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The God in the Stone: Gemstone Talismans in Western Magical Traditions

Liz Greene

Abstract: This paper will explore the perceived connection between gemstones and celestial potencies in particular magical currents in the cultures of the West, and the ritual use of gemstone talismans, amulets, and jewellery to invoke, persuade, learn from, or merge with celestial potencies. Underpinning this magical use of precious and semiprecious stones is the idea of correspondences or sympathies between the divine and the mortal realms, most emphasised through the significance of colour – itself understood, in certain currents of thought, to reflect the importance of sight as the organ of perception of the soul and the bridge to the intermediary world of the imagination in which the forms of gods, daimones, and angels can be envisioned through the mediation of those material objects with which they bear the strongest visual resemblance.

This is a conference about celestial magic, and my paper is about magical gemstones and their links with celestial potencies, as they have been understood in particular Western cultural milieux from antiquity to the present day. There is a more or less general agreement about the term 'celestial': it pertains to the heavens – although, in some instances, not the physical heavens as perceived by the eye or through the telescope. The heavens may also be a locus in the *mundus imaginalis*, teeming with daimonic powers, or a series of supernal palaces with floors and walls made of precious stones;¹ or an aspect of the mind of deity, as in Gnostic texts in which the celestial realms and their inhabitants are hypostatized thoughts of God.² But although there may be a general consensus about the

¹ See, for example, the descriptions of the gemstone constituents of the heavens in biblical and late antique Jewish *hekhalot* literature and Babylonian cuneiform texts, discussed below.

² *The Hypostasis of the Archons*, trans. Roger A. Bullard and Bentley Layton, in *The Nag Hammadi Library in English*, ed. James M. Robinson (Leiden: Brill, 1977), pp. 152–160. See also William Romaine Newbold, 'The Descent of Christ in the *Odes of Solomon*', *Journal of Biblical Literature* 31, no. 4 (1912): pp. 168–209.

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meaning of 'celestial', there is no agreed academic definition of the term 'magic'. Various perspectives will be offered in the papers given throughout this conference, and the way in which I will be using the word is a heuristic one, in the context of how gemstones have been, and still are, viewed as innately possessing, or amenable to being infused with, special potencies through their relationship with astral powers. I am loosely following an understanding of magic offered by Rachel Elior: it is concerned with initiating, developing, and maintaining 'the system of bonds and relationships between the revealed and concealed worlds'.³

Sympatheia

From 1890 onward, in his ever-expanding revisions of *The Golden Bough*, Sir James Frazer (1854-1941) presented his ideas about 'sympathetic' magic, under which appellation magical gemstones could be said to belong.⁴ According to Frazer, sympathetic magic 'commits the mistake of assuming that things which resemble each other are the same'.⁵ This 'mistake' rests on the perception of analogies: two apparently unrelated objects, linked through a thematic unity such as colour, shape, or number, are believed to be secretly interconnected and influence each other magically. This type of associative or analogic thinking is certainly involved in the magical lore of gemstones, although whether it is 'mistaken' is a subject of ongoing debate. Frazer does not seem to have given much value to the works of Posidonius, Plotinus, Iamblichus, or Proclus, and never discusses the ancient idea of *sympatheia* as it is presented in these authors: a living universe connected in all its parts through chains of correspondences, or, as Iamblichus himself, borrowing from Plato's *Timaeus*, put it: 'The universe is a single living being'.⁶

Sympatheia, or the doctrine of 'sympathies', emerges in Western philosophical contexts as a complex and sophisticated world-view from at

³ Rachel Elior, 'Mysticism, Magic, and Angelology: The Perception of Angels in Hekhalot Literature', *Jewish Quarterly Review* 1 (1993): pp. 3–53, on p. 16.

⁴ James Frazer, *The Golden Bough: A Study in Magic and Religion* (New York: Macmillan, 1922). For a similar perspective, see also Edward Burnett Tylor, *Primitive Culture: Researches into the Development of Mythology, Philosophy, Religion, Language, Art, and Custom* (London: John Murray, 1871).

⁵ Frazer, *The Golden Bough*, 3:1–2.

⁶ Iamblichus, *De Mysteriis*, trans. Emma C. Clarke, John M. Dillon, and Jackson P. Hershbell (Leiden: Brill, 2004), 4:12. See Plato, *Timaeus*, trans. Benjamin Jowett, in Edith Hamilton and Huntington Cairns (eds.), *The Collected Dialogues of Plato* (Princeton: Princeton University Press, 1989), 30a–e.

least the fifth century BCE onward, dominating the cultures of late antiquity and the alchemical and magical currents of the Middle Ages and early modern period; and virtually all the extant Western literature we possess on the magical properties of gemstones rests on this idea in its various forms. The Greek word *συνπαθεια* is a composite word comprised of *συν*, which means 'with', and *παθειν*, which means 'to experience' or 'to happen'.⁷ *Sympatheia* thus means 'happening with', or 'experiencing with': two apparently unrelated events, conditions, or objects that occur simultaneously and reflect a shared hidden meaning, root, pattern, or divinity. C. G. Jung coined the term 'synchronicity' to strip the old concept of its religious connotations and render it more acceptable to the psychiatric milieu in which he worked.⁸ Another, more poetic presentation of *sympatheia* in the language of the twentieth century comes from the Welsh writer and occultist Arthur Machen (1863–1947). His comments about landscape can equally be applied to gemstones:

The things which we distinguish as qualities or values are inherent in the real environment to make the configuration that they do make with our sensory response to them. There is such a thing as a 'sad' landscape, even when we who look at it are feeling jovial... That is not imputing human attributes to... the environment, but giving proper recognition to the other end of a nexus, of which only one end is organised in our own mind.⁹

The analogy of colour, which dominates the lore of magical gemstones, is not as simple as it might have seemed to Frazer. Some scholars, still identified with Frazer's understanding of magic, have suggested that, in the case of gemstone amulets intended for healing, 'the most important colours

⁷ For the Greek, see Henry George Liddell and Robert Scott, *An Intermediate Greek-English Lexicon* (Oxford: Clarendon Press, 1889; repr. Oxford: Oxford University Press, 1999).

⁸ For Jung's main discussions on synchronicity, see C. G. Jung, 'Letters on Synchronicity', in CW18, *The Symbolic Life*, trans. R. F. C. Hull (London: Routledge & Kegan Paul, 1975), §1193–1212; C. G. Jung, 'On Synchronicity', in CW8, *The Structure and Dynamics of the Psyche*, trans. R. F. C. Hull (London: Routledge & Kegan Paul, 1969), §969–97; C. G. Jung, 'Synchronicity: An Acausal Connecting Principle', CW8, §816–968.

⁹ Arthur Machen, 'The Children of the Pool' (1936), in *Tales of Horror and the Supernatural* (London: John Baker, 1949), pp. 316–335, on p. 334.

of stones were those of human organs and secretions'.¹⁰ But humans are visual animals, as evidenced by the disproportionately large area in the neocortex of the human brain devoted to sight; cats, in contrast, have a correspondingly large area dedicated to hearing, and dogs to scent.¹¹ Our perception of the world around us is ordered and defined by what we see and what we imagine we see, and theories of the nature and importance of sight in the context of both science and philosophy abounded in antiquity. Plato insisted that the power of vision is dependent on the Sun-god's 'influx' of physical light, comparable with the soul's vision of truth through the 'influx' of the wisdom of the same god.¹² Aristotle declared that the visibility of an object depends on the impact of its colour on the movement of the element of air between the object and the eye.¹³ Euclid was convinced that sight is achieved through a cone of rectilinear visual rays emanating from the eye to the object.¹⁴ Iamblichus, in the late third century CE, describes how the visions experienced in theurgic rituals show 'what is not body as body to the eyes of the soul by means of the eyes of the body'.¹⁵ Physical vision is thus the conduit through which the soul engages with what is seen and perceives through it what is unseen: the hidden

¹⁰ Attilio Mastrocinque, 'The Colours of Magical Gems', in *'Gems of Heaven': Recent Research on Engraved Gemstones in Late Antiquity c. AD 200-600*, ed. Chris Entwistle and Noël Adams. British Museum Research Publication 177. (London: Trustees of the British Museum, 2011), pp. 62–68, on p. 62.

¹¹ See Stephen Budiansky, *The Character of Cats* (London: Weidenfeld & Nicholson, 2002), p. 111.

¹² Plato, *Republic* VI:507d-510e, trans. Paul Shorey, in *Plato: Collected Dialogues*, ed. Edith Hamilton and Huntington Cairns (Princeton: Princeton University Press, 1961).

¹³ Aristotle, *On the Soul*, II:7.418a29-419a20, trans. J. A. Smith, in *The Complete Works of Aristotle*, ed. Jonathan Barnes (Princeton: Princeton University Press, 1984), Vol. 1, pp. 641–92.

¹⁴ See W. R. Knorr, 'On the Principle of Linear Perspective in Euclid's *Optics*', *Centaurus* 34 (1991): pp. 194–195; W. R. Knorr, 'Pseudo-Euclidean Reflections in Ancient Optics: A Re-examination of Textual Issues Pertaining to the Euclidean *Optica* and *Catoptrica*', *Physis* 31 (1994): pp. 1–45; A. Jones, 'Peripatetic and Euclidean Theories of the Visual Ray', *Physis* 31, no. 1 (1994): pp. 47–76. For a discussion of ancient theories of visual perception, see A. Mark Smith, *Ptolemy and the Foundations of Ancient Mathematical Optics: A Source-Based Guided Study* (Philadelphia, PA: American Philosophical Society, 1999); see also Dimitris Plantzos, 'Crystals and Lenses in the Graeco-Roman World', *American Journal of Archaeology* 101, no. 3 (1997): pp. 451–464.

¹⁵ Iamblichus, *De Mysteriis* II.6 and V.26.

divinity of whom the manifest object is a symbol. As Elliot Wolfson has put it: 'The mystical vision... is at the core metaphorical or analogical, for it seeks to make the spiritual world "perceptible" to the material by relating an object from the latter to the former'.¹⁶ And so Iamblichus declares that 'the eyes of the body' cannot tolerate a vision of the gods except through the mediation of perceptible symbols such as gemstones.

The *caelum*, or 'Azure Vault', as James Hillman calls it, would, as the abode of the gods and the *symbolon* of the world-soul, inevitably be seen as physically embodied in one or more gemstones in the universal chains of correspondences.¹⁷ This understanding was not limited to the world of Greek philosophy. A Talmudic legend speaks of a magical stone that hung around Abraham's neck:

When a sick man looked upon it, he was cured. And when Abraham passed away, the Lord sealed it in the planet of the sun.¹⁸

Abraham's gemstone became enmeshed with other legends and texts, forming a chain of narratives connected by sympathies of colour and meaning. In Exodus, the heavens under God's feet are 'like a pavement of sapphire'; in Ezekiel, the Chariot-Throne of God is 'as the likeness of a sapphire stone'.¹⁹ Abraham's stone, it was said, had first been given to Adam and Eve when they left Paradise, to remind them of the primordial light they had lost.²⁰ This light, according to an early thirteenth-century Kabbalistic text, is 'in the likeness of blue, which is the completion of all colors'.²¹ Later Noah was given the stone to guide him on the Ark: 'When it

¹⁶ Elliot R. Wolfson, *Through a Speculum That Shines: Vision and Imagination in Medieval Jewish Mysticism* (Princeton: Princeton University Press, 1994), p. 66.

