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objective as this is, an equally laudable task is to help the more junior person in his praiseworthy attempt to supplement his knowledge of present-day neurology by increasing his knowledge of its past. Such a history of neurology is still awaited.

EDWIN CLARKE

De Motu Locali Animalium (1627). WILLIAM HARVEY. Edited, translated and introduced by Gweneth Whitteridge. Cambridge University Press. 1959; XII, pp. 163. 60s.

In *De Motu Cordis* Harvey promises a special treatise on animal movement and the structure of muscle in general. It was never published, however, and its script was assumed to have been destroyed by the Parliamentary soldiers. The evidence for this does not seem to have been substantial at any time. In fact, the preparatory notes for the treatise are extant in a manuscript in the British Museum (Sloan 486, ff. 69–118 v). In 1847 R. Willis described them as ‘notes on the muscles, vessels and nerves and on the locomotion of animals’. They are here published for the first time together with a comprehensive introductory commentary, a translation and an apparatus in which the passages from Harvey’s sources referred to in the text are given in full. The treatise comprises two distinct works bundled together and possibly separated by nine years in time of production (1618–27)—the first dealing with the muscles and the second with animal movement. Most of the quotations come from the relevant Aristotelian treatises: *De Motu Animalium* (698a–704a), *De Incessu Animalium* (704a–714b) and *De Spiritu* (481a–486b). Apart from Galen the most quoted additional authority is Fabricius ab Aquapendente, Aristotelian naturalist and Harvey’s teacher in Padua; among others Thomas Erastus (1523–83), the famous adversary of Paracelsus, is cited as the author of a treatise *On Convulsion*. On the other hand, Robert Fludd (1574–1637), Paracelsist, Rosicrucian and mystical cosmologist is also mentioned (p. 94)—in connexion with the motive spirit and its power of contracting and relaxing. Fludd calls himself Harvey’s friend. At an early date he supported Harvey’s discovery on grounds of mystical philosophy (see *Bull. Hist. Med.* 1935, III, 278–9). It was Fludd who made contraction and expansion the basic operative principle in the cosmos—a ‘mysterium’ accessible to ocular demonstration by means of a universal instrument that was something between a thermometer and barometer. It is interesting that Harvey should refer to Fludd in this context, as the latter was hardly original, but borrowed the ‘principle’ from Telesius. In Fludd’s days it was called by Bacon ‘quite fundamental and catholic’ (for detail see *Bull. Hist. Med.* 1935, III, 272).

Harvey closely follows the Aristotelian lead, but adds some results of inductive observation and reasoning, for example on the erroneous idea (shared by Fabricius and finally refuted by Stenonis in 1667) that sinew is the essential component of muscle.

The work thus provides a further authentic guide into Harvey’s workshop and into the world of ideas that exercised his mind. As such alone it is invaluable. Moreover its broad comparative-anatomical outlook again shows the fruitfulness of Aristotelianism in Harvey’s hands. The singular crispness and incisiveness of some aphoristic discussions of fundamental problems amply reward the perusal of a treatise which otherwise may be found somewhat dry. It is in these passages that the author’s deep concern with general philosophical ideas and even mystical beliefs (such as the parallelism of macrocosm and microcosm) comes to the surface.

Just as divine Nature pursues an architectonic end making of diverse things one . . . by

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composing discords and making oppositions to harmonize, so through diverse movements and uses and employments of the muscles are effected the works and actions of the body and of the parts (p. 143).

Nature performs her works in animals by the power of the muscles and attains her end by means of rhythm and harmony. . . . It will appear that through godlike power truly in the heaven there is a pursuit of the delectable and the lovable by harmony and rhythm of movement of which we have no more perception than a dog has of music (*ibid.*).

Thus through orderliness and sympathy and antipathy, the final builder of all (sc. ordained) actions, passions and even dust. Hence the Cosmos (p. 194).

Harvey calls the proportion of the moving muscles and those at rest: 'Tacita Musica'—the silent music (p. 146).

Is the brain the general? The nerves carry the commands, sergeant major. The spinal medulla the lieutenant-cornet. The branches of the nerves . . . the captains. The muscles, the soldiers. Or is the brain the ruler of the senate. . . . The nerves, the magistrates. . . . Or again is the brain the choir-master. The nerves the time-keepers and prompters, dancers. The muscles, the actors, singers, dancers. . . . Or is the brain the prime mover? The nerves, the intelligences. The muscles, the spheres (p. 150).

Harvey, however, decides with Aristotle in favour of the sovereignty of the heart:

Or rather W.H. Is the heart the general or ruler? The brain, the judge, sergeant major, marching overseer. . . . Or is the heart the musician or the architect . . . the captain, maker, owner, prime mover? The brain the master of the ship, the *primum mobile*, the sun. . . (*ibid.*, see also p. 110).

No word of praise can do justice to the very high standard of the work performed by Dr. Whitteridge. A glance at the frontispiece—a photostat-page of the manuscript exhibiting the familiar scrawls—should suffice to judge the magnitude of the task that confronted the editor and translator. She has shown herself equal not only to this, but also to a full provision of the intricate historical-philosophical (notably Aristotelian) and historical-medical background of the treatise. Her book forms an essential part of the Harveian Corpus, and a fine piece of scholarly editorship and historical understanding.

WALTER PAGEL

Jacopo Berengario da Carpi: a Short Introduction to Anatomy (Isagogae breves). Translated with an introduction and historical notes by H. R. LIND. University of Chicago Press, 1957; pp. xi, 228. \$5.00.

The Renaissance of anatomy did not occur overnight. Nevertheless, it has often been said that the study of anatomy, as we know it, began with Vesalius, and that before him no light had penetrated the mediaeval penumbra shrouding the structure of man. He had, however, several important predecessors whose contributions, although less well known, are of considerable significance in the history of the subject.

Perhaps the most outstanding was Berengario da Carpi (?1460–?1530), who has been claimed by some as the first modern anatomist. He possessed a bold and original mind, he made original observations, and he had a healthy scepticism of blind tradition. Evidence of these qualities, together with the earliest use of figures to illustrate the text, are found in his work, *Isagogae breves*. It was designed as a dissecting