

Diocles Of Carystus | Encyclopedia.com

Complete Dictionary of Scientific Biography COPYRIGHT 2008 Charles Scribner's Sons
17-21 minutes

(b. Carystus [?]; Greece; fourth century BCE), *medicine, anatomy*. For the original article on Diocles see *DSB*, vol. 4.

Diocles of Carystus (a major town on the south end of the Greek island of Euboea, facing the East Coast of Attica) is enjoying renewed attention from historians of medicine, science, and philosophy. His significance as a major thinker, practitioner, and writer of the fourth century BCE had always been recognised from antiquity onwards, but the details of his role in the history of medicine and related areas like botany—and possibly even meteorology—are now more accurately being grasped (see van der Eijk, 2000–2001; Hankinson, 2002; Vivian Nutton, 2004).

This renewed interest comes after several decades of considerable neglect. Early and mid-twentieth century attempts to date and relate Diocles's medical ideas to other intellectual traditions (such as Max Wellmann's claim [1901] that Diocles belonged to the Sicilian school of medicine, or Werner Jaeger's thesis [1938; 1940; 1951; 1952] that Diocles was a pupil of Aristotle's) have proven too speculative and failed to find universal agreement (for surveys of earlier scholarship see von Staden, 1992, and Longrigg, 1993). A period of scepticism followed, and scholarship was aporetically stuck in "Probleme um Diokles von Karystos" (Kudlien, 1963). The chief difficulties were the fragmentary nature of the evidence (none of Diocles's works have survived in their entirety) and the bias of the sources reporting or quoting his views. The absence of a reliable collection, interpretation, and evaluation of the surviving evidence (Wellmann's 1901 collection widely being regarded as obsolete) presented a serious obstacle to a fresh and comprehensive investigation of his views.

New Historical Methods . Yet two related trends in classical scholarship addressed this situation and helped to restore Diocles's prominent position in the history of thought. First, there has been a renewed and systematic examination of medical and philosophical doxography and, more generally, of ancient authors' methods and strategies for quoting, reporting, and representing the views of earlier authorities. (Mansfeld and Runia, 1996; van der Eijk, 1999b). Scholars' knowledge of Diocles's ideas depends entirely on what later authors tell about him—authors such as Galen, Celsus, [Pliny the Elder](#), Oribasius, Soranus, Caelius Aurelianus, the so-called 'Anonymous of Paris' (probably first century CE), Aëtius the doxographer, and Athenaeus of Naucratis's *Sophists at Dinner* (a voluminous work from the second century CE full of quotations from earlier authors). It is therefore important to determine how well informed they were (e.g. whether they had direct access to Diocles's writings or relied on intermediary sources), how they viewed his role in the history of medicine and his relationship to other medical authors, for what reasons they were interested in him, for what reasons they were citing or quoting him, what the peculiarities were of their methods of reporting, and how selective they may have been in directing their attention to specific areas of Diocles's output. Such determination is important not only in order to estimate the extent to which all these factors may have colored their representation of Diocles's views and scientific activity, but also to evaluate the information these source authors provide and to have some idea as to what one can expect them to say.

Secondly, and on the basis of this development, there has been a new approach to fragment collecting in classical scholarship that takes due account of the context in which a fragment is embedded and of the role of the reporting author in the representation of a thinker's views (Burkert, 1998; van der Eijk, 1999a; Hanson, 1997). This then feeds into the reconstruction of the thinker's views in that, during the process of piecing together the surviving evidence, the material is differentially weighted in accordance with its relative evidential value.

In the case of Diocles, these scholarly developments led to a new collection, English translation, and comprehensive interpretation of the fragments (van der Eijk 2000–2001), which provides a basis for renewed study. The net result is a substantial collection of 234 fragments (more than fifty more than in Wellmann's collection), surviving in Greek, Latin, and Arabic; of these, nearly forty fragments lay claim to being direct *verbatim* quotations from his works (although in some cases their reliability is somewhat dubious), ranging in size from a few words to ten pages of text (fr. 182); the rest are reports in indirect speech, sometimes paraphrase, sometimes openly polemical in nature (for example, Caelius Aurelianus, our major source for Diocles's therapeutic views, heavily criticised him), or associating Diocles's views with those of other medical writers (such as many testimonies in Galen, who on the whole tends to downplay Diocles's originality in favor of his own achievements). The evidence adds up to an overall picture of a very self-conscious scientific thinker/practitioner with wide-ranging interests and a substantial output.

