Abstract
This brief essay retraces several circuitous yet interlacing story lines that culminated in the construction of the Morbid Anatomy Museum, in 2014. I consider how uncertainty and methods of inquiry, such as the close reading of artifacts, buildings, texts and contexts, have fueled my work and informed such new habits of mind as *upstreaming*. Throughout, my desire to understand how artifacts and buildings are used has centered on the physicality of thought and the roles of multisensorial perception in shaping our constructed environment.

Museum Board: “Can you design this to open in late April?”
Me: “Yes. I believe we can.”
It was January 2.

Some projects are conceived over a long duration by a patient labyrinth of lines, enabling their physical execution to be comparably swift. The Morbid Anatomy Museum exemplifies such a project (Figures 1, 2). When the Museum Board approached me to design a new home for their library and collection of an-
atomical curiosities in Brooklyn, NY, it was an ideal collaboration. The invitation to transform an industrial building in the Gowanus neighborhood was prompted by the Board’s familiarity with my multimedia online book, *Architecture and Memory*,³ where I reconstructed the educational and rhetorical uses of two Renaissance memory chambers whose masterful trompe l’oeil ornament played on ancient metaphors of recondite knowledge and common sense wisdom.

The Morbid Anatomy Museum project plumbed an intellectual history of creating, collecting and categorizing knowledge that had fascinated me for years. In striking alignment with the new non-profit museum’s mission to explore “the intersections of death, beauty, and that which falls between the cracks,”⁴ my work has investigated forms of knowledge and know-how that don’t quite fit; things that have been lost or overlooked, including everyday habits and their impressions on the constructed environment. We proved an even better fit than the Museum Board perhaps had at first imagined.

Twenty-four years earlier, I had designed a Curiosity Shop for my Master’s Thesis in Architecture,⁵ which proposed a building-as-cabinet for knowledge fabrication and display (Figure 3). Sited directly opposite the Eastern State Penitentiary, in Philadelphia, *The Curiosity Shop* offered a vehicle to examine relationships between habits and habitats, and deliberately inverted the penitentiary’s panoptical mechanisms of control and sublimation of the body.⁶ That speculative project led to a full-scale collaborative installation of the Curiosity Shop at the Philadelphia Art Alliance several years later (Figure 4),⁷ and fueled my subsequent doctoral research at McGill University.⁸ Immersion in medieval reliquaries, Renaissance anatomical theatres and memory theatres, and Enlightenment wunderkammern, coalesced in a focus on the studioli of Federico da Montefeltro. The resulting dissertation precipitated further investigations at the Canadian Centre for Architecture and an opportunity to publish *Architecture and Memory* in an interactive digital format with Columbia University Press, with support from the American Historical Association’s Gutenberg-e Prize.⁹

Nearly a quarter of a century after its conception, then, *The Curiosity Shop* had met its ideal clients in Director Joanna Ebenstein and kindred spirits at the Morbid Anatomy Museum. For me and my collaborators,¹⁰ the goal was to create in the Gowanus neighborhood a building-as-cabinet where knowledge that typically “slips through the cracks” is produced and exhibited (Figures 5-15). Consistent with this approach, there were marvelous opportunities to exhibit the anatomical innards of a building that are typically obscured. In fact, the spirit of the museum emerges from these between spaces, including resuscitated coal chutes and obscure niches, materializing the museum’s aim to survey “the interstices of art and medicine, death and culture.” With constraints of time and funding it was simultaneously poetic and pragmatic to preserve (and even highlight) choice infrastructural elements from the former (remarkably homely) nightclub, juxtaposing them with older building features that were revealed during a surgical renovation of the building’s façade and viscera. This anatomical dissection of the building coupled well with the museum’s mission to study, fabricate and exhibit hybrid forms of knowledge, and was in close keeping with the arc of my own scholarly interests and methods of close reading.
Given the cluttered irregularity of the Gowanus streetscape, a dark exterior with simple bold signage created a provocative profile that anchored its corner site. It was critical, though, to contrast the mysterious and brooding envelope with a welcoming, well-lighted interior that would inspire visitors to linger and explore every corner. To achieve this we opened the façade on the ground floor and installed generous steel windows, fabricated locally by a third generation family business in a remarkably streamlined process. For the interior we created domestic-scaled settings – parlors and a cozy library for the director – encased by the exposed brick walls and steel frame structure of the industrial shell. What emerged was a 4200 square foot museum, with a research library and permanent collection of anatomical curiosities, an exhibition gallery, café and retail, a lecture space, and a workshop – a program bearing an uncanny resemblance to the original program of The Curiosity Shop.

