

## Ian Maclean: Bacon, Hippocrates, and the Aphorism: Seventeenth-Century Critiques

1. *Maxims of Law* (1596): 'Whereas I could have digested these rules into a certain method or order, which, I know, would have been more admired, as that which would have made every particular rule, through this coherence and relation into other rules, seem more cunning and more deep, yet I have avoided to do this, because this delivering of knowledge in distinct and disjointed aphorisms doth leave the wit of man more free to turn and toss, and to make use of that which is so delivered to more several purposes and applications. For we see all the ancient wisdom and science was wont to be delivered in that form; as may be seen by the parables of Solomon, and by the aphorisms of Hippocrates, and the moral verses of Theognis and Phocylides: but chiefly the precedent of the civil law, which hath taken the same course with their rules, did confirm me in my opinion.'

2. *Advancement of Learning* (1605): '[The] informations of the particulars touching persons and actions are as the minor propositions in every active syllogism; for no truth or excellence of observations or axioms (whence the major political propositions are drawn) can suffice to ground a conclusion, if there be error in the minor proposition.'

3. *Ibid.*: 'The writing in aphorisms hath many excellent virtues, whereto the writing in method doth not approach. For first, it trieth the writer, whether he be superficial or solid: for aphorisms, except that they should be ridiculous, cannot be made but of the pith and heart of sciences; for discourse of illustration is cut off; recitals of examples are cut off; discourse of connexion and order is cut off; descriptions of practice are cut off. So there remaineth nothing to fill the aphorisms but some good quantity of observation: and therefore no man can suffice, nor in reason will attempt, to write aphorisms, but he that is sound and grounded. But in methods

Tantum series juncturaque pollet,

Tantum de medio sumptis accredit honoris, [Horace, *Ars poetica*, 242-3]

as a man shall make a great shew of an art, which, if it were disjointed, would come to little. Secondly, methods are more fit to win consent or belief, but less fit to point to action; for they carry a kind of demonstration in orb or circle, one part illuminating another, and therefore satisfy. But particulars being dispersed do best agree with dispersed directions. And lastly, aphorisms, representing a knowledge broken, do invite men to enquire further; whereas methods, carrying the show of a total, do secure men, as if they were furthest.'

4. *Novum organum* (1620), 1.105: In forming axioms, we must invent a different form of induction from that hitherto in use; not only for the proof and discovery of principles (as they are called) but also of minor, intermediate, and, in short, every kind of axioms. The induction which proceeds by simple enumeration is puerile, leads to uncertain conclusions, and is exposed to danger from one contradictory instance, deciding generally from too small a number of facts, and those only the most obvious. But a really useful induction for the discovery and demonstration of the arts and sciences, should separate nature by proper rejections and exclusions, and then conclude for the affirmative, after collection a sufficient number of negatives. [...] The assistance of induction is to serve us not only in the discovery of axioms, but also in defining our notions.

5. *Advancement of learning* (1605): 'Antiquity and authority; common and confessed notions; the natural and yielding consent of the mind; the harmony and coherence of a knowledge in itself; the establishing of principles with the touch and reduction of other propositions unto them; induction without instances contradictory; and the report of the senses; are none of

them absolute and infallible evidence of truth, and bring no security sufficient for effects and operations.’

6. *Instauratio magna* (1620): ‘At nos demonstrationem per syllogismum rejicimus, quod confusius agat, et naturam emittat e manibus. Tametsi enim nemini dubium esse possit quin, quae in medio termino conveniunt, ea et inter se convenient (quod est mathematicae cujusdam certitudinis): nihilominus hoc subest fraudis, quod syllogismus ex propositionibus constet, propositiones ex verbis, verba autem notionum tesserae et signa sint. Itaque si notiones ipsae mentis (quae verborum quasi anima sunt, et totius hujusmodi structurae ac fabricae basis) male ac temere a rebus abstractae, et vagae, nec satis definitae et circumscriptae, denique multis modis vitiosae fuerint, omnia ruunt.

