

Transgressing Boundaries: Skin in the Construction of Bodily Interior

Skin and the contemporary bodily interior

The contemporary concept of a bodily interior, of skin bounding a space inhabited by the individual, is not unchallenged nor has it spontaneously arisen. The interior has been constructed as the human body has undergone various modes of production. It is, and will remain in a state of 'becoming' as the boundaries of the lived body are continually challenged and redefined. This paper briefly outlines the role that skin has played in constructing the notion of the bodily interior, and how this concept has changed markedly over the centuries as a result of evolving cultural attitudes and scientific advances.

Human skin functions simultaneously as a sensory surface and the border of the inhabited space that is the bodily interior. A place of tension and flux, this interior is caught between states of containment and revelation as the boundaries of the lived body are continually challenged and redefined. A product of the dialectics between outside and inside it is a concept that in its contemporary incarnation is comprised of inward character as much as inner organs and parts. French psychoanalyst Didier Anzieu's notion of the skin-ego addresses the foundation of the division between the bodily interior and outside environment. The skin-ego acts as a unifying psychic envelope in accordance with the skin itself:

'The primary function of the skin is the sac which contains and retains inside it the goodness and fullness accumulated there through feeding, care, the bathing in words. Its second function is as the interface which marks the boundary with the outside and keeps that outside out; it is the barrier which protects against penetration by the aggression and greed emanation from others, whether people or objects. Finally, the third function – which the skin shares with the mouth and which performs at least as often – as a site and a primary means of communicating with others, of establishing signifying relations; it is, moreover an 'inscribing surface' for the marks left by those others.'¹

As Anzieu outlines, the skin-ego is functional in the constructing of bodily boundaries on a fundamental level. It is a protective container, an expressive interface that communicates an inner essence, and a filter for exchanges that moderates the inscriptions of others and the environment. The skin-ego is formed through tactile interaction as children come to perceive their skin as a surface and arrive at the understanding of the self as contained within it, exclusive of the other. The formative experiences of touch reveal skin to be both a receptive and expressive organ subject to a phenomenon known as 'double sensation'. Elizabeth Grosz explains that 'double sensations are those in which the subject utilizes one part of the body to touch another, thus exhibiting the interchangeability of active and passive sensations, of those positions of subject and object, mind and body.'² In the act of both touching and being touched

¹ Didier Anzieu. 1989. *The Skin Ego*. New Haven and London: Yale University Press. Trans. Chris Turner, 40.

² Elizabeth Grosz. 1994. *Volatile Bodies: Toward a Corporeal Feminism*. Bloomington: Indiana University Press, 35-36.

double sensations illustrate the skin's ability to mediate the tensions that arise out of the negotiation between surface and interior.

Gaston Bachelard engages with this phenomenology of the outside and inside through a poetic exploration of surface in his seminal work on the experience of intimate space, *The Poetics of Space*. He deliberates that 'on the surface of being, in that region where being *wants* to be both visible and hidden, the movements of opening and closing are so numerous, so frequently inverted, and so charged with hesitation, that we could conclude on the following formula: man is half-open being.'³ Surface is here characterised as caught in a state poised between the unseen and exposed, so engaged in both the desire to be revealed and to hide away that it exhibits a changeability. Whether the stuttering between visible and hidden is a result of the intertwining of subject and object states as described by Grosz, or a protective function of the skin-ego as Anzieu suggests, the tension that emerges on this surface manifests in a state of half-openness.

Academic and author of a cultural history of skin, Claudia Benthien examines how in a cultural context the skin acts as a potent and protective covering. Exposure of the interior is frequently equated to weakness, the fear implicit in Bachelard's hesitation to be made visible, and the desire to cover oneself to stave off shame and vulnerability.

"The human being must protect himself or herself against the penetrating gaze of others. That requires covering oneself – even if, as in many cultures, this is done merely through symbolic ornaments or a specific inner attitude that regulates the act of looking. What we are dealing with is the archaic fear of the magical, possession-taking gaze of the other, a fear of a look that could rob one of something if one is not careful, and at the same time with the fear of being fascinated and blinded by what is seen, the desire for possession and incorporation."⁴

