII, 187 mentions a stone named  
taos resembling a peacock (taos pauoni est  
similis) but a description is lacking. Cf.  
Isid., Orig., XVI, 15, 19.
- (2) Pliny, N.H., XXXVII, 178.
- (3) Isid., Orig., XVI, 12, 1 : Panchrus uarius ex  
omnibus pene coloribus constans; unde et  
nominatus.
- (4) Socrates and Dionysius 45 (ed. HALLEUX-SCHAMP,  
p. 174); Damigeron - Evax XXXVII (ibidem, pp.  
277-278).
- (5) D.E. EICHHOLZ, Pliny Natural History, vol. X,  
London Loeb ed. p. 309.
- (6) Pliny, N.H., XXXVII, 80 : est in his carbunculi  
tenuior ignis, est amethysti fulgens purpura,  
est smaragdi uirens mare, cuncta pariter  
incredibili mixtura lucentia (translation D.E.  
EICHHOLZ).
- (7) R. HALLEUX - J. SCHAMP, Les lapidaires grecs,  
p. 174.
- (8) Cf. F. DE MELY, Les lapidaires III, p. LXVII.
- (9) ed. A. DELATTE, Anecdota Atheniensia, p. 381,  
22-23 : βοῶ μεγαλοφώνως εἰς τὸν  
θεόν .
- (10) Cf. d'Arcy W. THOMPSON, A Glossary of Greek  
Birds, p. 277.
- (11) Cf. O. KELLER, Antike Tierwelt II, p. 152.
- (12) Aelian, N.A., V, 21 : ἔάν γοῶν θελήσῃ  
φοβήσασθαι τινα , ἐγείρας τὰ οὐράτα εἰτα  
διεσεύσασθαι καὶ ἀπέστειλεν ἤχον , καὶ  
ἔδειξαν οἱ παρεστῶτες, ὡς ὀπίσθου τὸν  
ἐκ τῶν ὀπλων κεφοβημένοι δοῦπον .
- (translation A.F. SCHOLFIELD).
- (13) In Cyran., III, 42 the interpretation of the  
peacock's cry is the scientific one.

- (14) Cyran., III, 42, 8-13.
- (15) Cyran., III, 42, 8 : τούτου ὁ ἐγκέφαλος  
φιλτροπόσιμος ἐστὶ .
- (16) Cyran., III, 42, 12-13 : ἡ δὲ κόπρος πινο-  
μένη ἐπιληψίαν ἰάται .
- (17) Cyran., III, 42, 6-7 : εἰάν τις ἀποθάνῃ ὁ  
ταῶν, οὔτε σῆκεται , οὔτε ὄξει δυσωδῶς,  
ἀλλὰ μένει ὡς ἐμμυρισμένος .  
This is an obvious parallel with Augustin, De  
Civitate Dei, 21, 4 : quis enim nisi Deus  
creator omnium dedit carni pavonis mortui ne  
putrescet ? Augustin's remark forms the base of  
the christian symbolism of the peacock's  
immortality.
- (18) Pliny, N.H., X, 43. There are two categories of  
augurial birds : the alites, where the  
observation of the flight is important, and the  
oscines of which the cry has an augurial value.  
Cf. Daremberg-Saglio, s.v. augures p. 555.  
Cicero, N.D., II, 160 and De Divin., I, 120,  
gives the same classification as Pliny.
- (19) d'Arcy W. THOMPSON, A Glossary of Greek Fishes,  
p. 270.
- (20) d'Arcy W. THOMPSON, A Glossary of Greek Fishes,  
p. 271, refers to Horapollon, Hierogl., II, 112.  
For commentary on this text see ed. F.  
SBORDONE, pp. 211-212.
- (21) For the sting-ray as a symbol of evil see  
Cyran., IV, 64 : ἐστὶ γὰρ κατὰ πάντα  
αἰτίον βλάβης μεγάλης .
- (22) R. STROEMBERG, Griechische Fischnamen, pp. 118-  
119 : 'Ob der Name ursprünglich einen  
lautgebenden Fisch bezeichnet hat, wobei u.a.  
das Girren das Tertium comparationis gebildet  
haben mag, lässt sich nicht entscheiden. Ich  
möchte τρυγῶν "Turteltaube", die als Sinnbild  
der friedfertigkeit und Artigkeit gilt, als  
Bezeichnung für den ausserordentlich  
gefährlichen Fisch Trygon pastinaca lieber als  
durch Tabu bedingten Schmeichelnamen  
auffassen.'
- (23) Dioscor., Mat. med., III, 109 .
- (24) Pliny, N.H., XXI, 152 : tripolium scio credi  
praeualere contra serpentium et scorpionum  
ictus ... serpentesque numquam in tripolio  
aspici.

- (25) A. DELATTE, Anecdota Atheniensia, p. 74 :  
 πλάσων , όταν κάμνη ή Σελήνη την ημέραν  
 της , και κόψων τρίφυλλα μετά χρυσάφιν και  
 λέγε . ὦ βοτάνη , εἰς τὴν ἀγάπην σε θέλω.  
 και τρίψων και βάλε εἰς οἶκον και πότισσον  
 ὅποιον θέλεις και ἀγαπήσει σε .
- (26) F. de MELY, Le poisson, p. 328.



ὑπέρεικον βοτάνη	St.-John's wort (Hypericum)
ὑπερωνίς πτηνόν	female eagle
ὄλλος ἰχθὺς θαλάσσιος	octopus ?
ὀέτιος λίθος	eagle-stone

I, 20, 10-19

Τὸν μὲν οὖν λίθον λιθουργήσας, γλύψων εἰς αὐτὸν ἀετὸν διασπαράττοντα τὸν ἰχθύν, ὑπὸ δὲ τὸν λίθον μικρὸν ῥίζιον τῆς βοτάνης καὶ τὸ ἀκρόπτερον τοῦ πτηνοῦ. ἔάν δὲ μὴ ἔχης ὑπερωνίδος, κἄν θεὸς ἰέρακος, καὶ κατακλείσας ἔχε μέγα φυλακτήριον καὶ ἀνδράσι καὶ γυναιξὶν πᾶσι χρήσιμον. ποιεῖ γὰρ πρὸς τε τὰς ἀναδρομὰς τῆς μήτρας, παρεκλίσεις, σκοτισμοὺς, αἱμορραγίας, ἀκαταστασίας, φλεγμονάς, ροιάδας καὶ ἀπλῶς, χωρὶς πώσεως καὶ ἀναβρώσεως καὶ καταβρώσεως, πρὸς πάντα ποιεῖ. δίδου οὖν φορεῖν ταῖς ἀναγκαζομέναις γυναιξὶν πρὸς τὰς ἀναδρομὰς τῆς μήτρας, παρεκλίσεις καὶ τὰ ἄλλα, ὡς μέγα μυστήριον καὶ ἀφελέστατον βοήθημα ἄκρως.

"After carving a stone, engrave an eagle in it tearing the fish to pieces. Under the stone a rootlet of the plant and the top of the bird's wing. If you haven't got one of the hen-eagle and you have one of the hawk, put that underneath, enclose it and have a great amulet useful for all, men and women. It works indeed against refluxes of the womb, flexures, dizziness, haemorrhages, unsteadiness, inflammations, fluxes, and it simply works against everything, not to speak of prolapse, corrosion and cancer. Therefore give it to the women suffering from refluxes of the womb, flexures etc. as a great mystery and as a most unfailing help."

This amulet description contains two hapaxes: *δέτιος* as name of a stone is unknown and the fish name *ὄλλος* isn't attested either. The adjective *δέτιος* of course means "rainy", which makes us translate *δέτιος λίθος* as "rain-stone" or "water-stone". Now there is such a stone called by that name with a Greek synonym, i.e. *ἐνύδρος*. Pliny describes it as a perfectly round, smooth, white stone shaking like an egg because of its contents, while Solinus and Isidorus assert that it exudes water like a fountain (1). Therefore Riddle suggests it is probably a transparent chalcedony containing water (2). The *enhydros* is included by Laurenberg and Bausch among the eagle-stones (3). As an eagle is engraved in the *δέτιος* the stone has all the chances of being identical with the *ἐνύδρος*.

The name *ἐνύδρος* is derived from the fact that this kind of stone is filled up with water. The *aetites* or eagle-stone in general, says Bausch, is also called 'pregnant stone' either because it contains another little stone or some other matter - water in the case of the *ἐνύδρος* - like an embryo enclosed within a womb, or because it is of help to pregnant women (4). Pliny who did not ascribe special virtues to the *enhydros*, indeed noticed that eagle-stones wrapped in the skins of animals that have been sacrificed, are worn as amulets by women or

four-footed creatures during pregnancy so as to prevent a miscarriage. They must not be removed except at the moment of delivery : otherwise, there will be a prolapse of the uterus. On the other hand, if they were not removed during delivery no birth would take place (5).

The helpfulness of the eagle-stone for pregnant women is also attested by Aelian, Dionysius and others (6). The use of the δέτιος in Cyranides is enlarged to all kinds of women's diseases (7).

Barb explained why these stones were associated with eagles (8). In medical treatises of the Assyrians ABAN ERU means "pregnant stone". But the significance of the word ERU not only is "pregnant" but also "eagle". As the medical terminology became unclear later on, ABAN ERU was soon interpreted as "eagle-stone". So it is but a step to the belief that these stones were found in eagle-nests where they were supposed to help the female eagle give birth. Precisely the relationship of the stones with the eagle, the king of the birds, increased their value and the legend remained current in natural science for many centuries, also in the west.

The amulet in Cyranides which is helpful especially for women, therefore is a clear illustration of this legend : the first element is an eagle-stone, here called δέτιος for the sake of the alphabetical order of course and perhaps also in connection with the third element i.e. the water symbolized by the fish; the second element is the female eagle ὑπερωνίς represented by the engraving in the stone and by the top of the wing placed underneath. The interchangeability between the eagle and the hawk has already been discussed above (9).

The third element in the legend had to be a snake. The inimity between the eagle, symbol of heaven and light, and the snake, symbol of earth and darkness, indeed is a very ancient part of universal mythology (10). In Greek figurative art and literature the representation of the eagle devouring a snake is very common (11). Snakes are also associated with the eagle-stone : there is a tradition going that eagles take the stone to their young as a talisman against snakes (12).

In Cyranides of course the third element obligatorily is a fish. So the snake was replaced by the ὕλλοc of which is said it is a well-known sea-fish, edible and bad (13). This description is very poor and makes no identification possible. But what could be a better substitution for a snake than a sea-snake, if it has to be a sea-fish? A sea-snake however is a very indefinite concept. Our first thoughts go to the legendary monster Hydra as the prototype of the sea-snake. Now as ὕλλοc is nothing else but a diminutive of ὕδρα or ὕδροc our thoughts seem to put us in the right direction.

The Lernaic Hydra beaten by Heracles is a fabulous creature and it isn't easy to discover the real animal behind it. First of all there is the ὕδροc to be taken in consideration because of its name. Pliny says it is the most beautiful eel in the world, it is amphibious and no other snake is more venomous (14). An exact identification however is impossible, for the distinction between anguis and serpens is not very clear. Aristotle's attestments are not more helpful: the ὕδροc is amphibious and footless (15) and its gall-bladder is close to the liver (16). Ernout thinks the ὕδροc is the Coluber natrix (17), i.e. Tropidonotus natrix (18). This indeed is a water animal but certainly not a sea-fish. Moreover no medical use of the ὕδροc is known.

For Keller the figure of the notorious sea-monster depends largely upon the octopus. For this statement he brings forward a vase-illustration representing Heracles and Iolaos fighting the Hydra: the eight arms of the octopus are clearly distinguishable (19). In my view, the identification of the ὕλλοc in Cyranides with an octopus is very likely to be correct. Indeed, the amulet is entirely focused on the cure of uterine diseases. Now there is a widespread and very ancient belief among different peoples that the female womb leads an independent life moving freely within the body. It is therefore quite natural that the uterus was represented as an animal. Bonner noted the fact that "in the Byzantine uterine charms, which are inscribed on the Medusa-like amulets, the womb is said to coil like a snake and hiss like a dragon". He furthermore draws the

attention to a certain number of much earlier stone amulets where the uterus is given a form like that of an octopus ! Bonner offers a very good explanation for the choice of so strange a form : "One can only suggest that the rounded organ was felt by suffering women to be a center from which stabbing pains radiated in various directions, and this gave rise to the amulet types of the octopus and the snake-encircled Medusa" (20).

With this knowledge we can't doubt the ὕλλος in Cyranides being an octopus and by this the symbol of the uterus. In the figure on the amulet the disease of the womb, represented by the octopus, is wiped out by the eagle tearing the fish to pieces. Moreover, there is a complex universal symbolism where the eagle is the spiritual male element and the snake - sea-snake or octopus - the material female element. The ὕλλος certainly gives a wink at its homonym ὕλη "material".

The fourth element of the amulet finally, the ὑπέρεικον, is the Saint-John's wort. It is described in Cyranides as follows : "Hypericum is a good plant, shrubby, some call it διονυσεῖα ; it is a summer-plant" (21). Dioscorides speaks extensively about the hypericum giving several other names by which the plant is called (22). Among these is also Διονυσιάς . According to this name the hypericum played a certain part in the cult of Dionysus but no more is known about it (23). Perhaps the fact that a variety of hypericum grows in vineyards is the cause (24). Another possibility is that the plant beared this name because of its red grains which remind us of red wine (25). The name ἀνδροκαίμων given to the same plant certainly is based on the stalk tops that, when crushed, give out a juice of the colour of blood (26). The medical properties of the plant are numerous and various. Women employed it as an emmenagogue (27). This is also attested by Pliny and Galen (28). Other specific female diseases however, curable with hypericum, are not mentioned. de Mély says Saint-John's wort also is anti-hysterical (29), but I wasn't able to find this in ancient literature.

Apparently no connection between the hypericum and the three other elements of the amulet can be made.

NOTES

- (1) Pliny, N.H., XXXVII, 190; Solinus XXXVII, 24 (ed. MOMMSEN, p. 161); Isid., Orig., XVI, 13, 9.
- (2) J.M. RIDDLE, Marbode of Rennes ' De lapidibus, pp. 81-82.
- (3) Cf. A.A. BARB, Birds and medical magic, JWI 13 (1950), p. 317 referring to Joh. Laurentii BAUSCHI, Med. D. et Physici Reip. Suinfurtensis ordinarii, Schedismata bina curiosa de lapide Haematite et Aetite, ad mentem Academiae Naturae Curiosorum congesta, Leipzig 1665; id., De Lapide Aetite schediasma, ad modum et mentem Academiae Naturae Curiosorum congestum, Leipzig 1665; Guilielmi LAUREMBERGII Historica descriptio aetites seu lapidis aquilae ..., Rostock 1627.
- (4) A.A. BARB, o.c., p. 317. On the eagle-stone see also supra, chapter Alpha.
- (5) Pliny, N.H., XXXVI, 151 : aëtitae grauidis adalligati mulieribus uel quadripedibus pelliculis sacrificatorum animalium continent partus, non nisi parturiant remouendi; alioqui uoluae excidunt. sed nisi parturientibus auferantur, omnino non pariant. Translation D.E. EICHHOLZ, Loeb edition.
- (6) Aelian, N.A., I, 35; Dionys., De auibus 1, 3. Other references, also medieval in d'Arcy W. THOMPSON, A Glossary of Greek Birds, p. 14. C.N. BROMEHEAD, Aetites or the Eagle-stone, Antiquity 21 (1947), pp. 16-22 traces the history of the use of eagle-stones from Dioscorides (1st cent. A.D.) to the Pharmacopeia (1769).
- (7) It was the text of Pliny "alioqui uoluae excidunt" that made me translate  $\chi\omega\rho\iota\varsigma$  in Cyran., I, 20, 16 by "not to speak of" so including  $\pi\tau\omega\iota\varsigma$  (= excessio) in the diseases that may be cured by the  $\delta\epsilon\iota\iota\omicron\varsigma$ .  $\chi\omega\rho\iota\varsigma$  in this sense is used by Plato, Apol., 34b. de MELY, Les lapidaires III, p. 61 translated  $\chi\omega\rho\iota\varsigma$  by "sauf". In my view  $\chi\omega\rho\iota\varsigma$  is

leading to a climax in the enumeration of diseases : even the worst can be cured by this stone.

