

REAL, UNREAL AND MAGIC IN PLINY THE ELDER'S *NATURALIS HISTORIA*

Pliny the Elder was the first author to accomplish a treatise on the totality of nature.¹ Knowledge on magic, relating to the period of time from the founding of Rome to the end of the first century AD, can be reconstructed using Pliny the Elder's *Naturalis Historia*, the first treatise that refers to the achievements of Asian magic and culture in a specific way. Objectivity, even if a distant goal, is among the best qualities in historical writing and Pliny is careful in the presentation of his *auctores*.² At the same time, there can never be a truly objective presentation of medicine when a writer aims at including his emotional and personal opinion as well as historic data. However, it holds true that such an inside perspective can be useful in terms of our modern understanding and interpretation of such facts.

Our knowledge of what the ancients selected to be part of everyman's lore in matter of medicine and healing, in fact, comes from this encyclopaedia which was widely read until the Scientific Revolution in the 17th century. Categories of thought, underlying the way the Roman understood life in terms of attainable knowledge, were present in all sciences, and ways of healing deriving from such knowledge of human anatomy. Medicine stands in contrast with witchcraft and magic, which subvert a cosmic order, as well as science is opposed to non-science, truth to falsity, and, furthermore, religion to magic.³ The opening lines of Book XXX (1-2) list the three obstacles to humankind's full understanding of nature, ie. *magicas vanitates*, *medicina*, and *artes mathematicas*. Of all three, however, magic is the biggest threa to nature, both in the sense of physical elements overcome by obscure forces, and in

¹ A proud (I am not sure assertions can be proud) assertion of which is found in *Praefatio* I, 13-17.

² NH I 14; 17-18.

³ A passage that is a clear statement of Pliny's conception of nature, science and technology as instrumental to man: NH XXX, 1.

the sense of her divinity/motherly character transfigured. Science is a field in progress,⁴ therefore a question arises too: Is only science a legitimate way to know reality?

Guiding ideas, as well as moral considerations deriving from the first-century philosophical background in Epicurean and mostly Stoic beliefs, mark turning points in Pliny's presentation of these specific issues. A perception of what was real, unreal, or caused by magic was not always derived from personal experience, if the author was not close enough to scholars and collectors.⁵ Indeed, reading and authorities reporting information were trustworthy.⁶

The way we define our own perceptions gives the tone of an analysis about magic.⁷ Beliefs bear a significance and, being not neutral, they greatly contribute to changing science through time as much as persuasion works in other disciplines. The interesting fact is, what looks like magic to the eyes and mind of the Roman, is actually medicine to the foreign practicing it. This kind of analysis, perspective-based, provides reasons for a more profound understanding also of Christian opinions regarding magic and illicit practices, which would be established in the following centuries.⁸ It is perhaps commonsense that magic and belief are subjects still closely associated with personal opinions:⁹ gullibility and trust work on double standards, as one can either believe in an alternative practice individually, or recognise its power

⁴ NH II, 62: astronomy shows how man can dignify his situation by seeing that progress is an achievable goal, therefore encouraging the study of nature.

⁵ Antonius Castor, for example, who owned a botanical garden and was a friend of Pliny's: NH XXV, 9.

⁶ We learn about things never heard of before through representations of real, unreal, or imagined experiences: under this respect, see the knights' vain ambition, inducing them to be liars about travel stories (NH V, 12). It is also true, however, that what is unknown always puzzles the observer, or the reader (NH VII, 6).

⁷ Beagon (1992: 102-133), is following Lloyd's perspective on cultural foundations.

⁸ Magic, if good in intent, will be part of the alchemical tradition, much of their knowledge came from the Kabbalistic tradition. Pliny also quotes Jewish magicians in Book XXX.

