

Steve Baker · Carol Gigliotti

We have always been transgenic

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Abstract This dialogue concerns the nature of ethical responsibility in contemporary art practice, and its relation to questions of creativity; the role of writing in shaping the perception of transgenic art and related practices; and the problems that may be associated with trusting artists to act with integrity in the uncharted waters of their enthusiastic engagement with genetic technologies.

Keywords Art practice · Transgenic art · Ethics · Aesthetics · Genetics · Postmodernism

1 Introductory remarks

This email conversation, stemming from Steve Baker reading Carol Gigliotti's essay, "Leonardo's Choice," and conducted on an occasional basis from November 2004 to March 2005, emerged as a format in which we hoped to be able to explore both our common interest in contemporary artists' engagement with questions of ethics and animal life, and the significant differences in our own approaches to those questions. Both of us were in the middle of writing books considering aspects of these issues in more detail, which may explain why we seemed sometimes to have too much to say, without always managing to say it very clearly. The conversation touches—sometimes only very lightly—on issues that include the following: the nature of ethical responsibility in contemporary art practice, and its relation to questions of creativity; the role of writing in shaping the perception of transgenic art and related practices; and the problems that may be associated with trusting artists to act with integrity in the uncharted waters of their enthusiastic engagement with genetic technologies. Running through much of the conversation is a tension between what is perceived by each party as the adoption

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of a wide or too narrow focus: is the wider focus to see this area of art practice as something that should be viewed in a similar manner to other forms of contemporary art, where an artist's "proper business" is "curiosity and awareness" (as John Cage once remarked), or is the wider focus to see the ethical implications of this kind of art practice as inextricably linked to the methodologies and goals of the techno-science it purports to critique? We call what follows a conversation because—like any lengthy face-to-face conversation—it seems occasionally to display a frustrating circularity, a failure on both our parts quite to grasp the point the other is making, and a failure to return to certain issues to which we promised to return. Conversations develop at their own pace, and cannot always be hurried, so as the publication deadline loomed there was a sense of much remaining to be said, and of little having been resolved. This reminded both of us of the character in a Martin Amis novel who reflects: "I am taking a good firm knot and reducing it to a mess of loose ends." It is perhaps for readers to decide whether or not any discernible pattern emerges from these loose ends.

Steve Baker and Carol Gigliotti, March 2005

Steve Baker: Let me try this out as an initial question: For me, one of the most striking statements in your "Leonardo's Choice" (Gigliotti, 2006) essay is the assertion, towards the end of the essay, that "we have always been transgenic." It struck me as having as much to do with politics as with science, coming across as a kind of rallying-cry, or as the title of an as-yet-to-be-written manifesto. And without really stopping to analyze the reasons, it was a rallying-cry to which I was immediately drawn. Am I misreading what you had in mind?

Carol Gigliotti: I do appreciate your close reading of my essay. It is that phrase, "we have always been transgenic," which made me pause briefly before I decided to, in fact, include it in the essay. My hesitancy about including it had less to do with the meaning behind it, which I shall explain in more detail in a bit, and more to do with what the possibilities are for readers to misunderstand its actual intent. You are correct in intuiting it as a kind of rallying cry, or to be more descriptive of my thoughts when the phrase rushed from my mouth in intense frustration: a rallying scream.

This frustration is both personal and representative of a bafflement borne by people from many corners who see the state of the non-human world as so obviously at risk. I worked on this essay for over 6 months and have been deeply involved for over 25 years with many of the very sources that artists I was writing about were utilizing to rationalize their work: cognitive ethology, animal consciousness, animal rights, and ethical vegetarianism and veganism. After, at least I hope, specifically taking to task the misuse and misunderstanding of these commitments in the service of activities so obviously counterproductive to an awareness of either this growing risk or the goals upon which much of these commitments have been undertaken, I must have felt the need for a phrase that might indicate some of this bewilderment at what seemed to me a severe myopia among a number of artists and thinkers.

