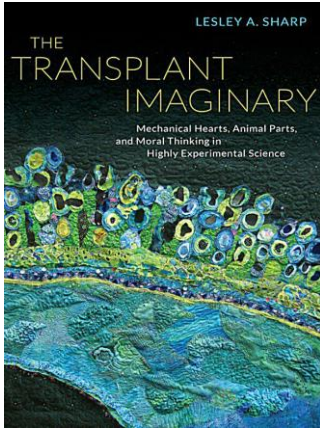


Lesley A. Sharp



Review:

The Transplant Imaginary: Mechanical Hearts, Animal Parts and Moral Thinking in Highly Experimental Science

University of California Press,
Berkeley, Los Angeles,
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Reviewed by
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We live in a world deeply marked by the century diseases. In response to this, our society is filled of “fields of hope” given by the high levels researches in biotechnology and prolonging life. Life hope, in our times, plays a fundamental yet ambiguous role in the somatic ethics. Given this



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context, the “hope technologies”, which are overly publicized, may figure prominently: professional aspirations, commercial ambitions and personal desires of people are reshaped around the macro-biosocial entity, where keeping hope is a crucial element for the erasure of sufferings and for surviving both in the present and future. In this perspective, the organ transplantation is driven by highly oriented hopes that accompany futuristic medical pursuits.

Given these preliminary considerations, the “transplant imaginary” is very much a moral domain. The sorts of “if only” or “what if” statements lay bare professionals’ anxieties that then drive the transplant imaginary. The moral imagination as a social process materializes during moments marked by confusion and cultural dissonance. As a consequence, highly experimental science puts in discussion moral alertness. Morality and science are often presumed to define an awkward and even inappropriate pairing because moral thinking hampers scientific pursuits and thus should be the purview of religion and philosophy.

When bioethics is conflated with morality, it effectively obscures a different sort of logic that may indeed inform scientific interests and decisions and determine the trajectory of experimental work beyond the rationale encountered in research proposals and associated evaluations. A key concern of this book is what the author reference as *moral thinking in science* – a process that falls beyond codified behaviors circumscribed by the field of formal bioethics.

In *The Transplant Imaginary*, author Lesley A. Sharp, Professor of Anthropology at Barnard College and Senior Research Scientist in Sociomedical Sciences at the Mailman School of Public Health, Columbia University, USA, explores the extraordinarily surgically successful realm of organ transplantation. The work postulates that highly experimental research in human organ replacement offers a fertile ground for a moral investigation. Organ transplantation is an excellent ground for studying scientific morality, because it has long

stood as a standard in clinical work, ceaselessly blending sophistication with medical innovation. As the author says, the high levels of unpredictability are what that stimulate moral thinking in experimental science.

The scientists with whom the author worked, and then she record their opinion along the pages of this book; often speak in term of “what if”. The questions are scattered along the pages: What if blood typing no longer mattered and organs and tissues could be shared by any and all bodies? What if we could grow organs from scratch that could fold to the personal needs and size of patients? What if we could render human a chimpanzee tissue compatible and, thus, easily interchangeable? What if we could breed *en masse* hybrid swine to harbor human genetic material so that their organs and tissues would “fool” the immune systems into perceiving them as “self” and not “foreign”? What if a mechanical heart could be light, efficient, and strong as a patient’s natal one? What if these innovative procedures and inventions meant we could eliminate altogether the need for donated human parts? In these imagined scenarios, scientific creativity is understood not merely as a set of discrete laboratory-based events (when, for example, particular discoveries are “made”), but rather as elaborate social and temporal processes with multiple destinies and, thus, unfixed futures.

In the “Transplant imaginary”, Lesley A. Sharp is not trying to identify moments of consensus among involved scientists. The issues explored throughout this book are framed simultaneously by themes of wonder and struggle. Reading the pages, the lecturer can convince himself that the author is a firm believer in the dictum that knowledge of social life is enhanced through contrast, a position that has proved fruitful in the context of this project. Comparisons abound throughout this work. They are most evident as the author tack back and forth between domains inhabited by xenotransplant experts and bioengineers.

Throughout “The transplant imaginary”, the author seeks to trace how scientists talk informally about their work in quotidian contexts, which is a very important research. Moral values are evident not merely in their words but also in their actions, the material culture they produce and the visual representation of their work. Whereas the author most certainly owes a heavy debt to science studies, she’s far less interested in discrete “enactments” involving “actors” and “actants”. Serious moral consequences are at stake here, concerning the genetic hybridization of species, the technological enhancement of the human form and the physical and psychological harm endured by experimental animal and human subjects, as well as more general questions regarding the prioritization of healthcare needs across diverse populations.