⁹ See Wallace-Hadrill (1990).

and effectiveness by admitting into society, as in the case of travel reports and religion.¹⁰ For this reason, it is useful to give a general account of the ancient scientific knowledge on which healing was based, and, moreover, this is also beneficial in terms of setting historical categories, conducive for both reading and interpreting scientific data.¹¹ Nature and culture together co-exist in a mutually interactive relationship whereby nature's gifts are exploited by the discipline of medicine, all under the banner of health. Medicine, magic and religion are a good area for comparison, since they all appeal to a conjectural model of knowledge by which men can have benefits.¹² Magic is a practice that undermines the Roman sense of duty and activity. More so, the Roman conquest of Britain stopped monstrosities, such as human sacrifices and rituals performed by the Druids, both prophets and doctors (XXX,13 *hoc genus vatum medicorumque*). Aiming at unnatural, or, at least, unexpected events, it is based on illusion, deceit and entertainment. The viewer's perception of reality and belief are part of this process. Ritual beliefs and practices, but also self-promoting wellness and power are the result of magic, a social and cultural phenomenon common to all places, times, and cultures. Pliny, however, is keen on assessing that magic is, indeed, only found in all

¹⁰ Carey (2003: 25): "Pliny's attitude to Greek scholarship is an expression of the nationalistic current which underlies much of the *Natural History*. (...) But if the Greek sources are criticized by default for being foreign, then they are also, Pliny implies, immoral." Beagon (1992), p. 102: "The greatest challenge which Pliny has to face in combating the claims of astrology and magic is their appeal to a learned as well as to an uneducated audience." See V, 8 *alia quidem fabulosa*.

¹¹ A scientific paradigm basically empiricist rules our modern world, though not prohibiting also to use the word 'science' and its likes in ancient culture's own reference. We think that means avoiding anachronisms and terms that are matter of opinion, such as 'pseudo-science' and 'forerunners', as well as achievements in terms of how modern one can be. Beagon (1992), p. 107, justly points out that "To the modern reader, there is often little to choose in this respect between Pliny's magical and his 'respectable' herbal remedies."

¹² I (where does the 'I' suddenly come from? You always used 'we' so far – please pick one) will not deal with divination, which should be distinguished from magic in that its purpose is not to influence events but rather to understand them.

non-Roman places, institutions and periods,¹³ with the Persian priests (*Magi*)¹⁴ as the most important.

Ita est profecto, magnitudine populous Romanus perdidit ritus, vincendoque victim sumus. Paremus externis, et una artium imperatoribus quoque imperaverunt. It is perfectly true that owing to their greatness the Roman people have lost their usages, and through conquering we have been conquered. We are the subjects of foreigners, and in one of the arts they have mastered even their masters.”

(NH XXIV, 5)

The nature and significance of magic is, therefore, part of the process of making it possible to understand how it is appealing to foreign people, as well as with storytelling from exotic lands (NH V, 12 *quia dignitates, si indagare vera pigeat, ignorantiae pudore mentiri non piget, haut alio fidei proniore lapsu quam ubi falsae rei gravis auctor existit*). The believer must be kept in an allure of mystery, as in the case of the Mages, Oriental priests devoted to magic practices. Otherwise at first he will think the doctor had done something clever, but then he sees there was nothing in it after all once explanation is based on pulse and scientific parameters. A foreign slave—as a doctor often is—Pliny asserts in XXX, 2,¹⁵ would consequently have his poor little reputation suffering shipwreck if he were so candid as to admit that he cheats on patients. In a world in which anyone can set up as a doctor, rhetoric is all-

¹³ If man is a microcosm in himself, therefore a miniature of the universe, healing should be possible in all areas, using local products. Therefore, the relevance of the inquiry about who invented magic (XXIX). The Roman perception of differences and cultural specificity is evident in the weird exposition of some magico-religious formulae (XXIV, 12). The Roman place in the world, which was an expanding horizon undergoing globalization, is clearly stressed as part of political propaganda (NH XXIV, 4-5).

¹⁴ NH XXX, 1-18.

¹⁵ *natam primum e medicina nemo dubitabit ac specie salutari inrepsisse velut altiolem sanctioremque medicinam, ita blandissimis desideratissimisque promissis... vires religionis, ad quas maxime etiam nunc caligat humanum genus, atque, ut hoc quoque successerit, miscuisse artes mathematicas, nullo non avido futura de sese sciendi atque ea e caelo verissime peti credente. ita possessis hominum sensibus triplici vinculo in tantum fastigii adolevit, ut hodieque etiam in magna parte gentium praevaleat et in oriente regum regibus imperet.*

important¹⁶ and at its sharpest. Everything that is kept unknown and mysterious is deemed to be wonderful. Pliny justifies his choice, that is, the ambitious project of describing everything that exists, and explains his purpose on utilitarian grounds as “the nature of things, that is, life” (*Praefatio* I, 13).