The phrase itself, as you suggest, has to do with both its political and scientific underpinnings, as well as a bit of a nod towards Bruno Latour and Donna Haraway. I wanted to throw the reader, the artist, the writer, the techno-theorist, the student, who appreciated my very specific points in earlier parts of the essay, a metaphoric hook upon which they might begin or continue their own thinking. The fact that there is a vast amount of genetic similarity between organisms,

including humans, and we are all related by a shared evolutionary history, is the basis for the idea that we are all transgenic, and the basis, as well, for notions of a bio-centric compassion. What current transgenic technologies are doing, however, is based on a flawed application of this similarity by reducing complex behaviors to single genes completely apart from the context of the formations of those behaviors. The problem with using what might be construed as an ambiguous metaphor is that it, too, might be misread and misapplied.

I am happy you read it as a rallying cry and were immediately drawn to it. After all my consternation, I would love to hear why you think you particularly were drawn to it.

SB: Perhaps I will come back to that question a little later. For the moment, I would rather take up your concern with the “problem” of using an ambiguous metaphor. I think ambiguous metaphors can be thoroughly good things. Yes, it is hard to patrol or control the work they may do, but they allow thought in, instead of shutting it out. I have always been struck by a statement made by Sue Coe, who I guess is still the best known artist working in North America to address an explicit animal rights agenda through her work. She said in an interview, with reference both to her own work and to that of other artists she admires, that “the most political art is the art of ambiguity.”

Because I agree so thoroughly with that view, I have reservations about using terms like “severe myopia” to characterize the attitudes of some of the artists whose work you describe. Especially when working in relatively new or unfamiliar fields, artists’ experimental strategies inevitably run the risk of being open to contradictory readings—and of course to being unsuccessful!

Does that risk (and far more importantly, of course, the risk to animals’ well-being that their work may also—sometimes inadvertently—entail) mean that such strategies are automatically invalidated? To my surprise, I find it increasingly difficult to separate that question from the question of what art is for, and what kinds of work art can do, and why it is that we believe (as I am guessing we both do) that art matters. This raises all manner of difficulties and contradictions. I suspect, for example, that I am perilously close to arguing that artists should be allowed certain freedoms that scientists should not be allowed! And my interest in pursuing this conversation with you is partly to explore those contradictions in my own thinking. If we believe that art can indeed, in principle, open up productive new perspectives on pressing and controversial contemporary political issues (not least issues to do with animal life), how do we deal with those very many cases of artists who may actively be trying to act responsibly, but whose views on animal life, animal welfare and animal rights may be slightly (or even significantly) different to ours? I am not suggesting, of course, that you and I necessarily hold exactly the same views on these matters, and those differences are also ones that I think we both see as worth teasing out in the course of this exchange.

CG: Ah, Steve. You have hit on the crux of the matter for artists, but not for artists alone, when you allude to how close you might be to “arguing that artists should be allowed certain freedoms that scientists should not be allowed!” The idea of unfettered creativity is the holy grail, not only in the arts, but in the sciences and society at large. In my experience, and increasingly so, as I have not only been researching artists’ and scientists’ work, but involved actively in technological development, the push for an unfettered path to the new, the imaginative, the original has gained incredible momentum and force for the last

half century in all areas of endeavor. I realize you see the goal behind this freedom as opening up “... productive new perspectives on pressing and controversial contemporary political issues” as a very positive one. Many scientists, however, see this need for freedom of investigation as necessary for creative progress in solutions to problems as well, medical ones, for instance.

Granted there are good reasons for progress spurred on by the creative imagination, the freedom to dream, but there is also a darker side to that lust for the new, the original. I will not go into detail here about the repercussions of that drive, but as Ronald Wright (2004, p. 5) points out, “The myth of progress has sometimes served us well—those of us seated at the best tables, anyway—and may continue to do so. But I shall argue in this book that it has also become dangerous. Progress has an internal logic that can lead beyond reason to catastrophe. A seductive trail of successes may end in a trap.”

Like you, I have struggled with seeming contradictions between my long-time support of creative freedom (I teach art and design, after all) and my increasing discomfort with the work and attitudes of some of my colleagues in interactive technologies or what is now called New Media. My discomfort and criticism of their work stems not only from their inclusion of the areas concerning animals I mentioned in my last email and my essay, areas I feel are being used for reasons directly opposed to ideas about the intrinsic worth of animals and the natural world. My disagreement with this work also emerges from an ongoing concern over where our increasingly technologized world is taking us, and what we are losing because of the bargains we have made along the way. I do not see these works as “opening up new perspectives,” but immersed in existing perspectives, which I, among others, have already found to be not only troublesome, but also disastrous, not just for animals, but for the planet at large. I said very specifically in my essay what I was taking to task was the “new art form of creating life.” The drive behind that goal is not altruism.