- (8) A.A. BARB, Birds and Medical Magic, p. 317. See also M. STOL, Zwangerschap en geboorte bij de Babyloniërs en in de Bijbel, Leyde 1983, pp. 19-23 for a survey on previous theories on the subject.
- (9) Cf. *supra*, chapter Alpha. The same kind of legends can also be ascribed to the vulture. Cf. Physiologus 19 where an εὐτόκιος λιθός helps the pregnant vulture.
- (10) Cf. M. LURKER, Adler und Schlange. Von der Polarität des Daseins und ihre Aufhebung in der Symbolsprache des Mythos, Anthaios V (1964), pp. 344-352; W. FAUTH, Widder, Schlange und Vögel am heiligen Baum, Anatolica VI, 1977-1978, pp. 129-155.
- (11) First in Homer, Il., XII, 200 sqq. Further references in E. KUESTER, Die Schlange in der griechischen Kunst und Religion, Giessen 1913, pp. 127-131.
- (12) Cf. R.C. THOMPSON, A Dictionary of Assyrian Chemistry and Geology, Oxford 1936, p. 105 quoting the Arabic writer El-Ghafeki.
- (13) Cyran., I, 20, 7 : ἄλλος θαλάσσιος γνωστός, ἑδωδιμος, κωνηρός .
- (14) Pliny, N.H., XXIX, 72 : in orbe terrarum pulcherrimum anguium genus est quod et in aqua uiuit, hydri uocantur, nullo serpentium inferiores ueneno.
- (15) Aristotle, H.A., I, 1, 6 (487a).
- (16) Aristotle, H.A., II, 17, 12 (508b); Nicander, Ther., 411 sqq.; Isid., Orig., XII, 4, 27.
- (17) A. ERNOUT, Pline l'Ancien Histoire Naturelle livre XXIX, Paris 1962, p. 83.
- (18) O. KELLER, Antike Tierwelt II, p. 298.
- (19) O. KELLER, Antike Tierwelt II, pp. 508-509.
- (20) C. BONNER, Studies in Magical Amulets, p. 91.
- (21) Cyran., I, 20, 3-4 : Ὑπέρεικόν ἐστίν βοτάνη ἀγαθή, θαμνώδης, οἱ δὲ διοινύσαν καλοῦσιν ἔστι δὲ θερινή .
- (22) Dioscorides, Mat. med., III, 154-156.
- (23) Cf. J. MURR, Die Pflanzenwelt, p. 234.

- (24) Cf. Pliny, N.H., XXVII, 27 about the ἀνδρο-  
 καιμον , precisely the variety which is also  
 called διονυσιάς according to Dioscorides,  
Mat. med., III, 156.
- (25) Cf. A. CARNOY, Dictionnaire étymologique, p.  
 26.
- (26) Cf. Pliny, N.H., XXVII, 26.
- (27) Dioscorides, Mat. med., III, 154; III, 157.
- (28) Pliny, N.H., XXVI, 158 : menses ciet hypericum  
 utrumque adpositum; Galen XII, 148: καταμήνια  
 προκαλεῖσθαι .
- (29) F. DE MELY , Le poisson , p. 329.

φρύνη βοτάνη	goat's thorn (Astragalus Poterium)
φρῦνος πτηνόν	golden oriole (Oriolus galbula L.)
φώκη θαλασσία	seal (Class. Phocidae)
φρῦνος λίθος	frog-stone

## I. 21, 61-69

Εἰς δὲ τὸν βατραχίτην λίθον γλύψον ἱέρακα καὶ  
παρὰ τοὺς πόδας αὐτοῦ βάτραχον, καὶ κατάκλειε  
γλώσσαν βατράχου καὶ ῥίζιον τῆς βοτάνης καὶ ἄκρον  
γλώσσης τοῦ πτηνοῦ καὶ κατακλείσας ὁδὸς φορεῖν.  
Ἦστησιν δὲ πᾶσαν αἱμορραγίαν καὶ ἀσκληπιάδας  
φοροῦμενον καὶ ἰχτεριῶντας διασώζει. ποιεῖ δὲ  
καὶ τοῖς αἷμα ἀνάγουσιν καὶ ταῖς ἀπὸ μήτρας  
αἱμορραγούσαις γυναίξιν. ἔστι δὲ καὶ κραῦντικόν  
θυμὸς ἐπὶ ὀργῆς ἐχθρῶν, εἰάν μάλιστα καὶ τὰς τρι-  
χας ὑποκατακλείσῃς τῆς φώκης. διαφυλάττει γὰρ  
καὶ ἀπὸ θηρίων ἰοβόλων. ἔχει δὲ καὶ ἄλλας πρά-  
ξεις ὡς φράσω θειοτάτας ὁ λίθος οὗτος .

"Engrave a hawk in the frog-stone and a frog at its feet, and enclose a frog's tongue and a rootlet of the plant and the top of the tongue of the bird and give it to wear after setting. It stops every haemorrhage, and it cures those who suffer from haemorrhoids and persons with jaundice. It also works for those who vomit blood and for the women with haemorrhages of the womb. It also calms down the bad temper of enemies, especially if the hairs of the seal are enclosed underneath. The amulet also protects against venomous animals. And that stone has more divine activities about which I am yet to speak."

The central element of this amulet doubtlessly is the frog: the stone as well as the bird and the plant are named after it. This is even more peculiar since this animal does not suit in the general pattern of four elements. The frog indeed takes the place of the fish, although this particular element is represented too. The seal however doesn't play but a secondary part and is facultative.

In Cyranides the frog βάτραχος is clearly assimilated with the toad φρῶνη, obviously for alphabetical reasons (1). Although this chapter is devoted to the letter phi the description of the amulet speaks of βάτραχος and βατραχίτης. So no doubt is possible about the frog being meant.

Frogs are largely represented in all kinds of folk medicinal recipes (2). I shall only quote those in connection with this amulet of Cyranides. Pliny says the ashes of frogs or their dried blood was applied to stop bleeding (3). This is also attested by Dioscorides and Galen(4). So the frog causes the amulet to stop haemorrhages. The protection against venomous animals is also due to the frog. According to Pliny "a decoction of sea frogs boiled down in wine and vinegar is drunk to counteract poisons, also that of the bramble toad and the salamander; if the flesh of river frogs is eaten, or the broth drunk after boiling them down, it counteracts the poison of the sea-hare, of the snakes ... and of scorpions if wine is used in the preparation." (5). Dioscorides says that frogs are an antidote for all reptiles if boiled with salt and oil (6).

Why the bird engraved on the amulet should be a hawk and not a golden oriole (φρῶνος) is rather enigmatical. Probably we should think of the λέραξ φρουνολόγος mentioned by Aristotle in his Historia animalium (7). The word means toad-catcher; the bird could be a marsh-harrier (8). The hawk however does not seem to have a precise function in the amulet's working. Could it be that it is there only for solar symbolism (9)?

Anyhow, the bird of which the top of the tongue should be enclosed in the amulet, is not a hawk but a φρῶνος, i.e. the golden oriole which is also called ἔκτερος and χλωρός (10). The name ἔκτερος clearly refers to ἔκτεριῶντες: those who suffer

from jaundice and are cured by the amulet. "Ικτερος is in the first place the name of a disease. The golden oriole is a yellow bird which was said according to the rule of the similia similibus, to cure jaundice. Pliny tells us how this happens: "There is a bird called 'jaundice' from its colour. If one with jaundice looks at it, he is cured, we are told, of that complaint - and the bird dies. I think that this bird is the one called in Latin 'galgulus'." (11).

Χλωρός, the other name of the bird, also means "yellow" or rather "greenish-yellow", often referring to bilious looking persons. Usually the form χλωρόων is preferred (12). The association of this bird with a frog and the name-giving φρῦνος obviously is due to the greenish part of the colour (13).

The plant φρῦνη is also called βατράχιον or βατραχίτης and is thus connected with the frog. It is said to be an evil plant looking like celery. It grows in watery places. It is hot and fiery (14). According to the descriptions by Dioscorides and Pliny φρῦνη or φρῦνιον is to be identified with different species of the Astragalus (15). It was used against different kinds of diseases mentioned by Dioscorides and Pliny (16), but these are of no importance for the amulet in Cyranides. Its presence here can only be explained by that it was thought to be a helpful remedy against the poison of frogs (17).

Optionally the hairs of the seal may be added: this calms down the bad temper of enemies. The φώκη is described in Cyranides as a very beautiful animal, well-known, with human hands and the face of a cow (18). It has big prickly hairs between the nose and the mouth (19). It has nails (20). This description and all the superstitious beliefs attributed to certain parts of the animal, beliefs which are widespread in antiquity (21), can't leave any doubt about the identification of the φώκη with a seal (22). The power of its whiskers over the mind of enemies however, isn't expressed but in Cyranides (23).

NOTES

- (1) Another name for the plant φρύνη is βατράχιον or βατραχίτης (Cyrano, I, 21, 3) and the stone φρυνος is synonym for βατραχίτης (Cyrano, I, 21, 10). In the lapidary of Socrates and Dionysius 52 (ed. HALLEUX - SCHAMP, p. 177) the stone φρυνίτης is said to come from a frog (βάτραχος).
- (2) See M. WELLMANN, Frosch, RE XIII. Hb. (1910), col. 117-119.
- (3) Pliny, N.H., XXXII, 121: ad sanguinem sistendum et ranarum inlinunt cinerem uel sanguinem arefactum.
- (4) Dioscorides, Mat. Med., II, 26: καέντες δὲ ἐπιπαστοι αἱμορραγίαν στέλλουσι. Galen XII, 362: τῶν γε μὴν κεκαυμένων βατράχων τὴν τέφραν αἱμορραγίας ἰαμὰ φασιν ὑπάρχειν ἐπιπαστομένην.
- (5) Pliny, N.H., XXXII, 48: Ranarum marinarum ex uino et aceto decoctarum sucus contra uenena bibitur, et contra ranae rubetae uenenum et contra salamandras. fluuiatilum si carnes edantur iusue decoctarum sorbetatur, prosunt et contra leporem marinum et contra serpentes ..., contra scorpiones ex uino. Transl. W.H.S. JONES (Loeb ed.).
- (6) Dioscorides, Mat. Med., II, 28: βάτραχοι ἀντιφάρμακόν εἰσιν ἑρπετῶν πάντων ζωμευθέντες σὺν ἄλει καὶ ἑλαίῳ.
- (7) Aristotle, H.A., IX, 36 (620a 21).
- (8) d'Arcy W. THOMPSON, A Glossary of Greek Birds, p. 310.
- (9) This chapter contains more descriptions of amulets showing the figure of a hawk with a frog at its feet. They bear quite enigmatical inscriptions: Cyrano, I, 21, 88-97.
- (10) Cyrano, I, 21, 6.
- (11) Pliny, N.H., XXX, 94: auis icterus uocatur a colore, quae si spectetur, sanari id malum tradunt et auem mori. hanc puto Latine uocari galgulum. Aelian, N.A., XVII, 13 ascribes a similar power to the χαράδριος, the stone-curlew. "If a man who has become infected with

jaundice gazes intently at it and it turns the gaze without flinching, as though it were moved by jealousy against the man, the retaliatory gaze heals the man of the aforesaid complaint." (Transl. A.F. SCHOLFIELD in the Loeb ed.).

- (12) Cf. d'Arcy W. THOMPSON, A Glossary of Greek Birds, pp.332-333.
- (13) For certain there cannot be any doubt about the lecture φρῦνος, since the frog plays the principal part in this amulet. The conjecture of d'Arcy W. THOMPSON, A Glossary of Greek Birds, p.310 reading φρῦσον is to be rejected. Thompson supposes the reading φρῦσον not impossible for the Italian frisone, frosone, frusone etc., names for the hawfinch.
- (14) Cyran., I, 21, 3-5: φρῦνη βοτάνη ἐστίν, ἣν καὶ βατράχιον καλοῦσιν ἢ βατραχίτην. πόνηρον φυτόν, τῇ ἰδέῃ ὡς κέλινον. φύεται δὲ ἐν τοῖς ὕδασι. ἐστίν δὲ καυκῶδες καὶ ἔμπυρον τῇ δυνάμει.
- (15) J. ANDRE, Pline l'Ancien Histoire naturelle livre XXV, Paris 1974 (Budé), p.149 referring to Dioscorides, Mat. Med., III, 15 and Pliny, N.H., XXVII, 122-123.
- (16) Dioscorides, Mat. Med., III, 15; Pliny, N.H., XXVI, 130; XXVII, 122-123.
- (17) Pliny, N.H., XXV, 123: Sunt et ranis uenena, rubetis maxime ... auxiliatur phrynion in uino pota.
- (18) Cyran., I, 21, 8-9: φώκη θαλασσία, ζῷον κἀλλιστόν ἐστι καὶ γνωστόν, ἀνθρωπείας χετρας ἔχουσα, πρόσωπον δὲ βοῦς μικράς.
- (19) Cyran., I, 21, 29-30: τῆς οὖν φώκης αἱ τρίχες αἱ ἀνὰ μέσον τῶν ῥινῶν καὶ τοῦ στόματος εὐρεῖσκόμεναι μεγάλαι καὶ τραχεῖαι.
- (20) Cyran., I, 21, 43: οἱ δὲ ὄνυχες τῶν χειρῶν τῆς φώκης.
- (21) Cyran., I, 21, 43-56; II, 41; IV, 67. On the medicinal use and superstitious beliefs about parts of the seal, see H. GOSSEN, Robbe, RE II, 1.Hb.(1914), col.948-949 with references to ancient authors.

- (22) The difficult problem of the confusion between φώκη , βοῦς θαλάσσιος , uitulus marinus etc., studied by F. BENEDETTI, Note filologiche e zoologiche al βοῦς marino in Aristotele e Plinio, Annali della Facoltà di Lettere e Filosofia Università di Perugia XVI-XVII,1 (1978-80), pp.179-196 can thus be left out of consideration.
- (23) Cyran., I, 21, 29-41 in combination with other parts of the seal itself and different other elements; Cyran., II, 41, 13-15; Cyran., IV, 67, 19-21.

χρυσάνθεμος βοτάνη	gold-flower ( <i>Helichrysum</i> <i>siculum</i> )
χρυσόπτερον πτηνόν	golden oriole ( <i>Oriolus</i> <i>galbula</i> L.)?
χρυσόφως λίθος	dorade ( <i>Chrysophrys aureata</i> )
χρυσίτης λίθος	chrysites

## I, 22, 23-31

Εἰς δὲ τὸν χρυσίτην λίθον γλύψον τὸ ὄρνειον βα-  
 σίλειον ἔχον δισκοειδές, καὶ παρὰ τοὺς πόδας τὸν  
 λίθον, καὶ ὑποκατακλέσας ῥίζιον τῆς βοτάνης, ὀίδου  
 φορεῖν. ποιεῖ γὰρ πρὸς τὰς ἀλγηδόνας τοῦ στομάχου  
 καὶ ἀναδρομὴν μήτρας καὶ νεφρῶν. ποιεῖ δὲ ἐπιχαρῆ  
 τὸν φοροῦντα καὶ ἐν πᾶσι φιλητόν. ποιεῖ καὶ πρὸς  
 τοὺς πυρέσσοντας ἐὰν εἰς ἔλαιον βληθῆ καὶ συγχερί-  
 σης τοῦ ἔλαιου πρὸς δυομᾶς ἡλίου. ἔχει δὲ καὶ  
 ἄλλας ἐνεργείας πρὸς φίλτροπόσιμα, ἐὰν βραχῆ εἰς  
 οἶνον καὶ καταποθῆ. ἐὰν δὲ καὶ λίθον ἔχῃς τῆς  
 κεφαλῆς τοῦ λίθου σὺν τοῖς λεχθεταῖς, καὶ φθισι-  
 κοῦς ὠφελεῖ σφόδρα .

