

PAWEŁ GOŁYŹNIAK

Institute of Archaeology, Jagiellonian University
pawel.golyzniak@uj.edu.pl

HERMES-THOTH ON MAGICAL GEMS AND AMULETS

ABSTRACT

This paper examines ancient glyptics that provide evidence for the merging of the cults of Thoth, the Egyptian god of wisdom and writing, and Graeco-Roman Hermes/Mercury. With the use of semantics and iconological methodologies, the paper demonstrates that the popularity of the syncretic deity Hermes-Thoth was far greater than previously thought and, in fact, comparable to that of other syncretic figures, such as Hermanubis. This is possible because the analysis is not

limited to the iconography of magical gems that clearly refer to this deity represented in figural form, but also encompasses symbolic amulets featuring rebuses which, if properly read, refer to Hermes-Thoth as well. It is argued that *kerykeion* was not the only Hellenising element used to mark Hermes's nature in the cult of Hermes-Thoth. The article also contributes to the wider discussion on the identification and function of magical gems and amulets in general.

Keywords: amulets, glyptics, Hermes-Thoth, magical gems, syncretic deities

Introduction

In the Ptolemaic period, the Egyptian religion was significantly transformed under Greek influences and a number of local deities were identified with their Greek counterparts. This process continued in the first centuries of the Christian era, once the Romans conquered the Mediterranean world. As Pliny the Elder reports, already by the 1st century AD both the oddity and mystery of the Egyptian cults, which often referred to the afterlife, became appealing to the Romans who willingly carried images of Egyptian deities and related subjects on their personal finger rings inlaid with engraved precious and semi-precious gemstones.¹ Tiny gems constitute a group of archaeological artefacts that provide us with a huge amount of information regarding the intimate and deliberate choices made by people in Antiquity, especially when they reflect religious beliefs. Their character was intrinsically private; therefore, they are good indicators of contemporary trends in religion and magic. They are also a plausible means of conveying the mechanisms of religious evolution, as well as more abrupt revolutions and the emergence of new faiths. One such case was the

assimilation of the Egyptian god of wisdom and writing, Thoth, with Graeco-Roman Hermes/Mercury. Hence, the present paper sets out to prove the occurrence of this phenomenon through an analysis of some intaglios which are called magical gems due to the frequently accompanying inscriptions and incantations.

Merging of Thoth and Hermes

In the Egyptian pantheon, Thoth was essentially the god responsible for the maintenance of the universe. He was one of the two deities (the other being Ma'at) who stood on either side of Ra's solar barge.² The god of the Moon played many vital and prominent roles in Egyptian mythology, and in the Hellenistic and Roman periods Thoth became strongly associated with the arbitration of godly disputes, arts of magic, the system of writing, the development of science, the judgment of the dead, and the control of destiny.³ Because of these multiple functions that were associated with him, Thoth frequently appears on magical gems dated to between the 1st and 3rd centuries AD.⁴ These small carved gemstones

¹ Pliny the Elder, *NH*, XXXIII, 41.

² Delatte, Derchain 1964, 141; Budge 1969, 400.

³ Budge 1969, 403; Michel 2004, 50–51; Bąkowska-Czerner, Świerżowska 2015, 3.

⁴ Michel 2004, 198–202.

were primarily used as protective and curative amulets, but there is also evidence for their usage in magical rituals and offerings.⁵ Thoth is usually depicted as a human figure with the head of an ibis or baboon.⁶ The magical inscriptions that appear on gems representing Thoth, which often repeat texts and incantations from magical papyri, can be divided into two types: those that refer to grand ideas, the creation of the world and its rebirth as well as the Moon and astrology; and those that performed apotropaic and medicinal functions.⁷

Hermes/Mercury was a major god in the Graeco-Roman pantheon. He was the god of financial gain, commerce, eloquence, messages, communication (including divination), travellers, boundaries, luck, trickery and thieves.⁸ Due to his many talents and auspices, he was one of the primary divine characters represented on intaglios and cameos, especially in the Roman period. As the messenger of the gods, Hermes was obliged to keep their secrets safe, and therefore was the perfect choice for a seal.⁹ He also served as a guide of souls to the underworld and it appears that this was the main reason why he was associated with Thoth.

