OF THE FISHERMAN’S NET AND SKIN PORES.
REFRAMING CONCEPTIONS OF THE SKIN IN MEDICINE 1572–1714

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Summary

Between 1572 and 1714, existing conceptions of the skin as being porous were reaffirmed by visual microscopic evidence. Platonic understandings of the skin as a fisherman’s net were both reformulated in new vocabularies and reframed by new findings in microscopic observations. In this paper I argue that the transition from macroscopic anatomy to microscopic anatomy changed the anatomical views of the skin yet left medical practice in the European context intact. The skin, as the ultimate layer of communication between the body and the world, was seen as a porous tactile part of the body, capable of excreting noxious matter in sweat. Moreover, historical conceptions and visualisations of the skin tell us about changing concepts of the body, and ultimately about the way the body is constructed. While the skin as a symbolic layer has been the subject of studies in art and literature, little is known about the medical and physiological meanings of skin in early modern history. This paper seeks to investigate the physiology of the skin and thus deepen the history of the body as a changing subject of interpretation and analysis, through comparisons of works by Girolamo Mercuriale to early microscopic findings by such scholars as Nehemiah Grew and Antoni van Leeuwenhoek.

‘our entire skin is as one pore’
Antoni van Leeuwenhoek, 1674

The skin as a bodily structure occupied anatomists, physiologists and surgeons in the past in many different ways. In the late seventeenth century, microscopy introduced a new dimension. From being the most obvious structure that needed no depiction, according to Vesalius, skin became a target for such microscopists as Antoni van Leeuwenhoek and Nehemiah Grew. What the microscope revealed was a skin that abounded in pores. What did this mean for existing anatomical and physiological conceptions of the skin? How were medical perceptions of skin challenged by the new natural philosophy? In this paper I argue that microscopic findings

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concerning skin in the late seventeenth century were part of the reframing of skin in a novel intellectual framework with surprisingly little effect on medical practice or patient experiences. The way microscopic investigations into the skin were discussed by physicians can tell us much about the relationship between technology and medical practices, and about the physiological understandings of skin throughout the period between 1572 and 1714. With the emergence of microscopic studies, existing (multiple) understandings of the skin as a ‘fisherman’s net’ were reformulated in new vocabularies and reframed by microscopic evidence and drawings. Here I will focus particularly on the skin’s pores, which closely defined the interplay and exchanges of sweat and other substances between the body and the outer world. Capable of expelling sweat and other matter from the body, the pores could at the same time import air and other substances into the body. As such, the pores of the skin symbolize one important yet paradoxical role of the skin for the physiology of the healthy body: it is at once a large structure for safeguarding the integrity of the body while simultaneously being a layer of exchange and interaction between body and environment.

Although the skin as a symbolic layer has been the subject of studies in art and literature, little is known about the medical and physiological meanings of skin in early modern history. Scholarly interest in the body has in recent years brought the skin to the attention of interdisciplinary groups and historians. Literary critics, psychologists, art historians and others have begun to analyze the skin in our present culture and in psychological or bodily experience. By tracing the meanings and understandings of skin in history, these scholars have relieved the skin of its self-evident image. Literary scholar Steven Connor, for example, has underlined the multiple readings of the skin in Western culture in his work *The Book of Skin* (2004). By studying a wide variety of medical and literary texts,

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