7. *De interpretatione naturae* (1653): ‘Age citetur jam Hippocrates, antiquitatis creatura et annorum venditor. In cujus Viri auctoritatem cum Galenus et Paracelsus magno uterque studio, velut in umbram Asini, se recipere contendat, quis non cachinnum tollat? Atque iste homo certe in Experientia obtutu perpetuo haerere videtur, verum oculis non natantibus et inquirentibus, sed stupidis et resolutis. Deinde a stupore visu parum recollecto, Idola quaedam, non immania quidem illa Theoriarum, sed elegantiora ista quae superficiem Historiae circumstant, excipit, quibus haustis tumens et semisophista, et brevitate (de illius aetatis more) tectus, oracula demum (ut his placet) pandit, quorum ii se interpretes haberi ambiunt; cum revera nihil aliud agat, quam aut sophistica quaedam per abruptas et suspensas sententias tradens redargutione subducat, aut rusticorum observationes supercilio donet’

8. Joannes Heurnius, *Institutiones medicinae* (1592): [on the aphorism]: ‘pressa verborum proprietas, concisa sententiarum subtilitas, veneranda sermonis antiquitas, commendabilis artificii dignitas.’

9. Hieronymus Capivaccius, *De differentiis doctrinarum* (1603): ‘nam doctrina aphoristica nil aliud est, quam actio docentis gravissimi; proindeque mira gravitate et brevitate et veluti aenigmatice proposita ...innititur methodo resolutive, nempe a notione finis progrediens a posteriori ad prius, a re videlicet indicata ad sua indicantia, et coindicantia.’

10. Macrobius, *Commentarii in somnium Scipionis*, 6: ‘Hippocrates ipse qui tam fallere quam falli nescit.’

11. Hippocrates, *In the surgery*, 1.1: ‘Aut similia, aut dissimilia, a principio, a maximis, a facilimis, ab his quae undiquaque penitus cognoscuntur: quae ex videre, et tangere, et audire licet: quae et visu, et tactu, et auditu, et naribus, et lingua, et intelligentia sentire licet: quae et quibus cognoscuntur, omnibus cognoscere licet.’

12. Georg Wolfgang Wedel, *Propempticon inaugurale de demonstratione hippocratica* (1689): ‘cum vero sparsim et per totum volumen Hippocratis librorum flosculos tales offendere liceat, ita ut forte integer liber de demonstratione hac exinde condi posset facillimo negotio, praecipuum illum laudabimus, et instar oraculi generalis, quem et *Pergamenus* [Galenus] citat, explicat et dilaudat non uno loco.’

13. Hippocrates, *Aphorisms*, 6.28: ‘Eunuchi podagra non laborant.’

14. Johann Friedrich Lorenz, *Exercitationes* (1647): ‘Eunuchi podagra non laborant, nisi aut a parentibus podagricis vel lue venerea infecti, aut epidemica ac contagiosa podagra infecti, aut

ob herniam podagrici effecti, aut natura dispositi, ac simul otio, crapulae, ingluviei, et veneri minus dediti fuerint.’

15. Bernhard Langwedel, *Hippocratis defensio* (1647): ‘Hippocrates enim optime novit, Aphorismos suos non esse omnes limitatos, sed exceptionis apti, atque subjectis individuīs aegrotantibus, secundum temperamentorum, partium affectarum, caussarum et reliquarum circumstantiarum varietatem ac diversitatem, esse applicandos, uti ex particulis distinctivis in quamplurimum Aphorismis apposis manifeste elucescit’

16. Sydenham, *Observationes medicae* (1676): ‘Medicorum ille *Romulus*, nunquam satis laudatus *Hippocrates*, qui hanc Arti Medicae insuper struendae solidam ac inconcussam substernens basin, viz., *νοῦσων φύσεις ἡττοί*, [Ep. 6.5.1] i.e. Naturae morborum mediatrices, id egit, ut morbi cujuslibet Phaenomena aperte traderet, nulla Hypothesi adscita, et in partes per vim adacta; ut in ejus libris *de Morbis*, *de Affectionibus*, etc. videre est. Regulas etiam quasdam tradidit, ex observatione methodi istius, qua utitur natura tam in morbo provehendo, quam in eodem amoliendo, natas; cujusmodi sunt *Coacae Praenotiones*, *Aphorismi*, et reliqua id genus [...] illa Divini senis θεωρία [...] nihil [erat] aliud quam exquisita naturae descriptio [...].’

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