

**The Architecture of Design:
The Cooper Hewitt, Smithsonian Museum of Design (1896-1976)**

by

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DEDICATION

To Alex, with profound gratitude for your love, support, encouragement and perspective;
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ABSTRACT

Challenging the dominant views of architecture as either a fine art, an 18th century affiliation with assumptions of disciplinary autonomy and the primacy of aesthetic experience, or design, a late 20th century notion emphasizing performance and problem solving, this dissertation examines a third transitional architectural orientation—architecture’s 19th century affiliation with the *decorative arts* and its relationship to the evolving notion of design throughout the 19th and 20th centuries. This orientation was one that emphasized architecture’s accessibility, openness to non-specialist participation, and situatedness in larger spheres of culture and experience. I explore this trajectory through the specific case of the Cooper Union Museum of the Arts of Decoration, (f. 1897), and its successor, the Cooper Hewitt, Smithsonian Museum of Design (f. 1967), concluding with its Hans Hollein-designed inaugural exhibition, *ManTRANSforms: Aspects of Design* (1976). Examining three distinct periods in which the institution collected architecture within its evolving orientation to the decorative arts and design through its exhibitions, collections, and pedagogical engagement with the Cooper Union, this dissertation explores three primary questions: How did the institution and its activities contribute to the development of the concepts of ‘the decorative arts’ and ‘design’ in the 20th century? Secondly, how was architecture implicated materially and conceptually in these larger categories, and how did they shape the discipline as a result? Finally, how were its changing utilization and interpretation of historical objects in the collections reflective and even constitutive of these intellectual orientations? Combining methods from institutional history and the history of ideas, I identify three distinct conceptions of design that bridged architecture with other forms of creative endeavor: first, a 19th century notion of design that distinguished form and surface to emphasize the autonomy of two-dimensional composition; secondly, a mid-century approach that eschewed historical classifications to focus on individual characteristics through ahistorical visual and formal categories; and thirdly, a concept developed in the 1970s that expanded the definition of design to new scales and forms, broadening the scope to include the quotidian and anonymous efforts of the layperson.

Chapter 1: Introduction: The Cooper Hewitt: A Tale of Two Interpretive Paradigms

Consider for a moment two textiles from the collection of the Cooper-Hewitt National Museum of Design, in New York City [Figs. 1.01 & 1.02]. Both are samples of embroidery by unknown makers from late 18th century France. Both were purchased by the museum in 1932 from the same fund, and both employ brightly colored silk thread to create a floral motif contrasting with a darkly colored background. These samples come from a much larger collection of similar textiles purchased at the same time, and in and of themselves are unexceptional within that collection.

However similar the two objects might appear to be, the ways in which they were conceptualized and exhibited were worlds apart. Accession 1932-1-62 was exhibited in *Treasures from the Cooper Union Museum* at the National Collection of Fine Arts in Washington, D.C., staged in 1967 when Cooper Union was about to transfer ownership of its museum to the Smithsonian [Fig. 1.03]. Accession 1932-1-20 appeared in *MANtransFORMS: Aspects of Design*, the inaugural exhibition of the Cooper Hewitt mounted in 1976 to celebrate the opening of the museum's new permanent home [Fig. 1.04].

The sample exhibited in the *Treasures* show was framed as one of many historical embroideries from the vast decorative arts collection, originally acquired for the Museum's purpose of "serving the designer, the artisan, the manufacturer, and the merchant" by providing a direct "confrontation with the object of study."¹ Its presence in *Treasures*, however, signaled a retrospective view of that earlier purpose as one that had become an anachronism. Instead, the embroidery had transformed over the intervening decades into a "treasure," a beautiful old piece of workmanship to be preserved as evidence of a past that was irrevocably disconnected from the present.

In contrast, the textile included in *MANtransFORMS* took part in an exhibition about design addressed to the layperson, emphasizing the anonymity and ubiquity of design as an

¹ Christian Rohlfing, *Treasures from the Cooper Union Museum* (Washington: Smithsonian Institution Press, 1967). 8.



Figure 1.01 Embroidery Sample (France), ca. 1790; silk; H x W: 23 x 15 cm (9 1/16 x 5 7/8 in.); Museum purchase from Au Panier Fleuri Fund; 1932-1-20. Exhibited in “Treasures of the Cooper Union Museum,” at the National Collection of Fine Arts, National Museum of Natural History, Washington, D.C.. July 13 - September 24, 1967. From: Cooper Hewitt, Smithsonian Museum of Design, www.cooperhewitt.org (accessed August 17, 2016)



Figure 1.02 Embroidery Sample (France), 1775–1805; silk thread, metallic threads, metallic wire, sequins, and glass on silk ground, paper; H x W: 29.5 x 17.3 cm (11 5/8 x 6 13/16 in.); Museum purchase from Au Panier Fleuri Fund; 1932-1-62. Exhibited in *MANtransFORMS* at the Cooper Hewitt, Smithsonian Museum of Design, New York City. October 7, 1976 – February 6, 1977. From: Cooper Hewitt, Smithsonian Museum of Design, www.cooperhewitt.org (accessed August 17, 2016)



Figure 1.03 Installation view, *Treasures of the Cooper Union*, a display of furniture and art work at the National Collection of Fine Arts, now the Smithsonian American Art Museum, held at the National Museum of Natural History, July 13 - September 24, 1967. Image contained in Smithsonian Institution Archives, Record Unit 314, Box 27, Folder: Treasures from the Cooper Union (Master Set). From: The Smithsonian Institution, www.si.edu (accessed August 18, 2016).



Figure 1.04 Installation view, Hans Hollein, "A Piece of Cloth," *MANtransFORMS: Aspects of Design*, October 7, 1976 – February 6, 1977, Cooper Hewitt, Smithsonian Museum of Design. From: Hollein, Hans, et al. *Hans Hollein, Design: Man Transforms: Konzepte Einer Ausstellung = Man Transforms: Concepts of an Exhibition*. Wien: Löcker, 1989. p. 66..

innate activity pervasive in daily life. While the particular form and technique of the textile may have appeared old fashioned, the exhibition emphasized the ahistorical impulse toward embellishment that underwrote it. The display of embellished cloth was itself part of a much larger and wide-ranging installation about the myriad uses of textiles. Including examples from throughout human history and multiple cultural contexts, *MANtransFORMS* downplayed the specialist practices of the designer or artisan to foreground the universal, creative practices of everyday life as forms of design. In the decade between the two exhibitions, these humble works of embroidery, and the entire collection they represented, underwent a translation from one conceptual frame to another—from the decorative arts to design.

At first glance, the categories of the decorative arts and design appear as two chronologically distinct entities. In contemporary museology, the decorative arts generally refer to a wide variety of objects and materials whose collections terminate with the nineteenth century. In contrast, design collections begin in the early twentieth century concurrent with the advent of Modernism. The institutional history of the Cooper Hewitt museum bears out this distinction in a different manner, presenting a stable set of historical collections in both paradigms, first as decorative arts, then as design. This transition occurred at the founding of the Cooper-Hewitt, National Design Museum (1967), in which the historical *decorative arts* collection, formed under the auspices of the Cooper Union Museum for the Arts of Decoration (1897), was recast through the new category of *design*.²

Through an examination of these two categories, this dissertation considers the history of the Cooper Hewitt towards two primary ends. First, I explore the ways in which a single institution responded and contributed to the development of design and the decorative arts as *ideas*. Secondly, I examine the institution to understand how this shift in interpretive lens can recast the significance, utility and value of a set of objects. In shifting the conceptual environment from the decorative arts to design, we will see drastic changes in the significance of almost every protagonist and idea implicated therein: how objects are framed

² When the Cooper Hewitt was first founded in 1967, it was first called the “Cooper-Hewitt, National Museum of Design.” Over time, that name has changed slightly and it is today known as the “Cooper Hewitt, Smithsonian Museum of Design.” Throughout this dissertation, I will refer to pre-1967 institution as the Cooper Union Museum of the Arts of Decoration, or the CUMAD, and the post-1967 institution as the Cooper Hewitt.

and exhibited in the museum context, the identity of the maker or designer, how she engages with historical objects and how they are instrumentalized, the location of authority in the design process, as well as the role that decorative arts and designed objects play in culture and daily life.

Territory and Questions: Architecture, Museology, and Architectural Museology

The historical, theoretical and disciplinary territories in which this dissertation is situated is broadly twofold: it addresses historical and theoretical questions in the discipline of architecture, and it contributes to ongoing scholarly debates in museology. These overlap, of course, in the realm of architectural museology, which is a relatively new field to which this dissertation seeks particularly to contribute.

One primary and ongoing architectural problem to which this work is addressed lies with architecture's ontology. I do not look to architecture's intrinsic characteristics, if indeed these could be identified, but rather I engage the history of *conceptions* of this nature as they unfold over time and as architecture creates and maintains affiliations with other disciplines. Surveying major works of architectural theory from antiquity to Revolutionary France, Stephen Parcell articulated in his 2012 book *Four Historical Definitions of Architecture* architecture's various classifications as a *techné*, a mechanical art, as an art of *disegno* or drawing, and as a fine art. In each period, architecture's classification reflected the ways in which its most fundamental practices, roles and objects were conceived of, often in drastically different terms than we understand them today. For example, the very identity of the architect—today a role professionalized and codified through education, licensure, and the responsibilities shared with the related professions of builders and engineers—was recognized, defined, and practiced by very different means and accountable for dissimilar expertise and labor. These differences extend, Parcell argues, to the categories of architecture, the designer, material, the dweller, the building, the drawing, and the architectural work.³

This dissertation builds upon Parcell's scholarship in two ways. First, I extend his inquiry forward in time, examining architecture's affiliations with two related disciplines that

³ Stephen Parcell, *Four Historical Definitions of Architecture* (Montreal ; Ithaca: McGill-Queen's University Press, 2012). 12.

emerged in the nineteenth century: the decorative arts and design. Because Parcell's scholarship demonstrates how ideas about architecture built up over time to culminate with its (albeit) tenuous affiliation with the fine arts, an inquiry into architecture's status in the nineteenth and twentieth centuries is particularly important because it begins to affiliate more strongly with the minor, applied, industrial and decorative arts that have been intentionally marginalized by the fine arts and the philosophy of aesthetics.

Unlike the ostensibly individual pursuit of the artist in the employment of their genius to produce unique and singular works, the decorative arts and design are often associated with functional objects of everyday use, objects and elements that may even be industrially or mass produced. Such objects circulate in markets that allow consumers a great deal of agency in their selection and assembly in the domestic sphere. The designers and artisans that produce them are trained outside of the academy and salon systems, sometimes in schools of design or as apprentices or workers in workshops and factories. Their creative labor as individual designers is likely to be anonymous. Through an affiliation with forms of production creatively and intellectually distinct from the fine arts, the focus shifts from idealized notions of architecture to one based in the realities of its training and practice.

Architecture's shifting affiliations from the fine to the decorative arts and design is not only an intellectual development, but it is one that was driven by changes in the nature of architectural education and practice. Developments in the education and training of architects and decorative artists is thus another important context for this dissertation. Architectural historian Mary Woods has elaborated the many forms of education available to architects and those in the building trades, most notably in *From Craft to Profession: The Practice of Architecture in Nineteenth-Century America* (1999). Over the course of the nineteenth century, apprenticeships and other craft-based forms of artisanal learning common in the antebellum years gave way to drawing schools, mechanics' institutes, training in architects' offices, and eventually university programs in architecture.⁴ The first of these programs emerged at MIT (1868), Cornell (1871), the University of Illinois (1873), Columbia (1881) and Tuskegee (1881).⁵

⁴ See Chapter 3: "Training and Education" in Mary N. Woods, *From Craft to Profession: The Practice of Architecture in Nineteenth-Century America* (Berkeley: University of California Press, 1999). 53-81.

⁵ More recently, Michael J. Lewis credits the Polytechnic College of Pennsylvania with the first collegiate program in architecture, founded in 1861. In that essay, Lewis argued that postbellum architectural education

Woods omitted all mention of the architecture course offered at the Cooper Union upon its founding in 1859, perhaps because Cooper Union was not a degree-granting institution for some decades and thus not a “university,” or perhaps because architectural training at Cooper was taught as “architectural drawing” until the first decade of the twentieth century. Yet the training in architecture, decorative design, interior design, and the decorative arts at Cooper Union was a defining milieu for the Cooper Union Museum at the time of its founding. As a museum operating in the larger context of a school of art, architecture, and design, it took on a unique pedagogical function, defining itself as a “working museum” addressed to designers rather than a general public. Its founders maintained courses that met in the museum and utilized its collections, and through their work on the art school’s advisory council, they mandated its continued use through their sponsorship of lectures, courses and student competitions. The museum’s proximity to the school continued to influence its activities and identity, though in the later years the served primarily as foils to one another rather than intimate collaborators. Elaborating the museum’s role as a pedagogical institution contributes to the scholarship on architectural education by highlighting the importance of museum institutions that supported and influenced formalized training.

One of the most important contributions that the museum accomplished in conversation with the school was in the way it structured the relationship between new creative work and historical example. One way to think about the history of architecture is as an account of its multiple forms of historical consciousness, the evolving disposition of design with respect to the forms of continuity and difference it sought to engender, and the nature of its engagements with specific precedents. Perhaps two of the most important versions of this historical disposition can be found in the late 17th century *Querelle des Anciens et des Modernes* and the modernist notion of precedent. If the *Querelle* marked the first time it was thinkable that the aesthetic and intellectual authority of the past—specifically

was influenced by both the French Beaux-Arts system as well as the German polytechnic model. While the Beaux-Arts treated architecture as a fine art, esteeming its aesthetic aspects through its emphasis on the design studio and the monumental projects taught there, the polytechnic model required the study of the sciences and technical drawings prior to design training. Though the nineteenth century American system is largely assumed to be a derivation of the Beaux-Arts model, Lewis suggests that it was an amalgam of the two. Michael J. Lewis, "The Battle between Polytechnic and Beaux-Arts in the American University," in *Architecture School: Three Centuries of Educating Architects in North America*, ed. Joan Ockman and Rebecca Williamson (Cambridge, Mass. : Washington, D.C.: MIT Press ; Association of Collegiate Schools of Architecture, 2012). 69.

antiquity—could be surpassed by new forms and ideas, then the approach to past work that precedent structures allows the designer the greatest latitude in both the categories of analysis and the methods of applying its results to the new problem. An examination of the Cooper Hewitt’s evolving conception of the instrumentability of the past provides a window into the broader developments of the nineteenth and twentieth century, thereby providing a bridge between the *Querelle’s* legitimization of departing from the appearance and rules of antiquity and precedence’s power to self-select sources from the past and intentionally construct its relevance. This conception evolved over time from one rooted in imitation to a constellation of approaches that variously considered sources in terms of inspiration, underlying principles, and the models of design process that could be carried forward into a new design.

The museological context for this inquiry is necessarily broad and episodic, owing to the eighty years of history that I cover and the particular areas of focus within that time span. In the first period of the museum’s history, from its establishment by the Hewitt sisters in 1896 to their deaths in 1924 and 1930, the gendered context of women’s work, women’s artistic education, and the experience of women collectors and curatrices becomes important. Kathleen D. McCarthy’s *Women’s Culture: American Philanthropy and Art, 1830-1930* outlines the milieu of arts education, the economic and social structures of artistic work, and the wide variety of associations and institutions that emerged during this time. Underwritten by a feminized of “the decorative” that McCarthy argues was distinct from the male-dominated French notion and practice of decorative art, she traces the development of artistic educational opportunities for women, and the establishment of museums and societies of decorative arts founded by women, as structures that facilitated women’s economic and social independence. The Cooper Union Museum adds important nuance to McCarthy’s narrative of women working in a sphere apart, one that separated fine art and architecture from the minor decorative arts. In contrast, I elucidate the ways in which the Hewitts’ efforts influenced the nature of artistic training for both men and women, how their work constituted participation in broader intellectual debates, and the ways in which they sought to bridge architecture, the decorative arts and fine arts through the museum’s activities.

The second phase of the museum’s life, spanning from 1930 to 1967, constituted the first time it came under professional administration. It was a period of redefinition that took

place within the competing internal pressures of museum development and specialization, pressure from the school to maintain its instrumentability in the face of changed educational practices, and external pressures having to do with the profound changes in the production, consumption and conceptualization of the former decorative arts in the new modern terms of design. While the tendency has been for scholars to focus more intently on avant-garde and cutting-edge practices, both in terms of museum practice and in the design of architecture and products, the Cooper Hewitt serves as an important reminder that the adoption and diffusion of the Modernist paradigm was not immediate nor without resistance. Indeed, it occurred over protracted periods of time and negotiated strong oppositional forces.

In museum practice, this manifested itself in the tension between the late nineteenth-century paradigm of educational utility and the early- to mid-twentieth century aims of museums to legitimize trends and encourage their consumption. Historians of the Metropolitan Museum of Art and the Museum of Modern Art have shown how the “industrial art” and the “design” paradigms, respectively, were used throughout the 1940s and 1950s to draw consumers’ attention to new Modern styles of interior design, furniture, and objects, and intentionally displaying goods available for purchase. The Cooper Union Museum, in contrast, maintained its nineteenth-century identity as a working museum for designers and producers, but was forced to reframe its utility to new audiences. In this respect, it joined other institutions such as the Metropolitan’s Costume Institute and the Brooklyn Museum’s Blum Design Laboratory, which both catered to the fashion and textile industries.

The third phase of the museum’s history commenced upon its transfer to the Smithsonian Institution in 1967 and its reopening as the Cooper-Hewitt, National Museum of Design. At this time, design as a category of collection and exhibition was just starting to spread beyond single departments of specialized institutions such as the Museum of Modern Art, and emerged as a paradigm that could encompass entire museums. In the early 1970s, nineteenth century museums of decorative, applied and industrial art began to reconceptualize their collections and activities in terms of design, and it was also at this time that new museums of design began to emerge. In this understudied scholarly territory, this dissertation argues that the Cooper Hewitt was one of the earliest institutions to take this

turn, and it approached design in one of the most creative ways. Unlike many museums, for whom ‘design’ was a chronological category referring to twentieth century production, the Cooper Hewitt utilized it to reengage their historical collections and reinvigorate them with contemporary interest and relevance.

What unites the inquiry into each of Cooper Hewitt’s three periods is an overriding concern with how the museum conceived of its utility, how it chose and framed its interpretive lenses to maintain that utility, and the way in which the assemblage, organization, presentation, and exhibition of the collections was orchestrated to realize this goal. In particular, the Cooper Hewitt’s collection of historical decorative arts and its multiple ways of framing those historical collections for contemporary audiences allows this dissertation to examine the various ways in which the relevance of history itself is constructed.

This is a particularly important question in the context of architectural museology. Architecture figured heavily in the museum’s conception, development and activities, though these evolved along with the museum. In the 2014 book *Exhibiting Architecture: Place and Displacement*, Oslo-based architectural historian and theorist Thordis Arrhenius noted the interdependence of architecture taken as a museological subject and architecture as a device that structures the museum and exhibition experience.⁶ This interdependence has been very much at play throughout the history of the Cooper Hewitt. At its outset, the Cooper Union Museum collected and exhibited architecture as one of many types of the decorative arts, and architecture figured prominently in the conceptual organization and classification of its collections. This dual engagement with architecture in its reality and ideality occurred again when the museum was reestablished as the Cooper Hewitt. The museum initiated a program of collecting architecture under the auspices of “environmental design,” and it hired a number of prominent architects to reimagine the museum’s design paradigm and to engender that paradigm through the design of its inaugural exhibition.

As a museum that addressed architecture under the larger categories of the decorative arts and design, the degree of its disciplinary influence is an important one. Eszter Steierhoffer has argued that, since 1970, exhibition has served as an important medium of

⁶ Thordis Arrhenius et al., *Exhibiting Architecture : Place and Displacement* (Zürich: Lars Müller, 2014). 15.

architectural discourse, providing a new space for speculative and experimental work. However, following Alina Payne, she implies that this has produced a bifurcation between art and architecture, leading to disparate curatorial practices and further isolation between their respective academic disciplines.⁷ The case of the Cooper Hewitt pushes back against that narrative of isolation and retreat. It does so not only as an institution that refused these distinctions, but also as a scholarly project that must necessarily analyze and interpret its activities within larger frames and contexts.

Methodologies: Reading the Intellectual through the Institutional

To propose an institution as the subject of an intellectual history is not without its difficulties. It is easy to assume the universality and broad influence of a phenomenon so portable as text, while the influence of an institution is more clearly localized. However, over the course of the eighty-year history of the Cooper Hewitt treated here, the European connections forged by its founders, curators and collaborators have allowed the institution to participate in debates and developments that were much larger than its locality in New York City. Another difficulty arises in considering the forms of evidence created by such an institution. While methodologies for the interpretation of text are well established, the procedures by which the multiple and varied productions of a museum—textual, spatial and visual—are less codified. It is here that I draw together hermeneutical methods of exegesis with the spatial, visual and formal modes of analysis proffered by architecture. I bring together these seemingly disparate aspects in an effort to understand how concepts that seem perfectly clear and stable in their meaning—architecture, museum, the decorative arts, and design—could maintain such drastically different and often ambiguous meanings and affiliations over the course of a century and a half.

Arrhenius pointed out one of the particular difficulties in undertaking this approach when she noted the acute ephemerality of museum exhibitions. To visit an exhibition is to experience a set of objects in a particular architectural setting, in a specific order and through highly tuned spatial and visual relationships. Once an exhibition is dismantled, however, its record persists imperfectly through ephemera, photographs and exhibition catalogs, at best.⁸

⁷ Eszter Steierhoffer, "The Exhibitionary Complex of Architecture," *OASE*, no. 88 (2012). 11.

⁸ Arrhenius et al. 8.

The photographic record of the Cooper Union Museum is particularly sparse and uneven, and often, surviving exhibition records consist only of catalogs that provide little more than lists of included objects. It is only by examining the visual in the context of the bureaucratic that sense can be made of a great deal of the museum's history, and its contribution to larger discourses ascertained. Over the course of three chapters, this dissertation traces larger ideas about architecture, design and the decorative arts, their changing meanings and shifting relationships, through an examination of the practices, activities and polemics of an institution as told through its visual and bureaucratic record.

In the remainder of this introduction, I examine the intellectual context that gave rise to the Cooper Union Museum, and to which it then contributed—nineteenth century design discourse. Towards that end, I establish the territory of the decorative arts and design through a survey of Anglophone literature intended to parse the relative roles of imitation and innovation, and the competing authority of history, nature, and composition.

The first chapter, “‘A Working Museum’: The Hewitts and the Founding of the Cooper Union Museum,” examines the influence of nineteenth-century theories of design and the decorative arts on the conception and practices of the fledgling institution and its subsequent contributions to this discourse. Multiple contexts prove important to understand their reception of and participation in the larger discourse. I scrutinize the nature of their familial influences, the context of arts education at the Cooper Union, the influence of local museum precedents such as the Metropolitan Museum of Art, as well as the real impact of the model that the Hewitts explicitly drew upon, the Paris-based Union Centrale des Arts Décoratifs. Examining the classification system adopted and modified by the Hewitts, the spatial organization of the museum, and the pedagogical activities that it sponsored in the Art School, I argue that the Cooper Union Museum maintained values of historical authority and imitation well past the point that it had been superseded in contemporaneous design theory by the focus on natural sources and innovation. However, their commitment to historical example led the museum to exercise creativity in the variety of ways they encouraged students and designers to engage the historical collections, particularly with respect to the forms of innovation they encouraged within their conservative paradigm.

The second chapter, “Between the Antiquarian and the Modern: The CUMAD at Mid-Century,” explores the museum's slow and tumultuous turn to a new concept of design as it

negotiated myriad internal and external pressures as well as its own historical legacy. Starting with the waning appeal of the museum with its traditional audience of designers and producers, I examine the museum's myriad efforts to reinvent itself through a reform of its museological practices, the identities of its audiences, and the new curatorial practices designed to appeal to those audiences. In so doing, I identify an internal "antiquarian" impulse to approach the historical collections through a specialist art-historical lens and a "modernizing" impulse driving the institution to pursue renewed relevance to students and professional designers through an ahistorical concept of design based in abstract visual categories such as form, texture and color.

Finally, "A New Kind of Design: Cooper Hewitt, Smithsonian Museum of Design," treats the third phase of the museum's life beginning with its transfer to the Smithsonian Institution in 1967 and culminating with its inaugural exhibition, *MANtransFORMS* in 1976. During this short period, the museum undertook a conscious reinvention under the explicit aegis of 'design', one that intentionally drew upon architectural perspectives. I trace this reinvention and its resulting interpretive paradigm through early debates about the museum's name and mission, its extensive survey of users and experts culminating in two think tanks, the development of an Environmental Design collection, and most importantly the conceptualization and execution of its inaugural exhibition. Rather than simply carry forward the mid-century notions of design already in use, the museum formulated a new approach addressed to a general audience that emphasized the everyday, pervasive, anonymous qualities of design activity, expanding it from a specialist practice to a widely shared faculty.

Taken together, these three chapters essentially seek to elucidate the contribution of the curatorial perspective to the history of ideas. Returning to the French embroidery that opened this introduction, the significant agency exercised by formulating the interpretive lens that frames existing objects becomes apparent as a crucial source of meaning-making and value. Ideas do not emerge in a vacuum, nor is their circulation in the ephemeral world of text their only important milieu. Rather, it is in the struggle to connect ideas with things, concepts with actions, that ideas gain force. This account and analysis of the development of the Cooper Hewitt grounds this proposition in the messy context of old things, a coterie of actors and their diverse perspectives, and the sense-making activities of the museum.

Design: The Boundaries of an Idea

In March of 1859, John Ruskin delivered a lecture at the Bradford Mechanics Institute entitled “Modern Manufacture and Design.” Despite its title, the lecture omitted pragmatic questions pertaining to the relationship between manufacturing processes and the designs created for them, focusing instead upon questions of design propriety, such as how design should be distributed in space or its various forms arranged with respect to one another. In this lecture and others, Ruskin entered an ongoing debate about design’s regulatory principles and the increasingly compositional terms in which they were couched.


In one line of argumentation, Ruskin described an “amusing discussion” with a friend who argued that all ornament was essentially determined by the principles of symmetry, contrast, and series.⁹ In response, Ruskin drew a crude symmetrical stick figure, a dark blob that contrasted with its white ground, and a series of numbers—retorting that the symmetrical, contrasting, and serial qualities of the drawn figures did not elevate them to the level of ornament proper. Ruskin’s friend quickly drew up a design for a “choice sporting neckerchief” utilizing Ruskin’s elements [Fig. 1.05], to press the point that individual elements had to be assembled into a repeating pattern in order to become ornamental, asserting that figures became ornament through their composition.

Concluding the debate, Ruskin agreed that the real work of design lay in the application and arrangement of elements. However, he pointed out that even in the realm of arrangement, characteristics such as symmetry, contrast and series could not account for the complex design decisions that produced the neckerchief. These included the scale of the figure and its repetitions, the size and character of the border, and the location of the blots. Rather, Ruskin attributed these decisions to an “unconscious” application of “essential laws” that could not be articulated, but were expressions of the individual artist’s “sense and judgment.” For Ruskin, these laws involved the realistic imitation of nature in a way that privileged the fine arts and subordinated the decorative.

Frank G. Jackson, a British sculptor, designer, design educator, and administrator at the Birmingham Municipal School of Arts, revived Ruskin’s “amusing discussion” three decades later in his book *Lessons on Decorative Design* (1888). Revisiting Ruskin’s dismissal

⁹ John Ruskin, *The Two Paths: Being Lectures on Art, and Its Application to Decoration and Manufacture* (New York: Wiley, 1879). 93.

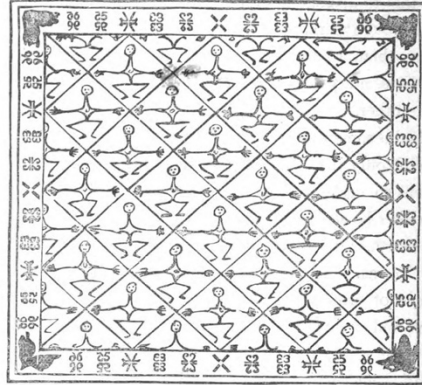
once that to arrange a group of two or more figures, you must, though perhaps it may be desirable to balance, or oppose them, at the same time vary their attitudes, and make one, not the reverse of the other, but the companion of the other.

I had a somewhat amusing discussion on this subject with a friend, only the other day; and one of his retorts upon me was so neatly put, and expresses so completely all that can either be said or shown on the opposite side, that it is well worth while giving it you exactly in the form it was sent to me. My friend had been maintaining that the essence of ornament consisted in three things:—contrast, series, and symmetry. I replied (by letter) that “none of them, nor all of them together, would produce ornament. Here” —(making a ragged blot with the back of my pen on the paper)—“you have contrast;  but it isn't ornament: here, 1, 2, 3, 4, 5, 6,” —(writing the numerals)—“you have series; but it isn't ornament: and here,” —(sketching this figure at the side)—“you have symmetry; but it isn't ornament.”