Glyptic art, alongside other media, provides evidence for Hermes's syncretisation with Egyptian deities such as Anubis, but also Thoth.¹⁰ In Munich, there is a haematite intaglio featuring Hermes and Anubis standing next to each other.¹¹ The combination of Hermes and Anubis, also known as Hermanubis, frequently appears on gems and is illustrated in a standardised form, e.g. as a jackal-headed anthropomorphic figure dressed as a Greek and holding a *kerykeion* (Fig. 1).¹² However, in Kassel there is an unparalleled magical gem cut in haematite that shows Mercury, Anubis and an ibis together.¹³ Since the ibis was a sacred bird of Thoth, the gem should be interpreted as



Fig. 1. Intaglio, Hermanubis with the *kerykeion* and a palm branch (carnelian), 16 x 12 x 4 mm. The British Museum, London, inv. no. G 420 (EA 56420). Photo by Christopher A. Pharaone, courtesy of the ©Trustees of the British Museum.

standing in for the Egyptian god, so in effect the object depicts a triad of somehow parallel deities.

The deity that came into being as a combination of Hermes and Thoth was Hermes-Thoth, sometimes also called Hermes Trismegistus. The main location where he was worshipped was the Temple of Thoth in Khemenu, which was known in the Hellenistic period as Hermopolis.¹⁴ That location was not accidental, as the syncretic deity was also combined with the local ones – Khnum and Hapy.¹⁵ It seems that the syncretisation of Hermes and Thoth was not illustrated on engraved gems as often as Hermanubis, especially in the anthropomorphic form,¹⁶ but it was often expressed using different (symbolic) means in the late 1st century BC and throughout the Roman period.¹⁷

⁵ For a general introduction to the subject, see Michel 2004; Zwierlein-Diehl 2007, 210–231; Mastrocinque 2003; 2007; 2014.

⁶ Delatte, Derchain 1964, 141–51.

⁷ Michel 2004, 198–202; Bąkowska-Czerner, Świerżowska 2015.

⁸ Sena Chiesa 1966, 137–38.

⁹ Gołyźniak 2017, no. 390. For more reasons behind the popularity of Hermes/Mercury on gems, see LIMC VI 1992, 550–554, s.v. Mercurius (E. Simon, G. Bauchhens); Henig 2007, 28–29; Sena Chiesa *et al.* 2009, 44–46.

¹⁰ Quaegebeur 1986, 525–44; Henig, MacGregor 2004, 121; Michel 2004, 52–53.

¹¹ Unpublished object, available at: http://antik.szepmuveszeti.hu/talismans/cbd/323?lang1=default&description1=hermes&mdesc=false&lang2=default&multiple_cond=and. Accessed 10 July 2019.

¹² Philipp 1986, n. 142; Zwierlein-Diehl 1991, n. 2201; Michel 2001a, nn. 59–60. For more general information about the association of Hermes with Anubis, see Benaissa 2010, 67–68.

¹³ AGDS III Kassel 1970, n. 172; Michel 2004, 52–53.

¹⁴ Delatte, Derchain 1964, 141–42; Bailey 2012, 192.

¹⁵ Bąkowska-Czerner, Świerżowska 2015, 3.

¹⁶ Mastrocinque 2003, 197. Even a quick look at the Campbell Bonner Magical Gems Database (http://classics.mfab.hu/talismans/visitors_salutem), which includes more than 2800 specimens, shows that Hermanubis is represented on 19 gems, whereas there are only six objects which may be securely identified as featuring Hermes-Thoth.

¹⁷ Zwierlein-Diehl 1991, n. 2209; Michel 2001b, n. 38; Mastrocinque 2014, no. 49.

