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Again on fragment 4 D.-K. Alcmaeon and Galen compared



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ABSTRACT

Going over the main bibliography on the text (which has not failed to arouse interest even in recent times), a comparison is made between the famous fragment 4 D.-K. by Alcmaeon, containing the oldest definition of health and disease in terms of *ισονομία* and *μοναρχία τῶν δυνάμεων*, and a passage from *De sanitate tuenda* by Galen, also relating to the definition of those concepts.

Keywords: Definitions of health and disease - Political metaphor - Alcmaeon - Galen

1. Studies on the fragment

Fragment 4 D.-K. by Alcmaeon represents – as Jacques Jouanna observed in the first edition of his *Hippocrates*¹ – the oldest definition of the concepts of ‘health’ and ‘disease’ that the Greek world has handed down to us:

Ἀλκμαίων τῆς μὲν ὑγείας εἶναι συνεκτικὴν τὴν ἰσονομίαν τῶν δυνάμεων, ὑγροῦ, ξηροῦ, ψυχροῦ, θερμοῦ, πικροῦ, γλυκέος καὶ τῶν λοιπῶν· τὴν δ’ ἐν αὐτοῖς μοναρχίαν νόσου ποιητικὴν· φθοροποιὸν γὰρ ἑκατέρου μοναρχίαν. [...] τὴν δὲ ὑγείαν τὴν σύμμετρον τῶν ποιῶν κρᾶσιν.

Alcmaeon says that health is the result of the equality of the forces, the moist, the dry, the cold, the hot, the bitter, the sweet and the others, while the exclusive predominance of one of them produces disease; indeed, the exclusive predominance of each single quality is destructive. [...] Health instead is the well-proportioned temperament of the qualities.

Attention to this text, long neglected compared to others by the doctor and thinker from Croton, began to assert itself – I believe not by chance – in the 1980s. Indeed, the first pioneering studies by Mario Vegetti and Giuseppe Cambiano were carried out in that period. Both scholars, participating in the IV Colloque International Hippocratique *Formes de pensée dans la Collection Hippocratique* held in Lausanne in September 1981, gave talks referring to the relationship between medical thought and political thought, starting precisely from the fragment by Alcmaeon.

In his talk Mario Vegetti, through a close comparison with various texts of the *Corpus Hippocraticum*, observed that in them there is evidence of the substantial absence of a ‘political’ model understood as a practice of mediation, of assembly discussion, of consensus, of shared power, and that instead there is a reference to an idea of social relations expressed (according to the Homeric and ‘pre-political’ model) in terms of conflict and violent domination (verbs κρατεῖν, ἐπικρατεῖν, δυναστεύειν, ἰσχύειν, πολεμεῖν, στασιάζειν). And he concluded by observing that: “(nel *Corpus Hippocraticum*) l’immagine medica del corpo resta tenacemente pre-anatomica; l’interpretazione dei suoi processi resta parallelamente pre-politica, o comunque legata a un’idea della politica come conflitto”³.

Also starting from fragment 4 D.-K. by Alcmaeon, Giuseppe Cambiano focused his analysis on a comparison with some Platonic dialogues (in particular *Sophist* and *Republic*) in which the identity between στάσις and νόσος is affirmed with a view to a definition, this time, of ethical-political categories⁴. Reprising some observations by G. Vlastos and J.E.R. Lloyd, the scholar highlighted the fact that in Plato illness is not identified *tout court* with the ἄρχειν of one person alone, but rather consists in the inversion of the natural hierarchy of power⁵. The central egalitarian presupposition in the Alcmaeon fragment (whatever form of egalitarianism it is) having disappeared, the place of ἰσονομία was thus taken by ἁρμονία, which could also be constituted starting from unequal elements. The Platonic reference point was therefore

Pythagorean harmony, rather than Alcmaeon's *ισονομία*, which would lead one to underline the differences, rather than the affinities, between the doctor from Croton and the Pythagoreans⁶.

A much-discussed aspect in the critical debate that – within a broader reflection on the theme of equality in Greek thought – has developed around fragment 4 D.-K. is identification of the specific form of *ισότης* referred to in it. In particular, scholars have wondered whether the equality referred to by Alcmaeon is to be understood – to use categories employed in Plato's *Laws* – in an 'arithmetical' sense, or, as is more likely, in a 'geometrical' one⁷.

