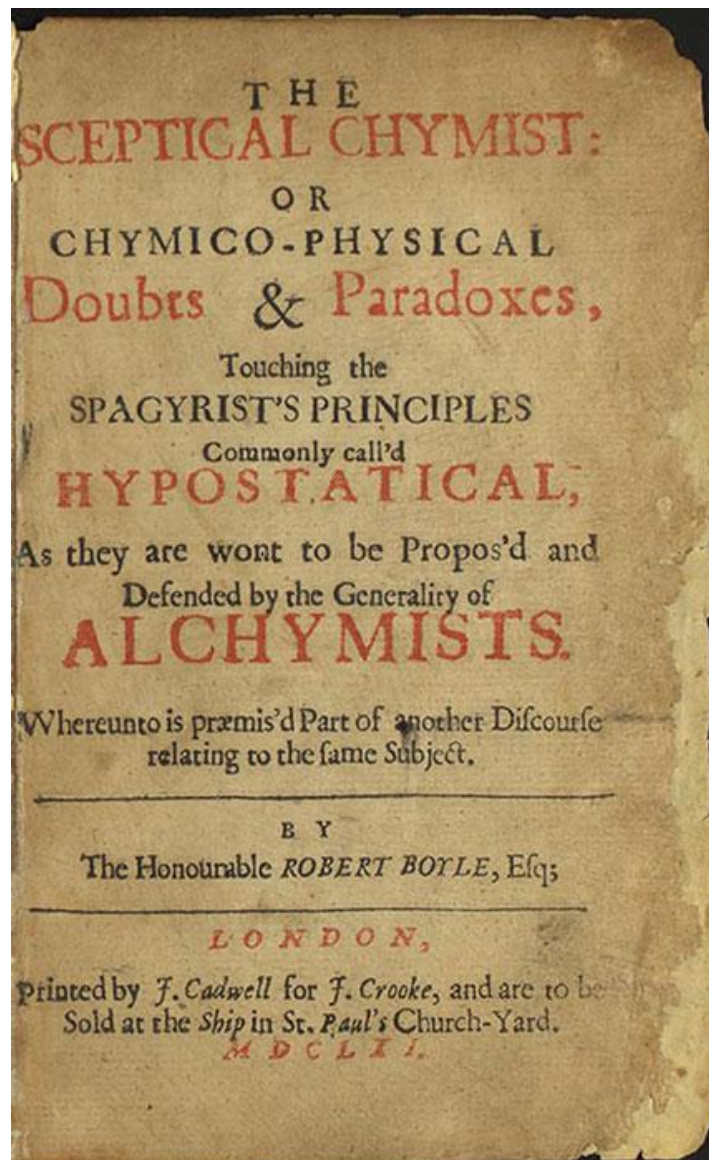


Robert Boyle, *The Sceptical Chymist*, 1661

or Chymico-Physical Doubts & Paradoxes, Touching the Spagyrist's Principles Commonly call'd Hypostatical; As they are wont to be Propos'd and Defended by the Generality of Alchemists. Whereunto is præmis'd Part of another Discourse relating to the same Subject.



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THE CONCLUSION.