Hermes-Thoth: anthropomorphic form

The figure of Hermes-Thoth finds its clearest expression in the anthropomorphic form on a magical gem (green and red jasper or bloodstone) from Hamburg. The object depicts an ibis-headed god striding towards the left, wearing a mantle, a crown and winged sandals. He is holding a *kerykeion* in his left hand, while the right hand is grasping a rod driving forward a wheel (Fig. 2).¹⁸ As a sacred bird to Thoth, the ibis serves to represent this god, while the *kerykeion* stands for Hermes. The wheel of fortune is normally an attribute of Nemesis;¹⁹ however, in this case it refers to destiny and thus to Thoth's and Hermes's role as *psychopompos*. The other side of the gem is inscribed with the name of Thoth and a salutation to him. The gem was used as an amulet purposed either to bring its owner good luck and prosperity under the auspices of Hermes-Thoth or to ensure a successful journey of the soul to the underworld.²⁰ On the gem in London, cut in brown-green jasper, the figure of Hermes-Thoth may be inferred not from iconographical elements alone – since the nude male with a chlamys, *kerykeion* and the wheel of destiny could be interpreted simply as Hermes – but because the inscription on the other side of the stone adds the name of Thoth to the rebus, transforming the figure into the syncretic god, Hermes-Thoth.²¹ Another vague instance of this deity is represented on a red jasper in Paris. On one side, it is engraved with an image of an ibis standing on the primeval mound facing left, wearing the atef crown, carrying the *kerykeion* and surrounded by a few illegible characters. The other side of the stone shows Hermes represented as a naked figure, wearing a crown and boots, holding an object (or a turtle?) in his raised right hand, with animal skin or a mantle hanging down from his left hand. There are characters and Greek letters all around it.²² Since the ibis was the sacred bird of Thoth, it represents this deity here; in combination with the fact that it is carrying the *kerykeion* while the figure of Hermes himself is on the other side of the gem may suggest that the image shows a syncretic variant of the two gods in one: Hermes-Thoth. It is noteworthy that Hermes-Thoth represented as the ibis with the *kerykeion* or the wheel of fortune may be accompanied by other, usually solar, deities, as in the



Fig. 2. Intaglio, Hermes-Thoth with a wheel and the caduceus, inscribed (green jasper-bloodstone), 15 x 12 x 2 mm. The Skoluda collection, Hamburg. Photo: courtesy of ©Simone Michel, reproduced with the kind permission of Wolfgang Skoluda.

case of the touchstone intaglio which also features the figure of Apollo-Mithra and a red jasper engraved with Apollo on the other side, both in Paris.²³ Another important example is a haematite intaglio in London, where ibis-headed Hermes is sitting on a throne, holding the *kerykeion* while a solar deity is standing in front of him.²⁴ This setting may be explained by Thoth's original connections with primordial myths of creation and renewal of life to which solar deities were also attached.²⁵

Hermes-Thoth: symbolic forms

As mentioned above, the concept of Hermes-Thoth seems to have been much less frequently represented on magical gems compared to Hermanubis; however, this first impression changes considerably when more attention is paid to symbolic gems. This may be best illustrated by the haematite intaglio in London, where the figure of Hermes stands next to Thoth represented as the ibis (Fig. 3).²⁶ It should be taken for granted that whereas the ibis represents Thoth on magical gems when it is depicted alone, the same bird combined with the figure, or at least symbols, of Hermes stands for Hermes-Thoth. This notion is confirmed by a green jasper intaglio set in an iron ring from Rome, engraved with the *kerykeion* surrounded by Greek letters forming the name Thoth.²⁷

¹⁸ Michel 2001b, no. 24.2.1.

¹⁹ Gołyźniak 2017, nos. 62 and 408 (with further literature on the subject).

²⁰ Henig (Henig *et al.* 1994, no. 503) points out that some magical gems have been found in burials which indicates that people believed in their essential help in the afterlife.

²¹ Michel 2004, no. 61. A slightly different variant is depicted on another stone from London; see Michel 2004, no. 62.

²² Mastrocinque 2014, no. 106.

²³ Mastrocinque 2014, nos. 105 and 107.

²⁴ Michel 2001a, no. 52.

²⁵ Mastrocinque 2003, 197–98.

²⁶ Michel 2001a, no. 58.

²⁷ Mastrocinque 2007, no. RoC.3.



