

©2006 The Institute of Mind and Behavior, Inc.  
The Journal of Mind and Behavior  
Summer and Autumn 2006, Volume 27, Numbers 3 and 4  
Pages 351–356  
ISSN 0271–0137

**Topologies of the Flesh: A Multidimensional Exploration of the Lifeworld.**  
Steven M. Rosen. Athens, Ohio: Ohio University Press, 2006, 335 pages, \$59.95  
hardcover.

*Reviewed by Michael Washburn, Indiana University South Bend*

---

Steven Rosen's book is not easy reading, but it is well worth the effort required. *Topologies of the Flesh* follows *Science, Paradox, and the Moebius Principle* (1994) and *Dimensions of Apeiron* (2004) in presenting Rosen's remarkable project. Rosen is both an original thinker and a synthesizer of ideas from diverse fields, including topology (focusing on paradoxical shapes such as the Moebius strip and the Klein bottle), phenomenology (the later Heidegger, Merleau-Ponty), depth psychology (Jung), post-structuralism (especially Lacan), history of consciousness (Gebser), mythology (especially Eliade), and subfields such as the psychological study of alchemy and the anthropological study of shamanism. Rosen brings together widely differing perspectives in an accomplished and creative way. His text is necessarily densely packed, but it is impeccably written and, to the attentive reader, always lucid.

A principal focus of Rosen's book is the paradox implicit in the fact that we are both subjects and objects, that we have both conscious interiors and physical exteriors. This paradoxical duality seems to put us at odds with ourselves, for how can we be integral wholes if we are divided into two such opposite sides? The sense of being at odds with ourselves is especially distressing in the current age, which, heir to modernity, interprets the paradoxical duality of human nature in exaggerated, Cartesian terms. Rosen's response to the paradox of subjectivity and objectivity differs from most others because he embraces the paradox rather than trying to disarm it by attempting, as physicalists do, to turn us inside out or, as idealists do, to turn us outside in.

Rosen uses topological shapes such as the Moebius strip and Klein bottle to demonstrate how paradoxical duality can be physically embodied. The Moebius strip, for example, although having two opposite sides at any local point, is nonetheless one-sided globally, for movement along the length of the strip leads from one side of the strip to the other. The Moebius strip thus brings opposing sides together, allowing them to flow into each other. So, too, does the Klein bottle, the Moebius

---

Requests for reprints should be sent to Michael Washburn, Ph.D., Department of Philosophy, Indiana University South Bend, 1700 Mishawaka Avenue, P.O. Box 7111, South Bend, Indiana 46634. Email: mwashbur@iusb.edu

strip's higher-dimensional counterpart. The Klein bottle, described from the perspective of three-dimensional space, is a bottle the neck of which bends around and, moving through a hole in the side of the bottle, extends through the interior of the bottle until it joins with an opening at the bottom, thus joining the interior to the exterior of the bottle. The Klein bottle, then, is a self-containing bottle with a curious hole that allows its principal opposing dimensions, its interior and exterior, to flow into each other. Rosen suggests that it is through such a Kleinian hole in our being that we, as three-dimensional beings, have interfluent interiors and exteriors. The paradox of our duality, then, is that we are subject-object wholes precisely because our subjectivity and objectivity are connected through a Kleinian hole. There is no need to turn us inside out or outside in because the Kleinian hole in our being allows our inside to flow out and our outside to flow in.

Again, however, despite our Kleinian (w)holeness (Rosen's term), we sense that our subjective consciousness is at odds with our objective existence. As Cartesian subjects we sense that we are out of touch with the embodied bases of our being. Rosen, from his Kleinian perspective, offers a strikingly original account of how this sense of mind-body alienation can be overcome. Differing from those who say that we can return to embodied existence only by struggling against the mind's tendency toward abstract inwardness, Rosen suggests that, because subjectivity and objectivity flow into each other in Kleinian fashion, we can more integrally return to embodied existence — or, rather, realize that we have never truly been separated from it — by following the mind to its most abstractly inward limit, to the point at which our subjective interior flows through a Kleinian hole out to our objective exterior. Pursuing this idea, Rosen suggests that our sense of Cartesian disembodiment is not a symptom of pathology but is rather a proper developmental phenomenon. It is a perceived one-sidedness that indicates that a limit has been reached at which the differentiation of subjectivity from objectivity is complete and the fully differentiated subject is ready to pass through a Kleinian hole back toward the prereflective, embodied bases of its being.

