

Galen reminds his public that the four humours as defined in the Hippocratic treatise *On the nature of man* are blood, phlegm, yellow bile and black bile. This one was not the only system of humours proposed in Antiquity, but by taking it up in his works Galen granted its eventual status as the classical doctrine on this matter in the subsequent medical tradition. The humoral theory of the Pergamene physician is actually more refined than the stereotyped four-humours system commonly presented in the handbooks of medical history: Galen's references to a "leek-coloured" bile and to Praxagoras' humoral system bear witness to this complexity.

The equal or unequal proportion of humours in the body is closely linked with health and disease, and Galen may single out some humour or other as the cause of a condition, e.g. phlegm for some paralyses; a whole substantial treatise is even devoted to black bile alone. However, when the composition of the diverse homogeneous parts of the body is at stake, the elementary qualities, hot, cold, dry and wet, and their subtle blends, are predominantly called in to account for the formation of bone, sinew or hair.

Accordingly, reference to the elementary qualities is much more Galen's standard way of expressing the chemistry of living bodies than resorting to the humours. The treatise *On mixtures (De temperamentis)* is nevertheless of fundamental importance in his thought, as is proved by the number of internal references made in other treatises by Galen to this very work. Its central place in the Late Antique medical curriculum in Alexandria, and subsequently in the whole Galenic tradition, does then not come as a surprise. The much shorter treatise *On uneven bad temperament (De inaequali intemperie)*, while lacking the theoretical significance and the systematic progression of the former work's three books, deals in a well-focused manner with fundamental issues about the mixture of qualities; hence its success in the Renaissance, when it was one of Galen's regularly reprinted texts.

After a brief definition of the theories on elements, qualities, and humours, we shall concentrate on a group of closely linked treatises dealing with this matter, namely *On the elements according to Hippocrates*, *On the best constitution of our bodies*, *On good condition*, besides the two already mentioned. We shall address the following questions:

-How far are the explanatory systems that use these categories in harmony with each other, and how does Galen bring them into play, switching sometimes between categories in the same exposition?

-How far are these parallel systems, since balance and proportion play an important role in all of them?

-Does one of these explanatory models suit medicine better than the others, considering therapeutics, physiology and anatomy?

-For what reasons did the vulgarizations of Galen's doctrine and the reception of his thought concentrate on the theory of humours, rather than on the yet more fundamental theory of the mixture of qualities?

This will allow us to tackle some fundamental issues of Galen's broader explanatory system and of his theory of disease, to which modern research has not paid very much attention, despite their importance, due to the huge gap that is seen to divide such theories from contemporary Western medicine.