The titles surviving from his works are *Anatomy* (according to Galen the first handbook of its kind), *Affection, Cause, Treatment* (Diocles's major work on pathology), *On Treatments* (a detailed work in at least four books on the treatment of a wide range of different diseases), *On Prognosis, On Fevers, On Digestion, On Catarrhs, On Matters related to Women* (an extensive work in at least three books), *On Matters of Health to Pleistarchus* (Diocles's major work on regimen in health), *Archidamus* (on the medicinal usage of [olive oil](#)), *On Evacuations, On Bandages, On External Remedies, On Lethal Drugs, On*

Vegetables, On Rootcutting, In the Surgery, On Sexual Activity, Letter on the Preservation of Health to Antigonus, and On Cookery (the evidence for the latter three works is, however, not entirely secure). It is reasonably certain that at least some of these works were widely available in the Hellenistic and early Imperial age, and some were subjected to close textual and medical analysis: Thus the first century BCE writer Apollonius of Citium quotes from Diocles's work on surgery (fr. 163), Galen reports textual variants in different copies of Diocles's *Matters of Health* (fr. 188), and Oribasius in the fourth century preserved some extensive excerpts from Diocles's dietetic and therapeutic works. In the Byzantine era, however, direct access to Diocles's works seems to have become rare, and Arabic authors citing him seem to have been familiar with his views through Galen and other intermediaries only.

Research Approach . It is clear that, in antiquity, Diocles played a key role in the development of dissection and comparative anatomical research (fr. 24b refers to repeated animal dissection to prove a point in human anatomy), in systematic pathology (carefully distinguishing causes, symptoms, and therapies), in the further differentiation and refinement of therapeutics and surgery (where he earned fame for his *spoon* for the removal of arrow heads [fr. 167] and for his *bowl*, a particular type of bandage [fr. 166]), in gynaecology and especially dietetics and regimen in health—a field in which he acquired the greatest reputation (although again our view may be somewhat distorted by bias on the part of the sources and in the subsequent selective transmission of his ideas). He collected and systematised a large number of foods and drinks, herbs, and poisons. He went into great detail specifying their qualities and powers (*dunameis*) and differentiating according to mode of preparation, environmental factors such as season and climate, and according to age, living pattern, and constitution of the patient. Furthermore, his views on the role of *pneuma* in the psychophysiology of human cognition (in which both the heart and the brain are involved), emotion, movement, and action, as well as on blockage of the flow of *pneuma* as the major cause of a number of diseases, clearly paved the way for later developments in Hellenistic medicine and Stoic philosophy; and his account of *hypochondriac melancholy* (fr. 109) continued to be cited by later authors (Greek as well as Arabic) as the authoritative treatment of the subject.

Apart from this, Diocles is also being appreciated by historians of ancient philosophy for his methodological awareness and his theoretical views on causal explanation, inference from signs, for his careful balancing of reason and experience, and for the overall consistency and coherence of his views (Frede, 1987; Hankinson, 1998 and 2002). Diocles was not an armchair physician, and he clearly had a keen interest in the phenomena and in the practical aspects of medical care. Yet at the same time, he displayed a strong theoretical outlook, a desire to build his medical views on a general theory of nature, and a belief that the treatment of specific bodily parts has to be based on a consideration of the patient's body (and mind) as a whole—characteristics that prompted later Greek medical writers reflecting on the history of their own subject to speak of him as a member of the Rationalist (*logikos*) or Dogmatist (*dogmatikos*) sect of medicine. It is true that Diocles sometimes showed himself eager to back up physiological reasoning by empirical evidence (e.g., in frs. 109 and 176), and he insisted that causal explanations must be empirically verifiable and relevant to the situation at hand (fr. 176). At the same time, he did not shy away from referring to hidden causes (fr. 178) and other invisible entities like *pneuma*; he seems to have adopted rather uncritically the principle that healing takes place by means of opposite qualities, and he shared several more speculative interests of some of the Hippocratic writers, such as the notion of critical days and the belief in the determining role of the number seven in areas like embryological development.

