

Specimens as Spectacles

Reframing Fetal Remains

Suzanne Anker and Sarah Franklin

Introduction

As the question of the human species comes under mounting scrutiny, the rapidly expanding corpus of work known as bio-art provides an increasingly important frame of reference for academic scholars and public audiences alike. New York-based artist Suzanne Anker is a founder of the bio-art movement and one of its leading critical commentators as well as practitioners. This article is based on a conversation between Anker and feminist science studies scholar Sarah Franklin concerning Anker's recent work on fetal specimens. In part 1, Franklin combines a brief introduction to the history of fetal specimen collection with a discussion of the scholarly and artistic work referred to in the following dialogue. This is followed in part 2 by an interview with Anker, which is structured as a conversation and based on themes discussed in advance by both authors.

Part I: Specimen Histories

"Species" is a complex, polysemic, and, as Donna Haraway has noted, oxymoronic category:

"Species," like all the old and important words, is . . . promiscuous, but in the visual register. . . . The Latin "specere" is at the root of things here, with its tones of "to look" and "to behold." In logic, species refers to a mental impression or idea, strengthening the notion that thinking and seeing are clones. Referring both to the relentlessly "specific" or particular and to a class of individuals with the same characteristics, species contains its own opposite in the most promising—or special—way.¹

The history of the term *specimen* similarly conflates parts with wholes, and objects with ways of seeing, originally referring to an experiment, pattern, model, sample, or representative type. Specimen collection or “hunting” to fill specimen boxes, bottles, and books was so widespread by the nineteenth century that it was denoted by the transitive verbs to “specimenize” and to “specimenify.” Like taxidermy, specimen collection has long been both an academic and a popular activity, and both practices share overlapping histories in the natural sciences, popular entertainment, and plastic arts. Successful “wet” preparation of human and animal tissue dates back to antiquity. It is not until the seventeenth century that it begins to become associated with natural history and displays in jars, in part through the efforts of technical innovators such as Dutch anatomist Frederick Ruysch and English polymath Robert Boyle.² Specimen preservation in alcohol (and later formaldehyde) was crucial to the establishment of early scientific societies, the disciplines of anatomy and zoology, and the emergence of the modern museum.³ Its development parallels the use of older techniques of “dry” tissue preservation, including taxidermy, dry mounting, and mummification, as well as wax modeling and scientific illustration. Associated with the rise of natural history, world exploration, and the effort to understand and classify life’s diversity, *in vitro* methods of preservation mark a trail through the history of modern science and medicine that begins with the curiosity cabinet and later influences photography and modern art.⁴

As art historian Barbara Maria Stafford has documented, displays animating early modern “curio culture” routinely employed human and animal remains, including skulls, mummified body parts, and anatomical specimens as part of their *ars recombitoria*.⁵ It was in this context, such as in the collections of prominent European aristocrats, that the display of human and animal perinatal remains became generic elements in cabinets intended to educate, amuse, and titillate.⁶ By the seventeenth century, fetal remains had come to play a prominent role within the otherwise chaotic semiotic economy of the neo-natural *Wunderkammer* aesthetic, in which the bizarre and marvelous were celebrated as objects of monstrosity, exotism, and wonder.⁷

During the nineteenth century, specimen collections became crucial to the emergence within modern biology of its core, and unifying, hypothesis of life’s evolutionary development. Charles Darwin and Richard Owen debated theories about morphological emergence and change in the early 1800s, in London’s Hunterian Museum, where Owen presided over approximately fourteen thousand specimen jars collected and prepared under the supervision of surgeon John Hunter in the latter half of the eighteenth century. At Hunter’s death the specimens became a gift to the



Figure 1. Suzanne Anker, "The Glass Veil (Spoon)," 2009, digital print on watercolor paper, 24" x 36". Courtesy of the artist

nation on the condition that the collection would be housed in a public museum. Owen's task was to catalog this vast A–Z of "jarred life," and for both him and Darwin the jars, like fossils, offered a unique window onto the emergence of biological form.⁸

Owen and Darwin were influential (and famously opposed) participants in the epochal changes described by Foucault in *The Order of Things*, in which he chronicles the emergence of a new definition of life as a unified, law-like, singular system of descent (life "itself").⁹ As the post-Enlightenment preference for empirical evidence increasingly displaced the "sentimental" search for a more Platonic world described by Stafford for the eighteenth century, so too did experimental technique, and its logic of "objective" demonstration, come to predominate, participating in what Foucault describes as the birth of a modern connection between "les mots et les choses."¹⁰ New ways of understanding based on objective observation and experimental proof accompanied new modes of specimen collection and preservation, which were codified by new institutions, such as the museum, in which scientific knowledge could be displayed as "factual" objects. Significantly, much of the "stilled" life packed into "wet" tissue collections was "failed" in the sense of displaying pathological disease, deformity, and death, illustrating, among other things, that life was both radically plastic and capable of veering "off plan."