"Engrave in the chrysites the bird with a quoit-  
 shaped diadem and at its feet the fish, enclose a  
 rootlet of the plant and give it to wear. For it  
 works against stomach pains, inversion of the womb  
 and of the kidneys. It makes the wearer charming  
 and beloved by everyone. It is also helpful for feverish  
 persons if it is dropped in oil and you apply some  
 of the oil at sunset. Besides it has other powers as  
 a love-philter, if it is soaked in wine and drunk.  
 If you have also a stone of the head of the fish  
 along with what is said, it is most helpful for  
 consumptives."

According to Thompson's Glossary the χρυσόπτερον πτηνόν is an unknown bird (1). de Mély translates the word by 'plume d'or'; he thinks it might be the French 'loriot', i.e. the golden oriole, Oriolus galbula L. 'qui passait pour avoir de grandes propriétés médicales' (2). This identification has good chances to be the right one : the bird's colour is quite suitable to the name χρυσόπτερον and besides Aristotle's account on the oriole contains a suggestion of the phoenix myth. The philosopher says some tell the story of its birth out of a burning pyre (3). The χρυσόπτερον's figure on the amulet described in Cyranides, with a quoit-shaped diadem around its head clearly reminds of the phoenix's. Or should we rather say χρυσόπτερον simply stands for phoenix ? Indeed, certain stomach amulets studied by Bonner show a phoenix with seven rays round the head (4) which can be interpreted as a quoit-shaped diadem. And isn't the amulet of Cyranides in the first place helpful against stomach pains ?

However, the resemblance between the χρυσόπτερον πτηνόν and the quail, in size (5), may not be forgotten. The quail is a sun-emblem too (6) and by that quite comparable with the phoenix. In fact, the medical properties ascribed to the χρυσόπτερον and those ascribed to the quail are in Cyranides almost identical (7). It is therefore quite probable that a confusion has taken place between the two of them as for their medical use. So if the amulet also works on the kidneys, this is rather due to the quail's action, for it is said in Cyranides that the eating of quails cures the kidneys.

The helpfulness for feverish persons is ascribed as well to both of the birds as to the amulet. The influence of solar animals on fever and their use in fever amulets is well known (8). This amulet however is effective when dropped in oil, which afterwards is to be applied at sunset. The withdrawing of the sunfire obviously was believed to encourage the dropping of the fever, while the use of oil was supposed to increase the magical power (9).

A bird called χρυσόπτερον πτηνόν obviously can be used in love-spells since χρυσόπτερος is an epitheton of Eros (10) and of Aphrodite's children (11).

The χρυσοφῶς or dorade engraved in the amulet, is known as a sacred fish, sacred to Aphrodite (12). By that it surely makes the wearer of the amulet charming and beloved. Its power as a love-philter is complementary to that of the χρυσοπτερον πτηνόν. In the fourth book of Cyranides this power is ascribed to the bile of the fish (13). The dorade is further said to cure fever, particularly the fish's eyes and its heart (14). Stones in the head of the dorade aren't mentioned but in Cyranides. There indeed is stated that these might be helpful for consumptives if they wear them around the neck (15).

The chrysanthemum or gold-flower, is the third element of the amulet to make the wearer charming. Thus is said in Cyranides: 'It makes you beloved charming and good company to everyone' (16). But it also has medicinal qualities. Dioscorides mentions among other things the diuretic and emmenagogue virtues of its foliage (17) and Pliny speaks of the use of chrysanthemum or heliocrhysus against female and bladder diseases (18). This is the obvious reason why the amulet gives protection against inversion of the womb and works on the bladder.

Murr states that the chrysanthemum as a medicine for female diseases was sacred not only to Hera but also to Artemis (19). Moreover the name heliocrhysus suggests connections with the sun, while the name chrysanthemum and the fact that this flower makes people beloved, refer to Aphrodite.

The stone χρυσίτης, the fourth element of the amulet is poorly described: κοικίλος ὡς χρυσιζων (20). Χρυσίτης is the name of a touchstone for gold in Pollux's Onomasticon, where it is also called Lydian stone (21). A χρυσίτης λίθος is mentioned in an inscription (22). The nature of this stone is quite obscure and no link can be laid with the amulet in Cyranides. The χρυσίλιθος on the other hand shows better aptitudes to be the stone meant here. Although the name χρυσίλιθος is used in the sixth book of Cyranides, there is no fundamental objection against regarding it as a synonym for χρυσίτης, since no explicit description is given (23).

The χρυσόλιθος of ancient times seems to correspond with our topaz, while the modern chrysolite or peridot was called τόπαζος in Greek (24). The reason why I thought of identifying the amulet's χρυσίτης with a χρυσόλιθος was the item on this stone in the περὶ λίθων of Socrates and Denys. The text runs as follows :

Λίθος χρυσόλιθος ὑγρός, διαυγής, διαφανής, χρυ-  
 σίζων. Οὗτος φοροῦμενος κοσμοῦς ποιεῖ καὶ ἀγα-  
 θοὺς ταῖς γυναικί, μάλιστα δὲ ταῖς γυναιξὶ φορεῖν  
 συμφέρειν. Ἐπιχάρασσε οὖν Ἀφροδίτην καὶ τελέ-  
 ρασ ἔχε. Ποιεῖ δὲ πολλὴν χάριν (25).

The word χρυσιζων is also used in the description of the χρυσίτης in Cyranides, while the name of Aphrodite and the loveliness and charms she brings along play an essential part in the amulet described there. A confusion with the χρυσόπρασος, which has been made by Epiphanius in the fourth century A.D. but surely dates from far more earlier times, makes of the χρυσόλιθος described as χρυσιζων, also a good medicine for gastric patients and for the persons suffering in the bowels (26). Here we recall that the χρυσίτης amulet in Cyranides is a stomach amulet too. As for the inversion of the womb, Bonner already called attention to the fact that "in the minds of the common folk a remedy for colic would also help abdominal pains originating in the uterus. A connection between these disorders, however absurd from scientific point of view, seems to have been firmly established in various superstitions" (27).

This being considered, the χρυσίτης of Cyranides doesn't seem to designate a specific mineral : it can be interpreted as a synonym for χρυσόλιθος while the confusion with the χρυσόπρασος is very likely.

NOTES

- (1) d'Arcy W. THOMPSON, A Glossary of Greek Birds, p. 334.
- (2) F. de MELY, Le poisson, p. 330.
- (3) Aristotle, H.A., IX, 609b10 : τῷ χλωρίωνι , δὲ ἐνίοι μυθολογοῦσι γενέσθαι ἐκ πυρκαϊᾶς .
- (4) C. BONNER, Studies in magical amulets, pp. 60-61; fig. D 103. The other figures on this amulet however do not correspond with the description in Cyranides.
- (5) Cyran., I, 22, 4 : χρυσοπτερον πτηνόν , ὡς ὄρνυξ τὸ μέγεθος .
- (6) Cf. d'Arcy W. THOMPSON, A Glossary of Greek Birds, pp. 218-219.
- (7) About the χρυσοπτερον πτηνόν Cyran., I, 22, 19-20 ; about the quail Cyran. III, 35 .
- (8) Cf. H.J. HORN, Fieber, RLAC VII (1968), col. 880-883 on fever amulets of all kinds.
- (9) Cf. E. KUTSCH, Salbung und Rechtsakt im Alten Testament und im alten Orient, BZAW 87, Berlin 1963, p.33.
- (10) Aristophanes, Aves, 1738.
- (11) Aristaenet., Ep., II, 10, 34.
- (12) Archippus ap. Athenaeus, Deipn., VII, 328b : ἱεροὺς Ἀφροδίτης χρυσοφρυς Κυθήρας; Callim. ap. Athen., Deipn., VII, 284c : Καλλιμαχος δ' ἐν Γαλατείᾳ τὸν χρυσοφρυν' ἢ μᾶλλον ἐπ' ὄφρυσιν ἱερὸν ἰχθῶν ; Plutarch, De soll. an., 981d : Ἐρατοθένης δὲ τὸν χρυσοφρυν ἔοικεν ἢ ὀρομῆν χρυσειον ἐπ' ὄφρυσιν ἱερὸν ἰχθῶν λέγειν .
- (13) Cyran., IV, 74, 4-6 . Its bile worn in a clean vessel or anointed with unguent procures beauty and comeliness and pleasure in intercourse.
- (14) Cyran., IV, 74, 6-7; Cyran., I, 22, 19-20; Cyran., IV, 74, 2-3 .
- (15) Cyran., I, 22, 21-22 ; cf. Cyran., IV, 74, 3-4.
- (16) Cyran., I, 22, 13-14 .
- (17) Dioscor., Mat. med., IV, 57 : βοηθεῖ δὲ ἡ κόμη σὺν οἴνω ποθεῖσα δυσουραῖς καὶ ἐρπετῶν δῆγμασι καὶ ἰσχυάσι καὶ ῥήγμασι, καὶ ἔμμηνα ἄγει καὶ θρόμβους αἵματος τοὺς ἐν κόστει ἢ κοιλίᾳ τήκει σὺν <οἴνω ἢ> οἰνομέλιτι πινομένη .

- (18) Pliny, N.H., XXI, 168-169 : ciet urinas e uino pota et menses. ... sanguinem concretum uentris aut uesicae absumit cum mulso. Folia eius trita trium obolorum pondere sistunt profluvia mulierum in uino albo. "Taken in wine it is diuretic and promotes menstruation. ... With honey wine it removes congealed blood in the belly or the bladder. Three oboli by weight of its leaves, pounded and taken in white wine, check excessive menstruation"(transl. W.H.S. JONES, Loeb ed.); XXVI, 87 : chrysanthemum is good for the bladder.
- (19) J. MURR, Die Pflanzenwelt, pp. 194-195, referring to Etym. Magn., 330, 35.
- (20) Cyran., I, 22, 6.
- (21) Pollyx, Onom., 102.
- (22) IG/2, 1424a.254.
- (23) Cyran., VI, 5, 4-5 where the colour of the ἄδαμας is compared to that of the χρυσόλιθος
- (24) Cf. A. HERMANN, Chrysolith, RLAC III (1957), col. 60-61. D.E. EICHHOLZ, Pliny Natural History, vol. X (Loeb ed.), p. 267 identifies the χρυσόλιθος with a 'yellow sapphire (oriental topaz), but perhaps also yellow zircon'. See also J.M. RIDDLE, Marbode of Rennes' De lapidibus, pp. 48-49.
- (25) Socrates and Dionysius 37 (ed. HALLEUX - SCHAMP p. 171, with references to other ancient testimonia).
- (26) The Greek version of Epiphanius, De XII gemmis, ed. de MELY, Les lapidaires, p. 197, 10 reads : λίθος χρυσόλιθος. Τοῦτον τινες χρυσόφυλλον κεκλήρασι. χρυσόζων μὲν ἔστιν' ... Ἐστι δὲ καὶ χρυσόπρατος. Οὗτος στομαχικοῖς καὶ κοιλιακοῖς τριβόμενος καὶ πινόμενος ἰαματικὸς ὑπάρχει . Gesner proposed to read χρυσόπρατος for χρυσόπρατος (cf. de MELY, ibid., n. 19); this correction was right, cf. the Latin translation chrysoprasus (CSEL 35, p. 755, 12).
- (27) C. BONNER, Studies in magical amulets, p. 92.

ψύλλιος βοτάνη	flea-wort ( <i>Plantago Psyllium</i> )
ψύλλος θαλάσσιος	sea-flea ( <i>Cyclops vulgaris</i> ?)
ψάρος πτηνόν	starling ( <i>Sturnus vulgaris</i> L.)
ψωρίτης λίθος	poros / psorites

I, 23, 24-28

Εἰς δὲ τὸν ψωρίτην λίθον γλύψον ψύλλους θαλάσσιους γ' ὑπὸ κάλαμον χλωρὸν ἐστῶτας καὶ κατάκλειστον ῥίζιον τῆς βοτάνης καὶ ὀδίου φορεῖν πρὸς τὰ ἐξαλλόμενα παιδία, κατὰ τὴν νύκτα καὶ τρίζοντα τοὺς ὀδόντας. Ἐὰν δὲ ἄλοεός αὐτὸ φορῆ ἄγρυπνῶν ἐν ἡμέρᾳ ἐπὶ ποταμὸν ἢ λίμνην ἀγρευῶν, μεγάλως ἐπιτυχεῖ τῆς ἀλείας.

"Engrave in the psorites three sea-fleas under green reed and enclose a rootlet of the plant and give it to wear to the turbulent children at night and when they gnash their teeth. If a watchful fisherman wears it by day while he is fishing on the stream or at sea, he will make a nice haul."

For the meaning of the three sea-fleas on this amulet I have to refer to two rather enigmatic texts, one by Aristotle and the other by Pliny. Aristotle speaks of τοὺς καλουμένους ψύλλους, "the so-called fleas". The passage, as all the editors agree, seems corrupt. It runs as follows :

ἀλίσκονται γὰρ οἱ ἰχθύες, εἰ μὴ διὰ τοὺς φθετρὰς καὶ τοὺς καλουμένους ψύλλους, κἂν ὥστε τῇ χειρὶ λαμβάνειν ῥαδίως· νῦν δ' , ἂν χρονίζωσιν, οὗτοι τῆς νυκτὸς κατεσθίουσι προσπίπτοντες, πολλοὶ τὸ πλῆθος ὄντες. γίνονται δ' ἐν τῷ βυθῷ τῆς θαλάσσης καὶ τοσοῦτοι τὸ πλῆθος ὡστε καὶ τὸ δέλεαρ, ὃ τι ἂν ἰχθύος ᾖ, εἰάν χρονίσῃ ἐπὶ τῆς γῆς, κατεσθίουσιν· καὶ ἀνέλκουσι πολλάκις οἱ ἀλιεῖς περὶ τὸ δέλεαρ ὥσπερ σφατραν συνεχομένων ἀτῶν.

"for fish are caught, unless on account of lice and the so-called 'fleas', even so that one can take them up easily in the hand; but as it is, if they remain for some time, these attack them at night and devour them, being very numerous. They are formed in the depths of the sea, and in such large numbers that they devour even the bait, provided it consists of fish, if it remains some time on the sea-bed; and often fishermen haul up as it were a ball of them packed round the bait."(1).

Aristotle thus represents the sea-fleas as parasites attacking fish in large numbers and devouring them, principally at night when they are asleep and could easily be caught by fishermen. An exact identification of the ψύλλος θαλάσσιος is quite difficult to make. Richter thinks the φθετρὰς certainly are Steganopodes (Ruderfüsser), especially Achtheres percarum (Barschlaus) and Argulus foliaceus (Karpfenlaus); as for the ψύλλοι he suggests the Cyclops (Hüpferling), 'weniger wahrscheinlich die den Floh sehr ähnlichen, aber völlig harmlosen Springschwänze (Collembolen), die sämtlich in Süßwasser leben '(2).

Anyway, the ψύλλος θαλάσσιος is not an insect but a crustacean of a microscopic size.

Without calling them by name, Pliny supplies Aristotle's notice on the sea-fleas :

"adeoque nihil non gignitur in mari ut cauponarum etiam aestiva animalia, pernici molesta saltu aut quae capillus maxime celat, existant ibi et circumglobata escae saepe extrahantur; quae causa somnum piscium in mari noctibus infestare existimatur. quibusdam uero ipsis innascuntur."