My friend replied:—

“Your materials were not ornament, because you did not apply them. I send them to you back, made up into a choice sporting neckerchief:—



Symmetrical figure Unit of diaper.

Contrast Corner ornaments.

Series Border ornaments.

Each figure is converted into a harmony by being revolved on its two axes, the whole opposed in contrasting series.”

My answer was—or rather was to the effect (for I must expand it a little, here)—that his words, “because you did not apply them,” contained the gist of the whole matter;—that the application of them, or any other things, was precisely the essence of design;—the non-application, or wrong application, the negation of design: that his use of the

Figure 1.05 John Ruskin, pages from "Modern Manufacture and Design," *The Two Paths: Being Lectures on Art, and Its Application to Decoration and Manufacture*. New York: Wiley, 1879. 78-112. 93-94.

of compositional rules as the basis of ornamental design, Jackson argues that while symmetry, contrast and series might not exhaustively account for all compositional principles, he found them useful in suggesting a variety of ornamental possibilities. In a dense and frenetic drawing, Ruskin's original design was joined by a series of figures, borders, and diaper patterns utilizing Ruskin's ragged blot, stick figure, and numeral forms, each of which was a clear improvement upon Ruskin's initial design [Fig. 1.06].¹⁰ In contrast to Ruskin's assumption that his friend's design was the best possible assemblage of his elements, Jackson worked to show that an iterative design process utilizing a variety of compositional strategies without particular fealty to the original figures showed far greater and more varied potential.

This limited exchange between Ruskin and Jackson belied the wide gulf that separated them on larger issues of design, decoration and ornament. These were mainly concerned with the affiliation of design to the fine or decorative arts, with the proper models and sources of art, and with the relative propriety of imitative fidelity to sources, conventionalization, and originality. Such issues were indeed controversial in the nineteenth century and generated a tremendous amount of debate in the forms of design manuals, handbooks, treatises, lectures, pattern books, histories, articles in professional journals, and books of instructional exercises written by architects, artists, decorators, designers, and art and design instructors. Together, they expressed an astonishing breadth of perspectives on such fundamental issues as the definition of design, the branches of creative endeavor it included, design's regulatory principles, the relative authority of historical style and the natural world, and the tensions between imitation, conventionalization, and invention.

A survey of the Anglophone literature on design and decoration during the nineteenth and twentieth centuries serves to outline the broad history of the idea of design, a task insufficiently addressed by existing scholarly treatments. It also reveals the importance of 'design' as an idea well before the twentieth century, and one whose meanings and associations range far more widely than is generally assumed. Finally, the explication of design as revealed by such a survey formed one of the primary intellectual contexts in which the Cooper Union Museum emerged and operated. An examination of that context shows

¹⁰ 'Diaper' is a term that refers to patterns whose repeating figures are enclosed in a geometric shape or with a series of diagonal lines, arranged so as to imply a diamond pattern.

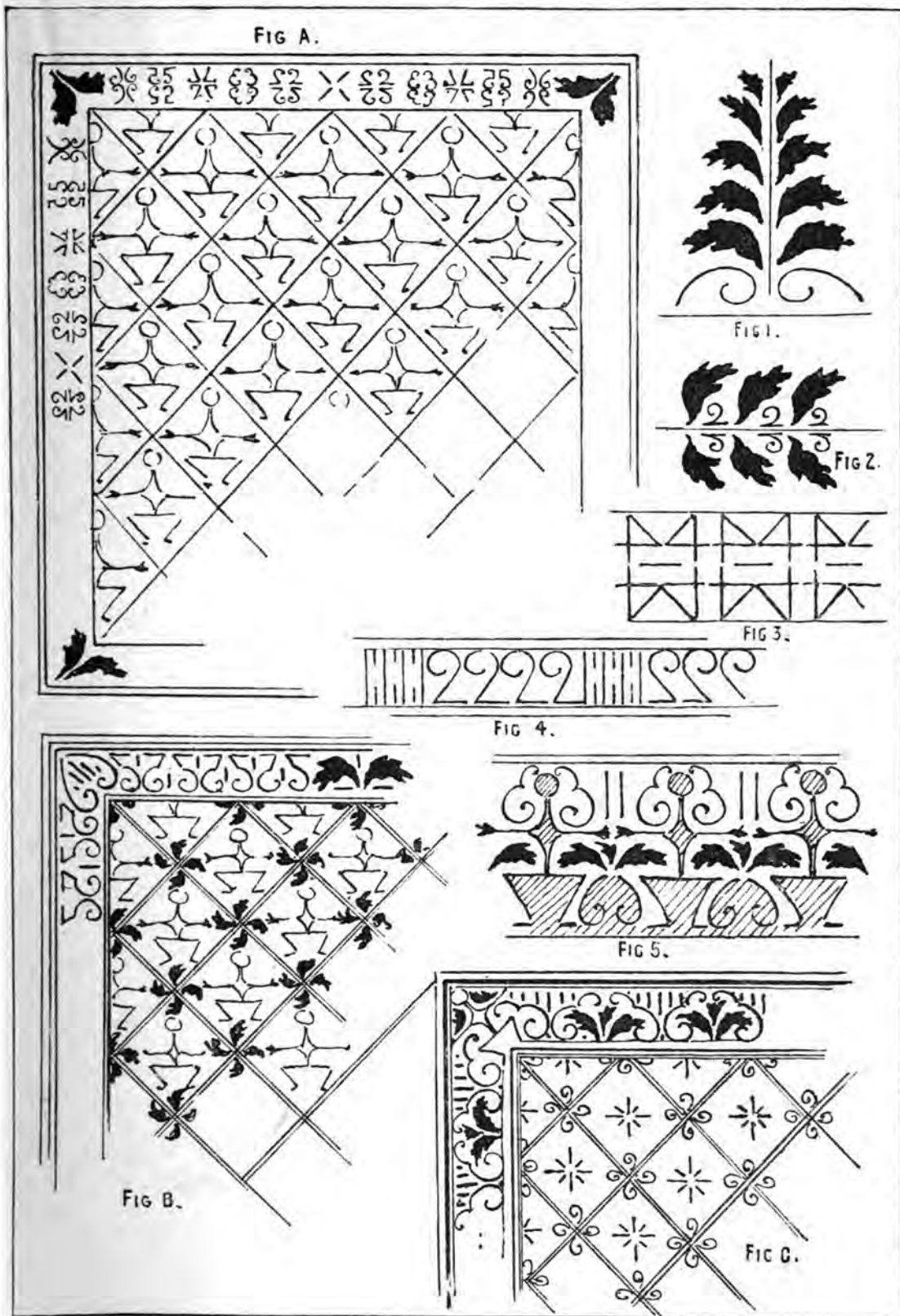


Figure 1.06 Frank G. Jackson, Neckerchief Designs following John Ruskin. Ruskin's original design at top left is surrounded by iterations designed by Jackson. From *Lessons on Decorative Design*. London: Chapman & Hall, 1888. 25.

the museum's emergence to be more intentional and idiosyncratic than is commonly believed.

The word 'design' entered the English lexicon through the Italian *disegno*. Tracing the early history of this migration, Michael Baxandall has shown how the common, everyday senses of *disegno* in early seventeenth century Italy referred to intellectual and physical objects as well as activities.¹¹ It could designate an intention, purpose or plan formed in the mind, and could also nominate a graphic representation such as a drawing or a model as the physical manifestation of that plan. Thus, Baxandall concluded, *disegno* referred both to "purposeful devising and physical drawing, between the intentional and the manual."¹² Baxandall's intellectual history is however less clear in determining whether *disegno*'s polysemy simply meant it could be used to refer to two distinct activities, or whether it effected an elision between its multiple meanings. Understanding design as a wholly intellectual activity demotes drawing to a mere manifestation of a completed process of ideation. Yet, if drawing itself is integral to the design process, then thinking and drawing are not exclusive processes. Rather drawing is an activity that facilitates thought, and one that allows the mind to draw upon the intelligence of the hand. This ambiguity inherent to *disegno* would travel with the word's translation into English, and is indeed foundational for some of the nineteenth century debates around the term and its various conceptualization as intellectual or physical activities of various types.

The *Oxford English Dictionary*'s expansive definitions of design echo the tensions described by Baxandall.¹³ The aesthetic implications of 'design' emerged half a century later when it further became a reference to the preliminary sketch, *maquette*, or architectural plan embodying and articulating the scheme used to produce the final full-scale work. The semantic innovation of the English 'design' was that it could not only indicate the end or aim at which a scheme was intended, but also the particular aesthetic features or characteristics constituting a finished work of art or architecture. In this way, design is both alpha and

¹¹ Michael Baxandall, "English Disegno," in *Words for Pictures: Seven Papers on Renaissance Art and Criticism* (New Haven: Yale University Press, 2003). 84-85.

¹² Ibid. 85.

¹³ The earliest use of 'design' in English, dated to the late sixteenth century, refer to its intellectual origin as a plan, intention, or scheme intended for execution—a thought to be enacted. University of Michigan and Oxford University Press, "Design," in *Oxford English Dictionary* (Ann Arbor, Mich.: University of Michigan Humanities Text Initiative, 1996).

omega, conception and result, with the peculiar assumption of equivalence between the two. This equivalence posited that the result is not only evidence of an intention or plan, but of a perfectly executed admitting no serendipity, mechanical intelligence nor a making-based design process.

In the nineteenth century literature of design manuals and treatises, design is rarely explicitly defined. It is rather qualified, extended, reduced and scaled to include and exclude certain categories of practice or objects. These might include painting, sculpture, drawing, modeling, architecture, and product- or material-specific categories of production, such as textiles, glass, or furniture. Design was positioned within a series of polarities, creating a network of affiliations that could serve as much to characterize the status quo as to advocate for changes in future practice and production. Nineteenth century design thinkers conceived of design as an activity of the mind or the hand, one that addressed construction or decoration, form or ornament. It valued either distinct originality or the explicit imitative fidelity to its sources. Likewise, it, was determined to some extent by the realities of fabrication technique, material, or utility, or it might be independent and entirely unbound from them. The central potential contribution of design was similarly polarized between the intellectual, visual, and economic.

The lack of agreement about design's territories and affiliations is indicative of a period of flux and volatility. This affected fabrication technologies, divisions of labor, the cultural significance of designed products, and the identities of producers most acutely. The emergence and development of design as an idea was not prompted by an entirely new activity or object, but rather to changed conditions of production and new measures of aesthetic and economic value.

In the face of increasing industrialization and a growing chasm between designer and producer, many artists, architects, and decorative artists sought to establish design as a distinct form of expertise and enterprise centering on composition, with its own principles, procedures, and bounds of propriety. Simultaneously, other authors resisted the delamination of thinking and making by linking design to material, technique, handicraft or machine production. Many tried to temper the newness and abstraction of a composition-based design by requiring its dependence on other sources of authority, such as historical stylistic traditions, or nature.

From the Fine Arts to the Decorative Arts: The Evolution of Design

Throughout the nineteenth century design encompassed a wide and changing variety of activities, modes of production, and end products. This could be observed in the definitions given to design, as well as in its practice and dissemination through teaching. Perhaps the most important development in the nineteenth century conception of design occurred in the late 1860s or early 1870s, when design shifted from serving as a general term for the drawing- and modeling-based practices of painting and sculpture to one that increasingly indicated the artistic aspects of the decorative and industrial arts.

Painting, sculpture and architecture were sometimes referred to as the fine arts. However, this genre did not yet enjoy the special privilege of autonomy that would later be conferred on them by the exceptional space of the museum. Nor did they yet possess the freedom from utility demanded by the Aesthetic Movement and its *cri de coeur*, Art for Art's Sake. The divisions of labor between artist and artisan, designer and laborer were also far less strict. Rather than design serving as a category apart, the fine arts were unified by 'design' as it referred to their visuality, the centrality of drawing to their practice, and their primary concern with beauty.

In his three-volume *History of the Rise and Progress of the Arts of Design in the United States* (1834), the painter and art historian William Dunlap used the term 'design' to distinguish the visual fine arts from the non-visual forms. As such, he excluded poetry and music from his treatments of sculpture, painting, engraving and architecture, or those arts that "rely upon *form* displayed in *space*."¹⁴ William Mitford, a British historian of antiquity, formulated design as that which was allied with the beautiful rather than the useful, and thus as a term that was limited to aesthetically oriented practices of the useful arts, such as architecture.¹⁵ The British painter Benjamin Robert Haydon similarly utilized design to refer to the visual fine arts, and

¹⁴ Expressing the tensions inherent to *disegno*, Dunlap argued that the practice of drawing was particularly central to design. "Design, in its broadest signification, is the plan of the whole, whether applied to building, modeling, painting, engraving, or landscape gardening; in its limited sense it denotes merely drawing; the art of representing *form*." William Dunlap, *History of the Rise and Progress of the Arts of Design in the United States* (New York: G. P. Scott and co., printers, 1834). 2-3.

¹⁵ In his 1824 book, *Principles of Design in Architecture*, Mitford utilized the liminal example of architecture as a "useful art" that could become a "fine" or "ornamental art" when it aimed to produce beauty. "The term Design certainly may be properly applicable to both. But in the practice of language it is more commonly limited to Architecture considered as one of the fine arts, the sister of Painting, than extended to it as simply a useful art." William Mitford, *Principles of Design in Architecture Traced in Observations on Buildings Primeval, Egyptian, Phenician or Syrian, Grecian, Roman . . . And Modern English Domestic: In a Series of Letters to a Friend* (London: Printed for Rodwell and Martin, 1824). 13-14.

like Dunlap he insisted on the paramount importance of the human figure in both art education and practice.¹⁶ As the “principal vehicle of conveying ideas by his features and form,” study of the human body was central to both fine and industrial art as the most common subject represented in its products, and as the surest portal into its “eternal principles,” based on the range, accuracy and subtlety of its communicative abilities.¹⁷

When authors considered the relationship between the fine and industrial arts during this period, influence was usually understood to trickle-down from the former to the latter. Beaumont, writing in *Godey's Lady's Book* in 1848, understood design as the principles of taste and beauty as they concerned form and ornament. He suggested that ornamental design produced industrially would follow the lead of the “highest style” of painting and sculpture.¹⁸

In contrast to the fine arts-centric notion of design, theorists in the late 1860s onwards began to reject the subordination of the decorative or industrial arts. They sought to distinguish the role and labor of the designer from the artisan, and to cultivate design as its own discipline. While maintaining some differences between the fine and decorative arts—the necessity of utility in the decorative arts, for example—theorists at this time attempted to elevate the status of the decorative or industrial arts. This elevation was to be both conceptual and practical, recognizing these arts as philosophically meaningful, and as a field of endeavor requiring elucidation.

The British designer and design theorist Christopher Dresser asserted that decorative arts products, such as furniture or vessels, should indeed be considered art. Their makers must then be recognized as artists, argued Dresser, understanding that beauty was not the

¹⁶ It was, he believed, central to British design reform, which sought to raise the level of quality of art and designed objects, particularly domestic furnishings. “The first great step in the reform of design, as applied on art and manufacture, is to be assured that the human figure is the basis of all drawing, and then to settle on such principles as cannot be shaken a lasting and imperishable standard of the form of the most gifted being on earth, viz. man, and to ascertain what are his physical superiorities as a species, and what are his mental, as expressed by his physical figures; so that the principle may be comprehended and adopted as a leading basis for the use of all those who devote themselves to sculpture and painting, either as tutors or students.” Benjamin Robert Haydon, *Lectures on Painting and Design* (London: Longman, Brown, Green, and Longmans, 1844). 13.

¹⁷ Ibid. 35.

¹⁸ Those professions “obliged to use form and ornament” included “calico printers, paper stainers, carpet weavers, iron founders, wood carvers, turners, lamp makers, architects, carpenters, makers of cabinet furniture, potters and china manufacturers, plasterers and modelers, glass-makers, jewelers and silversmiths, printers and book-binders, picture-frame makers, shawl manufacturers, coach builders, shipwrights, harness makers, and others”. Beaumont, “The Arts of Design,” *Godey's Magazine and Lady's Book* March 1848. 184.

sole purview of painting or sculpture.¹⁹ Similarly, the American journalist George Ward Nichols was critical of what he viewed as the artificial conceptual divide between fine arts and the art industries in his book on art education, and he argued for the elevation to artistic status of industrially produced objects.²⁰

Others in this period noted practical distinctions in labor practices in order to demonstrate design as a specialized and distinct activity. The British painter, educator and curator Richard Redgrave elaborated the differences between the labor of the designer and that of the art-workman. He suggested that while the art-workman was trained in the specifics of his or her particular form of manufacture, the designer needed only a general knowledge of the manufacturing process, since he or she could design for multiple object types and manufacturing techniques.²¹ Design for Redgrave was more closely aligned with the industrial arts than it was with the fine arts, yet nevertheless a distinct practice and profession that required its own educational curriculum and practical knowledge.

John Ruskin offered a more nuanced if contrary view of the relationship between the fine and industrial arts, distinguishing them in two important ways. First, decorative art was different from fine arts in that it was “fitted for a fixed place, and in that place, related, either in subordination or command, to the effect of other pieces of art.”²² Easel painting or free-standing sculpture were then mobile arts not destined for a particular place. Nonetheless in Ruskin’s conception the best art was conceived and executed for a particular context.²³ The role of the decorative arts in its larger context remained a humble one, forming “part of a great and harmonious whole, in companionship with other art.”²⁴

¹⁹ Christopher Dresser, *Principles of Decorative Design* (London: and New York [etc.] Cassell, Petter, & Galpin, 1873). 3.

²⁰ “The broad meaning of the term ‘art education’ has not always been understood. It is most often used in its relation to the fine arts of painting, sculpture, and architecture, as if these higher arts and the industries were not mutually dependent, or as if the boundary which is supposed to separate them were not, in all three of the arts, constantly invaded, so that often the product of the industry may be called a work of art.” Nichols referred particularly to fresco-painting, monumental ornamentation, decoration of pottery, and the manufacture of bronzes as those products in which “the work of the mechanic becomes a work of art.” George Ward Nichols, *Art Education Applied to Industry* (New York: Harper & Brothers, 1877). 9.

²¹ Richard Redgrave and G. R. Redgrave, *Manual of Design*, South Kensington Museum Art Handbooks, No. 6 (New York: Scribner, Welford, & Armstrong, 1876). 169-170.

²² John Ruskin, “Modern Manufacture and Design,” in *The Two Paths: Being Lectures on Art, and Its Application to Decoration and Manufacture* (New York: Wiley, 1879). 79.

²³ Non-stationary decorative objects, like utensils, were understood as “fixed” insofar as their purpose naturally attracted them to certain domestic contexts like the dining table.

²⁴ Ruskin, “Modern Manufacture and Design.” 80.

Ruskin's second distinction between the fine and decorative arts was rooted in his very definition of design as "the visible operation of human intellect in the presentation of truth" utilizing the human inventive capacity.²⁵ The particular truths that art was meant to present were the human knowledge and interpretation of nature. While the fine arts were charged with the direct representation of nature, the decorative arts could only do so indirectly because of the conventionalization required by their fabrication processes.²⁶ Ultimately, different art forms were permitted varying levels of ambition to beauty, which for Ruskin was conferred primarily by the realistic imitation of nature, depending on the position of a work in space, its ability to be viewed well, and the likelihood of harm or wear.

Following Ruskin, the French architect and professor of decorative art at the *École des beaux-arts*, Henri Mayeux, also distinguished the decorative arts by their response to context. However, his notion of design was centered on "decorative composition," or "those qualities whereby balance between the various parts of a work, whether of *form* or *decoration*, is secured, and a whole, attractive in itself and in harmony with its surroundings, is obtained."²⁷ In this way, design was very much distinguished from making, and aimed less at an experience of beauty focused on the individual object and more upon the creation of an aesthetic whole out of all of the elements of a room, space, or façade.

Robert Scott Burn, the Scottish engineer and author of numerous treatises on mechanical, architectural and ornamental drawing, moved towards a more decisive break between the fine and decorative arts. As an engineer, design for Burn referred to a field of endeavor beyond the solely aesthetic that included "all branches of industrial work," denoting "the product of the mind as applied to the doing of any kind of work."²⁸ In fact, he bracketed fine art out of design, limiting it to the industrial, or those objects "produced by one or another branches of trades," eschewing those in which "imagination or fancy gives

²⁵ "The Deteriorative Power of Conventional Art over Nations." 43.

²⁶ That is to say, realistic representations were not possible in woven fabrics, and inappropriate to items like wallpaper, curtains, or drinking vessels.

²⁷ Originally published as *La Composition decorative* (1885). Henri Mayeux, *A Manual of Decorative Composition for Designers, Decorators, Architects, and Industrial Artists*, trans. J. Gonino (London: J. S. Virtue, 1889).

²⁸ Robert Scott Burn, *The Ornamental Draughtsman and Designer; Being a Series of Practical Instructions and Examples of Freehand Drawing in Outline and from the Round, Examples of Design in the Various Styles of Ornament Adapted to Practice; Together with a Series of Practical Papers on Form and Colour, as Applied to Industrial Decoration and Art Manufactures*, "Practical Mechanic" Series of Industrial Handbooks (London, New York [etc.]: Ward, Lock, Bowden and Co., 1892). 1.

birth to a conception which is recorded in what we call a painting, picture or drawing.”²⁹

Burn did not argue that ‘art’ no longer referred to the fine arts, but rather that the concerns of the fine and industrial arts had diverged so much so that the principles and practices of one no longer had any bearing on the other.

Thus the decorative and industrial arts were established as an autonomous and legitimate sphere of design endeavor, and indeed became ‘design’s primary affiliation as its connection to the fine arts waned. But an additional development served to further narrow the meaning of decoration. It was in this period that it took on its lasting definition, which concentrated on surface decoration such as pattern or relief applied to independently conceived forms, and the work of composing such surfaces in the absence of propriety-based principles. In doing so, decoration dropped its concern with objects or buildings as a whole and the corollary issues of construction, utility and form.

The art educator and prolific author of drawing and design manuals Richard G. Hatton was a transitional figure in this development. Hatton argued that decoration functioned primarily to enrich objects with interest, meaning and beauty through the introduction of complexity and texture. Design, in contrast, worked towards harmonious unification of elements into a coherent whole.³⁰ If decoration emphasized the complexity of the surface, then design foregrounded the singularity of form.³¹ Celebrated Arts and Crafts designer Charles Robert Ashbee also perceived design exclusively as a matter of appearance, distinguishing it from both utility and workmanship.³² Design, which had long encompassed both criteria, was now limited to the latter. The cause of this development was, at least in part, related to the increasing specialization of labor in which the roles of the designer and maker were now rarely shared by the same person. The respective knowledge and expertise required by the designer and the workman certainly overlapped at some points, but it was largely distinct.³³

²⁹ Ibid. 2.

³⁰ Richard G. Hatton, *A Text Book of Elementary Design* (London: Chapman & Hall, 1894). 26.

³¹ Ibid. 32.

³² “Design is that which, in subordination to utility, dignifies it and makes it pleasing.” Charles R. Ashbee, “On the Meaning of Design,” *Work: the illustrated weekly journal for mechanics* 6, no. 240 (1893). 214.

³³ “A distinction must be drawn between design and workmanship. The designer should know sufficient of workmanship to enable him to feel the value of what he is making.” Ibid.

The primary responsibility of the designer was increasingly limited to how an object looked, while its techniques of fabrication, its form, and its handling came increasingly under the purview of the manufacturer. Design, as an idea and an activity, was thus increasingly associated with the narrower field of decoration and composition, and no longer used with respect to the representative arts of painting and sculpture.

The Mother of the Arts?: Architecture, Design, and the Decorative Arts

In the latter half of the nineteenth century, it was common to refer to architecture as “the mother of the arts” or “the mother art” referring to a conception of architecture as the first of the fine and decorative arts to be fully developed as an art-form, and as the primary and originary art giving all other art-forms site, context, structure, and style. Today, the idea is most commonly attributed to Frank Lloyd Wright, who is widely quoted as saying “The mother art is architecture. Without an architecture of our own we have no soul of our own civilization.”³⁴ Wright was in fact not only far from the first to articulate this sentiment, he actually merely repeated a phrase that was very familiar and established as he came of age professionally in the late nineteenth century. The first mention of the phrase can be attributed to Peter Legh, an English member of the landed gentry, and it appeared in his work on architectural theory and Vitruvian analysis, *The Music of the Eye* (1831). Here he asserted that architecture is the “mother of the fine arts” because of its monumental scale and earlier historical development compared to painting or sculpture.³⁵

Around this time, the motherhood of the arts was also attributed to many other phenomena besides architecture. These included places, institutions, and ideas: the cities of

³⁴ Despite the fact that numerous publications, scholarly and otherwise, have reproduced this quote, their authors have unfailingly included it without citing its origin, which I have not been able to locate. Wright utilized the phrase “the mother of the arts,” without conceptual elaboration, in his 1937 book *Architecture and Modern Life*, two chapters of which are included in *The Essential Frank Lloyd Wright: Critical Writings on Architecture*. Frank Lloyd Wright, “Architecture and Modern Life: Some Aspects of the Past and Present Architecture,” in *The Essential Frank Lloyd Wright: Critical Writings on Architecture*, ed. Bruce Brooks Pfeiffer (Princeton: Princeton University Press, 2008). 290.

³⁵ This is the first instance that I have been able to find. Peter Legh, *The Music of the Eye: Or, Essays on the Principles of the Beauty and Perfection of Architecture, as Founded on and Deduced from Reason and Analogy, and Adapted to What May Be Traced of the Ancient Theories of Taste, in the Three First Chapters of Vitruvius* (London: W. Walker [etc.], 1831). 2.

Cicyon,³⁶ Athens,³⁷ and Babylon,³⁸ and the institutions of trade,³⁹ philosophy,⁴⁰ and the “western church.”⁴¹ Beginning in the late 1850s, architecture was increasingly credited with art’s motherhood, primarily in professional and trade literature for architects, decorators, and craftsmen.⁴² In each instance, whether attributed to architecture, place or idea, the implications of pinpointing art’s maternal origin remained unexplored and rather functioned as a reflexive honorific, or a nod to an early inventor whose innovations had long been superseded.

The fact that architecture’s maternity of the arts was widespread enough to produce a well-known phraseology raises the question of how theorists of architecture, design and the decorative arts conceived of architecture’s relationship to other arts, not only in terms of their origin but also with respect to their ongoing contemporary relationship. William Mitford and other architectural theorists like him, understood architecture in the early nineteenth century as something that was affiliated with the fine and decorative arts, but a discipline that maintained its own rules and practices—alike and distinct at the same time. The principles of architectural design were not presumed to be identical to other art forms, and indeed for Mitford a building’s design properly stemmed from its programmatic purpose

³⁶ James Dallaway, *Anecdotes of the Arts in England or, Comparative Remarks on Architecture, Sculpture, and Painting, Chiefly Illustrated by Specimens at Oxford*. By James Dallaway (London: printed for T. Cadell and W. Davies. 1800. T. Bensley, printer, 1800). 187.

³⁷ W. H. Davenport Adams, *Temples, Tombs, and Monuments of Ancient Greece and Rome. A Description and a History of Some of the Most Remarkable Memorials of Classical Architecture* (London, New York [etc.]: T. Nelson and sons, 1871). 92.

³⁸ William Morris, *Architecture, Industry & Wealth; Collected Papers* (London, New York [etc.]: Longmans, Green, and co., 1902). 12.

³⁹ J. N. Brewer, *The Beauties of Ireland: Being Original Delineations, Topographical, Historical, and Biographical, of Each County* (London: Printed for Sherwood, Jones, & co. [etc.], 1825). 92.

⁴⁰ Samuel Huggins, *The Course and Current of Architecture; Being an Historical Account of the Origin, Successive and Simultaneous Development, Relations, Periods, and Characteristics of Its Various Known Styles* (London: J. Weale [etc.], 1863). 185.

⁴¹ *Ibid.* 90.

⁴² The phrase can be found in the following documents: "Curiosities of the National Competition: The Honorary Awards," *The Artist and Journal of Home Culture* 6, no. 68 (August 1, 1885); "Proceedings of Allied Societies: Architecture and the Applied Arts in Manchester," *Journal of the Royal Institute of British Architects* 4, no. 3 (January 1897); "The Architect and Decorator," *The Artist and Journal of Home Culture* 6, no. 63 (March 2, 1885); Alexander Beresford Hope, "On the Common Sense of Art" *The Civil Engineer and Architect's Journal* 22, no. 298 (January 1859); Clarence H. Blackall, "Notes of Travel: Amsterdam," *The American Architect and Building News* 19, no. 531 (February 27, 1886); H. H. Stannus, "Architecture as an Applied Art," *The Architectural Review: For the Artist & Craftsman* 1 (Nov 1896-March 1897); T.R. Tinsley, "Owner's Influence on Architects," *The Artist and Journal of Home Culture* 8, no. 79 (July 1, 1886).

and the required utility specific to that purpose.⁴³ Beauty was secondary, unlike in the case of other art forms.