Ironically, as Lisa Cartwright observes, it was the early use of still photography in the early twentieth century that helped inject life and the body with a new kind of motion—a movement that in her classic work *Screening the Body: Tracing Medicine's Visual Culture* she argues informs the power of cinema as both an artistic and mass media form.¹¹ Crucial to her argument is the movement depicted by Foucault referred to earlier, whereby the static grid of natural history is replaced by the modern view of life as a single, dynamic, “biological” system defined instead by movement and change. As she notes,

Foucault suggests that biological representation no longer defines living beings descriptively but functions according to a structure that language cannot fully describe. This structure is “the dark, concave, inner side” of the visibility of things/living beings. Whereas the grid of natural history brought living beings to full knowledge, biological representation seeks to get at what cannot be seen in a process that makes all the more evident the disjuncture between representation and “object” (or body). . . . With the emergence of biological modes of representation, we find a historical break between observation (or image) and object of knowledge—a break in which the visualization of “life” becomes all the more seductive to the scientific eye even as the limitations of representation are made plain.¹²

This paradox at the foundation of what Foucault describes as the birth of modern biology is its “dark, concave, inner side”—a visual crisis that is presciently identified by Cartwright as a rupture that makes the visualization of life “all the more seductive.” This desire to transcend the limits of visualization has become so ubiquitous in the twenty-first century that it might even be said to define the relationship between science and all its visual technologies, which, while they appear to reveal more and more, seem also to reinforce the limits of visualization.¹³ At the edges of the scopic economy in which seeing is knowing are all of the processes that remain barely visible—such as the epigenetic cascades shaping development, or the complex chemical relationships that organize physiology, metabolism, or endocrinology. As feminist media theorist Jose Van Dijck argues in her work on medical imagery, new “mediations” of the body—be they via ultrasound, x-ray, MRI, CAT scan, endoscopy, or digitalization—may evince the transparent body as an ideal, albeit an ideal “that has not remained static over the ages.”¹⁴ Similarly, as art historian Jonathan Crary argues in *Techniques of the Observer*, the history of visualization is discontinuous in terms of not only how technologies mediate their objects (a fetus in a jar is not the same as an ultrasound scan) but how they affect the kinds of connections and relationships that contextualize these objects, thus changing not only what, but *how* they mean.¹⁵

Given the importance of visualization, transparency, “the medical gaze,” and “techniques of the observer” to the history of clinical medicine and the modern life sciences, it is perhaps no surprise that fetal imagery comprises one of the most distinctive genres of spectacularized specimens in the history of science and medicine. A key figure in the history of knowledge, the fetus (also known until recently as the embryo) became the epistemic center of gravity in the study of generation, speciation, and evolution and is equally crucial to arguments in philosophy and theology.¹⁶ The study of ovulation, conception, gestation, and fertility comprise and reprise the modern history of reproductive control, extending from livestock breeding and embryology to obstetrics and gynecology, and to practices as diverse as embryo culture, artificial insemination, and contraception.¹⁷ They also map the emergence of an iconic imaginary of biological control over inner life that arguably reaches its “big bang” in the contemporary era.¹⁸

By the mid-twentieth century, as cultural anthropologist Lynn M. Morgan describes in her revealing study of modern American fetal specimen preservation *Icons of Life*, fetal remains were routinely collected and preserved, the practice having become “thoroughly normalized and unremarkable.” “During this time,” Morgan writes, such collections had become “commonplace”: “many universities, hospitals, and even small undergraduate colleges would have acquired their own [fetal specimen] collections to use for reference, teaching, and research.”¹⁹

By the postwar period, fetal specimens made their way into popular culture, too. In his pioneering photographic images of “unborn life” first published in the mid-1960s in *Life* magazine, Swedish photographer Lenart Nilsson combined the power of specialized medical photography with the mass reproduction of glossy magazine images to produce a series of gestational portraits that are now considered to be among the most iconic photographic images of the twentieth century. They are the subject of an extensive scholarly literature, in which it is often pointed out that his portraits of unborn life were in fact fetal postmortems.²⁰ A less remarked upon feature of Nilsson’s novel portraiture is how he extended a centuries-old tradition of fetal representation through a series of transpositions—in a sense reanimating the tradition of the spectacle in jars for a mass audience using what was then an almost hyperreal photographic technique.²¹ Staged in much the same way as earlier fetal displays, the specimen having been repaired to wholeness and presented to resemble living entities, Nilsson’s portraits engaged the modern viewer through a series of invisible technical transpositions: from womb to studio, studio to photographic portrait, and portrait to magazine. Thus, consistent with three centuries of manufactured fetal transparency—of fetal specimen-spectacles in bottles, in wax,



Figure 2. Suzanne Anker, "The Glass Veil (The Hand-Mirror)," 2009, digital print on watercolor paper, 76" x 96". Courtesy of the artist

and in illustrations—Nilsson's fetal photographic album ushered in the modern era of fetal specimen display in order to educate the Kodachrome® generation about their offspring.²²

Like his predecessors in the ancient art of staging and displaying specimens, Nilsson was a highly, and in some senses uniquely, accomplished technician and craftsperson. Having invented many of his own techniques and equipment, he became a master of the photographic art of revealing the inner and micro worlds of ant colonies and opera singers' voice boxes as well as the human placenta. His self-professed motivations were as old-fashioned as they were modern—in part professional (to see if it could be done) and pedagogical (to discover and to educate). But accompanying these was the traditional sense of wonder and curiosity that appears to be one of the constant themes throughout the long tradition of fetal collection and display.

