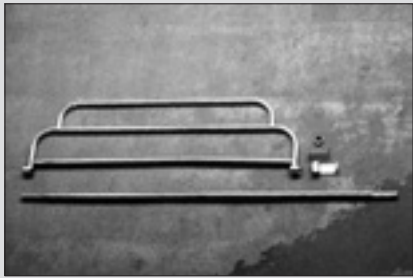
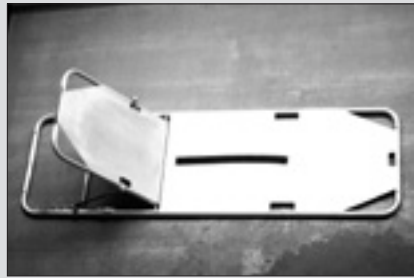
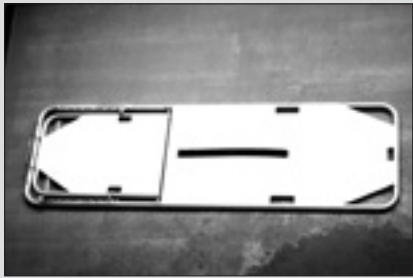
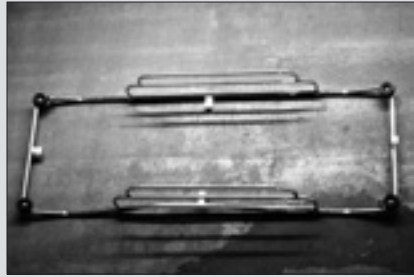
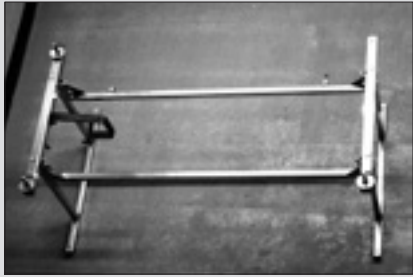


Xenotransplantations of the [In]Animate:
A Speculative Dissection
by Emily Vanderpol

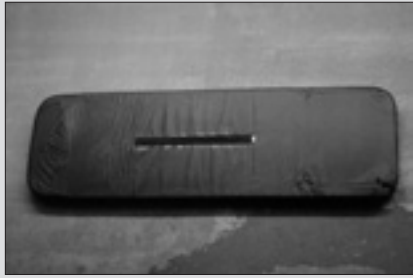
We are experiments; at least let us want to be them.
— Friedrich Nietzsche



The gurney functions as both a scale model and a one-to-one model. It serves as a proposed method of building within the site—the rails representing the surrounding buildings—but it is simultaneously suggestive of an operating theatre for surgery on the non-alive.



The deer head springs from the gurney, stretching the energy contained inside, an animal trying to escape. The inner animal stretches to form an inhabitable space, providing a building within the energy of the site, potentially unbeknownst to inhabitants as an animal.



The building model sets the stage for the operating theatre, test tubes with building parts, pills, and entrails surround the built form; other material palettes for objects linger close by. The operating theatre teaches surgery on the inanimate, but calls to attention the life in any object on the table.

Xenotransplantation offers a method of design in which every space and object has life-like qualities, whether latent or apparent. This project uses the idea of xenotransplantation on all levels: as program, scale, siting strategy, and in terms of the behaviour of objects themselves. In this design experiment, objects are treated as alive, dissected, and rebuilt. This disciplinarily transplanted architecture can play a particularly vital role in the dissection of taboo spaces controlled by the field of medical research.

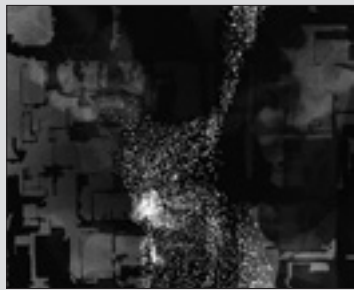
Xenotransplantation: The transplant of organs or tissues from a non-human animal to a human. Xenotransplantation of organs is typically unsuccessful, but if successful, could alleviate the stress of finding the amount of human organ donors needed to meet the organ demand.
— Wikipedia.org

The Centre for Research in Xenotransplantation (TCRX) proposes, as its site, a vacated 30-acre pharmaceutical research and development complex that has been devoid of human habitation for several years. In the absence of human security, local fauna stand guard, circulate, and stop to stare at more recent intruders.

