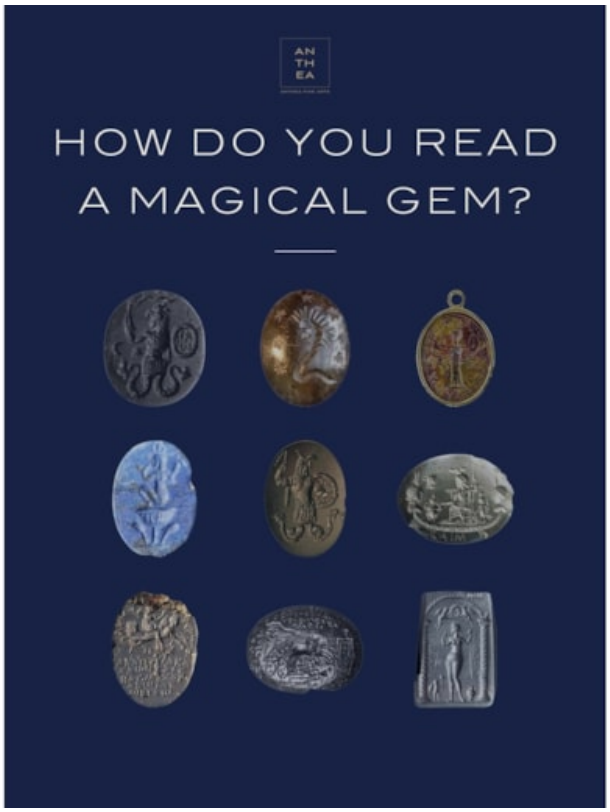
HOW DO YOU READ A MAGICAL GEM?

NOVEMBER 23, 2026



A cockerel-headed god with serpents for legs, a lion-headed snake crowned with rays, Greek letters forming words that belong to no known language. On the amulets of the Roman Empire, stone, image, name and sign were each chosen for their power. This is a guide to reading them.

By Bianca Massard and Gabriele Vangelli de Cresci

Experts in Classical Antiquities and Ancient and Modern Glyptics

16 minute read

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A WORLD OF OMENS

People in Antiquity lived among omens. A stumble, the cry of a crow or an owl, a spilt jar of oil, a bad dream: anything might foretell the future.

A black dog coming into the house, a snake dropping from the roof, a beam cracking, a mouse gnawing a flour sack all boded ill. A god's statue breaking into a sweat was worse. Against such threats, people carried protection on their person.

Roman law opposed magic from the start. The Twelve Tables, the city's first written code, in the mid-fifth century BC, already punished anyone who bewitched another man's crops. Pliny traces magic back to Persia and sees in it the worst of medicine, religion and astrology combined.

Yet magic and religion address the same supernatural powers, in opposite ways. Religion serves the community, magic a private need. The priest acts in public; the magician works in secret and compels the gods instead of praying to them.

Despite the penalties, every class of society used magic, emperors included. Magical gems belong to that world.

A STONE MADE TO BE READ

The first purpose of an engraved stone was to seal. On a seal the inscription is cut in reverse, to be read on the impression.

On magical gems the inscriptions read correctly on the stone itself. These are talismans, not seals, and they were set in rings or pendants. One anguipede was found still on its gold necklace in a tomb in Cyprus.

Three things distinguish them from ordinary intaglios. A priest or magician consecrated them. They are often engraved on both faces and sometimes on the edge. And their inscriptions are meant to be read as they stand, on the stone.

The ancients would have called them phylaktêria, protective amulets, periammata, amulets worn on the body, or pharmaka, remedies.

Most amulets were in fact papyri, less often metal strips or bronze pendants. Engraved stones were a small minority, with uses of their own. They protected the stomach and digestion, the womb, the liver and the hips, and kept off demons and scorpions.

No ancient author tells us which gems counted as magical. The category is modern. It goes back to Gorlaeus and Macarius, around 1600, and for a long time the gems were called ‘Gnostic’.