It is further clear that Diocles was a prolific writer and medical communicator using a variety of literary forms (including doxographical discourse and possibly letters and dialogues) and an elegance of style that would have contributed to the dissemination of medical ideas among wider audiences. He was part of a movement aiming for expansion of the area of expertise commanded by the medical profession of his time, comprising areas like wine-tasting, cookery, gymnastics, travel, and other life-style features, even the raising of children—all of which belonged to the matters of health (*hugieina*) covered by the health expert (*hugieinos*).

In all this, Diocles was most likely aware of a considerable number of other medical, scientific, and philosophical views of his time. He is seen on a number of occasions taking account of existing ideas, including some of the views found in the so-called Hippocratic writings, with which he sometimes took issue, but claims that he possessed, or even created, a Hippocratic Corpus go beyond the evidence (and there is no certainty that he took these writings to be by Hippocrates). On other occasions, he quoted or reported the works of Aristotle (fr. 40) and of a physician named Archidamus (fr. 185)—perhaps his father, although again this is not certain—and he displayed a more general concern with medical language and nomenclature. Considering his high reputation in Athens, it is plausible to assume that he was in touch with the main currents and centers of scientific thinking, such as Plato's Academy and Aristotle's Lyceum, and probably also the Athenian physician Mnesitheus and other dietetic writers, and although it is difficult to prove influence, similarities with Aristotelian and Peripatetic ideas and styles of reasoning and arguing are unmistakable. Yet there is no evidence that Diocles was a member or pupil at Aristotle's school, and there is good reason to believe that any intellectual exchange there may have been in both directions (the oldest reference to Diocles being found in Theophrastus's work *On Stones*).

On the negative side, associations of Diocles with Sicilian medicine (as represented by Empedocles, Philistion, and Plato) must be considered doubtful, and something similar applies to his putative connections with empiricism or scepticism: These are constructs of twentieth-century scholarship that fail to find corroboration by the evidence. Likewise, the hotly disputed question of Diocles's date must be regarded as insoluble for lack of secure independent evidence. All that can be said with some degree of certainty is that Diocles lived somewhat later than Hippocrates and somewhat earlier than Erasistratus and Herophilus. Considering the difficulties involved in dating these medical writers, the question must remain open, and any reasonable pair of dates within the broad time-frame of the fourth century must be deemed possible.

SUPPLEMENTARY BIBLIOGRAPHY

WORKS BY DIOCLES OF CARYSTUS

Eijk, Philip J. van der. *Diocles of Carystus. A Collection of the Fragments with Translation and Commentary*. Vol. 1: *Text and Translation*. Leiden, Germany: Brill (Studies in Ancient Medicine 22), 2000; Vol. 2: *Commentary*. Leiden, Germany: Brill (Studies in Ancient Medicine 23), 2001. This replaces the older editions by Max Wellmann *Die Fragmente der sikelischen Ärzte Akron, Philistion und des Diokles von Karystos* (Fragmentsammlung der griechischen Ärzte, Band 1), Berlin: Weidmann, 1901, and Moritz Fraenkel, *Dioclis Carystii fragmenta quae supersunt*, Berlin: Typus Haynianis, 1840. Collection of the fragments of Diocles.

OTHER SOURCES

Burkert, Walter, ed. *Fragmentsammlungen philosophischer Texte der Antike—Le raccolte dei frammenti di filosofi antichi*. Göttingen, Germany: Van den Hoeck & Rupprecht, 1998.

Eijk, Philip J. van der. “Some methodological issues in collecting the fragments of Diocles of Carystus.” In *I testi medici greci III. Tradizione e ecdotica*, edited by Antonio Garzya and Jacques Jouanna. Naples: M. d’Auria, 1999a.

— —, ed. *Ancient Histories of Medicine. Essays in Medical Historiography and Doxography in Classical Antiquity*. Leiden, Germany: Brill, 1999b.

— —. “Diocles and the Hippocratic writings on the method of dietetics and the limits of causal explanation.” In *Medicine and Philosophy in Classical Antiquity. Doctors and Philosophers on Nature, Soul, Health and Disease*, by Philip J. van der Eijk. Cambridge, U.K.: [Cambridge University](#) Press, 2005.

— —. “The Heart, the Brain, the Blood and the Pneuma: Hippocrates, Diocles and Aristotle on the Location of Cognitive Processes.” In *Medicine and Philosophy in Classical Antiquity. Doctors and Philosophers on Nature, Soul, Health and Disease*, by Philip J. van der Eijk. Cambridge, U.K.: [Cambridge University](#) Press, 2005.

