Sublunary Region: Elements and Principles


Overview: Sources

For Theophrastus' general theory of the sublunary elements a major source is the first part of the extant treatise On Fire (137 no. 13). For secondary reports our chief sources are the tradition of commentary on Aristotle, and also Plutarch. (For the Lumen Animae or Light of the Soul, the highly unreliable source of some of our reports in this section, see above on 167.) A related question is that of the authorship of book 4 of the Meteorology attributed to Aristotle, which has sometimes been attributed to Theophrastus or to Strato. See below, under Overview: Doctrines, 2. The Structure of Matter; and also below on 197.

For one aspect of Theophrastus' influence cf. Mansfeld (1971) 82-5. The lack of influence of On Fire is noted by Steinmetz (1964) 355-6, who also lists parallels—relatively few as compared with the majority of the Theophrastean opuscula—between this work and the pseudo-Aristotelian Problems.

Overview: Doctrine. 1. The Four Elements

Aristotle correlates fire with hot and dry, air with hot and moist (or "fluid", ὑγρόν), water with cold and moist, earth with cold and dry, although in each case one of the qualities is primary: but simply, being four, each of [the simple bodies] is characterised by a single [quality], earth by dry rather than cold, water by cold

318 Aristotle, GC 2.3 330b3-5. "Fluid", for ὑγρόν is associated with air rather than water (below).
rather than fluid, air by fluid rather than hot, fire by hot rather than dry.\textsuperscript{319}

The Sicilian medical school, on the other hand, had correlated the elements with one primary opposite each, but regarded air as cold and water as moist.

Aristotle in \textit{On Coming-to-Be and Passing-Away} takes the view that hot and cold are active, moist and dry passive.\textsuperscript{320} However, Steinmetz (1969) and Longrigg (1975) argue that in Aristotle’s biology, as opposed to his physics, the hot is the active principle, and that Theophrastus extended this view to physics in general.\textsuperscript{321} Galen in 331DE attributes to Theophrastus, among others, the view that hot and cold are active, moist and dry passive, but the hot \textit{more} active. This might suggest that air as well as fire was active, but in a secondary way,\textsuperscript{322} for Theophrastus regards air as cold (\textit{On Fire} 26);\textsuperscript{323} this too, as Longrigg points out, can be connected with

\textsuperscript{319} Aristotle, \textit{GC} 2.3 331a3-6; cf. Alexander of Aphrodisias, \textit{Quaestio} 1.6.

\textsuperscript{320} \textit{GC} 2.2 329b24-32; cf. \textit{Meteorology} 4.1 378b12, if indeed this is Aristotle, with Furley (1989) 133. Galen, \textit{On the Natural Faculties} 1.2, p.8.14 Kühn, criticises Aristotle for using four qualities in \textit{GC}, but only two—i.e. hot and cold—in the \textit{Meteorology} and the \textit{Problems}. Cf. G. Marenghi, \textit{[Aristotle]}, \textit{Profumi e miasmi}, Naples: Arte Tipografica, 1991, 22 n.30. But on the consistency of \textit{Meteorology} 4 and \textit{GC} cf. Lewis (1996) 22-3; also Kullmann (1982), arguing that both \textit{Meteorology} 4 and \textit{PA} 2.1-9 are moving towards a position in which earth and water are material, heat and cold the active powers. See below, 171.

\textsuperscript{321} For heat as active see also Steinmetz (1964) 124-5; H.J. Krämer, \textit{Platonismus und hellenistische Philosophie}, Berlin: De Gruyter, 1971, 110 n.14. \textit{Meteorology} 4 by implication describes the hot as the primary cause of \textit{generation} (and cf. Alexander \textit{Quaestio} 3.14 110,33. At \textit{Meteorology} 4.5 382b4-5 cold is \textit{more} passive than hot, though still active). Freudenthal (1995) 34 suggests that for Aristotle cold is co-ordinate with heat as an efficient cause, but not with \textit{vital} heat as a formal cause. Longrigg (1975) 215-216 well describes Aristotle’s difficulties as reflecting the divergences between medicine and biology, stressing the sensible opposites, on the one hand, and physics which, in Democritus and in Plato’s \textit{Timaeus}, had come to treat them as derivative.

\textsuperscript{322} See also below, on 171. For the Stoics fire and air are active, earth and water passive (\textit{SVF} 2.418, 439, 444 = \textit{LS} 47D,F,G); hot and cold are active (\textit{SVF} 2.406, 430 = \textit{LS} 47E,T); fire is hot, air cold (\textit{SVF} 2.430, 841 = \textit{LS} 47T,H). If Theophrastus regards fire as active and air as cold, and heat as active primarily, cold secondarily, his theory might seem to anticipate the Stoic theory, and has indeed been regarded as doing so, e.g. by Long and Sedley (1987) vol.1 287 n.1. But there is the important difference that for the Stoics, or at least for Chrysippus, the heat of fire and the cold of air act \textit{together}, in physical as well as in biological contexts, in \textit{pneuma}, which combines opposite characteristics (\textit{SVF} 2.442, 450 = \textit{LS} 47I,K; also Nemesius, \textit{On the Nature of Man} 18.5-8 Morani = \textit{LS} 47J).

\textsuperscript{323} Theophrastus also differs from Aristotle in regarding air as naturally moving downwards (\textit{On Winds} 22; though at \textit{On Sensation} 88, arguing against