These similarities in compositional arrangement evolved not by force of architectural will, but rather by an ineluctable logic that was at times eldritch. For example, although the Museum Board initially desired a ground floor lecture room, it was ultimately most reasonable to combine the lecture hall and workshop in the basement. In my earlier hypothetical project, architectural experiments and hybrid fragments would be composed below grade and then incorporated throughout the building as part of its fabric and intellectual commerce. In the current museum, workshops on anatomy and taxidermy are conducted in the cellar, producing jackalopes and other chimeras for display and retail. The compressed timeline, and budget, inspired design strategies and tactics that brought ideas dreamt of in The Curiosity Shop to realization in the Morbid Anatomy Museum. In less than two weeks from the project start, we’d progressed from schematic design to a full bid set. By late April the building was freshly wrapped in steel windows and a thick coat of charcoal grey, and the ground floor was inaugurated with the book launch of The Morbid Anatomy Anthology, complete with an anatomical cake (Figure 16). In late June, merely five months after renovations began, the ceremonial umbilical ribbon was cut and a new museum was born.11

Close Readings and Uncertainty

Was it for that or was it that my Soul
Had been possessed in that dark Cabinet
-- A. S. Byatt, “Jan Swammerdam”12

In the Morbid Anatomy Museum, the complementary pursuits of architecture and anatomy converge in a site of inquiry to explore the edges of certainty and uncertainty, and they expose the terra incognita between internal revelation and shared witness, as well as persuasive logic and empirical evidence. The inspiring and unsettling tensions of certainty and uncertainty are exquisitely expressed in the work of Jan
Swammerdam (1637-80), a pioneering entomologist whose inquiries into empiricism and spiritualism I studied closely during my doctoral residence at McGill University, in the History and Theory of Architecture Program.13

Swammerdam’s all-encompassing and single-minded pursuits offered a model for performing close readings: not only did he conduct scientific experiments, but he also devised the methods and fabricated the tools both for their execution and for two- and three-dimensional documentation. As evidence of his theory that humans emerge from eggs, like other species, in 1672 Jan shipped to the Royal Academy of Science a crate containing a human uterus he’d preserved with waxes that were colored to distinguish specific features and injected by delicate glass straws he’d devised. Reflecting on his study of the eyes and reproductive organs of bees, he noted: “When I carried out my research on the bees, on which I worked without interruption from half past five in the morning until twelve in the afternoon, countless times I had to neglect my religious exercises (...) which sometimes caused such an inner conflict that I shed tears of distress. For it was as if a warring host were there within my spirit, the one party compelling me to cling to God, the other, with infinite arguments, to go on in my pursuit of curiosities.”14

Gazing into the optical structures of a bee offered Swammerdam a close reading of God: “Everywhere and in the humblest of creatures the traces of divine wisdom and supreme skill are made known.”15 As evidenced in Swammerdam’s writings – Ephemeris Vita is a 400 page poem inspired by the biology and fleeting existence of the mayfly – his was a milieu where science and faith were experienced in dramatic and palpable tension, though not yet perceived as polar opposites. Such tensions were to imbue Enlightenment inquiry in general, and the genetic constitution of the United States in particular (i.e. separation of church and state) and its early social infrastructures, including the hospital and penitentiary typologies of its health care and penal systems. Such tensions continue to color our everyday experience, public imagination, and institutions.

Inspired by Swammerdam’s tenacity, I retooled and applied several research methods in tandem during my study of the Montefeltro studioli (Figures 17, 18), to raise the grain of history and reconstruct from visual and verbal clues how a community of politicians and popes, military captains, poets, artists and architects distilled their world through architecture and ornament. My surveys of the studioli and Renaissance architecture, pedagogy and rhetoric expanded on existing research, deciphering clues that pointed toward how they worked and were used in an average day by their patron and his cohorts. I scrutinized details that revealed how the rooms were composed to assist in composing one’s thoughts by nourishing the memory. Such practices, I found, were commonplace in the late fifteenth century, yet any reference to memory or the memory arts had been neglected in previous scholarship on the studioli. My research addressed this lacuna.

