

There is nothing funny about Humours: The origins of the humoral theory in Hippocratic medicine.

Keith Stewart

Department of Classics and Ancient History

University of Exeter

Contents

- The Humours
- Galen
- Hippocratic Corpus

The Humours

- The humours are regarded as four fundamental fluids, which determine health and illness in the body
- These four fluids are Blood, Phlegm, Yellow Bile and Black Bile
- The basis of theory comes from Greek medicine

The Humours

- Rudolf Virchow's 1858 *Cellular Pathology* was part of a process that replaced the humours as the explanation of how the human body works (Guthrie, 1960: 282-283)
- The best starting point to understand how this humour theory developed is the physician Galen, who lived in second century AD

Galen

- Born in Pergamum in AD 129, his family were wealthy, which allowed Galen to obtain a good education in rhetoric, philosophy and medicine
- Galen started working as a physician for gladiators in Pergamum in AD 157
- Later Galen gained influence in Marcus Aurelius' imperial court and became an imperial physician for Marcus Aurelius, Commodus and finally Septimus Severus

Galen and the Humours

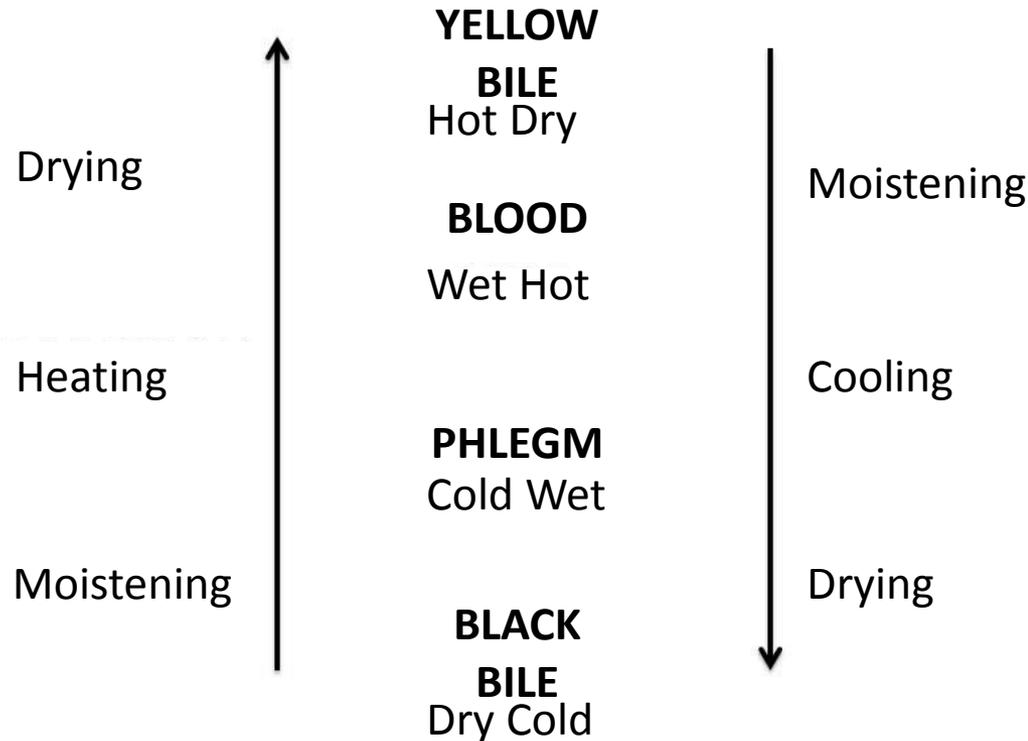
- Elements or Atoms?
 - Galen was not convinced that random particles could explain how the body worked
 - Galen used the authority of Hippocrates to present an elemental theory of the body:
 - If people were made up of atoms, they would not be able to feel pain (Galen, *On the Elements According to Hippocrates*, 2.15-17)
 - Galen stated that the random nature of particles in atomic theory could not explain how substances change from hot to cold or dry to wet or explain human temperaments and behaviour (Galen, *On the Elements*

According to Hippocrates, 2.15-17)

Galen and the Humours

- Galen showed how the four humours could be explained by the combination of qualities: Hot, Cold, Dry and Wet (Galen, *On the Causes of Diseases*, VII 21-22):
 - Hot and Wet = Blood
 - Hot and Dry = Yellow Bile
 - Cold and Dry = Black Bile
 - Cold and Wet = Phlegm

Galen and the Humours



The Hippocratic Corpus

- The Hippocratic Corpus is a set of medical texts, mostly written in the fifth and fourth centuries BC
- They are named after the physician Hippocrates, but there is much debate about who actually wrote these texts

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Hippocratic Humours

- One of the Hippocratic texts which presents the four humours as Blood, Phlegm, Yellow Bile and Black Bile is the *Nature of Man*
- But the presence of humours as a theory to describe health and disease in the Hippocratic Corpus is more complex than the content of this single text ...