Benthien uses the analogy of the body as a house, both being 'solid, enveloping, and concealing forms, as rooms in which life happens.'⁵ She questions the underlying implications of the skin as surface, particularly the possibilities presented through the notion of 'the skin-wall as a boundary marker between intimacy and the outside world, in which the doors and windows mediate between the private world of the individual and his or her environment'. She identifies this skin-wall as fundamentally impermeable and the body-house as immovable and static, but engages with the possibilities of leaving, changing, or modifying the house and the ability of the skin to open and close to sensory perceptions.⁶ The interior here is one glimpsed through openings in the skin-wall and through chinks in the armour of the skin-ego. The body pocked with 'doors and windows' acts as a threshold to the potentials of the bodily interior. Half-opening, just as much as it embodies a wariness of becoming lost, incorporated, possessed or revealed also invites imaginative speculation about what control of the bodily interior might mean. Overwhelmingly, it is access to the interior through the porosity and malleability of skin and surface that is central to the concept of the bodily interior in the contemporary setting. Skin is positioned as the gateway between an individual's

³ Gaston Bachelard. 1958. *The Poetics of Space*. 1994 edition. Boston, Massachusetts: Beacon Press, 222.

⁴ Claudia Benthien. 1999. *Skin: On the Cultural Border between Self and the World*. New York: Columbia University Press, 99.

⁵ Ibid, 26.

⁶ Ibid, 27-28.

essence and the cultural, social, and environmental other. Access to the interior presents possibilities for the control of body and self, control over surface and inhabited space.

Production of the anatomical interior

There was a time when the bodily interior was not readily observable. It was hinted at by mucous lined passages that led to dark inner spaces, and glimpsed fleetingly through bloodied ruptures. Access to the body's hidden inner anatomy required passage through the skin, bringing the concealed interior to the surface and rendering opaque depths visible. From the Middle Ages to the European Baroque period, the body was seen as grotesque and intermingling with the world through gross protrusions, excretions, orifices and generally anything 'which leads beyond the body's limited space or into the body's depths.'⁷ The inside of the body was feared, conceived as a series of invisible processes that were known only through signs manifested on the skin and discharges of 'fluxes' including blood, pus, urine, phlegm, and sperm. Despite this porosity the transgressing of bodily boundaries was not encouraged as the interior was regarded as a sacred container harbouring the soul. Sickness was treated on the body's surface by physicians who would attempt to purify a patient though controlling the fluxes, achieved by actively damaging the skin using bloodletting, leeches and minor mutilations.⁸

Modern medicine is generally understood to have begun in the late sixteenth and early seventeenth century when regular dissection and documentation of corpses became integrated into medical teaching and learning.⁹ The publication of Vesalius' *De Humanis Corporis Fabrica* (1543) marked a major turning point in the unfolding of the hidden interior body. Replacing the speculative, theoretical approach of earlier Galenic anatomy the Vesalian system regularly dissected corpses, often surrounded by an audience, in order to understand the body and what it contained. Jonathan Sawday details the confusion of early practical anatomy in which the reality of the body resulted in a tension that 'developed between the ideal anatomization, which took place only in the pages of textbooks, and the practice of dissection which was situated in the anatomy theatre.'¹⁰ The construction of the bodily interior can be seen as an ongoing process through the changing modes of representation of the anatomised body. In the examples cited by Sawday¹¹ a thirteenth century image of the dissected body retains signs of a resistant surface barrier as the internal and external are simultaneously viewed through the oddly transparent skin. The dissected body of the sixteenth century was most frequently shown in the tradition of the flayed body or *écorché*. Vesalian images, and those that followed as the style was popularised, were segmented from the body or dissociated from the external world. In these images the body is constructed following an architectural mode of representation, the layers of skin, muscle and veins peeled back as the body is rendered both alive and inanimate.

⁷ Michael Bakhtin. 1984. *Rabelais and His World*. Bloomington: Indiana University Press, 318.

⁸ Benthien, *Skin: On the Cultural Border between Self and the World*, 39-41.

⁹ Catherine Waldby. 2000. *The Visible Human Project: Informatic bodies and Posthuman Medicine*. London: Routledge, 59.

¹⁰ Jonathan Sawday. 1995. *The Body Emblazoned: Dissection and the Human Body in Renaissance Culture*. New York: Routledge, 133.

¹¹ *Ibid*, 100-102.