Magic consists as a sort of ritual activity, with the purpose of influencing ordinary events, like weather, or extraordinary ones, like childbirth and fertility promotion, by an external force invoked by man. Pliny does not refrain himself from describing the performance, listing objects and spells, or a particular attire worn by the magician. Three principles seem to be ruling: like cures like (‘*Similia similibus curantur*’), or, by contrast, opposite cures opposite (‘*Contraria contrariis curantur*’), and contact between things or people, transmitting magic as a fluid or power inherent in them. A connection between reality and numbers also exists and it is good to know what rules are in it (the discipline called ‘iatromathematics’): numbers are mostly effective in parts of the human body and as a consequence in therapies too, where three and seven are the most powerful numbers. Most of all, Pliny is concerned about the consistency and relevance of charms and spells, giving a rationalistic reason of interest in them, and a utilitarian aim for mankind:

“Of the remedies derived from man, the first raises a most important question, and one never settled: have words and formulated incantations any effect? If they have, it would be right and proper to give the credit to mankind. As individuals, however, all our wisest men reject belief in them, although as a body the public at all times believes in them unconsciously.”

(NH XXVIII, 10)

¹⁶ Pliny is scared of doctors also because of their communication skills (a statement often found in NH XIX). speaks of nonsense

(*vanitas*: NH XXXVII, 54 and 195), referring to the Greek and Magi, thus justifying his authorial role in the search for truth.

However, ‘medicine alone of the Greek arts has not yet exercised Roman gravitas’ (XXIX, 17).

Spells are recorded to ensure success and prosperity in family, business, and oratory (NH XXVIII, 10; XXVII, 57, 125 and 131). Magic prevails during periods of rapid social change and mobility. Gaius Furius Chresimus, a farmer accused of witchcraft (NH XVIII, 41-43), is close to Democritus' troubles (XVIII, 273) and Pliny's frustration in front of disinterested contemporaries, when he is even teased for dealing with futile topics (NH XXII, 15).

The nature of magic is frequently ambiguous, being its boundaries, set by Pliny in astronomy, medicine, and religious behaviour and institutions. Magic, by definition, tends to be a part of all known societies, with a varying degree of importance, as a counterpart to accepted standard problem-solving techniques, (i.e. medicine and religion), both working on nature and spirituality (NH XXX, 1-2). It is, indeed, noteworthy that the defining of magic as a cultural phenomenon are so rare, Pliny being a unique case. It can be understood that its affinity with religion might make magic a dangerous thing to mention, requiring silence to protect oneself, not dissimilarly from Rome's secret name, never to be communicated to anyone (NH II, 65). Silence is very important and makes a difference, through the absence of voice and sounds, as well as spells to be performed in the most careful way. This is also why Pliny includes details on how to observe precautions and taboos, to avert danger, and amulets, to capture good energies. Purification of the parts involved in this ritual performing, usually the healer and the patient, or the patient seeking health for his own benefit, is possible thanks to food and sexual restrictions, otherwise magic is not attainable, and the performance gets to a transcendent level. Considering beneficial aspects, magic protection through objects is similar to the Medieval belief that to touch the king's clothes might cure scrofula (whereas king Pyrrhus' right big toe can be a healing portent, in NH VII, 20). Practitioners believe that magic is useful: trust makes its power. Someone could think about comparing it