¹⁷ James Hillman, 'The Azure Vault: *Caelum* as Experience', in *Alchemical Psychology* (Dallas, TX: Spring Publications, 2010), pp. 318-42. See C. G. Jung, CW14, *Mysterium Coniunctionis*, trans. R. F. C. Hull (London: Routledge & Kegan Paul, 1970), §761-70 for these and other associations with the *caelum*.

¹⁸ *Babylonian Talmud, Bava Batra* I:16, Jewish Virtual Library (2013), at <http://www.jewishvirtuallibrary.org/jsource/Talmud/bavabatatoc.html> [accessed 1 June 2013]. For an elaboration of this legend see Howard Schwartz, *Tree of Souls: The Mythology of Judaism* (Oxford: Oxford University Press, 2004), pp. 86 and 332; Howard Schwartz, *Reimagining the Bible: The Storytelling of the Rabbis* (Oxford: Oxford University Press, 1998), pp. 17-18.

¹⁹ Exodus 24:10; Ezekiel 1:26.

²⁰ *Targum Yonatan* 6:16; see also *Genesis Rabbah* 31:11.

²¹ R. Azrael of Gerona, *Perush 'Eser Sefirot 'al Derekh She'elah u-Teshuvah*, cited in Wolfson, *Through a Speculum*, p. 299.

[the stone] was dim he knew it was day, but when it was bright, he knew it was night'.²² In the late antique magical text called *Sefer ha-Razim* or 'Book of Secrets', it is related that Noah was given a book 'by Raziel the angel', and inscribed the divine mysteries revealed in the book 'upon a sapphire stone'.²³ In the late twelfth-century text known as *Sefer ha-Bahir* or 'Book of Brightness', the mysterious blue stone is the primal stone of heaven:

What is the earth from which the heavens were graven?

It is the Throne of the Blessed Holy One. It is the Precious Stone and the Sea of Wisdom...

Why is blue chosen above all other colors?

Because blue resembles the sea, the sea resembles the sky, and the sky resembles the Throne of Glory. It is thus written: 'They saw the God of Israel, and under His feet was like a pavement of sapphire, like the essence of heaven in clarity.'²⁴

The blue gemstone – possibly sapphire, but more likely the stone we now know as lapis lazuli – has an ancient association with the highest divinity and the celestial realm in which he has his abode. While this might seem a simple analogy of colour, colour is not simple, and we still do not fully understand why humans respond psychologically and physiologically to different colours of the spectrum in different ways. Like all symbols that have potency, the legendary blue stone contains a profound paradox. It is the least animate of all things in the world, and the furthest away from heaven, yet in legend it is filled with a living light that speaks of the highest realms of spirit. The blue stone is also called *tzohar*, meaning 'brilliance' or 'radiance'. *Tzohar* can also mean a window.²⁵ This enigmatic word with its multiple associations is the same as the title of the great Kabbalistic work of the late thirteenth century, the *Zohar*, in which the divinely infused gemstone, whose light is 'like the radiance of the sun from its sheath', is in the possession of R. Shim'on ben Yochai, the legendary

²² Genesis 6:9–11:32.

²³ *Sefer ha-Razim*, trans. Michael Morgan (Chico, CA: Scholars Press, 1983), 5, p. 17.

²⁴ *Sefer ha-Bahir* 96, in *The Bahir*, trans. Aryeh Kaplan (York Beach, ME: Weiser Books, 1979), pp. 35–36. For an alternative translation, see *The Book of Bahir: Flavius Mithridates' Latin Translation, the Hebrew Text, and an English Version*, ed. Saverio Campanini (Torino: Nino Aragno Editore, 2005), p. 296.

²⁵ Schwartz, *Tree of Souls*, p. lxxiii.

author of the book:²⁶ a stone that is also a window and a text, whose letters and words themselves are precious gems that contain the power of the 'primordial light'.

Tradition and modernity

Belief that gemstones 'do something' or 'make something happen' is no less endemic today than it was in antiquity. Even the *Financial Times* has noticed. In a recently published article, the author observes, with ill-disguised irritation: 'In the jewellery business there's more superstition than at the Salem Witch Trials... Mysticism is definitely in the ascendant.'²⁷ Commercial jewellers often present the magical lore of gemstones in a light-hearted way hedged with disclaimers, as in this example provided by a British company called Pia Jewellery:

Peach aventurine for friendship. Delicately hued semi-precious stones, believed to bring friends together.²⁸

The phrase 'believed to' frees the jeweller from all magical claims, yet the statement nevertheless implies that the gemstone possesses some kind of occult potency. An American website says of the gemstone haematite, a crystalline form of iron oxide, that it

... harmonizes mind, body and spirit. It prevents negative energies from entering the aura. This is an excellent stone to wear while doing ritual work.²⁹

A one-inch piece of polished haematite from this supplier costs \$1.99. This gemstone of ancient lineage, associated in one of the earliest Greek lapidaries with the war-god and his planet, is for sale on the internet at a price that would put Tesco to shame; but haematite is a commonly available gemstone, found wherever iron is mined, and the information offered is not necessarily insincere, any more than when it was offered by the amulet-sellers of antiquity.

²⁶ Daniel C. Matt, trans, *The Zohar*, Vol. 1 (Stanford, CA: Stanford University Press, 2004), 11b, p. 76.

²⁷ James Sherwood, 'Romancing the Stones', *Financial Times*, 25 March 2006, at <http://www.ft.com/cms/s/0/ac3ef5a6-bba4-11da-8f51-0000779e2340.html> [accessed 30 April 2016].

²⁸ Pia Jewellery catalogue, Summer 2013; see www.piajewellery.com [accessed 25 May 2013].

²⁹ <http://www.amerindea.com/gemstones03.html> [accessed 2 June 2013].

The perceived relationship between haematite, its magical powers, and its planetary lord, is based on colour. Declared in the second-century BCE lapidary of Damigeron to be the stone of Mars, haematite became the most common gemstone for inscribed magical amulets in the late antique Mediterranean world, even in Christian milieux.³⁰ Uncut and unpolished, haematite is black, lumpy, and unattractive. But when it is broken, carved, chiselled, or powdered, it turns blood-red, calling to mind the words of Shylock in Shakespeare's *Merchant of Venice*: 'If you prick us, do we not bleed?'.³¹ The name itself is derived from the Greek $\alpha\iota\mu\alpha$, meaning 'blood'. Haematite's relatively consistent astrological tradition is, however, exceptional; in the main, there is little agreement in older texts about which stone 'belongs to' which planet, sign, star, constellation, or decan, or even whether a stone has any astral associations at all.

The first tradition

Three distinct currents, emerging from different cultural contexts, dominate the traditions surrounding magical gemstones. These traditions have become so entangled over the centuries that they now appear as a homogenous lore. The first is the direct association of a gemstone with a celestial potency. Lists of magical stones appear in a Babylonian work from the second millennium BCE known as 'The Tablet About Stones'.³² The Babylonian gods inhabit a heaven made of gemstones: the realm of the sky-god Anu is composed of reddish *luludanitu*, speckled with white and black; the middle heaven, in which the god Bel sits enthroned, is of deep blue *saggilmu*; and the lower heaven is made of a translucent bluish-grey stone, upon which are inscribed 'the constellations of the gods'.³³ An Assyro-Babylonian incantation from the ninth century BCE describes an amulet of seven stones, to be worn on the breast of the king; the number

³⁰ See, for example, the vast number of haematite amulets described in Campbell Bonner, *Studies in Magical Amulets, Chiefly Graeco-Egyptian* (Ann Arbor, MI: University of Michigan Press, 1950).

³¹ William Shakespeare, *The Merchant of Venice*, in *The Oxford Shakespeare*, ed. W. J. Craig (Oxford: Oxford University Press, 1914), Act III, Scene 1.

³² See Erica Reiner, *Astral Magic in Babylonia* (Philadelphia, PA: American Philosophical Society, 1995), p. 29 and the references given there. Only a small portion of this tablet remains.

³³ Cited in Francesca Rochberg, *In the Path of the Moon: Babylonian Celestial Divination and Its Legacy* (Leiden: Brill, 2010), p. 347. The same Babylonian text is also cited in Daphne Arbel, *Beholders of Divine Secrets: Mysticism and Myth in the Hekhalot and Merkavah Literature* (Albany, NY: SUNY Press, 2003), p. 77.

suggests that they are planetary, although no gods are explicitly linked with the stones.

The magnificent stones, the magnificent stones, the stones of abundance and of joy.

Made resplendent for the flesh of the gods.

The *hulalini* stone, the *sirgarru* stone, the *hulalu* stone, the *sandu* stone, the *uknu* stone.

The *dushu* stone, the precious stone *elmeshu*, perfect in celestial beauty...

Placed upon the shining breast of the king as an ornament.

Azagsud, high-priest of Bel, make them shine, make them resplendent!

That they may keep the evil one from the dwelling.³⁴

Sadly, we cannot identify any of these stones, although *elmeshu*, 'perfect in celestial beauty', is probably lapis lazuli, a deep blue stone so prized by the Babylonians that, in the absence of local availability, they imported it from India.³⁵ The technology to facet and 'make shine' the extremely hard form of corundum we now call sapphire was not available in the culture which produced this incantation, nor has any Babylonian sapphire jewellery been found.³⁶ For the Babylonians, the inherent power of the stones remained dormant until they were 'irradiated', which meant, quite literally, that the stone 'should spend the night under the stars' in order to become impregnated with divine effluence and fulfil its magical potential.³⁷ That the Greeks and Romans borrowed from Babylonian gemstone lore is evident from Pliny, who, in his *Natural History*, written in the first century

³⁴ Charles Fossey, *La Magie Assyrienne: Étude suivie de Textes Magiques transcrits* (Paris: Ernest Leroux, 1902), 18.a2, p. 301 (translation from the French mine). For the original cuneiform text, see Sir Henry Creswicke Rawlinson, *The Cuneiform Inscriptions of Western Asia, Vol. IV: A Selection from the Miscellaneous Inscriptions of Assyria* (London: Trustees of the British Museum/R. E. Bowler, 1875), 4:18:3.

³⁵ Entwistle and Adam, eds., *Gems of Heaven*. For the unlikelihood of the stone being sapphire, see Tait, *7000 Years of Jewellery*, p. 161; Richard M. Pearl, *Faceted Gems: A Historical Article on the Methods and Equipment Used in Lapidary* (Roche Press, 2011).

³⁶ See Hugh Tait, ed., *7000 Years of Jewellery* (London: British Museum Press, 2006), p. 161; Richard M. Pearl, *Faceted Gems*.

³⁷ Reiner, *Astral Magic*, pp. 49 and 53.

CE, lists a number of lost Greek and Babylonian sources.³⁸ Whatever stones are described in the cuneiform tablets, Babylonian ideas about their magical potency were transmitted not only to the Greco-Roman world, but also to the Jews during their period of captivity, appearing in biblical texts such as those I quoted earlier.

