Skin is special. Nowadays considered to be the largest human organ, the skin occupies a remarkable position as mediator between the inner body and the outside world. Visible as bodily surface and boundary, physicians have used the skin in the nineteenth century to inquire into the health of patients, while microscopists examined it as an object to learn about physiology and anatomy. Only since the early nineteenth century has the skin been treated as an organ that mattered. In microscopical practices in Germany between 1820 and 1850 anatomists and physiologists increasingly produced drawings of the intimate anatomical structure of healthy and diseased skin. Inner structures of the skin itself were named, renamed, defined, redrawn and functionally redefined. A new image of the skin materialized in microscopic pictures in a process of visual articulation. This paper argues that microscopic depiction of the skin reinforced a substantial shift in the meaning of the skin from an open porous cover towards a thick, functional and protective boundary organ of the human body.

In recent work on the history of microscopy historians of science have noted that the renewed interest in microscopy from the 1830s onwards was related to a context of new theoretical and social frameworks and not necessarily to the technological enhancements of the compound achromatic microscope (La Berge 1999; Ruestow 1996; Wilson 1995). In microscopical communities in Germany and Paris medical research on organs and tissues was growing. Cell theory was launched in 1839 and in the 1850s Rudolf Virchow introduced cellular pathology (Bracegirdle

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1 The term ‘visual articulation’ does not imply the visualisation of a pre-existing idea. Instead, I introduce the term ‘visual articulation’ to refer to the way the meaning of skin came into being through its depictions in the context of microscopical investigations between 1820 and 1850. Cf. Bruno Latour’s concept of ‘articulation’ in Prentice 2005.
In the climate of newly emerging microscopic communities comparative studies were also made of the structure of human and animal skin. Why this new interest in the skin? How were pictures involved in these new researches? What did the findings and pictures imply for the scientific and medical understanding of the skin and the body? In this paper the depiction of skin is taken as an activity deeply rooted in microscopical research. Not only did microscopists create pictures of the skin, the pictures were also actively involved in the construction of new ideas about the skin and the body.

Scholars of art history and cultural studies have linked the history of the skin to a profound shift in the conception of the human body around the time of the French Revolution. This shift is often connected to Mikhail Bakhtin’s argumentation of a cultural change in perception of the body between the Renaissance and the onset of bourgeois modernity (Bakhtin 1984). The process entailed the replacement of a ‘grotesque’ image of the body as open and porous to a closed-off, delimited and individuated body. In her work on the body in the French Revolution historian Dorinda Outram has linked this change to Norbert Elias’ notion of *Homo clausus* (Outram 1989). Outram argued that the dominance of the closed, individuated body image was only completed with the new political culture of the French Revolution. Scholars writing on the historical conceptions of skin in art, literature and medicine have taken up this idea of a changing body image towards an individuated and ‘sealed-off’ body in the late Enlightenment. They argued for a concurrent changing conception of the skin from an open porous layer to a closed boundary limit for the body (Benthien 2002; Fend 2005). Art historian Mechtild Fend explicitly associates the introduction of the term ‘boundary’ in the work by Xavier Bichat with the emergence of the skin as limit of the body (Fend 2005, 314). Yet most cultural historical accounts of the body have bypassed the production of knowledge on the skin in microscopical practices. From the perspective of medical history too, the microscopical redefinition of the skin in the formative period for investigations of bodily tissues between 1800 and 1850 has been under explored. This paper shows that the shift of body image gained currency in the production of a microscopical picture of skin in the early nineteenth century. The visual articulation of the *interior of the skin* in microscopic pictures defined a new idea of the relationship between the inner body and the outer milieu.

Skin pores were a focal point in microscopical investigations of the skin. Almost invisible to the human eye, these little openings in the skin