On the obverse, the cockerel-headed anguipede, whip raised, the shield marked IAΩ. On the reverse, a form of the palindrome Ablanathanalba. Dark green jasper, 18.7 × 13.2 mm. Naples, Museo Archeologico Nazionale, inv. 27018/1173.

THE MATERIAL COMES FIRST

The stone is chosen for its powers, not its beauty.

More than a third of magical gems are jasper, red, brown, yellow or green, and about another third are haematite, a black iron ore. Lapis lazuli is also heavily used, but it is still uncommon in collections, far behind jasper and haematite.

Haematite had its own planets. The Orphic Lithica says it was born from the blood of Ouranos, castrated by his son, which links it to Saturn. Lists that match stones to planets give it to Mars, because its powder is red and it was thought of as the stone of blood.

One papyrus lists code names that temple scribes supposedly used to mislead the curious. There haematite is ‘snake’s blood’.

These stones travelled a long way. Pliny locates haematite in Ethiopia, Africa and Arabia, and says the best gold-flecked blue stone, which we identify as lapis lazuli, came from Media.

The stone was matched to the complaint. In Attilio Mastrocinque’s words, ‘for the health of the womb haematite was used, white chalcedony for milk, prase for the stomach’. The papyri also say which stone to choose: brown jasper against scorpion stings, agate against thirst.

Doctors disagreed about these stones. Galen accepts that green jasper helps the stomach but adds that it works just as well without the radiate serpent engraved on it. Soranus does not believe in amulets but tolerates them for the hope they give the patient.

The power of these stones came from colour, mineral, image and words working together.



Chnoubis crowned with rays, among seven stars; on the reverse, the womb resting on its key, above the sign of Chnoubis. Prase, 15 × 12 × 6 mm. Paris, BnF, Monnaies, Médailles et Antiques, inv. 58.2187.

HOW WERE THESE STONES ENGRAVI

For ancient engraving we have few texts, a handful of images and, above all, the stones themselves. The technique hardly changed until the Neoclassical engravers.

The engraver began with a piece of the chosen stone: a pebble, a natural flake or a single crystal. Striking a block could shatter it or leave invisible cracks. The safest method, and the slowest, was sawing with a very thin blade, sometimes just a metal wire strung on a bow and charged with abrasive.

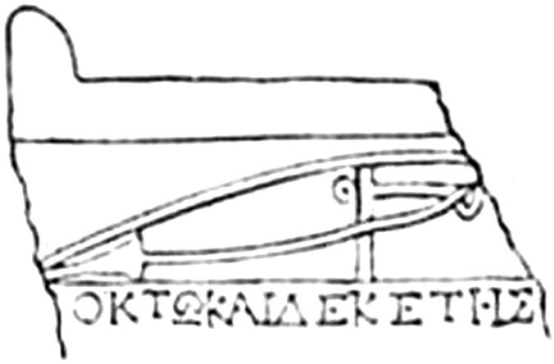
The blank was then ground by hand on blocks of harder rock. Finer and finer powders gave a first polish. The stone was almost always cut to shape before it was engraved.

The lathe and its drills

Soft stones could be engraved freehand. Hard stones need the wheel. The Mycenaeans knew the technique; it was revived in the Archaic period and used continuously down to Roman times.

The engraver worked at a fixed horizontal lathe driven by a bow. Its spindle took interchangeable drills, nearly always of copper or bronze. The drill heads came in every shape, ball, cone, disc or wheel, from a centimetre across to under two millimetres.

Friction heated and expanded the soft metal, which then gripped the abrasive. The abrasive was emery and, later, diamond powder, the most effective of all. The engraver held the stone against the spinning drill, and the groove took its shape from the profile of the tool, the angle and the pressure.



The engraver's tool on the funerary stele of Doros of Sardis, who died at eighteen: a horizontal lathe driven by a bow. Philadelphia in Lydia, 2nd century AD. Drawing after A. Furtwängler, Die antiken Gemmen, III, 1900, fig. 206. Heidelberg University Library.