Fig. 1 Rabbits in laboratory stocks
Credit: © Brian Gunn/IAAPEA

The book on which I am working (struggling with) is about this very issue. I feel I have gone on too long, but must respond to several other points about metaphor. I think metaphor is a very powerful form of communication. And I think all metaphors can be ambiguous to a greater or lesser extent depending on the context and to what degree people agree on experiences from whence the communicating metaphor has emerged. But while I see metaphor as a form of imaginative communication, I also understand it as neither objective nor subjective, but experiential. As a writer and artist, I believe that when I use a metaphor to communicate, I also have a responsibility for that communication. In the case of my “we have always been transgenic” metaphor, embedding it in the essay allowed me to feel that overall, its meaning would be taken in the context of the essay. My “severe myopia” metaphor is one, that while you may have reservations about, I do not.

Severe myopia is an extreme state of nearsightedness, due to the faulty focusing of light rays from objects at a distance. In other words, holding an object close allows the myopic person to see quite well, but what they cannot see or distinguish are distant objects. I think this is a very relevant metaphor for artists who seem unable to look at the larger world in which their art exists.

I do not see myself as an art critic, but an artist and writer whose main interest has always been ethics, and in my case, an ethics informed by my direct relationship with the natural world, about which I am determined to speak out.

I could go on, of course. I feel I have answered and not answered your questions, but tried to explain how I am answering those same questions for myself. How do we differ in our views on animal life, animal welfare and animal rights, may I ask?

SB: Let me start with that last question. How do we differ? Perhaps (though I may be wrong) in how we choose to approach the relation of our writing on art to our views on animal life. I first got interested in animal rights issues about 20 years ago when I first learned of the work of the work of the British Union for the Abolition of Vivisection (BUAV), and opposition to all forms of animal experimentation has always been the animal rights issue that has engaged me most directly, and about which I have felt most strongly. The first thing I ever published on an animal rights theme was a very short piece in the BUAV magazine, *Liberator*, in 1986, on the misrepresentation of animal rights activism in RSPCA publicity in the UK.

When my first book, *Picturing the Beast*, came out in 1993, my concern was again with representations of animals and representations of human attitudes to animals—not in contemporary art, but in contemporary Western culture as a whole. I was arguing a point that now seems blindingly obvious: that these representations (no matter how ephemeral) do matter, and that they help to shape our perceptions and our understanding. The final chapter also included discussion of the contested representation of the animal rights activist. The main point of that final chapter, though, was to explore what I provisionally termed “strategic images for animal rights”—images adaptable enough to resist easy incorporation into the culture’s dominant meanings, but sufficiently attuned to those meanings to enable them to be recognized within that culture. In trying to identify and to characterize effective strategies for image-making in this field, I had of course to be quite open about my own position. It was a position or undertaking that even then I preferred to describe as political rather than moral;

the point was to get beyond what I already, intuitively (which is to say in a thoroughly under-researched manner!), tended to think of as the evident limits of moral philosophy for thinking about animals.

At any rate, it seemed important to declare my hand in terms of where I stood on those issues, simply for that particular chapter to make sense. I am aware that I use writing differently now, and see it doing a different kind of work. I regard writing in much the same way that I regard artworks (even transgenic artworks): as attempts to undertake particular kinds of work. And that is where I think you and I may differ: in the kinds of work we want our writing to do.

CG: First of all it was obvious to me, at least, from reading *The Postmodern Animal* and other writing of yours that your beliefs lay within the sphere of animals rights. I, too, was very involved with the animal rights movement, through PETA (People for the Ethical Treatment of Animals, and Tom Regan's Culture and Animal Foundation). And I am aware of, and have used in the past, writing strategies that do not entail completely showing one's commitments. I sometimes used visual strategies in this manner as an artist, since most of my visual work was about our relationship with animals, specifically our use of animals in the laboratory and factory farming. In fact, *Leonardo's Choice* is probably the most overtly committed of my *writing* up to this point on issues surrounding animals. I have alluded to those commitments in many of my past essays, however.