In the Egyptian Old Kingdom in the third millennium BCE, two microcrystalline quartzes, carnelian and red jasper, were associated with blood and the solar life-force; as Bram Stoker succinctly put it at the end of the nineteenth century, 'The blood *is* the life'.³⁹ This association continues in Etruscan scarab amulets of the fifth century BCE, based on Phoenician and archaic Greek prototypes which were themselves borrowed from Egypt. The Egyptian scarab was a solar creature, linked to the god Khepri, the reborn Sun, whose name means 'He Who Comes Into Being'.⁴⁰



Fig. 1. Carnelian foot amulet fifth to eighth Dynasty, ca. 2465-2100 BCE, Metropolitan Museum of Art; http://www.metmuseum.org/toah/works-of-art/10.130.2355_10.130.2358.

³⁸ Pliny, *Natural History, Books 36-37*, trans. D. E. Eichholz (Cambridge, MA: Harvard University Press, 1962), 9.115; 37.59; 37.25, 34, 90, 114, and 153.

³⁹ Bram Stoker, *Dracula* (Oxford: Oxford University Press, 1983), p. 234.

⁴⁰ See Jan Bergman, 'Ancient Egyptian Theogony', in *Studies in Egyptian Religion: Dedicated to Professor Jan Zandee*, ed. M. S. H. G. Heerma van Voss (Leiden: Brill, 1982), pp. 28–37, on p. 32; Richard H. Wilkinson, *The Complete Gods and Goddesses of Ancient Egypt* (London: Thames & Hudson, 2003), pp. 230–33.



Fig. 2. Khepri scarab pectoral inlaid with carnelian, turquoise, and lapis lazuli with carnelian solar disk; tomb of Tutankhamun, ca. 1327 BCE, Egyptian National Museum, Cairo.

The carnelian foot amulet in Figure 1 was intended to confer speed and power to the limbs of the wearer. The scarab pectoral in Figure 2, found in the tomb of Tutankhamun, underlines the solar significance of the gemstone through the carnelian orb held in the scarab's claws.

The Etruscan scarab amulets of the fifth century BCE, in contrast, were usually engraved with a mythic *historiola*: the figure of Herkle, the Greek Herakles, undergoing one of his Twelve Labours, sometimes with a solar symbol above his head.⁴¹ This carnelian amulet portrays Herkle capturing the Keryneian Hind, the third of the hero's Labours.

⁴¹ For the Etruscan scarab amulets, see Larissa Bonfante, 'Etruscan', in *Reading the Past: Ancient Writing from Cuneiform to the Alphabet*, ed. J. T. Hooker (Berkeley, CA/London: University of California Press/British Museum, 1990), pp. 321–78; Nancy T. de Grummond, 'A Scarab Gem from the Etruscan Artisans' Quarter and Sacred Area at Cetamura del Chianti', *Rasenna: Journal of the Center for Etruscan Studies* 2, no. 1 (2010): p. 7, at <http://scholarworks.umass.edu/cgi/viewcontent.cgi?article=1013&context=rasenna> [accessed 30 April 2016]; Irad Malkin, *The Returns of Odysseus: Colonization and Ethnicity* (Berkeley, CA: University of California Press, 1998), p. 164; Otto Brendel and Francesca R. Serra Ridgway, *Etruscan Art* (New Haven, CT: Yale University Press, 1995), pp. 280–81.



Fig. 3. Etruscan carnelian scarab amulet portraying Herkle slaying a hind, found at a sanctuary at Cetamure del Chianti, ca. fifth century BCE; Museo Archeologico del Chianti Senese.

Eight centuries later, Greco-Egyptian carnelian and red jasper healing amulets like the one below, portraying Herakles battling the Nemean Lion – the first of the hero's Twelve Labours⁴² – demonstrate the longevity of the relationship between red gemstones and solar power and heroic strength.

Like the heavenly blue stone in Jewish lore, red quartzes such as carnelian, sard, and red jasper accrued over the centuries a chain of correspondences linking a gemstone, a celestial power, a colour, a bodily organ, a characterological quality, and a mythic narrative. The association of carnelian with Leo, ruled by the Sun, is still found in many contemporary works on gemstones.⁴³

⁴² The order of the Labours varies according to the source. The order provided by Pseudo-Apollodorus' *Bibliotheka*, probably dating from the first century BCE, is the best-known; for this compendium of Greek myth, see Aubrey Diller, *Studies in Greek Manuscript Tradition* (Amsterdam: Hakkert, 1983), pp. 199–216; R. Scott Smith and Stephen M. Trzaskoma, eds., *Apollodorus' Library and Hyginus' Fabulae: Two Handbooks of Greek Mythology* (Indianapolis, IN: Hackett, 2007). For earlier versions, see Timothy Ganz, *Early Greek Myth: A Guide to Literary and Artistic Sources* (Baltimore, MD: Johns Hopkins University Press, 1993), pp. 374–466.

⁴³ See, among many others, <http://www.birthdaygems.org/jewels-gemstones/carnelian.htm>; <http://www.shinjyujewelry.com/id182.html> [accessed 23 May 2013].



Fig. 4. Greco-Egyptian red jasper amulet portraying Herakles battling the Nemean Lion, ca. first to sixth century CE; Kelsey Museum of Archaeology, 26014.

Most early Greco-Roman lapidaries enumerate the magical properties of gemstones, but offer little in the way of celestial attributions. The oldest extant Greek gemstone treatise, a late fourth-century BCE work by Theophrastus (371–287 BCE) called *On Stones*, is concerned with the physical properties of gems and only refers obliquely to their magical uses, avoiding any discussion of astral connections.⁴⁴ Pliny's *Natural History* does describe, albeit with considerable scepticism, the magical properties of the stones; but it offers little in the way of celestial attributions.⁴⁵ The first-century CE text known as the Orphic *Lithica* is a religious work, written in the hyperbolic style of late antique poetry; it enumerates the magical attributes of around thirty gemstones, but provides no astral attributions.⁴⁶ The collection of Hermetic texts known as *Kuranides*, dated

⁴⁴ Theophrastus, *Theophrastus on Stones*, ed. and trans. Earle R. Caley and John F. C. Richards (Columbus, OH: Ohio State University, 1956). Theophrastus became head of Aristotle's Peripatetic school of philosophy in Athens after Aristotle withdrew from it before his death in 322 BCE. For biographical material, see the Introduction in Caley and Richards, eds., *Theophrastus On Stones*, p. 3.

⁴⁵ Pliny, *Natural History*, Books XXXVI and XXXVII.

⁴⁶ This work has not been translated into English. For a French translation, see Robert Halleux and Jacques Schamp, eds. and trans., *Les Lapidaires Grecs* (Paris:

to the fourth century CE, does, like a few other Hermetic treatises, contain a number of planetary attributions.⁴⁷ The black stone *kynaedius*, for example, declared to be 'Saturnine', is 'black but bright and shining like glass', apparently referring to the volcanic black glass known as obsidian.⁴⁸ But many of the stones are unrecognisable, and the astral associations are neither systematic nor comprehensive.⁴⁹

On the Virtues of Stones, attributed to Damigeron, a Greek author of the second century BCE, is an exception. It only survives in a Latin translation of the first century CE, with many interpolations; only fragments remain of the Greek original. It is in this work that we find the first systematic astrological attributions:

Seven of the stones belong to seven of the Zodiacal signs... The first stone is called *chrysolithos* and belongs to Leo. The second stone is called *astroselinus* and belongs to Cancer, the third, called haematite, to Aries, the fourth, called *keraunius*, to Sagittarius, the fifth, called *demos*, to Taurus, the sixth, called *arabica*, to Virgo, the seventh, called *ostrachitis*, to Capricorn. These you

Les Belles Lettres, 2003), 'Lapidaires Orphique', pp. 1–124, and 'Orphée, *Kérygmes lapidaires*', pp. 125–178. For an early bilingual Greek-Latin edition, see Orpheus, *Orphei Lithica: accedit Damigeron de Lapidibus*, trans. Eugenius Abel (Brussels: Berolini, 1881). See also Ruslan I. Kostov, 'Orphic Lithica as a Source of Late Antiquity Mineralogical Knowledge', *Annual of the University of Mining and Geology* 51, no. 1 (2008): pp. 109–115.

⁴⁷ An English translation of the Latin version of *Kuranides* was published in 1685, entitled *The Magick of Kirani, King of Persia, and of Harpocraton; Containing the Magical and Medicinal Vertues of Stones, Herbs, Fishes, Beasts, and Birds* (repr. Renaissance Astrology Facsimile Editions, ed. Christopher Warnock, 2005). A more recent English translation of Book One is found in Maryse Waegemann, *Amulet and Alphabet: Magical Amulets in the First Book of Cyranides* (Amsterdam: Gieben, 1987). See also Louis Delatte, *Textes latin et vieux français relatifs aux Cyranides* (Paris: Droz, 1942); David Bain, 'Some Textual and Lexical Notes on Cyranides', *Classica et Medievalia* 67 (1996), which on p. 153 n. 11 gives a handy list of the astrological references in the text. For other Hermetic texts in which the three decans of each zodiacal sign are assigned their own gemstones, see Rochberg, *In the Path of the Moon*, p. 157, n. 45.

⁴⁸ *Kuranides* I, p. 30.

⁴⁹ For the Neoplatonic framework of *Kuranides*, see Garth Fowden, *The Egyptian Hermes: A Historical Approach to the Late Pagan Mind* (Cambridge: Cambridge University Press, 1986), pp. 87–89. See also Brian P. Copenhaver, *Hermetica: The Greek Corpus Hermeticum and the Latin Asclepius in a New English Translation* (Cambridge: Cambridge University Press, 1995), pp. xxxiv–xxxv.

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should seek, so that you may have your life in your own safe-keeping at all times, and be ever healthy and carefree.⁵⁰

Damigeron seems to be referring indirectly to the seven planetary rulers of the seven zodiacal signs, and these rulers govern the other five signs as well. But problems begin with the names of the stones. *Chrysolithos*, the gemstone of Leo, means 'golden stone'.⁵¹ It is usually translated as topaz. However, Charles King, a Cambridge scholar writing on gemstone lore in the latter part of the nineteenth century, insisted that *chrysolithos* is yellow sapphire;⁵² George Frederick Kunz, an American gemmologist writing in the early twentieth century and citing a seventeenth-century astrological text, suggested that *chrysolithos*, the stone of the Sun, is in fact the 'yellow Brazilian chrysoberyl';⁵³ Campbell Bonner, one of the most important amulet collectors and cataloguers of the mid-twentieth century, declared that *chrysolithos* is the softer and more easily carved stone we call peridot;⁵⁴ and, more recently, the authors of a paper on the archaeology of the Greco-Roman harbour town of Berenike, state, in accordance with Bonner, that *chrysolithos* 'can only be the warm yellowish green peridot'.⁵⁵ We still cannot identify Damigeron's Leo gemstone with any accuracy – only that it is golden, as befits its planetary lord.

Some of Damigeron's stones can be safely identified. The Martial haematite still bears its ancient name;⁵⁶ *arabica* is probably pearl, as most

⁵⁰ Damigeron, *De Virtutibus Lapidum: The Virtues of Stones*, trans. Patricia Tahil, ed. Joel Radcliffe (Seattle, WA: Ars Obscura, 1989), p. 4.