The diamond point

The wheel could not produce the finest detail. Pliny mentions iron tools tipped with diamond splinters, and the grooves themselves bear this out.

A wheel leaves a U-shaped groove with rounded ends. A diamond point leaves very fine lines that end in a V, common on Hellenistic and Roman intaglios. The same points were used for the preliminary sketch.

A four-sided chalcedony left unfinished shows each face at a different stage: a quick sketch with the fine point, then forms roughed out with the wheel.

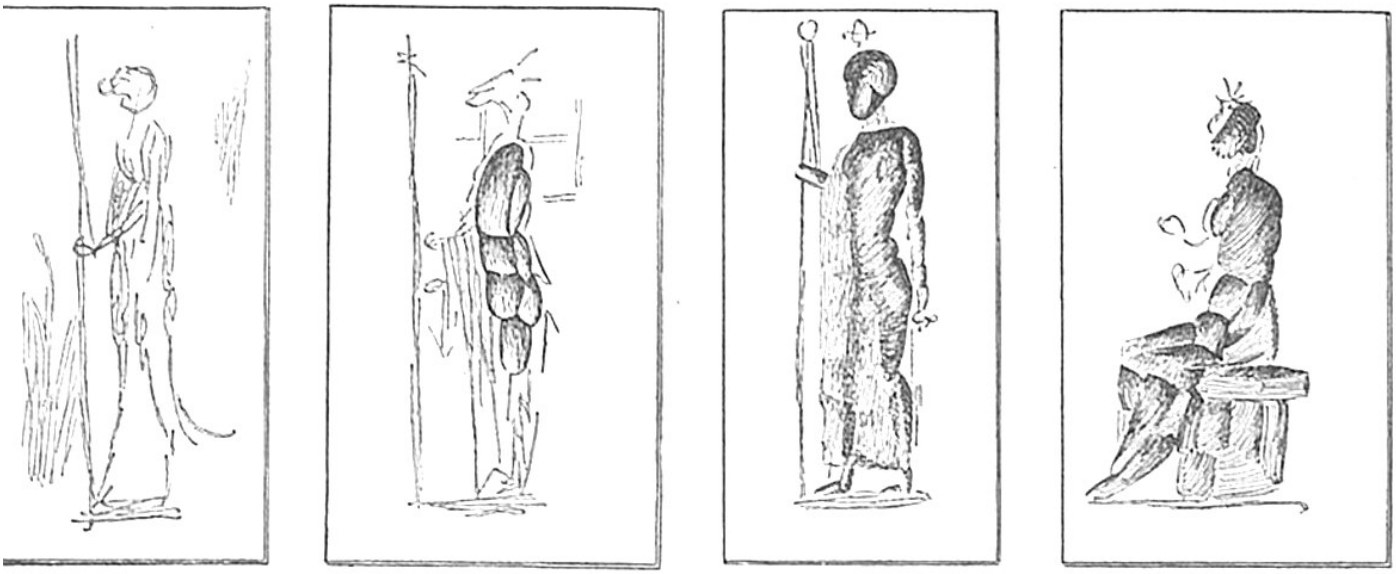


Fig. 207. Fig. 208. Fig. 209. Fig. 210.

The four faces of a chalcedony left unfinished: on the left, the bare sketch with the point; then figures increasingly advanced with the wheel, up to Isis seated holding the child Horus. Hellenistic period, probably Alexandria. Drawings by C. Reichhold, enlarged four times, after A. Furtwängler, Die antiken Gemmen, III, 1900, fig. 207–210. Heidelberg University Library.

Polish and wear

Polishing came last. The face of the stone and the inside of the engraving were worked with finer and finer abrasive pastes on a soft point of bone, wood or leather. To check their work, engravers took an impression in clay or wax. There is no evidence that they used magnifying lenses.

Daily wear, knocks and sweat left the surface covered in fine scratches. Some collectors and dealers point to these as proof of authenticity. They forget that many surviving intaglios have been repolished. Wear is evidence, but never proof on its own.