Many theorists viewed architecture as having originated first among the primitive art forms, but also as having lagged behind the modern fine arts in its development. William Dunlap, for example, acknowledged that the arts developed originally out of necessity, and only later out of a desire for aesthetic delight. In this way, man's need for shelter—and the architecture produced out of that need—preceded other purely aesthetic forms. Yet, “Of the four arts of design, to which our attention is directed, architecture alone is the offspring of necessity; but before it became one of the fine arts, sculpture, and perhaps, painting, had existence.”⁴⁴

Architecture's membership in the fine arts was exceptional and sometimes provisional because its root in utility marked it as fundamentally different than painting or sculpture. Other theorists sought to solve this dilemma by distinguishing architecture from building precisely in terms of aesthetics. The architect and theorist Edward Lacy Garbett presented two popular and conflicting definitions of architecture as a way of addressing architecture's ill fit with the fine arts.

The more common definition viewed architecture as “the art of clothing or masking buildings, of whatever class, with scenic representations of the features of a superior class, erected in some past age.”⁴⁵ The other was “less well known and practiced at present because [it was] more difficult and troublesome,” and that was “the art of Building Well—well as regards every purpose intended in building, and not only the actual fitness of a building or its parts to their several purposes, but also the fitness of their *appearance* thereto.”⁴⁶ Thus architecture was more commonly understood as entirely concerned with building's appearance, particularly its exterior façades, rather than as the sum total of its utility encompassing programmatic, structural and visual qualities.

⁴³ Mitford. 4.

⁴⁴ Dunlap. 11.

⁴⁵ Edward Lacy Garbett, *Rudimentary Treatise on the Principles of Design in Architecture as Deducible from Nature and Exemplified in the Works of the Greek and Gothic Architects*, Weale's Rudimentary Series ;No. 18 (London: J. Weale, 1850). iii.

⁴⁶ Ibid.

Garbett limited architectural *design*, however, to “all that relates to the *appearance of buildings*,” or what he described as “the head-work, not the pencil-work.”⁴⁷ Thus, design was the proper term for architecture’s aesthetic component, and it was this aspect that linked it to the fine arts. If theorists linked architecture to the fine arts via the former’s aesthetic component, they also distinguished architecture from other fine art forms on bases other than utility. The architect Marriot Field, for example, noted that architecture deviates from the fine arts because “it has no standard in nature: the imitation of nature is not its object.”⁴⁸ Theorists’ wide variety of views on architecture’s relationship to other arts suggests that its “maternity” was anything but undisputed.

Around the same time that design’s affiliations shifted from the fine arts to the decorative or industrial arts, a shift also occurred with respect to architecture’s relationship to other art forms. Rather than focusing on their differences, design theorists began using architecture’s similarities with other art forms to identify and extrapolate overarching design principles. Christopher Dresser, for instance, reported that he had often been criticized for eliding architecture and ornament, but in his view ornament or decoration and architecture were in fact determined by the same larger factors, such as cultural, religious and climatic conditions.⁴⁹ Furthermore, Dresser believed that ornament properly took its cues from architecture.

Dresser’s chapter on the “Decoration of Buildings” sheds light on how he conceptualized this influence. Rather than discuss the structure, spatial organization, or even the exterior character of buildings, his chapter contains two divisions dealing with the interior decoration of ceilings and walls. Beyond those fixed planes, Dresser argued that interior decoration as a whole, including furnishings, carpets, etc, should reflect the character of the architecture that encloses it. In this way, architecture’s influence was not so much epochal, but rather local and contextual. Dresser did not conceptualize architecture as an entirely separate entity issuing edicts from afar. Instead he appreciated the value of a more

⁴⁷ Ibid. iv, 13.

⁴⁸ Marriot Field, *City Architecture, or, Designs for Dwelling Houses, Stores, Hotels Etc.: In 20 Plates ; with Descriptions, and an Essay on the Principles of Design*, City Architecture (New York: G.P. Putnam & Company, 10 Park Place, 1853). 7.

⁴⁹ Dresser. 13.

intimate aesthetic and formal continuity existing between the external shell, the internal room, and all the objects contained within it.

While Dresser argued for architecture's influence as a matter of proximity and intimacy, others couched the importance of architecture in more conceptual and abstract terms. Richard Redgrave also argued for architecture as a primary source of influence for decoration, in a certain way. For Redgrave, it was style that unified the architecture and the decorative arts of any given period. Style did not arise from decoration, but rather resulted in it. Indeed, Redgrave proposed that "style originates in construction." Style was that which emerged out of bare walls rather than decorated ones.⁵⁰ In that way, he saw the style that encompassed the decorative arts as emerging from the architectural innovations of the period.⁵¹

The American architect Arthur Lyman Tuckerman went so far as to extend the architectural design process to all forms of decorative and industrial design in his 1891 book, *Design*. In it, he began with a schedule of questions designed to elicit an articulation of all the essential problems faced in designing an object.⁵² Though he framed his questions as being very broadly concerned with design, his course of questions undoubtedly stemmed from an architectural design process. This is evinced by the fact that questions concerning the design of a building would be largely and specifically answerable.⁵³ However, those concerning the design of a teapot, a piece of jewelry, or even a piece of furniture would not permit the designer to settle upon such definite answers.⁵⁴ For an architect like Tuckerman, architecture

⁵⁰ Redgrave and Redgrave. 15.

⁵¹ Similarly, in their book *Suggestions in Design*, the English architect James Kellaway Colling and book illustrator John Leighton described architecture as "the grammar or foundation" of ornament, arguing that theoretical and practical knowledge of architecture was indispensable to the design of ornament and decoration. John Leighton and James Kellaway Colling, *Suggestions in Design: Being a Comprehensive Series of Original Sketches in Various Styles of Ornament, Arranged for Application in the Decorative and Constructive Arts* (New York: D. Appleton and Co., 1881). 4.

⁵² These included questions such as: What is the definition of the subject to be designed? What is its purpose? What are its parts, and what are the functions of its parts? What are the conditions of its use, its required dimensions, and the traditions or conventions governing its design? Arthur Lyman Tuckerman, *Design* (New York: W. T. Comstock, 1891). 8.

⁵³ Given the building program, its required programmatic spaces, the dimensional limitations of a given site, and the material, constructional and stylistic traditions of a region or climate, Tuckerman's questions would be directly and specifically answerable.

⁵⁴ In response to the information gathered from answering his questions, Tuckerman directs the designer to accordingly choose the appropriate material, construction technique, proportion, decoration, and style. Tuckerman. 9.

and the decorative and industrial arts were conceptually similar enough that his treatise assumed identical design processes.

As the previous examples demonstrate, architecture was understood as existing within a variety of relationships to the fine and decorative arts. Architecture was seen as a mother nourishing her progeny, as a pesky younger brother struggling to keep up, as a black sheep who never quite fit in, as a prospective beau eager to find common ground, and as a narcissist who assumes perfect alignment with his intimates. Nevertheless, the notion of architecture as the mother art remained an *idée reçue*, unexamined and unexplored, until it was reconsidered and historicized by two members of the Arts and Crafts movement.

In a series of articles, the designer Charles R. Ashbee explored architecture's maternity of the arts as a matter of parentage of both the "minor arts" and the fine arts.⁵⁵ He historicized these maternal relations, arguing that "In olden times architecture was the dominant art; painting, sculpture, and the crafts, or minor arts, were dependent on it. Hence it is called the mother art."⁵⁶ The rise and fall of these maternal relations is particularly well illustrated in his history of furniture design. Here, Ashbee suggested that architectural motifs, geometries, and styles are imported as a form of situated influence. Thus furniture is designed to fit aesthetically within pre-styled works of architecture, and architectural styles remained codified in that furniture even when transferred to other architectural contexts. In the 'modern' production of Ashbee's time, however, architecture's children grew wayward due to rampant stylistic eclecticism; "that is to say, they have all styles and no style; they have no dependence upon architecture, because architecture is eclectic as they are, and so, having nothing to depend on, they run riot by themselves."⁵⁷

In this way, architecture's leadership and influence was understood to have once been a real and true factor in design, but this factor had waned to non-existence in contemporary times.⁵⁸ The particular innovation of Ashbee and others' historicization of architecture's

⁵⁵ His articles formed a six-part series in the journal *Work: The Illustrated Journal for Mechanics* between October 1893 and September 1894. His argument about the relationship between architecture and other arts can be found in the second of six parts, "On the Growth and Decay of the Furniture Industries."

⁵⁶ Charles R. Ashbee, "On the Growth and Decay of the Furniture Industries," *Work: the illustrated weekly journal for mechanics* 6, no. 246 (1893). 307.

⁵⁷ *Ibid.*

⁵⁸ Similarly, the artist and designer Walter Crane argued in his 1898 book, *The Bases of Design*, that of the ten criteria, motivations or determinants of design, architecture was among the earliest and yet the one that had lost the most influence. Echoing earlier theorists, Crane located the birth of the arts in the needs of primitive man,

maternity is not their formulation of how or why architecture may have given rise to other art forms, but the recognition that such relations change over time and depend to a large extent on the changing conditions of production and cultural interests and affiliations.

The Limits of Design: Nature, History, Invention, Imitation

The debates of nineteenth century design discourse extended beyond the definition of design and its various practices and professions. These debates also encompassed the formal and intellectual models that underscored design's activities as well as the aesthetic ambitions proper to its processes and products. Unlike twentieth century design's rejection of external models and its emphasis on novelty and innovation, nineteenth century design theorists uniformly believed that design had to be based on *some* model. They disagreed vociferously, however, about which was the proper one, and how exactly designers were to interact with that model to produce new forms and patterns. Some theorists maintained the authority of historical style, while others argued that the infinite forms of nature provided the most fruitful sourcebook for designers and simultaneously ensured the most ethical or truthful forms. Also, in approaching either historical elements or natural forms, theorists suggested a range of methods for transforming source into product. These approaches ranged from direct and realistic imitation to conventionalization, which rationalized and generalized the idiosyncrasies of the individual model, and of course to invention.

Early advocates of nature as the proper model and subject for the fine and decorative arts argued their position from ethical perspectives that paired natural subjects with a demand for imitative fidelity to sources that manifested in an aesthetic of realism. Benjamin

whose want of shelter led him to direct his first creative impulses toward "the form and character of the dwellings of man and their accessories." (3) In this way, architecture was indeed the mother of the arts, serving as the first art that gave rise to subsequent art forms. Touching on the major historical styles of architecture, Crane argued that architecture's influence on the fine and decorative arts had been strong throughout Greek and Roman antiquity and the Gothic period, only to wane in the following centuries. "From that time architecture, as the supreme organic and controlling influence in the arts of design, gave up her prerogative of leadership, and since has rather been on the whole displaced in artistic interest by the other arts; or rather, with the change of the principle of organic growth out of use and constructive necessity in architecture for those of classical authority, archaeology, or learned eclecticism, the different arts, more especially painting, began an independent existence, and, with the other arts of design, may be said to have been more individualized and less and less related both to them and to architecture ever since, reaching the extremest points of divergence perhaps in our own days." For Crane, design of late had abandoned the principles of utility and construction, which allowed architecture and its descendant art forms to maintain their contemporaneity, in favor of an appearance-based focus on historical style that foreclosed on innovation in favor of endless eclectic recombination. Walter Crane, *The Bases of Design* (London: George Bell and Sons, 1898). 42-44.

Robert Haydon's treatise on painting and design held up nature as the primary model for art and design, requiring art to reflect and recreate man's perceptions of the natural world. As the pinnacle of natural development, the human figure was for Haydon the model for design *par excellence*.⁵⁹ Haydon's conception of imitation centered on the artist's imagination,⁶⁰ allowing for a measure of invention within the imitative act.⁶¹ Imitation becomes a standard of perceptual realism that worked in concert with an inventive faculty limited to content, rather than to form or representational technique.

John Ruskin was also an ardent advocate of nature as the supreme model and source book for the fine arts and design.⁶² Contrasting two approaches he termed idealism and realism, Ruskin described former as a kind of formalism that found visual pleasure in the abstract and sensorial experiences of color and line, and celebrated the latter as an approach of truthful representation that strove to produce accurate depictions of nature.⁶³ Not only did Ruskin disapprove of art or ornament based on subjects other than the natural world and the human body, he also protested against the conventionalization of natural forms. He viewed conventionalization as unethical in representational art forms and grudgingly necessary in industrial art. For Ruskin, conventionalized ornament and the types of decorative and industrial arts that required it were subordinate both visually and conceptually to the representational fine arts, and permitted only when its objects were not central to an aesthetic experience.⁶⁴

⁵⁹ In an argument common to the first half of the nineteenth century, he appealed to the long historical tradition of organicism, justifying it according to the authority of the Greek historical tradition of realistic and sensitive depictions of human anatomy. Haydon. 16-17.

⁶⁰ "The power of representing things exactly as they are, constitutes the painter in domestic art; while that of restoring them to what they were at creation, constitutes the great painter in high art." Ibid. 7-8.

⁶¹ Haydon encouraged the artist to utilize his or her imitative faculties in the service of representing invented subjects, expressions, and situations "independent of historic relation or poetic description." Ibid. 300.

⁶² Writing with representational forms foremost in mind, like painting and sculpture rather than industrial or decorative arts, Ruskin's insistence on artistic fidelity to nature deployed numerous lines of argumentation, including cultural health, honesty, and artistic hierarchies. In one essay, Ruskin compared the naturalistic ornament of Scotland with the geometric and conventionalized ornament of India, correlating the former with virtue and natural delight and the latter with a destructive sensuality and indolence, suggesting an ethical dimension to the choice of decorative source material. Ruskin, "The Deteriorative Power of Conventional Art over Nations."

⁶³ "The Unity of Art." 65.

⁶⁴ In one essay, Ruskin outlined the situations in which conventionalized decoration was permitted: when materials were unable to accommodate accurate depiction, when the viewing conditions did not permit appreciation of fine work, and when decoration was applied to a subordinate element designed to highlight another work that was the primary focus, as in a picture frame. "Modern Manufacture and Design." 85.

As time passed and theorists became increasingly concerned with the decorative and industrial arts as their primary subject, some continued to tout the sourcebook of nature, but did so by jettisoning the rhetoric of truth and ethics as well as the mandate of realistic imitation. For example, a 1872 volume edited by the English art educator and botanist Frederick Edward Hulme, *Art-Studies from Nature, as Applied to Design: For the Use of Architects, Designers, and Manufacturers*, compiled four essays by Hulme and others that sought to legitimize rarely utilized sectors of the natural world as a sourcebook for design and ornament [Fig. 1.07].

While Hulme encouraged designers to look to the native plants of Great Britain rather than the foreign-born acanthus leaf or lotus flower, native to much warmer climes, other essays pointed to seaweed, snowflakes and even “organic remains” such as seashells, honeycomb and fossils as fruitful models. Making space for ornament within the hierarchy of the fine arts, Hulme proposed that botany was to the ornamentist what anatomy was for the painter or sculptor—a necessary body of knowledge central to his or her most common subjects.⁶⁵ Yet, unlike the realism and accuracy assumed to be the standard for sculpture and painting, Hulme eschewed copying or “direct imitation” in favor of “a due adaptation of the natural form to the purpose of our design.”⁶⁶

The literature on architectural design placed a greater emphasis on historical tradition than it did upon nature, and was particularly concerned with the form of codified elements and rules for their assembly, and with stylistic propriety. However, the architectural literature was a great force in legitimizing and developing strategies of conventionalization. The architect and educator Thomas Leverton Donaldson’s Vitruvian treatise eschewed the imitation of nature in favor of architecture’s own history as its most important model and precedent.⁶⁷ In response to earlier arguments for the perfect mimicry of nature, Donaldson

⁶⁵ Frederick Edward Hulme, “The Adaptability of Our Native Plants to the Purposes of Ornamental Art,” in *Art-Studies from Nature, as Applied to Design: For the Use of Architects, Designers, and Manufacturers* (London: Virtue & co., 1872). 5.

⁶⁶ *Ibid.* 7.

⁶⁷ While Donaldson acknowledged the operations of “the laws which govern nature,” he also recognized the conventional laws that functioned to govern man-made historical styles, and it was these he felt bore most significantly upon questions of architectural design. Thomas Leverton Donaldson, *Architectural Maxims and Theorems in Elucidation of Some of the Principles of Design and Construction: And Lecture on the Education and Character of the Architect* (London: Pub. for the author by J. Weale [etc.], 1847). 17.

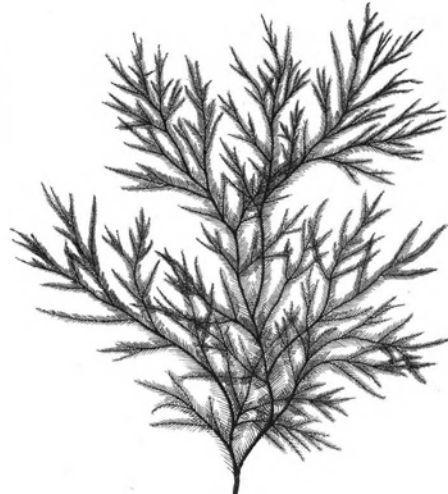
admirably fits it for the service of the designer, the leaves being very ornamental in form, and the long trailing stems admitting of great freedom of curve, while for its use in decorative art a further great recommendation exists in the power of representing the plant under several phases of growth without violating natural



Blackberry.

truth, as at one and the same time we find the opening bud, the fully-expanded flower, and the fruit of all sizes and stages of development, varying in colour from green, light red, and crimson, to deep purplish black in its progress to maturity. We thus gain great variety of form, and also, when admissible, of colour. The bramble appears to be of especial value in ornament

Of beneath the warm and brilliant rays of summer's sun, in



Portion of *Sphaeraria plumosa*.

shallow skiff, I have glided on the calm and polished surface of

reference to those ratios of number which are found most acceptable in composition.

Founded upon a strictly geometric base, and a uniform repetition of a certain concordant irregularity of parts, bound together in one harmonious unity by the laws of circular composition, which serve to lend beauty to their constructive details, and

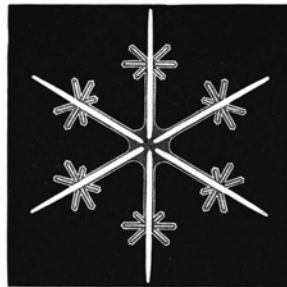


Fig. 40.

constitute the arches of the figure, we are impressed with a conviction of their truth and conformity to the natural principles of beauty.

The impulse created in their favour is thus subsequently confirmed on rational and acknowledged grounds of admiration.

of these fossils, and at the same time to show the elegant curvatures of these shells, when viewed in different positions.

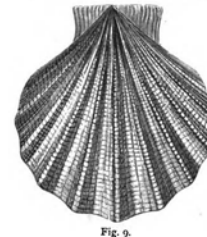


Fig. 9.

The *Trigonia carinata* (Figs. 10 and 11), one of a class of fossils

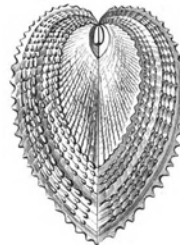


Fig. 10.



Fig. 11.

which has particularly engaged the attention of Agassiz, is also

Figure 1.07 *above left*: F. Edward Hulme, ornament derived from blackberry plant, from "The Adaptability of our Native Plants to the Purposes of Ornamental Art" (13); *above right*: S. J. Mackie, drawing of seaweed, from "Sea-Weeds as Objects of Design" (131); *below left*: James Glaisher, drawing of snowflake, from "The Crystals of Snow as Applied to the Purposes of Design" (157); *below right*: Robert Hunt, drawing of seashells, from "The Symmetrical and Ornamental Forms of Organic Remains" (192). Essays published in *Art-Studies from Nature, as Applied to Design: For the Use of Architects, Designers, and Manufacturers*. London: Virtue & co., 1872.

drew a nuanced distinction between imitation and copying. If copying required fidelity of the artist or architect to the details and idiosyncrasies of the original—plagiarism, in his view—imitation required a formal and conceptual translation in which the source form was modified to suit the material in which it was to be rendered and the aesthetic purpose it was to serve.⁶⁸ It was this creative and inventive aspect of imitation which led Donaldson to encourage architects to study the ancients and other historical periods enough to work in the spirit rather than the letter of their laws.⁶⁹

Edward Lacy Garbett extended the notion of an idealized or inventive imitation from a general notion of adaptation to a more elaborately conceived practice of conventionalization. Unlike Donaldson, Garbett believed that the imitation of nature was architecture's highest aim, and he was critical of Vitruvian theorists who posited the primitive hut as the natural state of building. Rather than imitating its own "rudest productions," he proposed that architecture should imitate nature by imitating its processes, rather than copying its forms.⁷⁰ Building upon Donaldson's finding of interpretive creativity in the process of inventive imitation, Garbett conceived of imitation as driven by a principle of generalization. Working within this principle, the architect or artist analyzed source material for those characteristics common to "the whole of a given class or kind of objects" rather than those specific to the individual example.⁷¹ For Garbett, conventionalization was actually a form of idealization that improved and corrected nature, making objects as nature should make them rather than as it actually did.

⁶⁸ "Architecture has its conventional laws; and a flower or a leaf even, introduced in a moulding, a frieze, or a capital, must be aesthetically modified to adapt it to its application. [...] He, who copies, is bound by the letter of the original. He, who imitates, is bound only by the spirit and essence of the type: for in copying is not the most exact copy the best? but to copy is not to create, and true originality does not consist merely in variation. [...] To copy is the instinct of the mere animal faculty; to imitate is the property of reasoning intelligence." Ibid. 32-34.

⁶⁹ "True genius develops [sic] itself by the study of the productions of others, and by an investigation into those laws of nature in which result the beautiful and the sublime of material objects. Transfer these laws to your art. Let your interpretation of the principles of the graceful and the grand open to others new sources of pleasing thought, fresh images of proportion and fitness." Ibid. 76.

⁷⁰ Garbett. 110.

⁷¹ Ibid. 111. And it was indeed this process of generalization, or conventionalization as it was more commonly termed, that distinguished architecture from painting or sculpture. "What natural objects or *individuals* are to the painter or sculptor, natural *species* or even *genera* must be to the architect and designer of ornament. The general nature which they are to embody is not that of a single species, but of some higher natural division,—a genus,—a family,—an order,—a class,—a whole kingdom,—nay, in some cases, even universal nature, animal, vegetable and mineral; or at least all those objects in universal nature which possess some particular character or quality which it is the object of the architect to express with the utmost force." (75)

In the later nineteenth century, design theory developed a looser attitude towards the bounds of propriety which had always limited the sources of decoration and regulated their application. This was accompanied by a growing attraction to the novelty and variety of eclecticism. One of the primary ways this was expressed was in the expansion of source material to draw equally on historical styles, natural forms, and abstract geometries, while still maintaining the need for designers to study past designs. Earlier theorists had supported either nature or history as the proper source for new design, and elaborated procedures for *how* to learn from those sources based in realistic imitation as a matter of propriety and truth. By the 1870s theorists settled on a vague notion of *historia magistra*—that a generalized notion of history and a familiarity with past works served to instruct present-day endeavors.⁷²

As a practicing designer, Christopher Dresser adopted an approach of profound pragmatism that greatly influenced his theoretical edifice—one that acknowledged the role of an individual designer’s ability and originality in the process of conventionalization. He rejected the pictorial or realistic depiction of natural forms on decorative arts objects, such as carpets or textiles, for reasons of compositional propriety and material honesty.⁷³ Dresser encouraged promiscuity with respect to source material, drawing evenly from historical styles, natural models, and any other examples that drew his eye. Revealing that in his own design practice he regularly experienced periods of greater and lesser creativity, Dresser gave advice for times spent working in an “ordinary mood” and for the “superior moments.”⁷⁴ In the former, Dresser gravitated towards a broad range of historical styles as a starting point for his own design work, drawing not only on his extensive study of existing patterns and products, but also on the feeling of his source cultures. In this way he would become “in spirit, a citizen of the country whose ornament I wish to simulate.”⁷⁵ However, when the designer experiences moments of intense creativity, he or she operates beyond the strictures

⁷² However, they wrote more specifically about the modes of translation from source to design, rejecting pictorial, realistic renderings of source material in favor of the conventionalization that acknowledged the particularities of the materials and techniques in which it was manifested, and sought to extract the general and the ideal out of the particularities of its models.

⁷³ Dresser found that surface decoration should complement and agree with the orientation of the planes to which it was applied, so a motif that engendered the vertical growth pattern of a plant form might be appropriate for a vertically oriented wall, but not a ceiling or floor. Furthermore, flat materials such as wallpaper, textiles or carpets would belie their own nature to artificially depict depth.

⁷⁴ Christopher Dresser, *Studies in Design* (London: Cassell, Peter and Galpin, 1876). 3.

⁷⁵ *Ibid.*

of codified styles to produce novel or innovative designs.⁷⁶ In this way, known style and motifs provided a useful launching pad for new work, but could be superseded by a discriminating eye and an internalization of quality examples and their underlying lessons.⁷⁷

Frank Jackson argued compellingly for the value of both historical and natural forms for the designer,⁷⁸ and like Dresser he encouraged the conventionalization of natural form—that is, taking the “accidental” and “particular” out of natural observation.⁷⁹ Jackson’s first contribution to this trajectory was to approach conventionalization of nature as itself a natural act. This was almost certainly a way to promote a necessary practice in the terms utilized by those in favor of more realistic mimicry.⁸⁰ His second contribution was to argue that the truth of the destination material was more important than the truth of the decorative source. That is, he shifted the concerns of propriety from the source material to the materiality of the product, recognizing in particular the translations required to represent

⁷⁶ To prepare for these moments, Dresser emphasizes “the necessity for ever seeking new ideas, and for training the mind to see new forms, or combinations of shapes, in everything that the eye can rest upon.” Ibid. 4.

⁷⁷ John Leighton and James Kellaway Colling’s book, *Suggestions in Design*, similarly encouraged creative engagement with historical style, arguing for the production of original designs in the spirit of the styles that inspired them, rather than for orthodox fidelity to codified styles. However, they did not advocate for total originality or novelty, suggesting that innovation was possible in new methods of conventionalization and new combinations of known motifs. “It is certain that no one can design or invent any work of art, solely and entirely new, without partially *copying*, or taking ideas from either nature or art. We must have some groundwork or *motif* to work upon. We have to learn all that has been done in art before our era, and to see how nature has been adapted and conventionalized by different people in former ages. We have to sift the good from the bad, the true from the false, and again study the works of nature in search of new forms and fresh modifications. For there are no forms in the whole arena of art which have not originally been taken from nature.” Like Dresser, Leighton and Colling encouraged designers to study both history and the natural world, and conceived of designerly creativity as interpretive and innovative—both in terms of examining extant designs and in creating new ones—and yet connected to tradition through an engagement with precedent. Leighton and Colling. 4.

⁷⁸ Familiarity with past work allowed the designer to build upon those achievements rather than reinventing the already discovered, while the study of nature provided both regulation in the form of “natural laws” and inspiration of new forms, textures and colors. “From the historical records of Art we gather the results of experience, and see the interpretation of natural laws. From Nature we get inspiration and material for our practice. If we disregard what has been already done, we must ever remain in artistic infancy; and again, if we close our eyes to the works of Nature, relying upon the treasures of the past, then our work will be retrogressive from the want of vitality which the study of Nature alone can give. [...] It is impossible for the designer to produce anything *true* but by the study of Nature, and it is impossible to produce anything *new* but by a knowledge of what has been done by his predecessors.” Frank G. Jackson, *Lessons on Decorative Design* (London: Chapman & Hall, ld., 1888). 2-3.

⁷⁹ Ibid. 10.

⁸⁰ “To copy Nature as she is presented to us, with all the accidents and defects, would be to render her realistically. To correct her by our knowledge of her derived from a wide study of her works, would be to treat her naturally.” Ibid. 110.

three-dimensional natural form in the flat surfaces of walls, floors, carpets, and textiles.⁸¹ As design came into its own as a profession, the concerns for the aesthetic coherence of its products eclipsed the verisimilitude of its representations.

Henri Mayeux further eroded the authority of nature and history when he expanded range of possible decorative sources as well as their modes of adaptation to include a new category of invented man-made forms. This differed from architecture's insistence on the authority of its own historical forms in that Mayeux populated this category with industrially produced objects such as scrolls, vases, arms, and anchors. Thus, for the first time, manufactured objects became both the source and the destination of decoration. Furthermore, Mayeux articulated the process of using source material in the creation of new design in terms of apprehension, translation, inspiration and interpretation. Significantly, these were *open* processes relying as much on the specificity of the source as on the creativity of the interpreter.

As theorists continued along their trajectory of opening up the categories of decorative source material while simultaneously eschewing imitative fidelity and claiming more creativity for the artist, Richard Hatton broke with his predecessors by actively rejecting historical authority. His critique targeted not only the use of particular historical styles or form, but the very authority of age itself.

No one has a right to dictate the principles of art or taste, though they be based upon the authority of artists and artistic societies. For the very authority of these law-makers is no authority at all: the next generation will, in all probability, upset the whole. The creed of art is best unwritten, subject as it is to every fluctuation of human thought and experience. To assume that our rules and principles are infallible is to destroy art altogether, not as a profession perhaps, but as a *living* thing.⁸²

Hatton viewed the artist's job as a disruptive and innovative one that was guided by the artist's personal taste, aesthetic responses, and interpretative capacities. In essence,

⁸¹ "In decorating the floor of a house, whether by carpets or otherwise, the prime condition to be met is the essential *flatness* of its surface; and, therefore, any decoration that tends in appearance to interfere with this quality is wrong." As a result, Jackson and others downplayed shading and other techniques used to represent depth, and instead emphasized the use of outline as an optimal compositional element to render flat, conventionalized decoration. *Theory and Practice of Design: An Advanced Text-Book on Decorative Art; Being a Sequel to the Author's "Lessons on Decorative Design* (London: Chapman and Hall, ltd., 1894). 59.