⁵¹ Damigeron, *De Virtutibus Lapidum*, XLVII and XLVIII, p. 60.

⁵² Charles William King, *The Natural History of Gems or Decorative Stones* (London: Bell & Daldy, 1867), p. 93.

⁵³ George Frederick Kunz, *The Curious Lore of Precious Stones* (Philadelphia, PA: J. B. Lippincott, 1913), pp. 347-48, citing Henrik Rantzau, *Tractatus de genethliacorum thematum judicia* (Frankfurt: Nicolaus Hoffman, 1633), pp. 46-55.

⁵⁴ Bonner, *Studies in Magical Amulets*, p. 205. See also Kostov, 'Orphic Lithica', for the equation of *chrysolithos* with peridot.

⁵⁵ Willemina Z. Wendrich, Roger S. Bagnall, René T. J. Cappers, James A. Harrell, Steven E. Sidebotham, and Roberta S. Tomber, 'Bernike Crossroads: The Integration of Information', in *Excavating Asian History: Interdisciplinary Studies in Archaeology and History*, ed. Norman Yoffee and Bradley L. Crowell (Tucson, AZ: University of Arizona Press, 2006), pp. 15-66, on p. 36.

⁵⁶ Another example of the association of Mars with haematite can be found in the text known as *The Alexander Romance*, a romanticised biography of Alexander the Great, dated to around the first to third centuries CE; see Richard Stoneman, trans., *The Greek Alexander Romance* (London: Penguin, 1991), p. 38.

of the pearls in Damigeron's world came from the Arabian Gulf;⁵⁷ and *astroselinus* is probably selenite, a translucent stone related to alabaster. *Ostrachitis* or 'oyster-stone' is the petrified shell of the oyster, possibly reflecting the idea of melothesia: the correspondence between a heavenly body and an organ in the human body, still found today in many astrological texts concerned with *sumpatheia*.⁵⁸ According to the traditions of melothesia, Saturn, as lord of Capricorn, governs the skeletal system, giving structure to the human body,⁵⁹ and is reflected in the fossilised shell of the oyster, bonelike in its colour and brittle friability.⁶⁰ But the Jupiterian *keraunios* or 'thunder-stone' has proven impossible to identify. And the Venusian *demos* – a word which means a tract of land – was unrecognisable even to Damigeron's Latin translator, who declared it to be *ignotus plane*: 'plainly unknown'.

This confusion is not surprising. Every culture assigns its own values and perceptions to the objects of the natural world; some gemstones familiar to us now were unknown in the Mediterranean world; and some,

⁵⁷ For the Arabian Gulf as the source of pearls, see Theophrastus, *On Stones*, pp. 134-35.

⁵⁸ The idea of melothesia is expressed in various texts contemporary with the Latin translation of Damigeron, including Marcus Manilius, *Astronomica*, trans. G. P. Goold (Cambridge, MA: Harvard University Press, 1989), 2.453-65, and Claudius Ptolemy, *Tetrabiblos*, trans. F. E. Robbins (Cambridge, MA: Harvard University Press, 1940), 3:12. For melothesia, see Auguste Bouché-Leclercq, *L'astrologie greque* (Paris: Leroux, 1899), pp. 318–25; H. G. Schipper, 'Melothesia: A Chapter of Manichaean Astrology in the West', in *Augustine and Manichaeism in the Latin West*, ed. Johannes van Oort et al. (Leiden: Brill, 2001), pp. 195–204; Otto E. Neugebauer, 'Melothesia and Dodecatemoria', in *Studia biblica et orientalia, Vol. 3: Oriens Antiquus* (Rome: Pontificio Instituto Biblico, 1959); Erica Reiner, 'Two Babylonian Precursors of Astrology', *Nouvelles Assyriologiques Brèves et Utilitaires* (1993): pp. 21–22; Mladen Popovic, *Reading the Human Body: Physiognomics and Astrology in the Dead Sea Scrolls* (Leiden: Brill, 2007), pp. 164–70.

⁵⁹ For this tradition about Saturn, see, among others, Fred Gettings, *The Secret Zodiac: The Hidden Art in Medieval Astrology* (London: Routledge, 1987), p. 137.

⁶⁰ See Nathaniel Fish Moore, *Ancient Mineralogy: Or, An Inquiry Respecting Mineral Substances Mentioned by the Ancients, with Occasional Remarks on the Uses to Which They Were Applied* (New York, NY: G. & C. Carvill, 1834), p. 175 and n. 3. Moore, who was Professor of Greek and Latin at Columbia College, New York, points out that Pliny compares this stone with *cadmitis*, which is identical except for the latter's 'blisters of an azure colour' (Pliny, *Natural History*, 37.10, 151), and that Dioscorides also describes *ostrachitis* as resembling a shell.

through extreme hardness or brittleness, defied the technology of the time in terms of cutting and polishing.⁶¹ Yet even recently 'discovered' stones can have their own magical traditions within cultures where no transmission of lore from Mesopotamia, Egypt, Greece, Rome, Persia, or India can be demonstrated. It would seem to be the *idea* of the relationship between gemstones and the heavens, rather than a specific association between one stone and one heavenly potency, that exhibits such extraordinary transcultural persistence.

An example is labradorite, a feldspar found primarily around the Arctic Circle. This stone is described in some modern manuals as one of the gemstones of Scorpio; it is called 'the temple of the stars', and is said to confer on the wearer the power to open the mind to hidden realities.⁶² The ancient Mediterranean world has, so far, yielded no artefact, amuletic or otherwise, made of labradorite. However, the Inuit of the Labrador Peninsula believe that the wandering spirits of the dead, who appear to the living as the celestial *aurora borealis*, were once trapped within the stone; an Inuit warrior freed most of them with a mighty blow of his spear, but some of the spirit-lights remained imprisoned.⁶³ Labradorite only entered

⁶¹ Diamonds, for example, were only obtainable from India with great difficulty before the sixth century CE, and made their first, and very scarce, appearance in Roman jewellery between the first and third centuries CE. See George E. Harlow, 'Following the History of Diamonds', in George E. Harlow, ed. *The Nature of Diamonds* (Cambridge: Cambridge University Press, 1998), pp. 116–135.

⁶² See, for example, Barbara Case, *Making Jewelry with Gemstone Beads* (Cincinnati, OH: David & Charles, 2007), pp. 11 and 80, where Case describes labradorite as 'the temple of the stars', reputed to 'enhance our awareness of and attunement to the cycles and rhythms of life'. See also the description of labradorite and its association with Scorpio at

<http://www.shimmerlings.com/gemstones/labradorite/> [accessed 2 May 2016] where it is said to awaken 'awareness of one's innate magical powers'; <http://gemstone-dictionary.com/labradorite.php> [accessed 22 May 2013], where labradorite is also associated with Scorpio and is 'a gemstone of destiny because it opens up your psychic abilities by connecting you to the Universal flow of energies that permeates our world and universe'; and

<http://www.vegaattractions.com/crystals/gems/labradorite.html> [accessed 1 June 2013], where it is said to be 'one of the best stones for enhancing the Scorpio personality'.

⁶³ For this legend, see Peter Budgell, 'Labradorite: Aurora Borealis Entombed in Stone', *TechnoMine Mining Technology*, 23 April 2007, at <http://technology.infomine.com/articles/1/947/labradorite.mineral.labrador/labradorite.aurora.borealis.aspx> [accessed 2 May 2016]; *Llewellyn's Magical Almanac*

Western cultural awareness in 1770, when the Inuit revealed it to the missionaries of the Moravian Church. But in this Arctic world, as in the ancient societies of the Mediterranean, an intimate relationship has developed between stone, colour, celestial potency, and mythic narrative, in a culture entirely unrelated to ancient Western gemstone lore.

With the arrival of Arab learning in the West in the twelfth and thirteenth centuries, new works, from grimoires and alchemical treatises to philosophical expositions and healing compendia, were produced describing the magical attributes of gemstones. Some are replete with magical spells, some are linked with alchemy, some concern the invocation of daimonic and angelic presences, and some are dedicated to healing. Although there is little accord in terms of their allocation to astral potencies, these works concur in the belief that certain gemstones possess 'occult' powers related to the heavens. The world of Renaissance Italy enthusiastically embraced late antiquity's fascination with gemstone amulets, and large collections of surviving Hellenistic gems were amassed by esoterically inclined rulers like Lorenzo de' Medici (1449-1492) and prelates such as Pietro Barbo (1517-71), later Pope Paul II, who possessed, according to Vasari, over a thousand ancient amulets, intaglios, and cameos, and died from a cold caught from the weight and chill of his rings.⁶⁴

In the late fifteenth century, Marsilio Ficino (1433-1499) encapsulated the Platonic framework of *sumpatheia* by declaring:

There is nothing so deformed in the whole living world that it has no soul, no gift of soul contained in it. The congruities of these forms, therefore... are what Zoroaster called the divine lure, and Synesius agreed, calling them magic charms.⁶⁵

(Woodbury, MN: Llewellyn, 2009), p. 27. Another, slightly different version can be found in Jenifer Altman, *Gem and Stone: Jewels of Earth, Sea, and Sky* (San Francisco, CA: Chronicle Books, 2012), p. 74: 'Labradorite fell from the Northern Lights and... each single specimen holds a blueprint of the universe within itself'.

⁶⁴ Patricia Aakhus, 'Astral Magic in the Renaissance: Gems, Poetry, and Patronage of Lorenzo de' Medici', *Magic, Ritual, and Witchcraft* 3, no. 2 (Winter 2008): pp. 185-206, on pp. 191-2. See also Laurie Fusco and Gino Corti, *Lorenzo de' Medici, Collector and Antiquarian* (Cambridge: Cambridge University Press, 2006).

⁶⁵ Marsilio Ficino, *The Book of Life*, trans. Charles Boer (Dallas, TX: Spring Publications, 1980), p. 87.

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The World Soul, according to Ficino, generates and animates all the myriad forms of matter, and drawing down celestial 'gifts' requires selecting their 'congruities': objects in natural sympathy with the gifts desired. Wearing, and performing rituals with gemstones with the right planetary 'congruities' facilitate healing and protection. Coral and blue chalcedony, for example, belonging respectively to Venus and Jupiter, 'work against the illusions of the black bile' imposed by Saturn, while the amethyst, also a Jupiterian stone, can protect against lightning.⁶⁶ Colours, according to Ficino, 'belong to the stars', and are especially strong in particular gemstones because of their likeness to the heavens.⁶⁷

Drawing on Arab magical texts such as the eleventh-century *Picatrix*, and on various medieval Jewish Kabbalistic works, Henry Cornelius Agrippa (1486-1535), writing early in the sixteenth century, produced *De occulta philosophia*, his great 'junction' text of magic, alchemy, and astrology, synthesising threads from many earlier traditions and providing a cornucopia from which later magi, from his time to the present, have begged, borrowed, and stolen. Agrippa displayed a refreshing pluralism about planetary gemstones, all of which, by his time, could be faceted:

We must know, that every stone... is not governed by one star alone, but many of them receive influence, not separated, but conjoined, from many stars.⁶⁸

Chalcedony, according to Agrippa, is 'under' Saturn and Mercury, emerald 'under' Jupiter, Venus, and Mercury, and chrysolite 'under' the Sun, Venus, and Mercury. Moreover, each planet 'receives' more than one stone. Jupiter 'receives' not only sapphire, but also aquamarine, emerald, and green jasper, while the Moon 'receives' selenite, pearl, and aquamarine.⁶⁹ Some of these associations draw on ancient lapidaries, and some on Arab and Jewish sources. Agrippa resolved the contradictions between the older texts through an inclusiveness that allows multiple relationships connected by what Jung, in the twentieth century, understood as 'archetypal' themes: Mars, for example, which 'receives' haematite, diamond, and red jasper,

⁶⁶ Ficino, *The Book of Life*, p. 123.