On magical gems, with few exceptions, the drawing is rough and the cutting

hasty.

FIGURES TO RECOGNISE

The gods come from very different traditions, Egyptian, Near Eastern and Graeco-Roman. A warning is in order. The Egyptian gods on these gems no longer belong to Egyptian religion. They have taken on attributes from Near Eastern, Jewish and Graeco-Roman traditions.

The cockerel-headed anguipede

This is the commonest figure, and the most debated. The word anguipede comes from the Latin for ‘snake-footed’. A man with a cockerel’s head and snakes for legs, in a cuirass, brandishes a whip and holds a round shield, often inscribed. He is found on about one gem in eight. The stone is usually jasper, mostly green.

No text mentions him, and we do not know his name. Apart from the gems, he is known only from a bronze statuette at Avenches.

The most widely held view is that the figure was an attempt to picture the biblical God. The cuirass suggests the Lord of hosts and his angels, the cockerel is a bird of the sun, and the snake legs recall the Giants. The shield regularly bears the name Iao, and Genesis calls God the shield of Abraham.

No Jewish source confirms this, however. It is safer to see a syncretic figure, at once Egyptian, Jewish, Greek and Judaeo-Christian.

Is he a god or a demon? Morton Smith raised the question and noted that the gems never mention demons. Their magic is credited entirely to gods.



The anguipede, with whip and shield; on the reverse, CABAΩΘ, ΑΔΩΝΑΙ and the palindrome ΑΒΛΑΘΑΝΑΛΒΑ. Dark green jasper, 23 × 16 × 4 mm. Perugia, Museo Archeologico Nazionale dell'Umbria, inv. 1248.

Chnoubis

Chnoubis is a coiled snake with a lion's head, often radiate. He is linked to one of the decans of the Egyptian sky, and perhaps to the god Khnum. Cut on a green stone, he protects the stomach.

One intaglio asks him to 'keep the stomach of Proclus in good health'. Others simply order 'digest!'.

Harpocrates

The divine child is among the commonest subjects. Son of Isis and Osiris and a solar god, he is shown as a naked child raising a finger to his lips. His name comes from the Egyptian Har-pe-khrod, ‘Horus the child’. Pliny notes that people were starting to wear his image and those of other Egyptian gods on their fingers.

Seated on the lotus, he recalls a myth from Hermopolis in which the sun is born from a lotus that rose out of the primeval chaos. The lotus closes under water at night and opens at dawn, and so stands for the daily birth of the sun.

He holds the flail. His head is radiate, with a star and crescent beside it. The lotus sometimes stands in the solar barque, among adoring baboons, falcons and animals in groups of three.



Harpocrates seated on the lotus, hand to his mouth, a cornucopia on his

arm; on the reverse, ΚΡΑΤΟΥΑΘ, ‘only son’. Lapis lazuli, 13 × 10 mm, 2nd century AD. London, British Museum, inv. G 209.

Serapis

Serapis usually sits enthroned, leaning on his sceptre, with Cerberus at his feet. The first two Ptolemies had promoted his cult, and in Rome the triumvirs voted a temple to Isis and Serapis in 43 BC.

On some gems the inscriptions, and attributes such as rays or the zodiac circle, make him an all-embracing god. A consecration in the papyri closes with the acclamation ‘One is Zeus Serapis’, which is found engraved on carnelians. Other gems pair him with the name Iao, or with the names of angels.



Serapis enthroned on the boat; on the reverse, the names of Michael, Gabriel, Samael and Raphael. Heliotrope, 24.1 × 30.7 mm, 2nd–3rd century AD. Hamburg, Skoluda collection, inv. M129.

Hecate

On gems Hecate is the goddess of magic above all others. She is triple, with three faces, three bodies and three pairs of arms, and holds torches, daggers and whips.

A goddess of the underworld who leads demons and ghosts, she also protects pregnant women and carries the light of the moon. The great Paris papyrus has her image engraved on a lodestone cut into a heart, with a name of twenty vowels.



