

(and words) at least as much as people made sense of models. While magnifying microscopic structures, wax-models of embryos hardly resembled anything that one could come to recognize as part of one's experience. Yet, they became powerful means of scientific communication. In order to illustrate how this happened, Hopwood takes readers back from the models to the busy laboratories in which they were made, the scientific practices and teaching methods they brought about, the forms of business and division of labour they supported, and the professional alliances and academic contempt they generated. Particular relevance is also given to the codification of the view that wax-models of embryos could be published; the relationship between "plastic publishing" and printed culture; and the bearing this relationship had on the publicity, credibility, and circulation of the models.

The discussion of all these aspects cogently addresses "the historical challenge" of getting "behind the finished products" (p. 2). Hopwood's reconstruction of the role of models in defining what embryos and embryology were all about makes a powerful case for a more integrated historical analysis of the different media of science. His assertion that this book is, among other things, "about wax" (p. 5) may whet the appetite for further systematic discussion of the part played by specific material domains—in this case wax—in the objectification of scientific tenets and values. But readers will find in this engaging study both a valuable source and new directions for research. At a time in which interest in the history of three-dimensional anatomical waxworks is growing rapidly, I would not be surprised if *Embryos in wax* came to be regarded as a model.

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Hans Bots and Rob Visser (eds),
*Correspondance, 1785–1787, de Petrus Camper
(1722–1789) et son fils Adriaan Gilles Camper
(1759–1820)*, LIAS Sources and Documents

Relating to the Early Modern History of
Ideas, vol. 28, Amsterdam and Utrecht,
APA–Holland University Press, 2002, pp. 304,
illus., €50.00 (paperback ISBN 90-302-1098-2,
ISSN 0304-0003).

The Dutch scientist second only to Boerhaave in international renown in the middle years of the eighteenth century, Petrus (otherwise Peter) Camper was typical of his time in bringing a restless intellectual curiosity to bear on a wide range of different subjects. Primarily a comparative anatomist, he made significant contributions to surgery, obstetrics, and ophthalmology as well. He discovered air spaces in bird bones and studied the hearing of fish and the croaking of frogs, while his measurement of the facial angle and his introduction of Camper's line notably furthered the young discipline of physical anthropology. From pioneer dissections of then little-known mammals, including an elephant and whales, he was later to apply his expertise to the identification of fossil vertebrates.

At the same time, Camper was untypical in the privilege he enjoyed from middle life in having the economic option of either continuing in a successful medical career as a university professor and consultant, or of retreating into rural seclusion and comfort to spend his days in private research and writing. It was an option he exercised in favour of the latter twice. He owed it to late marriage to a burgomaster's widow of great wealth, a change in circumstances for which he paid a price in role ambiguity and in a sense of public obligation as a landowner, which ultimately led to high office. He seems to have been temperamentally ill-suited to a political life and retired from it depressed and frustrated.

During the two years, 1785–7, leading up to his nomination as President of the Council of State of the United Provinces, Camper conducted an extensive correspondence with his third son, Adriaan, then following his father in a political career and in enjoying a leisurely grand tour which included a lengthy residence in Paris. Two collections of these letters, seventy-one by the father and fifty-one by the son, have survived and are now in the university libraries of

Amsterdam and Groningen. Most of them in French but a few in English, they document on a day-by-day basis Adriaan's attempt to interest Georges Buffon in publishing the anatomical discoveries made by his father in his dissections of monkeys and whales. Buffon, by then old and feeble, expressed great admiration of the drawing that had resulted but could not be pinned down to acting in accordance with the father's wishes. In the end the negotiations came to nothing, and another thirty years elapsed before Adriaan saw into print the work on whales (only), long after his father's death.

One of the editors of the publication under review, Rob Visser of the University of Utrecht, published in 1985 an authoritative account of Camper's zoological work and was consequently well-placed to realize the value of this correspondence for historians of the life sciences. This value resides most particularly in the light the letters shed on Camper's ways of working and intellectual preoccupations, in how his dissections had led him to view zoology in a very different way from Buffon, despite their shared antipathy to Linnaean method, and in how research on fossils was creating altered perspectives that would serve to shape the emerging discipline of palaeontology.

The production of the volume is excellent and the editorial annotation all that one could hope for.

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Vivian Nutton (ed.), *The unknown Galen*, *Bulletin of the Institute of Classical Studies*, Supplement No. 77, London, Institute of Classical Studies, 2002, pp. viii, 179, £45.00 (paperback 0-900587-88-1).

The remarkable and rapid growth of Galenic studies in recent years is reflected in this volume of conference proceedings. It is concerned with a number of Galenic works that, for a variety of reasons, were not included in the old—but in many respects still indispensable—nineteenth-century edition of Galen's works by Carl Gottlob

Kühn. Some of these works survive only in Latin, Arabic, Syriac, Hebrew or Armenian translations, whereas for others the Greek tradition was not yet available to Kühn—and indeed this corpus of new Galenic works, or parts thereof, or new versions of works already known, continues to be supplemented by new, sometimes spectacular discoveries. 'Galen beyond Kühn', the original title of the 1999 conference, would perhaps have been a more appropriate title for the volume, considering that even to Galen specialists, let alone to the wider scholarly community, many of Galen's works as included in Kühn are even more unknown (and even more inaccessible) than the works singled out for discussion here. For one thing, these works have at least received a proper critical edition and in most cases some further scholarly treatment—something which still cannot be said of, for example, Galen's pharmacological writings as included in vols. 11–13 of Kühn's edition. As always, new discoveries attract more immediate attention and excitement, but this should not obscure the urgent need for study of works "known" but left untouched on the library shelves for centuries.

Having said that, this collection is a welcome and valuable addition to scholarship, though obviously more for the individual contributions it contains than for any unifying theme or umbrella under which they are brought together. After the editor's introduction ('In defence of Kühn'), in which the principles and the limitations of Kühn's editorial project are positioned against the background of medicine and medical historiography in early nineteenth-century Germany, discussions follow of Galen's *On the parts of the medical techne* (Heinrich von Staden), *On the thinning diet* (John Wilkins), *Introduction to logic* (Suzanne Bobzien), *On unclear movements* (Armelle Debru), the Arabic books of *On anatomical procedures* (Julius Rocca), and the *Commentary on Hippocrates' Epidemics book II* (Rebecca Flemming, concentrating on the gynaecological sections). In addition, Véronique Boudon discusses new Arabic evidence for the text of *On my own books* (the Greek text of which was edited by Müller in 1891 in the *Scripta minora*), Emilie