"And to such an extent is it the case that everything grows in the sea, that even the creatures found in inns in summer-time, - those that plague us with a quick jump or those that hide chiefly in the hair, - occur there, and are often drawn out of the water clustering round bait; and their irritation is thought to disturb the sleep of fish in the sea at night. Indeed, on some kinds of fish these vermin actually breed as parasites."(3)

Obviously both attestations, Pliny's and Aristotle's, rely on a single source, i.e. a lost *περὶ ἰχθύων* (4). Although a reconstruction of the original source is impossible, we retain two elements out of these texts before we return to Cyranides :

1. ψόλλοι jump (saltu).
2. ψόλλοι disturb the sleep of fish at night.

The amulet with the three sea-fleas described in Cyranides is given to turbulent children at night. Remark that the Greek word for "turbulent" is ἐξαλλόμενα, i.e. "jumping"! So, the picture of the sea-fleas, disturbers of the sleep of fish, is supposed to calm down children whose sleep is disturbed as if they were irritated by these tiny animals and therefore gnash their teeth as big fish would do.

For the explanation of the second function of the amulet, i.e. to make fishermen successful, we turn to Cotte's commentary on Pliny's ninth book. Sea-

fleas, he says, which are crustaceans of different kinds such as Cymothoa, Cyamus, Caliga, Anceus, Argula, etc. are an excellent bait for fishing. They are used in Provence where they are called baboué (5). The sea-fleas on the amulet are thus to be interpreted as the fisherman's bait. That they are placed under green reed can also be explained in this sense. Indeed, ancient fishermen used to make angling-rods out of reed; the word κάλαμος can often be translated as "fishing-rod" (6). Reed was also used for fish-traps (7). So, the sea-fleas under the reed represent the bait attached to the fishing-rod or put in the fish-trap. By that the amulet procures the fisherman a nice haul.

The name of the herb ψύλλιον obviously is a derivation of ψύλλος. In English Plantago Psyllium is called 'flea-wort' too. Although there is a wide choice of medical properties attributed to psyllium (8), it seems to have been adopted in the amulet only for the resemblance of its name with that of the flea (9).

The stone ψωρίτης is also called πῶρος (10). Poros is a coarse-grained limestone, in antiquity extensively used as building material. Probably a more precious variety of this stone was found in Egypt. Theophrastus compares it to Parian marble (11). The use of this material for gemstones is textually attested only in Cyranides, but it bears no wonder. Indeed, the mineralogical examination of a series of gemstones of Paris collections showed out that all kinds of stones, also limestone, could be used for engraving (12). Why poros was chosen for this amulet is however not clear since no special powers seem to be ascribed to limestone.

NOTES

- (1) Arist., H.A., IV, 10 (537a); no corrections have been made in the text; the translation is by A.L. PECK (Loeb-edition).
- (2) W. RICHTER, Floh, RE Suppl. XV (1978), col. 106.
- (3) Pliny, N.H., IX, 154. Translation H. RACKHAM (Loeb-edition).
- (4) Cf. W. RICHTER, Floh, col. 106.
- (5) H.J. COTTE, Poissons et animaux aquatiques, p. 230.
- (6) E.g. Arist., P.A., IV, 12 (693a23).
- (7) Cf. N.C. APOSTOLIDES, La pêche en Grèce, Athens 1907, p. 62 who attests modern use of fish-traps in reed in the Greek lagoons.
- (8) Dioscorid., Mat. med., IV, 69. Other references in the edition of Wellmann, vol. II, p. 227.
- (9) The plant derives its name from the form and colour of its grains, cf. Isidor., Orig., XVII, 9, 54 : *psyllios dicta quod semen simile pulicis habeat : unde et eam Latini herbam pulicarem uocant.*
- (10) Cyran., I, 23, 2 ψωρίτης λίθος ὁ καὶ κῶρος λεγόμενος. Cf. Cyran., I, 23, 7.
- (11) Theophrastus, De lapidibus, I, 7 with commentary by D.E. EICHHOLZ, Theophrastus de lapidibus, pp. 92-93. See also Pliny, N.H., XXXVI, 132 with commentary by A. ROUVERET, Pline l'Ancien, Histoire Naturelle, Livre XXXVI, pp. 211-212.
- (12) A. DELATTE - Ph. DERCHAIN, Les intailles magiques, Examen d'un certain nombre d'intailles des collections de Paris par MM. Deicha, Lorenz et Viallefond, pp. 345-346 : "un certain nombre d'objets sont apparus tirés d'un matériau très vulgaire, pas toujours très dur, et qui séduisit sans doute le lapicide par sa couleur. On trouve ainsi des calcaires et des grès, qu'il serait sans doute permis de reporter exactement sur une carte géologique, si celle des pays d'origine possibles était

dressée. Dans certains cas même, il apparaît comme certain que le lapicide a pris pour support de sa gravure un simple galet ramassé sur le chemin."

ὄκιμος βοτάνη  
ὠκύπτερος πτηνόν  
ὠμίς θαλάσσια  
ὠκυτόκιος λίθος

basil (Ocimum Basilicum)  
swallow (Class. Hirundinidae)  
sprat (Maena vulgaris)  
birthstone

I, 24, 100-115

Γλύψον δὲ ἐν τῷ λίθῳ χελιδόνα καὶ παρὰ τοὺς πόδας τὸν σκορπίον ἐπὶ τῆς μαινίδος ἐστῶτα, καὶ ὑπὸ τὸν λίθον ὑποκατάκλεισον τοὺς ὀφθαλμοὺς τοῦ σκορπίου καὶ τῆς μαινίδος, καὶ σκορπιούρου ῥίζιον, καὶ κατακλείσας φόρει· ἀποστρέφει γὰρ παντοῦτον ἰοβόλον ζῦον ἐρπετόν τε καὶ τετράπουν, καὶ πάντα ἐχθροὺς καὶ ἐπιβούλους ταπεινοῖ.

Ἐὰν δὲ τις πληγῆ ὑπὸ σκορπίου καὶ τῆ σφραγίδι ταύτῃ σφραγίσῃ τὴν πληγὴν, ἀπαλλάξῃ τὸν πληγέντα τοῦ κινδύνου.

Ἐὰν δὲ ὑπὸ μαινομένου κυνὸς δηχθῆ τις καὶ γενόμενος ὑδροφόβος τὸ ποτὸν μὴ λαμβάνῃ, λαβὼν τὸν δακτύλιον τοῦτον βάλλῃ εἰς τὸ ὕδωρ καὶ οὐς πιεῖν ὁ πῖν ὠθεῖται. Ἐὰν δὲ πρὸ τοῦ μανῆσαι δώῃς προπιεῖν, οὐ μανῆσεται.

Ἐὰν δὲ τῆς μαινίδος τὴν γλῶσσαν νεαρᾶς οὔσης δώῃς τινὶ λειανθεῖσαν μεθ' ὕδατος, βαλὼν δὲ τὸν δακτύλιον κάτω δώῃς πιεῖν μαινομένῳ, ὠθεῖται· εἰ δὲ νήφοντι, μανῆσεται. τοῦτου λύσις· μαινίδα ὀπτὴν οὐς φαγεῖν· μανῆσεται ὁ ἄνθρωπος ἄγνοῶν τὰ λεχθέντα ἅπαντα, ὡς φράζει Κυρανὶς θεία βροτοῖς.

"Engrave in the stone a swallow and at its feet a scorpion staying upon the sprat, and enclose under the stone the eyes of the scorpion and of the sprat and a rootlet of the scorpion-wort, set it and wear it. For it turns away every venomous animal, reptile and quadruped, and it abases all enemies and traitors.

If one is hurt by a scorpion and you seal the wound with this seal, you'll put the injured person out of danger.

If someone is bitten by a mad dog and he cannot drink since he has become hydrophobic, take that ring, throw it in the water and give it to drink. He will drink it and get healthy. And if you give it to drink before he got mad, he will not get mad.

If you give someone the tongue of a fresh sprat smoothed with water and you throw the ring in it and then give it to drink to a maniac, he will get healthy; but if you give it to a sane person, he will get mad. The cure for this: give him a cooked sprat to eat. The man who doesn't know all what has been said, will get mad. This is what the divine Cyranis says to the mortals."

To understand the composition of this amulet we first of all have to bear in mind the ideas of ancient medicine about hydrophobia. "The antecedent cause of the disease is the bite of a mad dog or, as some say, of other animals that are subject to similar madness, such as the wolf, bear, leopard, horse and ass, or the bite of a human being who has hydrophobia", Caelius Aurelianus declares (1). Theodorus Priscianus on the other hand ascribes hydrophobia to the bite of a mad dog or to that of a snake (2). This theory proclaimed by fifth century physicians is of course much older and is to be found in Cyranides too. Indeed, the same amulet is used for curing hydrophobia caused by the bite of a mad dog, while it also drives away every venomous animal, specified as reptile - i.e. the snake mentioned by Theodorus Priscianus - and quadruped -

i.e. all the other animals that are subject to similar madness enumerated by Caelius Aurelianus. That the amulet further is prescribed for persons suffering from mania can easily be explained by the fact that hydrophobia and mania often were confounded (3).

Having defined this starting-point, let us now examine the impact of the different elements of the amulet. First, there is the swallow, χελιδών, called by the epithet ὠκύπτερος obviously for alphabetical reasons. As a remedy for bites of mad dogs Pliny advises "to drink a decoction of the dung of badger, cuckoo and swallow" (4) or "an application in vinegar of a bit of earth from the swallow's nest or of the chicks of a swallow reduced to ash" (5). According to Pliny the flesh of swallows freshly torn away is also a remedy against snake-bites (6). Although he doesn't say anything about hydrophobia being caused by snake-bites, Pliny's statement about the treatment of snake-bites and of hydrophobia by swallows corresponds very much with Priscianus' view on the causes of the disease.

Furthermore the intervention of the swallow in the Tereusmyth makes its figure on the amulet very likely to abase enemies and traitors : Philomela, who was changed in a swallow later on, revealed to her sister Procne the treacherous practices of Tereus, so that Procne could take her terrible vengeance. Plutarch tells a story about swallows denouncing a fathermurderer : "As for Bessus, the story goes that he killed his father and long went unsuspected. At last, when he had come to dine at a certain house, he prodded a swallow's nest with his spear, knocked it down, and killed the nestlings. The rest naturally asked : 'What is wrong with you, man ? What is the meaning of such a strange behaviour ? ' To this he answered : 'Why, haven't they all along accused me falsely and denounced me for killing my father?' The company was astonished at these words and reported them to the king. The truth was discovered, and Bessus suffered the penalty." (7) The two following stories told by Aelian can also be interpreted in this sense : they show swallows nesting in a general's tent not only as an evil omen, but also as denouncers or even punishers of evil actions. The text runs as follows:

"A swallow made its nest in the tent of Alexander the son of Pyrrhus and then indicated that, whatever the somewhat discreditable expedition on which he was setting out, it would be ineffectual. And (a swallow) which made its nest (in the tent) of Antiochus hinted obscurely at the future in store for him. For he went up against the Medes and never returned to Syria but threw himself over a precipice. He too therefore embarked on no prosperous affair." (8)

The swallow's figure thus fulfils the largest part of the amulet's purposes.

The stone ὠκυτόκιος obviously is a birthstone similar to the eagle-stone (9). Its magical use in childbirth however is of no importance for the amulet, although it is said in Cyranides that the swallow's feathers in combination with a rootlet of basil - i.e. ὠκιμος, the plant with the letter omega - procure an easy delivery to pregnant women (10). The feathers are even called ὠκυτόκια! The stone is by that clearly connected with the swallow, but it remains uncertain whether it is to be identified with one of the varieties of χελιδονία or swallow-stones (11).

A tradition goes that eagles took the eagle-stone to their young as a talisman against snakes (12). Probably the ὠκυτόκιος of Cyranides, compared to the eagle-stone was supposed to offer the wearer of the amulet a similar protection.

The herb ὠκιμος is not used for the amulet. Instead of its root, of which the medicinal qualities are attested anyway as we saw above, a root of the scorpion-wort is enclosed. Obviously the scorpion-wort is associated with the figure of the scorpion engraved on the amulet near the feet of the swallow. Amulets showing the figure of a scorpion are very common. They were worn as a protection against scorpions and other venomous animals, in accordance with the rule of similia similibus (13). This is also the purpose of the amulet in Cyranides.

Amulets with scorpions in combination with other animals, venomous or wild, can be found (14), but till now no swallow with a scorpion at its feet appeared as an iconographical item. The meaning of

this combination however is quite understandable: the swallow as well as the scorpion are supposed to avert venomous animals.

The root of the scorpion-wort enclosed under the stone has a similar function. Σχορπύουρον is the name of a variety of heliotropium, ἡλιοτρόπιον τὸ μέγα . Dioscorides says it is called that way because of the shape of the flower. He also notices the resemblance of its leaves with those of the basil, i.e. the ὄχιμος (15). By that the σχορπύουρον is related not only with the scorpion but also with the plant of this chapter. For Pliny the seed of the σχορπύουρον "is shaped like a scorpion's tail, which accounts for its name. An application is of great efficacy against the poison of all venomous animals and spiders, but especially against that of scorpions. Those carrying it are never stung, and if with a sprig of heliotropium a circle be drawn on the ground round a scorpion, it is said that it never moves out, and moreover, that if the plant is put on a scorpion, or if a scorpion merely be sprinkled with the wet plant, it dies at once" (16).

The use of σχορπύουρον against scorpion-bites is also attested by Dioscorides. According to him some call the plant σκορπιοκτόνον , i.e. scorpion-killer (17). An explanation for this use of the σχορπύουρον is easily found in the so-called "Signaturlehre" : it was believed that a plant with a shape resembling that of a harmful animal had a deadly power thereupon.

Along with the root of the scorpion-wort and the eyes of a scorpion, which obviously increase the power of its figure engraved on the amulet, the eyes of a sprat are to be enclosed while its figure appears under the scorpion's. The sprat is called μαινύς . It remains uncertain if the real etymology of the word is linked up with the verb μαινόμεναι (18), but for certain the author of Cyranides believed in the relationship. So he thought that a fish called by that name had an influence, in one way or another, upon μαινία : maniacs were supposed to be cured by it, while mentally healthy persons risked to get insane. The reason for adoption of this fish in the amulet thus lies only in the sound of the name (19).

NOTES

- (1) Cael. Aurel., Acut., III, 99 : antecedens autem causa passionis est canis rabidi morsus uel, ut quidam memorant ceterorum quoque animalium quae sint simili rabie obnoxia, ut luporum, ursorum, leopardorum, equorum et asinorum, (uel) hominum hydrophobarum. Translation I.E. DRABKIN, Caelius Aurelianus On Acute Diseases and on Chronic Diseases, Chicago 1950, p. 363.
- (2) Theodor. Prisc., Log., 26 : hydrophobicorum causam aliqui ex morsu canis rabiosi aliqui ex serpentium euenire asseruant.
- (3) Caelius Aurelianus, Acut., III, 107 warns for this confusion : Similes sunt hydrophobicae passioni phrenitis, mania quam nos furorem siue insaniam dixerimus. 'Mania (Latin furor or insania) and phrenitis resemble hydrophobia" (translation I.E. DRABKIN, o.c., p. 367).
- (4) Pliny, N.H., XXVIII, 156 melis et cuculi et hirundinis decoctum et potum. (translation W.H.S. JONES, Loeb edition).
- (5) Pliny, N.H., XXIX, 101 glaebola ex hirundinum nido inlita ex aceto, uel pulli hirundinis combusti. (translation W.H.S. JONES, Loeb edition). Pliny mentions several other remedies against hydrophobia in N.H. XXIX, 98-102 and XXVIII, 156.
- (6) Pliny, N.H., XXIX, 81 : auxiliatur contra serpentes ... caro recens concerpta et hirundinum.
- (7) Plutarch, De ser. num. uind., 553 e-f (Translation Ph.H. DE LACY, Loeb ed. pp. 213-215).
- (8) Aelian, N.A., X, 34 (Translation A.F. SCHOLFIELD, vol. II, p. 331). H. GOSSEN, Schwalben und Segler, RE 2. R., 3. Hb. (1921), col. 775 also underlines the fact that the actions of Pyrrhus and Antiochus were reprehensible.

