

## **Galen on the causes and signs of the features of human bodies**

On numerous occasions in his wide-ranging works, Galen engages with the question of how to recognise and to explain the internal and external features of human bodies – both those features that human bodies have in common with animal bodies, those features that are specific to human bodies, those features that may vary between different categories or types of human bodies, and those features that vary from one individual human being to another. This paper will study the different explanatory and inferential strategies that Galen adopts in his attempts to address these questions. It will study the interaction, and occasionally the tension, between the various modes of explanation that Galen deploys (e.g. teleological and mechanical explanation, top down and bottom up explanation), the different causes that Galen identifies (e.g., nature as a craftsman; the physiological mixtures; hereditary, congenital and acquired factors), the different levels (generic, specific, sub-specific, individual) at which these explanations are applied, and the different thematic contexts (anatomy, physiology, embryology, psychology) in which they are used. It will further discuss Galen's views on the relationship between causal explanation, observation and inference from signs, and it will analyse the modes of cognition (empirical observation, especially through the sense of touch; indication on the basis of functions; theoretical reasoning; inference from observable signs) that Galen identifies in order to determine the internal parts, states and processes hidden within the body on the basis of external evidence. Finally, it will study the relationship between theory and practice and consider how Galen implements these modes of cognition in his actual research and what criteria he adopts in order to validate or refute claims about the non-evident aspects of human bodies.

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