But, personal experiences with the drift in thought and actions of a number of artists involved with technology over the last five years or so have caused me to rethink the viability of my continuing to use those strategies, especially when faced with the realities of biotechnology. I know Eduardo Kac very well and have been friends and colleagues with him for over ten years, supporting his previous work and curating an earlier work into a Siggraph Art Show. I tell you this because some of my feelings about the importance of not only considering but also clarifying how ethics and aesthetics are so entwined has to do with my intimate involvement with technological art and many of the people who have pioneered artistic technological work.

My dissertation, "Aesthetics of a Virtual World," concerning ethical issues in interactive technological development specifically virtual environments and finished in 1993, was somewhat ahead of its time. After a number of years of attempting to embed these ideas in publications, lectures and projects, I have decided that time is too short, for me, and for the planet, not to speak directly about these issues. I do, however, appreciate what you are doing a great deal! Over time I have learned to appreciate Dorothy Parker's assertion, "If you can't be direct, why be?"

SB: I think it is fascinating that our writing is moving in opposite directions, or that our strategies for writing are taking us in those directions. I wonder why that is happening? I had one idea about this, though I could be quite wrong. In your current work your focus is directly on artists working with genetic technologies, and more specifically with those who presume to explore the creation of new lifeforms as their art practice. I have no difficulty at all in seeing why you want to take a stand against that work. Why do not I do so too, in an equally direct manner? I think because I continue to want to address the whole spectrum of contemporary art that engages with ideas of the animal—everything, that is, from the animal advocacy that is at the heart of the work of artists like Angela

Singer and Sue Coe, to the transgenic explorations of Kac, Adam Zaretsky, and so on. And all points in between, including non-transgenic work with living animals, such as that of Catherine Chalmers or Olly and Suzi, often undertaken for incredibly diverse reasons. And I am very reluctant indeed to identify (or even to try to identify) a point on that spectrum beyond which my disapproval kicks in. (It does kick in, of course, but to say so would I think get in the way of how I am trying to use that writing.) Why? Because my conviction that recent and contemporary art can offer fresh perspectives on ethical questions—and we will have to come back shortly to the reservations you have already expressed about that idea—has led me to the really quite uncomfortable view that it is not only “ethically sound” art, for want of a better term, that can do this. I seem to have ended up taking the view—or more accurately, I am still in the early stages of trying to articulate the view—that postmodern animal art constitutes a kind of fluid sub-ethical practice, and that the integrity of that work is not fashioned out of, and is not best expressed through, the language of morals and ethics.

CG: I agree that our different strategies, and perhaps, directions, are due to the breadth of contemporary art about which we write.

At this point, my focus is on technologically mediated work, alife, genetics, interactive installation, augmented realities, computer game design, immersive environments and how and why the non-human, though often seemingly absent or exploited, is fundamental to understanding the meaning of these technologies for the future of both the human and non-human.

SB: That part of writing that you describe where you know things are connected, connectible, but have not yet figured out how to articulate that conviction is, I always think, the most exciting part or stage of writing (or of making art). It has a lot to do too, I think, with my sense of the integrity of how artists think and work. Perhaps my favorite statement by an artist is from Jim Dine in the 1960s, saying “I trust objects so much. I trust disparate elements going together.” And even if the artists we are talking about in this exchange are ones who push that perception close to or beyond tolerable limits, I am reluctant entirely to let go of that notion of trust.

I want to try to bring us back on track, because our recent exchanges around writing have perhaps (though perhaps necessarily) diverted us from the direct question of genetic technologies, and of artists whose practice involves “creating living beings” (Gigliotti 2006, p. 3) or “new life forms” (Robin Held, qtd. in Gigliotti, p. 3).

To do this perhaps we could look at one particular passage in “Leonardo’s Choice” (p. 12). There, you effectively distinguish an anthropocentric worldview in which those practices are implicated—and I want to return to that word—from a more radical worldview that would allow that “we have always been transgenic.” What I would like to try to think about is the difficulty of disentangling those worldviews. When you first sent me your essay, thinking back after reading it I made a brief note to myself, and misremembering your crucial phrase as “we are already transgenic,” I scribbled down an echo of that phrase as “we are already (necessarily) compromised ... gloriously.” This little Haraway-style celebratory observation, which I came across again the other day, seemed to resonate with your word “implicate” (p. 12), with its intriguingly varied uses (to show to be involved in a crime; to imply; and to entangle) ...