- (9) Cyran., I, 24, 8-11 : ὠκυτόκιος λίθος ἔστιν ,  
 εἰκλῶς τῷ ἀετλίῳ, μικρότερος δὲ ἐκείνου, πλὴν  
 ἀπηχῶν ὡς ἐκεῖνος ἐν τῷ κινεῖσθαι παρὰ τὸ οὖς.  
 ἔστι δὲ λεῖος τῆ θέρ.
- "The stone okutokios, similar to the eagle-stone, but smaller, making noise like the first one, when shaken next to the ear. It has a smooth look." On the eagle-stone see also supra, chapter alpha and upsilon.
- (10) Cyran., I, 24, 28-29 and III, 50, 28-29.
- (11) See about those D'Arcy THOMPSON, A Glossary of Greek Birds, p. 322 with references to ancient authors. The use of swallow-stones for lunatics, epileptics and insanity is attested by Socrates and Dionysius 47 (HALLEUX - SCHAMP, p. 175) and Damigeron-Evax X (ibid. p. 246).
- (12) Cf. A.A. BARB, Birds and Medical Magic, p. 317.
- (13) Several examples in S. EITREM, Der Skorpion in Mythologie und Religionsgeschichte, SO 7 (1928), p. 70. See also supra, chapter eta.
- (14) Cf. S. EITREM, o.c., pp. 72 sqq. 'auch mit ganz verschiedenartigen Emblemen, deren einheitliche Deutung schwierig scheint'.
- (15) Dioscorides, Mat. med., IV, 190 : ἡλιοτρόπιον τὸ μέγα, ὃ ἔνιοι σκορπύρου ἀπὸ τοῦ περὶ τὸ ἄνθος σχήματος ἐκάλεσαν ... ἔχει τὰ φύλλα ὠκίμψ παραπλήσια .
- (16) Pliny, N.H., XXII, 60 : semen ei est effigie scorpionis caudae, quare nomen. uis ad omnia uenenata et phalangia sed contra scorpiones praecipue inlata. non feriuntur habentes, et si terram surculo heliotropii circumstat aliquis, negant scorpionem egredi, inposita uero herba aut uda omnino respersum protinus mori. (Transl. W.H.S. JONES, Loeb ed. p. 335). Other medical uses in Pliny, N.H., XXII, 60-61.
- (17) Dioscorides, Mat. med., IV, 190.
- (18) Other forms : μαίβνη (Anthol. Pal., IX, 412),  
 μαινομένη (Sch. Luc. Gall. 22) and  
 μαινομένιον (Alex. Trall., de febr., 7). P. CHANTRAINE, Histoire des mots, p. 658 : 'Les rapprochements avec des termes russes, lit., skr., etc. indiqués chez Frisk et Pokorny 731,

sont invraisemblables. Strömberg, Fischnamen 53 sqq., se demande si le mot ne pourrait être tiré de μαίνομαι en signifiant "le poisson fou qui s'agit de tous les côtés".

- (19) R. STROEMBERG, Griechischen Fischnamen, pp. 54-55 also stated that the symbolism of the name of the μαίνις was the main reason for its adoption in this context.

## APPENDIX : The κεστὸς ἱμάς of Aphrodite

Chapter Kappa, which in fact is completely dedicated to Aphrodite, also offers a detailed description of her κεστὸς ἱμάς . The text runs as follows:

## I, 10, 49-100

Τῆς οὖν μεγάλης θεᾶς τῆς Ἀφροδίτης ὁ πρῶτος κεστὸς ὁ δεινότατος καὶ μεταλλάσων τὰς φύσεις τῶν ἀνθρώπων καὶ πάντων ζῴων, ὁμοίως καὶ τὰς γυνάμας ἀρρενικῶν, μάλιστα δὲ ἀνθρώπων ὥστε μαλακίζεσθαι καὶ ἀπογυναικῶσθαι τὸν ἀψάμενον ἢ φορέσαντα.

Ἔτι δὲ εἰς τὸν ὄψιανδὸν λίθον γλύψον ἄνθρωπον ἀπόκοπον, ἔχοντα παρὰ τοὺς πόδας τὰ αἰδοῖα κείμενα, τὰς δὲ χεῖρας κάτω ἐσταλμένας, αὐτὸν δὲ κάτω βλέποντα τοὺς αἰδοῖοις· ὅπως δὲ πρὸς νῶτον Ἀφροδίτην, νῶτα πρὸς νῶτον ἔχουσαν, αὐτὴν δὲ ἑαυτὴν στρέφουσαν τὴν ὄψιν καὶ βλέπουσαν αὐτόν. ὑποκατάκλεισον δὲ τοῦ κιναιδοῦ ἰχθύος τὸν λίθον . εἰάν δὲ μὴ ἔχῃς ἓνα τῶν ἐν τῇ κεφαλῇ , ὑπόθεε ῥίζιον τῆς βοτάνης καὶ τοῦ ὀρνέου ἀκρόπτερον τὸ εὐώνυμον . κατάκλειε δὲ εἰς λήγειον χρυσοῦν πλατύτερον· θῆσεις δὲ αὐτὸ ἐντὸς ἱμάντος νευρίου ἀπὸ τῆς κοιλίας ἱέρακος, ἵνα ἡ τρυφερὸν, κυρράψας κατὰ τὸ μέσον τοῦ ἱμάντος, ἵνα μὴ φαίνεται . οὗτός ἐστιν ὁ περὶ τὴν κεφαλὴν τῆς Ἀφροδίτης ζωγραφούμενος ἢ πλαστούμενος ἱμάς ὡς διάδημα, ὃ καλεῖται κεστὸς . εἰάν οὖν τις ἀψηται ἄρρηγ τοῦ ἱμάντος, οὐκ ὀρθιάσει· εἰάν δὲ ἀγνώστως φορέσῃ , μαλακισθήσεται . εἰάν δὲ ἐκ τοῦ λίθου τοῦ ἰχθύος γεύσῃται, κιναιδὸς τέλειος γενήσεται, μὴ ἀποκαθιστάμενος εἰς τὸ κατὰ φύσιν . εἰάν δὲ γυνὴ φορέσῃ τὸν ἱμάντα τοῦτον, οὐδεὶς αὐτῇ συνελεύσεται ἐν συνουσίᾳ· οὐ γὰρ ὀρθιάσει ὁ ἀνήρ . ἡ δὲ

συμμετρία του ἱμάντος πλάτος μὲν δακτύλων β' μήκος δὲ παλαιστῶν ε' .

Ἔστι δ' οὖν καὶ ἕτερον σκευος, ὃ φοροῦσιν αἱ βασίλισσαι, τῆς Ἀφροδίτης καὶ ὅσα δύνανται οἱ ἄλλοι ὁμοίως. εἰς ἱμάντα ἀπὸ νεύρου συντίθενται τῷ τρόπῳ τούτῳ, ἵνα φαίνωνται οἱ λίθοι τὴν γλυφὴν ἔχοντες ὡς ὑπόκειται.

Ὁ μὲν πρῶτος ἔστω κατὰ τὸ μέσον τοῦ ἱμάντος λυχνίτης ἢ κεραυνίτης, ἔχων γλυφὴν τὸν Ἄρεα ἔνοπλον.

Ἐνθα δὲ καὶ ἔνθα συγκατερραμμένους ἀδάμαντας οὖο ἔχοντας Ἀφροδίτης ἀκάνθη ἤγουν ῥοδωνιὰν ἔκ τοῦ ποδός.

Εἶτα πάλιν ἐξ ἑκατέρου μέρους σαπφείρου λίθου ἀπλίου β', ἔχοντας Ἀφροδίτην ἀναδεδεμευομένην τὴν τρίχα καὶ ἔρωτα παρεστῶτα.

Πάλιν δὲ ἄλλους β' λίθους ἐξ ἑκατέρου μέρους ὁμοκάρδια γλυφὴν ἔχοντας ἀμφότερα ὁμοῦ Ἥλιον ἐπὶ τετραπύλου καὶ Δελήην ἐπὶ δύο ταύρων, ἕνα ἕκαστον λίθον.

Ἄλλους δὲ δύο λίθους <ἀχάτας> ἐξ ἀμφοτέρων τῶν μερῶν γλυφὴν ἔχοντας Ἑρμῆν κηρύκιον ἔχοντα ἐν τῇ δεξιᾷ ῥάβδον.

Ἄλλους δὲ δύο <νεμεσίτας> κειμένους ἐξ ἀμφοτέρων τῶν μερῶν † βράχιστα †, ἔχοντας Νέμεσιν ἐπὶ τροχοῦ τὸν κόδα ἔχουσαν καὶ ῥάβδον κατέχουσαν.

Ἄλλους δὲ δύο μαργαρίτας ἀσπίλους ἔχοντας ἕκ τῶν δύο μερῶν ἀγλύφους συγκειμένους τῷ κεστῷ, ἵνα πλήρεις γένωνται οἱ λίθοι ἰγ'.

Βληθέντες δὲ εἰς ληνεῖαν χρυσὴν ἵνα οὕτως εἰς τὸν ἱμάντα ῥαφέντες μὴ φαίνωνται ὑπὸ τοῦ ὄχλου. ἔστι δὲ ὁ ἱμᾶς οἰκλοσὸς γινόμενος. ἀκόλουθος δὲ ἔστιν ἕτερος λίθος περὶ τὸν τράχηλον φορούμενος, ὃς ἔστι σεληνίτης, ἐν ᾧ φαίνεται ἡ θεὸς ἀξουμένη, ἡ σελήνη, καὶ μειουμένη. ἔχει δὲ γλυφὴν σελήνην ὡς στήθιασαν, ὑπὸ δὲ τὸν λίθον σελίνου ἀγόνου ῥίζαν ἐν ληνεῖῳ χρυσῷ. οὗτος δὲ φορεῖται περὶ τὸν τράχηλον. τοῦτο τὸ μυστήριον φορούμενον ἔνθεον ποιεῖ τὸν φοροῦντα, καὶ ὑπὸ πάντων προσκυνεῖσθαι καὶ σέβεσθαι ἄξιον. πολλοὶ δὲ τῶν βασιλέων ἔνδοθεν αὐτὸ φοροῦσιν ἢ ἐν τὸς τοῦ διαδήματος ὡς κεστόν, ἵνα μὴ ὑπό τινος ὄραθῃ.

Τὸν δὲ σεληνίτην ἐν δακτυλίῳ φορούμενον τὰ αὐτὰ φασιν ποιεῖν.

"The first keston of the great goddess Aphrodite, very mighty and capable of changing the natures of mankind and of all animals, and likewise the inclinations of males, especially men, so that he who touches or wears it becomes weak and effeminate.

Engrave in the obsidian a castrated man with his genital parts lying at his feet, his hands pointed downwards, while he is looking downwards at his genitals; on the reverse, back to back, Aphrodite turning her face backwards and looking at him. Enclose the stone of the fish kinaidios. If you haven't got one of those in its head, put a rootlet of the plant underneath and the tip of the bird's left wing. Enclose it in a rather large golden box; you will put it in a strap made of sinew string out of the stomach of a hawk, to make it soft, and sew it in the middle of the strap so that it is invisible. This is the strap which is painted or moulded around Aphrodite's head like a diadem, which is called keston. Now, if a man touches the strap, he will have no erection; and if he wears it without knowing, he will be made effeminate. If he eats of the fish's stone, he will become a lewd fellow and he will never return to natural sexual intercourse. If a woman wears that strap, no one will have intercourse with her, because the man will have no erection. The convenient size of the strap is two fingers in breadth and five palms in length.

Now, there is also another object of Aphrodite, which queens wear and others as well as far as possible. They arrange it on a strap of sinew string in such a way that the stones apparently show the following engraving.

The first one in the middle of the strap has to be a lychnites or ceraunites showing the engraving of Ares in arms.

On both sides two adamas are sewed with a wild rose of Aphrodite, out of her foot.

Then again on both sides two stainless sapphires with Aphrodite binding up her hair and Eros standing at her side.

Again two other stones on both sides, homosardia, both together showing the engraving of Helios on his four-horse chariot and Selene on two bulls, one picture on each stone.

Two other stones on either side, agates, showing the engraving of Hermes holding a herald's wand in his right hand.

Two other Nemesis stones on both sides + ... + showing Nemesis with her foot on a wheel and holding a wand.

Two other stainless pearls without engraving are put on both sides of the keston, so that the full number of the stones is thirteen.

They are placed in a golden box not to be seen by the people when stitched on the strap. There is also the double strap.

Furthermore there is another stone worn around the neck, which is the moon stone. In this stone one sees the goddess, the moon, increasing and waning. Its engraving represents the moon as bust-shaped and then under the stone is a root of unfertile celery in a golden box. This amulet is worn around the neck. This mysterious object when worn makes the wearer inspired by the god and makes him worth to be honoured and worshipped by everybody. Many kings wear it under their clothes or within their diadem as a keston, not to be seen by anyone.

The moon stone is said to have the same effect when worn in a ring."

Aphrodite's  $\kappa\epsilon\sigma\tau\acute{o}\varsigma \ \dot{\iota}\mu\acute{\alpha}\varsigma$  was mentioned for the first time in Homer's Iliad. The love goddess gave it to Hera so that she might regain the love of Zeus. The text runs as follows :

"She spake, and loosed from her bosom the brodered zone, curiously-wrought, wherein are fashioned all manners of allurements; therein is love, therein desire, therein dalliance - beguilement that steals the wits even of the wise. This she laid in her hands, and spake, and addressed her : "Take now and lay in thy bosom this zone, curiously-wrought, wherein all things are fashioned; I tell thee thou shalt not return with that unaccomplished, whatsoever in thy heart thou desirest." (1).

Murray thus translates κερτός ἱμάς by "broidered zone". However the exact meaning of the two words is far from clear. The details of Homer's text on the subject were discussed by Bonner (2). Bonner remarked that the κερτός ἱμάς is not a girdle (ζώνη), which in Homeric times was worn just above the hips, while Aphrodite clearly wore it on her bosom. The idea put forward by some older commentators that it could have been some kind of bra is definitely rejected. Nor does Bonner believe that it could have been a patterned strap loosely carried in the fold of the garment, as several authorities supposed it was. Going further into the etymology of the word κερτός, which can be derived from κεντέω or rather from a hypothetical \* κέντω, "to prick or pierce", or perhaps from the stem κε-, "to split", Bonner finally is inclined to identify the κερτός ἱμάς with "the ornament that appears on figures of the Naked Goddess, the divinity of fecundity who was known to her widely scattered worshippers as Ishtar, Astarte, Atargatis or Aphrodite". Count du Mesnil du Buisson, who published an iconographical study on the subject called it "sautoir", which stands for the English word "saltire" (3). It consists of "two bands, each of which passes over a shoulder and under the opposite arm, crossing the other band between the breasts and on the back." (4)

But before considering the iconographical aspects of the κερτός ἱμάς, we will first consult our literary sources, especially the above quoted text of Cyranides, which is the most extensive account on the subject.

Homer's description of the κερτός ἱμάς is very vague. The epithet ποικίλος translated by Murray as "curiously-wrought" may indicate an artful decoration, but it may also have the meaning "charged with subtle art", i.e. "magical", as Bonner remarked (5). Anyway, Homer certainly attributed to it a magical power by adding the words ἔνθα τέ οἱ θελκτήρια πάντα τέτυκτο. In later literature the κερτός ἱμάς became a proverbial symbol of the female art of seduction (6). Mostly the texts simply refer to the well-known verses of the Iliad without giving more details about the

object itself. The word  $\kappa\epsilon\sigma\tau\acute{o}\varsigma$  became a substantive and  $\acute{\iota}\mu\acute{\alpha}\varsigma$ , 'strap' is often omitted. One might therefore think that what once was meant as Aphrodite's concrete ornament later on turned into an abstract idea, the word  $\kappa\epsilon\sigma\tau\acute{o}\varsigma$  meaning 'charm'. The first book of Cyranides however offers a detailed description of the composition of the strap ( $\acute{\iota}\mu\acute{\alpha}\varsigma$ ) which is also called  $\kappa\epsilon\sigma\tau\acute{o}\varsigma$ . There is even more than one.

