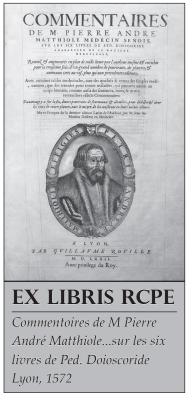
## A French 'Matthioli on the herbal of Dioscorides'; 1572

Our knowledge of the ancient practice of medicine is scant, but we know it was established long before the 18th century BC when the Code of Hammurabi first set out laws governing the behaviour of doctors. In the few extant ancient sources, diagnosis and treatment are conjoined in the descriptions of cases or types of illness and there is no separate account of the medicines to be used. This changed in the 1st century AD when Dioscorides, a Greek practising medicine in Nero's Rome, wrote a systematic account of the sources of medicaments whose Latin title, De materia medica, gave the topic its name. The herbal of Dioscorides remained the principal authority on the sources and preparation of medicines for one and a half millennia. Dioscorides was not the first to write about plants as sources of medicines; the treatise latinised as the Historia plantarum of Theophrastus, written about 300 BC, provided a rough framework for classification of the plants it described. Celsus's De medicina

then Pliny's *Naturalis historia*, written in the 1st century AD and roughly contemporary with Dioscorides, contain information on sources and preparation of plant remedies. These authorities, interpreted and reinterpreted by many authors, of whom Avicenna in the 11th century was the most influential, together with Galenic writings, formed, with Dioscorides, the backbone of therapeutic practice until the Renaissance.

Not until the 16th century was much new added to this ancient corpus. By the time the physician Pietro Andrea Matthioli (1501-1577) began to publish his Commentaries on the Herbal of Dioscorides about the middle of the century, there were a number of contemporary writers on plants and animals whose opinions he could quote and with whom he could, quite frequently, disagree. These included Leonhart Fuchs (1501-1566) and Ulisse Aldrovandi (1522–1605), who were renowned botanists, Guillaume Rondelet (1507-1566) who wrote on animals, and Conrad Gesner (1516-1565) who composed systematic works on both plants and animals. Matthioli's interest in the work of Dioscorides may have been triggered by Ruel's new translation of the Greek text of Dioscorides into Latin in 1516,1 which Matthioli translated into Italian with additions of his own and published in 1544 as the first edition of his Discorsi. This quite modest unillustrated book developed over the years through a number of increasingly ambitious - and lengthy - editions in Bohemian (Czech), German and Latin into the lavishly



illustrated late versions of the 1560s. It was these late Latin editions that formed the basis of the illustrated French edition in 1572 of what was then the most popular contemporary book on materia medica.

# THE FRENCH EDITION OF 1572 TRANSLATED BY JEAN DES MOULINS

The Sibbald Library is fortunate to own a particularly fine copy of this French translation of Matthioli's Commentaries.<sup>2</sup> It is a large volume of over 800 pages, hand-ruled in red ink on each page and all but a few of its hundreds of woodcuts of plants and animals are hand-coloured by a contemporary hand. Though in most cases the colours are rather sombre there is no evidence that they have faded and a few of the woodcuts show very lively tones. The book has been handsomely re-bound, probably in the 18th century in France, in fine crimson morocco with gold tooling.

Matthioli believed that the woodcuts of his later editions were fine enough that they did not require colour to make the plants recognisable; nevertheless, there are a few copies of various editions in which the pictures have been hand-coloured. This would have been done to special order, presumably by the first owners. The most striking feature of the book, and particularly of the Sibbald Library copy, is the wealth of its (coloured) illustrations – something of which it is not easy to convey an impression in a short monochrome essay.

The various aids to the reader in finding their way through the book's huge mass of information prefigure in some ways those in use now. First, there are tables classifying plants according to their 'Similar and different properties' on the basis of structure, morphology, colour and similarity to some model plant such as vine, fennel or plantin. Then there are pages of tables of parts of the body and their ailments and symptoms with a list of the medicines appropriate for each; these are separated into lists of those in Dioscorides and those added by Matthioli - often the longer list. Next, inversely, are tables of the properties of each medicament. Overall the classification is into those which are 'hot or 'cold' in the Galenic system but some also have self-explanatory qualities such as 'poisonous' or 'bitter'. Perhaps more usefully, there is often a short note on their (supposed) actions. These are not always quite what one might expect. Opium is not listed in the table (though it is described in the main text)

but, under Poppy (pavot), we find that, according to Galen, 'all poppy in general has the quality cold'. The article, on 'Meconium' is a little more helpful; 'When one has drunk juice of the poppy, called Meconium, a deep sleep ensues accompanied with cooling and a fierce itch...which grows so strong that it wakes the patient'. Meconium is considered a poison whose effects need to be treated and not, it appears, as of any therapeutic value; analgesia is not mentioned. The description of opium is longer and includes instructions about incising the poppy capsule and extracting the juice. But the discussion of its uses again concentrates on its dangers though, interestingly, it is noted as being effective in treating cough.