What made me think about that was a statement by Yve Lomax that I read recently in a student assignment: “The implication of metaphor brings a much richer knowledge of the World. To speak by way of implication is not about standing back and attaining the right distance in order to see things clearly; implication is about being plunged into things, finding oneself in the middle of things” (quoted in Wheale (ed), *The Postmodern Arts*, Routledge 1995, p. 157).

Without going back just for now to our earlier brief comments on metaphor, it was that sense of “finding oneself in the middle of things” that I wanted to hold on to. Perhaps this is one of the points at (or from) which you and I articulate the fairly small differences in our outlook quite markedly. You justifiably challenge “the idea that a confrontation with the complexity of a topic or issue precludes the necessity of confronting ethical choices embedded in that complexity” (Gigliotti, p. 3), and conclude that opting for one or the other of the incompatible worldviews you have described is “the choice before the contemporary artist” (p. 13). I think I would simply choose to articulate the negotiation of those choices differently.

This, and my admittedly rather wayward refusal (or disinclination, at least) to engage with the language of ethical choice will take some explaining, so let me at least try to say something plainly:

Do I think that artists messing around with animals in laboratories is wrong? Yes. But my disapproval alone is not going to stop them doing it. Guattari (1995, p. 131) (of whom, more later) wrote: “The work of art, for those who use it, is an activity of unframing, of rupturing sense ...” And that is what writing is, too. That is why the question we have already touched on, of how we were using our writing, seemed so important. When Eduardo Kac invited me to write about his work, I had some reservations, but when I realized just how seriously his transgenic work was being taken by writers with little apparent interest in its ethical implications, it seemed important to accept the invitation. And of course it was a compromise, with uncertain outcomes on both sides, I think. He can legitimately take the view that I find his work interesting (which I do, in all sorts of ways) because I agreed to write about it in a book devoted to that work, and I managed at least implicitly to put in place some serious criticisms of the work by juxtaposing his words with those of Derrida’s forthright remarks about the “hell” of “the imposition of genetic experimentation.” It was a fairly small-scale attempt at unframing, at rupturing the sense of what Eduardo was doing. I realize that by writing about it at all, some people may think I condone the work, but the idea—whether or not it works out that way—was to open a dialogue.

CG: I am finding, have found, ideas around creativity as central to finding a direction through these issues, just as you have. I see our differences as one of context, since you seem to be making a case for artists while I am looking at artists and scientists as one increasingly blended field. For me that is a large and very important difference. The realities of genetic technologies and artificial life research and practice are the context I am trying to keep in the forefront, and I think the kind of creativity this blending of art and science has encouraged is key to both a positive and negative future for the human and non-human world.

SB: I want to move on to something slightly different now, though still around those ideas of implication, and of the difficulty of sharply differentiating between particular worldviews. I want to suggest (though you know this perfectly well, of

course!) that there is a rather complex contemporary rhetoric around body-image, and body-images, and to juxtapose a few statements that employ it in various ways in order to see what kinds of work that rhetoric is being used to do.

The first is from David Abram (1997, p. 46), from a broadly ecological/anthropological standpoint: “the boundaries of a living body are open and indeterminate; more like membranes than barriers, they define a surface of metamorphosis and exchange.”

Next, the British sculptor Athony Gormley whose work focuses directly on the form of his own body: “Our bodies are on temporary loan from the circulation of the elements in the atmosphere.”

Then Donna Haraway (1991, p. 149), whose particular elaboration of the idea of the cyborg, which she terms “my blasphemy” is one that “insists on the inextricable weave of the organic, technical, textual, mythic, economic, and political threads that make up the flesh of the world” (Haraway 1995, p. xii).

Taking it into more fanciful, virtual and dodgily Baudrillard-style imagery is Arthur Kroker (2004) relishing the idea that “skin smoothes out into Flash flesh cut at the speed of syncopation, and the face itself floats away, not into an aesthetics of facialization, but into something more indeterminate, more tentative, more slippery in the codes” And from there it seems but a small step to Catts and Zurr’s (qtd. in Gigliotti, p. 5) “only when humans realize that they are part of the continuum of life will manipulating life not be as alarming as it now seems.”