These last Words of *Carneades* being soon after follow'd by a noise which seem'd to come from the place where the rest of the Company was, he took it for a warning, that it was time for him to conclude or break off his Discourse; and told his Friend; By this time I hope you see, *Eleutherius*, that if *Helmonts* Experiments be true, it is no absurdity to question whether that Doctrine be one, that doth not assert Any Elements in the sence before explain'd. But because that, as divers of my Arguments suppose the marvellous power of the *Alkahest* in the Analyzing of Bodies, so the Effects ascrib'd to that power are so unparallell'd and stupendious,(428) that though I am not sure but that there *may be* such an Agent, yet little less than *αυτοψια* seems requisite to make a man sure there *is*. And consequently I leave it to you to judge, how farre those of my Arguments that are built upon *Alkahestical* Operations are weakned by that Liquors being Matchless; and shall therefore desire you not to think that I propose this Paradox that rejects all Elements, as an Opinion equally probable with the former part of my discourse. For by that, I hope, you are satisfied, that the Arguments wont to be brought by Chymists, to prove That all Bodies consist of either Three Principles, or Five, are far from being so strong as those that I have employ'd to prove, that there is not any certain and Determinate number of such Principles or Elements to be met with Universally in all mixt Bodies. And I suppose I need not tell you, that these *Anti-Chymical* Paradoxes might have been manag'd more to their Advantage; but that having not confin'd my Curiosity to Chymical Experiments, I who am but a young Man, and younger Chymist, can yet be but slenderly furnished with(429) them, in reference to so great and difficult a Task as you impos'd upon me; Besides that, to tell you the Truth, I durst not employ some even of the best Experiments I am acquainted with, because I must not yet disclose them; but however, I think I may presume that what I have hitherto Discoursed will induce you to think, that Chymists have been much more happy in finding Experiments than the Causes of them; or in assigning the Principles by which they may best be explain'd. And indeed, when in the writings of *Paracelsus* I meet with such Phantastick and Un-intelligible Discourses as that Writer often puzzels and tyres his Reader with, father'd upon such excellent Experiments, as though he seldom clearly teaches, I often find he knew; me thinks the Chymists, in their searches after truth, are not unlike the Navigators of *Solomons Tarshish* Fleet, who brought home from their long and tedious Voyages, not only Gold, and Silver, and Ivory, but Apes and Peacocks too; For so the Writings of several (for I say not, all) of your Hermetick Philosophers present us, together with divers Substantial and(430) noble Experiments, Theories, which either like Peacocks feathers make a great shew, but are neither solid nor useful; or else like Apes, if they have some appearance of being rational, are blemish'd with some absurdity or other, that when they are *Attentively* consider'd, makes them appear Ridiculous.

Carneades having thus finish'd his Discourse against the received Doctrines of the *Elements*; *Eleutherius* judging he should not have time to say much to him before their separation, made some haste to tell him; I confess, *Carneades*, that you have said more in favour of your Paradoxes then I expected. For though divers of the Experiments you have mention'd are no secrets, and were not unknown to me, yet besides that you have added many of your own unto them, you have laid them together in such a way, and apply'd them to such purposes, and made such Deductions From them, as I have not Hitherto met with.

But though I be therefore inclin'd to think, that *Philoponus*, had he heard you, would scarce have been able in all(431) points to defend the Chymical *Hypothesis* against the arguments wherewith

you have oppos'd it; yet me thinks that however your Objections seem to evince a great part of what they pretend to, yet they evince it not all; and the numerous tryals of those you call the vulgar Chymists, may be allow'd to prove something too.

Wherefore, if it be granted you that you have made it probable,

First, that the differing substances into which mixt Bodies are wont to be resolved by the Fire are not of a pure and an Elementary nature, especially for this Reason, that they yet retain so much of the nature of the Concrete that afforded them, as to appear to be yet somewhat compounded, and oftentimes to differ in one Concrete from Principles of the same denomination in another:

Next, that as to the number of these differing substances, neither is it precisely three, because in most Vegetable and Animal bodies Earth and Phlegme are also to be found among their Ingredients; nor is there any one determinate number into which the Fire (as it is(432) wont to be employ'd) does precisely and universally resolve all compound Bodies whatsoever, as well Minerals as others that are reputed perfectly mixt.

Lastly, that there are divers Qualities which cannot well be refer'd to any of these Substances, as if they primarily resided in it and belong'd to it; and some other qualities, which though they seem to have their chief and most ordinary residence in some one of these Principles or Elements of mixt Bodies, are not yet so deducible from it, but that also some more general Principles must be taken in to explicate them.