The first is definitely not the saltire of the love-goddess. It is a kind of diadem worn by Aphrodite on paintings and statues. The strap itself is made of the sinew string out of a hawk's stomach. Doubtlessly a certain solar symbolism is meant as the hawk is a sun bird. On the other hand the hawk can be understood as a symbol for Aphrodite. Horapollon (4th c. A.D.) indeed noticed that the Egyptians represented Ares and Aphrodite by a couple of hawks (7). He explained the symbolism by the zoological particularity of the bird: no other female animal submits so willingly to the sexual desires of its partner (8). It may therefore seem quite strange that the strap on the contrary prevents every sexual intercourse, since the man who touches it will be unable to have an erection. A solution for this problem can be found in the engraved gem which is supposed to be fixed in the strap. The required invisibility of this gemstone is to increase of course the magical power. This seems to be a universal magical principle, since women in Burundi still wear a girdle with amulets inserted in such a way that they cannot be seen (9). The use of gold for the box refers to Aphrodite's epithet "the golden". The composition of the amulet resembles that of all the other amulets in the First Book of Cyranides. Its composing elements are an engraved stone and a part of the fish connected with chapter Kappa. The part of the fish may be substituted by a rootlet of the homonymous plant or a tip of the left wing of the corresponding bird. In fact this amulet is quite representative for chapter Kappa since all the elements bear the name  $\kappa\iota\nu\alpha\lambda\delta\iota\omicron\varsigma$ .

The stone  $\kappa\iota\nu\alpha\lambda\delta\iota\omicron\varsigma$  is also called  $\delta\psi\epsilon\iota\nu\delta\omicron\varsigma$ .

In Cyranides it is described as follows : 'It is sacred to Kronos. That stone is double. For there is one dark and black, while the other, though black, is radiant as a mirror. That is the one which many are searching and which they do not perceive. For it is a dragon-stone.' (10).

The stone can be identified with the modern obsidian which is described by Pliny in a similar way : 'This stone is very dark in colour and sometimes translucent, but has a cloudier appearance than glass, so that when it is used for mirrors attached to the walls it reflects shadows rather than images. Gems are frequently made of it.' (11).

According to Cyranides the obsidian is sacred to Kronos. In the lapidary of Damigeron - Evax it is said to be the stone of Dispatet, i.e. Jupiter or Pluto (12), but the dedication to Kronos is far more likely. In Cyranides Kronos indeed stands for the planet Saturnus. If we now bear in mind that in astrology the colour associated with Saturnus is black, while moreover the planet is also called Φάλων, "the shining", the black translucent obsidian is a very appropriate planet stone (13). Vettius Valens, an astrological writer of the second century A.D. - possibly contemporary with Cyranides - explained this seemingly contradictory symbolism. 'The colour of Kronos is black', he says, 'because he is the sign of time' - Kronos being identified with χρόνος according to a play upon words of orphic or stoic origin - 'for the god is slow. This is also why the Babylonians called him Φάλων, because time makes everything clear ( φανερὰ )' (14).

The name κίναιδος for the obsidian is furthermore to be explained by its connection with the planet Saturnus. I already mentioned that the word κίναιδος was frequently used in the sense of 'a lewd fellow', while κίναιδία refers to any kind of sexual perversion. Vettius Valens now tells us that one of the diseases due to the influence of the planet Saturnus precisely is κίναιδία (15). How are we to understand this association? Bouché - Leclercq tried to explain the incoherency in the character of Kronos by his assimilation with Ninib, an ancient Chaldean sun god, and with the Latin

Saturnus (16). On the one hand Kronos, considered as an old extinct sun, is personified as an old man with intellectual faculties predominating over his physical capacities. On the other hand he inherited from Saturnus the idea of generative power, materialized in sperm. So, on the risk of going a bit too far, Kronos can be seen as a dirty old man with vicious proclivities, i.e. *κιναιδέα*. This is why the obsidian, stone of Kronos, is called *κιναιδέλιος*.

For the engraving on the stone we have to go back to Greek mythology and the well-known myth of Kronos who castrated his father Ouranos (Heaven) on advice of his mother Gè (Earth). The sexual organs of Ouranos fell in the sea and generated Aphrodite. The illustration on the stone thus has a deep-rooted cosmic significance. Furthermore the position of the two figures, Kronos and Aphrodite, also seems to require an astrological interpretation. The conjunction of the planet Kronos/Saturnus and Aphrodite/Venus is said to be most unfavourable for a harmonious sex life. According to Vettius Valens it makes men secluded from women or badly treated by them, while some are very unstable in their married life and in sexual intercourse (17). Liber Hermetis Trismegisti goes in the same sense: "Saturnus in conjunction with Venus: frigid in veneral acts and unstable in life. This conjunction also makes unfertile" (18). The first *κεκτόν* *ἰμύς* described in Cyranides clearly has the same astrological background, for it prevents men from having an erection and in the worst case, if it is worn by a man, it makes him effeminate.

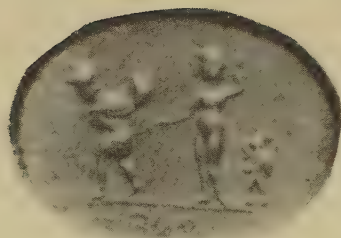
The stone of the fish *κιναιδέλιος* enclosed under the gemstone clearly has in view to make men effeminate and to turn them towards homosexuality. As said above the name *κιναιδέλιος* clearly refers to this purpose. The fish has not yet been identified satisfactorily. It is not inserted in Thompson's Glossary of Greek Fishes, unless it is the same fish as the *κινανουίδες* mentioned by Hesychius (19). The passage of Cyranides describing the *κιναιδέλιος* apparently eluded the observation of former scholars. Their only reference is Pliny's concise note on the subject: "cinaedi, soli piscium lutei", where the interpretation of "lutei" is

unclear : it can be derived from lūteus, yellow or from lūteus, slimy (20). Yet Cyranides offers more information about the fish: "The κίναβδιος is a sea-fish. It has a length of six fingers, its head is broad like that of the blenny. It is a small rounded fish and its body is translucent so that its spine can be seen through the body like through mica. It is wide-spread on the seabord of Syria, Palestine and Libya. That fish now has two stones, which have the same working, as will also be told afterwards; they are in the head. It has also another stone in the third vertebra of the spine counting from the tail. It is very powerful and it can be found in the girdle of Aphrodite" (21).

This text offers a definite answer to the problem of Pliny's "luteus". The translucency of the fish's body gives it a slimy aspect. "Luteus" therefore is to be interpreted as "slimy". The slimy appearance of the fish probably evoked the comparison with the blenny as well. According to Thompson these little sea-fishes "common in the rock-pools, often are called Butterfishes from the slime or mucus which they exude. Hence their name from βλέννος = μύξα ." (22). The description of the κίναβδιος in Cyranides indeed fits to a fish belonging to the family of the Blennioidea.

The stone of the fish can be replaced by two other elements which surely were presumed to have the same effect, in view of the homonymity of their names. The bird κίναβδιος, whose left wing tip can be used, has already been discussed above in chapter Kappa. Why it has to be the left wing tip is unclear. Probably the left one was to be preferred because of the association of the left side with femininity, since the man who touched the κεκτόν ἱμάς was supposed to feminize.

The plant κίναβδιος is said to be the holy vervain, sacred to Aphrodite (23). It is also called περικτερέων, possibly because the doves (περικτεράς) adore its seeds (24). The association with doves of course made the plant sacred to Aphrodite. The name κίναβδιος, likewise referring to the love goddess, only appears in Cyranides.



Aphrodite with Ares in arms and Eros.  
Coll. Blanchet (=Delatte - Derchain nr.334).  
Lapis lazuli, 16 x 22mm.

The second κεστός ἱμάς is made of thirteen engraved gemstones arranged on a strap of sinew string. As in the first one the stones are put in a golden box so that they are invisible, obviously for the same reasons. The cosmic symbolism that was present in the first one, here appears far more clearly (25).

The stones are fixed in pairs symmetrically flanking the unique central stone which is a lychnite or ceraunite showing the figure of Ares in arms.

Bonner remarked that the connection of Ares with Aphrodite is due largely to the memory of Odyssee VIII. Therefore the two deities are depicted together on many gems (26). Some of them indeed show Ares fully armed. On this amulet of Cyranides however the god appears alone as often occurs on gemstones. This picture certainly is a symbol of power (27) and thus well chosen as the central part of the κεστός ἱμάς. A gemstone representing the figure of Ares in arms is also described in the lapidary of Damigeron - Evax (28). This stone is not a lychnite, but a chalcedonium lapis, which is sanctified and attached around the body. Among other properties it makes the wearer beautiful, trustworthy, powerful and capable of accomplishing everything. This is exactly what kings and queens need in order to be honoured and worshipped by everyone. This is also the reason why they wear the κεστός ἱμάς.

The chalcedonium and the lychnites are not identic, but they resemble each other, so that both can be used for the same purpose. Pliny calling them lychnis and charcedonia, names them one after another (29). They both are fiery red stones. Of the lychnis different varieties are known to him. The Carian lychnis possibly is red garnet, while 'the finest kind' from India may have included rubies. The other varieties mentioned may be identified with tourmaline of different colours (30). According to Pliny the carchedonia has the same pyroelectric power, although it is far less valuable. Halleux and Schamp think of a cornelian or a garnet (31).

Strangely enough Pliny asserts that the carchedonia as well as the lychnis 'obstinately resist engraving' (32), while Damigeron - Evax, as said

above, prescribed the chalcedonius lapis, for the engraving which figures on the lychnites in Cyranides. Moreover an engraved lychnites showing another figure, but having a similar function, is described in the lapidary of Socrates and Dionyus (33). Although an exact identification of this blood-red stone cannot be given, the colour of the lychnites makes its dedication to Ares obvious. Indeed, red is the colour of the planet Mars, i.e. Ares (34).

The lychnites may be replaced by a ceraunites. The name κεραυνίτης is not attested elsewhere. Probably the stone is to be identified with one of the varieties of the ceraunia summed up by Pliny (35). In the lapidary of Damigeron - Evax there is but one ceraunius mentioned, but the different properties ascribed to it correspond with different varieties in Pliny's Natural History (36). The identification of the diverse varieties is problematic (37). We may suppose that a red coloured stone was most appropriate for the use in Cyranides.

Next to the Ares stone, we find two stones named ἀδάμας. As no description of the stone is given, an exact identification is not possible. Adamas indeed is a more generic term designating different kinds of stones besides our diamond. An extensive account on six kinds of adamas is to be found in Pliny's Natural History (38). The notes on the adamas in other lapidaries are more concise and do not serve our purpose.

The principal reason why this stone was adopted in the κεκτιδς λιμάς is connected with the popular etymology of its name. Ἀδάμας indeed can be interpreted as "invanquished, indomitable", if one derives it from δάμνημι "to force, to conquer" (39). This etymology was already suggested by Pliny who refers to the Greek word ἀδάμας which he translates in Latin by "indomita uis" (40). The stone is said to be indescribably hard and even unaffected by fire (41). Its indomitable nature due to this hardness was believed to be transferable to human beings as well so that the wearer of an adamas

was said to be indomitable (42). Therefore Pliny considers the stone as "the most highly valued of human possessions, let alone gemstones" and he asserts that "for long it was known only to kings and to very few of them" (43). The *κεκτόε ἱμάε* indeed is worn but by kings and queens to make them powerful.

The *adamas* in *Cyranides* is sacred to Aphrodite.

This association does not appear in any other lapidary. I wonder if the dedication of the *adamas* to Aphrodite is not related with the castration of Ouranos (Heaven) which also plays an important part in the first *κεκτόε ἱμάε*. Indeed, the word was used in Greek for the first time in that context by Hesiodus (44). Furthermore, if we accept Barb's identification of the *adamas* with the haematites, the account on the origin of the stone in the Orphic lapidary points in the same direction. According to this esoteric source the haematites is the blood of Ouranos fallen on earth and dried by the fiery horses of Helios (Sun) (45). We remember that on the same occasion Aphrodite was born out of the sperm of Ouranos fallen in the sea.

The identification of the *adamas* with the haematites has another advantage. It opens the possibility of engraving, which would have been problematic with the very hard stones described by Pliny. In my view the haematites kept through its name *adamas*, interpreted by popular Greek etymology, the reputation of power and indomitability, which the other stones called *adamas*, owed to their mineralogical hardness.

The text of *Cyranides* describing the engraving on the stone, is quite unclear. Ἀδάμαντας δύο ἔχοντας Ἀφροδίτης ἀκάνθην ἤγουν ῥοδωνιάν ἐκ τοῦ ποδός (46) is translated by de Mély as follows: "deux *adamas* ayant la gravure d'Aphrodite avec des épines ou des roses sous les pieds", i.e. "two *adamas* stones showing the engraving of Aphrodite with thorns or roses under her feet". Grammatically this translation is incorrect. Ἀφροδίτης being a genitive cannot be the object of ἔχοντας (47). The Latin translation of the twelfth century, probably relying on a Greek manuscript showing the reading Ἀφροδίτην and omitting ἤγουν ῥοδωνιάν, has

"adamantes lapides sunt insuti, habentes Venerem cum spina circa pedes" (48). According to the reading adopted in Kaimakis' edition however the engraving shows the plant ἀνάθη or ῥόδωνιά, sacred to Aphrodite. Its identification is uncertain. Possibly the ῥοδάκανθα is meant, which is the wild rose (49). The connection of the rose with Aphrodite is well-known (50). In Geoponica the myth is told that the white rose turned red by the blood of Aphrodite, when she stepped with her foot on its thorns hurrying to her dead lover Adonis (51). Could it be that the enigmatical ἐκ τοῦ ποδός in Cyranides alludes on this myth? The identification of the adamas with the blood-red haematites certainly tells for its engraving representing a white rose grown red by the blood out of the foot of Aphrodite.

The gems next to the adamas stones are two stainless sapphires representing Aphrodite binding up her hair and Eros standing at her side.

Above in chapter Kappa it already appeared that the sapphire, which is to be identified with our lapis lazuli, was sacred to Aphrodite. I also dealt with the iconographic type of Aphrodite binding up her hair in chapter Epsilon, where this figure of the goddess occurs on an euanthes stone. As I already said this gesture is to be interpreted as a symbol of the strongest magical power existing: it binds the love of the entire cosmos to the person in possession of this figure. An Aphrodite figure of this kind, with a little winged Eros flying at her side occurs on a haematite described by Delatte and Derchain (52). The picture of Aphrodite with Eros standing beside her often appears on gems of the type "Ares and Aphrodite" (53). Delatte and Derchain stated that the function of these amulets may vary: some are love charms and others are supposed to be instruments of vengeance. A remarkable intaglio of the Collection Blanchet answers very well to the text of Cyranides (54). The stone is lapis lazuli as required in the text. The picture represents a nude Aphrodite with one hand touching her hair and with the other holding the chain that bonds Ares in arms; next to her stands a little Eros. A similar picture has been engraved in a haematite: here Ares is

nude, but he wears a helmet (55). In fact the picture on these gemstones is a combination of that on the central Ares stone in the  $\kappa\epsilon\tau\omicron\varsigma \lambda\mu\acute{\alpha}\varsigma$  and the one on the two Aphrodite stones. The two gemstones of the Collection Blanchet possibly were meant only as simple love amulets. In the stones of the  $\kappa\epsilon\tau\omicron\varsigma \lambda\mu\acute{\alpha}\varsigma$  however love gets a cosmic dimension and the cosmic power of Aphrodite was believed to benefit the wearer.