Fig. 3. Intaglio, Hermes and ibis (Thoth), inscribed (haematite), 22 x 9 x 2 mm. The British Museum, London, inv. no. OA.9620. Photo by CC BY-NC-SA 4.0: ©The British Museum.



Fig. 4. Intaglio, ibis-headed Thoth (amethyst), 14 x 10 x 5 mm. The Jean Paul Getty Museum, Malibu, inv. no. 83.AN.437.55. Photo by ©Digital images courtesy of the Getty's Open Content Program.

The ibis was sacred to and associated with Thoth because it represented the Nilotic revival and the cycle of life, as well as destiny.²⁸ Thoth was often represented on magical gems in the form of an ibis-headed human body, e.g. on the amethyst from Malibu, California (Fig. 4).²⁹ As a sacred animal, a dead ibis would be embalmed and put inside the hollow body of its wooden representation. Alternatively, the mummified remains were placed in pottery jars and deposited in vast underground galleries. Hundreds of thousands of such burials have been discovered at Sakkara, near Memphis, the ancient capital of Egypt.³⁰

The importance of the ibis in the cult of Thoth becomes obvious when magical gems featuring this creature are analysed. The ibis enjoyed extreme popularity and was presented in various forms reflecting individual aspects of Thoth's numerous skills.³¹ On a blue chalcedony intaglio in Kraków, the bird is represented with the *ankh* sign (cross of life) – this combination may reflect a desire for eternal life (Fig. 5).³² There is no reference to Hermes on this gem, but it possibly illustrates this god's

role of *psychopompos* which included the responsibility for escorting newly-deceased souls towards the afterlife. This function was shared by both Thoth and his Greek counterpart. Another popular motive featuring the ibis is a bird blowing a trumpet (*lituus*) (Fig. 6). Śliwa misunderstood the iconography, interpreting the bar of the instrument as a lance and thus suggesting that the motive was linked with the Roman army, perhaps a Roman legion stationed in Egypt which adopted the ibis as its symbol, speculating that legionaries may have used gems bearing this motive as amulets.³³ The trumpet which the bird is blowing is of a military type, but *lituus* was frequently used in funeral processions as well, so the motive from the gems in question rather refers to Thoth's role as *psychopompos*. Interestingly, a red jasper intaglio in Nuremberg and another one (carnelian) in Berlin present a cockerel, a sacred bird to Hermes, during the very same activity. This arguably strengthens the idea that both Thoth and Hermes, or rather their syncretic combination as Hermes-Thoth, was meant to be recalled by such imagery.³⁴

²⁸ Henig *et al.* 1994, no. 503.

²⁹ Bonner 1950, nos. D.45–46; Michel 2001a, nos. 52–55 and 122, 2001b, no. 38, 2004, no. 27.4.a.3; Mastrocinque 2014, nos. 95–100.

³⁰ Wasef 2016.

³¹ Michel 2004, 52.

³² Śliwa 2014, no. 27.

³³ Śliwa 2014, no. 91. This type is not as extraordinarily rare as Śliwa claims; for some analogies, see Furtwängler 1896, nos. 3296, 7909, 8328 and 8539; Walters 1926, no. 2457; Sena Chiesa 1966, no. 1321; AGDS I.2 1970, no. 907; AGDS IV Hannover 1975, no. 1126; Henig 1975, no. 228; Maaskant-Kleibrink 1978, no. 762; Zwierlein-Diehl 1991, no. 1946; Weiß 2007, no. 498.

³⁴ Furtwängler 1896, no. 7904; Weiß 1996, no. 344.



Fig. 5. Intaglio, an ibis with the *ankh* sign (chalcedony), 21 x 20 x 6 mm. The National Museum, Kraków, inv. no. MNK-Ew-IV-zł-119. Photo by © Photographic Studio of the National Museum, Kraków (public domain).