In this direction there go the essays by Charlotte Schubert (1984), according to whom the reference to *ισονομία* in Alcmaeon is strictly linked to the reforms of Cleisthenes⁸, and this is even more evident in the case of Jaap Mansfeld (2013), who specifically highlights the parallel with a passage from Herodotus' *logos tripolitikós* in which, precisely, the two terms *μουνναρχίη* and *ισονομίη* are contrasted⁹. The theme is also addressed by Stavros Kouloumentas (2014), who is responsible for the richest and most detailed study on the Alcmaeon fragment¹⁰, as well as in the very recent essay by Sierra Martín (2023), essentially focused on a comparison between Alcmaeon and *Airs, waters, and places*, the only Hippocratic text in which a reference to equality appears (chap. 12: *ισομοιρίη*, said, however, of the best climate, that is, the one in which no element violently predominates)¹¹.

2. Definitions of Health and Disease: Alcmaeon and Galen Compared

At this point, we must ask ourselves what remains of the happy metaphor present in the Alcmaeon fragment in the Greek author who most specifically and thoroughly dealt with health and disease, as well as their definitions, that is, Galen.

With Galen, as could easily be expected, we arrive at a very detailed and complex definition of the two concepts. It is a definition constructed here and there in various works of the immense *corpus* handed down under his name, but one which becomes the object of a systematic treatment in the great treatise on *Hygiene*, and in particular in the first of the six books that make it up¹². He does this first of all, by following the path of overcoming (and 'refunctionalizing') the two concepts usually used in the previous tradition, *συμμετρία* and *εὐκρασία*¹³, as well as through valorization of the idea of 'fulfilment of actions' (*ἐνέργεια*) and the introduction of the innovative notion of 'breadth of health' (*πλάθος τῆς ὑγιείας*)¹⁴.

What, in general, is the attitude of Galen – a profound connoisseur and attentive critic of all the previous scientific and philosophical tradition – towards the doctor from Croton? Apart from some citations in the pseudo-Galenic *Historia philosopha*, Alcmaeon is remembered, together with other important thinkers of the past, among the *παλαιοί* who wrote *περὶ φύσεως*, in some lists that can be read in the *De elementis ex Hippocratis sententia* and in the Commentary on *De natura hominis*¹⁵.

But what can we say with specific reference to fragment 4 and the political lexicon used in it? First of all, it will not be without significance that in the Galenic *corpus* there are no attestations of ἰσονομία, while there are numerous attestations of the abstract ἰσότης¹⁶. However, the extent of the distance that separates the two authors can be appreciated above all by reading a passage from the last book of the treatise on *Hygiene: De sanitate tuenda* VI 5.

It should first be remembered that in the work the concept of ‘health’ is worked out with reference to two essential data: constitution (διάθεσις/κατασθηνή) and the social condition of the subject considered.

Galen justifies his decision to begin the discussion starting from the man of excellent constitution completely free from commitments, in consideration of the paradigmatic character that such a figure may have¹⁷. Then he illustrates a plan of the work that will include exposition of the regime first of all of the man of excellent constitution who is perfectly free (ἀκριβῶς ἐλεύθερος), and then of the man who is free but has an imperfect constitution, and finally of those who have an imperfect constitution and lead an unfree life, and he underlines with great clarity the canonical role that the first typology of subjects covers within this order:

The hygienic method, like any other method, requires that the exposition begin precisely in this way. In fact, what is simple and perfect in each kind must be placed, as a sort of canon, before those things which are neither simple nor perfect (τὸ γὰρ ἀπλοῦν καὶ ἄμειπτον ἐν ἐκάστω γένει, καθάπερ τις κανὼν, ἀπάντων ἐθέλει προτετάχθαι τῶν οὐχ ἀπλῶν οὐδ’ ἀμείπτων). Being simple and perfect corresponds, in bodies, to having an excellent constitution, and in life to being perfectly free (ἀπλοῦν δὲ καὶ ἄμειπτον ἐν μὲν τοῖς σώμασι τὸ κατεσκευασμένον ἄριστά ἐστιν, ἐν δὲ τοῖς βίοις τὸ ἀκριβῶς εὐλεύθερον).

