PROBLEM: in what way is the body an idea, and the idea bodily? In what way can probing one extend the other? "How is it that the body thinks itself?"
-- Stelarc

"The eye is like a mirror, and the visible object is like the thing reflected in the mirror."
-- ibn Sena (Avicenna), early 11th century²

The initial problem is posed by Stelarc, an Australia-based performance artist who allows his own body to be manipulated and controlled by machine. Stelarc’s work, like much digital art focusing on the postmodern, extended, decentralized body, focuses on the extensions—on external technology and how our bodies interact with it—rather than on our bodies in isolation as systems of biological relationships. But the biological body itself has been decentralized and expanded, and is therefore increasingly incomprehensible to us. My concern here is not with how we think about the body, or how the body acts upon, interacts with, and is acted upon by our new decentralized, technological world; it is specifically with how we see the body—how we view, literally, the interior of our biological self.

The very idea of a single biological “self” extended over the species, rather than the individual selves of discrete organisms, is a place to start. This single self has now come under fire, by theorists and by artists such as Stelarc, who claim that cyborg-like technologies are making our bodies extended, decentralized, and thus helplessly individual. But the single biological self has never really existed. (Stelarc himself makes this point when he says, “We fear the involuntary and we are becoming increasingly automated and extended. But we fear what we have always been and what we have already become—Zombies and Cyborgs.”)³ Even in human bodies in which technology has not intervened, individual differences have always rendered us distinct from each other. The biological self is a fiction, and its component parts—organs, muscles, nerves—are characters in a narrative devised to enable us to understand the physical reality. This fiction predates modern scientific rationalism, and has at various times taken part in different narrative functions—allegorical, analytical, moral—depending on circumstance.

New scientific knowledge of the body forces us to think about the body in new ways, but they are ways to which most of us don’t have access. DNA sequences, for instance, are a meaningless code to us as thinking beings; we cannot recognize an individual by looking at his or her code. Even the technologically unaltered body has changed in our sight, both because we observe it through technological mediation and because we conceive of it scientifically and rationally. Microscopic photography of a macrophage deep

---

¹ All quotes from Stelarc are from his website, http://www.stelarc.va.com.au.
within the bloodstream is merely an extension of early modern anatomical observation and analysis—emptied of human narrative, and of the tropes of narrative such as allegory. As our technical knowledge expands, an increasing amount of conceptual space is opened that could contain narrative—that is, a meaningful way for us as thinking beings to understand the interior actions of the body—but doesn’t.

By contrast, descriptive anatomy of the medieval and early modern periods analyzed the body literally as a microcosmic echo of the larger universe; for instance, there were serious attempts to locate the physical location of the soul, or of Aristotle’s *communis sensus*, the “common sense” in which all perceptions came together into a coherent picture of the world. Thus anatomy described not just bodily mechanics, but our relationship to the macrocosm. This is also, more famously, the basis of alchemy, which has been called superstition, mysticism, and a forerunner of modern science, and is in fact all those things at once. In alchemy, physical description and spiritual meaning are indivisible; the physical transmutation of lead into gold echoes both physical and spiritual transformation in the alchemist. More lately, our understanding of science is that it has become objective, but our understanding of our understanding has become subjective and psychoanalytic. On this shifting ground, symbolic science—transcendental anatomy, so to speak—has been relegated to superstition or to poetic imagery; but that very shift has made the literary tradition of medieval natural history a deep and rich vein upon which to draw, to comment on our modern relationships to our body and to the larger world.

I am interested in the questions posed by the work of Stelarc and others precisely because my own work is displayed, in its final form, in the most traditional of media: ink marks on paper. I am a “digital” artist, but only as an end-user: I use commercially available software in the ways made possible by the software developers, no more; I make a conscious effort to produce my finished work in “casual” media (that is, reproducible prints and books) that can be distributed and experienced without reliance on a particular event or context. In *Künstler’s Anatomy*, my current project, I have created virtual 3D models of internal anatomy, and mapped descriptive text to these forms so that they seem to be made entirely out of words.4

I am curious about the meaning and affect carried by these textual images. The models are based on real anatomy, and presented in a style vaguely reminiscent of anatomical diagrams, but the final images are abstracted nearly to the point of unrecognizability; what affect these images have as anatomy comes not from the models themselves—few viewers would recognize even a very faithful model of, for instance, the spleen—but from the presentation. The forms seem generically anatomical, and so the viewer trusts me when I label them as specific organs. This has freed my text to wander from physical description into more fantastical language. A realistic model of a vein becomes the *kiveris* vein, which medieval anatomists hypothesized was specific to women; it carried milk, thought to be formed from semen, from the womb to the breasts. To medieval anatomists, this was a literal description, based nonetheless on moral and social assumptions; to me, drawing on this literature, this anatomical fiction becomes a way to comment not just on our increasing distance from our postmodern, dissociated bodies, but on the distance we have always had from the interior of our bodies.

The text I write is visually broken up by the act of applying it to the models, and becomes legible but unreadable; it acts as image rather than message-bearing signal. The

4 Images from this project can be seen at http://www.sethellis.org/kunstler.
importance of the text is not the meaning it bears, but that it seems to bear meaning. As-
sociations arise from the linking of dissociated texts. My contention in my work is that
this is at the heart of our relationship towards the physical perception of our bodies as
well. Medieval anatomy forced narrative upon our internal organs; though the breadth
and detail of current scientific knowledge makes it increasingly impossible to do so, the
urge is with us still. As technical knowledge of biology increases, our conventional under-
standing of the body decreases; we are left with fragmented information and assumptions
out of which to fashion some kind of understanding. The search for a mysterious organ
that would allow us to understand the mysteries of our lives—a parallel of the alchemist’s
search for the Elixir of Life—becomes the basis of my fictional anatomy, through the
character of the obscure philosopher, and my fictional stand-in, Kunstler.