Somehow, somewhere, across those five small statements (a random selection) that all seem to share a desire to celebrate rather than to fear the openness of bodies, a slippage—a rather terrible slippage— happens. (The one thing Kroker gets right is the slipperiness.) But— and this is a hard thing to express clearly, so forgive me if this first attempt does not quite get it right—poststructuralism’s decentering of the subject, the integrity with which it refuses the fixity or the propriety of all selves, all bodies, all identities (I am thinking here of Deleuze & Guattari, and of Cixous, and Haraway, at their radical, uncompromising best) is perhaps necessarily difficult—impossible?— neatly to separate from what I think of (excuse the judgemental tone) as a less accomplished playing with or employment of that rhetoric. If I seem to be reducing this body-immediate stuff to aesthetics, I guess it is because, in part, I just cannot see ethics as a higher ground to which to retreat here.

So, to my last main point here. Can we perhaps, no matter how tentatively, distinguish three claims (in relation to the kinds of work discussed in “LC”)?

First (and these are not direct quotations), “I make new life”— presumptuous, immodest, oddly uncreative, and somehow not what we want or expect from artists. Second, “I play with materials (sometimes ‘new’ materials) and look on with interest as things happen”—better, and more in the spirit of Jim Dine on trust, at least if we can bracket out the idea that those materials might include animals (but we cannot bracket that out). Third, “I use this (art) play to address issues” (big, important issues of course)—but that is maybe too conscious, too intentional, too self-consciously “responsible.” I am still, pressingly, in the middle of trying to think this through, but it seems to me the second claim that is the creative one, the one that has a space for and of not-knowing, despite the terrible precariousness of that position for animals who somehow get caught up in it.

Why raise this now? Well, partly because “Leonardo’s Choice,” Catts and Zurr aside, tends to quote critics rather more than artists themselves (critics who appear to assert the first claim, on behalf of artists). And what the artists say seems to me to matter a great deal, no matter how contradictory it is. Eduardo’s claim both is and is not the “I make new life” claim. His transgenic art is about the making of new life, but he is equally adamant that Alba is not/was not herself the art, the artwork. GFP Bunny, as an artwork, is a dialogue and (of sorts) an ecology of social exchange, not the one-off creation of an out-of-species being.



Fig. 2 Baboon in laboratory
Credit: None

CG: I would like to take up first your ideas about implication. I agree wholeheartedly with an understanding of speaking, writing, or making art that is not distanced from that which it is about. “Finding oneself in the middle of things” is, more often than not, when ethical dilemmas become apparent. It is because we are implicated in something, that our judgment becomes so important, and carries so much weight. How we choose to be in the middle of things is the important question. Your assumptions about what kind of ethics I am referring to are, perhaps, hindering our discussion of these issues. I would like to come back to that in just a moment, but first, I would like to make it clear I am not saying that artists should hold themselves back from involvement with ideas about genetic technologies.

These technologies will have a huge impact, are having a huge impact, on contemporary life and artists will, of course, be involved in the making of the meanings of that impact. And it is here where I think we may differ in more than our strategies. The description of art in the quote from Guatari is very much a postmodern one. The postmodern sees art as an activity about “an unframing, a rupturing sense.” But what about other functions of art: to make sense, for instance, to creatively look for alternatives, to offer connections where none

were seen before. My point is that there are many more creative and, in the long run, more imaginative ways for artists to make sense out of today's technologies, to even have an impact on their development, than to merely repeat current technological methods. This is especially relevant when the effects of the much sought after experience of implication fall not upon the artist herself, but another being.

Now back to ethics: I do not see ethics as a higher ground where one can retreat! In fact, I see ethics in the exact opposite way. For me, ethical understanding and action emerges from a common embodied imagination that celebrates and respects "...rather than fears the openness of bodies." In the midst of all those variations of rhetoric you mention and, perhaps more importantly in the midst of the rhetoric of today's corporate techno-science, my interest is in what, specifically, the speaker means. What do they mean, I want to know, not in any abstract theoretical way, but in ways that are "implicated" in real outcomes for specific beings, both human and non-human. It is our embeddedness in the physical world we share with humans and non-humans that allows us opportunities for an empathic understanding of what those outcomes might mean. And through that empathic experience we search for actions to mirror that imaginative understanding in the real world.