to a placebo effect. Medicine does not differ in this and it also pretends to be clever, as Pliny sometimes suggests. In this, it is challenging to the Roman *pater familias* who is self-sufficient in all his, his family and household's needs. Beagon (1992: 97) clearly states that Pliny is critical of "another facet of the abuse of ratio which he opposes." If life is being awake (*Praefatio* I, 18 *vita vigilia est*), and we keep in mind that nature is life (*Praefatio* I, 13 *rerum natura, hoc est vita*), the consequent statement is that intellectual life is best expressed in man's study of nature. Intellectual dignity is threatened by the rise of magic as a source of interest for the learned. Charms ridicule human understanding. Magic spells had to be pronounced and Pliny is ashamed of the widespread naivety that seemed to abound (V,12). Asbestos protects against spells, as Pliny records (*amiantus... veneficiis resistit omnibus privatim Magorum*, NH XXXVI, 139).¹⁷ Even the upper crust of society would secretly practice magic as an alternative to medicine.¹⁸ Therefore, it would be necessary, on Pliny's account, to make a reassessment of the position of the sciences in the intellectual life of the Roman Empire.

The body, in theory and in practice, had become an object of study since Hippocratic times. It may sound obvious to us, but it did not use to be so for a long time. Once one is certain of the unity between body and soul, psychosomatic medicine and, accordingly, remedies are to be found working by sympathetic principles. Roman ways of healing, in addition to this, are safer and more legitimate than magic, as they acknowledge *vis naturae* (NH XXI, 78) and are morally plausible:

"Not even the woods and the wilder face of Nature are without medicines, for there is no place where that holy Mother of all things did not distribute remedies for the healing of mankind, so that even the very desert was made a drug store, at every point occurring wonderful examples of that well-known antipathy and sympathy".

¹⁷ Healy (1999: 196-197), describes chemical properties and uses of asbestos in antiquity.

¹⁸ Beagon (1992: 97): "Magic had, of course, long been embedded in popular religion, but its elevation to an *ars* gave it a new and, to Pliny, spurious respectability."

(NH XXIV, 1)

The Romans often relied on remedies whereby there was a strong resemblance between the shape of the plant and that of the ailment.¹⁹ Pliny advocated the so-called doctrine of signatures: a resemblance between the external appearance of a plant, animal or mineral and the outward symptoms of a disease was thought to indicate the therapeutic usefulness of the plant. On this basis, they made a theory of sympathy and antipathy regulating every living thing permeated by nature's breath.²⁰ Ingesting pills, using ointments or drinking boiling water were all considered to be effective. In fact the composition of the medicine could express its latent power by transmission and contact with the person to be healed, as in the case of the mugwort.

“A traveller who has Artemisia and elelisphacus tied on him does not, they say, feel any fatigue.”

(NH XXVI, 150)

Nature's remedies were to be found in local products. Pliny criticizes the importation of drugs from India and Arabia (XXIV,5). In his opinion, effective drugs would never be sold elsewhere, were they indeed effective. For all his practical wisdom, Pliny was a supporter of autarchy. He justifies a political and economic system on account of theological reasons: Nature is a Mother and pervades every living being, providing everything one needs in terms of benefit and preventing risks. This kind of reasoning is justified by the sympathy and antipathy reigning in the world

¹⁹ Magic and herbal recipes are hardly distinguished, to a modern reader, as in NH XXVII, 57; 125; XXV, 95.

²⁰ Sympathy and antipathy are forms of harmony and war in Nature: NH XXI, 78; XXIV, 1 and 3. An array of remedies working by analogy are in NH XXIV, 3 and XXVI, 150, for instance. At the same time, he criticizes the common belief that a star, or maybe a *Genius*, is connected to each individual destiny (NH II, 16; 28). That heaven and earth might be connected is an idea from Stoic cosmic sympathy; Beagon (1992: 102-103).

as we know it and wishing to give reasons to the unseen processes underneath life. The solution to health problems comes from everyday products, the same our ancestors had been using for over six centuries, when spelt in diet was prerequisite for a healthy body.²¹ When men notice they need more than they have, they construct tools and also invisible powers beyond ordinary reality, allowing one to be confident enough to face reality. Man, nature, and the divine are parts of the same world, when man as a subject can understand and perceive his own frailty and ambition: Book VII is but an assessment of man's physical and mental traits. Desires are fulfilled when expressions of them are voiced. It is no wonder at all that silence is, by contrast, required when protection is needed, while chanting and recitation are needed when things have to take part to the never-ending transformation of things. Explanations provided reassure people and strengthen the society that decides this discipline, be it medicine or magic, to be legitimate and standardized.