The following gemstones were evidently influenced by the solar religion, which in fact is present on all the amulets in the First Book of Cyranides. The first shows the picture of Helios on his four-horse chariot, its pendant represents Selene on two bulls.

Gems showing the picture of Helios driving his four-horse chariot are wide-spread. As Bonner says, "the ever-renewed brilliance of the sun seems to have caused representations of its god to be taken as propitious emblems in various ways" (56). Several gemstones of this kind were described and photographed in the studies of Bonner and Delatte and Derchain (57). It is remarkable that for most of them green jasper was used. In the text of Cyranides the stone needed for the engraving is called  $\delta\upsilon\omicron\kappa\alpha\rho\delta\iota\omicron\nu$ . The word does not occur elsewhere, but its significance clearly is "like a sard". Pliny mentions a variety of the iaspis which he defines with the words 'similis est et sardae'. (58). Possibly this is the stone meant in Cyranides. Since no other description of the stone is given, an exact mineralogical identification is not possible (59). It also remains in darkness why this particular stone was adopted for the Helios gem as well as for the Selene gem.

It bears no wonder that Selene's figure forms a pendant with that of Helios. I already mentioned that the sun and the moon were considered as the eyes of the sky. In mythology Selene is the daughter or the sister of Helios. Furthermore in astrology the sun is a male planet, while the moon is female (60).

A passage of Plutarch's Dialogue on Love is quite enlightening for understanding the function of Helios and Selene in the  $\kappa\epsilon\tau\omicron\varsigma \lambda\mu\acute{\alpha}\varsigma$  of



Helios on his four-horse chariot.  
Staatliche Kunstsammlungen Kassel 157.  
Green-red jasper.

Aphrodite. In fact, it explains the cosmic value of the whole  $\kappa\epsilon\sigma\tau\omicron\varsigma \lambda\upsilon\acute{\alpha}\varsigma$ . The text runs as follows:

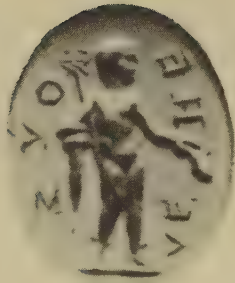
"The Egyptians recognize two Loves, just as the Greeks do. Uranios and Pandemos, but they believe that the sun is a third Love, and they reverence greatly the moon and the earth calling them both Aphrodite.

We also observe that there is considerable similarity between Eros and the sun. Neither of them is really fire, as some think, but a radiance of sweet and fertile warmth. The radiance that proceeds from the sun gives nourishment, light and the power of growth to the body, while the gleaming ray from Love does the same for the souls.

Now if they call Aphrodite earth, in no respect do they attain any verisimilitude ... The moon, in fact, is both earthly and heavenly, a place where the immortal is blended with the mortal, ineffective by herself and without illumination when the sun is not shining on her, just as Aphrodite is nothing without the presence of Eros. It is, then, likely that the resemblance of the moon to Aphrodite and of the sun to Eros are much stronger than those which these stars have to the other gods." (61).

Although the context is rather obscure, the text clearly shows that there existed a syncretic graeco-egyptian religion which assimilated the sun with Eros and the moon with Aphrodite, while Aphrodite is said to be nothing without Eros as the moon is nothing without the sun. The figure of Eros next to Aphrodite on one of the gemstones of the  $\kappa\epsilon\sigma\tau\omicron\varsigma \lambda\upsilon\acute{\alpha}\varsigma$  possibly is to be explained in this way. On the other hand the couple of gemstones showing Helios and Selene on their chariots can also be interpreted as a symbol for the power of love, apart from its cosmic significance (62).

The iconographical analogy of the moon's chariot with that of the sun is well-known from literature and from plastic art. The wheel-shaped disk of the full moon, just like the solar disk, caused the representation of Helios and Selene on a chariot.



Hermes with caduceus.  
Paris, Bibl. Nat. Cab. des Médailles M8416  
(=Delatte - Derchain nr.229).  
Carnelian, 20 x 16mm.

While the Sun's chariot is drawn by horses, that of the Moon is drawn by bulls. Mostly Selene rides on a two-bull chariot, but there are also figures of her riding on a bull's back (63). Probably the amulet description of Cyranides refers to the chariot. Anyway the choice of bulls for the moon can be explained by the resemblance of the crescent with a bull's or cow's horn (64).

Amulets showing the figure of Hermes with his typical attribute, the caduceus or herald's wand in his right hand are iconographically attested but their function is thusfar unexplained (65). Bonner remarked that Hermes is sometimes assimilated in graeco-egyptian syncretism with Thot and likewise with Anubis, but he does not go further into this matter (66).

A parallel for this amulet in the  $\kappa\epsilon\sigma\tau\omicron\varsigma \iota\mu\acute{\alpha}\varsigma$  of Aphrodite can be found in the lapidary of Socrates and Dionysius. There it is said that the agate, the stone used in Cyranides for the engraving of Hermes, is sacred to Hermes and that it has a very great power (67). It is evident that Hermes refers to the planet Mercurius whose influence appears in the various properties of the agate described in this lapidary. On the other hand the figure of Hermes in the  $\kappa\epsilon\sigma\tau\omicron\varsigma \iota\mu\acute{\alpha}\varsigma$  of Aphrodite may be related to the syncretic Graeco-egyptian mythology that seems to haunt the entire strap. Indeed, according to a certain tradition of graeco-egyptian origin Aphrodite, assimilated with Isis, is the daughter of Hermes, the equivalent of Thot. This filiation which is a topic in Hellenistic religion, appears in several magical papyri (68).

For a commentary on the two Nemesis stones I refer to chapter Nu, where the amulet description showed a Nemesis figure with her foot on a wheel, holding a cubit-rule in the left hand and a wand in the right hand. The appearance of Nemesis in the  $\kappa\epsilon\sigma\tau\omicron\varsigma \iota\mu\acute{\alpha}\varsigma$  of Aphrodite emphasizes the relationship between the goddess of vengeance and Aphrodite. Since the Hellenistic period Nemesis indeed plays an important role in eroticism and magic (69). In literature she often stands beside Aphrodite and Eros, without being completely identified with them (70).

Finally two stainless pearls make part of the  $\kappa\epsilon\sigma\tau\omicron\varsigma \lambda\mu\acute{\alpha}\varsigma$ . According to Usener the pearl was a symbol of the sea-goddess Aphrodite, as she was born out of a mussel, though Keller doesn't believe a word of it (71). Keller claims that pearls are worn by several gods and goddesses without having a religious meaning. In my view however the occurrence of pearls in the  $\kappa\epsilon\sigma\tau\omicron\varsigma \lambda\mu\acute{\alpha}\varsigma$  of Aphrodite, with its highly symbolical and cosmological value, tells for their special significance. Furthermore the pearl appears as a planet stone of Venus in the astrological lapidary of Theophilus of Edessa (72).

We now have examined the individual stones composing the  $\kappa\epsilon\sigma\tau\omicron\varsigma \lambda\mu\acute{\alpha}\varsigma$  of Aphrodite and we noticed that several beautiful gems are preserved showing a figure which resembles the description in Cyranides. These amulets obviously exist and accordingly were worn for the purposes mentioned above. The initial question "what is the  $\kappa\epsilon\sigma\tau\omicron\varsigma \lambda\mu\acute{\alpha}\varsigma$  and how was it worn?" thus deserves an answer.

The first  $\kappa\epsilon\sigma\tau\omicron\varsigma \lambda\mu\acute{\alpha}\varsigma$ , the one with the unique obsidian enclosed, clearly is described as a diadem. As for the second one, namely the valuable cosmic jewel with the thirteen stones, no specific way of wearing it is prescribed. The only important thing is for the stones to be invisible. The remark however that the  $\lambda\mu\acute{\alpha}\varsigma$  also may be double (73), made me think that this double  $\lambda\mu\acute{\alpha}\varsigma$  indeed is the cross-your-hart saltire put forward by du Mesnil du Buisson. Returning to the archaeological evidence brought to light by this scholar and comparing it with the literary evidence of the descriptions offered in Cyranides I should like to conclude as follows.

The  $\kappa\epsilon\sigma\tau\omicron\varsigma \lambda\mu\acute{\alpha}\varsigma$  initially was a cosmic ornament worn by "the goddess". In Cyranides she is called Aphrodite but she is assimilated with all the other oriental goddesses showing a comparable character: the Assyro-babylonian Ishtar, the Syrian Atargatis, the Egyptian Isis. It is the all embracing love and fertility goddess, it is the celestial  $\text{Ἀφροδίτη}$   $\text{Ὀὐρανία}$ , it is also the planet Venus. One of the typical ornaments of the goddess is a crown,

tiara or turban which in the Hellenistic and Roman period often became a diadem. du Mesnil du Buisson remarked that this diadem may be ornated with gemstones, like the phosphorescent stone of Atargatis in Hierapolis (74). The first  $\kappa\epsilon\sigma\tau\omicron\varsigma$   $\iota\mu\acute{\alpha}\varsigma$  of Cyranides seems to be quite comparable.

The second  $\kappa\epsilon\sigma\tau\omicron\varsigma$   $\iota\mu\acute{\alpha}\varsigma$  of Cyranides can be the saltire, other typical ornament of the goddess. The representations studied by du Mesnil du Buisson, show that the saltire may have various aspects : it can be a simple strap, or a chain of pearls, or then again a chain with all kinds of terracotta amulets in the shape of animals, bells etc. The  $\iota\mu\acute{\alpha}\varsigma$  described in Cyranides is a very sophisticated one, symbolizing in its different components the cosmic power of Aphrodite, which was supposed to be transferable to the wearer.

In Cyranides it is also said that many kings likewise wear a selenites, moon stone around the neck or as a ringstone for the same purposes as they wear the  $\kappa\epsilon\sigma\tau\omicron\varsigma$   $\iota\mu\acute{\alpha}\varsigma$ .

The selenites of the ancients is described as a bright transparent stone, which can be identified with transparent crystal or gypsum (75). The fact that the ancients thought they could see the increasing and the waning of the moon in it, made the stone very valuable for them (76) as the moon was believed to be the generating principle of everything that grows. Obviously the engraving in the moon stone represents the moon. Less clear is the significance of  $\acute{\omega}\varsigma$   $\sigma\tau\eta\theta\iota\alpha\iota\acute{\alpha}\nu$ , omitted by several manuscripts. The adjective  $\sigma\tau\eta\theta\iota\alpha\iota\omicron\varsigma$  simply means "of the breast". Possibly it refers to representations of the moon as the bust of the goddess Selene on astrological talismans (77).

I don't understand however why the root of unfertile celery (  $\sigma\epsilon\lambda\acute{\iota}\nu\omicron\upsilon$   $\acute{\alpha}\gamma\omicron\delta\omicron\nu\omicron$   $\rho\acute{\iota}\zeta\alpha\nu$  ) should be enclosed under the moonstone. The reading  $\sigma\epsilon\lambda\eta\nu\delta\omicron\gamma\omicron\nu\omicron$  rejected by Kaimakis as a *lectio facilior* indeed is easier to explain in this context. This name for peony referring to the moon also explains why Theophrast gave the advice to gather its roots only at night (78).

As gold is an attribute of Selene, the amulet is to be worn in a box of gold (79).

## NOTES

- (1) Homer, Iliad XIV, 214-221. Translation A.T. MURRAY, Homer, The Iliad, II, London - Cambridge Mass. 1963 (Loeb ed.), p. 83.
- (2) C. BONNER, ΚΕΣΤΟΣ ΙΜΑΣ, pp. 1-6.
- (3) R. du MESNIL du BUISSON, Le sautoir d'Atargatis et la chaîne d'amulettes, Documenta et Monumenta Orientis Antiqui I, Etudes d'iconographie orientale I, Leyde 1947.
- (4) C. BONNER, ΚΕΣΤΟΣ ΙΜΑΣ, p. 1.
- (5) C. BONNER, ΚΕΣΤΟΣ ΙΜΑΣ, p. 4.
- (6) Cf. W. SPEYER, Gürtel, RLAC XII (1983), col. 1241-1242 with many references to ancient authors.
- (7) Horapollon I, 8 (ed. SBORDONE, pp. 16-17).
- (8) F. SBORDONE, Hori Apollonis Hieroglyphica, p. 17 refers to Aelian, N.A., II., 43 for a former step in the tradition: "Both species (of the hawk) are remarkably addicted to the female bird and pursue it after the manner of lovesick men and never cease from the pursuit. But should the female chance to disappear without the male noticing it, he is overcome with grief and cries aloud and is like one in the depths of woe from love." According to Sbordone, Ares stands for the Egyptian Horus, Aphrodite could be Hathor or Hort.
- (9) Cf. the paper presented by F. RODEGEM, Amulettes, charmes et talismans africains at the Colloque international Sorcellerie, magie, croyances populaires en Wallonie et dans les régions avoisinantes. Discours et pratiques, Liège 8, 9, 10, 11 may 1985, the publication of which is announced.
- (10) Cyran., I, 10, 19-22.
- (11) Pliny, N.H., XXXVI, 196. Other uses and finding places XXXVI, 197-198; XXXVII, 177. For further references and bibliography on the subject see the notes of A. ROUVERET, Pline l'Ancien Histoire Naturelle, XXXVI, Paris 1981 (Budé), p. 246; E. de SAINT-DENIS, Pline l'Ancien Histoire Naturelle, XXXVII, Paris 1972 (Budé), pp. 180-181.

- 12) Damigeron - Evax 25 (ed. HALLEUX - SCHAMP, p. 264). The editors adopted the reading "Dispatris" offered by two manuscripts. We may wonder whether the meaning of this uncertain word is not related with the word  $\delta\epsilon\kappa\kappa\omicron\varsigma$  proposed in Cyranides' description of the stone.
- 13) Cf. A. BOUCHE-LECLERCQ, L'astrologie grecque, pp. 313-314. As far as I know the obsidian appears as a planet stone dedicated to Saturnus only in Arabian and Indian planet lists of more recent date, cf. K.-W. WIRBELAUER, Antike Lapidarien, p. 25.
- 14) Vettius Valens, Anthol., VI, 3, 4-5 (ed. D. PINGREE, Vettii Valentis Antiocheni Anthologiarum libri novem, Leipzig Teubner 1986, p. 238).
- 15) Vettius Valens, Antholog., I, 1, 14 (ed. D. PINGREE, p. 2). A. BOUCHE - LECLERCQ, L'astrologie grecque, p. 436 stated that the astrological tradition almost always ascribes perverted love to Saturnus.
- 16) A. BOUCHE-LECLERCQ, L'astrologie grecque, pp. 93-97.
- 17) Vettius Valens, Antholog., IV, 20, 10 (ed. D. PINGREE, p. 184).
- 18) Liber Herm. Trism., XXXI (ed. W. GUNDEL, Neue astrologische Texte des Hermes Trismegistos. Funde und Forschungen auf dem Gebiet der antiken Astronomie und Astrologie, München 1936 (repr. Hildesheim 1978), p. 87, 1-2).
- 19) D'Arcy W. THOMPSON, A Glossary of Greek Fishes, p. 115. The reading is uncertain and the fish is unknown.
- 20) Pliny, N.H., XXXII, 146. E de SAINT-DENIS, Le vocabulaire des animaux marins, p. 23 chose for "yellow"; cf. also E. de SAINT-DENIS, Pline l'Ancien Histoire Naturelle, XXXII, p. 72 and 131; H.-J. COTTE, Poissons, p. 60; F.A. WOOD, Greek fish names, American Journal of Philology 3 (1928), p. 169 preferred "muddy": "a sea-fish, named in reference to its slimy or filthy appearance."
- 21) Cyran., I, 10, 10-17.
- 22) D'Arcy W. THOMPSON, A Glossary of Greek Fishes, p. 32.