Écorché as exemplified in the anatomical artwork of Valverde, Charles Estienne and Spigelius depicts classically posed subjects complicit in their own dissection, passively holding flaps of skin apart to reveal interior organs. These bodies were shown as bloodless and animated, conspiring in their own dissection as a means of distancing the field from the reality of gaining anatomical knowledge through the availability of the bodies of executed criminals.¹² The style also reveals the extent to which skin was understood as an envelope in which the true essence of a human being was contained. By the late eighteenth century as *écorché* gave way to the Vesalian style of ‘new science,’ the body had made the full transition from being regarded as a porous surface with a multitude of possible openings to being a closed, individual boundary. As Elizabeth Stephens observes, the *écorché* took on such importance as transgressions of the skin boundary began to distinguish inside and outside from one another. Through practical anatomy bodies came to be seen as self-enclosed:

‘It is the new understanding of the skin as the border of an individuated body that allows an emergent idea of bodily interiority to be simultaneously established and exposed. Early modern *écorché* illustrations do not simply represent the peeling away of the body’s outside in order to reveal its inside but, on the contrary, represent the establishment of the skin as a border of an individuated self.’¹³

By breaking through the skin with the dissection knife the body’s fleshy hollows were demystified and its boundary established, crucial steps in the construction of the bodily interior. The desirable bourgeois body came to be an individuated one, the skin regarded as capable of revealing a person’s essence, ‘able to develop into a surface that could bear semantic meaning and on which individuality could reveal itself.’¹⁴ Skin and surface proved instrumental in both bounding the self to the bodily interior and helping to constitute the identity of an individual. Its removal can result in the loss of this identity but also results in a ‘universal humanity’ as Nina Jablonski describes the effect of the skinless, plastinated human bodies that contemporary German anatomist Gunther von Hagens’ exhibits. Following in the *écorché* tradition these bodies are publicly displayed, posed and sliced into sections that reveal the hidden interior. Elizabeth Stephens identifies von Hagens’ work as repeating a central paradox seen throughout the history of anatomy, the visualising of the body resulting in ‘the invention of the body’s interiority, and the significance attributed to that interiority, [which] can only be represented when bought to – and depicted as – the surface.’¹⁵ There is no doubt that this is the case in von Hagens’ work as the flayed body becomes clothed in a fleshy outer layer rather than skin, but there is a fundamental distinction between the concept of bodily interiority as it is applied to the representations of the anatomised corpse as opposed to the lived body. In the former instance the visualising of the body results in the production of an image. The image is caught in stasis, unlike the dissected body that begins to decompose and break down its boundaries soon after death, and unlike the lived body that is caught in a state of constant responsive flux. The bodily interior is not simply constituted by the body’s organs but by inner nature, thus representations of the body can only ever remain as surface.

¹² Elizabeth Stephens. 2007. “Inventing the Bodily Interior: *Écorché* Figures in Early Modern Anatomy and von Hagens’ *Body Worlds*.” *Social Semiotics* 17 (3): 313-326, 318.

¹³ *Ibid*, 317.

¹⁴ Benthien, *Skin: On the Cultural Border between Self and the World*, 102-103.

¹⁵ Stephens, “Inventing the Bodily Interior: *Écorché* Figures in Early Modern Anatomy and von Hagens’ *Body Worlds*,” 324.

Transgressing the Boundaries of Lived Interior

'The opacity of the body's exterior surfaces and tissues, its deflection of lights and its material self-enclosure present one of medicine's persistent epistemological problems. This problem has been addressed by a succession of visual technologies which try in various ways to anatomise the body – dissection within the anatomical theatre itself, the anatomical atlas, the multifarious endoscopes which traverse the body's lumens, the radiograph and the more recent kinds of computed vision already mentioned. Each of these technologies transluminate the body in some way, open it to the incursion and projection of light or some other radiant spectra, so that its tissues become readable and interpretable as projected images, traces on a page or screen.'¹⁶

Today the human anatomy is an accepted region of interior exploration, readily accessible through non-invasive medical imaging techniques. Beginning with the 1896 discovery of X-rays by Dr. Wilhelm Roentgen the inner regions of the body could be observed in patients without dissection. Previously forbidden by the threat of pain or death the private world of the living body could be accessed and seen by the inhabitant. While vestiges of taboo remain over relinquishing the bodily interior as a private, sacred space, the contemporary bodily interior is overwhelmingly one in which the hidden is revealed. The visitation of its depths is sanctioned, if not normalised, by the primacy of medical practices and paradigms in the construction of how the human body is understood in western culture.

X-rays endowed the medical profession with the ability to simultaneously expose both the inside and outside of the body, retaining its form and dimensions while plumbing its depths. As a technology it also marked the move from the artist as the generator of medical images and the subsequent rise of the technician, engineer or software developer. 3D scans are now widely used in medical treatment yet their remarkable ability to transgress the skin barrier of the living subject (*Leib*) in real time, as distinct from anatomy's static body-object (*Körper*), goes largely unmentioned on by those who experience the viewing of their interior. In studies cited by Mitchell and Georges, women in Greece and Canada were observed while undergoing pregnancy ultrasounds. Many women in these studies unquestioningly accepted the scan on their doctors' recommendations, 'the loss of their bodily boundaries and bodily knowledge passes unnoticed or without comment,' while others embraced it as an opportunity to view the foetus growing within them, personified the image, and looked forward to taking 'baby's photo' home.¹⁷ Very few expressed negative feelings about the ultrasound, a point that Mitchell and Georges attribute in part to feelings of dependency on the technology, yet the primacy of the role of the sonographer in mediating the physical and emotional connection between woman and foetus places an unsettling primacy upon the *körper* of the image over the experience of the lived body. The intimate world of the interior is overwhelmingly one that is transcribed into a visible form for public exploration and interpretation.