⁶⁷ Ficino, *The Book of Life*, p. 120.

⁶⁸ Henry Cornelius Agrippa, *Three Books of Occult Philosophy*, trans. James Freake, ed. Donald Tyson (St. Paul, MN: Llewellyn, 2004), I.32, p. 99.

⁶⁹ Agrippa, *Three Books of Occult Philosophy*, I.24, p. 81; I.26, p. 86; I.27, p. 89.

rules 'all fiery, red, and sulphurous things', and Mercury rules stones 'which are of divers colours'.⁷⁰

I am going to pass over the alchemical literature from this period, because its rich corpus of writings on planetary gemstones, metals, and soul transformations would merit a separate paper to do the subject any justice. I will only briefly mention Paracelsus (1493-1541), who, in the sixteenth century, demonstrated the ways in which gemstones could be seamlessly incorporated into the framework of the alchemical *opus* through the idea that the heavens are secretly contained within the stones. Gemstones, according to Paracelsus, carry within them the incorruptible spirits of the stars, which must be 'extracted' through various chemical processes in order to reveal their innate perfection and healing powers.

Precious stones... have the nearest place to the heavenly or sidereal ones in point of perfection, purity, beauty, brightness, virtue, power of withstanding fire, and incorruptibility... It [the incorruptible spirit] should therefore be sought and found in the stones, be recognized in them and extracted from them... For then it is no longer a stone, but an elaborate and perfect metal, comparable to the stars of heaven, which are themselves, as it were, stones separated from those of earth.⁷¹

From the late seventeenth century onward, belief in the magical power of gemstones began to wane; they became historical artefacts as well as subjects for a more 'scientific' investigation of their nature.⁷² But the magical lore of gemstones survived the Enlightenment. A number of important archaeological discoveries in Egypt and the Middle East in the late nineteenth century generated a plethora of new scholarly works on magical amulets, and several important collections of stones were

⁷⁰ Agrippa, *Three Books of Occult Philosophy*, I.27, p. 89; I.29, p. 94. For planetary themes as archetypes, see C. G. Jung, CW9i.1, *The Archetypes and the Collective Unconscious*, trans. R. F. C. Hull (London: Routledge & Kegan Paul, 1968), §606; Jung, CW14, §308.

⁷¹ Paracelsus, *The Hermetic and Alchemical Writings of Paracelsus*, trans. and ed. A. E. Waite (Chicago, IL: Laurence Scott & Co., 1910), Vol. 1, *Coelum Philosophorum* Part II, pp. 16–18.

⁷² See, for example, Robert Boyle, *An Essay About the Origine and Virtues of Gems, Wherein Are Propos'd and Historically Illustrated Some Conjectures About the Consistence of the Matter of Precious Stones, and the Subjects Wherein Their Chiefest Virtues Reside* (London: William Godbid, 1672).

published and analysed.⁷³ Many of these works, as befits their cultural context, are concerned solely with cataloguing ancient examples in important collections.⁷⁴ These catalogues make no magical claims, and there is usually little or no knowledge of astrology demonstrated by the authors.⁷⁵ But other works from this period, emerging from the waters of the occult revival, resurrect the old magical lore. Isidore Kozminsky's *The Magic and Science of Jewels and Stones*, for example, presents the astrological significance of the gemstones as a single ancient tradition, assigning one zodiacal sign to each stone.⁷⁶ Moss agate is 'under the celestial Taurus', and pyrite is 'martial' and 'attached to the zodiacal Scorpio'.⁷⁷ Faced with continuing disagreement about the astral correlations of the stones, Aleister Crowley (1875-1947) adopted Agrippa's pluralistic approach. His list of gemstone attributions deemed suitable for ritual work includes the following:

Lapis Lazuli is of the blue violet of the highest form of Jupiter... The Amethyst is the violet of Jupiter. The Topaz is of the gold of the Sun. The Emerald is of the green of Venus. Turquoise is the blue of Venus. The Opal has the varied colours attributed to Mercury. Agate has the Mercurial yellow...

⁷³ See, as a typical example, Lady Helena Carnegie, ed., *Catalogue of the Collection of Antique Gems Formed by James Ninth Earl of Southesk*, 2 vols (London: Bernard Quaritch, 1908).

⁷⁴ See, for example, J. Henry Middleton, ed., *The Lewis Collection of Gems and Rings in the Possession of Corpus Christi College, Cambridge* (Cambridge: C. J. Clay & Sons, Cambridge University Warehouse, 1892); Charles William King, *The Natural History of Precious Stones and of the Precious Metals* (London: Bell & Daldy, 1867); Carnegie, *Catalogue of the Collection of Antique Gems Formed by James Ninth Earl of Southesk*; Kunz, *The Curious Lore of Precious Stones*; E. A. Wallis Budge, *Amulets and Superstitions: The Original Texts with Translations and Descriptions of a Long Series of Egyptian, Sumerian, Hebrew, Christian, Gnostic and Muslim Amulets and Talismans and Magical Figures, with Chapters on the Evil Eye, the Origin of the Amulet, the Pentagon, the Swastika, the Cross (Pagan and Christian), the Properties of Stones, Rings, Divination, Numbers, the Kabbalah, Ancient Astrology, etc.* (Oxford: Oxford University Press, 1930).

⁷⁵ See Kunz, *The Curious Lore of Precious Stones*; Budge, *Amulets and Superstitions*.

⁷⁶ Isidore Kozminsky, *The Magic and Science of Jewels and Stones* (1922; repr. in 2 volumes, San Rafael, CA: Cassandra Press, 1988).

⁷⁷ Kozminsky, *Magic and Science of Jewels and Stones*, Vol. 2, pp. 28, 74.

The Moonstone is a direct image of the Moon. Pearl and Crystal [rock quartz] are given for the suggestion of purity⁷⁸

Crowley's inclusiveness, limited only by analogies of colour, encouraged the adoption, not only of newly discovered planets such as Uranus and Neptune, but of newly discovered gemstones with no ancient tradition. But the so-called 'tradition' currently offered by many jewellers, in which twelve 'birthstones' are allocated to the twelve zodiacal signs and the twelve months of the year – diamond, for example, is given to April and Aries, emerald to May and Taurus, amethyst to February and Aquarius, and ruby to July and Leo – is actually a list created by the American National Association of Jewellers in Kansas in 1912 for the purpose of promoting expensive precious stones.⁷⁹ There *are* older traditions about so-called 'birthstones', which I will discuss later, but they bear no relationship to this list.

The second tradition

The second tradition involving magical gemstones concerns the use of images, words, names, and letters inscribed on the stones, and it is to this tradition that most current scholarly literature is directed. During the 1950s, dedicated gem historians began systematically cataloguing gemstone amulets according to type and cultural provenance.⁸⁰ But defining a 'magical' gem, in contrast to one intended purely for 'ornament', is a modern distinction that may be entirely misleading when applied to older cultures; and the frailty of the perceived boundaries between religious, magical, astrological, and medical spheres of human activity is not always acknowledged in the scholarly literature. Many antique gems have been ignored because there are no recognisable magical images, words, or symbols inscribed on them. Given the ubiquity of various forms of magic in antiquity, and the complex ways in which religious ideas and symbols – including astral symbols – were seamlessly integrated into everyday life, this may be entirely anachronistic. As Thales remarked in

⁷⁸ Aleister Crowley, *777 and Other Qabalistic Writings of Aleister Crowley* (York Beach, ME: Weiserbooks, 1977), pp. 102–105.

⁷⁹ See, for example, <http://www.pledgejewellers.co.uk/guide-to-birthstones.html> [accessed 2 May 2016]. The discrepancy between the months and the zodiacal signs, which overlap the last part of one month and the first part of the next, is usually ignored.

⁸⁰ See, for example, Bonner, *Studies in Magical Amulets*.

the sixth century BCE, 'All things are full of gods',⁸¹ and thus all gems, inscribed or not, may reveal a god in the stone.

The astrological dimensions of engraved gemstone amulets have also been overlooked if they do not display overtly zodiacal images. There *are* a few extant amulets where a zodiacal sign seems to be indicated, such as these three late antique stones in the British Museum's collections.



Fig. 5. Astrological gemstone amulets from the British Museum collections.

The green jasper amulet on the left portrays a leaping ram with a lunar crescent and star, and the magical name 'Abraxas'. The yellow jasper amulets in the centre and on the right display a crab; the central amulet portrays a crescent Moon in the crab's right claw, while the amulet on the right has engraved on the reverse *BARCHAI*, a magical name for the Moon-goddess, also found in the Greek Magical Papyri.⁸² But when a scene from a mythic historiola is portrayed, it may not be recognised as a reference to a planetary god. Christopher Faraone suggests that 'astrology probably always played a role in the Chnoumis amulets',⁸³ and it is likely that it played a role in a great many gemstones on which only the figure of a deity is inscribed. The astrological dimension may be oblique or simply implicit, as in the case of a haematite healing amulet in the British Museum

⁸¹ Thales, cited in Aristotle, *On the Soul*, 1.5.411a8, Plato, *Laws*, trans. A. E. Taylor, in Hamilton & Cairns (eds.), *The Collected Dialogues of Plato*, pp. 1225–1516, 10.899b9, and Iamblichus, *De mysteriis*, I.9.5–6.

⁸² For more on these three gemstone amulets, see S. Michel-von Dungern, 'Studies on Magical Amulets', *Recent Research on Engraved Gemstones in Late Antiquity c. AD 200*, no. 600 (2011): pp. 82–83.

⁸³ Christopher Faraone, 'Text, Image, and Medium: The Evolution of Graeco-Roman Magical Gemstones', in Entwistle and Adam, eds., *Gems of Heaven*, pp. 50–61, on p. 52.

collection, portraying the war-god Ares (Mars) and bearing an inscription stating: 'Ares stopped the liver's pains'.⁸⁴

By late antiquity, engraved gemstone amulets, which seem to have originated in Egypt, had proliferated all over the Roman-ruled world.⁸⁵ The sudden popularity of these amulets may be related, not to some sudden conversion to magic, but to a shift from oral to scribal magic, with an accompanying belief in the magical potency of letters, words, and glyphs. Engraving an incantation on a gemstone made it solid, and represented a symbolic re-enactment of the original creation of the world.⁸⁶

An interesting illustration of this emphasis on engraving is a blue chalcedony amulet of the Sun-god with seven rays on his head (Fig. 6), signifying his role as noetic cosmocrator of the seven planets. At the end of each ray is one of the seven Greek vowels, implying a direct link between the planets and their gods, the divine potency of the alphabet, and the kinds of rituals in which the amulet might have been used – including the use of sounds involving the vowels, or what Joscelyn Godwin has called 'vowel-song'.⁸⁷ Over five thousand engraved gemstone amulets are known in dozens of private and public collections all over the world, and, given the permissiveness of previous centuries concerning objects stolen from tombs and archaeological sites, a great many more are probably uncatalogued. The chalcedony amulet I have just described is not unique.