According to Rosen, a fundamental shift in ontological posture occurs at the developmental limit point just described. The subject shifts *from* a posture of appropriation *to* a posture of proprioception, *from* a posture of standing apart from objects *to* a posture of sensing its own embodied and deeply rooted existence. Rosen interprets this shift in posture in a Heideggerian, Being-centered rather than in a subject-centered way. The change in the subject's posture from appropriation to proprioception is fundamentally a change in the developmental directionality of Being. The developmental process is fundamentally about Being and only secondarily about the "ontic" subject, which is the "child" of Being and the vehicle through which Being develops. Accordingly, the subject's posture of appropriation is at bottom Being's Self-Appropriation (Rosen's caps). It is the creative gesture by which Being posits itself beyond itself by giving birth to the subject and by invisibly supporting the subject's development in relation to and in independence from objects. Correspondingly, the subject's developmental turn from appropriation to proprioception is at bottom a developmental turn by Being from Self-Appropriation to Proprioception (Rosen's caps). It is the turn by which Being returns to itself and brings itself to light by rendering its underlying layers visible to the subject.

For Rosen, then, the development of subjectivity is a reflection of the more fundamental Ontogeny (Rosen's term) of Being. It is the process by which Being gives birth to itself and develops itself through increasingly differentiated forms of subjectivity (Self-Appropriation) until, finally, subject-object differentiation reaches its

Cartesian limit and the oppositely-directed process of integration begins (Proprioception). Rosen stresses that the oppositely-directed, proprioceptive process of integration is not a merely regressive U-turn to origins. Just as, in normal development, earlier levels are retained within later levels (as their prereflective bases), so, Rosen explains, later levels, in non-regressive, integrating return, are retained within earlier levels (as their reflective illumination and appreciation, their "grateful children"). In particular, the movement of return to origins is a proprioceptive process by which Being brings itself out of concealment by revealing itself to the subject as the layered understructure and ultimate source of the subject's existence.

Being's Ontogeny thus has two major directional movements, which, according to Rosen, represent the second and the third of the following three major Ontogenetic stages: (1) the initial stage prior to any differentiation of subjectivity and objectivity; (2) the stage of appropriative, ontically-focused movement during which Being, in supportive concealment, gives birth to subjectivity, to "children," in increasingly developed ontic forms; and (3) the stage of proprioceptive, explicitly ontological movement during which Being returns to itself by revealing itself, layer by deeper layer, to the ontic subject until, finally, the subject is reabsorbed in Being. The second and third of these three stages, again, are not merely departing and returning movements; rather, they are, according to Rosen, major phases of a cycle of Being's spiraling development — a cycle eventually to be followed by new, superior cycles.

Rosen's perspective is not only Ontogenetic but also Topogenetic (Rosen's caps) because the development of Being through increasingly differentiated forms of subjectivity is at the same time a development of Being not only through corresponding forms of objectivity but also, necessarily, through corresponding dimensions of space, in which objectivity is situated. I have already noted that Rosen believes that the Klein bottle is the topological structure that best embodies the paradoxical duality of subjectivity and objectivity in our three-dimensional space. For reasons that are complex and cannot be explicated here, he believes that the Moebius strip is the topological shape that best embodies this paradoxical duality at the lower level of two-dimensional space, that the lemniscate is the topological shape that best embodies this duality at the even lower level of one-dimensional space, and that the sub-lemniscate (the lemniscate bisected along its length) is the topological figure that best embodies the predifferentiated character of zero-dimensional nonspace. Much of what Rosen has to say about these dimensional orders of topology is difficult to follow but fascinating nonetheless. This reader, however, came away with the impression that Rosen overextends the usefulness of his topological metaphors.