In what is undoubtedly the largest contemporary literature on fetal imagery, feminist scholars from a range of disciplines have exhaustively analyzed its deployment in contexts of public contestation over women's reproductive rights from the mid-1980s onward. In her classic essay addressing "the power of visual culture in the politics of reproduction," feminist political theorist Rosalind Pollack Petchesky drew attention to an important shift in American pro-life politics toward the "long-term

ideological struggle over the symbolic meanings of fetuses, dead or alive.” Antiabortionists in the United States, she argued,

have long applied the principle that a picture of a dead fetus is worth a thousand words. Chaste silhouettes of the fetal form, or voyeuristic and necrophilic photographs of its remains litter the background of any abortion talk. These still images float like spirits through the courtrooms . . . hospitals . . . abortion centers, legislative committees, bus terminals and other places right-to-lifers haunt. The strategy of antiabortionists to make fetal personhood a self-fulfilling prophecy by making the fetus a public presence addresses a visually oriented culture.²³

Now a measure of neoliberal demographic policies and a symbolic index of health and wealth deliverables as well as of social exclusion, the contrast between the healthy and the damaged fetus is one of the defining “biographic indicators” of contemporary industrialized society and one of its prominent visual iconographies.²⁴

Given their artistry, antiquity, and increasing visual prominence, it is no surprise fetal and other preserved specimens have increasingly become the subject of work by visual artists, in a tradition of often provocative pieces and exhibits in which the history, ethics, and politics of specimen display are explored aesthetically. To some, this work represents a return to the perverse, or grotesque, associated with postmodernity and its rebellious, carnivalesque counterculture of pastiche. For example, in his essay “Nature Morte: Formaldehyde Photography and the New Grotesque,” the iconoclastic U.S. cultural critic Mark Dery describes what he sees as an “obsession with dark matter . . . joined at the hip to the eruption of freakery” as a form of popular rebellion against the more staid, orderly, and restrictive ideals of late modernity.²⁵ Dubbing the “resurgent interest in medical grotesquerie” “freak chic” and “pickled punk,” Dery links a renewed interest in medical specimens to wider shifts in popular culture, citing examples such as the 1994 video *Closer* shot by Nine Inch Nails (itself an homage to the New York Alternative Museum exhibition in 1986 titled *Repulsion: Aesthetics of the Grotesque*). For Dery, “the new grotesque” was largely introduced through the work of photographer Joel-Peter Witkin (“renowned for baroque tableaux starring costumed freaks, sexual fetishists, and, most notoriously, the borrowed heads and limbs of forlorn cadavers”²⁶). He could also have cited the 1990 catalog of the *Repulsion* show (edited by Frans Schouten²⁷ and in which the term *formaldehyde photography* is introduced) as an example of what he calls “the pathological sublime.”²⁸

Such exhibits give a sense of the much wider associations drawn upon in the depiction of natural history museums and specimen collection. For

visual artists such as Roger Wagner, Joan Fontacuberta, Paul den Hollander, and Jurgen Straub, it is the aesthetics of museum architecture and space, and of specimens in their “native world,” that is foregrounded in their artistic productions, often through an effort to re-create more playful, lively, Edenic, or pastoral settings in which specimens are restaged both individually and as groups. For others, including Rosamund Purcell, Olivia Parker, Manuel Vilarino, Akin and Ludwig, and Patrick Bailly Maitre Grand, it is the specimen itself which is re-presented, often by using the medium of photography to re-aestheticize it. In Purcell’s 1986 “Monkey in a Box,” for example, the warm glow of the beautifully illuminated golden fur of a dried animal specimen “framed” by the wooden edges of its storage container establishes a suggestive contrast between formal beauty (as of a photograph) and disturbing content (as of an image of a dead animal in a box).

Tellingly, the natural history museum aesthetic has become increasingly commercial, and it is now the theme of stores such as Soho’s Evolution or the Anthropologie chain. It is featured in mainstream popular cinema such as *Night at the Museum* or *Raiders of the Lost Ark*. As the popularity of medical museums, such as Philadelphia’s Mütter Museum, attest, “the pathological sublime” elicits a diverse array of responses, from enchantment and awe to discomfort and disgust. Visual artists have similarly sought to elicit conflicting emotions in such exhibits as British conceptual artist Helen Chadwick’s Stilled Lives, in which photographs of embryos are mounted on large Plexiglas sculptures of jewelry.²⁹

Many of these themes are addressed in Suzanne Anker and Dorothy Nelkin’s pioneering text *The Molecular Gaze: Art in the Genetic Age*.³⁰ One of the primers of “sci-art,” and more specifically “bio-art,” this work encompasses a wide variety of artistic interpretations of biological and genetic manipulation, mutation, and morphogenesis. In their discussion of the “new grotesque” associated with the work of artists such as Jake and Dinos Chapman, Anker and Nelkin pay homage to the “long and fecund tradition” of this genre in the history of art: “The grotesque is a complement of beauty, a blatant distortion or counterstatement of the aesthetic. . . . Characterized by its early evocation of the intermingling of fantastic persons with foliage and plants or by bizarre incongruities and distortions of the body, conceptual understandings of the grotesque, to this day, remain enigmatic.”³¹

By invoking the grotesque as a counter-aesthetic, and one that commonly involves the intermixing of elements, Anker and Nelkin widen the scope for this genre to encompass the theme of provocative mixtures that is so prominent in much contemporary artistic work addressed to biomedicine and bioscience. Hence, for example, Paul McCarthy’s “Tomato Heads” (1994), in which anxiety about genetically modified foods, such as