One facet of my work sharpened critique of the iconographic method by expanding Michael Baxandall’s notion of “the Period Eye” to what I term “the Period Body,” i.e., by carefully reconstructing how a particular artifact or building was experienced multisensorially by its original creators, as distinct from
hindsight rationalization by categories of appearance, or via style. The thoughtful scrutiny of paintings, clothing, furniture, interiors, buildings, sites and cities offers access to others who lived five hundred years in the past, whose habits are distinctly different yet hauntingly familiar.

I discovered that the studioli worked on many levels – in debate, meditation, civil governance, education, political negotiation, and leisure. At times these roles were distinct and at others overlapping, their multivalent character energized by pedagogical practices inlaid in a room’s multisensual architecture and ornament, reflecting cognitive habits that are akin to, yet strikingly different from, our own today. As vehicles for contemplation, the studioli could be read by quattrocento inhabitants according to ancient traditions of rhetorical composition (top to bottom, left to right); spiritual meditation, and also in a non-linear manner – as provoked by phenomenological details (trompe l’œil and linguistic figures). Produced within a predominantly oral culture, the rooms were replete with literary and poetic references and were ripe with visual and verbal puns and onomatopoeia hiding in plain sight among the scientific, military and musical instruments. Cross-checking my conjectures with the contents of the ducal library, one of the largest in its time, surfaced a legacy of thinking and making that had shaped the studioli and their ornament, demonstrating an interplay of personal and communal identity-building. In this milieu, ornament was not mere styling—it interfaced personal and cultural character. Ornament and decorum equipped citizens for the public forum and civic action (Figure 19).

Empathy and Upstreaming

Historical research methods have translated seamlessly into my design practice. On the heels of completing my research on the studioli, an examination of the flora and fauna of a thirty-one acre steep-sloped forested site, for example, guided my design of low-impact erosion controls and infrastructures for a land planning project that received approvals from all local, state and federal agencies. As I’ve noted elsewhere, the slowness of my site surveys actually accelerated the approvals of an otherwise excruciatingly slow and expensive process, reducing overall project costs (Figure 20). My experiences over the past decade in land planning, watershed hydrodynamics and problematic public infrastructures have led me to consider the extended impacts of design proposals more systemically. Close readings of site and context, physical and social, continue to inform my investigation of relationships between habits and habitats, whether for a private residence, a museum, or to repurpose abandoned psychiatric hospitals.

In “Upstream/Downstream” (2014) and “Veils and Velocities” (2013), a pair of articles that reflect on convergences in my design scholarship, practice and teaching, I advocate upstreaming as an intellectual reflex that retraces the sources of downstream conditions. While we are often encouraged to reduce our
downstream impacts, looking upstream is an empathic and extremely pragmatic design research method that equips multiple scales and angles of investigation, from the tectonics of a watershed and construction site management to the reconceptualization of a product by the flows of its supply chain and lifecycle, and a broader awareness of history and one’s own position in it (Figure 21).  

Upstreaming cultivates the mental habit to imagine the future outcomes of present circumstances by examining the forces at play in any product and in any context, targeting systemic thinking to change the poetics of material production and intangible human behaviors. Upstreaming enhances conviviality by translating self-interest into mutual benefit, enabling us to identify and articulate where we fit in and how we stand out with respect to global issues and local conditions. Historical, contextual, and systemic research connects individual action with material and social resources and practices. Upstreaming clarifies one’s own position in legacies of human endeavor – who has tackled this problem before and how? with what beneficial or problematic results and byproducts? whose voices have not yet been heard? Upstreaming is ethically charged, revealing multiple points of entry for short- and long-term improvements in social equity and justice.

Upstreaming highlights where we stand, and others with whom we stand. Such mental fuel is critical across disciplines, and especially for designers. Relationships between waste and resourcefulness, embodied knowledge and energy, global and local production, digital and manual fabrication, are dynamic. A mindful and nimble calibration of these forces and factors is essential to conceive a more equitable, enduring and enjoyable coexistence on our planet.

Why does this matter? It’s pivotal to recognize how and where our work connects to the work of others. This is especially true for students in creative and design fields, who often fear that awareness of historic precedents might contaminate their individual voices and thereby hinder creativity. Awareness of precedents cultivates a sensibility tuned not only to the what of our efforts, but also to the why. Knowing whose shoulders one stands on provides orientation and also evokes humility, since others will use and interpret one’s own work in ways unforeseeable. It also underscores that an artifact – baguette, bag or building – cannot be exhausted of its past and potential significance. Designers and scholars are detectives, rediscovering everyday habits and world-views that may have been forgotten or deliberately suppressed and may be hiding right under our noses.