Rosen interprets the four dimensional orders as representing four stages through which Being gives birth to and develops subjectivity. The zero-dimensional order represents the stage before the birth of subjectivity, and therefore before the emergence of objectivity and spatial dimensionality. This is the stage of prime matter prior to any actual, ontic forms. Rosen associates this stage with mineral existence and, from the perspective of alchemy, locates the philosopher's stone here. He interprets this stage in terms of Gebser's archaic structure of consciousness, describing it as a stage in which subjectivity is predifferentiatedly nascent. The one-dimensional order represents the first emergence of subjectivity in relation to objects in space, and Rosen correlates this level with Gebser's magical structure of consciousness, which is characterized by magical, *pars pro toto* thinking, feelings of anger or rage, sensing dominated by the olfactory modality, and intuition of a merely sensuous, vegetative sort. The two-dimensional order represents a more evolved stage of subjectivity, which Rosen correlates with Gebser's mythical stage of consciousness,

which is characterized by mythic, binary thinking, feelings of animal affection, sensing based primarily in the auditory modality, and intuition of an emotional, heart-centered sort. Finally, the three-dimensional order represents the most recent epoch in the history of human consciousness, which Rosen correlates with Gebser's rational structure of consciousness, which is characterized by rational, linear thinking, mental rather than full-bodied feelings, sensing dominated by the visual modality, and intuition of a mental or intellectual sort.

These correlations, and others, produce a rich matrix of developmental ideas. Fleshing out Being's Ontogeny with these ideas, Rosen describes the first major directional stage of Being's development, moving in an appropriative, optically-focused direction, as proceeding from the predifferentiated condition of archaic, "stony" zero-dimensionality, to the first differentiation of magical, vegetative one-dimensionality, to mythical, animal-like two-dimensionality, and, finally, to rational, fully human three-dimensionality. He then fleshes out the return movement by which Being, having maximally developed its "child" subjectivity, now begins the proprioceptive return of integration. In this return of Being to itself, the subject is released from its Cartesian stance of separateness and begins to proprioceive its own ocularly dominant, head-centered embodiment in the brain. The subject then proprioceives its deeper two-dimensional embodiment by experiencing full-bodied, heart-centered emotionality. From there, the subject descends proprioceptively to its one-dimensional vegetative embodiment and experiences rawly-sensuous instinctuality and primitive rage. Finally, the subject withstands fear of extinction as it approaches the threshold of zero-dimensionality, which, without subject-object differentiation, carries with it the presentiment of stony inanimateness, death. Withstanding this fear, the subject gives way to seeming death only, because it has thus released itself to its ultimate origin, to find itself reborn, this time integrated not only with its three-, two-, and one-dimensional embodiments but also with Being itself. Ontogeny has at this point reached full spiral and is ready for future spirals, spirals that will surpass fully differentiated, fully integrated humanness.

I hope that I have conveyed to the reader of this review not only the remarkable magnitude and range of *Topologies of the Flesh* but also some of its many incisive particular insights. Rosen's book is an impressive achievement. It is not, however, without points of concern. I have already expressed reservation about the extensive use of topological metaphors. To this I would add that the Gebserian developmental schema, although wondrously revealing when used as a map of the underlying strata of human consciousness, is not as revealing when used as a map of the history of human consciousness. In particular, although it seems plausible that archaic and magical structures of consciousness lie implicit as deep strata of human consciousness, it does not seem plausible that *Homo sapiens*, as *Homo sapiens*, passed through corresponding archaic and magical stages of development, at least not in some of the particular ways that Rosen, following Gebser, suggests. On a related point, some readers will not be persuaded by Rosen's Heideggerian theorizing about Being and Being's developmental history in relation to human subjectivity. Agreement or disagreement on this matter, however, is a matter of philosophical taste.

I highly recommend *Topologies of the Flesh*. It is a wide-ranging, richly informed, and impressively original work. The concerns expressed in the previous paragraph are minor when weighed against the overall excellence — indeed, brilliance — of Rosen's book.