Figure 3. Suzanne Anker, “Water Babies I Series,” 2004–2006, digital suite on watercolor paper, 55” x 59”. Courtesy of the artist

the Flvr Savr tomato, is depicted in a sculpture of an anthropoid figure with a tomato head, made as if out of a cross between the familiar Mr. Potato Head toy and children’s blocks, garden tools, and miniature vegetables. Similarly, Matthew Barney’s *Cremaster Cycle* is a film in which traditional pastoral themes are “mutated” by a sheep-man who cavorts with a beribboned, four-horned ram. Borrowing from surrealism, Eva Sutton’s *Hybrids* similarly depict sheep-bird, crab-horse, and fish-sheep-plant combinations. As Anker and Nelkin suggest: “These visual images of hybrid forms may also represent a model of the human mind—a fabrication of the chaos, discordance, and incongruity that seem to characterize contemporary culture. Perhaps the fragmented and reconstituted body has become, as Linda Nochlin suggests, a fundamental metaphor of postmodernity.”³²

• • •

Suzanne Anker is an artist for whom the biological sciences have long posed questions of altered morphology and representational form. She has

been instrumental in shaping the emerging field of research on the visual cultures of bioscience and biomedicine. Following influential exhibits of work on stem cells, cloning, and the new genetics, her most recent work engages with fetal specimens in a project stimulated by visits to European medical collections and museums. In the following extracts from a conversation with Sarah Franklin in Anker's Soho studio in May 2009, surrounded by enlarged photographs of fetal forms, Anker reflects on the evolving challenge of interpreting the fetal specimen. Touching on many of the themes raised earlier, she revisits the history of her subject in a spirit of both reflection and reclamation.

SARAH FRANKLIN: I wonder if you could tell me how your work on the “molecular gaze” led to your more recent work on specimens. What were some of the influences that led you in that direction?

SUZANNE ANKER: Well, the gaze is very central to my work. In my research for *The Molecular Gaze* I began to get acquainted with collections and specimens. Barbara Maria Stafford's work was an influence as well as Mark Dery's *Pyrotechnic Insanitarium* in which he discusses formaldehyde photography. Also the Mütter Museum's book, which came out in 2002. So that excited me to a certain degree since the way I initially entered into the world of genetics was through optical devices. So, I think what braids this whole thing together is the relationship of instruments of optimization or instrumentalization to the experience of being there. Of being a witness. And they are very different kinds of experiences. After the *Molecular Gaze* was published in 2004, I'd been invited to give many talks in Europe, first in Berlin at a conference entitled “The Image and Science,” organized by Werner Busch and Horst Bredekemp and held at the Hamburger Bahnhof. And then in Amsterdam and in Leiden through the newly formed Art and Genomics Center. So I was floating around, really for the first time, with European audiences who were interested in this subject. While I was in Amsterdam, I took a ride out to the Vrolijk Museum, which is on the outskirts of Amsterdam and is also connected to an operational medical facility. So you have a modern world of medical high tech that encases the world of these much older medical specimens. And, [when I visited] no one was there. It was empty, and there were no signs on the wall about conduct befitting such a place. And that's when I took the images of *Water Babies*, as a hit-and-run kind of experiment. As a photographer, this was just something I was doing while I was doing something else. And that was in 2004. It took several years for me to finally show these images, because of how many issues surfaced in regards to the spectacle and the question of the best way to pay homage to these dead carcasses, essentially. And to create an empathetic environment



Figure 4. Suzanne Anker, *First Fetus*, 2004, subtractive rapid prototype sculpture, 25" x 48" x 13".
Courtesy of the artist

for them visually as opposed to horrific. I mean, you can go in the [horrific] direction, but I don't think it does anyone any good. The concept of beauty and the sublime has been discussed in relation to these kinds of experiences, and I think that beauty needs to be updated as a foil to attract viewers, in order to expand their conceptual apparatus of looking

and seeing. If you horrify the viewer they'll never come back for more. So, the distinction between the beautiful and the sublime in my own work has been a very slow schematic shift. On one hand, the pieces appear to be quite enchanting, and then when you look further, there is a sense of disquiet in which you see what you're observing. That is the strategy I am endeavoring to pursue.

SF: That's very interesting what you're saying, because what you're pointing out is that the ethical can't be separated from the aesthetic question of the human fetal remains, and in the way *Water Babies* shows a person passing through, we're not getting a cleanly focused image. We're getting the sense literally of someone passing by. Perhaps that blur is also a question mark about what kind of aesthetic space these specimens might belong to?

SA: Absolutely. And how they resonate with us sort of in our bones, so to speak. They raise numerous questions about viewing and feeling. Also, the appropriateness of subject matter.

SF: So you're thinking about how you would, in a sense, widen the space for a response, and as you say, a somatic response?

SA: Yes, being in the room with a specimen—not just looking at a photograph of a specimen.

SF: If we think about widening the aesthetic response, and exploring what kind of aesthetic space it might occupy, one of the things you've mentioned is a sense of wonder, a sense of beauty. Is that something that you're trying to explore with these images?

