According to late medieval medical authors, human bodies consisted of hard, noble, white, and sustaining parts, the spermatic membra, and of soft, inferior, red, and filling parts, the sanguinary membra. These two types of membra were formed within the developing body of the embryo. While sanguinary membra were derived solely from menstrual blood, spermatic membra came from male and female sperm.

The central question in this paper is: what connections existed between generation and nutrition in the embryology of spermatic and sanguinary membra in late medieval academic medicine, and how did these connections function in the construction of notions of male and female in early physiology? Commentaries on the chapter discussing membra in Avicenna’s Canon (I.1,5,1) form the main sources.

In the paper, many ties between generation and nutrition are described. Most significant for answering the paper’s central question is, however, the strong and consistent connection between the female contribution to generation and nourishment, which was in line with broader cultural assumptions about the female role in society. Sanguinary membra came about when the spermatic membra started to be nourished. Later in life, the soft sanguinary membra would be easily replaceable by material which had entered the body as nourishment. The spermatic membra, on the other hand, were just as irreplaceable as they were indispensable for the continuing existence of the body, reflecting contemporary ideas about masculine superiority and about sperm as the inimitable core of the human body.

Introduction

In early thought about physiology, the dividing lines between generation on the one hand, and nutrition and growth on the other were intriguingly fuzzy. Learned medieval physicians found it difficult to establish the precise difference between the constitution of an embryo during generation, and the bringing about of new tissue in nutrition. Many other facts in
early physiology confirmed the tight connections between nutrition and generation. For instance, nutrition and generation both were capacities of the nutritive soul, the sperm necessary for generation was also a product of food, the uterus had a mouth just like the one in the face, and female sperm functioned as nourishment for male sperm.

It is innovative to study early embryology not as an isolated strand of thought, but as a subject tightly linked to nutrition through bonds of metaphors and parallels, with only vague boundaries separating the two processes. Through this new research trajectory, I hope to throw new light on the notions of male and female within medieval physiology. Much has been said already – and therefore I can safely summarise the debate – about the supposedly misogynist theory of Aristotle concerning the generation of the embryo, and its supposedly more liberating counterpart devised by Galen. Aristotle claimed that form was brought upon the embryo entirely by male sperm, which would refrain equally entirely from becoming part of the embryo. Female blood would provide only matter for the embryo. Galen wrote about the ovaries, the female


2 In tracing the imagery of embryology and femininity in medical texts, I am following King H., “Making a Man: Becoming Human in Early Greek Medicine”, in Dunstan (ed.), The Human Embryo 10–19, where the image of the female as soil is discussed.