As reported by both Bonner and Michel, a very popular type of magical amulets would depict an ibis tied to an altar with three flowers or other plants. On Palestinian, and possibly Christian, amulets it is tied to a structure that lacks the plants at the top and instead it is usually attacking a serpent which symbolises Thoth's combat against evil.³⁵ An analysis of the inscriptions that accompany many of such pieces allows to conclude that those gems were particularly effective against indigestion and were also helpful in healing fevers (Fig. 7).³⁶ The ibis was believed to be free of all diseases and was thought to be an antidote to poison or polluted water.³⁷ Thus, its healing powers combined with the properties of the stones which it was engraved upon (mainly green and black jasper, dark grey-green steatite, and dark brown limonite) significantly increased the effectiveness of this sort of amulets.³⁸ Yet, as Henig observes, there was a connection between Thoth, represented as the ibis, and Isis – and this connection referred to the cult of regeneration.³⁹

All of the types of amulets discussed above lack direct references to Hermes; however, it is worth pointing out that according to some magical papyri, Aesclepius was regarded as a disciple of Hermes-Thoth.⁴⁰ In light of the above, could these amulets, which clearly address



Fig. 6. Intaglio, an ibis blowing a trumpet (*lituus*), a star in the field, inscribed (red jasper), 12 x 9 x 3 mm. The National Museum, Kraków, inv. no. MNK-Ew-IV-zł-1827. Photo by © Photographic Studio of the National Museum, Kraków (public domain).

medicinal issues, indirectly refer to that syncretic deity rather than exclusively to Thoth? There are combinations where the bird is depicted together with emblems of Hermes, which clearly suggests an association of the whole rebus with Hermes-Thoth. The most popular iconographical scheme is the ibis standing (often on the primeval mound) with the *kerykeion* (Fig. 8).⁴¹ This configuration should be read as a combination of two deities in one, since the ibis stands for Thoth and the wand stands for Hermes.⁴² This is another way of referring to the common function of the two gods, i.e. acting as *psychopompos*. It was a symbol of rebirth, with an additional apotropaic function.⁴³ Gems of this type were also used as amulets intended to bring good fortune and prosperity ensured by Hermes as an overseer of commerce. A slightly different version of the same concept is illustrated by a flying ibis holding a staff (the *was*-sceptre?) in its beak and the *kerykeion* of Hermes in its talons on a carnelian in Berlin.⁴⁴

³⁵ Bonner 1950, nos. 304–6.

³⁶ Bonner 1950, 51–53; Delatte, Derchain 1964, 145–148; Philipp 1986, no. 119; Zwierlein-Diehl 1991, no. 2209; Michel 2004, 199–200.

³⁷ Henig, MacGregor 2004, 122.

³⁸ Bąkowska-Czerner, Świerżowska 2015, 4–5.

³⁹ Henig *et al.* 1994, no. 503.

⁴⁰ Bąkowska-Czerner, Świerżowska 2015, 11.

⁴¹ The Campbell Bonner Magical Gems Database (http://classics.mfab.hu/talismans/visitation_salutem) includes nine gems bearing this sort of iconography, whereas Michel (2004, no. 27.1.b) collected eleven examples.

⁴² Philipp 1986, no. 120; Michel 2004, 54.

⁴³ Bąkowska-Czerner, Świerżowska 2015, 9.

⁴⁴ Weiß 2007, no. 497.



Fig. 7. Intaglio, an ibis tied to an altar, inscribed (limonite), 24 x 20 x 4 mm. The Kelsey Museum of Archaeology, Ann Arbor, University of Michigan, inv. no. 26038. Photo courtesy of Christopher A. Pharaone with the kind permission of the ©Kelsey Museum of Archaeology.

Another field in which the syncretic deity of Hermes-Thoth was useful was the engagement in the combat between order and chaos, good and evil.⁴⁵ This is well illustrated on an unparalleled red jasper intaglio featuring an ibis standing on a tortoise (Fig. 9). The gem was found in Greece by Athanasius G. Trypanis in 1905 and for many years was part of the Professor Constantine Athanasius Trypanis (1909–1993) collection. Theodora Hadzisteliou Price published it for the first time in 1972, asserting that the ring in which it is set is ancient, which is untrue, because its form and decoration are alien to any type of ring known from the Roman period.⁴⁶ It is a modern product that must have replaced the original from which the gem was extracted, becoming cracked in the process and repaired later. The stone itself is red jasper (not sard as Hadzisteliou Price believes) and according to the stylistic criteria ('Imperial Small Grooves Style'),⁴⁷ the intaglio should be dated to the 2nd century AD. Red jasper was one of the most popular gemstones used either as magical and the so-called *grylloil/baskania* gems,



Fig. 8. Intaglio, an ibis with the *kerykeion*, inscribed (magnetite), 17 x 14 x 4 mm. The British Museum, London, inv. no. G 1986,1-5,115. Photo by Christopher A. Pharaone, courtesy of the ©Trustees of the British Museum.