SA: Yes, at the bottom line, it is wonder. And because when we see the fetus, we're looking at death in and of itself. It's the flipside. One of the great things about the natural world is that when you think it's over, it might not be. And there's no way to verify any of this. And this is not just religious hyperbole. It goes back to the ways in which different molecules, energies transfer throughout our universe. You know, when spring comes like it is now, and all of the flowers and trees come into bloom after this period of dormancy, this is like evolution in miniature, par excellence. I think that when one thinks about death, which there is no entry into, the closest one can get is the reaffirmation of life. Whatever that may be. I think that is the wonder that comes from these specimens, from being in the room next to them.



Figure 5. Suzanne Anker, *Buddha Baby (Origins and Futures)*, 2005, rapid prototype sculpture, 5" x 5" x 5". Courtesy of the artist

SF: One of the other things you've mentioned about looking at the specimens and being in the room with them is the fact that the word *species* shares an etymology with the idea of spying, or pulling back the veil. How does that fit with the kind of space you're exploring for how we might relate differently to the specimen?



Figure 6. Suzanne Anker, *Golden Boy*, 2004, subtractive rapid prototype sculpture, 16" x 24" x 18".
Courtesy of the artist

SA: Well, I think that the specimen needs to be bifurcated in two ways. Okay, one is the initial reaction of looking at the specimen in a jar, and it appears as if it is a quote-unquote baby. Because it has certain recognizable features from the morphology on the outside. And it's, it's tricky. It's very tricky. But you know, you look at a jar, it contains the specimen. It looks like a baby. Is it a baby? No. It's not a baby. It's a never-been-born, un-dead specimen. So, it's very in-between. It's the border zone between these ideas about where life begins, where it ends, and these are not scientific questions.

SF: Maybe that relates back to the idea of pulling back the veil, because I suppose if the specimen is, in a sense, a border entity, then, in a sense, engaging with the specimen is to engage with the border, and in a way to engage with the question of the border. What does it mean that we're

clearly separated from the specimen as dramatically as we are connected to it? It's interesting how it kind of does both of those things at once.

SA: Correct.

SF: It looks like a human.

SA: Correct, emphatically so!

SF: It looks like a baby, but it's dead. We know it's dead, so it's obviously completely unlike us at another level.

SA: It's a fictive space. And in fictive spaces you can have contradictions that operate simultaneously. That's one of the areas of fiction-slash-art in which there are things operating in identical time. So, I think the lull of vision at this time with computer simulation and Photoshop and all kinds of other visualization tools is that *seeing is no longer believing*. It's the same as when you go to the grocery store and you see these fabulous-looking strawberries. If it looks too good to be true, it's not true. And this is, I think, what Nicole [Karafyllis] talks about when she talks about the difference between the natural and the artificial, or nature and culture. She says that the same dichotomy still exists, but it is far more hidden now than it has been. Because you can't see the internal workings. It's the same way with the fetus in a jar. You can't see why that specimen is not privy to life. And that changes how you enter into a discussion about what it appears to be.

SF: That suggests the idea of the specimen offering a range of different kinds of invitations. So the specimen is imagined as a fact, but your collection shows how differently specimens have been presented over time, so we can see that, in addition to being a factual depiction, in a medical sense, it's also a staged display. It's in a jar. It's in a clear substance, in alcohol or formalin, or some of the earlier specimens you have been engaged with are made of wax. And, in a sense, they don't look as realistic, in a sense, as say the more recent anatomical specimens.

SA: I think that another point [is about] the simulacra and the surrogate, and the way in which our perception reacts to the surrogate in the same way it reacts to real things. I think that these questions about phenomenology now enter into this [specimen] discourse, which you don't get in photography. Particularly clinical photography [where we see] it is what it is. Well, *it never is what it is*. It's always about some interpolation. Some kind of mediation. And the thing about looking at specimens is that you

don't know how to integrate these visions into your being. You observe it. Look at it from one specific angle. You look at it from another. The glass jar, which is the lens, and sort of the optical device, again, changes what you are looking at. So, your mind goes back and forth trying to arrive at a kind of stability, which can never be there. And, in that sense, it's a border object. I think the specimens unfold in time as you become more familiar with what's going on. In "The Hand Mirror"—and this is just a fragment of the piece that presents a sort of wider window—what you can see in the photographs are fingerprints on the glass. So, whoever is looking inside is trying to get up close to it. The window washers' marking patterns are swish, swish, swish. So, you're seeing through two different lenses already just from the perceptual point of view in order to look at what is presented to you.

SF: It's such a fascinating image, the fingerprints on the glass, because it's at once an image of separation and proximity. The glass separates you from the specimen, yet it is the lens, as you say, through which you examine it. And the fingerprints remind us that even though it is behind glass and enclosed, and separated, that touch continues to be a very prominent way that people literally reach out to the specimen, which returns us again to the difference between being in a room with a specimen and looking at a photograph.