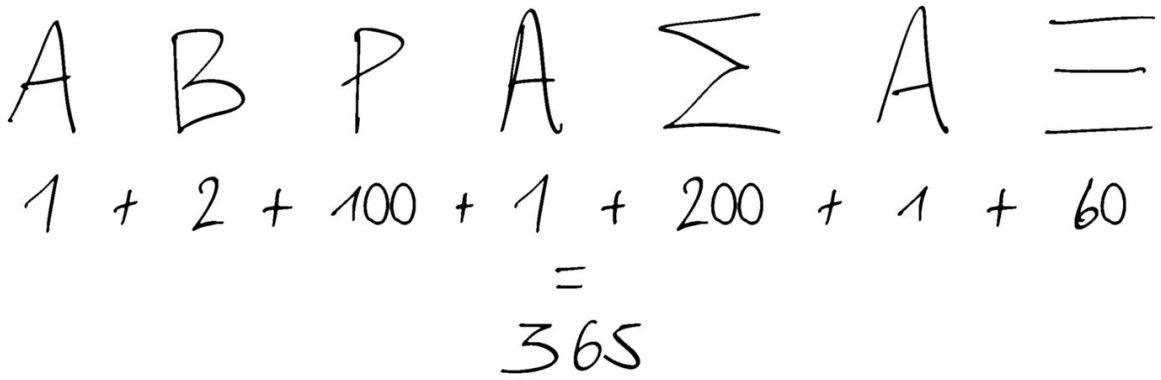
Triple Hecate with torches, daggers and whips; inscriptions on both faces.
Yellow and red jasper, 19.8 × 15.4 mm, in a post-antique gold mount.
Florence, Museo Archeologico Nazionale, inv. 15078.

Other figures appear beside them: Helios in his chariot, Aphrodite wringing out her hair, Anubis before the mummy of Osiris. Celestial symbols nearly always surround them and mark them as bearers of cosmic power.

THE NAMES: ABRASAX, IAO, SABAO

Then come the inscriptions, in Greek letters.

The word Abrasax is engraved on a great many stones. In Greek, the numerical values of its letters add up to 365. The Church Fathers report that the followers of Basilides, in the second century, gave this name to the supreme God of the 365 heavens.



The name ΑΒΡΑΣΑΞ and the value of each of its letters. Drawing by Bianca Massard.

Abrasax and Iao are the commonest inscriptions beside the anguipede. They also occur on other types and need not refer to him, though scholars long assumed they did.

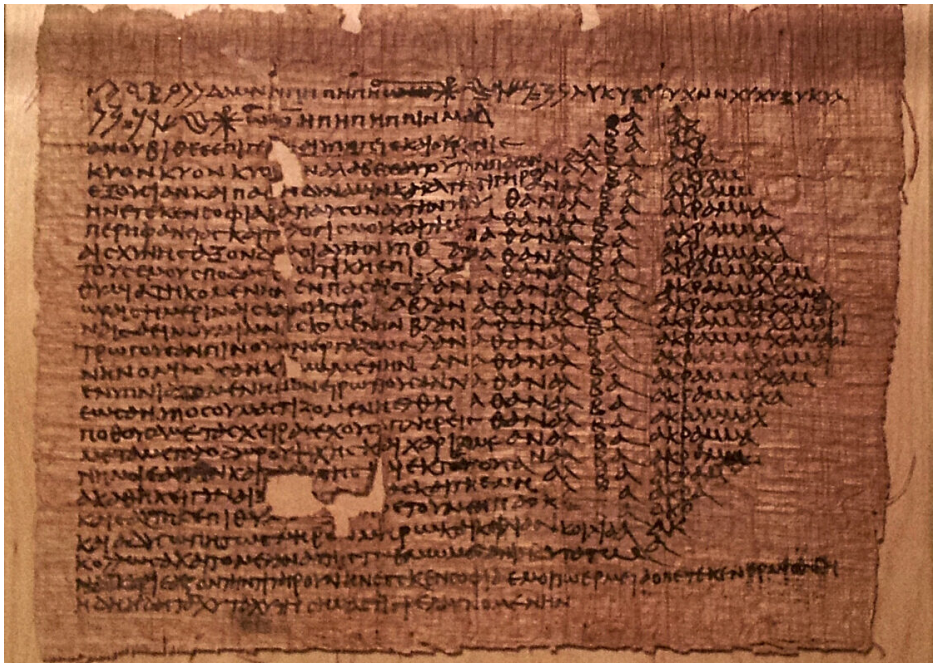
Iao is the Greek form of the name of the God of Israel. Sabaoth, 'of hosts', and Adonai, 'my Lord', also come from Hebrew. On a gem they are not just pious words. They are powers. One stone lists the seven archons of the Ophite