There is probably little to be gained from any detailed comparison of the supposed 'virtues' and dangers of medicines in the Galenic system of materia medica with those of modern medicine predicated on completely different understanding of physiology, pathology and pharmacology. While Matthioli's descriptions of plants may well be of considerable interest to botanists and – to a lesser extent – those of animals to zoologists, the most interesting parts of the book from the historical point of view are the prefaces, letters to the reader and dedication.

#### THE ORIGINS OF THE FRENCH TRANSLATION

In his 'Letter to readers', the French translator, Jean des Moulins, describes how this edition came to be published:

Having read and thoroughly leafed through the fine and extensive Commentaries of Matthioli on Dioscorides, in the company of learned men, praising them as I thought they merited, the Sieur Rouillé being present showed to us some of the plants contained in this work, very well executed and represented from the natural, promising to achieve them all to make known the said Dioscorides and Commentaries to us Frenchmen, if he could find a translator, in the same way as the said Matthioli made them known first to those of his own nation, then to the Germans and Bohemians then to everyone in general. This enterprise, profitable to everyone, necessary for doctors and especially for apothecaries, because all do not understand the Latin tongue, was greatly praised by the said gathering, who charged me with making a translation of it all. This I promised to do, more to encourage the said Rouillé to bring to fruition such a good and noble enterprise than for any other reason that might be attributed to me. I began the work ten years ago and completed it long ago; however it was not possible for the said Rouillé to bring it to light sooner because, wishing to employ only the most excellent painters and block-cutters that it was possible to find - who are rare and fewer in number than the incompetent - he was able to achieve this only after the passage of much time particularly during the reverses and miserable calamities of the past years. Which [work], had he

been willing, like some, to publish with hastily-made images and no matter what kind of workmen, to draw a quick profit and to the great detriment of the buyers, indeed he would have put the work out with much less investment of money and could have let you see the book long ago — but not with the faithfulness of translation and the beauty and simplicity of the illustrations that he now presents.

So the origin of the book is presented as being a project arising from a meeting. But why was there such a meeting? One probable interpretation is that it was instigated by the printer and publisher Guillaume Rouillé anxious to produce a new, illustrated, French edition of the very popular Commentaries. He wanted it to be comparable with the recent lavishly illustrated Italian and Latin editions. In effect, he saw a gap in the market. At this stage it would seem that he had some woodcuts already made that he showed and promised that he would have the set completed. Des Moulins's comments about the potential market for a French edition among non Latin-speakers sound entirely credible. But, according to the translator, the meeting had taken place more than a decade before 1572; he had had the translation ready for some time but the publication was delayed because of the time it to took Rouillé to have all the woodblocks cut to his satisfaction. Again, the explanation for the delay in collecting the blocks may well be true; the book contains hundreds of woodcuts and they are, indeed, well executed even if they do not reach the very high standard of the illustrations in the late Latin and Italian editions. The translator claims later that his source was the text of the most recent Latin edition, but this was published only in 1568 so he cannot have been working on that text for ten years in 1572; perhaps he simply meant that he had begun the work of reading and planning the work a long time before it came to fruition. Again, we are told that the sample woodcuts shown were 'represented from the natural' - that is, drawn from living, or at least real, specimens rather than copied from other illustrations. It is entirely possible that this was so for the samples, but it is not believable for all the woodcuts in the book; some of the more exotic animals, in particular, were clearly drawn by someone who had never seen them. What was important, and had exercised minds since antiquity, was the difficulty that a reader had in deciding if the plant in his hand was the same as that described in the text he was reading.

Sylvius, in his intemperate attack on his former pupil Vesalius after the *Fabrica* was published in 1543, quotes Galen's prohibition of publishing drawings of plants: 'nor did Galen permit plants to be drawn, [as he says in] the beginning of the sixth book of 'de simpl. facul. med'. The problem was that, when books were copied by hand, each scribe copied the drawings of his source manuscript and, over time, the representations deteriorated until they bore no resemblance to the original plant and were downright misleading. But when printed books illustrated

with woodcuts developed, an accurate representation in a woodcut could be perpetuated indefinitely so there was a strong incentive for the publisher to have his blocks drawn from life – or to claim that they had been – and thus that they could be relied upon for the identification of the real plant.

Matthioli himself was concerned with exactly this problem. The early editions of his commentaries were unillustrated. Having attracted praise for these from French and German writers, he says he decided to make them more widely available by translating his book into Latin: '... changing many things [because of the difficulty of the material] and augmenting them greatly but without illustrating them in any way.' But in his next Latin edition he began to add illustrations and then elaborated and improved these in later editions:

I have added [presumably, now] images of the plants and animals in a small format, taken from nature, in order that those who cannot journey and who have no means of having masters, will find here a garden, in which, at all times and without any labour of cultivating, they may as it were see the live plants. Having published the Commentaries anew in 1558 I have added several pictures of plants and animals of which we have treated particularly in our Commentaries, beyond those spoken of by Dioscorides.We have also enlarged the Commentaries in many places. Now, having lived for ten years at the court of the Most Serene Prince Ferdinand, Archduke of Austria etc., being his doctor, I have used all the leisure I could win to study materia medica more deeply; not only have we published herbals specifically for the Germans and Bohemians but we have enlarged our Latin Commentaries by more than a thousand passages, and along with this, have had all the pictures printed in a larger size and much more carefully executed, and have added several hundred new and foreign plants drawn from life, and not previously brought to light by me, nor by anyone else. As one can see, the images are of such great artistry and [made with] such care (I say it without boasting) and so accurately that, without [needing] any colour they [the plants etc.] may easily be recognised.