Fig. 9. Intaglio, an ibis (Thoth) with a snake stands on a tortoise (Hermes) (red jasper), 13 x 6 mm, set in a modern silver ring. Private collection. Photo courtesy of Hadrien J. Rambach.

or simply hybrid/combination gems.⁴⁸ This was because red jasper was believed to bestow strength, fortitude and courage on its carrier and was valued as a natural remedy to calm turbulent blood, slow down an accelerated heart rate, and curb excessive desires. It was thought to be efficacious in any bleeding and to facilitate childbirth.⁴⁹

The bird depicted is not a pelican⁵⁰ but an ibis which was famous for devouring snakes and reptiles.⁵¹ The ibis is often presented on gems while attacking a lizard or snake. Such stones were intended as apotropaic amulets that protected the owner from all kinds of evil. Naturally, they could be used to ward off snakes and reptiles in a mundane sense, but on gems the serpent symbolises

⁴⁵ This role seems to have originally belonged more to Thoth than Hermes, as the former's anthropomorphic or ibis form is often presented in the act of trampling a lizard, snake or crocodile; see Mastrocinque 2003, 197; Bąkowska-Czerner, Świerżowska 2015, 9–10.

⁴⁶ Hadzisteliou Price 1972, 60 and 62–63. Neither Henkel's typology (1913) nor that compiled by Guiraud (1988–2008) include a similar type of ring.

⁴⁷ On the Imperial Small Grooves Style, see Maaskant-Kleibrink 1978, 251–52.

⁴⁸ Lapatin 2011, 89; Bąkowska-Czerner, Świerżowska 2015, 4–5; Weiß 2017.

⁴⁹ Bąkowska-Czerner, Świerżowska 2015, 4–5.

⁵⁰ Hadzisteliou Price 1972, 60.

⁵¹ Bonner 1950, 53.

evil forces in general. What is more, some scholars interpret the ibis fighting a snake as an allegory of Moses who protected his people against snakes.⁵² It is possible that in the first centuries of the Christian era, the syncretisation process of various deities was progressing even further and Graeco-Egyptian elements merged with Jewish ones. It is worth noting that a tortoise, symbolically linked to Hermes, is often part of complex compositions focused on destroying evil or attracting the gaze of the Evil Eye with magical gems and simpler amulets before it reaches the owner.⁵³ Interestingly, sometimes the creatures/hybrids built from various elements that appear on those combination gems take the form of an ibis, as in the case of a carnelian in Leiden and a glass mould replicating an ancient gem in Würzburg.⁵⁴

In any case, there is a clear correlation between the type of gemstone used and the depiction engraved on it in the case of the ring formerly in the Trypanis collection. Taking into account that the Egyptian god Thoth, represented by the ibis, is combined with Hermes (in the form of a tortoise), it might be proposed that the snake attacked by the bird is Apep – an ancient Egyptian deity that embodied chaos and was an opponent of light. The coexistence of Hermes-Thoth with other solar deities on some of the magical gems mentioned above strengthens this hypothesis, since the amulets representing this syncretic deity alone are made of such gemstones as haematite or green jasper (see above) – the preferred types for these gods – and would have protected their wearers against a malevolent opponent. The combination of elements symbolising Thoth and his fight with evil, as well as those related to Hermes (one of his sacred animals – the tortoise), intended to bring peace, good fortune,

and prosperity to the owner of the gem, is particularly effective in this case.