— —. “To Help, or to Do no Harm. Principles and Practices of Therapeutics in the Hippocratic Corpus and in the Work of Diocles of Carystus.” In *Medicine and Philosophy in Classical Antiquity. Doctors and Philosophers on Nature, Soul, Health and Disease*, by Philip J. van der Eijk. Cambridge, U.K.: Cambridge University Press, 2005.

Frede, Michael. “The Original Notion of Cause.” In *Essays in Ancient Philosophy*, edited by Michael Frede. Oxford: Clarendon Press 1987.

Hankinson, R James. *Cause and Explanation in Ancient Greek Thought*. Oxford: Clarendon Press, 1998.

— —. “Doctoring history: ancient medical historiography and Diocles of Carystus,” *Apeiron* 35 (2002): 65–81.

Hanson, Ann Ellis. “Fragmentation and the Greek medical writers.” In *Collecting Fragments—Fragmente sammeln*, edited by Glenn W. Most. Göttingen, Germany: Van den Hoeck & Rupprecht, 1997.

Harig, Gerhard, and Kollesch, Jutta. “Diokles von Karystos und die zoologische Systematik.” *NTM Schriftenreihe zur Geschichte der Naturwissenschaften, Technik und Medizin* 11 (1974): 24–31.

Jaeger, Werner Wilhelm. *Diokles von Karystos. Die griechische Medizin und die Schule des Aristoteles*, Berlin: Weidmann, 1938a.

— —. “Vergessene Fragmente des Peripatetikers Diokles von Karystos. Nebst zwei Abhandlungen zur Chronologie der dogmatischen Ärzteschule.” *Abhandlungen der preussischen Akademie der Wissenschaften, Philosophisch-historische Klasse*, 1938b.

— —. “Diocles. A New Pupil of Aristotle.” *Philosophical Review* 49 (1940): 393–414.

— —. “Diokles von Karystos. Ein neuer Schüler des Aristoteles.” *Zeitschrift für philosophische Forschung* 5 (1951): 25–46.

— —. “Diokles von Karystos und Aristoxenos über die Prinzipien.” In *Hermeneia. Festschrift für Otto Regenbogen*. Heidelberg, 1952.

Kudlien, Fridolf. “Probleme um Diokles von Karystos.” *Sudhoffs Archiv* 47 (1963): 456–464.

— — . “Diokles von Karystos.” *Der kleine Pauly* 2 (1967): 56–57.

Kullmann, Wolfgang. *Wissenschaft und Methode. Interpretationen zur aristotelischen Theorie der Naturwissenschaft*. Berlin: De Gruyter, 1974.

Longrigg, James. *Greek Rational Medicine*, London: Routledge, 1993.

— — . *Greek Medicine from the Heroic to the Hellenistic Age*. [New York](#): Routledge, 1998.

Mansfeld, Jaap, and Runia, David T., *Aetiana. The Method and Intellectual Context of an Ancient Doxographer*, Vol. 1: *The Sources*. Leiden, Germany: Brill, 1996.

Nutton, Vivian. “Diokles von Karystos.” *Der neue Pauly* 3 (1997): 610–613.

— — . *Ancient Medicine*. London: Routledge, 2004.

Sconocchia, Sergio. “La lettere di Diocle ad Antigono e le sue traduzioni latine.” In *Prefazioni, prologhi, proemi di opere tecnico-scientifiche latine*, edited by Carlo Santini and Nino Scivoletto, Vol. 3. Rome: Herder, 1998.

Staden, Heinrich von. “Jaeger’s ‘Skandalon der historischen Vernunft’: Diocles, Aristotle, and Theophrastus.” In *Werner Jaeger Reconsidered: Proceedings of the Second Oldfather Conference, University of Illinois, 26–28 April 1990*, edited by William M. Calder III. Atlanta: Scholar’s Press, 1992.

Torraca, Luigi. “Diocle di Caristo, il Corpus Hippocraticum ed Aristotele.” *Sophia* 33 (1965): 105–115.

Vallance, J. “Diocles (3).” In *Oxford Classical Dictionary*, edited by Simon Hornblower and Anthony Spawforth. Oxford: Oxford University Press, 1996, 470.

Wöhrle, Georg. *Studien zur Theorie der antiken Gesundheitslehre*(Hermes Einzelschriften 56). Stuttgart, Germany: Steiner Verlag, 1990.

Philip J. van der Eijk