SA: And this really brings up other metaphors too. The specimen in the jar. The fetus in the jar. Well, this goes back to *Brave New World*. It goes back to the fears and fantasies in science fiction about procreation that is, um, ectopic pregnancy. And I think that in looking at these things, you become engaged in your own mortality. As the question about holding up the mirror. I was looking up a few things about that today and came across a poem by Walt Whitman, who in some ways captures some of this stuff in his *Leaves of Grass*, when he talks about looking in the mirror and seeing. Okay, it's called "The Hand Mirror" by Walt Whitman. And I'll just read this to you. "A Hand Mirror. Hold it up sternly. See that it sends back. Who is it? Is it you? Outside fair costume—within ashes and filth. No more a flashing eye. No more a sonorous voice or springy step. Now some slave's eye, voice, hands, step. A drunkard's breath. Unwholesome eater's face. Venerealee's flesh. Lungs rotting away piecemeal. Stomach sour and cankerous. Joints rheumatic. Bowels clogged with abomination. Blood circulating dark and poisonous streams. Words babble. Hearing and touch callous. No brain. No heart left. No magnetism of sex. Such from one look in this looking glass ere you go hence. Such a result says so and from such a beginning." I think the fetus becomes our mirror,



Figure 7. Suzanne Anker, "The Glass Veil (Lonely Planet)," 2009, digital print on watercolor paper, 24" x 36". Courtesy of the artist

because also we have no memory of being there. And we probably have no memory or at least cannot enter the space again. And so I think about the formal aspects here. The way the picture is cropped. Clearly the preparator was not making this statement, but the artist here is reframing the image. I think again, it carries with it many of the ideas about mortality and fiction. In fact, this [specimen] may be a composite. We don't know. And, the way in which the larger-than-life fetus is presented to us. Also, the double image of the fetus, like cloning.

SF: I mean it, a strong sense that comes from the poem is also of revulsion, abjection, and disgust.

SA: Absolutely.

SF: So I suppose another challenge the specimen presents, whether it's a fetal specimen or a human specimen or even any specimen, is that it produces an alienating sensation, to which we still have a very intimate connection. So, yeah. So, it's appropriate that the specimen is an educational device.

SA: Yes.



Figure 8. Suzanne Anker, *The Glass Veil (In and Out of Time)* (installation), Berliner Medizinhistorisches Museum der Charité, Berlin, Germany, 2009, digital prints on Sintra, 76" x 96". Courtesy of the artist

SF: But the kind of education we expect from it is obviously changing. I suppose maybe that's where the role of bio-art is now—it is producing a new collection of specimens that serve as spectacles and serve as questions about how we understand ourselves, because certainly the idea of species would be one of the containers in question?

SA: Absolutely.

SF: In a nutshell.

SA: Yeah, it's viral in several ways. The integrated, integral species may be akin to specimens that have been refabricated from multiple parts. And it may be like a metonymy, in which parts represent wholes. And that's sort of how I've always felt about genetics, in that the very early piece I wrote about how the genetics laboratory is like a museum in which this fragment of a human being now comes to represent that human being, but it doesn't represent the human being.³³ It represents the collective identity of the species. So that even looking at the code, it represents a human being. This is what has created a lot of hyperbole about how you are your genetic code. So, I think this question of the fragment is very important. And how it's represented, how it's presented. What fragments we share with



Figure 9. Suzanne Anker, *The Glass Veil (The Center of Gravity)* and *(The Hand-Mirror)* (installation), Berliner Medizinhistorisches Museum der Charité, Berlin, Germany, 2009, digital prints on Sintra and nylon, approx. 30' x 40' x 40'. Courtesy of the artist

our animal others. What are the gene sequences that are there that allow us to use animal models as surrogate replacements for human disease? Those are questions we can explore even further.

SF: And if species, in a sense, is the whole for which the specimen is the fragment, there's a way in which the dissolution of the species category repositions the specimen as part of other things, with relationships to other objects, that maybe we can see more clearly?

SA: Correct. And those parts are the social parts in many ways. The cultural residue of how it got there, who it was, of what transpired, what were the microbes of the time, what was the politics in the pathology museum that spent the money on this? All of these other social questions, and what they were there to quote-unquote prove? Because we've seen a lot of, you know, disgraceful sort of social implications that have come out of biological interpretation. But at the same time, biology is, is part of the package here.

SF: So these questions take you back to the role of the specimen as a source of reflection. Because if we think of a museum in London like the Hunterian Museum at the Royal College of Surgeons, it has become

a museum of a museum. In a certain sense, it is a museum of what a museum used to be. So the display is in part a reflection on how knowledge was produced. How understandings of the human body evolved and what kinds of techniques and what kinds of material culture were used to stabilize them. So this is really a very nice return to the fingerprint on the glass, and the ways of seeing that the specimen allows us to consider and reconsider.

SA: And they should never be the exception. I think we need them there as reminders of the way we can consider life and life forms [in general].

SF: So they become an audience of witnesses.

SA: That's right. That's absolutely right. Part of respect for the specimen is really a collective process. It's never really respect for the individual specimen, but it's a respect that would be shown to the collectivity of which they are an example.

SF: Which is one of the things your work has really emphasized in joining groups of specimens together. In a sense, looking back at us. Often off-kilter, often slightly out of focus, raising the question of what do we think we're seeing. In a sense, what is looking back at us is part of ourselves?

SA: That's right. You know, what's looking back at us are a lot of the subliminal responses we are having. And, that is again the somatic gaze. That you can't kind of pinpoint it. You wouldn't go into the specimen room and say, okay, now I'm going to show the underbelly of this or I'm gonna create some kind of, um, image I've seen on TV or whatever. It just unfolds. It just unfolds as a way of, again, having the image give itself up. And why it's so powerful as an image is because it causes us to reflect in new ways. It's not about the horror. It's not about the exaggeration. It really is paying homage in many ways to the delicacy of life's fragility, of all of that. Let's see if I have this picture. I think, this one. Look at that. I mean, it's like looking through a veil.