⁸⁴ Haematite Ares amulet, British Museum PE G 112, reproduced in Mastrocinque, 'The Colours of Magical Gems', p. 63. See also Christopher Faraone, 'Text, Image, and Medium', pp. 50–61, on p. 52. Ares is the Greek name for the Roman war-god Mars, after whom the planet is named. The gem is clearly magical, but there is no specific astrological inscription engraved on it. However, there is equally no reason why it is not directly related to the planet as well as its lord and therefore constitutes an example of astral healing magic.

⁸⁵ The centre for amulet production seems to have been Alexandria; see Carla Sfameni, 'Magic in Late Antiquity: The Evidence of Magical Gems', in *Religious Diversity in Late Antiquity*, ed. David M. Gwynn and Susanne Bangert (Leiden: Brill, 2010), pp. 435–473, on p. 443.

⁸⁶ See Roy Kotansky, 'Incantations and Prayers for Salvation on Inscribed Greek Amulets', in *Magika Hiera*, ed. Christopher A. Faraone and Dirk Obbink (New York, NY: Oxford University Press, 1991), p. 114; Andrew T. Wilburn, *Materia Magica: The Archaeology of Magic in Roman Egypt, Cyprus, and Spain* (Ann Arbor, MI: University of Michigan Press, 2012), pp. 65–66.

⁸⁷ For textual support for the late antique association of planets and vowels, and further sources on the correspondences between vowels, sounds, colours, and planets, see Joscelyn Godwin, *The Mystery of the Seven Vowels: In Theory and Practice* (Grand Rapids, MI: Phanes Press, 1991).

The engraved image of the astral divinity is often, but not always, accompanied by magical names, *characteres*, astral symbols, and *voces magicae*. Where Jewish influence predominates, there are no images of divinities; Hebrew letters, angelic and Divine Names, and simple diagrams, such as the *menorah* or seven-branched candelabrum, are inscribed on the



Fig. 6. Blue chalcedony amulet portraying the Sun-god. The reverse displays magical names and *characteres*. Taubman Collection 223, University of Michigan.

stone.⁸⁸ The magic of the Roman-ruled late antique world was henotheistic and thoroughly cosmopolitan; and some gemstone amulets combine with enthusiastic promiscuity the image of an Egyptian god, Greek *voces magicae*, astral symbols, and Hebrew Divine Names in a kind of syncretic soup that makes the religious provenance difficult to determine. Particularly popular were hybrid deities combining solar symbolism with names of power such as Abrasax, Iao, and Chnoumis. Amulets bearing such inscriptions were, in the early to mid-twentieth century, mistakenly labelled 'Gnostic'.⁸⁹ But Chnoumis was never the exclusive property of the Gnostic sects, nor was Abrasax, a magical name whose Greek letters, read as numbers, total 365, the number of days in the annual solar cycle.

Hybrid solar deities such as Chnoumis – a celestial being portrayed as a serpent with a lion's head crowned with seven rays – are coupled with

⁸⁸ See Gideon Bohak, *Ancient Jewish Magic: A History* (Cambridge: Cambridge University Press, 2008), pp. 159–161.

⁸⁹ See, for example, Campbell Bonner, 'Liturgical Fragments on Gnostic Amulets', *Harvard Theological Review* 25, no. 4 (1932): pp. 362–367.

names of power, especially IAO, the Greek rendition of the Hebrew YHVH. The red jasper Chnoumis amulet below (Fig. 7, left), from the third century CE, is inscribed with the name IAO;⁹⁰ the serpentine Chnoumis amulet (Fig. 7, centre), portraying the god with seven eggs and twelve rays – presumably the seven planets and the twelve zodiacal signs – is likewise inscribed with IAO;⁹¹ and the haematite cock-headed anguipede or snake-legged being (Fig. 7, right) is inscribed with the names AIEH and IAHO, both, like IAO, equivalent to the Hebrew YHVH.⁹²



Fig. 7. Left, red jasper Chnoumis amulet, third century CE. Centre, serpentine Chnoumis amulet with seven eggs and twelve rays. Right, haematite anguipede, first to sixth centuries CE.

Even early Christian amulets display this kind of syncretism.⁹³ It is the combination of symbol, writing, and stone, rather than the stone alone, which was perceived as possessing the greatest magical power. Many scholarly works on engraved gemstone amulets are not concerned with the reasons why a particular stone was chosen.⁹⁴ This might suggest that any

⁹⁰ Red jasper Chnoumis, third century CE, University of Michigan US-AA-SCL-Bonner 46.

⁹¹ Serpentine Chnoumis, first and sixth centuries CE, Kelsey Museum of Archaeology 26118.

⁹² Haematite anguipede, first to sixth centuries CE, Kelsey Museum of Archaeology, 26054.

⁹³ See, for example, the gemstone amulet engraved with Christ on the cross accompanied by *voces magicae*, illustrated in Sfameni, 'Magic in Late Antiquity', p. 466, Fig. 10.

⁹⁴ Exceptions are Mastrocinque, 'The Colours of Magical Gems', and Faraone, 'Text, Image, and Medium'.

old stone would do, provided the images and symbols were inscribed correctly. But certain stones do seem to have been favoured for particular purposes and specific astral potencies, even if they were difficult to obtain locally. Some of the *Greek Magical Papyri (PGM)* as well as the late antique lapidaries, offer careful instructions on how to engrave and use a particular stone in the context of a ritual.⁹⁵ An amulet similar to the Chnoumis amulet shown below (Fig. 8) is described in the late antique lapidary known as the *Lapidary of Socrates and Dionysius*,⁹⁶ dating from the third century CE. It is intended to heal stomach problems, and the image should be engraved on blue chalcedony, the 'colour of air'.⁹⁷



Fig. 8. Blue chalcedony Chnoumis amulet, first to sixth centuries CE.

⁹⁵ See, for example, Hans Dieter Betz, *The Greek magical papyri in translation, including the Demotic spells*. Vol. 1 (Chicago: University of Chicago Press, 1996), 5.477–58, p. 109, which instructs the adept to engrave on an agate an image of the syncretic Greco-Egyptian deity Sarapis, in order to facilitate divinatory dreams.

⁹⁶ For this lapidary, including the original Greek and a French translation, see Halleux and Schamp, *Les Lapidaires Grecs*, pp. 139–177.

⁹⁷ *The Lapidary of Socrates and Dionysius*, 35, in Halleux and Schamp, *Les Lapidaires Grecs*, p. 170. For the frequency of this gemstone among Chnoumis amulets, see Bonner, *Studies in Magical Amulets*, p. 60. Blue chalcedony Chnoumis amulet, first to sixth century CE, British Museum BMG173.

Engraved gemstone amulets were closely linked to rituals intended to procure the usual material goals,⁹⁸ but they were also used in theurgic efforts to transform the soul through a direct experience of divinity. The stones were not static objects that 'did' something if worn; they were dynamic participants in the ritual, ensuring that the god in the stone would join in. This is made clear in the *Greek Magical Papyri*, some of which offer instructions on how to use a particular engraved gemstone in the context of a ritual. For example, *PGM 5* instructs the adept to engrave on an agate an image of the syncretic deity Sarapis, a god devised during the third century BCE by King Ptolemy I of Egypt to unify the Greek and Egyptian pantheons. Agate, or *achates* in Greek, is a generic term used to describe a number of patterned and striped microcrystalline quartzes, including the spotted green and red jasper known as bloodstone.⁹⁹

The text of *PGM 5* instructs that the amulet, similar to the one shown in Fig. 9, should be utilised in a ritual in which divinatory dreams are invoked, and that the god's image is accompanied by his magical names.¹⁰⁰

Many engraved gemstone amulets were intended to cure a particular illness or protect a bodily organ.¹⁰¹ Chief among the potencies invoked for healing was Chnoumis. His seven-rayed crown suggests that he symbolises the 'Intelligible' or spiritual Sun: the great cosmic life-force embodied on the earthly level by the Sun in the heavens.¹⁰² His amulets are sometimes made of carnelian or red jasper, but they are also often carved from bloodstone, also called 'heliotrope' after the *heliotropium*, a plant whose flower turns its head to follow the Sun, and which was named, along with bloodstone, as the natural *sunthemata* or 'tokens' of solar power by the Neoplatonist Proclus in the fifth century CE.¹⁰³ The red flecks in

⁹⁸ See Carla Sfameni, 'Magic in Late Antiquity', pp. 435–473.

⁹⁹ See Faraone, 'Text, Image, and Medium', p. 60 n. 54.

¹⁰⁰ Betz, *PGM 5.477-58*, p. 109.

¹⁰¹ See Bonner, *Studies in Magical Amulets*, pp. 51–94, consisting of three chapters on medical amulets.

¹⁰² For Chnoumis' association with the first decan of Leo, see Michel-von Dungern, 'Studies on Magical Amulets', p. 83. For the 'noetic' or 'spiritual' Sun in Neoplatonic and Greco-Egyptian magical texts, see, for example, Hans Levy, *Chaldaean Oracles and Theurgy: Mysticism, Magic and Platonism in the Later Roman Empire* (Paris: Institut d'Études Augustiniennes, 2011), pp. 201–204, 409–430; Hans Dieter Betz, *The "Mithras Liturgy": Text, Translation, and Commentary* (Tübingen: Mohr Siebeck, 2003).

¹⁰³ Proclus, *Commentary on Plato's Timaeus*, ed. and trans. Harold Tarrant (Cambridge: Cambridge University Press, 2007), I.3.10, p. 206.

bloodstone may be related, as the name suggests, to blood, and thus to the solar life-force. But the predominantly green colour of this jasper implies that the world of nature, *phusis*, was perceived as the physical vehicle in which this creative cosmic potency is both embedded and embodied.



Fig. 9. Bloodstone amulet with Sarapis and *voces magicae*, first to second centuries CE.¹⁰⁴

The weaving of mythic narratives continued in Christian contexts. The bloodstone amulet below (Fig. 10), mirroring with precision the bloodstone amulet of Sarapis described above, portrays Christ healing the bleeding woman described in Mark and Luke; quotations from these Gospels are engraved on the amulet.¹⁰⁵

¹⁰⁴ Bloodstone Sarapis amulet, Roman-Egyptian provenance, first to second centuries CE, Yale Babylonian Collection 2492.

¹⁰⁵ Mark 5:25–35 and Luke 8:43–48. Some words from the Gospels are engraved on the amulet as words of power, in much the same manner as the *voces magicae* on the Greco-Egyptian amulets. For another Christian bloodstone amulet, see in Jeffrey Spier, ed., *Picturing the Bible: The Earliest Christian Art* (New Haven, CT: Yale University Press, 2007), on p. 228.