⁸² Hatton. 1.

“Designers must aim at producing things they like to look at.”⁸³ The styles in which designers worked were to be reflective of their personality, and the value of studying historical style no longer had any contemporary value—it was only useful as a means of understanding the historical period from which it came.

The Art of Composition: Form, Ornament, and the Waning of Theoretical Authority

If design theorists were concerned about the sources and models of decoration and design, a second and equally pressing concern centered on the designed object itself—specifically, the degree to which that object’s form, material, fabrication technique, or utility imposed restrictions and regulations on its applied decoration. For most of the century, form played an important role with respect to decoration, but the perceived primary version of form shifted over time, from the form of decoration’s source material, to the form of the objects to which it was applied, and even to the overall graphic form of the decoration itself. At various times and to varying degrees, form determined the structure and appearance of decoration. This led theorists to question whether the design of decoration included the object’s form at all, or whether form and ornament were two distinct and specialized endeavors. After the earlier fine-arts-centric model of ornament waned, two competing claims for decoration emerged. One model utilized ideas that originated in architectural theory to link decoration to the materials and technique of its construction, as well as the overall formal utility of the finished object. Another model gradually disengaged from this concrete view, reformulating decoration as an abstract endeavor whose primary concerns were compositional. This was in part a response to the growing separation of the labor of decoration from that of form making.

In many ways, the fine arts model and its insistence on realistic pictorial rendering served to privilege form over pattern and ornament. Three influential views of this model have already been discussed: Haydon’s assertion of the primacy of the human body, Dunlap’s definition of design as the representation of form, and Ruskin’s high estimation of realistic rather than conventionalized representations. All three privileged form both conceptually and visually, relegating the abilities of the material or technique to realistically render form to a secondary concern. This placed the decorative arts in a necessarily secondary or ‘minor’

⁸³ Ibid.

position with respect to the fine arts. An important if subtle shift occurred when decoration became subordinate to the form of the object to which it was applied rather than to the form of its inspiration or source. Redgrave's *Manual of Design* reveals the basis of this shift in architecture, arguing that the origin of decoration properly lay in construction and utility.

In all arts applied to articles for the use, convenience, and comfort of man, from the buildings which shelters him and the objects of his care, to the meanest utensil which he values enough to desire to render it ornamental, the utility and fitness for intended purpose is, or ought to be, the first consideration. [...] Granted that 'design' includes both construction and ornamentation, and that this latter should arise naturally out of the appropriate decoration of suitable materials, we shall arrive at a law of good taste, which, while it applies to architecture primarily, is equally to be observed in regard to the furniture and fittings which buildings contain, and to the smaller articles of everyday use.⁸⁴

The dependence of ornament on construction led Redgrave to make an important distinction between 'design' and 'ornament.' "Design' has references to the construction of any work both for use and beauty, and therefore includes its ornamentation. 'Ornament' on the other hand implies merely the decoration of an object already constructed."⁸⁵ In this way, Redgrave viewed the work of 'design'—and correspondingly the work of the designer—as responsible for the whole of an object or building. Design determined not only visual appearance, but also the overall physical form and structure and the processes and materials of production. Ornament, in contrast, comprised only a subset of the total effort and thinking required to produce an object. In delineating this difference Redgrave acknowledged the difference between 'designers' and 'ornamentists' and their relative responsibilities for the labors of conception and production.

Over time, the concept of design as it was used by decorative and industrial artists shifted to align with Redgrave's notion of ornament. It came to account for the decorative, compositional, or surface treatments of objects or buildings rather than their overall shapes or forms, and this corresponded to a division of labor that found designers' responsibility increasingly limited to those characteristics. One aspect of this development was the growing distinction between form and ornament, and the belief that different sets of principles

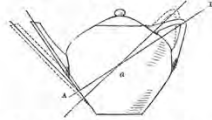
⁸⁴ In this analysis, architecture is as a primarily utilitarian endeavor whose decoration it utilized to "ornament construction, not construct ornament"—rather than the narrower definition that is restricted to the building's appearance. Redgrave and Redgrave. 36-38.

⁸⁵ Ibid.

or disadvantage. If the handle is a disadvantage we had better be without it, and hold the vessel by merely sustaining it between the hands, protected from the heat by two kettle-holders.

30. In order that the handle and spout be rightly placed on a tea-pot or similar vessel, it will be necessary that the form be originated with special reference to these affixes, and with full knowledge of the principles on which these additions are to be made. The first thing to be ascertained, in order that the spout and handle be rightly situated in relation to each other, is the position of the centre of gravity of the general mass of the vessel (. *a*, fig. 115); this being found,

FIG. 115.

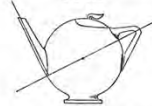


the centre of the handle falls upon any right line (A B, fig. 115), which passes through the centre of gravity (. *a*), but that which is of special importance is this—the spout must also fall upon a line so situated that it forms a right angle with the line passing through the centre of gravity and the centre of the handle, as the line A B. If the handle is raised to the position indicated by the dotted line the spout must be lowered to the position of the dotted spout, for the direction lines of the

spout and handle must bear the relation to each other of the lines enclosing the right angle. If the angle be made obtuse, leverage tending to bring about the lowering of the teapot will be induced, and if the angle be made acute, pressure will have to be exerted in order to depress the mass; hence it is of the utmost importance that the relation of right angle be maintained between the spout and the handle.

31. In some instances we find the tea running from the spout of the teapot before the pot itself is full, this of course arises from having the spout short; but a more common evil is the tea runs over the top of the pot before it runs out of the spout, when an attempt is made to pour out the liquid. In order the more fully to prevent this, we see no objection whatever to the lid having the form and situation shown in fig. 116, if necessary, for fitness and adap-

FIG. 116.



tation must be a first consideration in the production of useful objects.

32. In respect to the placing handles on jugs nothing can be worse than our common practice of attaching high handles to vessels of this class, which are without the advantage of a spout deviating in direction from the vessel. When we take hold of the water-

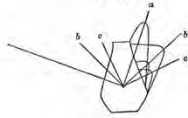
ewer in the bedchamber we grasp the handle near its base, just where the handle ought to be situated; and were it not that the handle is continued to the

FIG. 117.



lower portion of the jug it would be as difficult to pour water from it as it is to raise a chair by taking hold of one of its legs. Fig. 117 represents a

FIG. 118.



jug, and the dotted handle marks a correct position for this affix. Fig. 118 also gives positions for the handle and relative positions for the spout; thus the

handle *a* and the spout *a* correspond; the handle *b* and the spout *b*, and the handle *c* and the spout *c*.

33. A consideration of the principle of adaptation will further show us that each material is especially susceptible of some particular treatment, and this will reveal to us the folly of attempting the imitation of one material with another. Clay is especially adapted for being formed into jugs and other vessels of capacity which are required to hold water; why, then, cause clay jugs to imitate wicker work, as though it were to any extent adapted for fabrication into vessels which of necessity must be water tight? The folly of supping soup with a knitting-needle, of lading water with a gridiron, or carrying wine in a sieve is not greater than that of causing a jug to appear as wicker-work. Neither is the making a jug in imitation of cooperage much less a folly; still, a barrel will hold water, but why make an earthen vessel look like a specimen of bad cooperage and of defective wood carving when the clay can be wrought into objects of capacity of infinitely greater beauty than those formed of wood? Wood has its special uses, and is peculiarly suited to certain works, and clay is adapted for the formation of special articles; then one material should not stoop to do badly what the other does well when it can do well what the other cannot; the effort must be to find the susceptibilities of each material, and to apply the utmost skill to the furtherance of its legitimate uses.

34. Not only must the susceptibilities of the material be ascertained, but the most appropriate mode of fabricating the material into forms of utility and

Figure 1.08 Christopher Dresser, diagrams describing the proper relationship between handles and spouts in pitchers and teapots, from *The Art of Decorative Design*. (1862) New York: Garland Pub, 1977. pp. 134-137.

regulated each. Theorists around the mid-century continued to include form-making within the designer's purview. For example, Beaumont, writing in 1853, still described both form and ornament as of primary concern to a variety of decorative and industrial arts professions, such as calico printers, iron founders, china manufacturers and jewelers.⁸⁶ Christopher Dresser's first book, *The Art of Decorative Design* (1862), primarily addressed flat decoration but also instructed readers on three-dimensional form, such as in a section on the placement of handles and spouts on pitchers [Fig. 1.08].⁸⁷

The distinction between form and decoration or ornament continued to grow as theorists argued that decoration must be subordinated to the object on which it appeared. The nature of decoration's subordination was articulated in a variety of ways. One line of argumentation held that decorative additions must not disrupt the functionality of the object. Others emphasized the primacy of the object's structure, mandating a decoration that was aesthetically subordinate to form that took its cues compositionally and geometrically from the shape and contour of the object's form.

Christopher Dresser understood decoration to be "superadded to utility, render[ing] the object more acceptable through bestowing upon it an amount of beauty that it would not otherwise possess."⁸⁸ In his view, decoration was a secondary processes applied to an object whose form had already been carefully calibrated to satisfy its desired utility.⁸⁹ Richard Hatton warned similarly against decoration that appeared to be incongruous with its object. He argued that decoration must follow the example of nature in which "beauty and structure are interwoven: the beauty is not added to the structure. The two are inseparable. And so in design, the decoration must grow up with the structure."⁹⁰

⁸⁶ Beaumont. 184.

⁸⁷ However, in this and subsequent books, it became apparent that though Dresser encouraged the examination and analysis of three-dimensional form in the world, particularly in nature, he assumed that the designer's output would be exclusively flat, and applied to such things as walls, carpets, textiles.

⁸⁸ Christopher Dresser, *The Art of Decorative Design* (New York: Garland Pub, 1977). 1.

⁸⁹ "Utility, or adaptation to the purpose intended, must precede enrichment. The most useful form for the object, or most appropriate condition of the surface to be decorated, must be first ascertained, and then the enriching may take place by the application of forms or lines which in no way detract from utility or comfort; but no other form than that which is most desirable must be used in order that a special treatment of the surface be employed, for perfect regard to fitness can alone save art from suffering condemnation." Ibid. 117.

⁹⁰ Hatton. 2. While Hatton seems to depart from Dresser in appearing to propose a design process that addresses form and decoration simultaneously, he acknowledged that other factors required designers to consider structure before decoration, such as the desire for structural economy. While in nature, beauty and

As the discourse on decorative subordination developed, however, theorists began to posit separate regulatory principles for form and decoration, and to acknowledge distinct and even equivalently valued ambitions for each. This is seen mostly clearly in Henri Mayeux's *A Manual of Decorative Composition*. Superficially, Mayeux viewed form as a primary characteristic that defined the art object and preceded the application of decoration.⁹¹ Mayeux identified a number of formal faults that threatened the object's beauty, and articulated distinct guidance to avoid them. This included the use of dominant shapes and avoiding the equal weighting of parts, advice that was specific to three-dimensional design and not necessarily applicable to flat decoration and pattern. In his chapter on the application of ornament to form, decoration applied to three-dimensional form was determined to a certain extent by the specificities of that form and the desire to use decoration for formal emphasis.⁹² However, the negotiation between decoration and form was more collaborative than the rhetoric of subordination would admit, and in many instances decoration was used to enhance form.⁹³ In Mayeux's instruction, the principle of decorative aesthetic subordination belied a much more complex interchange between decoration and form, one that recognized a separation between decorative ambitions and formal ones. This hinted at a coming independence for decoration, free from subordinating regulations.

Theories of decorative independence, or the uncoupling of decoration from dependency upon form, material or fabrication technique, were not actually a late development. Variations on such theoretical position appeared over the whole course of the nineteenth century. Early texts, such as the unsigned *A Compilation of Splendid Ornamental Design from Foreign Works of Recent Production* (1835) and Enrico Salandri's later *Architectural and Decorative Designs* (1869) tacitly argued for decorative liberation via the presentation of collected

structure may be mutually constitutive and temporally inseparable, in the realm of man-made design they were indeed determined sequentially, with decoration serving to "follow and confirm the structure." (9)

⁹¹ Mayeux. 11.

⁹² For example, he advocated a principle of simplicity that allowed the overall form to maintain a visual dominance over the decoration.

⁹³ In one passage, Mayeux discourages designers from using decoration to create equal divisions in a form, but rather encourages their use to create dominant and subordinate divisions of greater and lesser weight. (Fig. pg 76) In other, he explores the use of decoration's "directing influence," drawing the eye over the surface of the form in ways that could create visual continuity and elongation or fragments. (Fig. pg 80, 81) Similarly, decoration that took advantage of the graphic possibilities inherent to a form, such as in fully utilizing the half-doughnut-shaped area available in the decoration of a fan or collaborating with the protrusions and recessions of a vase, rather than conflicting with them. (Fig. pg. 85, 88)

decorative schemes that could, according to the authors, easily be applied to alternative object types.

The authors presented ornamental compositions originally executed as painted panels, woven carpets, carved entablatures or embroidered chair covers, to name a few examples, They presented these, however, as eminently portable rather than inherently bound to their original material or object type.⁹⁴ Leighton and Colling too located an important part of design agency in drawing rather than in making, suggesting that artisans could achieve a greater degree of self-determination through the acquisition of drawing skills.⁹⁵ Despite the fact that artisans ultimately produced designed objects, the creative and intellectual labor of design—a labor that resulted in no less than the “embodiment of thought” for Leighton and Colling—could only be performed through the medium of drawing. In suggesting that decoration was applicable to multiple forms, materials and construction techniques, texts of this type implied a disconnection between decoration and its origins in a specific form, material or context. Simultaneously, they articulated the idea of a new independence for design born of the abstract space of the drawing.⁹⁶

For many theorists, this disconnection was a positive condition that emphasized the abstract nature of design, a result of the distance between the designer’s intellectual act of drawing and the artisan’s embodied act of making. Some theorists promoted an unbounded decoration through their interest in drawing-centered constructions.⁹⁷

⁹⁴ “Although in many instances these may be inapplicable for precisely the same purposes as those for which they were at first intended, yet they will be found eminently serviceable for selection and adaptation, this being the chief object of the Work; and with the consideration, that they would generally be applied to other uses, it was thought unnecessary to state for what they were designed originally.” *A Compilation of Splendid Ornamental Design from Foreign Works of Recent Production*, (London: Simpkin and Marshall ; J. Weale, 1835). n.p. Similarly, Leighton and Colling’s *Suggestions in Design* presented a sourcebook of decorative drawings that provided motifs that would “suggest, by some slight turn or alteration, a form or kind of enrichment which may be adapted to their purpose.” Leighton and Colling. i.

⁹⁵ The authors were troubled by the lack of drawing skills possessed by artisans and their reliance upon designers, asking “But is this as it should be? We never shall have high-class art workmanship in this country until the artisan, the executant, is also the designer of his own work, and this he can never be unless he practises the power of drawing.” . 2.

⁹⁶ In the long series of plates that followed Colling’s textual descriptions, the decorative drawings were organized according to style and period, and while some were obviously architectural in nature, as in columns, brackets or pedestals, most were drawn as flat pattern or shallowly rendered relief, offering the book’s readers decontextualized motifs that could indeed be applied in a variety of scales, materials and contexts.

⁹⁷ The English painter and architect Robert William Billings defended the centrality of geometrically structured composition, abstracted from its context or destination, in his 1849 book, *The Infinity of Geometric Design*. In it, he argued for the importance of a rigorous geometric structural diagram underlying repeated decorative patterns not only to ensure its aesthetic quality, but more crucially as a vehicle for variety and idea generation manifested

The centrality of drawing to the labor of design allowed theorists in the later nineteenth century to throw off material or technical determination of decoration in favor of a consuming interest in composition. Leaving aside questions of decorative source materials and their translation into flat, conventionalized decoration, theorists turned their attention to the problems and principles of composition itself. In so doing, they elaborated the technics of arrangement, aggregation, and repetition of motifs or elements into an ideal whole, uncomplicated by its application to form. The Boston-based art educator Charles Alfred Barry's *Primer of Design* (1878) instructed students in the principles of composition in decorative design. This compositional process created designs in the abstract and then applied them—or “attached” them, in Barry’s parlance—to actual forms like vessels, furniture, or architectural elements.⁹⁸ To govern the deployment of those line types, Barry outlined a plethora of regulations: a trio of “ruling principles” determining unity, symmetry and continuity, a series of “laws” dealing with repetition, alternation, radiation, and proportion, and a list of “methods of construction” that included the bi-, tri-, and multi-symmetrical.⁹⁹ This proliferation of rules and regulations was spurred in large part by the waning of traditional sources of authority.

Other experts in the design of decorative composition eschewed long lists of rules in favor of the how-to format, refiguring design as purely procedural. Leland’s *Drawing and Designing in a Series of Lessons* (1889) was organized in three parts, sequentially treating curves, straight lines, and curves used in conjunction with straight lines. Students were encouraged

in the abstract space of drawing, without reference to scale, context, material or construction technique. “Fixed geometric forms, rather than mere fancy, as the foundation of composition, are ever to be preferred as of the utmost importance to the designer, if he wishes or intends to arrive at a successful result; at the perfect artist needs not to be told the value of elegant and faithful forms as the groundwork for his picture; for, like the great musical composer, he would never think of proceeding to elaborate and finish, without having satisfied himself about the sufficiency of his starting points.” Working in the idiom of Gothic tracery, Billings’ drawings illustrated the wide range of possible designs constructed from relatively simple geometric constructions. Departing radically from historical precedent, Billings emphasized imagination and innovation without restriction from the stylistic propriety or material determination. Robert William Billings, *The Infinity of Geometric Design Exemplified* (Edinburgh, London: William Blackwood & Sons, The author, 1849). 10.

⁹⁸ Barry too found design’s foundation in geometry, as that which underwrote nature’s vast variation with the basic elements of the straight line, the curved line, and the straight and curved line used in combination. Charles Alfred Barry, *Primer of Design* (Boston, New York: Lee and Shepard; C.T. Dillingham, 1878). 20.

⁹⁹ A longer and more heterogeneous list of “rules for elementary design” included such advice about the treatment of natural elements, the avoidance of perspective and shading, and the density of patterns, recommending that the designer fill a given area two-thirds full of ornament, leaving one-third as white or blank space. Barry ended his text with step-by-step instructions for the creation of a decorative design, starting with the establishment of an underlying grid and describing how to use tracing paper and various pencil types to gradually develop the design, elaborating a real pragmatics of composition.

to develop their skills in drawing and composition *prior* to taking up a particular craft, as Leland argued that the geometries of drawing “forms the alphabet of all the minor arts, such as modeling, embroidery, wood carving, leather work, inlaying, ornamental and practical working in wood, metals, etc, since anyone who can design simple patterns may with perfect confidence attempt any of them.”¹⁰⁰

The English artist and art educator Edward R. Taylor, associated with the Arts and Crafts movement, likewise identified line types and elementary forms as a kind of alphabet the designer could deploy in more complex compositions. His 1893 book *Drawing and Design: A Class Text-book for Beginners* was made up of a series of drawing exercises intended to demonstrate how lines could be aggregated to suggest forms or motifs, and how those motifs could be combined to create repeating patterns and borders. This emphasis on the step-by-step procedure of design was presented as a way to allow for a single process to be applied to multiple object types and materials, further establishing its independence.

A further step in the professionalization and growing disciplinary autonomy of decorative design (understood in terms of drawing and composition) occurred with the development of a unique and specialized terminology. Frank G. Jackson’s *Theory and Practice of Design* (1894) presented an encyclopedic compendium of pattern types and instruction in constructing them, utilizing a highly specialized vocabulary only accessible to professionals.¹⁰¹ For example, Jackson distinguished “spotting” from “powdering” to differentiate the use of large contrasting ornaments to create the impression of spots from afar from the use of small less contrasting ornaments to give an impression of a dusting of color.¹⁰² Other types of pattern-creation techniques included “imbrication,” or the use of underlying geometry to combine large spot ornament with a smaller pattern,

¹⁰⁰ Charles Godfrey Leland, *Drawing and Designing in a Series of Lessons*, Kensington Art Series (Chicago: Rand McNally, 1889).

¹⁰¹ *Theory and Practice of Design* was a sequel to an earlier volume, Jackson’s 1888 *Lessons on Decorative Design*. In that text, Jackson addressed composition, and included a chapter on composition that sought to extend the principle of fitness to decoration itself. Just as objects had to be shaped and constructed in order to satisfy the utility that motivated their existence, so too should decoration be perfectly adapted to the space it was called upon to fill. This principle was to regulate the designer’s choices as to the degree and nature of the repetition, contrast, and variety they employed in balance with the harmony and unity their design achieved. That is to say, his earlier work attempted to maintain a compositional propriety based on form. While in his earlier text, Jackson approached decoration as something determined by form, utility and material, by 1894, his interests had become consumed by composition and the technics of pattern creation.

¹⁰² Jackson, *Theory and Practice of Design: An Advanced Text-Book on Decorative Art; Being a Sequel to the Author’s “Lessons on Decorative Design.”* 14.

“vermiculation,” or the creation of a ground condition using wavy lines in a fine scroll, and “free-all-overing,” meaning a less structured disposition of decoration over an area.¹⁰³ The shift in Jackson’s concerns from decorative propriety to the creation of a professional lexicon underscores the growing importance of composition as a technical skill particular to decorative designers.

The waning of concerns with propriety and other regulatory mechanisms in favor of an increasingly technical and procedural approach to composition was widely shared at the close of the nineteenth century. This took the form of elaborate and advanced instructional texts, designed to teach its readers how to achieve their own personally defined aims and intended effects. For example, the bulk of Richard Hatton’s *A Text Book of Elementary Design* (1894) addresses compositional problems and their visual consequences, aiming to instruct readers how to most effectively tune their designs according to their desired effects. Toward this end, Hatton discussed dynamic and static forms, principles of combination or unity (parallelism, radiation, rectangulation), principles of multiplicity (variety, contrast and, strangely, monotony) as well as chapters on filling spaces and the distribution of masses.¹⁰⁴

These abstract categories of composition provided designers with conceptual tools for compositional manipulation while avoiding any suggestion of ethical or aesthetic imperative. In fact, Hatton argued against such regulations, declaring that “We must never do a thing in design because someone, no matter who, has said it is *proper* for it to be done, but because it seems inevitably the thing to be done, and because we should be offended and miserable if it were otherwise.”¹⁰⁵ Hatton was more explicit than most in his rejection of theoretical as well as historical authority, and his confidence in the unregulated tastes of the individual designer demonstrates his affinity with the increasing turn towards composition as a technical endeavor.

By the time the Hewitts opened the doors of their museum to the public in 1897, the decorative arts and design had undergone a century of substantial shift and change. The ‘decorative arts’ had emerged as a capacious category encompassing a huge variety of object

¹⁰³ Ibid. 19.

¹⁰⁴ Hatton’s text did not lay out a clear system of regulations, but rather presented a range of techniques and solutions, as well as practical instruction in creating them, that he hoped would aid designers in the production of variety and novelty, ultimately based on their own inclinations and tastes.

¹⁰⁵ Hatton. 71.

types and fabrication techniques, gathering them together in an effort to highlight their aesthetic elements and de-emphasize factors such as the technological, cultural or utilitarian considerations involved in production.

At the same time, 'design' came forward to account for the creative, and eventually professional, activity of producing art and art applied to objects. In the process of fleshing out the procedures and principles of this activity, design theorists refined the boundaries of the end-products to which it could and could not be suitably employed. This process would ultimately lead to the exclusion of fine art. Design theorists also grappled with the legacy of historical authority, acknowledging its continued importance as a source and precedent, but elevating the natural world as more productive and relevant model.

As the bonds of traditional authority loosened, theorists parsed the relative commitments of imitation and invention, finding a place for both in design practice, most particularly in the process of conventionalization. Finally, in the latter decades of the nineteenth century, the practice of design became increasingly specialized and, as a result, emphasis shifted away from the regulations of propriety to the ethically unbound concerns of composition.

Chapter 2: “A Working Museum”: The Hewitts and the Founding of the Cooper Union Museum

The frontispiece of John Leighton and James Kellaway Colling’s 1881 book, *Suggestions in Design: Being a Comprehensive Series of Original Sketches in Various Styles of Ornament, Arranged for Application in the Decorative and Constructive Arts*, is a master class in the debates concerning ‘design’ in the nineteenth century [Fig. 2.01]. Drawn by Leighton, the vignettes at each of the four corners illustrate the well-established idea of nature as the source and model of human art. In the two lower corners, a sculptor carves a mermaid’s tail while consulting that of a fish, and a painter renders an ornamental panel while studying a display of flowers. In the upper corners, the artist himself disappears in order to demonstrate a procedure central to design—conventionalization. From the geometry of the lamp’s flame comes the diamond patterns of the drawing and window grille, and a rationalized fleur-de-lis from an unruly lily.

The central panel is flanked by two pairs of columns illustrating the evolution of architectural style through its archetypal element. Given pride of place between them, Leighton rendered a blooming plant, a designer clutching a drawing of an urn utilizing the bloom’s form, and an artisan eagerly presenting the finished work for the designer’s taciturn inspection. In other words, the central vignette presents the most important and common scenario: the production of objects through the collaboration of a designer and an artisan. Directly above and below the figures Leighton pays homage to the tools and sources of the trade: a pair of dividers is joined by basic geometrical compositions, and the painter’s palette is surrounded by various leaf forms from the natural world.

Adroitly distilling the multiple concerns of design practice into a single composition, Leighton illustrates the conventional design activity—borrowing from the sourcebook of nature and conventionalizing its forms utilizing geometry and the tools of drawing. This is done for the benefit of the book’s target audience of producers who make buildings and useful objects. Most importantly, the creative process, here illustrated by the sculptor and a painter who work directly upon their end products, is directed toward decorative arts production. This form of creative production is depicted by dual figures representing its

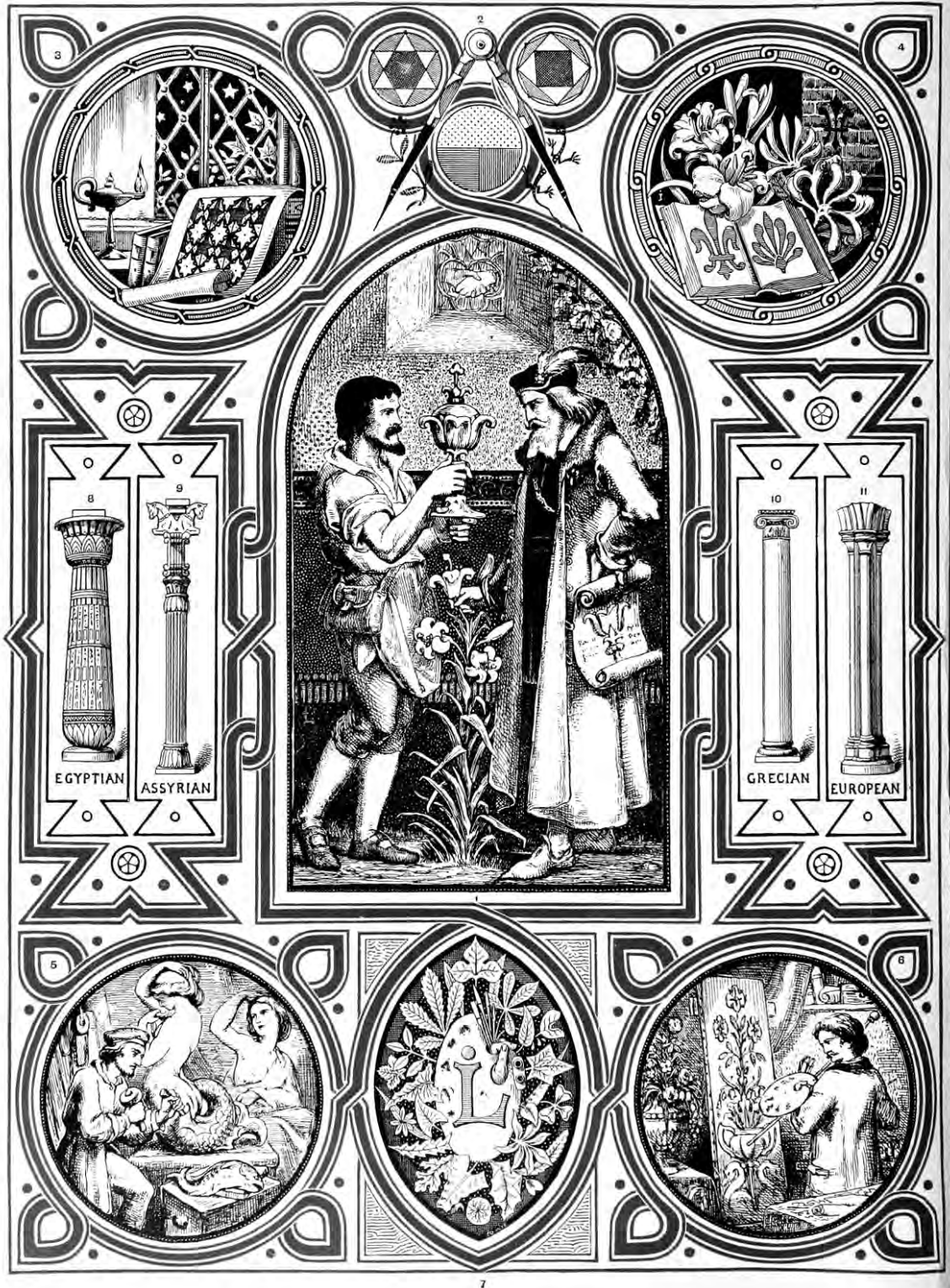


Figure 2.01 John Leighton, Frontispiece, from John Leighton and James Kellaway Colling. *Suggestions in Design: Being a Comprehensive Series of Original Sketches in Various Styles of Ornament, Arranged for Application in the Decorative and Constructive Arts*. New York: D. Appleton and Co., 1881.

increasingly complex division of labor, where conception, form and appearance are the responsibility of one professional, and the material, construction, and production that of another.

