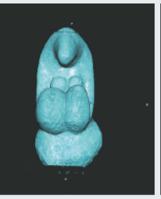
## **BOOKS & ARTS**

## EXHIBITION The ballerina within

At just over 60 centimetres tall, Picasso's Bust of a Woman (1931) is a small, compact mass of a sculpture that smacks of Stone Age totems. Using computerized tomography (CT), photographic artist Xavier Lucchesi has assembled three-dimensional images of it (shown here), revealing what appears to be another, antithetical form hidden inside. At the sculpture's heart lies a finely worked metal structure that bears a strong resemblance to a ballerina. Standing on her points, with head erect and arms



gracefully bent, she even appears to be wearing a tutu.

The tutu, it turns out, is an artefact of the technology: a halo of light similar to the phantom thrown up by a dental filling in a CT head scan. Picasso would build his sculptures

around metal skeletons, which, in other works scanned by Lucchesi, seem to have served a purely functional role. So it is possible that the ballerina wasn't Picasso's creation at all — that she exists only in the 'eye' of the scanner. If so,



there are at least two artists at work

SUCCESSION PICASSO/X. LUCCHESI/EDITIONS MB

here, and one of them is a machine. Xavier Lucchesi's exhibition, 'Picasso XRAYS', can be seen at the National Picasso Museum in Paris (www.musee-picasso.fr) until 8 January 2007. Laura Spinney

## Easing the pain

The Worst of Evils: The Fight Against Pain by Thomas Dormandy Yale University Press: 2006. 560 pp. \$35, £19.99

## John Carmody

Some years ago Australian poet Les Murray wrote a set of sonnets about his student days at Sydney University. The lines

With Duncan the Sydney historian who in an Australian course might send off the First Fleet by August

referred to Duncan McCallum, who was legendary for sometimes completing his lectures with the founding fleet still in Portsmouth. I felt that way about The Worst of Evils by Thomas Dormandy. Certainly human history is long, but our knowledge of the mechanisms of pain, and our capacity to treat it reasonably well, are quite recent, so it seems idiosyncratic for the author to take about 400 pages to reach the twentieth century.

In this odyssey, Dormandy tells an almost Homeric or Chaucerian saga, and if sometimes his divagations are rather too numerous, they are mostly interesting. Clearly, he is a learned man, but good - and cogent - writing demands selectiveness. You cannot put everything you know into a book; it fatigues the reader. His footnotes are numerous and sometimes florid, but even so I was often frustrated that some of his most interesting or dogmatic assertions were delivered ex cathedra, without substantiation. Regrettably, there are sufficient errors of fact to leave me uneasy, even when the author is at his most confident.

He is quite wrong, for example, in his account of the anatomy of the spinal cord and its nerves; he seems confused about what Otto

Loewi really did in 1921 when he discovered chemical neurotransmission; his grasp of modern neuroscience seems flawed, or perhaps just infelicitously expressed; and when his poetic muse usurps the historian's gravitas, the results are often unconvincing: "Soon the patella hammer would become as numinous a repository of medical wisdom as the stethoscope."

If, as Hippocrates observed and other writers have echoed, life is short and the art is long, the huge span of Dormandy's chronicle is hardly surprising. Nor is the fact that it seems to have as many characters as the phone book. As in a great novel, these people are vain, diligent, amorous, honourable, insightful, perverse, obtuse and arrogant. But unlike a novel, this book of 50 chapters (plus introduction and epilogue) does not have to be read all at once. As at a yum cha banquet, one can (and should) be choosy about the dishes. The pleasure of the book is as much in the travelling as the arriving; indeed, Dormandy seems to relish providing distractions for the reader.

The chapters on ether anaesthesia in the United States are especially enthralling. What the London surgeon Robert Liston referred to as a "Yankee dodge" was a marvellous clinical advance. But it had an unorthodox history, which Dormandy tells excellently, with the six principal characters playing out an almost Shakespearean drama. Whatever the avarice and personal tragedy involved, what apparently began as a circus act by 'Professor' Sam Colt (the inventor of the famous 'six-shooter') led to the safe anaesthesia we take for granted today, and makes possible the extraordinary range of modern surgery - even though it is the surgeons who take the glory.

Dormandy tells a good story, too, about the remarkable John Snow, who is best known for his painstaking epidemiological study of cholera in London — he identified the source as the Broad Street pump - but is equally deserving of renown as a pioneer anaesthetist. Dormandy also gives a fascinating account of the development of phenacetin and aspirin, and points to the moral ambiguity of the liaisons between industry and what is, sometimes disingenuously, called 'disinterested research'. He writes well, too, on the first era of cocaine abuse (which carried severe risks to experimenter and patients alike) as an example of the hazards of early clinical pharmacology. And much of what he says about self-medication using proprietary 'remedies' of a bewildering diversity is fascinating social history.

Part of the challenge facing Dormandy and, indeed, every author on this topic is that, like the perception of beauty, pain is a personal and 'internal' matter. He quotes Humphry Davy, who in 1800 wrote about his experiments with nitrous oxide: "From the nature of the language of feeling, my description must remain imperfect...We are at the best of times incapable of describing pleasure and pain except by means of inadequate terms which have been associated with them at the moment of experiencing them." But we can say when a perception, irrespective of whether it is pleasant or noxious, has disappeared or become significantly less intense.

Clinically effective anaesthesia, then, developed without any real understanding of what pain is, or how its perception is generated. This is why the climax of Dormandy's account of that 'Yankee dodge' is so splendid, with the ringing declaration — and it still rings! — by the previously sceptical Boston surgeon John Collins Warren, after he successfully operated on an etherized patient: "Gentlemen! This is no humbug."

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