Fig. 10. Christian bloodstone amulet, sixth century Byzantine from Egypt, Metropolitan Museum of Art 17.190.491.

The stone is the same, but the narrative has changed. The *voces magicae* have become quotations from the Gospels; as Origen declared in the third century CE, 'The name of Jesus is so powerful against the demons that sometimes it is effective even when pronounced by bad men'.¹⁰⁶ The bloodstone, in Christian lore, was believed to be created when drops of blood from Christ's wounds fell on a piece of green jasper lying in the earth beneath the cross.¹⁰⁷ Colour, narrative, celestial potency, image, language, and human suffering and aspiration are woven into a chain of sympathies that, once again, transform the gemstone into a potent intermediary spanning the abyss between revealed and concealed worlds.

¹⁰⁶ Origen, *Contra Celsum*, trans. Henry Chadwick (Cambridge: Cambridge University Press, 1965), I.6.

¹⁰⁷ See Brown University. Dept. of Art, and David Winton Bell Gallery (Brown University), *Survival of the Gods: Classical Mythology in Medieval Art* (Providence, RI: Brown University, 1987), p. 169. For earlier sources, see Kunz, *The Curious Lore of Precious Stones*, p. 267. For more on Christian bloodstone amulets, see Jeffrey Spier, 'Medieval Byzantine Magical Amulets and Their Tradition', *Journal of the Warburg and Courtauld Institutes* 56 (1993): pp. 25–62.

The third tradition

The last tradition I would like to explore is that of so-called 'birthstones', which, in modern times, have become the most familiar aspect of all magical gemstone lore. Although many people purchasing a ring set with their birthstone might not think of magic, nevertheless the belief that there is some hidden relationship between the date of one's birth, the gemstone, and the zodiac implies that *sumpatheia* is still alive and well, albeit unacknowledged.

In Exodus, written between the tenth and seventh centuries BCE, the Lord gives instructions for a 'breastpiece of decision' that Aaron, the brother of Moses, must wear 'for consecrating him to serve Me as priest'.

You shall make a breastpiece of decision... Set in it mounted stones, in four rows of stones. The first row shall be a row of carnelian, chrysolite, and emerald; the second row a turquoise, a sapphire, and an amethyst; the third row, a jacinth, an agate, and a crystal; and the fourth row: a beryl, a lapis lazuli, and a jasper... The stones shall correspond to the names of the sons of Israel: twelve, corresponding to their names... Inside the breastpiece of decision you shall place the *Urim* and *Thummim*, so that they are over Aaron's heart when he comes before the Lord.¹⁰⁸

There is ongoing disagreement about how to translate the names of some of the stones.¹⁰⁹ Moreover, the colours of these stones are not always consistent; garnets, for example, are found in green as well as golden-red and reddish-purple; turquoise can be green, sky-blue, or yellow; and it is unclear which type of jasper is meant as the last of the stones, since this mottled stone can be found in colours that encompass the entire spectrum. We still do not know which gems were utilised in this most important of religious symbols, although many attempts have been made over the centuries to reconstruct the breastpiece. Modern efforts at reproducing the stones of the breastpiece are not limited to Jewish contexts, but range from Mormon replicas to Masonic versions, affirming how this potent symbol still wields its ancient fascination in a wide variety of contemporary cultural milieux. There is, however, general agreement about the function of the 'breastpiece of decision': it was an instrument of divination, intended

¹⁰⁸ Exodus 28:5–22.

¹⁰⁹ For example, the fourth stone, which is called 'turquoise' in the translation of the *Tanakh* I have used above, is given as 'emerald' in the King James Bible, 'carbuncle' in the Septuagint, 'turquoise' in the *New American Standard Bible*, and 'garnet' in *Strong's Dictionary*.

to ascertain God's will.¹¹⁰ The mysterious *Urim* and *Thummim* may have been engraved gemstones used as lots, for divining God's intentions in situations where ordinary human judgement might fail.¹¹¹

Exodus makes no mention of the signs of the zodiac. But in the first century CE, the historian Josephus (37-100 CE) and the Platonic philosopher Philo of Alexandria (20 BCE-50 CE) both insisted on a relationship. Josephus is clear about the correlation between the breastpiece and the zodiac:

And for the twelve stones, whether we understand by them the months, or whether we understand the like number of the signs of that circle which the Greeks call the Zodiac, we shall not be mistaken in their meaning.¹¹²

He names the gemstones, but unfortunately his list does not accord with the one given in Exodus,¹¹³ although he offers further insight into the oracular nature of the breastpiece:

For God declared beforehand, by those twelve stones which the high priest bore on his breast... when they should be victorious in battle; for so great a splendor shone forth from them before the army began to march, that all the people were sensible of God's being present for their assistance. Whence it

¹¹⁰ The *Urim* and *Thummim* are also described as divinatory instruments in 1 Samuel 28:6 and Numbers 27:21. The understanding of the breastpiece as an oracle was also expressed in the so-called 'Letter of Aristeas', a document written in Greek by an Alexandrian Jew called Aristeas to his brother Philocrates, in the third century BCE: 'It was an occasion of great amazement to us when we saw Eleazar engaged on his ministry, and all the glorious vestments, including the wearing of the 'garment' with precious stones upon it... On his breast he wears what is called the 'oracle', to which are attached twelve stones of different kinds, set in gold, giving the names of the patriarchs in what was the original order, each stone flashing its own natural distinctive color.' See *Letter to Aristaeus*, pp. 96–98, trans. R. J. H. Shutt, in *The Old Testament Pseudepigrapha*, Vol. 2, ed. James H. Charlesworth (New York/London: Doubleday, 1985), p. 19. See also the notes by the translator of Exodus in *The Jewish Study Bible*, Jeffrey H. Tigay, who observes on p. 172 that both the breastpiece and the *ephod* are 'involved in ascertaining the divine will', see *The Jewish Study Bible, Tanakh Translation*, ed. Adele Berlin and Marc Zvi Brettler (Oxford: University of Oxford Press, 1999).

¹¹¹ See the notes by Jeffrey H. Tigay, the translator of Exodus in *The Jewish Study Bible*, p. 172.

¹¹² Flavius Josephus, *The Antiquities of the Jews*, 3.7.7, in William Whiston, trans., *Josephus: The Complete Works* (Nashville, TE: Thomas Nelson, 1998), p. 107.

¹¹³ Josephus, *The Antiquities of the Jews*, 3:7.5, pp. 105–106.

came to pass that those Greeks, who had a veneration for our laws... called that breastplate the Oracle.¹¹⁴

Philo's approach, in contrast, is unashamedly Platonic. In the treatise entitled *On Dreams*, he describes the High Priest's vestments as symbols reflecting both the cosmos and the human soul:

For there are, as it seems, two Temples of God, the one is this cosmos, in which the firstborn divine Logos is also High Priest, the other is the rational soul, whose priest is the true man, whose perceptible image is the one who offers the traditional prayers and sacrifices.¹¹⁵

The High Priest and his vestments as a 'perceptible image' of the divine Logos tells us something about Philo's understanding of the faculty of sight: what we see is the fleshly garb of the unseen, and the gemstones of the breastpiece are the 'perceptible images' of deity. In *On the Life of Moses*, Philo offers his understanding of the twelve gemstones as symbols of the zodiacal signs:

The twelve stones on the breast, which are not like one another in colour... what else can they be emblems of, except of the circle of the zodiac?... The twelve stones are of different colors and none of them like to any other. For each of the signs of the zodiac also produces its own particular coloring in the air and earth and water and their phases, and also in the different kinds of animals and plants.¹¹⁶

The natural world in all its complexity thus reveals a kaleidoscope of changing colours that reflect the zodiacal cycle, whose twelve 'phases' are also symbolised by the twelve gemstones.

In the two or three centuries following the destruction of the Temple in 79 CE, Jewish *hekhlot* literature reimagined the rituals and vestments of the High Priest as aspects of a heavenly ritual occurring in a *mundus*

¹¹⁴ Josephus, *The Antiquities of the Jews*, 3.8.9, p. 110.

¹¹⁵ Philo, *On Dreams*, in *Philo: Vol. V*, trans. F. H. Colson (Cambridge, MA: Harvard University Press, 1934), 1.214–15f. See also Jutta Leonhardt, *Jewish Worship in Philo of Alexandria* (Tübingen: Mohr Siebeck, 2001), p. 128.

¹¹⁶ Philo, *On the Life of Moses*, in *Philo: Vol. VI*, trans. F. H. Colson (Cambridge, MA: Harvard University Press, 1935), 2.124. Philo also offers a zodiacal interpretation of the breastpiece in *On the Special Laws*, in *Philo: Vol. VII*, trans. F. H. Colson (Cambridge, MA: Harvard University Press, 1937), 1.87, and *On Dreams*, 1.214.

imaginalis that was also an inner soul-journey. The Temple, no longer existent in material form, became a visionary sanctuary providing a point of union between heaven and earth.¹¹⁷ The gemstones of the breastpiece are now dimensions of the vision of the Divine Glory: beryls shine between the wings of the angels and the Throne of God,¹¹⁸ while the Throne itself, made of lapis lazuli, is 'surrounded by thickets of brightness, emerald and sapphire'.¹¹⁹ These references, highlighting the mysterious identity between gemstones and deity, were inspired by Ezekiel,¹²⁰ whose description of the 'stones of fire', written eight centuries earlier, comprise nine of the twelve stones of the High Priest's breastpiece.¹²¹

The twelve gemstones entered Christian celestial geography through the *Apocalypse of John*, in which they form the foundations of the walls of the New Jerusalem:

The first foundation was jasper; the second, sapphire; the third, a chalcedony; the fourth, an emerald; the fifth, sardonyx; the sixth, sard; the seventh, chrysolite; the eighth, beryl; the ninth, a topaz; the tenth, a chrysolite; the eleventh, a jacinth; the twelfth, an amethyst.¹²²

¹¹⁷ For the transformation of the Temple, see Martha Himmelfarb, 'From Prophecy to Apocalypse: *The Book of the Watchers* and Tours of Heaven', in *Jewish Spirituality from the Bible to the Middle Ages*, ed. Arthur Green (New York: Crossroad, 1986), pp. 146–65; Martha Himmelfarb, 'Earthly Sacrifice and Heavenly Incense: The Law of the Priesthood in *Aramaic Levi* and *Jubilees*', in *Heavenly Realms and Earthly Realities in Late Antique Religions*, ed. Ra'anan S. Boustán and Annette Yoshiko Reed (Cambridge: Cambridge University Press, 2004), pp. 103–122; Silviu N. Bunta, 'A Misplaced Temple Question About Ezekiel's Visions', in *With Letters of Light: Studies in the Dead Sea Scrolls, Early Jewish Apocalypticism, Magic, and Mysticism*, ed. Daphne V. Arbel and Andrei A. Orlov (Berlin: De Gruyter, 2011), pp. 28–44.

¹¹⁸ *Hekhalot Zutarti*, 356, cited in Peter Schäfer, *The Hidden and Manifest God: Some Major Themes in Early Jewish Mysticism*, trans. Aubrey Pomerance (Albany, NY: SUNY Press, 1992), pp. 62–63.