Then, later, listing his financial backers and many other supporters, Matthioli says :

Among these are the artists George Liberal and, after him, Wolfgang Meyerpeck de Misne who have spared neither pains nor diligence in drawing plants and animals.

By fortunate chance some of the woodblocks used in these later Latin and Italian editions survived to be acquired by a consortium of antiquarian book dealers and sold in 1989. These are not the blocks used for the French edition of 1572; though the latter were certainly influenced by the pictures in earlier editions their exact relation to the earlier series awaits further study.

#### MATTHIOLI ON THE USES OF HIS BOOK

Matthioli cautioned his readers to beware that possession of his book does not replace the knowledge and experience of the physician and, to emphasise this, he points out the way in which Galenic medicine regarded correct treatment of an ailment as strictly dependant on the personal details of the patient and his circumstances as well as on his symptoms:

Long experience of an infinite number of considerations is also necessary and of the limitations that the Greeks call διορισμός (distinctions perhaps even differential diagnosis) without which it is impossible to use these remedies; lest, instead of doing good they injure, instead of remedying the disease they increase it, in place of curing they cause death. Thus, one must take account of the course of the disease; that is, its beginning, increase, severity, decline; of the season of the year, of the details of the patient - that is, their strength or weakness, their age, their estate and condition, their manner of life, where they live. For different medicines are needed at the start of illnesses than during their increase or decline, others in winter than in summer, yet others in spring or autumn, others for a strong robust man, yet others for someone feeble. The old must be treated differently from the young, as must those of middle age, the gentleman differently from the merchant or the artisan, the independent man differently from someone in service or dependency, those who generally work from those who are idle, those who live delicately or amply from those who live roughly or meanly, the townsman differently from the peasant, the man of the mountains differently from him of the plains. These and suchlike are the limitations which must be considered carefully in order to use the remedies that are fully set out in this book

Matthioli's herbal offers many insights into the practice of Galenic and neo-Galenic medicine during the Renaissance, particularly into the therapeutic armamentum that was at the disposal of the physician – at least in theory.

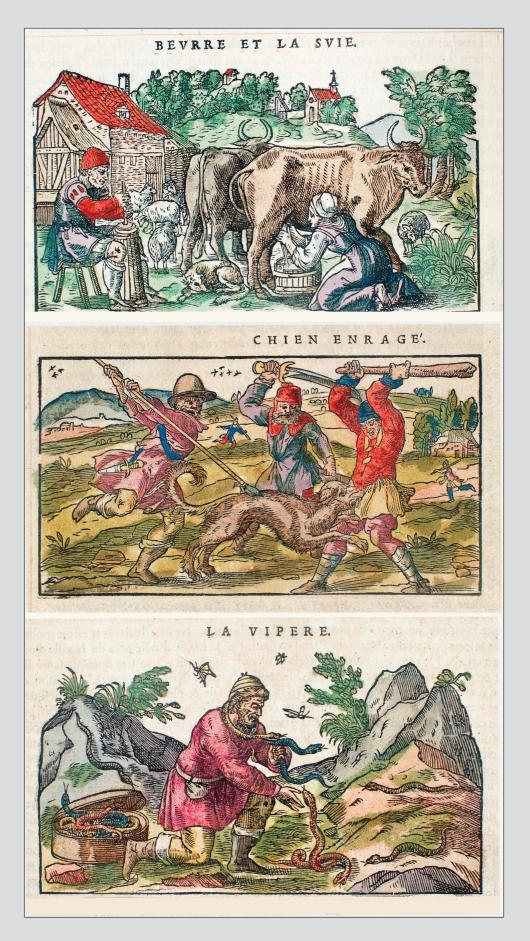
It is not possible to give much impression here of the book itself since the coloured woodcuts cannot be shown to best advantage. However, a sample of images of animals and plants from our copy of the book can be found on the journal website.

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### **REFERENCES**

- Watson WP, Raphael SA, Bain I. The Matthioli woodblocks. London, Amsterdam: Hazlitt, Gooden & Fox; Bernard Quaritch; Antiquariaat Junk; 1989.
- 2 Matthioli PA. Dioscorides P. Commentaires...sur les six livres de Ped. Dioscoride Anazarbeen de la matière medicinale. Trans. Jean des Moulins. Lyon: Guillaume Rouillé; 1572.



People and animals from Jean des Moulins's French translation of Matthioli's *Commentaries on the herbal of Dioscorides*, Lyon,1572. Woodcuts coloured by a contemporary hand.

From the top:
Butter and suet; 'Mad dog' – men killing a dog with rabies; 'The viper', collecting vipers, probably to make 'theriac' a supposed antidote to poison. This was in no sense an anti-venom but rather a mixture of many ingredients often including vipers and/or scorpions.

See pages 313–5 for more details of the book.