Speaking about the history of Lesley A. Sharp’s researches, this work grew gradually into a study focused on interrelated activities of xeno specialists and bioengineers based in five Anglophone countries: the United States, Canada, the United Kingdom, Australia and New Zealand. The settings and contexts that define the parameters of this research are diverse. They include personal visits of the author to individual researchers’ laboratories, on-site engagements at corporate headquarters, individual interviews with scientists ranging from seniors in the field to burgeoning graduate and undergraduate students, and attendance at a wide array of conferences in the United States, Canada, England, Australia and New Zealand. Although scattered across the globe, specialists from these countries express often remarkably similar and general moral tendencies. Within this book the author considers four moral domains: the ways in which the human body is reconfigured and imagined in highly experimental contexts; the promises, challenges and dangers of embodied hybridity and interspeciality; the presumed perfection associated with artificial, mechanical design; and the temporal framing of scientific desire. Each of these themes defines the focus of a discrete chapter.

Thus, chapter one, called “The reconfigured Body of the transplant imaginary”, interrogates the premise that experimental work necessitates tampering with the body’s integrity, where involved subjects include both animals and humans. The use of bodies is essential to testing experimental ideas, because it also induces harm, involved scientists must think with care about the moral parameters of their work. Here, the author talks about how standardized bioethical frameworks inflect sometimes individualized sentiments and convictions. More important, though, are scientists’ quotidian behavior and sentiments, which expose all their moralities.

In chapter 2, “Hybrid bodies and animal science: the promises of interspecies proximity”, the author explores the first of two ethnographic domains central to this project. Although efforts within xeno science correspond with watershed moments in allotransplantation, xeno research has nevertheless been stymied by repeated clinical failures (patients died very soon after implantation) and public resistance (most notably from animal activists).

Chapter 3, “Artificial life: perfecting the mechanical heart” focuses on the second ethnographic domain of bioengineering. Of special concern is how inventors seek to transform the human form, perfecting the flaws of the natal body through biomechanical enhancements, a process often referred to as “tinkering”. This chapter examines what constitutes moral or virtuous behavior in a field where many scientists, in asked directly, assert that ethics is the domain of the clinician and not the engineer. It demonstrates how engineers often historicized discourse and behaviors reflect complex moral understandings of what it means to “tinker” with the body and alter its natural form. Those scientists who venture beyond the laboratory and into the clinic also express profound shifts in moral reasoning about what they do, particularly if they encounter patients implanted with the very devices that they themselves have helped design.

Chapter 4, “Temporality and social desire in anticipatory science” talks about the significance of temporal thinking in experimental domains. Bioengineers are not always on the same page with xeno researches, given the fact that every prototype invented has design flaws or can always be further refined or perfected. Both scientists and bioengineers must each rely on the steady flow of investment capital, which inevitably transforms animals, heart devices (until now) and human patients into potentially lucrative sources of biocapital.

In the book’s concluding chapter, “The moral parameters of virtuous science” the author revisits questions of longing as a means to address the inseparable values of desire, hope and compassion in the experimental domain of xeno and allotransplantation, whose experts are intent on radically transforming the body of a person and life itself into something that, in short or long time, we can’t recognize as entirely human.

Throughout this work, the author strives to “surface” the affective dimensions of two morally provocative “clinical borderlands”. The richness of the transplant imaginary is facilitated by its highly experimental nature, where scientists at work on either xenografting or artificial organ design must embrace as givens that research outcomes are open-ended, that future successes are difficult to predict and that the experimental process presents extraordinary challenges at nearly every turn. In this perspective, the transplant imaginary is driven by widespread hopes that accompany futuristic medical pursuits.

Concluding, I have to mention that this book gives the specialized reader a new perspective regarding the future plans in human prolonging life, especially caused by xeno, allotransplantation and the designed brand new imagined mechanical organs, especially hearts. The purpose of this work is to encourage a fresh sensitivity to the significance of experimental work, to generate new ways of thinking more precisely about the moral parameters of futuristic ideals within

transplant medicine. At the same time, intrigued by the sentimental qualities that drive moral thinking among experimental transplant scientists, the author alerts the naïve yet inquisitive readers, alongside seasoned scientific researchers, to the socio-moral complexities of the experimental and so difficult work in the transplantation domain of biotechnology and post-modern medicine.