Gnostics, the planetary lords: Ia, Iao, Sabaoth, Adonai, Eloai, Oreos, Astapheos.

Another name recurs, Ialdabaoth. In the Nag Hammadi texts, and for Irenaeus and Hippolytus, he is the arrogant, ignorant Creator whose influence the Gnostic must escape. Yet heterodox Jews in Egypt and pagans worshipped him, as a youthful, warlike manifestation of God. On gems he takes three forms: the scarab, the lion-headed warrior and the jackal-headed anguipede. The cockerel-headed anguipede is not one of them.

Other formulas cannot be translated. Ablanathanalba is a palindrome, a word that reads the same in both directions. Akrammachamari is another such formula. These voces magicae are strings of vowels and apparently meaningless syllables. They worked only in their original language, and to translate them was to drain them of force.

Gems and magical papyri share a repertoire. In the papyri Abrasax speaks in the first person: ‘I, Abrasax, shall deliver’, says a phylactery written to protect a child, little Sophia-Priskilla, from fever, ghosts and demons.



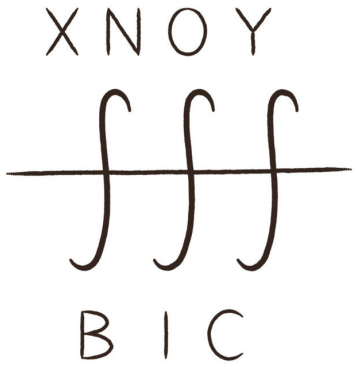
A love charm written for a man named Hermeias, with charakteres at the top and, to the right of the text, ABLANATHANALBA and AKRAMMACHAMARI. 4th century AD. Strasbourg, Bibliothèque nationale et universitaire, P. gr. 1167. Photo P. Tribhou, public domain.

CHARAKTERES: THE SIGNS THAT AR

Charakteres are magical signs that look like writing but are not.

The signs are not ornament. One recipe in the papyri sets out six of them and then addresses them: ‘mighty gods, restrain…’, as if the signs were the gods themselves.

One of them is the sign of Chnoubis, three S’s crossed by a bar, often found on the back of stones with his image. For pain in the side, the physician Marcellus Empiricus recommends engraving it on a jasper and hanging it round the patient’s neck.



The sign of Chnoubis, between the letters of his name, XNOYBIC. Drawing by Bianca Massard after a third-century chalcedony.

The sign has a history. In the tomb of Osorkon II at Tanis, the corresponding decan takes the form of a rearing snake whose body is crossed by other snakes. Attilio Mastrocinque offers two further readings. The three S's could be read as three times the number six, or as the first letter of the name of God in ancient Hebrew script, written three times.

Another figure to know is the ouroboros, the snake that bites its tail and marks the boundary between being and nothingness. One London formulary even supplies a drawing of it, to be traced on a sheet of gold, silver or tin.

TURN THE STONE OVER

The backs of the anguipede gems can surprise. They carry inscriptions, in lines or inside an ouroboros, and sometimes other figures, Harpocrates on the lotus or Helios standing on a lion.