Problems with Hippocratic Humours

- Nature of Man
 - Blood (hot and wet) associated with spring
 - Yellow Bile (hot and dry) associated with summer
 - Black Bile (cold and dry) associated with autumn
 - Phlegm (cold and wet) associated with winter
 - We are healthy when these four humours are perfectly mixed together in the body
 - Disease occurs when one or more of these humours separates from the mixture and moves around the body

Problems with Hippocratic Humours

ANCIENT MEDICINE

(Infinite number of opposites)

BREATHS

(All things come from Air)

The Sacred Disease
(Phlegm and Bile)

DISEASES IV

(Blood, Bile, Phlegm and Water)

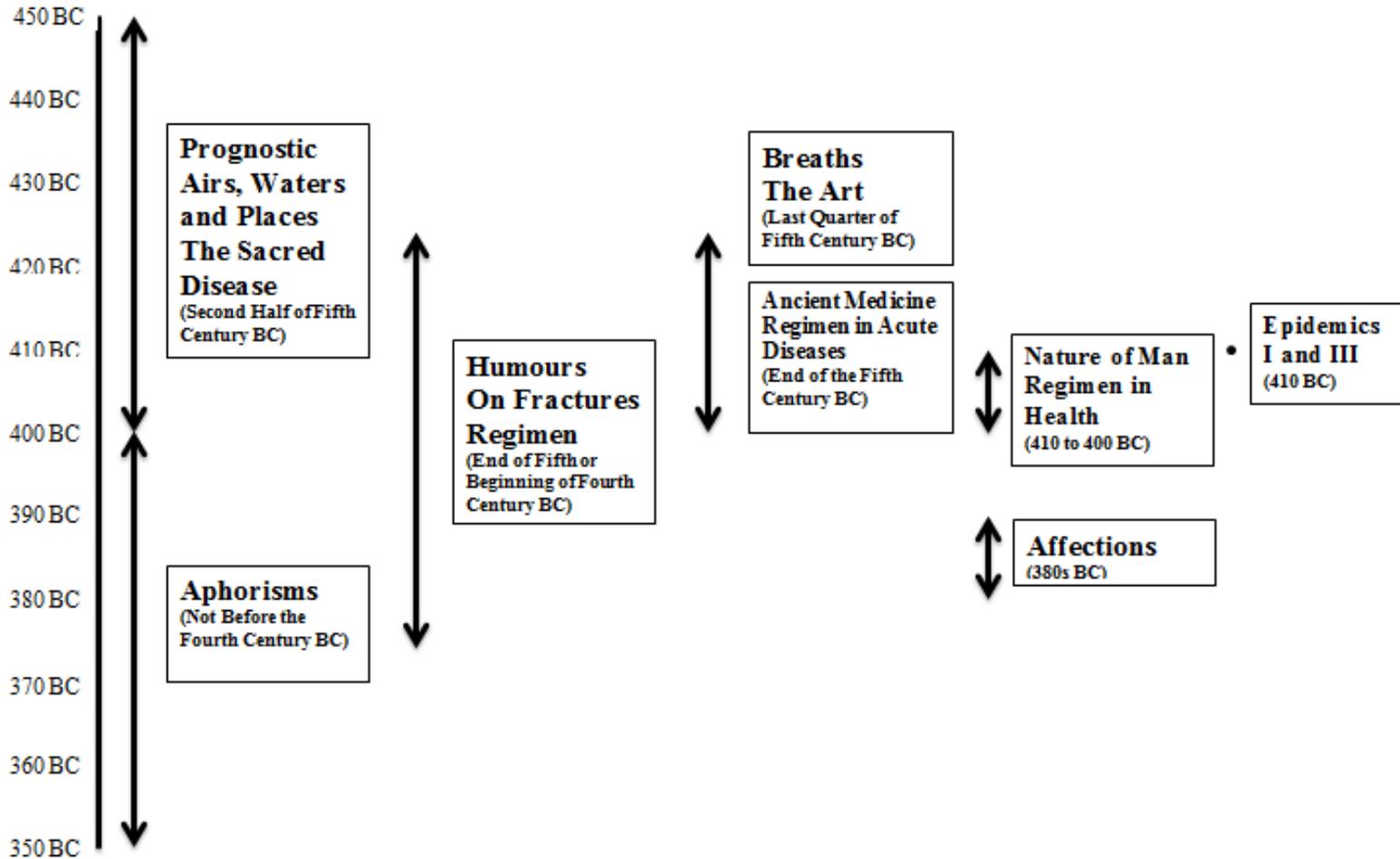
Regimen I

(Fire and Water)

Problems with Hippocratic Humours

- Chronology
 - There are over 60 texts in the Hippocratic Corpus, which have been written by different authors
 - Most of the texts come from the late fifth century BC, but some are thought to be dated to the fourth century BC and a few might have been written as late as the first century AD
 - It is therefore very difficult to try to trace a development of a particular theory through these texts

Problems with Hippocratic Humours



Progress?

- There is some consistency in the Hippocratic texts
 - Fluids are important, Mixture and Separation are key mechanisms
- Presocratic Philosophy is a helpful comparison
 - Empedocles, Heraclitus, Anaxagoras, Democritus etc.
- Questioning idea of Elements, Particles and the Void as explanations for the fundamental nature of matter in this context
- Looking at how these authors use analogies and descriptions of practical experiments in these texts is also important

Conclusion

- Galen's work on the humours is taken from a small selection of what was actually available in the Hippocratic Corpus
- The idea of Humours in the Hippocratic Corpus is complex
 - But there is some consistency in terms of fluids and mixtures
- Must look at this type of philosophy in context of what was going on in the sixth, fifth and fourth centuries BC
 - Presocratic philosophy compared to the work of the physicians writing the Hippocratic texts

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