Notes

1. Donna Haraway, *When Species Meet* (Minneapolis: University of Minnesota Press, 2008), 17.

2. For useful technical histories of liquid preservation of vertebrates in glass, see John E. Simmons, "Conservation Problems of Fluid Preserved Collections," in *Natural History Museums: Directions for Growth*, ed. Paisley S. Cato and Clyde Johns (Lubbock: Texas Tech University Press, 1991), 74–86; E. M. Jones and R. D. Owen, "Fluid Preservation of Specimens," in *Mammal Collection Management*, ed.

H. H. Genoways, C. Jones, and O. I. Rossolimo (Lubbock: Texas Tech University Press, 1987), 51–63; G. Hangay and M. Dingley, *Biological Museum Methods*, vol. 1, *Vertebrates* (New York: Academic Press, 1985); W. B. Quay, “Bird and Mammal Specimens in Fluid—Objectives and Methods,” *Curator* 17 (1974): 91–104; W. R. Taylor, “Observations on Specimen Fixation,” *Proceedings of the Biological Society* 90 (1977): 753–63. On Ruysch’s contribution, see Julie Hansen, “Resurrecting Death: Anatomical Art in the Cabinet of Dr. Frederick Ruysch,” *Art Bulletin* 78 (1996): 663–79. Ruysch employed the methods of preservation initially developed by William Harvey, and he perfected these so that he was able to preserve an entire human body with embalming fluid in 1666—coincidentally the same year Robert Boyle, another innovative preservationist, reported to the Royal Society in London his improvements in the use of ethyl alcohol for the preservation of fetal vertebrates. See Robert Boyle, “A Way of Preserving Birds Taken out of Eggs, and Other Small Faetus’s,” *Philosophical Transactions of the Royal Society* 12 (1666): 199–201. The manufacture of inexpensive glass was a further seventeenth-century innovation that made it easier to observe and study jarred specimens.

3. Eilean Hooper-Greenhill, *Museums and the Shaping of Knowledge* (London: Routledge, 1992).

4. Stephen T. Asma, *Stuffed Animals and Pickled Heads: The Culture and Evolution of Natural History Museums* (Oxford: Oxford University Press, 2001).

5. Barbara Maria Stafford, *Artful Science: Enlightenment Entertainment and the Eclipse of Visual Education* (Cambridge, MA: MIT Press, 1994), 274. Stafford chronicles the transformation of the private curio cabinet into an edifying public display—what she calls “the transmogrification of ‘picturesque trash’ into . . . orderly rooms” as part of a “transitional moment when the old polymathic jumble was in the process of becoming a new public service display requiring the interpretation of experts” (255).

6. See, for example, Eric Garberson, “Bibliotheca Windghagiana: A Seventeenth-Century Austrian Library and Its Decoration,” *Journal of the History of Collections* 5 (1993): 109–28.

7. Gijsbert M. van de Roemer, “From Vanitas to Veneration: The Embellishments in the Anatomical Cabinet of Frederick Ruysch,” *Journal of the History of Collections* 21 (2009): 1–18.

8. Nikolaas Rupke, *Richard Owen: Biology without Darwin* (Chicago: University of Chicago Press, 2009).

9. Michel Foucault, *The Order of Things: An Archaeology of the Human Sciences* (New York: Vintage, 1973).

10. *Ibid.* Foucault originally wanted to name his 1966 book what became the English translation, *The Order of Things*, but because another French book had been previously published with that title, his French edition was named *Les mots et les choses* (*Words and Things*).

11. Lisa Cartwright, *Screening the Body: Tracing Medicine’s Visual Culture* (Minneapolis: University of Minnesota Press, 1995).

12. *Ibid.*, 10.

13. Feminist historian Barbara Duden, for example, uses the term *commandeered vision* to describe how viewers of scientific objects are not so much simply shown them as *told what to see*. See Barbara Duden, “Visualizing Life,” *Science as Culture* 17 (1993): 562–600. For her observations on unborn life, see also Duden, *The Woman beneath the Skin: A Doctor’s Patients in Eighteenth Century Germany* (Cambridge, MA: Harvard University Press, 1991); Duden, *Disembodying Women: Perspectives on Pregnancy and the Unborn* (Cambridge, MA: Harvard University

Press, 1993); and Duden, “The Fetus on the Farther Shore: Toward a History of the Unborn,” in *Fetal Subjects, Feminist Positions*, ed. Lynn M. Morgan and Meredith W. Michaels (Philadelphia: University of Pennsylvania Press, 1999), 13–25.

14. Jose Van Dijck, *The Transparent Body: A Cultural Analysis of Medical Imaging* (Seattle: University of Washington Press, 2005), 15.

15. A good example of Crary’s hypothesis is the way an ultrasound scan is now often sent as an e-mail invitation to a baby shower. See Jonathan Crary, *Techniques of the Observer: On Vision and Modernity in the Nineteenth Century* (Cambridge, MA: MIT Press, 1992).

16. Nick Hopwood, “Producing Development: The Anatomy of Human Embryos and the Norms of Wilhelm His,” *Bulletin of the History of Medicine* 74 (2000): 29–79; Nick Hopwood, “A History of Normal Plates, Tables, and Stages in Embryology,” *International Journal of Developmental Biology* 51 (2007): 1–26.