The building no longer wants to be a building (to echo Coop Himme(l)blau); instead, it wants to choose its own site. Psycho-geographic maps of the building's *dérive* across the site examine both daytime and nighttime site conditions. Small black specks each represent a potential landing ground, as the building explores the complex for the best place to site itself. The site conditions don't rely exclusively on vacant space and topography, as they often do in institutional architecture. The building's *dérive* takes into account other life on the site, including deer and other animals that currently inhabit the space. The research centre eventually nestles itself into a hallway between an existing mechanical building, known as Building 80, and an empty but suggestive, three-story laboratory, with a vivarium in the basement. Building 80 sits on a busy street and operates non-stop. Daylight shows Building 80 as a reflective box with constant noise, while at night a transparent three-story box with visible moving parts is revealed. The xenotransplantation facility wants to be in plain sight while remaining somewhat hidden and censored, allowing visitors to choose whether to ignore or address the spatial and bioethical controversies that the building contains within. The architecture of medical research facilities is heavily institutionalized, controlled, and sterile, while the practice of

medical research itself is often ethically questionable. Bioethical issues linked to medical research practices raise eyebrows, arouse polemical opinions, and intimidate non-participants. If the field of bioethics is defined as the philosophical study of the ethical controversies brought about by advances in biology and medicine, and if spaces and objects all possess life-like qualities, what then are the bioethical issues of architecture itself? It follows that privileging human-centred design over design that accounts for all animals and objects is potentially unethical. Xenotransplantation, as an appropriated concept, questions the ethical implications of space between the animate and inanimate; rather than providing a solution, the work of an architectural xenotransplantation explores the nature of the argument, suggesting new methods of design and dealing with core issues of the human psyche with respect to the life in non-human and inanimate objects.

The animals that provide the most suitable organs and tissue for human use are baboons and pigs. Accordingly, TCRX needs to accommodate scales of inhabitation and modes of interaction for the various species involved, including the deer and other species on the existing site. The building becomes an animal that is part of the ecosystem, wrapped up in the interactions among species. Exploring the different inter-species relationships that are formed helps to elucidate the role of the building in the system. Since the building, at least in part, is the mechanism separating the “captive” from the “free,” is the building itself captive or free? How does it interact with its inhabitants and surrounding species? These questions need to be addressed when considering the bioethics of a space within the general economy suggested by a larger, multi-centred ecosystem.



To bring out the life-like qualities of the building, the visceral aspects of anatomy and life cycles need to be understood. In general, the act of building is related to some effort to improve the human condition; TCRX allows for the beings found in buildings' surround-

ings to participate in the process. The assumption that the users and sole beneficiaries are human, though, needs to be shed. Instead, the viscerality of life comes to the forefront, while the institutional formations of architecture shrink into the background.



The research facility, while nestled behind a constantly breathing and moving building, is opportunistic, and lurks in the shadows of this movement. The questionable practices of the inside are not closed off to passers-by, but instead arouse curiosity; the visceral program and its attendant apparatuses often intimidate humans, as the security of the building becomes indistinguishable from the activities of surrounding deer.

In the introduction to the Neoplastic issue of *Architectural Design* (2008), Marcos Cruz discusses the architecture at stake in fusing the live and the un-live. Cruz suggests that the un-live could be alive, once cells were grown *onto it*. Perhaps more provocatively, however, *Xenotransplantation* contends that “un-live” agents do not need any injection of biological material to exhibit the qualities, and defects, of life. *Xenotransplantation* suggests instead a non-institutional method of design to be imposed upon institutions. Accepting that life exists in every object, animate or inanimate, the question for designers becomes how to both account and design for the efflorescences of life. Outside of its intended organism, a xenotransplanted architecture is made vulnerable to its own becoming-other, a body-without-organs willing to risk the success of the architect to enliven the experiment.✕

Bio

Emily Vanderpol graduated from Oberlin College with a BA in mathematics and psychology and then went on to earn an M.Arch from the Taubman College of Architecture and Urban Planning at the University of Michigan. While there, her studies focused on making through the exploration of different materials and their properties. Vanderpol brought this interest to her current position as Outreach Exhibits Coordinator at the Museum of Mathematics, New York, where she designs interactive exhibits that show visitors the beauty and wonder of mathematics, which aren't typically addressed in traditional education.