masturbation mania. It will doubtless be of interest to the general reader unacquainted with the existing historiography, but for specialists in the history of gender, sexuality, and medicine, it will come as something of a disappointment.

Lesley A Hall,

Wellcome Library for the History and Understanding of Medicine

Anne L McClanan and Karen Rosoff **Encarnación** (eds), The material culture of sex,

procreation, and marriage in premodern Europe, New York and Basingstoke, Palgrave, 2002, pp. xiv, 285, £42.50 (hardback 0-312-24001-5).

Most of the twelve essays in this interdisciplinary anthology were originally presented as papers at the Berkshire Conference on the History of Women in 1999 or at the International Medieval Congress in Leeds in 2000. They all point to the significance of material culture in studying the histories of medieval and early modern sex, procreation, and marriage. Although sex and gender in pre-modern times have received increasing attention in recent years, their historical analysis, the editors claim, has tended to privilege texts over material objects.

The editors successfully avoid discussing the multiple meanings of and the many methodological uncertainties surrounding "material culture" by presenting their collection as a reflection of some of the existing approaches to this topic in the humanities. They need to, for the contributions cover many different disciplines, among them history, art history, classics and archaeology, women's history, medical history, and literature. The chapter topics are as wide-ranging materially as the geographical area covered-northern and southern Europe and the eastern Mediterranean. Early Byzantine magical marriage jewellery (Alicia Walker) rubs shoulders with abortion tools (Anne L McClanan), images of women on Roman sarcophagi in the ancient world (Janet Huskinson), Spanish paintings representing Maria's breasts (Charlene

Villaseñor Black), anatomical fugitive sheets from Germany (Karen Rosoff Encarnación), the fertile heart of a Italian saint (Katharine Park), and the magical clothes of Swiss sodomites in the late Middle Ages and the early modern period (Helmut Puff).

My preference is for the essays that emphasize the transient status of material objects and their diverse meanings over those that focus more on material aspects, or the physical quality, production, and use of things. The papers by Park and Puff are best. It is only partly my interest in medical history which prompts this view: they illustrate admirably the way in which the messages of material objects continuously shift. More interestingly, both authors claim that in the Middle Ages and the early modern period the boundaries between material objects and persons were drawn differently from today.

Park explores the meaning of religious relics in early fourteenth-century Italy. Clare of Montefalco's strange "autopsy", undertaken rather unprofessionally by her fellow nuns after her death in 1308, generated actual objects: a crucifix in her heart and Trinitarian stones in her gall bladder. The debates over Clare's holiness as part of the canonization process (the first ever systematically attempted in order to authenticate the visions and revelations of a holy person), revolved around the possible status of these objects. Park shows convincingly that the notion of human bodies generating relics cannot be simply dismissed as a product of the visions or entranced minds of Clare's fellow nuns, but rather, resonates and was couched within contemporary medical, theological and juridical practices. The flesh objects were explained, debated, and considered "real" or "fakes" within this context, depending on the onlooker. By examining this specific historical example from various perspectives, Park shows that medieval relics belong to a group of "things" that lay at the boundary between those physical bodies identified as persons and those identified as objects. Thus, for Clare's fellow nuns, the crucified Christ found in her heart was more person than thing, while for some of the opponents of Clare's canonization it was a mere artefact.

Although Puff deals with a later period, the time of the Reformation in southern Germany and Switzerland, and a different topic, the material culture of illicit sexual practices, some of the ideas in his rich essay are complementary to Park's argument. Like relics in the Middle Ages, clothes in the early modern period, Puff argues, occupied an in-between position. They belonged as much to the self of a person as to the outer world. Where today we tend to regard clothing as an exchangeable and merely external statement, our ancestors ascribed a more static character to the textile skin. This becomes evident in many early modern German sayings, such as "Clothes make the man" ("Kleider machen Leute"), as well as in "wanted" circulars or passports, which often specify clothing rather than corporal features as markers of identity. Puff follows Michel Foucault, and more recently Stephen Greenblatt, in claiming that before the seventeenth century allegorical techniques created connections between the world of matter and the world of ideas. Puff shows in his investigations of sodomites' clothes, in particular, that sexual acts could be easily attached to material goods; such as, for example, in the exchange of trousers between two men.

This collection of essays is helpful to those who would appreciate an overview on how different academic fields investigate the "material culture" of sex, marriage and procreation. The necessity of such a project for further historical studies cannot be emphasized enough. However, for those hoping for guidance through the methodological jungle that has been growing over the last few years around the topic of "material culture" disappointment awaits. Original ideas on how to combine written sources and objects, or suggestions on how to reconcile things and language are not apparent. But, other than the essays by Park and Puff, the contributors stay very much within their disciplinary boundaries. Material objects, it seems, travel rather better across time than between contemporary disciplinary divisions.

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Julius Rocca, Galen on the brain: anatomical knowledge and physiological speculation in the second century AD, Studies in Ancient Medicine, vol. 26, Leiden and Boston, Brill, 2003, pp. xxiii, 313, illus., €85.00, US\$99.00 (hardback 90-04-12512-4).

Galen's anatomical investigations have never entirely recovered from the assault made on them by Andreas Vesalius in 1543, who argued that Galen's human anatomy was based on false inferences from animals. Vesalius may have been largely right in this conclusion, but he also carefully played down the range and quality of Galen's dissections (and occasionally vivisections) of animals. Not even the rediscovery in 1906 of the Arabic version of the (lost) second half of his manual of dissection, Anatomical procedures, altered general perceptions of Galen's folly and incompetence. Julius Rocca's arguments, in line also with the recent work of the Italian neurologist, Tullio Manzoni, should put an end to that old canard. Galen, it is now clear, was a diligent, skilful, and exceptionally sophisticated anatomist, whose understanding of the brain was based on a remarkably detailed acquaintance with the facts revealed by dissection.

The foundations of Rocca's confidence in Galen rest on a long familiarity with his anatomical writings and, most important of all, on his own experience as a professional anatomist. Thanks to colleagues in Cambridge and Sweden, he has been able to repeat Galen's dissections under conditions similar to those of Antiquity. Although Galen often used monkeys, sheep, pigs and goats in his dissections, in his investigations of the brain he worked largely on ox brains, which provided him with the best evidence visible to the naked eye. Rocca has been able to follow in detail all the steps described by Galen in Anatomical procedures, and to confirm the accuracy of many of Galen's observations, warnings, and caveats. He shows in an appendix how Galen came to posit a rete mirabile in humans from a combination of bovine anatomy and a belief in Plato's tripartition of the body, in which blood required to be created (or transformed) in a particular organ