Design is often assumed to be twentieth century idea, one associated with industrial mass production, with new product typologies that proliferated during that century, such as automobiles and refrigerators, and with the Modernist evacuation of historical style and applied ornament in favor of functionalist streamlining and minimalist forms. While the transition of the Cooper Hewitt from a decorative arts museum to a design museum in 1967 would seem to indicate a sharply delineated before and after in which one paradigm replaced another, the reality is more complex. In fact, throughout the nineteenth century design and the decorative arts were complementary rather than competing concepts, the former referring to an integral activity in the production of the latter.

In an effort to account for the Cooper Hewitt's contribution to the larger intellectual history of the decorative arts and design, this chapter will treat the following questions and aims. Drawing upon the nineteenth century intellectual context that I elaborated in the introduction that gave rise to the Cooper Union Museum, and to which it then contributed, I situate the museum's genesis and early operations within two important local contexts—the pedagogical context of the Cooper Union itself and the American museological context illustrated by the example of the Metropolitan Museum of Art. Secondly, I delve into the Hewitts' acknowledged precedent for the CUMAD, the Union centrale des arts décoratifs, in order to articulate the founders' self-selected context, intellectual orientation and development. In so doing, I clarify the extent to which the Hewitts borrowed and departed from their mentors in an effort ascertain the originality and extents of their activities.

Historicizing the Presentism of the Decorative

The “decorative” is very much a category of the nineteenth century. Originating in late eighteenth century Europe coincident with the Enlightenment, the idea of “the decorative” emerged fully during the nineteenth century to account for objects and practices that had previously been produced and consumed through other categories. This phenomenon is demonstrated by the emergence of the art museum and the collection of objects that were previously associated with the domestic or sacred realms, as well as by the attempts of art

historians to account for the origins of art history in the ancient and primitive objects that we would today call “the decorative arts.”¹

Isabelle Frank, in her book *The Theory of Decorative Art: An Anthology of European & American Writings, 1750-1940* (2000), attributes the appearance of the “decorative arts” as a distinct sphere of activity within three key developments: first, the emergence of the philosophy of aesthetics, which required the work of art to eschew function or interest; secondly, to industrialization, whose new conditions of production changed the nature of the decorative art object; and thirdly to an increasing specialization of labor which found for the first time a split between the designer and the maker. Linda Seckelson, librarian at the Metropolitan Museum of Art’s Thomas J. Watson Library, has noted that the decorative arts have usually been distinguished from the fine arts in their dual motivation of utility and beauty.² While fine art objects are imagined to be made purely in pursuit of the beautiful, decorative art objects gain some aspect of their final form from functional considerations.

If we look to the history of the word itself, the verb “to decorate” gained its visual and artistic association relatively recently. Throughout the sixteenth and seventeenth centuries, according to the *OED*, “to decorate” meant “to grace or honor” in a social sense.³ One could be decorated with titles, or decorate a gathering with one’s presence. However, the visual sense of the term that refers to objects as ornaments did not appear until the early nineteenth century. Furthermore, the first use of the adjective “decorative” is not found until the 1790s and seems to have *only* been used in an ornamental sense. This is also true in French, where the term “décoratif” similarly came into common usage at that time.⁴ The capacity of objects to be conceived of as decorative is therefore a recent development. The significance of this development is a shift in the primary characteristic of the object, from an identity formed by type (a vase, a chair, a wall), to one formed by the object’s state of *decoration* or its *decorative* role in a space or a domicile. Historian and arts librarian Steven Blake Shubert acknowledged the bifurcation in types of decorative arts classifications,

¹ One can think of Gottfried Semper’s *Style in the Technical and Tectonic Arts, or, Practical Aesthetics* (1860) or Alois Riegl’s *Problems of Style: Foundations for a History of Ornament* (1893) as paradigmatic examples.

² Linda Seckelson, “Decorative Arts: Laying the Groundwork,” *Art Documentation: Journal of the Art Libraries Society of North America* 27, no. 1 (2008): 31.

³ *Oxford English Dictionary*, s.v. “decorate,” accessed January 11, 2014, <http://www.oed.com/view/Entry/48388>

⁴ *La Trésor de la Langue Française informatisé*, s.v. “décoratif,” accessed January 11, 2014, <http://atilf.atilf.fr/dendien/scripts/tlfiv5/advanced.exe?8;s=2673877215;>

pointing out the differences between theoretical approaches, based on concepts of “the decorative,” and pragmatic approaches that define the decorative arts by populating it with a limited set of object types, materials or techniques.⁵

The late eighteenth century developments in the philosophy of aesthetics were important for the production of the “decorative arts” as a distinct practice and body of objects in the following century.⁶ Both Seckelson and Shubert have argued that prior to the emergence of beauty as of value in and of itself, the various arts sat together upon an undifferentiated plane, grouped together as a form of technical skill and valued for their non-aesthetic cultural or religious functions.⁷ Developments during the Italian Renaissance began to distinguish certain art forms—painting, sculpture and architecture—from the minor arts. These selected art forms were codified by the philosophy of aesthetics as artistic media offering a pure “aesthetic experience,” and were also the proper subject of “aesthetic judgment.”

Ironically, for Immanuel Kant it was pure decoration that came closest to the beauty of nature, constituting a “free beauty” with no end or purpose other than to be beautiful.⁸ However, this conceptualization of decoration as distinct and no longer inherent to the object was only possible at the dawn of the Industrial Revolution, as new manufacturing techniques and the specialization of labor reframed decoration as an activity separate from the production of the thing to which it was applied.⁹ Thus, the mid- to late-nineteenth century practice of collecting ancient statuary, medieval textiles, or seventeenth century silver under the overarching category of the “decorative arts” was a distinct imposition of a contemporary view onto the past. The concept did not emerge from the concerns of producers or even consumers, but rather from collectors and eventually museums, who removed objects of use from circulation in everyday life into a sphere of aesthetic

⁵ Steven Blake Shubert, "The Decorative Arts: A Problem in Classification," *Art Documentation: Journal of the Art Libraries Society of North America* 12, no. 2 (Summer 1993). 77.

⁶ Indeed, it is difficult to find the phrase “decorative arts” prior to the 1830s.

⁷ Seckelson. 30. Steven Blake Shubert, "The Decorative Arts: A Problem in Classification," *ibid.* 12, no. 2 (Summer 1993). 77.

⁸ Immanuel Kant and Nicholas Walker, *Critique of Judgement* (Oxford; New York: Oxford University Press, 2007). 60.

⁹ Shubert has argued that the term “applied art” was entirely the product of the Industrial Revolution, referring to decoration applied to an industrially manufactured object. I have not been able to locate any use of the phrase prior to 1849. Shubert. 78.

appreciation and preservation, necessitating the creation of a new category articulate their value.¹⁰

The Making of a Modern Museum: The Cooper Union Museum of the Arts of Decoration

The Cooper Union Museum of the Arts of Decoration opened its doors on May 26, 1897, on the fourth floor of The Cooper Union for the Advancement of Science and Art. This was a free school for working class students in New York City's East Village. The museum's creators, Sarah Cooper Hewitt and Eleanor Garnier Hewitt, were the wealthy, well-travelled granddaughters of the school's founder, Peter Cooper [Fig. 2.02]. Both women had been acculturated from an early age towards the appreciation—and collection—of the decorative arts.¹¹

From the outset, theirs was not an art museum in the contemporary sense. It was not focused on the preservation of historical objects, nor on their appeal to a broad public audience. Rather, it was a focused collection assembled for the benefit of workers, artisans, designers, decorators, architects, and manufacturers who studied, copied, reproduced, and developed innovations upon the objects they encountered there. The Hewitt sisters sought to improve the state of American decorative arts production by making quality historical European examples available to those who designed and produced it. In this endeavor, they were supported by donations from family and friends, including their father Abram S. Hewitt, once mayor of New York, and J. Pierpont Morgan.

The intended audience of the museum was important in establishing its identity. Following from the South Kensington Museum in London and the Musée des Arts

¹⁰ It is no accident that the first museums of decorative art were founded in the mid-nineteenth century: London's South Kensington Museum in 1852, Vienna's Museum für angewandte Kunst (Museum of Applied Arts) in 1863, and Berlin's Kunstgewerbemuseum (known in English as the Museum of Decorative Arts, but most accurately translated as a Museum of Industrial Art) in 1868.

¹¹ Their other sister, Amy Hewitt Green, is sometimes credited as a third founder of the Cooper Union Museum. As the only married one of the three who lived most of the year in Europe, however, it was not possible for her to have had day-to-day involvement. Rather, she was supportive through monetary gifts and donations of objects. The biography of the Cooper and Hewitt families has been well documented by Russell Lynes' 1982 *More Than Meets the Eye: the History and Collections of the Cooper-Hewitt Museum*, by Polly Guérin's 2012 *The Cooper-Hewitt Dynasty of New York*, and most recently by Margery Mastinter's delightful blog series, *Meet the Hewitts*, available at <http://www.cooperhewitt.org/2013/11/05/meet-the-hewitts/>. This project does not seek to re-cover that well-trodden material.

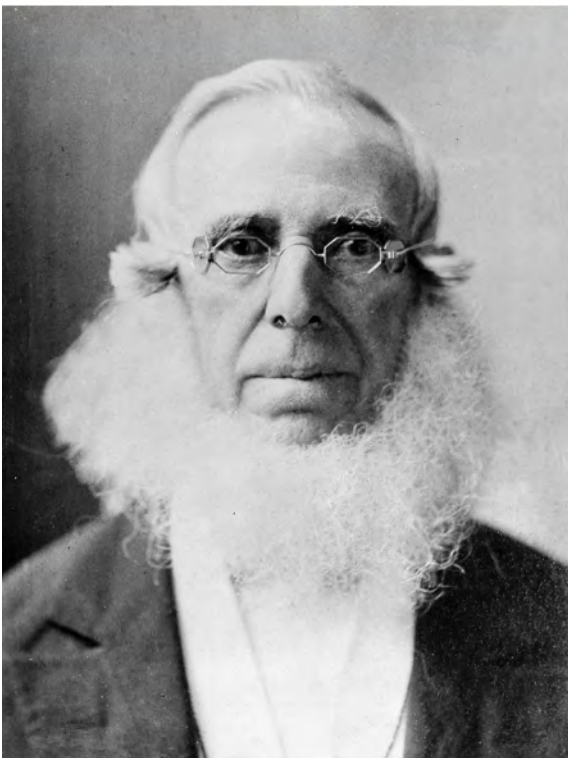


Figure 2.02 *above left:* Portrait, Portrait of Eleanor Garnier Hewitt, 1888; Antonia de Bañuelos (Spanish, born ca. 1856 - after 1921); Spain; brush and oil on canvas; 87 x 60.3cm (34 1/4 x 23 3/4in.); Bequest of Erskine Hewitt; 1938-57-737. Cooper Hewitt, Smithsonian Museum of Design, New York. From: Cooper Hewitt, Smithsonian Museum of Design, www.cooperhewitt.org (accessed August 8, 2016)
above right: Drawing, Portrait of Sarah Cooper Hewitt in French Costume, 1899; J. Carroll Beckwith (American, 1852–1917); USA; pastel on paper mounted on linen; (oval): 24 1/2 x 19 in. (62.2 x 48.3 cm); Bequest of Erskine Hewitt; 1938-57-890. From: Cooper Hewitt, Smithsonian Museum of Design, www.cooperhewitt.org (accessed August 8, 2016)
left: Peter Cooper, 187-?, Brown Brothers (New York, N.Y.), photographer. Miscellaneous photographs collection, Archives of American Art, Smithsonian Institution. <http://www.aaa.si.edu/collections/items/detail/peter-cooper-2034> (accessed August 8, 2016)

décoratifs in Paris, both of which were intimately familiar to the Hewitts, they sought to establish a working museum for the decorative artists, architects and interior decorators of New York. Like their grandfather, the Hewitts sought to encourage the development of skills, taste, and professionalism in a realm of American production that they estimated as retarded in comparison to its European counterpart. Their museum would collect and make available a well-curated selection of historical decorative arts to provide two forms of didactic instruction: individual objects that could be studied or copied, and collections of exemplary and typical objects—“specimens of art applied to industry”—that could be used to visually demonstrate the development of style and technique over time and national boundaries.

However, two additional audiences also became important: the collectors or purchasers of decorative arts as well as the students of these subjects, particularly Cooper Union students. At a time when large-scale mass production had yet to surpass smaller-scale workshop industries, the Hewitts encouraged both the manufacturer and the purchaser to visit the museum

if a carriage is to be built, a book bound, a door lock needed, a stair rail carved, a piece of plate designed, or a house decorated. An intending purchaser can familiarize himself with the best that has been done in any one of these departments, and can demand that his purchase shall not fall below their best standards of beauty, or his money secure less than its proper value in loveliness. the practical value of such an institution needs not to be pointed out, but it is as an educatory of the public standard of taste that this museum hopes to do its best work.¹²

The value of beauty and good taste was not only a matter of cultural refinement, but also of economic value: native artisans who could produce fine work would command higher prices and expand their clientele, instead of losing out to European immigrants who arrived well-educated, well-trained, and reared in an environment surrounded by good examples.¹³

Collections of beautiful specimens of art applied to industry, and the scarcity of artisans able to do this higher type of work, which requires an innate love

¹² Cooper Union for the Advancement of Science and Art, *Thirty-Seventh Annual Report* (New York, N.Y.: Cooper Union for the Advancement of Science and Art, 1896). 16.

¹³ “The fine arts have not lacked for encouragement, and the result of that encouragement is to be read even by those who run; but art as applied to industry has been less appreciated and aided, with the result that for the best work in decoration we have still to depend upon foreign skill and taste. in almost all trades requiring artistic skill the best paid workmen are foreigners, who sense of beauty has been trained by just such means as are offered by this new museum.” Ibid. 17.

of the beautiful to perfect, has made beautiful decoration unduly expensive. Admirable schools of design already exist, but after the hand has been trained the impulse of love and familiarity with beauty still is wanting, and such knowledge can only be acquired by the inspiration which comes from familiarity with masterpieces.¹⁴

This “familiarity” could only be achieved through close inspection—measuring, tracing, studying and copying—and these were only possible through the liberal policies of the museum, allowing objects to be occasionally handled or moved for a more advantageous examination. The Hewitts believed that simply surrounding oneself with good works could have an edifying effect, “unconsciously lead[ing] their ideas into correct channels and form their taste, judgment and execution. This should result in their producing a better type of work, and compel their patrons to approve it as well.”¹⁵

The “masterpieces” that made up the museum’s collections were not, for the most part, highly rare or precious objects, though many of them were quite old. The collections were made up of four primary types of objects: original historical examples, facsimiles and copies in plaster or electrotype, photographs, engravings, and drawings of objects or interiors that were contained in scrapbooks, and finally a library of reference materials.¹⁶ The Hewitts began their collection with a large order of plaster casts purchased from the Musée des Arts décoratifs, consisting of architectural ornament, decorative sculpture, and furniture elements. The Hewitts were also generously supported by family and friends, who donated a wide variety of materials to the museum, including engravings, original drawings, textiles, lace, book bindings, furniture, books, glassware and porcelain, silverware, costumes, jewelry, and even old weapons and musical instruments.¹⁷

While the Hewitts explicitly named workers as their primary audience in their early reports, the local artisans, manufacturers and professionals who actively worked in the museum made up only 3-7% of its visitors. In the first years of the museum’s operation,

¹⁴ Ibid. 17.

¹⁵ *Forty-Second Annual Report* (New York, N.Y.: Cooper Union for the Advancement of Science and Art, 1902). 25.

¹⁶ The scrapbook collection was modeled on a similar practice at the Musée undertaken by Jules Maciet. While the CUMAD’s scrapbooks have since been disassembled, the Maciet collection in the Musée des Arts décoratifs continues to be well utilized today.

¹⁷ Museum donors also supported the institution monetarily, to fund other acquisitions as well as display mounts for these disparate materials. The museum also occasionally received major donations, such as J. Pierpont Morgan’s gift of three European textile collections, consisting of over one thousand pieces from the 2nd through the 19th centuries.

other visitors made up about two-thirds of its yearly attendance, with students from the Woman's School of Art constituting the remainder. In the second decade of its operations, however, these proportions were flipped when students became the most numerous type of visitor.¹⁸ Although the Hewitts continued to discuss tradespeople, they made the most of their audience of students. They actively encouraged students to use the museum and capitalized on the high number of student visitors through a variety of strategies employed to influence the school's pedagogy, its curriculum, and its orientation to industrial and decorative art.

Returning to the "official" accounts of the Cooper Union Museum, which have been largely uncritically accepted by the celebratory works of the few historians to have treated the institution, this chapter seeks to reexamine the established and persistent preconceptions concerning the institution by revisiting the primary claims made by its founders. These include the credit given to Peter Cooper for the museum's conception, the museum's claim as a unique institution within the United States, and the Hewitts' invocation of the Parisian Musée des Arts Décoratifs as their inspiration and direct model. In treating these claims, this chapter seeks to unpack the complex nature of the museum's influences with the aim of situating it within the contemporaneous American context and further articulating the narrative of its early history. Furthermore, this chapter examines the Hewitts' conception of the "decorative arts," which was certainly shaped by their intellectual milieu, but emerged as individual during their establishment and development of the museum.

The Cooper Union: Between the Mind and the Hand

In 1860, Peter Cooper founded the Cooper Union for the Advancement of Science and Art, then colloquially called the Cooper Institute. As a wealthy man of modest background who continued to identify with the working class, Cooper sought to address and elevate every aspect of the life and culture of the working class, including their relationships to work, family, the nation, and themselves—their private enjoyments.¹⁹ In each of these

¹⁸ This was due to the fact that men from the night school had begun utilizing the museum in connection with their coursework, and because students from other institutions also began visiting regularly.

¹⁹ The school was founded with the following four broad aims, "as best calculated to instruct, elevate, and improve the working classes of this city: First.—Instruction in the branches of knowledge which are practically applied in their daily occupations, by which they support themselves and their families. Second.—Instruction in the laws by which health is preserved and the sanitary condition of families is improved; in other words, in personal hygiene. Third.—Instruction in social and political science, by virtue of which communities maintain

spheres Cooper aimed at improvement: to create happier and better-compensated workers, cleaner and healthier families, more deeply engaged citizens, and more highly refined and cultivated consumers of culture. By addressing these four aspects of working class life, Cooper sought to effect something of the same transformation that he himself underwent in his development from an uneducated cabinet-maker's son to one of the wealthiest industrialists in the United States. He hoped to achieve this by providing the kind of formalized education that was inaccessible to him as a youth.

While both men and women were implicated in Cooper's scheme, they were initially addressed quite differently by the school. Working class men were assumed to be actively working and engaged in a trade. At a time when public *elementary* schools were uncommon outside of large cities and the apprenticeship system was waning, the young men who entered Cooper Union were not likely to have a secondary education nor could their families generally afford or even gain access to the few elite educational institutions that existed. Rather, male Cooper Union students worked in a wide variety of trades: as clerks and bookkeepers, metal-, stone- and woodworkers, printers, painters, engravers, architects, sculptors, masons, machinists, Japaners, milliners, upholsterers and harness makers. After their workday, they were enrolled in one of six courses of study: mathematics, natural philosophy (physics), chemistry, architectural drawing, mechanical drawing or free-hand drawing.

While the Cooper Union was founded for the benefit of the working class and provided a free education where none was previously available, the school's aims for its students were more complex than simply outfitting them to continue surviving on an existential wage as manual laborers. From the very start, the Cooper Union purposefully did not provide hands-on training in the manual trades nor did it provide a basic education that its Trustees felt was the job of the state.²⁰ "As a matter of course, there are many excellent young men thirsting

themselves, and nations progress in virtue, wealth, and power. Fourth.—Instruction addressed to the eye, the ear, and the imagination, with a view to furnish a reasonable and healthy recreation to the working classes after the labors of the day." *The First Annual Report of the Trustees of the Cooper Union, for the Advancement of Science and Art*, (New York; New York: John F Trow, 1860). 9.

²⁰ Indeed, Peter Cooper was active in the Public School Society and its efforts to institute free public school in New York. Cooper Union also worked with the local Board of Education to found a night school for adults who had not yet learned the rudiments of reading, writing and arithmetic and thus had to be turned away from admission into Cooper Union. *The Tenth Annual Report of the Trustees of the Cooper Union for the Advancement of Science and Art*, (New York; New York: G A Whitehorn, 1869). 8-11.

for knowledge, who have never received the preliminary rudimentary instruction necessary to being the study of Algebra. Such young men belong in the public night schools, and after receiving the necessary training in the fundamental requirements of reading, writing and arithmetic, may properly enter the Cooper Union.”²¹

There were indeed trade schools that opened in the decades following the creation of the Cooper Union, most famously the New York Trade Schools founded in 1881 by Colonel Richard T. Auchmuty.²² While Auchmuty’s school and the Cooper Union shared a concern with the ability of the working class men to support themselves, and both operated from a similarly philanthropic perspective,²³ the programs at Cooper Union aimed at more than reproducing the status quo of manual labor. The education offered by Cooper Union worked to elevate the laborer by educating him in the abstract scientific knowledge and precise techniques of drawing that would allow him to not simply carry out the ideas of others, but to formulate and communicate his own. This was perceived as an education “without which he cannot either rise in life or in the scale of society.”²⁴ In this way, the worker was professionalized, capable of inventing and creating, and thereby alighting out of the working class and into a more stable middle class existence.

Toward this end, the Trustees of the Cooper Union designed the curriculum as a middle path between the two primary educational forms they found on offer in Europe, one for the elite and one for the laborer. Elite institutions trained the upper classes to work as professional engineers, architects, artists, industrial managers and government officials, while charitable schools for workers focused on manual skills and techniques. The latter institutions “produce[d] trained workmen of the highest order of excellence; but one looks in vain in them for any knowledge of scientific principles, such as appears to be a necessary element in modern civilization and progress.”²⁵ It was the opportunity to be educated in

²¹ *The Seventh Annual Report of the Trustees of the Cooper Union for the Advancement of Science and Art*, (New York; New York: John F Trow & Co 1866). 8.

²² Responding to the waning apprenticeship system and the great difficulties in obtaining training and therefore employment in the trades, Auchmuty’s school offered six-month low-cost evening training courses in trades related to construction: plumbing, bricklaying, gas-fitting, plastering, carpentry, stone-cutting as well as fresco-painting. Richard T. Auchmuty, "The Need of Trade Schools," *Century Illustrated Magazine* 33, no. 1 (1886). 90.

²³ Indeed, J. Pierpont Morgan donated a half million dollars to Auchmuty’s school in 1891.

²⁴ *The Tenth Annual Report of the Trustees of the Cooper Union for the Advancement of Science and Art*. 8.

²⁵ *The Ninth Annual Report of the Trustees of the Cooper Union for the Advancement of Science and Art*, (New York; New York: G A Whitehorne, 1868). 12.



Figure 2.03 Male Cooper Union students working in the chemistry laboratory, ca. 1910s?. From: *The Cooper Union 1859-1921*, The Cooper Archive, Cooper Union for the Advancement of Science and Art.

these “scientific principles” that Cooper offered to the working class, something that would have been previously inaccessible.

While the institution’s class aspirations for its students were only implied for the first few decades of its existence, by 1900 they had developed into an explicit desire to catapult such students into the middle class.²⁶ In the Annual Report of that year, the Trustees discussed their plans to open a Polytechnic School during the day, describing a past proposal to create a Mechanics Arts Day School that they had ultimately rejected. “[I]t was apparent that such a school to be of any value would necessarily involve mechanical shops filled with tools which the students would be expected to use. Now the design of the founder of the Cooper Union was not to teach trades, but to give instruction to those already engaged in trades in such departments of knowledge as might fit them to become foremen, employers and good citizens.”²⁷ By design, Cooper students were already trained and working in their chosen trade, and what Cooper offered was path by which the laborer could elevate himself out of the working class and into the middle class through education and professionalization [Fig. 2.03].²⁸

The Education of Women at the Cooper Union

In contrast to male students, women were not presumed to be engaged in daily employment, so their classes were held during the day. As Kathleen D. McCarthy has argued in her book *Women’s Culture: American Philanthropy and Art*, very few forms of gainful employment were open to “respectable” women in the mid-nineteenth century.²⁹ While urban working class women were primarily employed in factories and had a measure of social autonomy, this came at the expense of their “respectability” or moral standing in

²⁶ By 1900, the educational landscape had developed significantly, with public schooling now commonplace and a proliferation of trade schools, art schools, and non-elite universities that were increasingly accessible. As other institutions could ensure that students knew the rudiments of reading, writing and arithmetic and, later, as the high school diploma became commonplace and achievable, Cooper raised standards and requirements for incoming students in order to provide an education that was not freely available elsewhere.

²⁷ The Polytechnic Day School plan eventually came to fruition because of a \$300,000 donation from Andrew Carnegie, pledged in 1900. Cooper Union for the Advancement of Science and Art, *Forty-First Annual Report* (New York, N.Y.: Cooper Union for the Advancement of Science and Art, 1901). 14.

²⁸ In this same publication, the Trustees contradict themselves and assert that their “intention it to maintain a free school primarily for the education of workmen, and not a professional institution for the education of engineers, although it is to be expected that in the future, as in the past, its graduates will by their training and ability be fitted for the most responsible and difficult positions in practical business.” Ibid. 18.

²⁹ Kathleen D. McCarthy, *Women’s Culture: American Philanthropy and Art, 1830-1930* (Chicago: University of Chicago Press, 1991). 49.



Figure 2.04 Female Cooper Union students painting from casts, ca. 1910s?. From: *The Cooper Union 1859-1921*, The Cooper Archive, Cooper Union for the Advancement of Science and Art.

society. This was due to their engagement in public life without the “protection” of escorts, chaperones, servants, and other accoutrements of middle and upper class life.

The School of Design for Women was opened independently in 1858 and operated out of a suite of rooms in the Foundation Building [Fig. 2.04]. In the following year it was assumed into the newly founded Cooper Union. The school offered courses of instruction in the arts that capitalized on the dexterity and attention to detail that women were presumed to have, directing them towards industries that did not involve a great deal of public exposure. Women could paint, draw, sculpt, engrave, and design from the comfort of their own home, and training in the arts provided women new sources of remunerative employment that were previously untapped or inaccessible.³⁰ The opening of pursuits previously monopolized by men, allowed women an entry point into the economy, access to education and training necessary to the work, and an outlet for their artistic inclinations that did not require regular public circulation.³¹ And unlike the high degree of talent and skill

³⁰ Extracts from an article entitled “Woman’s Position in Art,” published in *The Crayon* in February 1861 appeared in the Cooper Union Annual Report of the same year, deployed to explain and legitimize the new school’s program of arts education for women. The article was itself a partial translation and summary of one that appeared originally in French in the *Gazette des Beaux-Arts* in 1860. See Léon Lagrange, “Du Rang Des Femmes Dans Les Arts,” *Gazette des Beaux-Arts* 8, no. 1 (1860). In it, the author argued that the arts of painting, sculpting and engraving were more suitable for women than were music and dancing because they helped maintain “a calmer and chaster existence” by removing women from the public eye. The arts were considered to be an optimal field of work for women because it not only provided them with employment that could be performed from the safety of home, but also because women’s physical capabilities and aesthetic taste were more suited to the industrial arts than were men’s. “Feminine hands” and “the good taste of women,” the author proposed, were best suited to the design and creation of embroidery, lace, fabric, carpet, illustration, stained glass, jewelry, wood sculpture, engraving and lithography. *The Second Annual Report of the Trustees of the Cooper Union for the Advancement of Science and Art. January 1, 1861*, (New York: J A H Hasbrouck & Company, 1861). 25. Originally published in “Woman’s Position in Art,” *The Crayon* 8, no. 2 (1861). 26. “Man is not made for sedentary life; woman, on the contrary, conforms to it without inconvenience; she better maintains that close, unceasing attention, that motionless activity which the engraver’s pursuit demands. Her nimble fingers, accustomed to wield the needle, lend themselves more easily to minute operations, to the use of small instruments, to the almost imperceptible shades of manipulations that wood engraving exacts. Cutting on copper and steel demands also a patience and minutia much more compatible with the nature of woman than with that of man. It is only in *womanizing* himself, in some degree, that man succeeds in obtaining the development of these facilities so contrary to his physical constitution, always at the expense of his natural force.” *The Second Annual Report of the Trustees of the Cooper Union for the Advancement of Science and Art. January 1, 1861*. 29.