Conclusions

As this short survey shows, Hermes-Thoth, a deity that came into being as an effect of conflating religious concepts in the first centuries AD, was much more popular on engraved gems than it may seem at first glance. This conflation was due to peoples' desires and their need for help and protection, so much so that Hermes-Thoth became the perfect candidate for addressing such supplications. The combination of Egyptian Thoth and Greek Hermes is represented on gems either figuratively (gems presenting the two deities next to each other, a single combined figure bearing the attributes of both, or a figure of one with the other substituted by its sacred animal or inscription) or in symbolic forms. It has also been shown that the *kerykeion* is not the only Hellenising element involved in Hermes-Thoth imagery on gems.⁵⁵ There has been an endless debate on how to define magical gems, and it has to be asked whether examples that do not include any inscriptions and whose iconography is based on pure symbolism rather than figural depictions should be included in this category. It would appear to be more suitable to describe them as amulets in which complex combinations of various elements are usually found, on the one hand for protection against all kinds of evil, and on the other – to gain divine help and blessing, as well as to ensure good fortune and prosperity. They nevertheless present a subtle allegory of syncretic deities, such as Hermes-Thoth, as effectively as the conflation of Thoth or Hermes with other deities (for instance, Anubis).

Bibliography:

- AGDS I. 2 = Brandt E., Schmidt E. 1970. *Antike Gemmen in deutschen Sammlungen. Band 1 Staatliche Münzsammlung München. Teil 2: Italische Gemmen etruskisch bis römisch-republikanisch. Italische Glaspasten vorkaiserzeitlich*, Munich.
- AGDS III Kassel = Schref P., Gercke P., Zazoff P. 1970. *Antike Gemmen in deutschen Sammlungen. Band 3: Braunschweig, Göttingen, Kassel, Wiesbaden*.
- AGDS IV Hannover = Schlüter M., Platz-Horster G., Zazoff P. 1975. *Antike Gemmen in deutschen Sammlungen 4, Kestner-Museum Hannover, Museum für Kunst und Gewerbe Hamburg, Wiesbaden*.
- Bailey D. 2012 Classical Architecture, (in:) C. Riggs (ed.), *The Oxford Handbook of Roman Egypt*, Oxford, 189–204.
- Bąkowska-Czerner G., Świerzowska A. 2015 Thoth on Magical Gems, (in:) G. Bąkowska-Czerner, G. Roccati, A. Świerzowska (eds), *The Wisdom of Thoth. Magical Text in ancient Mediterranean Civilisations*, Oxford, 3–15.

⁵² Bąkowska-Czerner, Świerzowska 2015, 9.

⁵³ Lapatin 2011, 90, with a commentary to Plutarch's passage on the usefulness and popularity of such gems among the Romans (*Questiones conviviales*, 5.7.681F).

⁵⁴ Maaskant-Kleibrink 1978, no. 1083 and Zwiernlein-Diehl 1986, no. 841, respectively.

⁵⁵ For a contrasting view, see Mastrocinque 2003, 197.