17. Adele Clarke, *Disciplining Reproduction: Modernity, American Life Sciences, and the Problems of Sex* (Berkeley: University of California Press, 1998).

18. Summarizing the historical importance of the fetal form in this way is not meant to suggest that the history of representations of unborn life is continuous, linear, or unified in the sense of being the same over time. As has often been pointed out, in particular by Duden (as cited above), the contemporary fetus is only recognizable as such within the relatively recent medical and scientific conventions that make it so. As Duden notes, for example, in her critique of Karen Newman’s discussion of fetal representation as “variations of the same”: “The mental topology and technological mediation fostering visualized developmental embryology in the nineteenth century cannot be likened to the earlier illustrations embodying and emblematically visualizing a human yet to come” (“The Fetus on the Farther Shore,” 21). See also Karen Newman, *Fetal Positions: Individualism, Science, Visuality* (Stanford, CA: Stanford University Press, 1996).

19. Lynn M. Morgan, *Icons of Life: A Cultural History of Human Embryos* (Berkeley: University of California Press, 2009), 9.

20. In fact, only one of Nilsson’s “photographs,” shot through an early laparoscope and revealing a tiny illuminated circle of a fetal head in utero, depicted a live unborn fetus (which, somewhat paradoxically, was in all likelihood photographed shortly prior to a termination). The literature on these images is too large to cite in full here, but for an excellent overview of this, and the related literature on fetal imagery, see Morgan, *Icons of Life*, esp. 24–29.

21. The simultaneous purchase and ambiguity produced by the “stilling” of fetal life on fixed emulsion returns us to the paradoxes of vision described by Cartwright, Foucault, Crary, and Duden, above—a heightening of liveliness through *what is not being shown*. By inducing fetal motion through time-lapse photographic sequences, Nilsson enables a renarrativization of life as a moving picture, or “biograph,” while depicting what is in fact an elaborate *nature morte*, if not *trompe l’oeil*. In Duden’s terms, we are not being “shown” what we are seeing, but rather the reverse (it is not unborn life but postpartum death). The concept of biological development and its relationship to visual narrative—perhaps especially narrative film—is one of the most intriguing aspects of contemporary biological representations of life, as is particularly well demonstrated by Hannah Landecker in *Culturing Life: How Cells Became Technologies* (Cambridge, MA: Harvard University Press, 2007). In all of these respects we can see how the history of specimen display is a history of “the art of staging” (and thus concealment) as much as of revelation, demonstration, or “objectivity.” Arguably, Nilsson’s images are an extension of the ancient roots of preservation in magic as much as of its modern roots in science.

22. Lennart Nilsson, *A Child Is Born: The Drama of Life before Birth* (New York: Delacourt Press, 1967). Nilsson was not the only photographer in this period to produce popular photographic images of unborn fetuses. Landrum Shettles, an obstetrician-gynecologist at Columbia-Presbyterian Medical Center in New York City, also produced numerous popular and scientific textbooks using similar imagery he produced during the 1960s, including *Ovum Humanum: Growth, Maturation, Nourishment, Fertilization, and Early Development* (New York: Hafner, 1960) and, with David Rorvik, *Rites of Life: The Scientific Evidence for Life before Birth* (Grand Rapids, MI: Zondervant, 1983). For further discussion of Shettles, see Robin Marantz Henig, *Pandora's Baby: How the First Test Tube Babies Sparked the Reproductive Revolution* (Boston: Houghton Mifflin, 2004), esp. 51–67.

23. Rosalind Pollack Petchesky, “The Power of Visual Culture in the Politics of Reproduction,” *Feminist Studies* 13 (1987): 264.

24. The use of fetal imagery, and in particular Lennart Nilsson's fetal portraits, as iconic sacrificial imagery by the pro-life movement, particularly in the United States, is a subject too broad for this brief introduction (see Morgan, *Icons of Life*, 24–33n5, 247). What Petchesky (“Power of Visual Culture”) refers to as the “visual politics” of fetal imagery is of considerable significance to the late-twentieth-century history of fetal display and thus to the art of Suzanne Anker, as discussed later in the subsequent section.

25. Mark Dery, *The Pyrotechnic Insanitarium: American Culture on the Brink* (New York: Grove Press, 2000), 148.

26. *Ibid.*, 149.

27. Frans Schouten, *Grotesque: Natural Historical and Formaldehyde Photography* (Amsterdam: Fragment, 1993).

28. Dery, *Pyrotechnic Insanitarium*, 160.

29. Helen Chadwick, *Stilled Lives*, exhibition shown at the Portfolio Gallery, Edinburgh, 1997. For a discussion of Chadwick's work in relation to feminist debates about the fetal form, see Sarah Franklin, “Dead Embryos: Feminism in Suspension,” in Morgan and Michaels, *Fetal Subjects, Feminist Positions*, 61–82.

30. Suzanne Anker and Dorothy Nelkin, *The Molecular Gaze: Art in the Genetic Age* (Cold Spring Harbor, NY: Cold Spring Harbor Press, 2004).

31. *Ibid.*, 57.

32. *Ibid.*, 108.

33. Suzanne Anker, “Gene Culture: Molecular Metaphor in Visual Art,” *Leonardo* 33 (2000): 371–75.