³¹ The school’s view of the societal benefit of educating women and encouraging their financial self-reliance underwent shifts over time. In the 1870s, the institution viewed the financial precarity of women as destabilizing to society, and a major contributor to social unrest and criminality. “Honorable and useful employment for women, is one of the problems of any high and advancing civilization. In this country, especially, it may be said, that the dignity and safety of woman involves the integrity and progress of republican institutions. How can we expect intelligent self-governed and freedom-loving sons, from ignorant and servile mothers. The necessity of self-support is as imperative on many women as on men.” *The Fifteenth Annual Report of the Trustees of the Cooper Union for the Advancement of Science and Art*, (New York; New York: G A Whitehorne,

required for success at the highest levels of fine arts production in the male public sphere, the article posited that in the realm of the decorative, applied or commercial arts, women could earn a living with a relatively modest amount of skill. With traditional forms of fine arts training largely closed to women in the mid-19th century, schools of design like that at the Cooper Union emerged to provide an education enabling women to earn a livelihood and achieve a measure of self-sufficiency while maintaining the classed notion of respectability.³²

Indeed, the School of Design for Women at Cooper, renamed the Woman's Art School in 1883, was one of the first of its kind in New York. In the early years of the Cooper Union,

1874). 9. In this view, Cooper's efforts to educate individual women would engender communal benefits persisting over generations—the children of independent women would themselves grow up to be good citizens. Over time, particularly in the 1890s as the Hewitts planned and installed their museum, the school's view shifted to emphasize the individual inner-development of a woman's character and virtue as the benefit of an arts education, rather than the political or societal benefit of earlier years. While the school maintained its goal of educating “respectable women” in order to make them self-supporting, the school began to tout its benefits for middle class women who would go on to marry. (The assumption being that they would not work, but remain at home, supported by their husbands.) The arts were no longer beneficial solely as an opportunity for honest employment, but also because they provided an individual mental and spiritual benefit. Mary Vinton, Principal of the Woman's Art School, described the primary benefit of an arts education in terms of improvement in the student's character. “But whatever may be the successes or discouragements of the financial aspect of the art student, as an individual or as a body, there is little question of the benefits of accruing from the civilizing and refining influences of the daily association with objects of beauty, and the constant training and stimulus of more cultivated minds. The mental and moral growth towards what makes for character—sense of responsibility and sobriety of judgment—may be noted from season to season, and no feature of the school life is more emphatically gratifying.” Cooper Union for the Advancement of Science and Art, *Thirty-Eighth Annual Report* (New York, N.Y.: Cooper Union for the Advancement of Science and Art, 1898). 24. Vinton continued this sentiment two years later in her statement included in the Annual Report of 1900, suggesting that even when the school's graduates ceased working upon marrying, they carried forward a sense of virtue imparted by their study of the arts. “The question is often asked what becomes of all these young women, and to how many does the final result justify the expense in time and money spent in these long years of study. [...] They carry into their homes and little communities an influence for refinement and culture which makes for civilization very far reaching, that would not otherwise be realized. If tradition may be regarded, this factor alone had much consideration with Mr. Peter Cooper, in his hopes for the benefits of this institution, who desired that its students should “not only acquire knowledge but virtue.” That this is as much a tangible result in the yearly outcome of this school as the painting of a good portrait or the earning of a competent salary, no one would question who could note, as it has been my privilege to do during the twelve and more years of my official series, the marked growth and improvement in tone of thought, bearing and character which develop in the student from the beginning to the close of her career here.” *Fortieth Annual Report* (New York, N.Y.: Cooper Union for the Advancement of Science and Art, 1900). 46. However, as the school continued to professionalize and draw increasingly talented and career-oriented students, the rhetoric of spiritual benefit waned in favor of a rigorous arts education, no doubt aided by the gender desegregation that would arrive in the early twentieth century.

³² For Kathleen McCarthy's discussion of the organization of fine arts training and practice in Antebellum American and its exclusion of women, see Chapter 1: “Culture and Gender in Antebellum America” in McCarthy. On the question of respectability, McCarthy demonstrates how a female artist's livelihood could depend on her social reputation. The character of successful women artists was often attacked and criticized, and women's access to galleries, patrons and even the studios and camaraderie of other artists was heavily circumscribed in the nineteenth century through social rules of propriety.

women could attend the night courses in science and mathematics—and a very few of them did—but they primarily enrolled in the daytime programs offered by the School of Design. These included courses in drawing, engraving, design for manufacturing, and painting [Fig. 2.05]. The women who enrolled in these classes were not solely working class women who sought to work in the industrial arts, many were also students aiming to become teachers in these fields. The school also attracted a great number of “amateurs,” or “ladies who desire to study art as an accomplishment” rather than as a profession, so much so that the school was compelled to limit their enrollment.³³ Women were not permitted to enroll in the men’s night courses in art and design, with the exception of architectural and perspective drawing because it was not offered to them during the day.³⁴ Art, Design, Architecture and the Decorative Arts: Competing Approaches to Arts Education

The pursuits of science and art were deeply imbricated in the early Cooper Union curriculum, typical of the period. As Peter Cooper designed the pedagogical organization of the Cooper Union, he was greatly influenced by William Barton Rogers’ plan for the Massachusetts Institute of Technology. In his plan, Rogers elided disciplines, modes of inquiry, forms of knowledge, and methods of production that today are considered quite

³³ *The Second Annual Report of the Trustees of the Cooper Union for the Advancement of Science and Art. January 1, 1861.* 30.

³⁴ Both men and women earned certificates upon the successful completion of their chosen course of study. until 1892, when the school began to confer the Bachelor of Science and degrees in Civil and Mechanical Engineering to those that completed the appropriate five-year course.



Figure 2.05 Cooper Union Foundation Building, 1899, Byron Company (New York, NY), photographer. From: Museum of the City of New York, 93.1.1.17355. <http://collections.mcny.org/Collection/Education,CooperUnion.-2F3XC5E7V93.html> (accessed August 9, 2016)

separate and distinct.³⁵ Alongside departments of mathematics, chemistry, physics, and geology, the School was also to contain a department of design. This faculty would “prepare its pupils for efficient service in the ornamental branches of manufactures, as well as in the pursuits of the mechanic, architect, and engineer; at the same time laying so broad a foundation of instruction, as to be a valuable help to general education, and to higher culture of the Fine Arts.”³⁶ Around the foremost concern of industrial production, nineteenth century education gathered together scientific and aesthetic orientations, the engineer and the architect, the mechanic and the fine artist. Although the Cooper Union would be quickly divided into separate science and art departments as of 1866, the insistence on the primacy of industrial production would continue to collapse distinctions, subvert classification systems, and frustrate established hierarchies—especially in the realms of design, the fine arts, the decorative arts and architecture.

Architectural coursework was offered from the outset at Cooper, though it evolved over the decades from curriculum focused on drawing techniques to one that trained students to produce original designs. In the early years, “architectural drawing” was offered alongside mechanical and free-hand drawing. These were later joined by courses on drawing from casts, ornamental drawing, and perspective drawing. Architectural education at Cooper remained focused on drawing throughout the nineteenth century, emphasizing the use of mechanical drawing tools and the production of richly rendered drawings. Students received little in the way of conceptual or theoretical instruction, nor was architectural history addressed beyond a once- or twice-yearly lecture on relevant topics included as a part of Cooper’s public lecture series and open to students.³⁷

³⁵ Rogers described the proposed MIT “School of Industrial Science and Art” as an institution where “regular courses of instruction should be given, by lectures and other teachings, in the various branches of the applied sciences and the arts; and where persons destined for any of the industrial pursuits might, at small expense, secure such training and instruction as would enable them to bring to their profession the increased efficiency due to enlarged views and a sure knowledge of fundamental principles, together with adequate practice in observation and experiment, and win the delineation of objects, processes, and machinery.” *Objects and Plan of an Institute of Technology: Including a Society of Arts, a Museum of Arts, and a School of Industrial Science: Proposed to Be Established in Boston*, ([S.l.: s.n.], 1861). 21. Quoted in *The Second Annual Report of the Trustees of the Cooper Union for the Advancement of Science and Art*, (New York: J A H Hasbrouck & Company, 1861). 34.

³⁶ *Objects and Plan of an Institute of Technology: Including a Society of Arts, a Museum of Arts, and a School of Industrial Science: Proposed to Be Established in Boston*. 21. Quoted in *The Second Annual Report of the Trustees of the Cooper Union for the Advancement of Science and Art*. 34.

³⁷ It is difficult to know exactly what the architectural instruction at Cooper entailed during the nineteenth century, as the Annual Reports include so little detail. Indeed, it was only in the Annual Report of 1906 that the

By the first decade of the twentieth century, however, architectural education had developed into a four-year program in architectural drawing. Incoming students began work in an “elementary architectural drawing class” where they spent “one or two seasons in drawing the classical and other historical styles to scale,” as well as learning to model in clay and “study the principles of ornamental design as applied to architecture.”³⁸ The four-year course took students through a sequence of instruction beginning with the study of drawing techniques and the study of the classical orders in years one and two. In year three students had to complete drawings from a given set of programmatic requirements, and the course culminated in year four with the production of an original design, complete with drawn details.

In 1907, architectural education was substantially reorganized when it was divided into two separate tracks, the Construction Department and the Department of the Study of the Orders, in an effort to train students for different specializations existing within the profession, namely residential and monumental architecture. Students in the construction section were introduced to the techniques and procedures of building construction early in their education through the practice of drawing, as first year students were required to draw large-scale section details of brick and stone construction as well as window and door openings. Advanced students produced full sets of drawings for contemporary residential types, culminating in their original design of a city residence. The section on the classical orders was focused heavily on historical style, interior decoration and façade design. Students spent the first two years learning to draw the classical orders, while year three was spent studying interior decoration in the classical idiom and producing intricately shaded and rendered drawings. Students were not required to produce an original design until year four, and this design was to be a city residence, just as in the construction section. The division between the pragmatics of building assembly and the aesthetics and order of its surfaces reflected a more general attitude about design. Despite the institution’s orientation toward training workers for industrial production, the education provided by the Cooper Union

coursework in the Free Night School of Art for Men was described at all, so it is likely that the sequence of instruction described there was developed throughout the 1880s and 1890s.

³⁸ Cooper Union for the Advancement of Science and Art, *Forty-Seventh Annual Report* (New York, N.Y.: Cooper Union for the Advancement of Science and Art, 1906). 73.

persistently resisted the material engagement of actual fabrication by structuring design of all types around drawing.

The boundaries between science and art were often a question of degree rather than of difference during this period. The same could in fact be said of the differences between art and design, or between design and the decorative arts. Prior to the founding of the Cooper Union Museum of the Arts of Decoration, decoration, art and design were often conflated. The very name of the women's school reveals the fluidity between these concepts. The institution that began its life as the "School of Design for Females" or the "School of Design for Women" (1860) was variously referred to in the early years as the "Female Art Department," (1866) the "Female Art School" (1868), the "School of Art for Women" (1869), the "Free Art School for Women" (1871), the "Woman's Art Department" (1874) and finally the "Woman's Art School" (1875) as it officially came to be called.³⁹

The development of the arts curriculum at Cooper reflects the oft-elided categories of art and design. From the outset, women's education at Cooper Union was predicated on the students' ability to obtain remunerative work based on the skills and training they received there.⁴⁰ While the general subjects and coursework offered by the existing design and fine art schools of the time were very similar, design schools were set apart by their inflection of those subjects toward the demands of the contemporaneous labor market. In short, they orientated themselves around the commercial application of the skills and techniques they taught.⁴¹ In keeping with this commercial orientation, courses were adjusted to meet demand

³⁹ Complicating matters, it was often referred to by multiple names in one annual report. Indeed, the Trustees continued to refer to the women's school as the "School of Design for Women" as late as 1906, indicating that for the school's leadership the distinction between art and design training was not a particularly important one.

⁴⁰ The Trustees' report of 1866 explained that the leading aim of the school was to "enable them to earn an honorable and comfortable livelihood in congenial occupations, such as teaching, engraving, designing for manufactures, illustrations of books, coloring photographs, and as artists where they are found to have the requisite talent," and that "the aim of the school henceforth should be directed solely to the preparation of the pupils for such artistic pursuits as offer to them a prospect of ready and remunerative employment. If great artists should come forth from the school it will be a matter of great pride and congratulations, but it is certainly much more in accordance with the design and spirit of the Institution to fit the pupils directly for industrial occupations." *The Seventh Annual Report of the Trustees of the Cooper Union for the Advancement of Science and Art*. 14-15.

⁴¹ Indeed, through the 1870s students of exceptional artistic talent were sent to the Academy of Design where, despite its name, the students could obtain an education geared towards the production of fine rather than industrial arts.

as various forms of media and method of reproduction emerged and others became obsolete.⁴²

The context of the Cooper Union into which the CUMAD emerged was thus a complicated one that valued scientific and theoretical knowledge as a way to ameliorate the overly manual emphasis of industrial labor. At the same time, the school maintained a commitment to preparing its students for paid work, and as such pragmatically tempered its ambitions to impart useful skills.

A Family Affair: Familial influence and the Cooper Union Museum

Sarah Cooper Hewitt and Eleanor Garnier Hewitt, along with their sister Amy Hewitt Green, were the granddaughters of Peter Cooper, a wealthy 19th century industrialist best known as the founder of The Cooper Union for the Advancement of Science and Art. Peter Cooper was born the son of a hatter of modest means and raised without a formal education, but later became one of the wealthiest men in New York as a result of his wide-ranging business endeavors. Involved in coal-mining and the manufacture of glue and iron, Cooper eventually amassed a fortune allowing him to underwrite philanthropic works. The largest of these was the founding of Cooper Union in 1859, an institution that provided free post-secondary education to underprivileged men and women.

Cooper's initial vision for his school included provision for a museum in broad terms. In the "Enabling Act" passed by the New York legislature in 1857 entitling Cooper to found the Union, the institution was charged with "procuring and maintaining scientific and historical collections, collections of chemical and philosophical apparatus, mechanical and artistic models, books, drawings, pictures, and statues, and for cultivating other means of instruction."⁴³ These would be arranged in a reading room, and also organized into galleries of artistic and scientific collections, "designed, in the opinion of the board of trustees to improve and instruct those classes of the inhabitants of New York whose occupations are such as to be calculated, in the opinion of the said board of trustees, to deprive them of

⁴² For example, courses in lithography and engraving, offered in the early years of the school, were discontinued in 1890, while courses such as photo-crayon and photo-color—methods of adding color to photographic prints—related to the early phases of photographic technology, were phased out in the 1910s.

⁴³ Cooper Union for the Advancement of Science and Art and Peter Cooper, *Charter, Trust Deed, and by-Laws of the Cooper Union for the Advancement of Science and Art: With the Letter of Peter Cooper, Accompanying the Trust Deed* (New York: Wm. C. Bryant & Co., printers, 1859).

proper recreation and instruction.”⁴⁴ The “By-laws and Regulations” expressly provided for a “Committee of the Reading Room and Cabinets,” empowered to collect an astounding range of materials:

complete collections of apparatus, drawings, representations, and models, for illustration and explanation, and specimens of the raw materials of arts, trades, and commerce, specimens of such materials as are last named, in their successive stages of manufacture in the arts and trades, and in the operation of commerce; with drawings, representations, models, and specimens of the tools, utensils, constructions, and machines used in each of them respectively—and collections of specimens, drawings, or representations of the manufactured articles, products and results of each of the arts and trades of commerce.”⁴⁵

These materials were to be complemented by “explanatory maps, books, dictionaries, and encyclopedias.”⁴⁶ Although the Hewitts always credited their grandfather with the museum’s conception, the founding documents of the school did not envision a decorative arts collection explicitly. Instead, they described an industrial collection of more interest to science and engineering students or historians of technology than those involved with the arts and design.⁴⁷ As such, the collections were never described as constituting a “museum,” and the plan was not pursued in Cooper’s lifetime due to lack of funds. The Hewitts’ decorative arts museum only came into being some fourteen years after Peter Cooper’s death, and it emerged as an endeavor quite distinct from the one he had imagined.

Polly Guérin has suggested the Hewitt sisters’ idea for the museum was the result of their grandfather’s childhood influence, but also pointed to the influence of their parents, Abram S. Hewitt and Sarah Amelia Hewitt. Hewitt, though similarly a self-made man of modest background, did not value frugality in the same way that Cooper did and took a

⁴⁴ Ibid. 20

⁴⁵ Ibid. 55.

⁴⁶ Ibid. 55.

⁴⁷ Charles R. Richards, Director of the Cooper Union from 1908-1921 and an expert in industrial education, distinguished industrial museums from industrial art museums, describing the former as “dealing with the history of science, industrial, transportation, agricultural methods and inventions,” and the latter in terms of its concern with “the production of things primarily of use in which the effort has been made to introduce the element of beauty. Whether the things are made by hand, or by machine, or by both, is a matter of no importance as regards their relation to life”—a definition that could just as easily describe decorative arts. The differences between industrial museums and industrial art museums were undoubtedly clear to him, writing in the late 1920s. In Cooper’s time, however, the distinction between industry and industrial art, particular with respect to their practice and educational needs, was not nearly so clear cut. Interestingly, the CUMAD is not mentioned among the numerous museums he discussed. Charles R. Richards, *Industrial Art and the Museum* (New York: Macmillan, 1927). v.

serious interest in the fine and decorative arts and architecture. He paid close attention to global trends, attending significant events such as the Great Exhibition in London of 1851 and the 1855 Paris Exposition Universelle.

That the Hewitt sisters were influenced to a greater degree by their parents than their grandparents can be inferred from the changes made to their lifelong home when Peter Cooper died, leaving the house to their father. Abram Hewitt began his association with the Cooper family as a tutor for Peter's son, Edward Cooper. Abram and Edward were involved in a shipwreck while traveling together on a grand tour and nearly killed, a shared traumatic event that cemented a lifelong friendship. Backed financially by the elder Cooper, Edward and Abram ventured into the ironworks business together, and Hewitt married Peter Cooper's daughter, Sarah Amelia.

Upon their union, Hewitt agreed to Cooper's stipulations that the family would reside together as a multigenerational household in his large but austere Gramercy Park mansion [Fig. 2.06]. After Cooper's death, Abram and Sarah Amelia renovated the house in their own lavish taste, making "an Italian Palace out of the old Cooper mansion and introduc[ing] the kind of luxury that Peter Cooper had always eschewed"⁴⁸ [Fig. 2.07].

The parlor room and the drawing room were decorated in Louis XV and XVI, respectively, and a mural purchased from a Venetian palace was installed in the dining room. Many of these pieces were collected during Abram and Sarah Amelia's extensive travels, accompanied by their children. The interest in the decorative arts engendered by the Hewitt family in their home reveals some of the biases the Hewitt sisters brought to the museum. Contemporary, utilitarian objects without added decoration, which would later be desired and collected in the modern period, were of little aesthetic interest. Rather, the Hewitts sought items with applied decoration, primarily European and of sufficient vintage,

⁴⁸ Polly Guérin, *The Cooper-Hewitt Dynasty of New York* (Charleston: The History Press, 2012). 80.

preferably 18th century and earlier. They lacked stylistic consistency, and in exercising their



Figure 2.06 Peter Cooper Mansion, 9 Lexington Avenue, photograph ca. 1883. From: Margery Masinter, *Meet the Hewitts Part 2*, Cooper Hewitt, Smithsonian Museum of Design. <http://www.cooperhewitt.org/2013/12/04/meet-the-hewitts-part-two/> (accessed August 8, 2016)



Figure 2.07 Drawing, Hewitt House, 1894; USA; brush and watercolor on paper; 15.2 x 15.2 cm (6 x 6 in.); Gift of Unknown Donor; 1980-32-1398. From: Cooper Hewitt, Smithsonian Museum of Design, www.cooperhewitt.org (accessed August 8, 2016)

taste as collectors, they freely mixed items from various periods, places, and idioms.

While Peter Cooper's vision of study collections in the Cooper Union certainly provided the institutional justification for the CUMAD, the Hewitt sisters' particular fascination with European decorative arts, especially eighteenth century French objects, was almost certainly inculcated in them by their parents.

The Hewitt Sisters in Paris: The Influence of the Musée des Arts décoratifs

In the late 1880s or early 1890s, the Hewitts began traveling and collecting in earnest and the idea for the museum began to germinate. At this point, they became acquainted with certain members of the Union Centrale des Arts Décoratifs [UCAD] who were among the founders of the Musée des Arts Décoratifs in Paris: Georges Berger, President of the UCAD, Alfred de Champeaux, curator of the museum library, and Jules Maciet. The latter was a collector who was active in the Commission du Musée and the creator of the "Albums Maciet," an encyclopedic collection of scrapbooks numbering in the thousands held in the museum's library. These men served as mentors to the Hewitt sisters, and through them the aims and concerns that shaped the Parisian museum influenced the Cooper Union Museum intellectually and materially, but also in terms of organization. Most importantly, however, they influenced the sisters' aspirations helping them to shape the goals and ambitions of their enterprise.

The Hewitts took every opportunity to cite the Musée des Arts Décoratifs as their model. This was an excellent strategy of legitimization for their novel fledgling operation, and also provided a baseline from which the Hewitts could set their enterprise apart.⁴⁹ As Elizabeth Bisland, a journalist and friend of the Hewitt sisters, noted, "The aim of the Cooper Union Museum for the Arts of Decoration is to establish in New York City an institution similar to the Musée des Arts Décoratifs of Paris: a museum which has done much to develop and maintain French supremacy in the finer forms of the industrial arts."⁵⁰ The Hewitts were enamored with French decorative arts, and informed by their perception

⁴⁹ In the two primary statements about the Cooper Union Museum, the founding 1896 pamphlet *Plan of the proposed Cooper Union Museum for the Arts of Decoration*, written by their friend Elizabeth Bisland, and Eleanor Hewitt's 1919 essay *The Making of a Modern Museum*, both credit the Musée des Arts Décoratifs at length as the primary model for their activities.

⁵⁰ Elizabeth Bisland, *Plan of the Proposed Cooper Union Museum for the Arts of Decoration* (New York: Cooper Union, 1896). 1.

of the UCAD's goal to improve contemporary design practice by addressing the knowledge, skills, and taste of producers. They therefore adopted the Musée's classification system, purchased a substantial number of reproductions from their collections, and focused their efforts on an audience of designers, workers, decorators, and manufacturers.

Despite the Hewitts' claim of direct and unmodified influence, the gap between the Hewitts' perception of the UCAD and the realities of its institutional development were significant. The degree to which the Musée served as a model for the CUMAD is also a far more complex narrative than that reported by the Hewitts. Actually, the Hewitts imported a conceptual orientation for their museum from France that was already largely redundant in its native context.

In order to understand the real nature of the Musée's influence upon the CUMAD, this chapter must also briefly touch upon the complex history of the Parisian museum and the way it was shaped by the French cultural, economic, and political situation in the nineteenth century. The Musée des Arts Décoratifs was one endeavor in an interrelated set of activities pursued by the UCAD. The UCAD, an organization of producers and collectors of decorative arts, was itself the third incarnation of an organization devoted to the improvement of the French industrial arts, preceded by the Société du Progrès de l'Art Industriel [SPAI], founded in 1858, and the Union Centrale des Beaux-Arts Appliqué à l'Industrie [UCBAI], established in 1864.⁵¹

The Union Centrale and the Société began as associations of industrial artists and small-scale industrial producers who were interested in raising the standards of quality, both technically and aesthetically, of industrially produced decorative art objects, such as tapestries, ceramics, lace, wallpaper, textiles, and silverware. While both organizations were devoted primarily to staging exhibitions comprising both historical decorative arts and newly produced items, they also sought to establish a museum, library and educational courses aimed at decorative arts manufacturers and workers, rather than at the consumers of their products.

⁵¹ The names of these organizations are translated as the Society for the progress of industrial art and the Central union of fine arts applied to industry. In this dissertation, I will refer to them by their original French names or by shortened versions. Only the Union centrale des Arts décoratifs was referred to historically by its acronym UCAD.

A series of societal, legal, and economic changes in the regulation and production of the decorative arts prompted these efforts. First, the elimination of artisan guilds that took place in the wake of the French Revolution left a regulatory vacuum,⁵² through the loss of the guilds' legal privileges. These included the sole right to train and license artisans and journeymen, to maintain standards of aesthetic and technical production, to control and limit the dissemination of trade-specific knowledge, and to prevent non-guild members from working in the trades through the seizure of tools or products.⁵³ Secondly, the collapsed social and economic hierarchy and the loss of regulation and training caused by the demise of guilds coincided in the early 19th century with the rise of industrialization and mechanized production.⁵⁴ The overwhelming success of the Great Exhibition of 1851 (and especially the quality of the English goods presented) wounded French national pride and threatened the long-held perception of French cultural superiority.⁵⁵ Thirdly, decorative artists were prevented from exhibiting at the salons by the Académie des Beaux-Arts, who wished to preserve the distinction between the *arts libéraux* and the *arts utiles*, or between the fine arts

⁵² Yvonne Brunhammer, former Director of the Musée des Arts décoratifs, argued that one of the primary impetuses for the UCAD's activities was to be found in the d'Allarde Law of 1791. Passed in the wake of the French Revolution, the law outlawed *corporations*, or artisan guilds that operated as trade unions. Yvonne Brunhammer, *Le Beau Dans L'utile: Un Musée Pour Les Arts Décoratifs* (Paris: Gallimard, Union centrale des arts décoratifs, 1992). 12.

⁵³ Guilds existed not only for artisans and builders, but were established for nearly every profession, including bakers, grocers, gunmakers, etc. In the wake of their disempowerment, any individual who could pay for the *patente*, or state-issued occupational license, could legally practice his chosen trade without the oversight that would have traditionally come from the guild. While this allowed workers to engage in previously closed professions and helped to dismantle the class hierarchy that the guilds created, the dissolution of the guild system also had the unintended consequences of eliminating well-established structures of oversight and training that had functioned to maintain standards of quality. See chapter 3, "Artisans," in James Richard Farr, *The Work of France: Labor and Culture in Early Modern Times, 1350-1800* (Lanham, Md.: Rowman & Littlefield, 2008). Also, see the introduction and chapter 1, "The Decline and Demise of Guilds 1176-1791," in Michael P. Fitzsimmons, *From Artisan to Worker: Guilds, the French State, and the Organization of Labor, 1776-1821* (New York: Cambridge University Press, 2010). Opponents of the guild system were critical of the legal privileges they maintained for their members, and sought to abolish them in the wake of the Revolution in an effort to eliminate the restrictions they placed on non-members from engaging in the trades. Debates about reinstating guilds, and their quasi-legal reappearance in the 1810s, persisted until 1821 when the matter was definitively settled, resulting in their permanent dissolution. See chapter 4, "The Triumph of Mechanization: 1812-1821," in *ibid.*

⁵⁴ In Britain, nostalgia for the traditional craftsmanship of the Arts and Crafts movement found its natural complement in the traditional profound mistrust of the machine. By contrast, in France the machine was viewed optimistically as a democratizing tool for the widespread distribution of artistic production. Rossella Froissart, "Socialization of the Beautiful and Valorization of the Useful: The Decorative Arts in France, from the Utopias of 1848 to Art Nouveau," *West 86th* 21, no. 1 (2014).72.

⁵⁵ The variety of goods exhibited by nations around the world was indicative of growing competition in the export markets of the decorative arts, threatening the historical dominance theretofore enjoyed by French producers. Debora Silverman, *Art Nouveau in Fin-De-Siècle France: Politics, Psychology, and Style*, Studies on the History of Society and Culture (Berkeley: University of California Press, 1989). 109.

and those utilized in interior decoration.⁵⁶ Thus, artisans and manufactures of the decorative arts found themselves in the mid-19th century without a guild system to structure production, shut out from the salons with few opportunities to exhibit, threatened by foreign competition, and uncertain how to maintain aesthetic and technical integrity in the face of the rapid mechanization of production.

In response to this set of conditions, a group of commercial artisans banded together to form the Société du Progrès de l'Art Industriel in order to lobby the state for a school, a museum and a library that could ameliorate the situation.⁵⁷ However, their primary activity was the staging of exhibitions, and their membership was made up in part by those that had lobbied for and installed a display of French industrial arts in the 1855 Exposition Universelle, held in Paris at the Palais de l'Industrie.⁵⁸ In 1864, the society was renamed the Union Centrale des Beaux-Arts Appliqués à l'Industrie, reflecting their concern with the development and maintenance of standards of taste in light of mechanization and not simply with industry itself.⁵⁹ The UCBAI continued to pursue the aims described by the Société du Progrès de l'Art Industriel, opening a small museum and library in the Marais, the main artisan district of Paris, holding a regular lecture series, and continuing to stage large public exhibitions in the Palais de l'industrie and elsewhere.