A Roman intaglio in the British Museum, engraved with Pan offering a cup to Isis-Tyche, was later given an anguipede on the back. An ordinary stone had been magically ‘charged’ after it was made. One stone can thus record two moments in its history.

The edge matters too. On a haematite in Perugia, magical signs run round the edge.

STONES ENGRAVED FROM BOOKS

The papyri sometimes explain how to engrave a stone. For the charm known as the ‘sword of Dardanos’, the great magical papyrus in Paris calls for Aphrodite riding Psyche to be engraved on magnetite, with Eros and Psyche embracing on the back. Once the stone is engraved and consecrated, the officiant puts it under his tongue and speaks the formula.

Two surviving gems show the subject.



The gem of the ‘sword of Dardanos’. Aphrodite riding Psyche; on the reverse, Eros and Psyche embracing. Magnetite, 21.8 × 16.2 mm. Perugia, Museo Archeologico Nazionale dell'Umbria, inv. 1526.

The Leiden roll prescribes a jasper ‘the colour of air’ engraved with a snake biting its tail, the moon and the sun inside the circle and, on the back, the names Iao, Sabaoth, Abrasax.

Still, the papyri are not the pattern books of the gems. Morton Smith showed this in 1979. In the whole corpus only eighteen passages mention a gem. Conversely the anguipede, so common on the stones, is never described.

Smith concluded that the engravers used other books, now lost. A gem in Budapest keeps a trace of them. Above three deities, the engraver copied the words ‘as in the model’. The handbook’s instruction ended up on the stone along with the image.

WHAT WAS THE STONE FOR?

Many magical gems are medical. Chnoubis protects the stomach, the haematites showing a womb locked with a key protect the womb, Perseus drives off gout, and the reaper eases the hips.

Ares, with the formula ‘Are you thirsty, Tantalus? Drink blood!’, stops bleeding. An agate asks for a woman called Gaia to be freed from fever, chills and headache. A specialist could therefore design a gem for one patient.

Other stones protect. Solomon on horseback spears a female demon, and Hecate kept demons away as well as the anguipede did.

Others serve love, like the Aphrodite wringing out her hair. A yellow jasper in Perugia with the griffin of Nemesis, paw on the wheel of fate, is probably an amulet for an athlete or gladiator.

Magic could also attack. A haematite in Berlin shows a skeleton driving a chariot drawn by two lions, which trample a second skeleton. It may be a curse on a charioteer.



A chariot driven by a skeleton, drawn by two lions; inscriptions in the field. Haematite, 29.1 × 23 mm, about AD 200. Berlin, Staatliche Museen, Ägyptisches Museum, inv. 9885.

To own such a gem, Attilio Mastrocinque writes, was to keep a private, portable temple.

WHERE AND WHEN WERE THEY ENGR

No workshop has been excavated. Most of these stones come from the Near East and Egypt, and many engravers must have worked near sanctuaries. Stones were cut to order, with the owner's name, or in series.

In the cities of the western provinces magical gems are rare and unlike local work, because they were imported.

It is generally agreed that most belong to the second and third centuries AD,

with a peak under the Severans, when easterners newly made Roman citizens spread their cults. Since dated archaeological contexts are lacking, these dates should be taken as approximate.

Christian amulets, made after Constantine, continued into the Middle Ages, even though the Synod of Laodicea, in the fourth century, condemned clergy who made amulets.

All these images work the same way. A figure from one tradition takes attributes from another, a name from a third, and signs that belong to none.

This freedom to combine is what makes magical gems so rich. It is also what makes them so hard to authenticate. A copy that mixes disparate elements looks as plausible as an original, because the original is itself a mixture.

FREQUENTLY ASKED QUESTIONS

What is an intaglio?

A stone engraved in hollow, the opposite of a cameo, which is carved in relief. Pressed into wax or clay, it leaves an impression in relief. The first purpose of an engraved stone was to seal.

What is a magical gem?