Therefore we will first consider the combination of these two elements, then those in which a bad constitution of the body and a free life are combined, and then a good constitution of the body and various kinds of servile life. Finally, if our reasoning is to be complete, we will consider the combination of a bad constitution of the body and a bad kind of life¹⁸.

Despite repeated declarations according to which the promises of hygiene are addressed to all men, Galenic treatment actually only focuses on the ideal model represented by the man of excellent constitution who is completely free. It is no coincidence that this treatment occupies the first five books of the work, while only in the sixth does Galen, rather hastily, turn his attention to subjects who do not fall within the canon of perfection analyzed up to that point, first taking into consideration the case of those who have a relatively (κατὰ πλάτος) perfect constitution but lead a non-free life:

ὑποκείσθω τοίνυν ἐν τῷ λόγῳ πρῶτος ὁ τὴν κατὰ πλάτος ἄμειπτον ἔχων κατασκευὴν σώματος, ἐν βίῳ δουλικῷ δι’ ὅλης ἡμέρας ὑπηρετῶν ἦτοι τῶν μέγιστα δυναμένων τισὶν ἢ μονάρχων, χωριζόμενος δὲ περὶ τὰ πέρατα τῆς ἡμέρας¹⁹.

Therefore let us assume first in our discussion him who has broadly a perfect constitution of body, in a slave's life, serving all day either some of the greatest magistrates or a monarch, but leaving his master at the end of the day.

This is a passage that in the use of *δύναμις* and *μόναρχος* (key terms – as we have seen – in the Alcmaeon fragment) very clearly highlights the fact that the medical dimension and the socio-political dimension are now radically distinct, at least on the level of the definition of key concepts, but certainly not on that of the relationship with political power. Indeed, the latter, with Galen, becomes completely organic, as shown, among other things, by the recent book by Gaetano Arena, with the eloquent title *La cura del potere e il potere della cura. Studi su Galeno*²⁰.