Ornament, for example, transports our eyes and minds across space and time. Plentiful or spare, such tell-tale details as fasteners, reveals, and moldings embody how designers reconcile the disparate and often conflicting influences of clients, fabricators, universal factors, and contextual constraints. From this angle, history is not merely a quarry for styling; it is a powerful vehicle for the imagination. Historical upstreaming fuels a more incisive and inclusive design process by training the mind’s eye to consider knowledge and know-how that may not fit into familiar narratives.

By asking how artifacts and buildings are used, we more closely imagine how original users experienced an artifact or building, multisensorially. Occupying another’s shoes across time and place augments
empathy and shifts the perspective on our decisions in the present to envision the implications of our actions. How a designer investigates seams and patterns in the surrounding world and translates them through the work at hand manifests a personal “vision,” or *poetics of design.*

The ancient tradition of composing architecture and its ornament as cues and conduits for social performance and private reflection imbued Renaissance pedagogy and the material fabric of everyday experience, from cathedrals, canals, and the marketplace, to facades, gardens, frescoes and birthing trays. In the Urbino studiolo, the *trompe l’oeil* bench legs are equipped with axles and chariot wheels, details that reveal the role of the studiolo ornament in moving observers – physically, emotionally and neoplatonically – to stimulate the memory and rhetorical invention.

Like the Montefeltro studioli (Figure 22), the Morbid Anatomy Museum (Figure 23) is part of a lineage of architectural vehicles for narrative construction. Whether an ark, a memory theatre, studiolo, museum, time machine, transporter room, holodeck, or insubmersible sieve, such devices transport us from here to there, below to above, private to public, across time and space and in and out of the mind, from birth to death and beyond. To what end? To catapult us from or into the everyday, *ex deus machina?*

Among their practical and propagandistic uses the studioli offered rhetorical lift machinery to transport their patrons from mortal coil to native star and from everyday life to communal memory. The Morbid Anatomy Museum, meanwhile, invites us to consider truths that lie at the margins, in the reveals, in the in-betweens where uncertainties blossom. Wherever our labyrinthine searches lead, remaining open to the charms of uncertainty is a source of illumination and even sublime joy.
Images

Figure 1. The Morbid Anatomy Museum (Brooklyn, NY), 2014. (Photo by author)

Figure 2. The Morbid Anatomy Museum. (Photo by author)
Figure 3. The Curiosity Shop, 1990. (Drawing by author)

Figure 4. Architectural Curiosities, 1995.
Figure 5. Before-, during- and after-photos, site surveys and renderings capture the transformation of a no-nonsense industrial shell and lurid nightclub into a museum in just over five months, start to finish.

Figure 6. From early in my architectural experience, site surveys have been a favorite part of the design process, directly analogous to a “survey of the literature” for any research project, or the close reading of a given text or context. (All photos and field notes by author)
Figure 12.

Figure 13.
Figures 12-15. Evoking intimacy through a salon-scaled exhibit space, and transforming a former access stair and bulkhead into a shrine. Although everyone agreed immediately on the appropriateness of the steel windows, they typically require 12-14 weeks to complete and were the most tenuous link in the timeline for a late April launch. Consistent with my experience that the slowness of personal interaction is the most expedient path to success, it proved a successful strategy to bring the client directly to the A&S Window Associates fabrication space in Queens, NYC in order to cement the commitment of all parties. The windows were completed in ten weeks. (All photos by author)
Figure 16. Anatomical cake at April 28 inaugural book launch. (Photo by author)

Figure 17.
Figures 17 & 18. Survey plan of Urbino studiolo and worm’s eye view. (Drawings by author)
Figure 19. Detail, Urbino studiolo. (Photo by author)

Figure 20. Perk tests, conducted along the East Branch of Brandywine Creek by the author, provided a close reading of the site, integrating the proposed dwelling units with erosion and sediment controls and accelerating the approvals process. Moreover, the deep memory remained of the scent of freshly cut sassafras roots, several feet below the cool soil on a hot summer day. (Photo by author)

Figure 21. Careful research performed upstream in a manufacturing sequence can enhance the poetics of a product by promoting the well-being of fabricators and distributors, as well as of users downstream. (Photo by author)
Figure 22. Urbino studiolo ceiling. (Photo by author)

Figure 23. Morbid Anatomy Museum. (Photo by author)
Notes


2 Portions of this monograph, for example, originate from a talk presented at McGill University in April 2012, “Sites of Inquiry,” as the inaugural lecture for the History and Theory of Architecture Lecture Series.