Now, on to your three claims. The artists discussed in LC and others involved in "creating life" wish to make or are involved in making all three claims. Certainly Eduardo makes the first and means it, though he problematizes that claim as well. And though he may be interested in the other two claims, his interest in "creating life" is long held on his part, as can be seen in his work with and writings on robotics and telepresence. The fact that we cannot bracket animals out of the second claim of playing with materials means, for me, that "looking on with interest as things happen" is not to be trusted in any conclusive way.

Your phrasing of the third claim undermines any attempt at responsibility, something I am not sure you meant to do. Permit me to use myself as an example. I, who know through my research and experience that using animals in experiments almost always puts animals in a precarious position, cannot pretend that I do not know this. The artists involved may not know that at the outset or care, but I do, and I cannot pretend that I do not. In this way I am consciously responsible. How else can someone take on responsibility for another, if not consciously?

Your observation that "LC" tended to quote critics rather than artists is a bit unfair. I quoted Eduardo four times in this essay and Catts and Zurr seven times. Since this essay was being written almost three years after the installation of *The Eighth Day* and almost four years after the announcement of GFP Bunny, I thought that Eduardo already had ample opportunities to be heard. More to the point however, I chose to look closely at what Eduardo insists is the real artwork, the surrounding dialogue. He is correct in asserting this and I chose to take him at his word and join in the dialogue. I am interested in what artists have to say, but I am even more interested in all the voices taking part.

But one voice was not heard: Alba's. Eduardo sees Alba as part of an "ecology of social exchange," but I completely disagree since no animal used by humans in this way has a choice or a voice. The "social exchange" in this case is entirely a human one, bounded entirely by the desires and needs of the human. My goal was to give Alba a voice.

SB: Right, let me try to work through the points you raise fairly systematically.

First, the question of the form or the nature of one's implication in things, one's being in the middle of things. I am not at all sure that it is possible to get this right. Wishy-washy as it may sound, I think that trying to act with integrity in specific circumstances is the most anyone can do, regardless of one's chosen medium. I recently read an interesting and broadly sympathetic review of Steven Wise's *Drawing the Line* (Wise 2002), the book in which Wise argues that the "probability of conscious awareness" of individual species can be credibly estimated, and that basic legal rights should be accorded to those species that are ranked at anything over a particular score on the numerical scale that Wise adapts from the one used in Griffin's book *Animal Minds* (1992). Wise has indeed thus drawn a line, a line informed by scientific research, and the reviewer's concern (as with some of the more familiar complaints about the Great Ape Project, for example) is that even when erring on the side of generosity, as Wise insists we must, certain species appear to fall on the wrong side of that line, and do not get the protection of legal rights. It reminded me of the point I made earlier in our exchange that in my proposal to trust artists to act with integrity in relation to questions of animal life, instead of drawing a line beyond which they should not go, certain animals like Alba may indeed end up on the wrong side, the unsafe side, of contemporary art's practices. I think the point I am trying to get at is that with or without a dividing line (which is only one of the things one might try to draw in the middle of things), we (merely intellectually) and animals (tragically physically) are left in the same uncomfortable, contradictory, inconsistent pickle. And whether or not that's the pickle of always having been transgenic, I am really not sure. Wise, it seems to me, was looking for a creative approach to furthering the case for animal rights, and the reviewer's question is whether or not the granting of rights is "the only way, or the best way, to secure a better deal for members of other species." But that's the whole point about inventiveness: you do not know if it is going to work. You try things, with the best of intentions, and if they do not work they may still help to nudge the debate forwards a little.

I agree with your idea about artists helping to make the meanings of the impact of genetic technologies, and I think you were right to say that the artists' good intentions will not necessarily enable them to control what those meanings are eventually judged to be. Being "consciously responsible," and acknowledging that responsibility, does not make the outcome predictable. I can see why you object to the incautious phrasing of my "third claim," and read it as undermining "any attempt at responsibility," which was certainly not my intention. It perhaps resulted from my trying to play up the importance of the second claim, which for me has parallels with Sue Coe's promotion of an art of ambiguity. Art's importance is in making statements, shaping meanings and shaping responsibilities, whose forms are distinct from those of philosophy or science, and I think that shaping an ambiguity can be a difficult and a highly responsible action. In an art of indirection and ambiguity, and of rhetorical inventiveness, an animal such as Alba's voice might just resonate all the more strongly, as might the silent "voices" of all the animals represented in Sue Coe's work.