The Visible Human Project (VHP) was developed in response to calls by U.S. based academic medical centres for a complete, anatomically 'normal' image set of the human body in the public domain. Launched

¹⁶ Waldby, *The Visible Human Project: Informatic bodies and Posthuman Medicine*, 20-21.

¹⁷ Lisa M. Mitchell and Eugenia Georges. 1998. "Baby's First Picture: The Cyborg Fetus of Ultrasound Imaging." In *Cyborg Babies: From Techno-Sex to Techno-Tots*, Davis-Floyd, Robbie and Joseph Dumit, eds. 105-124. London: Routledge, 110-111.

through the U.S. National Library of Medicine in November 1994 the VHP made publicly available the first digitisation of an entire human corpse. The Visible Male was one Joseph Jernigan, an executed convict who had donated his body to science. For the first time it was possible to view and interact with a whole human body via computer, which allowed unprecedented public access to the bodily interior. As one observer noted, 'the [VHP]... data set allows [the body] to be taken apart and put back together. Organs can be isolated, dissected, orbited; sheets of muscle and layers of fat and skin can lift away; and bone structures can offer landmarks for a new kind of leisurely touring.'¹⁸ In the virtual anatomical theatre the body becomes hollow and immortal. It can be repeatedly dissected, deformed, the structures isolated and removed, zoomed into and flown through. Like von Hagens' modern *écorchés* the VHP figures have been noted as abolishing the distinction between surface and depth, reducing interior spaces to superficial surface. Yet they also propose what Catherine Waldby suggests to be a new kind of interiority for the millennium:

'... An interior space whose superficiality and externality are always latent and articulated through instrumentation. It is a mode of interiority from which all claims to depth or essence have been subtracted. More tellingly, it is a mode of interior space which is coextensive with virtual or computational space... The VHP's iconography suggests that embodied subjectivity can no longer be considered vertically, from surface to depth, but must be considered horizontally, in terms of its technosocial assemblages.'¹⁹

Waldby here taps into the potentials of the cyborg, the body capable of assimilating into systems of extension and expansive action. With the skin boundaries transgressed the bodily interior has the potential to be accessible not only by its inhabitant and the individual, but on a broader public scale. Ionat Zurr and Oron Catts of the SymbioticA lab at University of Western Australia, are concerned with the ethical debates stemming from bio-technology art. The Extended Body, a result of SymbioticA's Tissue Culture & Art Project raises the issue of what may happen as the body's interior structures venture forth from the body itself, abandoning a bounded, unified form and identity. In their own words, 'The Extended Body is an amalgamation of the human extended phenotype and tissue life – a unified body for disembodied living fragments, an ontological devise, set to draw attention to the need for re-examining current taxonomies and hierarchical perceptions of life.'²⁰ Composed of a biomass of cells and tissues that are disassociated from the bodies that originally hosted them, The Extended Body is comprised of semi-living matter that requires technological intervention to prevent transformation into a non-living state. The biomass survives independent from a body, having transgressed beyond the boundaries of unified form and become a fragmented 'population'. It presents a glimpse of the dissipated body, boundaries entirely transgressed, and the interior without location.

Skin as a Bridge to be Traversed

In *Space, Time and Perversion* Elizabeth Grosz addresses the elastic nature of skin, stating that 'the boundary between the inside and the outside, just as much as between self and other and subject and

¹⁸ David Ellison. 1995. "Anatomy of a Murderer." *21.C.* (3): 20-25, 24.

¹⁹ Waldby, *The Visible Human Project: Informatic bodies and Posthuman Medicine*, 160.

²⁰ Oron Catts and Ionat Zurr. 2012. Towards a New Class of Being: The Extended Body. Accessed January 5, http://www.intelligentagent.com/archive/Vol6_No2_transvergence_cattszurr.htm

object, must not be regarded as a limit to be transgressed so much as a boundary to be traversed.²¹ How then may the skin be traversed by the interior? The skin boundary is the site through which the potential to span outward from the interior may be realised. As an instrument of communication the surface of the body is capable of engaging in detailed discourse. The surface inscription of the body can occur through social regulation, through institutions of correction and training, through adornment and voluntary procedures, all of which contribute to sending out particular visual messages about the self.