An engraved stone that is a talisman, not a seal, set in a ring or pendant. It shows hybrid creatures and syncretic gods, with inscriptions in Greek letters and signs, often on both faces.

How do you tell a magical gem from a seal?

By the direction of the writing. On a seal the inscription is cut in reverse, to be read on the impression. On a magical gem it reads correctly on the stone itself.

What does Abrasax mean?

It is a divine name. In Greek each letter stands for a number, and the letters of Abrasax add up to 365. According to the Church Fathers, the followers of Basilides gave this name to the supreme God of the 365 heavens. It is also written Abraxas.

Who is Iao?

Iao is the Greek form of YHWH, the name of the God of Israel. On gems the name also appears beside pagan figures.

What do Sabaoth and Adonai mean?

They are two Hebrew names of the God of the Bible. Sabaoth means ‘of hosts’, Adonai ‘my Lord’. On a gem they are not just pious words. They are powers.

What is the anguipede?

The word comes from the Latin for ‘snake-footed’. It is the commonest figure on magical gems, a man with a cockerel’s head and snakes for legs, in a cuirass, with a whip and a shield. We do not know his ancient name.

Is the anguipede a god or a demon?

Morton Smith noted that the gems never mention demons and that their magic is credited entirely to gods. Ialdabaoth, the arrogant, ignorant Creator of the Gnostics, takes other forms: the scarab, the lion-headed warrior, the jackal-headed anguipede.

Who is Chnoubis?

A snake with a lion’s head, often radiate, linked to one of the Egyptian decans. Cut on a green stone, he protects the stomach. His sign, three S’s crossed by a bar, often appears on the back.

What are charakteres?

Magical signs that look like writing but are not. They occur on gems and in the papyri, where one recipe addresses them as gods.

What are voces magicae?

Strings of vowels and apparently meaningless syllables. They worked only in their original language, and to translate them was to drain them of force.

What does Ablanathanalba mean?

It is a palindrome, a word that reads the same in both directions, and one of the formulas engravers cut on the backs of stones. Scholars have looked for the roots of such words mainly in Hebrew, and less often in Greek or Egyptian.

What is the ouroboros?

The snake that bites its tail. On gems it surrounds the figure or the names and marks the boundary between being and nothingness.

Gnostic gem or magical gem?

‘Gnostic’ comes from the Greek gnôsis, knowledge. Cardinal Baronius, on the trail of ancient heretics, was the first to call these gems ‘Gnostic’. Since the work of Armand Delatte and Campbell Bonner, most scholars have agreed that these amulets are magical rather than Gnostic, and were made by magicians of the imperial period.

How old are magical gems?

It is generally agreed that most belong to the second and third centuries AD, with a peak under the Severans. Christian amulets, made after Constantine, continued into the Middle Ages.

What stones are they made of?

More than a third are jasper and about another third haematite. Lapis lazuli and chalcedony are also used. The stone was chosen for its powers and matched to the complaint.

Who wore these stones?

The magicians sold their services widely, to initiates of the mystery cults as well as to the sick and the anxious. Roman law opposed magic, but every class of society used it, emperors included.

Are all magical gems ancient?

No. In the Middle Ages, and even more in the Renaissance, demand for these stones was so strong that copies were made in large numbers, and they are not always easy to spot.

FURTHER READING

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IMAGE SOURCES

The photographs of the gems in Naples (CBd-2198), Paris (CBd-3449), Perugia (CBd-4257 and CBd-4265), London (CBd-504), Hamburg (CBd-1669), Florence (CBd-4220) and Berlin (CBd-2141) come from the Campbell Bonner Magical Gems Database, which names the rights holders. The drawings of Doros's lathe and of the unfinished chalcedony come from the copy of Furtwängler digitised by Heidelberg University Library. The Strasbourg papyrus is a photograph by P. Tribhou, in the public domain. The Abrasax sum and the sign of Chnoubis are drawings by Bianca Massard.

Adapted from a study by Bianca Massard of Graeco-Roman magical gems (2026).