On the ethics question, I am absolutely not suggesting that you see ethics as a higher ground to which to retreat. Absolutely not. But in arguing for the

entanglement of aesthetics and ethics, I wanted to challenge the widespread assumption that the ethical is the more secure and important of the two concepts. As an editorial in *Geoforum* (Davies 2003, p. 411) put it a couple of years ago in relation to the “geography of monsters” that include transgenic creatures such as Alba, “there is nothing trivial about the role of aesthetics in the development of these new forms of hybrid nature.”

And this brings me to Guattari, whose view of the work of art as “an activity of unframing, of rupturing sense” (p. 131) you see as very much a postmodern one, and one that may be distinct from other art’s (or other artists’) concern “to make sense” and “to creatively look for alternatives.” I read this differently, and see his rupturing of bad sense as much the same thing as your making of good sense—though that’s probably far too abrupt a manner of putting this. The complacent, unthinking sense he is trying to rupture might be seen, for example, as the “sense” that informs what Eduardo calls “corporate genetic engineering” (I think that’s the term he uses), the “sense” that the GFP Bunny project was an attempt—a sincere but terribly flawed attempt—to rupture.

If you doubt my reading of Guattari’s phrase, bear in mind that art is one of Guattari’s examples of “incorporeal species”—things that act in the world, and act on the world—his other examples include “love and compassion for others” (p. 120). Our living interdependently among both corporeal and incorporeal species is something that will only work, he insists, accompanied by the development of a “sense of responsibility,” and is directly about how we “change mentalities” (p. 119). I have no objection to this being labeled postmodern, if you like, but to my mind this is postmodernism at its responsible, inventive best!

CG: In relation to what you say about acting “with integrity in specific circumstances” as the most anyone can do, on some levels I agree with you. But there is something to be said for thinking things through on a conscious and broadly inclusive level, and based on a great deal of information and experience and thought, deciding to commit to a particular course of action—in other words, what integrity is based on. Gandhi, Martin Luther King, Nelson Mandela and Vandana Shiva come to mind here as examples of people who have done that to great ethical effect.

I do think, however, a great many sources “nudge the debate a little bit forward” which is why I chose in this journal issue to bring in authors from a wide range of perspectives. My concern has been, having been in the new media/technology field for some time, that artists working in this particular field with its intricate connections to science and technology at large, did not have the realities of animal experimentation at the forefront of their concerns. I think it has been a side issue for most artists and in many cases, the viewers and critics have brought up these ideas. This may not be the case for the Tissue Culture and Art Project, interestingly enough, though their rhetoric seems to me to obscure their real intentions in this area. It is up to all of us who see those concerns not as a side issue, but at the center of a larger debate about the whole non-human world and our relationship with it, to speak up as we see fit. Exactly what you did in agreeing to write your excellent essay for *The Eighth Day*. The understanding of “we have always been transgenic” leads to actions such as this.

I, too, am arguing for the understanding of aesthetics and ethics as intricately linked practices. While we often can disentangle them conceptually, in practice, they are entwined. That is the whole point of the “LC” essay, and all my prior

writing on ethics and technology, and this discussion only encourages me to be even clearer about that.

Guattari, Derrida, these people have moved us further in understanding ideas about ourselves and with that knowledge one has to decide, on one's own, how to act. I suppose I am seeking to move past the indecision of much of post-modernism. I think it is time to do that. As I have said before, for me at least, the time seems too short not to be direct and clear.

SB: Well, as you know, my own view is that quieter or more indirect strategies may in fact be more effective for animals in the long run—and there is a long run to be considered here, as well as the more immediate issues that rightly concern you. The strategies I have in mind have nothing to do with “indecision.” They have to do with recognizing and articulating the considerable difficulties of being direct and clear, and finding ways of acting in the wake of those difficulties. And perhaps they have to do also with seeing contemporary art's experimental drive and its disregard for hierarchical thought as the things that create its potential as the space of a genuinely transgenic practice—in that wider, more metaphorical sense that we have used it here, as in “we have always been transgenic.” If this is difficult to articulate at present, it may be because the force of such work would lie (and occasionally already does lie) in its fusing of ambiguity of expression and clarity of purpose.

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