If, I say, the Chymists (continues *Eleutherius*) be so Liberall as to make you these three Concessions, I hope you will, on your part, be so civil and Equitable as to grant them these three other propositions, namely;

First, that divers Mineral Bodies, and therefore probably all the rest, may be resolv'd into a Saline, a Sulphureous, and a Mercurial part; And that almost all Vegetable and Animal Concretes may, if not by the Fire alone, yet, by a skilfull Artist Employing the Fire as(433) his chief Instrument, be divided into five differing Substances, Salt, Spirit, Oyle, Phlegme and Earth; of which the three former by reason of their being so much more Operative than the Two Later, deserve to be Lookt upon as the Three active Principles, and by way of Eminence to be call'd the three principles of mixt bodies.

Next, that these Principles, Though they be not perfectly Devoid of all Mixture, yet may without inconvenience be stil'd the Elements of Compounded bodies, and bear the Names of those Substances which they most Resemble, and which are manifestly predominant in them; and that especially for this reason, that none of these Elements is Divisible by the Fire into Four or Five differing substances, like the Concrete whence it was separated.

Lastly, That Divers of the Qualities of a mixt Body, and especially the Medical Virtues, do for the most part lodge in some One or Other of its principles, and may Therefore usefully be sought for in That Principle sever'd from the others.

And in this also (pursues *Eleutherius*)(434) methinks both you and the Chymists may easily agree, that the surest way is to Learn by particular Experiments, what differing parts particular Bodies do consist of, and by what wayes (either Actual or potential fire) they may best and most Conveniently be Separated, as without relying too much upon the Fire alone, for the resolving of Bodies, so without fruitlessly contending to force them into more Elements than Nature made

Them up of, or strip the sever'd Principles so naked, as by making Them Exquisitely Elementary to make them almost useless,

These things (subjoynes *Eleu.*) I propose, without despairing to see them granted by you; not only because I know that you so much prefer the Reputation of *Candor* before that of subtilty, that your having once suppos'd a truth would not hinder you from imbracing it when clearly made out to you; but because, upon the present occasion, it will be no disparagement to you to recede from some of your Paradoxes, since the nature and occasion of your past Discourse did not oblige you to declare your own opinions, but only to personate an Antagonist of(435) the Chymists. So that (concludes he, with a smile) you may now by granting what I propose, add the Reputation of Loving the truth sincerely to that of having been able to oppose it subtilly.

Carneades's haste forbidding him to answer this crafty piece of flattery; Till I shal (sayes he) have an opportunity to acquaint you with my own Opinions about the controversies I have been discoursing of, you will not, I hope, expect I should declare my own sence of the Arguments I have employ'd. Wherefore I shall only tell you thus much at present; that though not only an acute Naturalist, but even I my self could take plausible Exceptions at some of them; yet divers of them too are such as will not perhaps be readily answer'd, and will Reduce my Adversaries, at least, to alter and Reform their *Hypothesis*. I perceive I need not minde you that the Objections I made against the Quaternary of Elements and Ternary of Principles needed not to be oppos'd so much against the Doctrines Themselves (either of which, especially the latter, may be much more probably maintain'd than hitherto it seems to(436) have been, by those Writers for it I have met with) as against the unaccurateness and the unconcludingness of the *Analytical* Experiments vulgarly Relyed On to Demonstrate them.

And therefore, if either of the two examin'd Opinions, or any other Theory of Elements, shall upon rational and Experimental grounds be clearly made out to me; 'Tis Obliging, but not irrational, in you to Expect, that I shall not be so farr in Love with my Disquieting Doubts, as not to be content to change them for undoubted truths. And (concludes *Carneades* smiling) it were no great disparagement for a Sceptick to confesse to you, that as unsatisfy'd as the past discourse may have made you think me with the Doctrines of the Peripateticks, and the Chymists, about the Elements and Principles, I can yet so little discover what to acquiesce in, that perchance the Enquiries of others have scarce been more unsatisfactory to me, than my own have been to my self.

FINIS.