Amid the upheaval of the Paris Commune after the Second Empire collapsed in 1870, the UCBAI was effectively suspended and not reconstituted until 1874. Appalled at the destruction and defacing of cultural artifacts during the fighting, which targeted governmental buildings as well as the decorative arts of the Old Regime, the reincarnated UCBAI saw an influx of amateur collector-*amateurs* into the ranks of its leadership, which shifted its mission significantly.⁶⁰ Unlike the industrial workers, these collector-*amateurs* were “specialists in a particular period or medium, connoisseurs and scholars of the objects in their collections, recognized for their superior sensitivity and taste and much as for their

⁵⁶ Brunhammer. 13. James Farr has argued that this distinction between artist and artisan can be traced back to the foundation of the academies of painting (1648) and architecture (1641), which thus extracted those occupations from the guild system and affiliated them more closely with the liberal professions. Farr. 93-95.

⁵⁷ Silverman reports that the Society's membership included an architect-decorator, a metalworker, an industrial designer and ornamental engraver, as well as an ornamental sculptor. Silverman. 109.

⁵⁸ Brunhammer. 17.

⁵⁹ The steering committee of the Union centrale des beaux-arts appliqué à l'industrie was made up of “manufacturers of lace, wallpaper, rugs, and pianos as well as a tapestry designer, silversmith, and upholsterer.” Bisland. 110.

⁶⁰ Silverman. 111-112.

often illustrious social positions. [...] The *amateur* was not a passive consumer but an active re-creator of the past, and his efforts at reassemblage were like the creative work of an architect or poet.”⁶¹ Interest waned in addressing the problematics of machine production in the popularization of the decorative arts, and the UCBAI’s leadership focused now instead on the aristocratic luxury goods of the seventeenth and eighteenth centuries from the perspective of the collector-scholar.⁶² In contrast to its earlier goal of industrializing art, the UCBAI’s new aim, articulated by its President Edouard Guichard, was to reintegrate the decorative arts into the fine arts, leaving the concern with industry largely behind.⁶³

Though the UCBAI shifted its focus from the industrial arts to the luxury decorative arts in the mid-1870s, the ungainly “fine arts applied to industry” was first dropped from its title in 1882, and it was renamed the Union Centrale des Arts Décoratifs (UCAD).⁶⁴ The UCBAI did maintain exhibitions in the Palais de l’Industrie and a library in the Marais, where the workshops and industrial concerns were located throughout this period. After the Paris Commune, however, their focus shifted toward securing a proper museum space in a culturally privileged central site, revealing a continued turn away from their former audience of artisans and manufacturers.

After years of arduous negotiation, the UCAD eventually acquired the Pavilion de Marsan in the Louvre, where the Musée des Arts Décoratifs opened in 1904 and continues to operate today. As art historian Deborah Silverman has shown in her book *Art Nouveau in Fin-De-Siècle France: Politics, Psychology, and Style*, what began as an association of artisans and producers concerned with addressing the problematic of mechanization in contemporary production transformed over time into a group of collectors and historians concerned with the preservation of patrimony and an aristocratic notion of taste.

⁶¹ Ibid. 111. Despite their claims of authority, Lorraine Daston has argued that the amateur is motivated by affinity rather than by utility or expertise, suggesting that at root they were motivated by personal pleasure more than anything else. Lorraine Daston, “The Glass Flowers,” in *Things That Talk: Object Lessons from Art and Science*, ed. Lorraine Daston (New York : Cambridge, Mass.: Zone Books ; MIT Press [distributor], 2004). 230-231.

⁶² Indeed the leadership of the new Union centrale was made up of wealthy collectors as well as representatives of French luxury goods manufacturers such as Christofle. Despite being produced during an era of guild regulation, it should be noted that most of these goods were not produced by guild artisans because royal manufactories, such as Sèvres and Gobelins, were exempt from such regulation. Silverman. 112.

⁶³ Froissart. 74.

⁶⁴ This was due to its incorporation with the Société du Musée des Arts Décoratifs, a rival organization that was created in 1877 to focus efforts on the foundation of a state-sponsored decorative arts museum in Paris.

The Hewitts in Paris: Influence and Resistance

The shift in orientation undertaken by the UCAD was therefore well underway by the time the Hewitts first made contact with the institution sometime in the 1880s,⁶⁵ well before they began their research and planning for the Cooper Union Museum in earnest around 1894.⁶⁶ The Hewitts were introduced to a UCAD that had turned away from its earlier goals of addressing workers, the ranks of its leadership now filled by wealthy collector-*amateurs* entirely orientated toward the improvement of public taste through their own interest in art-historical accuracy and connoisseurship. At this time, the institution was also completely focused upon building the collections and installing them permanently in the Pavilion de Marsan in the Louvre, something that remain unaccomplished until 1905.⁶⁷ [Fig. 2.08] The Hewitts gave a great deal of credit to their French mentors. As Sarah Cooper Hewitt described it, they were entirely under the tutelage of men exhibiting great expertise and taste.

The library in connection with the Paris museum is purposely placed in the Places des Vosges, which is the centre of the artisans' quarter of Paris. My sister [Eleanor Garnier Hewitt] went into this library and for six weeks studied the French system of classification and arrangement. We were fortunate in interesting the directors of the French and other museums in our project. The French directors chose the best models in French casts, and copies were made for us. With these and a library of art books formed by Abram S. Hewitt, the museum started.⁶⁸

Yet despite the fact that the Hewitts' three primary contacts, Champeaux, Maciet and Berger, were all wealthy collector-scholars, ensconced in and responsible for the second orientation of the UCAD, the Hewitts returned from Paris with the UCAD's first orientation as a model, focusing on improving the decorative arts through the labors of the designer and

⁶⁵ The family travelled to Europe yearly throughout the sisters' childhood and adolescence, so it is impossible to know exactly when they first became aware of the Union Centrale and its activities. Archival records, however, prove contact with UCAD in 1889.

⁶⁶ There is a letter from Abram S. Hewitt dated December 10, 1889 referencing a purchase of plaster casts and thanking a member of the Union centrale for "your politeness to my daughters, and for the advice which enabled them to secure this admirable collection of models." This order cannot have been intended for the museum because of how early it was written, though it can be speculated that the casts were purchased for the Art School. Abram S. Hewitt to J. Mercer, December 10, 1889. Folder D4-62, Archives of the Union centrale des Arts décoratifs.

⁶⁷ The UCAD legally acquired the space in 1891 but were, in practice, unable to use it because the former tenants of the space, the Cours des Comptes (Court of Audits), had left it filled with their records, which they were prevented from moving or destroying, thus delaying the opening of the Musée until 1905.

⁶⁸ "Cooper Union Museum," *New York Tribune Illustrated Supplement*, June 7, 1903.



Figure 2.08 Photograph of the Pavillon du Marsan of the Louvre in the 1890s when the UCAD took possession of it. The Pavillon was filled with the records of the Cours des Comptes (Court of Audits), and bureaucratic disagreements prevented the UCAD from removing the records for a decade. From: *Albums Maciet*, 81:14, Bibliothèque des Arts décoratifs. p. 193.

worker.⁶⁹ This manifested itself in their choice of intended audience, the design and layout of the museum, their acquisitions strategies, their liberal policies of access to museum objects, and even the museum hours—open in the evenings for those working during the day.

Drawing parallels between the French and American contexts, the Hewitt sisters felt that the quality of American production also required improvement. However, they attributed its deficiencies to the lag of American taste behind that of Europe as well as to a dearth of skilled labor and technical knowledge. The latter they did not perceive as lost, but rather as never having been cultivated in the United States. Following suit, they too sought to found a museum and library, though theirs was to be a private initiative run under the auspices of the Cooper Union without sponsorship from the state.

As members of Cooper Union's founding family, the sisters were concerned with education and attributed this concern to the UCAD. They had clearly noted the lack of educational provision in France for industrial workers in comparison with the numerous schools of fine arts.⁷⁰ However, while the Musée did hold lecture series and exhibit the work of students from nearby schools, the UCAD's early educational initiatives were dropped as efforts were focused on securing a permanent space for the museum.⁷¹ The UCAD's longstanding lecture series had also gradually transformed from a practical series that addressed materials and techniques for the benefit of artisans into a series of specialized histories that were largely of interest to collectors, further evidence of its waning interest in practical education.⁷² At the same time, one of the UCAD's major activities was the staging of large-scale exhibits of contemporary projects at the Expositions Universelles, as well as retrospective shows designed to demonstrate the history of a particular craft type, material, or technique. These exhibitions were geared toward the general public of consumers rather than producers.

⁶⁹ This understanding well reflected the aims of the pre-Commune Union Centrale des Beaux-Arts Appliqué à l'Industrie in the 1870s, but not the Union Centrale des Arts Décoratifs as it had developed in the 1880s.

⁷⁰ Bisland. 2.

⁷¹ Indeed, the Union centrale's president from 1880 to 1889, Antonin Proust, came to the job after his short-lived appointment as the first Minister of Arts, during which he was charged with reforming arts education. In that role, he attempted to create, for the first time, an overarching state-sponsored educational system that would encompass both the fine and industrial arts. However, the proposal was so unpopular that Proust was thwarted by resistance from within the government as well as from students. Silverman. 119-120.

⁷² Ibid. 110, 124.

In this way, the developing UCAD sought to address a dual audience: a specialized group of artisans and manufacturers, through whom they sought to improve future production, and the general public whose taste they sought to educate in terms of European and particularly French decorative arts. Eventually, the audience of producers became less important to the UCAD, and its pedagogical mission was pursued solely through large public expositions and the Musée itself. The Musée remained a work in progress for another decade after the Hewitts' initial contact and it was still incomplete during their visits in the mid-1890s. On learning about the plans for the Musée, however, the Hewitts seem to have been told that it would be geared toward workers, something they reported in their *Plan*. "Workers who have constantly before them the last results of the labor of many generations in their own trades must necessarily have their conception of beauty refined and enlarged and be aroused to the possibilities lying in the material upon which they are engaged."⁷³

While they did very much intend to address the concerns of the worker, the Cooper Union Museum was to be a source of aesthetic rather than technical education, and the museum would be a place where workers and artisans could develop a true appreciation for the objects they produced. In this way, the museum aimed at the development of a particular version of "good taste", one solely cultivated through direct exposure to quality objects.⁷⁴

Despite the UCAD's shift away from industry and towards the historical decorative arts and the contemporary luxury artisan in its latter manifestation, themes of industrialization and the machine continued to be a topic of concern for some of its members as well as in the pages of the UCAD's journal, the *Revue des Arts décoratifs*.⁷⁵ The Hewitts understood the Union Centrale to be consciously grappling with the problem of industrialization, describing it as an organization devoted to the improvement of "industrial art." However, by the late 1880s the UCAD's leadership and major activities had largely de-prioritized this objective in favor of preserving objects perceived as important from the art-historical or stylistic perspective. Given their family fortune came from industrialized manufacturing, it is perhaps historically ironic that the Hewitts failed to fully address the problematic of mechanization in

⁷³ Bisland. 5.

⁷⁴ Ibid., 8.

⁷⁵ For example, Georges Berger, president of the Union from 1891-1901, continued to press for the improvement of industrial products as a way to democratize beauty and make it accessible across class lines. Froissart. 77. Further, thinkers like Pedro Rioux de Mailloux published articles in the *Revue* promoting the machine as both a spiritualizing force and a tool for social action. Ibid. 83-86.

their own museum, viewing the shift from craft hand-work to machine production as having little bearing on the actual design of objects. They focused their collection on European objects, architectural drawings, and books from the 17th and 18th centuries, declining to accept or exhibit objects produced any later than 1825,⁷⁶ viewing the question of mechanized production as a pragmatic problem of translation between techniques rather than a determinant of form or appearance. Thus in one important respect—industrialization—the Hewitts eschewed the early model proffered by UCAD and designed their museum to offer the viewer an educational experience that was visual, aesthetic and mimetic, but not particularly technical. The Wiener Werkstätte (1903-1932) or the Deutscher Werkbund (1907-1934) provide a good contrast. Both of these projects sought to improve industrial art by increasing cooperation between designers and producers to produce new and modern designs. Instead of following this model, the Hewitts emphasized access to quality historical example as the most effective way to encourage good (historicist) design and techniques of fabrication.⁷⁷

Publics, installation paradigms and plaster: The Cooper Union Museum and the Metropolitan Museum of Art

In 1895, when the Hewitts began to install their museum on the fourth floor of the Cooper Union Foundation Building, their institution joined only a small handful of museums operating in New York. These included the American Museum of Natural History (est. 1869), the Metropolitan Museum of Art (est. 1870), and the Brooklyn Museum, founded the same year as the CUMAD.⁷⁸ These late nineteenth century institutions emerged at a time when the term ‘museum’ referred, in the minds of most citizens, to establishments such as P.T. Barnum’s American Museum and its collections of curiosities, menageries, and exotica.⁷⁹ As the privileged granddaughters of Peter Cooper, and the daughters of Abram

⁷⁶ Eleanor G. Hewitt, *The Making of a Modern Museum* (New York: Wednesday Afternoon Club, 1919). 17.

⁷⁷ The Wiener Werkstätte, based in Vienna, was a workshop that brought designers and master craftsman together in the same concern to produce very high quality, expensive, handmade goods sold under their own label. The Deutscher Werkbund, in contrast, was a professional organization that brought together architects, designers and industrial manufacturers in order to encourage exchange and collaboration.

⁷⁸ The Art Institute of Chicago and the Boston Museum of Fine Arts were founded contemporaneously, in 1869 and 1870 respectively. Other museums that we think of today of as storied New York institutions, such as the Museum of Modern Art, the Whitney or the Frick Collection, were not established until the late 1920s and the 1930s.

⁷⁹ Indeed, Peter Cooper was familiar with and inspired by Barnum’s museum, likely more so by its natural science collections than by its circus-like spectacles, for in Cooper’s mind a museum at Cooper Union would be

Hewitt, Sarah and Eleanor Hewitt were familiar with these new institutions and socially acquainted with their leadership and donors, particularly those of the Metropolitan. It is revealing to examine the nascent Cooper Hewitt museum in the context of the Metropolitan Museum of Art. The Metropolitan's public address as an elite institution, art-historical paradigm of collection and installation, and extensive use of reproductive plaster casts reveals just how innovative the Hewitts' enterprise was, truly situated on the cusp of change occurring throughout American art museums.

In her 1995 book *Civilizing Rituals: Inside Public Art Museums*, Carol Duncan weaves a narrative of the Metropolitan Museum of Art's founding and early development framed by debates about the nature of the public museum, the role of wealth and class in shaping such institutions, and questions concerning their education mandates as manifested in strategies of acquisitions and installation. During the first twenty years of the Metropolitan's operation, tensions arose between the democratic ideal of an educational museum designed to elevate culture and civilize its citizens, and the elitism and self-interest of its wealthy founders. The latter capitalized greatly on the prestige of their association with the museum and also benefited from the improvement of the city's image such institutions conferred.

The Metropolitan was indeed a public institution owned by the city and located within Central Park. However, the bankers, lawyers and merchants who sat on its autonomous Board of Trustees felt an antipathy to the lower classes. This was problematic, since that demographic was ostensibly the target audience for the museum's civilizing and edifying functions. This attitude was manifested through real barriers to entry, such as the lack of evening and Sunday hours constituting the working class' only leisure time, and the museum's permanent location in the Upper East Side, far from the neighborhoods where the poor lived and worked.⁸⁰

primarily educational rather than titillating. Barnum's museum burned down in 1865, and a new museum opened shortly thereafter, only to succumb to fire itself in 1868. Hewitt. 5.

⁸⁰ The first evening hours were requested by the city in 1889 but not instituted until 1891, because the city had not yet paid for the installation of electric lighting in the galleries. The city also bore the expense for the additional open hours through an additional contribution of \$10,000 to the its annual maintenance payment, which at that time totaled \$15,000. The museum leadership was split on the issue, and subsequent annual reports detail a loss of membership and bequests by those who opposed the Sunday openings, and an increase of operating costs beyond that covered by the city's contribution. Sunday hours proved to be very popular, however, with approximately 20% of the annual visitors doing so on a Sunday. Henry G. Marquand and L. P. Di Cesnola, "To the Members Of: The Metropolitan Museum of Art," *Annual Report of the Trustees of the Metropolitan Museum of Art*, no. 20 (1889). 445.

The question of whether the Metropolitan appealed to a broad public or only certain elite sectors was also raised in the context of its educational programs. One of the museum's founding documents, the 1870 Act of Incorporation, inaugurated the Metropolitan "for the purpose of establishing and maintaining in said city a museum and library of art, of encouraging and developing the study of the fine arts, and the application of arts to manufactures and practical life, of advancing the general knowledge of kindred subjects, and, to that end, of furnishing popular instruction and recreation."⁸¹ In practice, the museum's educational programs were limited to a scholarly lecture series organized in conjunction with Columbia College from 1892, free admission for students and teachers, and the opening of the galleries to copyists who sold their work as reproductions.⁸² Beyond these measures, the Metropolitan offered little in the way of "popular instruction" in the arts and no mechanism to facilitate its application to either manufacturing or everyday life.

One of the most significant debates that occurred at the Met during the late nineteenth century centered around what kind of education the collections should provide and how the collections would be organized and installed in order to facilitate that education. The Metropolitan modeled itself after the great museums of Europe, seeking to match such institutions' cultural dominance. These were professionalized institutions whose public and educational mandates coalesced in an art-historical system of organization. Collections were installed according to style, school, and period, allowing the visitor to witness the evolution of each culture's artistic production over time.⁸³ In contrast, the Metropolitan's collections were largely donated by private collectors and therefore unevenly distributed both historically and qualitatively. It could not comprehensively illustrate the accepted account of art-historical development as it was understood at that time. In its place, curators utilized what Duncan has termed the "connoisseur's or gentlemanly hang," in which a collector's donations were maintained as a group and installed in rooms that mimicked the decorative context of the collector's home. This foregrounded the taste and discernment of the donor

⁸¹ New York (State), "An Act to Incorporate "the Metropolitan Museum of Art," Passed April 13th, 1870" (1870). 1.

⁸² The Museum ran an Art School, which offered courses in drawing, sculpture, illustration, architecture and ornament in the 1880s, although it was phased out in the mid-1890s due to cost.

⁸³ Carol Duncan, *Civilizing Rituals: Inside Public Art Museums* (London ; New York: Routledge, 1995). 24-25.

rather than the educational or art-historical usefulness of the work as an example of a style, period or school.

Installations organized on the basis of donor gathered works from multiple periods and regions in one space, sometimes even installing fine and decorative arts together. In this way, the implied aesthetic lesson on the assembly of individual works into a coherent and pleasing whole had its origin in the domestic space of the collector's home. Curator of Paintings Roger Fry admitted both historical and aesthetic educational aims as proper to the museum. However, given the uneven nature of the collection at the turn of the century, he felt the museum should emphasize the aesthetic by instructing visitors "that some things are more worthy than others of prolonged and serious attention."⁸⁴ The tension between an aesthetically oriented installation method and the art-historical method continued throughout the first decade of the twentieth century.

Donors to the Metropolitan Museum were also active in this debate, resisting the fast emerging art-historical method among curators and museum leadership. The 1905 incident concerning wealthy collector and regular donor to both the Metropolitan and the CUMAD, George A. Hearn, is a good example. Hearn offered to donate twenty-seven paintings and one-hundred thousand dollars to his existing museum collection of twenty-four canvases. However, he did so with the stipulation that the works remain installed together in a particular gallery for a minimum of twenty-five years.⁸⁵

The Executive Committee led by museum president J. P. Morgan, resisted this restriction, citing a change in policy that Morgan instituted in an effort to decolonize the museum of its donor-based collections and rationalize the museum's organization according to art-historical principles. Hearn countered the Committee's resistance by defending the integrity of the donor-assembled collection. He emphasized the care, sensitivity, and creativity with which his collection was constructed, resulting in a purposefully harmonious group.⁸⁶ He also contrasted that harmony with the cool, detached nature of the art-historical paradigm, arguing that "The proportion of visitors that demand such a condition for their

⁸⁴ Roger E. Fry, "Ideals of a Picture Gallery," *The Metropolitan Museum of Art Bulletin* 1, no. 4 (1906). 59.

⁸⁵ George A. Hearn et al., "Mr. George A. Hearn's Gift to the Museum, and to the Cause of American Art," *ibid.*, no. 3. 34-35.

⁸⁶ George A. Hearn, "Mr. George A. Hearn's Recent Gift to the Museum," *ibid.*, no. 7.

enjoyment is small indeed. Aesthetic pleasure derived from a work of art is not dependent on any such chronological or mathematical arrangement.”⁸⁷

There were two values at stake in Hearn’s restrictions. Firstly, an identity for the donor that superseded wealth and largesse, marking the learning and refined taste demonstrated in the assembly of a collection as a form of creativity worth preserving. Secondly, a rejection of the experience of artworks as sources of information, or specimen-instantiations of an evolutionary process at work. Rather they were to be enjoyed in their specificity and in their relation to each other, a relationship Hearn himself established and articulated as he directed their installation both in his own home and in the museum’s gallery. Ultimately, Hearn won the battle—the museum accepted his gift and others in subsequent years in accordance with his restrictions—but Morgan won the war. By 1910 the Metropolitan’s fine arts collections were organized primarily art-historically, with only a very few remaining whose restrictions he was unable to convince the donors to lift.⁸⁸

The final aspect of the Metropolitan Museum that significantly shaped the museological context into which the CUM entered was their voracious collection of plaster casts. Today, casts have largely been relegated to the dustbin of museum history, though in some quarters they are preserved as evidence of the nineteenth-century museology. While we now understand the art museum to be primarily concerned with collecting and displaying original, high-quality works of art, American museums prior to the turn of the century had neither the funds nor the access to original European works. Alan Wallach argued that the process of professionalizing and adopting the art-historical paradigm, which emphasized the visual apprehension of artistic development, necessitated reproductive plaster casts. They were in fact the only means by which a museum could assemble a complete collection of canonical works, something impossible to achieve with original works even in the best-endowed European museums.⁸⁹

Even in Europe, casts were collected to fill gaps in the collections of original works in order to produce an encyclopedic presentation of art-historical continuity and progress.

⁸⁷ Ibid. 103.

⁸⁸ Duncan. 63.

⁸⁹ Alan Wallach, "The American Cast Museum: An Episode in the History of the Institutional Definitions of Art," in *Exhibiting Contradiction Essays on the Art Museum in the United States* (Amherst, Mass.: University of Massachusetts Press, 1998). 45.

Indeed, nineteenth century museum collections included objects from across what Malcolm Baker has termed the “reproductive continuum,” such as plaster casts, electroplated copies of metal objects and engravings of original drawings.⁹⁰ Museums were also not the first or the only institutions to collect casts. Academies of art, universities, and other sites of instruction purchased casts both for students of studio art as well as those studying archaeology, classics, art history, and other subjects in the humanities.⁹¹ With the first plaster casts of European works arriving as early as 1822 to the Boston Athenaeum, the collecting of reproductions by major American museums reached its apogee in the 1880s and 1890s, only to fall out of favor in the first decades of the twentieth century.⁹²

The Metropolitan’s history of collecting plaster cast reproductions is typical of other American museums in the period.⁹³ Collection of architectural casts began in 1883, with sculptural casts following in 1886. The casts were purchased from numerous museums around Europe, including the Louvre, the South Kensington Museum, and the UCAD, and from private cast manufacturers such as Brucciani.⁹⁴ The purchases were completed by 1895, and included reproductions of objects from the Ancient Near East, Greek and Roman antiquity, the Byzantine, Romanesque, Gothic and Renaissance periods, the collection concluding with a few sculptures from the seventeenth and eighteenth centuries.⁹⁵ As the Metropolitan’s Committee on Casts argued,

We can never expect to obtain any large collection of original works, but we can obtain casts, which, for students of art and archaeology, and indeed for the general public, are almost their equivalent; and these casts can be so arranged as to group together all works pertaining to the same epoch, however widely their originals may be separated, so that the whole history of plastic art can be traced through its masterpieces from the earliest to the

⁹⁰ Malcolm Baker, "The Reproductive Continuum: Plaster Casts, Paper Mosaics and Photographs as Complementary Modes of Reproduction in the Nineteenth-Century Museum," in *Plaster Casts: Making, Collecting, and Displaying from Classical Antiquity to the Present*, ed. Rune Frederiksen and Eckart Marchand (Berlin; New York: De Gruyter, 2010).

⁹¹ For a survey of cast-collecting American institutions, see Stephen Dyson, "Cast Collecting in the United States," *ibid.*

⁹² Wallach. 41.

⁹³ Beginning in the 1880s, institutions such as the Boston Museum of Fine Art and the Art Institute of Chicago invested heavily in cast collections.

⁹⁴ A full listing of cast sources used by the Met can be found in *Tentative Lists of Objects Desirable for a Collection of Casts, Sculptural and Architectural, Intended to Illustrate the History of Plastic Art*, (New York: Printed for the committee, 1891). v-vi.

⁹⁵ For a complete list of the Met’s plaster cast collection as of 1910, see Metropolitan Museum of Art and Edward Robinson, *Catalogue of the Collection of Casts* (New York: Printed for the museum, 1910).

latest time. A collection of casts thus furnishes the best means for studying the history of art.⁹⁶

The practice of collecting of plaster casts was thus a corollary to the art-historical installation paradigm, as it facilitated the production of a visual narrative illustrating the development of the Western art canon. Reproductions were carefully chosen to represent not only the highest achievements in the form of masterpieces, but also key moments of change, and were displayed alongside original works.

Plaster casting, electrotyping, and other forms on the “reproductive continuum” undoubtedly mechanically reproduced works of art. The insights proffered by Walter Benjamin into the impacts of such reproduction in his seminal 1936 essay “The Work of Art in the Age of Mechanical Reproduction” highlight the degree to which conditions of reception changed in the fifty years prior. For Benjamin, the status of an object as art was derived from its historical authenticity, its temporal and spatial origin, its uniqueness, and its “aura” as a singular object produced directly from the artist’s hand. This authority was practically confirmed by those who commissioned, owned, preserved, and exhibited the object.⁹⁷

For museums collecting and exhibiting plaster casts, the art-historical authority carried by a relatively small number of canonical works was far more valuable than qualities of authenticity or aura. Casts could replicate the content, form and even surface treatment of original sculpture, thereby allowing viewers to access the vast majority of qualities that curators and educators found important. Furthermore, a well-chosen collection of casts could, in their assemblage, communicate a larger lesson about stylistic development for which originals were not required. Finally, the aesthetic transaction enacted by the nineteenth century museum visitor was not centered around communion with an artist’s genius or even the pleasures of disinterested aesthetic contemplation. On the contrary, cast collections allowed visitors to visualize a particular art-historical narrative or to study specific subjects or modes of artistic execution. This information would then be applied to academic,

⁹⁶ Metropolitan Museum of Art Special Committee to Enlarge Collection of Casts, *Report of Committee to Members and Subscribers, February 1, 1892* (Metropolitan Museum of Art, 1892), Internet Resource; Archival Material.

⁹⁷ Walter Benjamin, "The Work of Art in the Age of Mechanical Reproduction," in *Illuminations*, ed. Hannah Arendt (New York: Schocken Books, 1969).

design or consumerist ends. In this way, even collections of fine arts casts shared a degree of affinity with the decorative insofar as their utility was just as important as their beauty.

Hybrid and Heterodox: The Cooper Union Museum in Context

The museological context of New York in the late nineteenth century was fraught with both conceptual and demographic tensions. There were tensions between the elite museum leadership and the “public” they ostensibly served, between the values of connoisseurship and the ambitions of art-history, and between the differing agencies of the original and the copy. Within this context, the efforts of the Hewitts in the formation of the Cooper Union Museum were extraordinary in the degree to which they diverged from their closest neighboring models. Both the Metropolitan’s and the CUMAD’s founders came from the highest echelons of wealth and society, and their organization and conceptual policies encouraged an audience of similar pedigree. The Hewitts specifically targeted an audience of workers, artisans, and manufacturers—the “laboring classes” whose attendance the Metropolitan actively discouraged.⁹⁸

The *Plan of the Proposed Museum* was explicit in its aim to open its collections to use. “The rules and regulations make the museum of the utmost practical use, and encourage the full use of its advantages by removing tedious restrictions and formalities as far as it is possible.”⁹⁹ The Hewitts employed numerous strategies to attract the working classes and increase accessibility for those unused to visiting museums. They offered evening hours, and registration was a simple matter. The Hewitts decided against the employment of a catalog system, believing it to be a distancing mechanism. Rather, the entire collection was immediately available on display, and objects themselves were labeled with identifying and

⁹⁸ Duncan has described the debates among the Met’s Trustees and leadership during the 1880s and the 1890s when the older, more conservative members resisted changes that would allow the museum to be genuinely publically accessible. Duncan. 57-59. For example, throughout the 1880s, the museum resisted opening on Sunday, the only leisure time of the working class. It was not until 1891 that the Met capitulated to pressure from the city for more inclusion, requiring that the city foot the costs for its additional hours. When first Sunday hours were offered in May 1891, the Annual Report recounted a flood of visitors unused to the practice of visiting museums. “Many visitors took the liberty of handling every object within reach; some went to the length of marring, scratching and breaking articles unprotected by glass; a few proved to be pickpockets, and others brought with them peculiar habits which were repulsive and unclean.” The disdain for the poor by the wealthy museum leadership was apparent, and only subsided gradually through the 1890s. Henry G. Marquand and Louis P. Di Cesnola, “To the Members Of: The Metropolitan Museum of Art,” *Annual Report of the Trustees of the Metropolitan Museum of Art*, no. 22 (1891). 500-501.