¹¹⁹ *Seder Rabba di-Bereshit*, pp. 782–84, cited in Peter Schäfer, 'In Heaven as It Is in Hell: The Cosmology of *Seder Rabba di-Bereshit*', in *Heavenly Realms* (2004): pp. 233–74, on p. 251.

¹²⁰ See Martin A. Sweeney's Introduction to Ezekiel in *The Jewish Study Bible*, pp. 1042–1045.

¹²¹ Ezekiel 28:13–17.

¹²² *Apocalypse of John*, 19–21.

The twelve gates of the celestial City honour the twelve Hebrew Tribes, but the gemstone foundations are embedded in a new narrative.

And the wall of the city had twelve foundations, and in them the names of the twelve apostles of the Lamb.¹²³

Many modern attempts have been made to relate the twelve apostles to the twelve gemstones. John unfortunately did not provide this information, and disagreements about the gemstones of the New Jerusalem have continued ever since.¹²⁴

Although the High Priest's breastpiece continued to enjoy a powerful esoteric significance in early modern currents such as alchemy and Freemasonry, there is little Jewish literature in the intervening centuries that attributes specific occult properties to the twelve stones. A notable exception is a thirteenth-century work from the Rhineland called *Sefer Gematriot*, which describes the particular occult powers of each of the stones of the breastpiece.

Odem appertains to Reuben... Its use is to prevent the woman who wears it from suffering a miscarriage. It is also good for women who suffer excessively in childbirth.¹²⁵

The association of red gemstones with childbirth is common in the ancient world.¹²⁶ The medieval provenance of *Sefer Gematriot* suggests that this

¹²³ *Apocalypse of John*, 21:10–14, *KJV*.

¹²⁴ For a modern attempt to correlate the twelve apostles with the twelve stones, see http://overcomers.ca/blog_New_Jerusalem/The_New_Jerusalem_New_Creation_001.htm.

¹²⁵ *Sefer Gematriaot*, 43a-44b, cited in Joshua Trachtenberg, *Jewish Magic and Superstition: A Study in Folk Religion* (New York, NY: Behrman's Jewish Book House, 1939; repr. Philadelphia, PA: University of Pennsylvania Press, 2004), p. 137. The full Hebrew text of this work is given by Trachtenberg in Appendix II, pp. 265–268, and was more recently published as *Sefer Gematriot of R. Judah the Pious: Facsimile Edition of a Unique Manuscript*, ed. Daniel Abrams (Ashland, OH: Cherub Press, 2001). For more on *Sefer Gematriaot*, see Ronald H. Isaacs, *Divination, Magic, and Healing: The Book of Jewish Folklore* (Lanham, MD: Jason Aronson, 1998), pp. 77–86.

¹²⁶ For an example, see Timothy P. Harrison and Douglas L. Esse, *Megiddo 3: Final Report on the Stratum VI Excavations* (Chicago, IL: Oriental Institute of the University of Chicago Press, 2004), p. 70.

association found its way into Jewish magical lore at an early date, and syncretic traditions of the stones of the breastpiece emerged in medieval Germany in the circles of the German Jewish Pietists, and from there into Eastern Europe with the migration of the Ashkenazi Jews over the ensuing three centuries. In eighteenth-century Poland, Jewish gem cutters and traders, many of them aligned with the Hasidic movement and familiar with Kabbalistic themes,¹²⁷ seem to have generated the lore of the twelve gemstones as birthstones, and it is from this cultural matrix that the modern association of gemstones with the month of one's birth arose.¹²⁸ The belief that wearing the stone of one's birth-sign can confer good fortune is now found everywhere – even when the discrepancy between months and zodiacal signs creates confusion, and despite the fact that no agreement has been reached about the identity of the stones.

The imprint of modernity can be glimpsed in more recent permutations of this long tradition that reaches back to Exodus. The stones of the breastpiece originally seem to have represented the Tribes of Israel as a community, and not any individual's birth date. When Philo and Josephus related the breastpiece to the zodiac, they were not referring to anyone's natal horoscope. Even Marsilio Ficino, who complained about the melancholy his natal Saturn made him endure, advocated rituals using Venusian coral and Jupiterian chalcedony, not because he was born under Libra or Sagittarius – in fact, he was a Scorpio – but because these gemstones could help anyone suffering from Saturn's 'black bile'. It is not until the modern era that 'my birthstone' becomes a dominant feature in gemstone lore and gemstone marketing. It has been argued that awareness of an individual, isolated self is itself a signature of modernity.¹²⁹ If so, gemstones have made the transition smoothly and seamlessly, without abandoning the magic of their ancient lineage.

¹²⁷ For the dominance of Hasidism in Polish Jewry in the eighteenth century, see Glenn Dynner, *Men of Silk: The Hasidic Conquest of Polish Jewish Society* (Oxford: Oxford University Press, 2006). For the magical and Kabbalistic predilections of the Hasidim, see Moshe Idel, *Hasidism: Between ecstasy and magic* (Albany, NY: SUNY Press, 2012).

¹²⁸ See Lance Grande and Allison Augustyn, *Gems and Gemstones: Timeless Natural Beauty of the Mineral World* (Chicago, IL: University of Chicago Press, 2009), p. 335; Kunz, *The Curious Lore of Precious Stones*, pp. 307–337.

¹²⁹ For this theme, see Alex Owen, *The Place of Enchantment: British Occultism and the Culture of the Modern* (Chicago, IL: University of Chicago Press, 2004).

Conclusion

Poets, novelists, and playwrights have always sought inspiration in the lore of gemstones. Shakespeare's work is encrusted with references to their powers. In the poem called *A Lover's Complaint*, he praises

... The deep-green emerald, in whose fresh regard
Weak sights their sickly radiance do amend,¹³⁰

echoing Theophrastus' statement, in the fourth century BCE, that *smaragdus* 'is good for the eyes'.¹³¹ John Milton, in *Paradise Lost*, writes of the towers of heaven 'with battlements adorned of living sapphire', mirroring Babylonian and Hebrew descriptions of *sappheiros* as the stone of heaven.¹³² Literature can also generate new gemstone myths; the irresistible urge to weave narratives around the stones is not limited to the ancient world. In 1576, the French poet Rémy Belleau, drawing on the etymology of the Greek word *amethystos*, which means 'not intoxicated', published a poem about the god Dionysus and his pursuit of the nymph Amethyste. She refused the god's affections and was turned into a white stone; Dionysus wept in frustration, and, being the god of wine, his tears dyed the stone purple.¹³³ This story cannot be found in any Hellenistic, Roman, or medieval source, but it appears in modern descriptions of amethyst as though it were an ancient tradition. The sinister opal that disintegrates on contact with holy water in Sir Walter Scott's nineteenth-century novel, *Anne of Geierstein*, was entirely Scott's invention;¹³⁴ but for over fifty years his coupling of opals with sorcery and ill fortune almost single-handedly destroyed European trade in a gemstone which Pliny, in

¹³⁰ Shakespeare, *A Lover's Complaint* (1609), in *The Oxford Shakespeare*, ed. W. J. Craig (Oxford: Oxford University Press, 1914), p. 212.

¹³¹ Theophrastus, *On Stones*, 24, p. 99.

¹³² John Milton, *Paradise Lost* (London: Penguin Classics, 2003), 2:1049–1050.

¹³³ Rémy Belleau, 'L'Amethyste, ou les Amours de Bacchus et d'Amethyste', in Rémy Belleau, *Les Amours det Nouveaux Eschanges des Pierres Precieuses* (Paris: Mamert Patisson, 1576), pp. 4–6. See also Kunz, *The Curious Lore of Precious Stones*, pp. 58–59.

¹³⁴ Sir Walter Scott, *Anne of Geierstein, or, The Maiden of the Mist* (Edinburgh: Cadell & Co., 1829). Kunz, in *The Curious Lore of Precious Stones*, pp. 143–44, noted in 1913 that 'much of the modern superstition regarding the supposed unlucky quality of the opal owes its origin to a careless reading of Sir Walter Scott's novel'.

the first century CE, described as possessing all 'the most brilliant qualities of the most valuable gems'.¹³⁵

More recent narratives include the elvish gemstone rings – Narya, the red Ring of Fire; Nenya, the white Ring of Adamant; and Vilya, the blue Ring of Firmament – in J. R. R. Tolkien's *Lord of the Rings*. The names of the stones – Fire, Adamant, and Firmament – are very ancient, dating back to biblical literature as well as the Greek lapidaries, as Tolkien was well aware.¹³⁶ More recently, numerous magical gems have made their appearance in the Harry Potter novels, such as the rubies that adorn the hilt of the Sword of Godric Gryffindor, which makes its first appearance in *Harry Potter and the Chamber of Secrets*.¹³⁷ The gemstones of Middle Earth and Hogwarts, like Scott's opal, are magical but not explicitly celestial. But the interweaving of the traditions has resulted in literary tropes attaching themselves to astral gemstone lore, and vice versa. In the Greco-Roman world, the griffin was the creature of the Sun-god.¹³⁸

The Sword of Godric Gryffindor, which alone can destroy the dreaded Basilisk, bears on its hilt blood-red stones redolent of strength and power, mirroring the red fire-stone Narya worn by Gandalf in *The Lord of the Rings*, and echoing the blood-red talismans of Egypt, Etruria, and Greece. Such stones seem to emanate solar light even when the name of the god has changed. However innovative the cultural adaptation, the perception that gemstones – uncut or faceted, plain or engraved – embody, through their colours, emanations of celestial divinity, is an idea with extraordinary agency and continuity.

¹³⁵ Pliny, *Natural History*, 37:21.80.

¹³⁶ For Tolkien's familiarity with biblical and ancient Greek, Norse, and Teutonic literature, see, among others, George Clark and Daniel Timmon, eds., *R. R. Tolkien and His Literary Resonances: Views of Middle-Earth* (Westport, CT: Greenwood, 2000); Verlyn Flieger, *Splintered Light: Logos and Language in Tolkien's World* (Kent, OH: Kent State University Press, 2002).

¹³⁷ J. K. Rowling, *Harry Potter and the Chamber of Secrets* (London: Bloomsbury, 2002).

¹³⁸ See Jamie Claire Fumo, *The Legacy of Apollo: Antiquity, Authority, and Chaucerian Poetics* (Toronto: University of Toronto Press, 2010), p. 33.



Fig. 11. Apollo riding on a griffin, Attic red-figure *kylix*, ca. 380 BCE, Kunsthistorisches Museum, Vienna IV 202.

I can think of no better way to conclude this paper than to cite a passage from the work of a sixteenth-century Kabbalist called Moshe Cordovero:

The essence of divinity is found in every single thing – nothing but it exists... Do not attribute duality to God... Do not say 'This is a stone and not God'. God forbid! Rather, all existence is God, and the stone is a thing pervaded by divinity.¹³⁹

¹³⁹ Moshe Cordovero, *Shi'ur Qomah*, Modena MS 206b, cited in Daniel Matt, *The Essential Kabbalah: The Heart of Jewish Mysticism* (Edison, NJ: Castle Books, 1997).