The body, however, is prone to involuntary encoding and misinterpretation by other agencies. It can send mixed messages and be camouflaged or coerced into transmitting desired but incorrect signals. As Jay Prosser explains, 'the fact that we continue to invest the legibility of identity in the skin in spite of knowing its unreliability suggests skin to be a fantasmatic surface, a canvas for what we wish were true – or what we cannot acknowledge to be true. Skin's memory is burdened with the unconscious.'²² This unconscious burden can include the skin visually broadcasting cultural and personal values, genetic history, health, habits, lifestyle, and emotions, or the projection of these upon the skins of others. Body image, as Grosz points out, is instrumental in establishing the distinctions and relations between the experiences of the body as a whole and in its various parts (as outside and inside, organs and processes, active and passive). It is 'the result of shared sociocultural conceptions of bodies in general and shared familial and interpersonal fantasy about particular bodies.'²³ The skin surface then becomes a medium for the expression of what is experienced or fantasised about both in the interior and on a social level. Juhani Pallasmaa explains, 'our domicile is the refuge of our body, memory and identity. We are in constant dialogue and interaction with the environment to the point that it is impossible to detach the image of the Self from its spatial and situational existence.'²⁴ The interior can traverse skin into the spatial and situational both by incorporating objects into body-image and through projecting socially encoded messages upon the skin surface about inner nature or aspirations. These extensive functions are inseparable from the interior itself.

Objects beyond the bodily boundary can become incorporated into body-image simply through prolonged placement in the space surrounding the body. These can be accessories, artefacts, clothes, jewellery, devices, even other people, absorbed into the interior as body-image expands outward into the perceptive field. Jewellery is particularly effective in projecting socially encoded messages upon the body surface, which jeweller and theorist Susan Cohn says is important in identity management and establishing the self through visual codes and signs:

'Visual codes are elemental to human survival, for both individuals and groups. The development of visual codes precedes in most cases the evolution of language in human societies. Traditional cultures used adornment as a fundamental means for communicating and maintaining continuity and stability within their societies. Visual codes work like signs as discrete units of meaning which

²¹ Grosz, Elizabeth. 1995. *Space, Time and Perversion: Essays on the Politics of Bodies*. Routledge, New York; and Allen and Unwin, Sydney, 131.

²² Jay Prosser. 2001. "Skin Memories." In *Thinking Through the Skin*, Ahmed, Sara, and Jackie Stacey, eds. 52-68 London and New York: Routledge, 52.

²³ Grosz, *Volatile Bodies: Toward a Corporeal Feminism*, 84.

²⁴ Juhani Pallasmaa. 2005. *The Eyes of The Skin: Architecture and the Senses*. New York: John Wiley, 64.

represent the deeper cultural matrix. Codes facilitate the relationships between individuals, their society and its environment.²⁵

Within this context, the skin surface can be seen as an important site for forging and transforming alliances, attracting and managing relationships with others and signifying details that are intimate to the wearer. Jewellery especially is instrumental in the management of body-image, and becomes incorporated into the body schema. Cohn proposes that in the future the body will no longer be bound to the organic boundaries of the human form, and user-wearer-makers will generate materials and determine the outcomes of 'objects' through the feedback of biotechnology, virtual reality and computer simulation,²⁶ outcomes already becoming visible as designers collaborate across fields. Drawing on Donna Haraway's well-established theory of the cyborg Cohn proposes that the body can be self-generating and re-crafted through aligning with technological, biological and other hybrid agencies.

Examined as a construct born out of both the phenomenological experience of the body and its medical modes of production, the bodily interior is revealed to be in a state of 'becoming'. Historically constructed through the penetration of the skin, the interior is a product of evolving medical paradigms and phenomenological knowledge gained through the interaction of self and world on the skin boundary. The interior has been transgressed through penetrations, evolving ways of seeing and the ability of the self to incorporate and extend beyond the skin surface. Generated as bodily boundaries have been established and challenged, and undergoing constant change, the interior engages with both the containment and projection of the body's individual agency. Through the transgressing and traversing of bodily boundaries it represents the potential to embrace design innovations that may infiltrate, protect and encode the body and its surface as no other site can.

²⁵ Susan Cohn. 2009. "Recoding Jewellery: identity, body, survival." PhD diss., COFA, University of New South Wales, 71-72.

²⁶ Cohn, "Recoding Jewellery: identity, body, survival," 112.