The issue of the relationship of magic to technical and scientific knowledge has had many debates going on among scholars. I assume that magic is not a prerequisite for scientific knowledge, but a different way of constructing and representing a cause-effect connection: thus, Pliny's indignation about salamanders, which cannot put out fire, otherwise Rome would have been saved by them (NH XXIX, 76). Medicine, magic, and religion arise from an individual and intellectual matter of involvement to a form of dominating nature, one of the ways in which individuals think about the world and represent it to share this experience of life with their fellow-humans, in front of indifferent deities (II,54), hoping to win their favour. It is not a matter for which to verify the true and the false: these are different languages expressing the same thing.

²¹ Insert king Numa's ritual prescription in order to facilitate health in society starting from individual responsibility. This also involved that the sacral value of transmission reinforced parental directions on diet.

My main objective to date has been to investigate data in order to explain facts and opinions as voiced by those who supported them. The study of magic as a unique cultural expression has interested scholars, who nevertheless reflect personal faith and background in some respects. I believe that integrating approaches must consider the Roman worldview on scientific and technical knowledge as a necessary blueprint, where magic is dangerous because it sounds unknown and mysterious.

C. AGOSTINI
Wake Forest University, Winston-Salem, North Carolina, USA
agostic@wfu.edu

Bibliography

- All references to Pliny are according to his *Historia naturalis* eds. Harris Rackham *et alii*. London; Cambridge, Mass.: Harvard University Press, 1938-1962. 10 vols. (Loeb Classical Library).
- Beagon, M. (1992). *Roman Nature. The Thought of Pliny the Elder*. Oxford: Clarendon Press.
- Burriss, E. (1972). *Taboo, Magic, Spirits. A Study of Primitive Elements in Roman Religion*. Westport: Greenwood Press.
- Carey, Sorchá (2003). *Pliny's Catalogue of Culture. Art and Empire in the Natural History*. Oxford: Oxford University Press.
- Caspar, J.W. (1934). *Roman Religion as Seen in Pliny's Natural History*. Chicago: University of Chicago Libraries.
- French, R.; Greenaway, F. (Eds.) (1986). *Science in the Early Roman Empire. Pliny the Elder, His Sources and His Influence*. London; Sydney: Croom Helm.
- Gudger, E.W. (1924). "Pliny's *Historia Naturalis*. The Most Popular Natural History Ever Published," *Isis* 6:269-281.
- Healy, J. (1999), *Pliny the Elder on Science and Technology*. Oxford: Oxford University Press.
- Lloyd, G.E.R. (1973). *Science, Folklore, and Ideology*. Cambridge: Cambridge University Press.
- Lloyd, G.E.R. (1979). *Magic, Reason and Experience: Studies in the Development of Greek Science*. Cambridge: Cambridge University Press.
- Murphy, T (2004). *Pliny the Elder's Natural History. The Empire in the Encyclopedia*. Oxford: Oxford University Press.
- Scarborough, J. (1992) *Medical Terminologies. Classical Origins*. London: University of Oklahoma Press.
- Stearn, W.T. (1966) *Botanical Latin. History, Grammar, Syntax, Terminology and Vocabulary*. London: Nelson.
- Stannard, J. (1965). "Pliny and Roman Botany," *Isis* 56:420-425.
- Stannard, J. (1982). "Medicinal Plants and Folk Remedies in Pliny, *Historia naturalis*," *History and Philosophy of the Life Sciences* 4:3-23.
- Thorndike, Lynn (1923-58). *A History of Magic and Experimental Science*, 8 vols. New York: Columbia University Press.
- Veltri, Giuseppe (1998). "The Rabbis and Pliny the Elder: Jewish and Greco-Roman Attitudes toward Magic and Empirical Knowledge," *Poetics Today*, pp. 63-89.

Wallace-Hadrill, A. (1990). "Pliny the Elder and Man's Unnatural History," *Greece & Rome*, NS 37: 80-96.