- Benaissa A. 2010 The Onomastic Evidence for the God Hermanubis, *American Studies in Papyrology*, Ann Arbor, 67–76.
- Bonner C. 1950 *Studies in Magical Amulets, chiefly Graeco-Egyptian*, Ann Arbor, London.
- Delatte A., Derchain P. 1964 *Les intailles magiques gréco-égyptiennes*, Paris.
- Furtwängler A. 1896 *Beschreibung der Geschnittenen Steine im Antiquarium*, Berlin.
- Golyźniak P. 2017 *Ancient Engraved Gems in the National Museum in Krakow*, Wiesbaden.
- Hadzisteliou Price T. 1972 An Ionian Silver Ring with Sard, *Antike Kunst* 15, 60–63.
- Henig M. 1975 *The Lewis Collection of Engraved Gemstones in Corpus Christi College, Cambridge*, British Archaeological Series Supplement 1, Oxford.
- Henig M. 2007 *A Corpus of Roman Engraved Gemstones from British Sites*, third edition, British Archaeological Reports British Series, Oxford.
- Henig M., MacGregor A. 2004 *Catalogue of the Engraved Gems and Finger Rings in the Ashmolean Museum*, vol. 2: *Roman*, British Archaeological Reports International Series 1332, Oxford.
- Henig M., Scarisbrick D., Whiting M. 1994 *Classical Gems: Ancient and Modern Intaglios and Cameos in the Fitzwilliam Museum, Cambridge*, Cambridge.
- Lapatin K. 2011 Grylloi, (in:) C. Entwistle, N. Adams (eds), *Gems of Heaven: Recent Research on Engraved Gemstones in Late Antiquity*, London, 88–98.
- LIMC VI 1992 = *Lexicon Iconographicum Mythologiae Classicae*, VI, 1992, Zürich–München–Düsseldorf.
- Maaskant-Kleibrink M. 1978 *Catalogue of the Engraved Gems in the Royal Coin Cabinet, The Hague (2 Bde.)*. *The Greek, Etruscan and Roman Collections*, The Hague–Wiesbaden.
- Mastrocinque A. 2003 *Sylloge Gemmarum Gnosticarum parte I*. Bollettino di Numismatica, Monografia 8.2.1, Rome.
- Mastrocinque A. 2007 *Sylloge Gemmarum Gnosticarum parte II*. Bollettino di Numismatica, Monografia 8.2.2, Rome.
- Mastrocinque A. 2014 *Les intailles magiques du département des Monnaies, Médailles et Antiques*, Paris.
- Michel S. 2001a *Die Magischen Gemmen im Britischen Museum*, London.
- Michel S. 2001b *Bunte Steine - Dunkle Bilder. Magische Gemmen*, Munich.
- Michel S. 2004 *Die Magischen Gemmen. Zu Bildern und Zauberformeln auf geschnittenen Steinen der Antike und Neuzeit*, Berlin.
- Philipp H. 1986 *Mira et Magica. Gemmen im Ägyptischen Museum der Staatlichen Museen. Preußischer Kulturbesitz Berlin-Charlottenburg*, Mainz am Rhein.
- Quaegebeur J. 1986 Thot-Hermès, le dieu le plus grand!, (in:) A. Guillaumont (ed.), *Hommages à Francois Daumas*, Montpellier, 525–544.
- Sena Chiesa G. 1966 *Gemme del Museo Nazionale di Aquileia*, Aquileia.
- Sena Chiesa G., Magni A., Tassinari G. 2009 *Gemme dei civici musei d'arte di Verona*, Rome.
- Śliwa J. 2014 *Magical Gems from the Collection of Constantine Schmidt-Ciążyński and from other Polish Collections*, Kraków.
- Wallis Budge E.A. 1969 *The Gods of the Egyptians*, vol. 1, Dover Publications.
- Wasef S. 2016 *Ancient Egyptian Sacred Ibis Mummies: Evolutionary Mitogenomics Resolves the History of Ancient Farming*, Ph.D. diss., Griffith University, Queensland, Australia.
- Walters H.B. 1926 *Catalogue of Engraved Gems and Cameos, Greek, Etruscan and Roman in the British Museum*, London.
- Weiß C. 1996 *Antike Gemmen in deutschen Sammlungen: Die antiken Gemmen der Sammlung Friedrich Julius Rudolf Bergau im Germanischen Nationalmuseum Nürnberg*, Nürnberg.
- Weiß C. 2007 *Die antiken Gemmen der Sammlung Heinrich Dressel in der Antikensammlung Berlin*, Würzburg.
- Weiß C. 2017 Non grylloi, baskania sunt. On the significance of so-called grylloi/grilli or grylli in Greek and Roman glyptics, (in:) B. van den Bercken, V. Baan (eds), *Engraved gems. From antiquity to the present*, Papers on Archaeology of the Leiden Museum of Antiquities 14, Leiden, 145–53.
- Zwierlein-Diehl E. 1986 *Glaspasten in Martin-von-Wagner-Museum der Universität Würzburg*. Band I: *Abdrücke von antiken und ausgewählten nachantiken Intagli und Kameen*, Munich.
- Zwierlein-Diehl E. 1991 *Die antiken Gemmen des Kunsthistorischen Museums in Wien*, vol. 3, Munich.
- Zwierlein-Diehl E. 2007 *Antike Gemmen und ihr Nachleben*, Berlin–New York.