- (23) Cyran., I, 10, 3 : περιττερεῶν ὕπτιος Ἀφροδίτης .
- (24) Cf. R. STROEMBERG, Griechische Pflanzennamen, p. 118; A. CARNOY, Dictionnaire étymologique, p. 209.
- (25) The influence of the κερτός ἱμάς on the cosmos also appears in Valerius Flaccus VI, 465 sq., Nonnus, Dionys., XXXII, 5-8; Claudianus, Carm., X, 124-126.
- (26) C. BONNER, Studies in Magical Amulets, p. 42. Six gems of this type were studied by A. DELATTE - Ph. DERCHAIN, Les intailles magiques, pp. 239-244.
- (27) C. BONNER, Studies in Magical Amulets, p. 24 asserted that in some designs Ares is present merely as a symbol and vehicle of power. He refers to B.M. 56112, stone of the British Museum which has on the obverse Ares, on the reverse Ἄρης ἔτεμεν τοῦ ἥπατος τὸν κόλον[ν] , "Ares has cut the liver pain".
- (28) Damigeron - Evax XXVII (ed. HALLEUX - SCHAMP, p. 266).
- (29) Pliny, N.H., XXXVII, 103-104.
- (30) Cf. D.E. EICHHOLZ, Pliny Natural History, X (Loeb ed.), p. 247, n. e-g.
- (31) R. HALLEUX - J. SCHAMP, Les lapidaires grecs, p. 167, n.3.
- (32) Pliny, N.H., XXXVII, 104.
- (33) Socrates and Dionysius XXIX (ed. HALLEUX - SCHAMP, p. 167). On this rather obscure text see K.W. WIRBELAUER, Antike Lapidarien, pp. 35-36. The λίθος κἀντιος in XXVIII possibly may be assimilated with the λυχνίτης .
- (34) Cf. A. BOUCHE - LECLERCQ, L'astrologie grecque, p. 314.
- (35) Pliny, N.H., XXXVII, 134-135.
- (36) Damigeron - Evax XII (ed. HALLEUX - SCHAMP, p. 249).
- (37) Attempts of identification by D.E. EICHHOLZ, Pliny Natural History, X (Loeb ed.), pp. 273-274; E. de SAINT-DENIS, Pline l'Ancien Histoire naturelle, XXXVII, Paris 1972, pp. 166-167; R. HALLEUX - J. SCHAMP, Les lapidaires grecs, p. 249 and 338; J.M. RIDDLE, Marbode of Rennes' de lapidibus, p. 66.

- (38) Pliny, N.H., XXXVII, 55-61. Attempts of identification in D.E. EICHHOLZ, Pliny Natural History, X, pp. 206-209; R. HALLEUX - J. SCHAMP, Les lapidaires grecs, p. 334; J.M. RIDDLE, Marbode of Rennes' de lapidibus, p. 35. A.A. BARB, Lapis adamas - Der Blutstein, Hommages à Marcel Renard I, coll. Latomus 101, Brussels 1969, pp. 66-82 sees in the word adamas a semitic equivalent for the Greek haematites.
- (39) P. CHANTRAINE, Histoire des mots, p. 18 takes this for granted. H. FRISK, Griechisches etymologisches Wörterbuch, I, Heidelberg 1960, p. 19 was the first to doubt the Greek etymology. A.A. BARB, Lapis adamas, pp. 66-82 definitely rejected it, deriving the word from the semitic adamu/'adom, meaning red.
- (40) Pliny, N.H., XXXVII, 57.
- (41) Pliny, N.H., XXXVII, 57.
- (42) See also J.M. RIDDLE, Marbode of Rennes' de lapidibus, pp. 35-36 : for all his descriptions of the adamas Marbode relied on Isidore who, in turn, was based on Pliny.
- (43) Pliny, N.H., XXXVII, 55.
- (44) Hesiod., Theog., 161.
- (45) Orph. Lith., 642-663 (ed. HALLEUX - SCHAMP, pp. 117-118). Cf. A.A. BARB, Lapis adamas, p. 81.
- (46) Cyran., I, 10, 76-77.
- (47) Many manuscripts show the reading 'Αφροδίτην , making the same mistake as de Mély, Les lapidaires, III, p. 51.
- (48) Ed. L. DELATTE, Textes latins, p. 60, 7-8. The corresponding Greek text is to be found in the mss. ICOBP (ed. KAIMAKIS).
- (49) Cf. LSJ s.v. ῥοδωνίδ .
- (50) Cf. J. MURR, Die Pflanzenwelt, pp. 78-83.
- (51) Geoponica XI, 17.
- (52) A. DELATTE - Ph. DERCHAIN, Les intailles magiques, p. 188.
- (53) A. DELATTE - Ph. DERCHAIN, Les intailles magiques, pp. 239-244.
- (54) A. DELATTE - Ph. DERCHAIN, Les intailles magiques, p. 243, nr. 334.
- (55) A. DELATTE - Ph. DERCHAIN, Les intailles magiques, p. 243, nr. 335.
- (56) C. BONNER, Studies in Magical Amulets, p. 148.

- (57) C. BONNER, Studies in Magical Amulets, pp. 148-149; p. 291, D227, 228, pl.XI; A. DELATTE - Ph. DERCHAIN, Les intailles magiques, pp. 217-219.
- (58) Pliny, N.H., XXXVII, 116.
- (59) E. de SAINT-DENIS, Pline l'Ancien Histoire naturelle, XXXVII, p. 84 maintained the text as offered by the manuscript tradition. For him the iaspis which resembles the sard is an apart variety. On the other hand D.E. EICHHOLZ, Pliny Natural History, X, p. 258 changed the order of the text. He interpreted "similis est et sardae" as a supplementary description of the so-called "turpentine iaspis".
- (60) Cf. A. BOUCHE-LECLERCQ, L'astrologie grecque, pp. 89-92.
- (61) Plutarch, Amatorius, 19, 764 b-d. Translation E.L. MINAR, F.M. SANDBACH, W.C. HELMBOLD, Plutarch's Moralia, IX London, Cambridge Mass. (Loeb ed.) 1961, pp. 396-398, save for the first sentence where I adopted the reading proposed by R. FLACELIERE, Plutarque Oeuvres morales X Dialogue sur l'amour, (Budé ed.), Paris 1980, pp. 88-89.
- (62) On the assimilation Helios-Eros-Osiris and Selene-Aphrodite-Hathor-Isis see J. HANI, La religion égyptienne dans la pensée de Plutarque, Paris 1976, pp. 217-224.
- (63) Cf. W.H. ROSCHER, Lexicon, s.v. Mondgöttin, col. 3135-3137.
- (64) Lactantius 1, 21. J. HANI, La religion égyptienne, p. 219, remarks that the cow horns of Isis never have been a symbol for the moon crescent. According to him this interpretation which can be found in several Greek and Latin texts, is a interpretatio graeca of Egyptian mythology.
- (65) Cf. A. DELATTE - Ph. DERCHAIN, Les intailles magiques, pp. 175-177.
- (66) C. BONNER, Studies in Magical Amulets, p. 41.
- (67) Socrates and Dionysius 39 (ed. HALLEUX - SCHAMP, p. 172 with notes on p. 331). The inscription 'Ιάω on fig. 229 of Delatte and Derchain corresponds to the advice of Socrates and Dionysius who prescribed to engrave 'Ιάω in the stone as a consecration.

- (68) Cf. J. HANI, La religion égyptienne dans la pensée de Plutarque, pp. 37-39.
- (69) Cf. H. POSNANSKY, Nemesis und Adrasteia, p. 22 sq., 39 sq.
- (70) E.g. Philostratus, Epist. 14; Nonnus, Dion., XV, 292 sqq.
- (71) O. KELLER, Antike Tierwelt, II, pp. 557-558 referring to Usener in Festschr. K. v. Weiszäcker, Berlin 1893, Preuss. Jahrb. 1905, p. 380.
- (72) Ed. A. LUDWICH, Maximi et Ammonis carminum de actionum auspiciis reliquiae. Accedunt Anecdota Astrologica, Leipzig 1877, p. 121.
- (73) Cyran., I, 10, 91.
- (74) R. du MESNIL du BUISSON, Le sautoir d'Atargatis, p. 6 referring to Lucian, De dea Syra 32.
- (75) J.M. RIDDLE, Marbode of Rennes' de lapidibus, p. 64; R. HALLEUX - J. SCHAMP, Les lapidaires grecs, p. 277.
- (76) Attested not only in Cyranides, but also by Pliny, N.H., XXXVII, 181; Damigeron - Evax XXXVI (ed. HALLEUX - SCHAMP, p. 277); Mich. Psellos 18 (ed. de MELY, Les lapidaires, II, p. 203); Augustinus, Civ. Dei, XXI, 5; Solinus, 37, 21; Priscianus, Perieg., 989; Marbode, de lapid., XXVI.
- (77) A. DELATTE - Ph. DERCHAIN, Les intailles magiques, p. 266 fig. 381 : the sun and the moon both bust-shaped; p. 271 fig. 387 : the moon bust-shaped, together with a crab representing the sign of the Cancer.
- (78) Theophrast, Historia Plant., IX, 8, 6. Cf. J. MURR, Die Pflanzenwelt, p. 227.
- (79) W.H. ROSCHER, Lexicon, s.v. Mondgöttin, col. 3136 mentions several Greek authors giving the moon an epithet beginning with  $\chi\rho\nu\sigma\omicron-$ .



## EPILOGUE

At the end of the analysis of the amulet descriptions in the First Book of Cyranides a few conclusions can be uttered.

de Mély in his rather superficial article Le poisson dans les pierres gravées, dealing with the same subject claimed that the most important element in the composition of these amulets doubtlessly was the part of the plant, mostly its root, enclosed under the stone. In his opinion the medical properties of the plant determined the entire function of the amulet. As we saw in the preceding chapters the author of Cyranides indeed was quite well acquainted with the medical knowledge of his time. Often I had the opportunity of quoting a parallel text from some ancient physician prescribing the same plants for their pharmaceutical qualities. On the other hand the plants are not only used for their scientifically proved curative virtues. Some of them are adopted in function of the rule of homeopathy similia similibus curantur, while others are connected with a certain divinity. Aphrodite, Dionysus and Nemesis appeared to be the most popular gods influencing the vegetal reign.

The other elements however are not less important. Some of the birds were likewise adopted for their medical properties, although the magical factor in popular medicine plays in their case a greater part. In this context we remember that parts of animals were currently used as materia medica in all kinds of recipes of ancient medicine. The examples in Cyranides are abundant. Moreover, apart from the fact that some of the birds are apparently sacred to one of the Greek gods, it is very remarkable that most of them seem to be a solar emblem. This solar symbolism sometimes can be traced back to Egyptian

religion, as for the hawk or the vulture. Quite often the bird is a substitute for the legendary phoenix, the very sun-bird !

Bearing in mind the syncretic solar religion which clearly influenced the amulet descriptions, I am very inclined to follow the statement of Anna Roes (Birds and Fishes) on the combination of the bird and the fish. This pattern occurs not only in the text of Cyranides, unknown to her, but also on prehistorical painted ware, on Palestinian vases and in Greek geometric art. In her view this combination represents a sun emblem, the bird being the sun in the sky and the fish the sun sunk in the sea. Most of the fishes appearing in the amulet descriptions indeed do not seem to have a definite function on their own. Their magical power is mainly an associative one.

The function of the stones was on all accounts the most difficult one to explain. Some of them, as the gnathios, are completely unknown, others could not be identified with any modern mineralogical species. Undoubtedly in ancient and mediaeval lapidaria one stone could bear different names, which doesn't make things easier. The stones said to be sacred to a certain divinity are for sure planet stones having an astrological significance. This fact appeared more clearly in the description of the kestos of Aphrodite. As for the others, most of them seemed to be adopted in the amulet principally for the homophony of their names with one of the other elements.

This leads me to the Leitmotiv dominating all these amulet descriptions, I mean verbal magic, verbal homeopathy. Looking at the fine specimens of amulets preserved, some of them answering quite well to the descriptions, one couldn't possibly understand their meaning without going into the complex matter of cumulative magic. Indeed each of the elements in the composition has its magical function, but furthermore the combination and the magical link between the elements makes the amulet more powerful. Now this magical link is in most of the cases a verbal one. The alphabet, homonymity and homophony are used as magical functions serving one and the same purpose : making people healthy, happy and successful.

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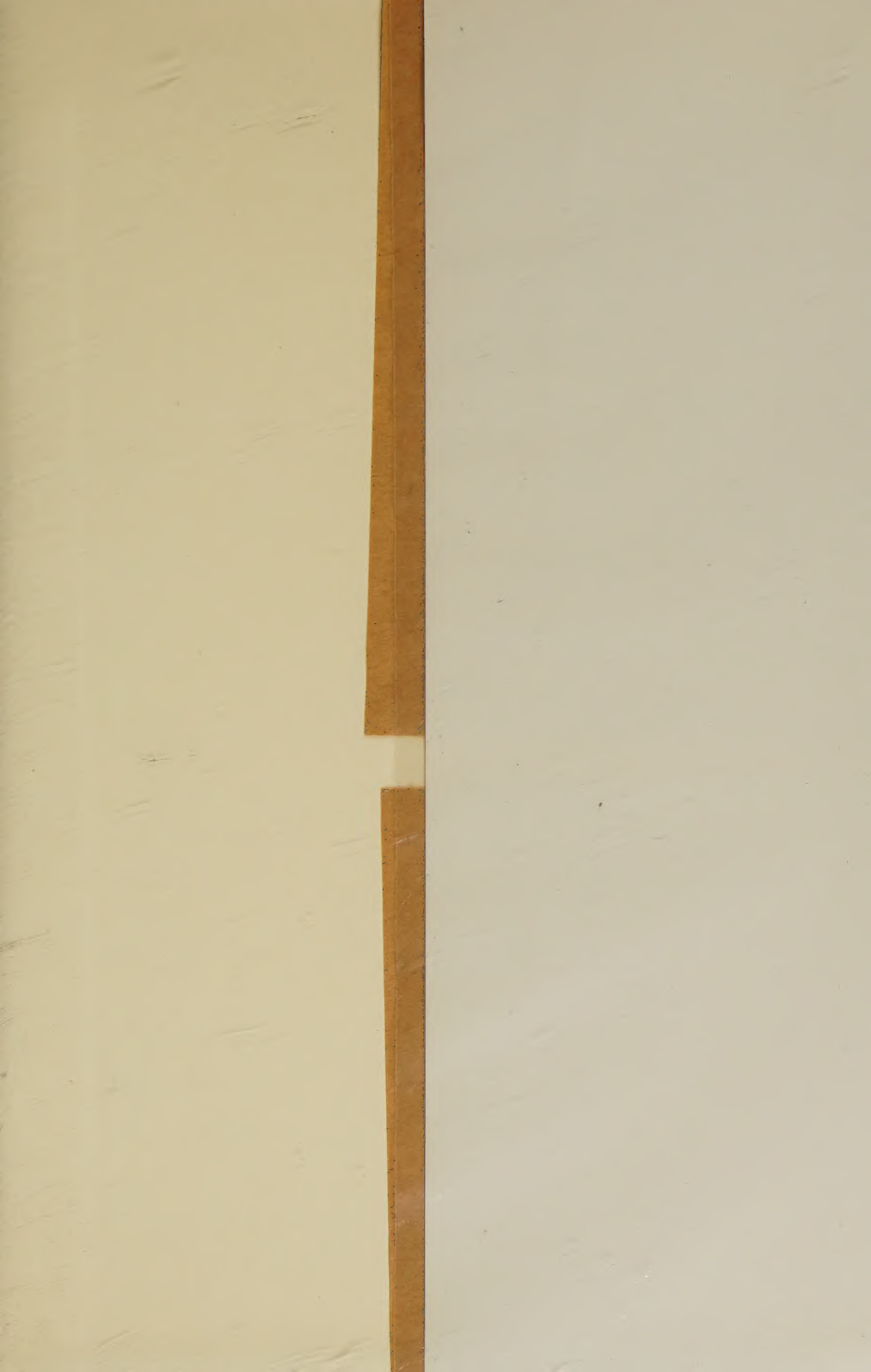












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