6 Over the years, it is has been challenging to decouple the benefits of adaptive reuse for this massive structure from the negative histories and associations that accumulated around it and the panopticon model, which was replicated worldwide. As such, E.S.P. shares a problematic history with other Quaker Enlightenment social infrastructures, including Kirkbride Plan Hospitals for the Insane.


8 McGill University, Ph.D. Program in the History and Theory of Architecture, 2003. My committee included Dr. Alberto Perez-Gomez (advisor), Dr. Mary Carruthers (external reader), Dr. Annmarie Adams and Ricardo Castro.


10 Anthony Cohn, AIA, and my research assistant Andrew Broddle.


12 A. S. Byatt, “Jan Swammerdam,” Possession (New York: Vintage International Edition, 1991), 225. Although I conceived The Curiosity Shop contemporaneously to the release of this remarkable book, I was unaware of its existence until the week following the ribbon-cutting at the Morbid Anatomy Museum a quarter century later. Re-encountering the themes in the book I’d pursued in my own research – the scholar-as-detective, creativity at the heart of tension between empirical science and spiritualism – parallel to the completion of an architectural project centered on those very subjects (designer-as-detective for a museum that explores
the tensions of the empirical and spiritual) amounted to two intertwining circuits closing simultaneously—a most uncanny and satisfying sensation.

I cannot overstate the importance of the McGill Libraries as a critical link in this unfolding story: I spent hours in the Osler Library of the History of Medicine, Blacker-Wood Library of Zoology and Ornithology, and the Blackader-Lauterman Library of Architecture and Art, and am deeply grateful to all of the librarians and staff who endured my curiosity and queries with patience. In addition to Swammerdam’s texts, I highly recommend viewing the illustration of *Metachirus nudicaudatus* (opossum w/ babies in pouch) in Volume 1, p. 38 of Albertus Seba’s *Locupletissimi rerum naturalium thesauri*, Blacker-Wood Rare Books: elf QH41 S43 1734 v.1


*PreservationWorks* (http://thepreservationworks.org) is an advocacy network committed to the preservation and adaptive reuse of the remaining Kirkbride Plan buildings across the USA. Restoration of these irreplaceable buildings is commonsense and achievable, supporting economic and cultural growth in the communities they have proudly served. PreservationWorks offers a hub for data and resource sharing among groups committed to preserving their local Kirkbride.


This an underlying premise of *Poetics of Design*, a studio-seminar I’ve taught for the past decade at Parsons School of Design, which emphasizes the interdependence of design and research through a series of writing and making exercises that culminate in a manifesto defining a personal poetics of design, and a physical Ark that embodies its principles.

About the Author

Robert Kirkbride, Dean of Parsons School of Constructed Environments and Associate Professor of Architecture and Product Design, received his Ph.D. in the History and Theory of Architecture from McGill University, and a Master of Architecture and Bachelor of Arts in Design of the Environment from the University of Pennsylvania. Robert is a scholar-practitioner who has directed studio ‘patafisico for 25 years and is also Spokesperson and a founding Trustee for PreservationWorks, a non-profit organization for the adaptive reuse of Kirkbride Plan Hospitals. Robert designed the Morbid Anatomy Museum, in Brooklyn, NY, with collaborator Anthony Cohn, AIA, and authored the multimedia online book, Architecture and Memory, which reconstructs the pedagogical and rhetorical uses of two Renaissance memory chambers. Architecture and Memory was awarded the Gutenberg-e Prize, and a second version has been launched online by the American Council of Learned Societies (ACLS) as part of its Humanities E-Book series. Robert has continued to explore the interplay of architecture and memory in a chapter on architecture and rhetoric in the Renaissance for The Oxford Handbook of Rhetorical Studies, and the volume, Geometries of Rhetoric, which he guest-edited for the Nexus Network Journal. Dr. Kirkbride has been a visiting scholar at the Canadian Centre for Architecture, and architect-in-residence at the Bogliasco Foundation in Genoa, Italy. At Parsons/The New School, where he recently received the University Distinguished Teaching Award, Robert established the Giuseppe Zambonini Archive at the Kellen Design Archives and Special Collections, and is an ongoing contributor to the Memory Studies Group.