Bibliography, notes and references

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2. Aët. V 30 I (D. 442).
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4. Cambiano G, Patologia e metafora politica. Alcmeone, Platone, *Corpus Hippocraticum*. Elenchos 1982;3(2):219-36; Italian version by Id., Pathologie et analogie politique. In: Lasserre F, Mudry Ph, Ref. 3. pp. 441-458. As is well known, in Plato the relationship between the two forms of knowledge (which in Alcmaeon started from political knowledge – which was more ancient and original – in view of the definition of categories of the nascent medical thought) has been inverted. On this topic see especially Vegetti M, La medicina in Platone. Venezia: Il Cardo; 1995.
5. In this sense, the formulation in *Republic* IV 444d3-e2 is particularly clear: ΣΩΚΡ "Ἔστι δὲ τὸ μὲν ὑγίαιαν ποιεῖν τὰ ἐν τῷ σώματι κατὰ φύσιν καθιστάναι κρατεῖν τε καὶ κρατεῖσθαι ὑπ' ἀλλήλων, τὸ δὲ νόσον παρὰ φύσιν ἄρχειν τε καὶ ἄρχεσθαι ἄλλο ὑπ' ἄλλου. ΓΛΑΥΚ. Ἔστι γάρ. ΣΩΚΡ. Οὐκοῦν αὖ, ἔφη, τὸ δικαιοσύνην ἐμποιεῖν τὰ ἐν τῇ ψυχῇ κατὰ φύσιν καθιστάναι κρατεῖν τε καὶ κρατεῖσθαι ὑπ' ἀλλήλων, τὸ δὲ ἀδικίαν παρὰ φύσιν ἄρχειν τε καὶ ἄρχεσθαι ἄλλο ὑπ' ἄλλου; ΓΛΑΥΚ. Κομιδῆ, ἔφη. ΣΩΚΡ. Ἀρετὴ μὲν ἄρα, ὡς ἔοικεν, ὑγιάειά τέ τις ἂν εἴη καὶ κάλλος καὶ εὐεξία ψυχῆς, κακία δὲ νόσος τε καὶ αἴσχος καὶ ἀσθένεια. ΓΛΑΥΚ. Ἔστιν οὕτω.
6. Cfr. Vlastos G, Equality and Justice in Early Greek Cosmologies. *Classical Philology* 1947;42:156-78, and Lloyd GR, The Hot and the Cold, the Dry and the Wet in Early Greek Thought. *Journal of Hellenic Studies* 1964;84:92-106.
7. For this distinction in Greek texts and for the bibliography on the subject see Grimaudo S, Misurare e pesare nella Grecia antica. *Teorie storia ideologie*. Palermo: l'Epos; 1998. pp. 37-58.
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9. Mansfeld J, The body politic: Aëtius on Alcmaeon on isonomia and monarchia. In: Harte V and Lane M (eds), *Politeia in Greek and Roman Philosophy*. Cambridge-New York: Cambridge University Press; 2013. pp. 78-95. Mansfeld's reading is discussed in Lebedev AV, Alcmaeon of Croton on Human Knowledge, the Seasons of Life, and *Isonomia*: A New Reading of B 1 DK and Two Additional Fragments from *Turba Philosophorum* and Aristotle. In: Vassallo Ch (ed.), *Physiologia. Topics in Presocratic Philosophy and its Reception in Antiquity*. Trier: WVT Wissenschaftlicher Verlag Trier; 2017. pp. 227-257.
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12. *Galen De sanitate tuenda libri VI*, ed. Koch K, *Corpus Medicorum Graecorum V 4,2*, Leipzig-Berlin 1923. On this important Galenic treatise I would like to refer the reader to Grimaudo S, *Difendere la salute. Igiene e disciplina del soggetto nel De sanitate tuenda di Galeno*. Napoli: Bibliopolis; 2008. Specifically on the first book see Ead. (ed.), *Galeno La salute. De sanitate tuenda – libro I*. Palermo: duepunti edizioni; 2012.
13. Cfr. especially *san. tuend.* I 4, 7,27-33 Koch: “health does not consist simply in a good temperament or proportion of the elements from which we are formed (οὐχ ἀπλῶς εὐκρᾶσιαν ἢ συμμετρίαν τῶν στοιχείων), as almost all my predecessors believed (καθάπερ οἱ πρὸ ἡμῶν ὀλίγου δεῖν ἅπαντες ἐνόμιζον), but only of homeomeric bodies, [...] while in organic parts it is given by the conformation, number, size and composition of the homeomeric bodies.”
14. Cfr. *san. tuend.* I 5, 10,34-11,25 Koch: “For health is defined above all by the fact that necessary occupations are not hindered (τὸ γὰρ τῆς χρείας ἀπαρεμπόδιστον ὀρίζει μᾶλλον τὴν ὑγίαν). For weakness of action is not a sign of disease in general, but that which is contrary to nature in each individual. [...] Therefore, one should not judge the healthy and the sick according to the strength or weakness of their actions in absolute terms, but one should add for the healthy ‘according to nature’, and for the sick ‘against nature’, so that health will be found to be a disposition according to nature which produces actions, while disease will be found to be a disposition against nature which damages actions (ὡς εἶναι τὴν μὲν ὑγίαν διάθεσιν κατὰ φύσιν ἐνεργείας ποιητικὴν, τὴν δὲ νόσον διάθεσιν παρὰ φύσιν ἐνεργείας βλαπτικὴν)”. On Galen's use of the concept of *πλάτος τῆς ὑγείας* cfr. Grimaudo S, *Ref. 12*. 2008. pp. 73-97.
15. Cfr. *De elem. ex Hipp. sent.* 9,27-28, 134,16-21 De Lacy; *In Hipp. Nat. hom. Comm. prooem.* 5,10-12 Mewaldt.
16. There are over sixty occurrences of *ισότης* and its opposite *ἀνισότης*. The term is used above all in contexts that refer to the theory of temperaments (*De elementis*) or to the harmonious disposition of the parts of the human body (*De usu partium corporis humani*).
17. Cfr. Grimaudo S, *Ref. 12*. 2008. pp. 189-204.
18. *San. tuend.* II 2, 38,27-39,6 Koch.
19. *San. tuend.* VI 5, 171,10-13 Koch.
20. Arena G, *La cura del potere e il potere della cura. Studi su Galeno*. Roma: Edizioni Quasar; 2021.