⁹⁹ Bisland. 5.

historical information that could be directly accessed by visitors.¹⁰⁰ Most unusually, works could be handled and moved by visitors seeking to measure or copy them. Eleanor Hewitt explained,

Restrictions are eliminated, except the few necessary to protect the objects; the salient point is, that the objects are there for use, to be worked from, and, if so desired, to be removed from their positions and placed in any light. They can be photographed or measured... Naturally constant use will have a tendency to damage, even destroy certain objects (many of course are indestructible), but irreparable damage could not be accomplished under a hundred years, and if in that time an artistic tradition passed on from father to son, as in Europe has been created, the existence or non-existence of these objects will not seriously matter, and during all that time the Museum will have been fulfilling its destiny.¹⁰¹

Indeed, the Hewitts oriented all rules and procedures for visiting the museum around an explicit accommodation the “artistic temperament” of its visitors.

The management never loses sight of the fact that the first delightful and wonderful frenzy for work, so well known to artistic temperaments, is easily dashed and cooled by uncongenial influences, petty annoyances and delays, and that those who obtain the greatest benefit from working in Museums are frequently ill fed and badly clothed, and the loss of vitality in getting out, carrying to and from the lockers the canvases, easels and materials, frequently militates against the quality and output of the work.¹⁰²

The objects in the CUMAD were understood as valuable models that enabled workers to earn significant sums in their reproduction, thereby constituting “a fountain of wealth for the community.”¹⁰³ The Hewitts themselves were a fountain of information for the museum visitors, as the museum was staffed solely by the sisters, some close friends, and the amateur curator Mary Gibson, hired in 1904.

Unlike the art-historical paradigm instantiated by the Metropolitan Museum of Art, the CUMAD employed a hybrid organization prioritizing accessibility and utility. Occupying the fourth floor of the Cooper Union Foundation Building, an area of approximately 14,000

¹⁰⁰ The historical information included with the objects was itself simplified in order to be accessible to workers and artisans who were often uneducated. Eleanor Hewitt reports, This Museum was formed to facilitate the free acquisition of knowledge in the arts, styles and periods. Its practical relation to the artistic trades is a "First Aid to the Ignorant," and many people who visit Museums show such queer elementary forms of ignorance that dealing with them becomes a picture puzzle indeed.

¹⁰¹ Hewitt. 20.

¹⁰² Ibid. 21.

¹⁰³ Ibid. 22.

square feet, the Hewitts utilized a series of overlapping systems of installation that were intended to provide multiple lessons. The 1913 plan of the museum, the only extant version from the museum's early years, identifies rooms and object groupings by several characteristics: period (century), country, material, object type, and occasionally donor [Fig. 2.09]. For example, one can variously see on the plan a seventeenth century room, a room of furniture mounts, and a large area dedicated to the Pierpont Morgan textile collection. The most common designation lists period and then object, such as "18th century wood carvings" or "17th-18th century clocks." The use of chronology, so central to the art-historical mode of installation, was combined with the conscious assemblage of objects from different regions and various media—a tactic eschewed by art museums in favor of segregating art forms and grouping schools of artistic practice.

Eleanor Hewitt elaborated on the ambitions of their installation regime, foregrounding the educational opportunities it offered to the viewer.

With another end in view, which is, that people come to this Museum to learn, its objects have been arranged chronologically from earliest to latest, and from left to right, just as a book is written, so the artistic work of many trades and countries at the same period is placed in juxtaposition, to form a practical basis for technical instruction, for ambulant lectures and class work. The arrangement of the Museum in small sections and with a mass of objects in each is open to some objection, but it does invite much comparison and discussion as to material, workmanship and design, and gives an insight into the artistic work of each epoch all over the world; possibly it may in the end bring about the same habit of criticism and discussion that exists in France.¹⁰⁴

Hewitt expresses multiple ambitions: clarity of an art-historical narrative of development, comparisons across various regions, periods, and media, revealing of the stylistic core of each period, and debates about the quality and propriety of individual designs facilitated by multiple examples of each type.

Furthermore, the relatively small size of the museum necessitated installation strategies that are less apparent in plan but plain in photographs: the spatial layering of multiple object types in order to best utilize both floor and wall space, and the use of specially designed armatures to store (primarily flat) materials densely, safely, and accessibly. In a 1920

¹⁰⁴ Ibid. 20.

COOPER UNION
Fourth Story

Scale 1/8" = 1'-0"

Museum for the Arts of Decoration

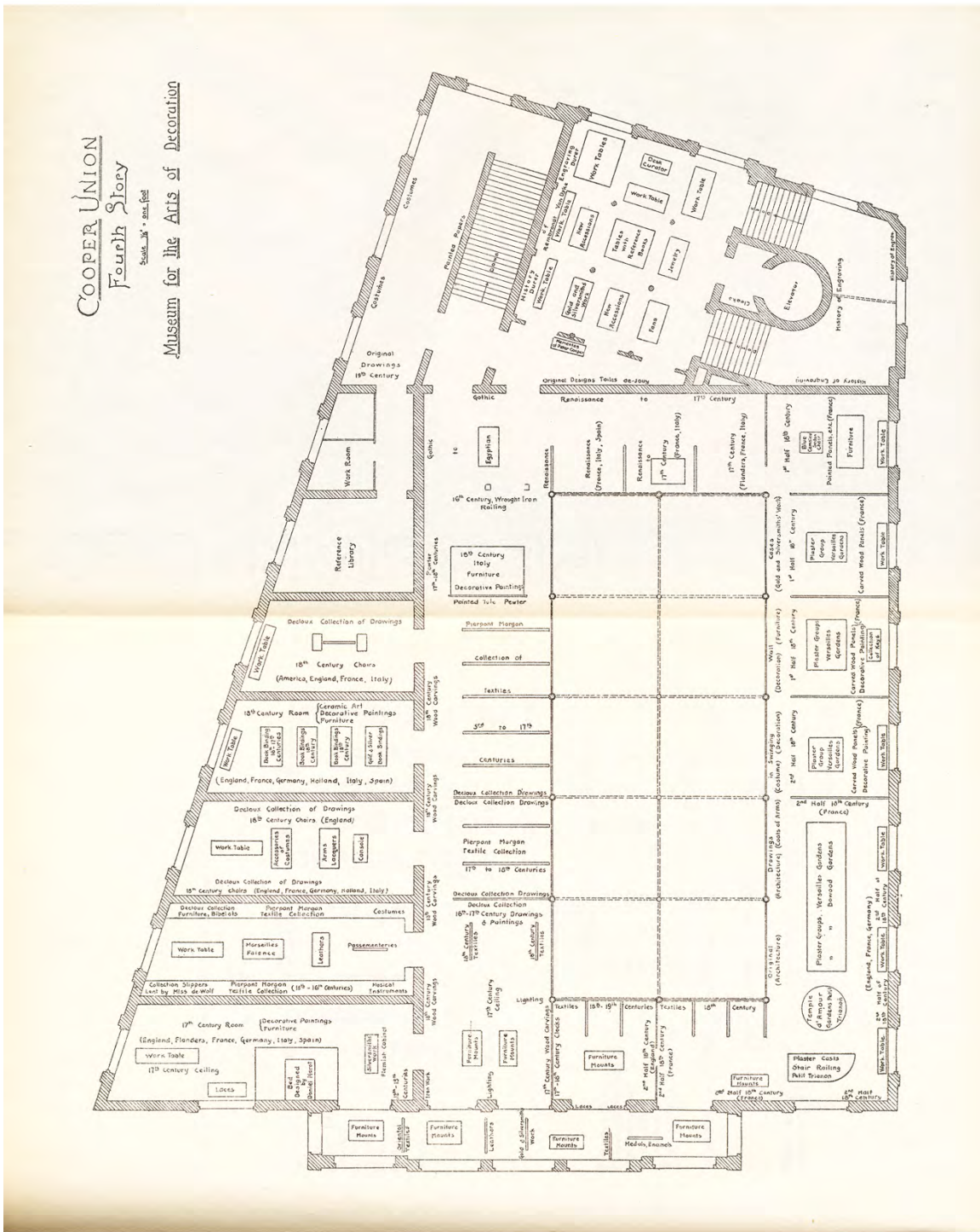


Figure 2.09 1913 Floor Plan of the Cooper Union Museum of the Arts of Decoration. Note the central space is open to below. From: The Cooper Archive, Cooper Union for the Advancement of Science and Art.



Figure 2.10 The Decloux Room, Cooper Union Museum of the Arts of Decoration, 1921. Wurts Brothers (New York, NY), photographers. From: *The Cooper Union 1859-1921*, The Cooper Archive, Cooper Union for the Advancement of Science and Art.



Figure 2.11 Display of Plaster Casts, Cooper Union Museum of the Arts of Decoration, 1903. From: "Two Sisters Devotedly Carrying Out a Philanthropic Idea of their Grandfather and Father," *The New York Tribune Illustrated Supplement*, June 7, 1903. p. 5.

photograph of the Decloux room [Fig. 2.10], framed drawings from the Decloux collection line the walls, and a collection of 18th century chairs occupy the room's perimeter. Museum visitors sat at a designated worktable in the center, while the display cases beyond them contained costume accessories, arms, lacquers, and consoles (decorative brackets used in both furniture and architecture).

In another photograph from 1903 [Fig. 2.11], groupings of the plaster casts purchased from the UCAD are clearly visible. Behind them sit original drawings in custom swinging wall cases, while against the exterior wall in the foreground the Hewitts placed a mixture of worktables, vitrines, and what appears to be a display system for drawings or textiles. Finally, in another photograph from the same year [Fig. 20], another collection of furniture sits in multiple rows in front of a collection of *boiseries* hung on the wall. The installation of multiple object types in such a dense manner led to a condition of visual crowdedness not often seen in museums today. Lack of space was also a cause for complaint from the curators of the Metropolitan Museum, and this led to numerous expansions and additions there from 1888 to 1902. The desire for more and larger galleries did not, however, result solely from the growth of the collection and subsequent need for space, but also from shifting preferences and protocols for display.

Rather than amassing sculptures or paintings together in the densely hung manner of the collector's house, museums began to prefer more generous spacing between works and architecturally quieter surroundings in order to facilitate an undisturbed aesthetic engagement with the individual work. The CUMAD, limited as it was to one floor within a larger institution already pressed for space, had little opportunity for expansion. However, the Hewitts consciously departed from the masterpiece model, in which a few works are displayed in their singularity, favoring instead a display strategy of rich density.

The entrance of this Museum is the most modern of all; it is the main work room and laboratory, in contrast to the great hall of most Museums, delightful with empty spaciousness and with a few superlatively fine objects beautifully and singly displayed. At once on entering, the inspiration of the happy busy atmosphere starts an electric current of sympathy. No explanation seems necessary about the quantity and massing of the objects;

there is no feeling of confusion, since each one, or all, are there for immediate use.¹⁰⁵

Since the CUMAD's visitors were designers and artisans who came to find not only general inspiration, but specific works to copy, the multiplicity of examples and the potential for serendipitous discovery was far more desirable than the empty spaciousness affected by other museums and the distanced aesthetic appreciation it facilitated. Furthermore, with its multiple iterations of object types, the museum foregrounded the rich variations found within periods or styles, rather than linear art-historical narratives of stylistic development.

The use of plaster casts in American museum collections such as the Metropolitan was well-established by the time the Hewitts founded their museum.¹⁰⁶ The casts forming the original kernel of the Cooper Union Museum's collection were obtained during the zenith of the practice's global popularity. Unlike most other curators though, the Hewitts did not purchase casts in an effort to illustrate an art-historical narrative that emphasized antiquity and the Renaissance as the pinnacles of global human achievement. Their purchase of plaster casts for the museum was a much more local decision. It was conditioned not only by the Hewitts' taste as connoisseurs of the decorative arts, but also by their ambitions for the collections' impact in New York among its intended audience of workers and professionals. The Hewitts aimed to increase the quality of American decorative arts by exposing industry to high quality examples available for a direct or an innovative imitation. The highest achievements of decorative arts, in their estimation, were not antique or from the Renaissance, but rather emerged from pre-Revolutionary seventeenth and eighteenth century France. This was also a period in which the Metropolitan Museum's cast collection was severely lacking.

The CUMAD's collection of casts were purchased primarily from the *atelier de moulage* (the plaster casts workshop) of the UCAD.¹⁰⁷ This *atelier* was created in 1883 and remained actively productive until 1899, ultimately dismantled in 1901 due to its unprofitability. The *atelier* supplied casts of architectural ornament, furniture, and other objects to museums, academies of art, professional architects and designers, and private collectors, creating copies

¹⁰⁵ Ibid. 20-21.

¹⁰⁶ Indeed, the Met's extensive collection of casts from museums and private purveyors throughout Europe was completed the same year that the Hewitts obtained theirs.

¹⁰⁷ Eleanor Hewitt also reports that a handful of casts were later purchased from the Museum of Comparative Sculpture at the Trocadéro.

of objects from both within their collection of originals and outside of it [Figs. 2.12 & 1.13]. Academies of art displayed the casts for students of drawing, sculpture and architecture, who drew, measured and modeled them. Professional architects purchased reproductions as models for the design and production of new ensembles for their clients. Casts were regularly exchanged with or sold to other museums, both in Europe and the United States.

In 1895, the president of UCAD, Antonin Proust, explained that the *atelier's* aim was to provide access to the masterpieces of history. "Without disdaining originals, the UCAD believes that it must create a vast factory of reproduction, which would not be confined to producing models for its museum, but which would permit it to place these models at the disposition of every workshop and every school."¹⁰⁸ Some within the UCAD leadership believed that the as yet unrealized Musée des Arts décoratifs should be populated primarily with reproductions, since these would be more financially accessible, and materially more appropriate for the purposes of educating the ranks of artisans and manufacturers.¹⁰⁹ Decorative arts scholar and curator Evelyne Possémé has shown how the art-historical preoccupation with thorough and accurate illustration of stylistic development did not truly find purchase at the UCAD. The institution aimed instead at the provision of inexpensive reproductions for students and workers to study and to copy.

The order submitted by the Hewitts in July 1895, though not finalized until October, was likely the largest one ever received by the UCAD atelier, costing over eleven thousand francs, and accounting for some 336 objects packed into nineteen shipping crates.¹¹⁰ The Hewitts' order took two months of discussions and eight drafts to finalize, and was so large it prompted the director of the workshop, Dureau, to request two additional workmen in order to complete the work in the promised two months. In their purchase and collection of plaster casts for the Cooper Union Museum, the Hewitts eschewed the prospect of the

¹⁰⁸ "L'organisation Du Musée Des Arts Décoratifs. Une Lettre Par M. Antonin Proust," *Revue des Arts décoratifs* 6 (1885). Cited in Evelyne Possémé, "La Politique De Reproduction À L'union Centrale Des Arts Décoratifs Au Xixe Siècle," in *La Jeunesse Des Musées : Les Musées De France Au Xixe Siècle : Paris, Musée D'orsay, 7 Février-8 Mai 1994*, ed. Chantal Georget (Paris: [Musée d'Orsay] : Editions de la réunion des musées nationaux : Diffusion, Seuil, 1994). 77.

¹⁰⁹ Paul Christofle, "Bulletin officiel de l'Union centrale des arts décoratifs. Rapport du Conseil d'Administration," *Revue des Arts décoratifs*, 5 (1884) Cited in . 78.

¹¹⁰ In comparison, most orders received by the workshop were for a handful of casts whose charges usually totaled under one-hundred francs.



Figure 2.12 Atelier de moulage (plaster cast workshop) of the Union Centrale des Arts Décoratifs, 1892. From: Albums Maciet, 309bis:3bis, Bibliothèque des Arts décoratifs.

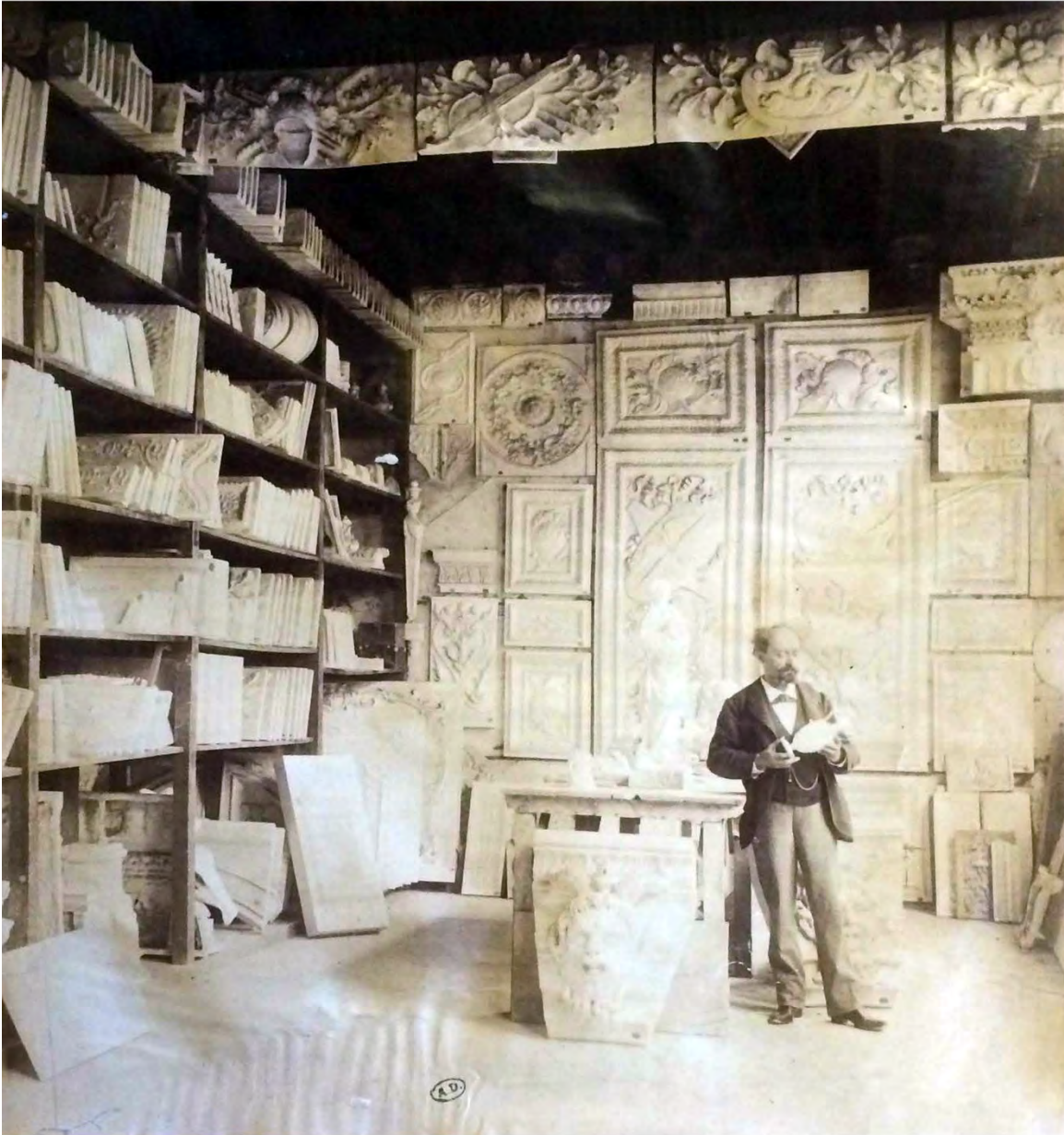


Figure 2.13 Atelier de moulage (plaster cast workshop) of the Union Centrale des Arts Décoratifs, featuring its director, Duveau. 1892. From: Albums Maciet, 309bis:3bis, Bibliothèque des Arts décoratifs.

comprehensive illustration of art historical development (which would have required purchases from multiple sources) in favor of a rather narrow selection of French decorative arts from the sixteenth, seventeenth, and eighteenth centuries.

The order contained a large variety of items. It included a great deal of architectural ornament, such as statuettes, capitals, pilasters, bas-relief, molding, brackets, and balustrades. It also included many small items of interior ornament and furniture elements, such as the feet of chairs and beds, carved panels, vases, andirons, locks, clocks, and knobs.¹¹¹ In one 1903 newspaper article, Sarah Cooper Hewitt gave credit to their UCAD contacts for the choice of objects in the order,¹¹² and in Eleanor Garnier Hewitt's *The Making of a Modern Museum* (1919), the sisters portrayed themselves as naïfs guided by sophisticates, who were "perhaps secretly amused at the youth and inexperience of their collaborators."¹¹³ However, given how many drafts of the order exist, it is hard to imagine it was anything but a collaboration. The Hewitt's disavowal of responsibility may very likely have been a strategy for promoting the validity of the collection to those disposed to seriously doubt their authority as women curatrices.

Though the Hewitts conceived of the plaster cast collection as the "nucleus and backbone" of the CUMAD, the museum did in fact open with plaster reproductions alongside an established and growing collection of original works. Unlike the Metropolitan, whose transition from a cast-centric collection to one comprised exclusively of original works was hotly debated among its curators and trustees, the CUMAD's collection was originally conceived as a hybrid deploying originals and reproductions to suit the needs of its target audience.

After their major purchase of casts from the UCAD atelier and a small additional order from the Trocadéro, the Hewitts bought no additional reproductions as they continued to

¹¹¹ While there are many drafts of the Hewitts' 1895 order for reproductions, and other mentions of the Hewitts in the records of the Commission du Musée, there is one mysterious document whose significance I have not yet fully understood. There is a letter dated December 10, 1889 written from Abram Hewitt, Eleanor and Sarah's father, remitting a payment of 4495 francs for "models which were ordered by my daughter for the Cooper Union." Why they would have ordered casts for the museum eight years before it opened is unclear, and I have not found any other record of this earlier order. If the Hewitts did in fact make contact with the UCAD as early as 1889, this would indicate a much longer germination period of their museum project, and a longer acquaintanceship with French decorative arts people, than is currently believed.

¹¹² "Cooper Union Museum."

¹¹³ Hewitt. 11.

acquire original objects. Some forms of the decorative arts were well represented by casts, particularly architectural ornament, sculpture, furniture, and reliefs, because of the medium's facility for accurately reproducing form, proportion, and surface treatment in a hardy and stable material. However, many of the decorative arts were not easily reproducible, in plaster or otherwise. The workmanship, color, material, and assembly of many decorative art forms, such as woodwork, textiles and drawings, necessitated engagement with originals, especially in light of the museum's intended audience of artisans and designers.

In freely mixing reproductions and originals, the Hewitts tacitly adopted some of the same attitudes that underwrote the use of casts in museums like the Metropolitan. That is, a rejection of the notion that genius resides in unique and authentic objects, or that the most important forms of aesthetic engagement involve the communion with auratic objects. However, the Hewitts also rejected the aspiration towards a thorough art-historical narrative that the Metropolitan and other institutions illustrated through their comprehensive collections of reproduced canonical works. Because many decorative arts objects were often not in fact unique objects, but rather industrially produced iterations, it was not conceptually problematic to collect both casts and originals. In the context of the decorative arts, both were to some extent examples of multiple production. Casts and electrotypes could also serve the educational role required of them at the CUMAD more effectively than originals, in that reproductions could be freely handled by artisans or designers drawing or modeling them. Finally, because the collections were assembled to facilitate study, imitation, and even direct reproduction, it was objects' form and appearance that was of greater interest than their functionality—something that casts rendered quite well for certain object types.

The rise of American wealth in the nineteenth century coincided with increased archeological activity and an opening up of the European art market, allowing American museums to develop collections of original objects, thereby dimming the attraction of reproductions. The Hewitts were no exception, and their family wealth alongside that of their friends ensured a steady stream of donated objects into the nascent museum. One of the museum's most important early gifts, a collection of textiles, was purchased by J. Pierpont Morgan. Morgan was a major donor to the Metropolitan Museum of Art and served as its president from 1904-1913. His wealth and zeal for collecting art is in fact credited with helping to turn the tide of museum practice away from the use of casts and

toward the collection of original objects.¹¹⁴ Another important early supporter of the CUMAD was none other than George Hearn, the recalcitrant patron of the Metropolitan who insisted his gift of paintings remained installed as a group. It was a major monetary gift from Hearn that prompted the formation of the museum Advisory Council to guide future acquisitions according to the expertise of its members. The plaster casts remained a small but important part of the CUMAD's collections until the 1910s, when the museum had collected original objects in sufficient quantity and variety to render such reproductions entirely obsolete. However, the originals and casts remained on display, side by side, until 1938 when the larger casts were given away to local design schools and the smaller ones were placed in storage. They remained there until the 1950s when the museum sold the casts to Joseph Gorelik, a native of Brooklyn, who shipped them to Ecuador where he planned to open a museum and school.

Sorting Things Out: the organization of decoration

One of the most important conceptual structures that the Hewitts borrowed from the Parisian Musée was their method of classification. This was used to organize the decorative arts both spatially and categorically, determining their grouping and arrangement in exhibition displays as well as the grouping of object classes and types in the expositions for judging and competition. However, like other ideas borrowed from an organization that had already moved on to a new set of concerns, the Hewitts returned home from Paris to New York in 1895 with a classification system that had been adopted by the UCAD in 1877 but then rejected twice over in 1882 and 1885. This system was one that placed architecture directly at the center of the decorative arts.

In their 1999 book *Sorting Things Out: Classification and its Consequences*, Geoffery C. Bowker and Susan Leigh Star have written about the nature of classification systems, describing an ideal system as ordered by “consistent, unique classificatory principles,” whose mutually-exclusive categories comprise a complete system that “provides total coverage of the world it describes.”¹¹⁵ Classification systems seek to order a messy world full of irreducible individual objects and ideas into discrete and limited categories, thereby abstracting the undifferentiated

¹¹⁴ Wallach. 51.

¹¹⁵ Geoffrey C. Bowker and Susan Leigh Star, *Sorting Things Out: Classification and Its Consequences*, Inside Technology (Cambridge, Mass.: MIT Press, 1999). 10-11.

mass of reality into simplified and structured sets of information graspable by the human mind. They do however note the incapacity of real-world classification systems to perform ideally, whether because of the difficulty of defining categories, an ill-fit between the categories and the objects they order, or seepage at the edges of the system caused by recalcitrant individuals who overflow the categorical boxes designed to hold them. The study of the systems themselves can be illuminating and revealing about the attitudes and beliefs that shaped them, and about their creators' intentions in employing them.

The systems of classification for the decorative arts debated and utilized by the UCAD and that adopted by the Hewitts for their museum are no exception: imperfect and revealing in their imperfections. Specifically, they reveal the museums' conceptions of the decorative arts and understanding of their own agency as museums. I will therefore examine the UCAD classification system debates, the influential classification systems developed both for and in reaction to the Great Exhibition, and the Hewitts' adoption and modification of the French system, in order to demonstrate how the Hewitts engaged with this important global discourse. Further, I will explore the distance between the ideality of classification systems and the reality of their deployments by analyzing the tensions between the motivating concepts of each system—material, use, technique, and relationship to architecture—and the practical maneuvers utilized to escape their rigidities. Finally, I will articulate connections between the multiple uses of architecture as an organizational paradigm for the decorative arts and the disciplinary contexts in which those arts emerged.

Material versus Use:

Classification Debates in the Society du Musée des Arts Décoratifs

When the Société du Musée des Arts Décoratifs [SMAD], precursor of the UCAD, was founded in 1877 with the primary aim of establishing a permanent decorative arts museum in Paris, one of the first orders of business was to decide upon the classification system by which the collections would be ordered, both conceptually and spatially. The debates were purely speculative. While the UCBAI did have a small two-room museum in its headquarters in the Marais, its primary efforts were dedicated to the staging of large temporary exhibitions of contemporaneous works. In contrast, the SMAD did not possess space or collections. And yet, the question of classification was hotly contested and one that the group would return to again and again over the ensuing years. While classificatory structures might seem

DIVISION 1:
THE DECORATION OF BUILDINGS

SECTION 1: EXTERIOR DECORATION

- A. The Whole of Architecture
- B. Sculpture Applied to Architecture
- C. Painting Applied to Architecture

SECTION 2: INTERIOR DECORATION

A. FIXED DECORATION

- 1. Wood
- 2. Painting
- 3. Textiles
- 4. Metal

B. MOBILE DECORATION

- 1. Cabinetry
- 2. Ceramics
- 3. Metal work
- 4. Art Objects of a Diverse Nature

DIVISION 2:
THE DECORATION OF MAN AND THE OBJECTS OF HIS USE

- 1. Clothing
- 2. Weapons
- 3. Various Instruments
- 4. Means of Instruction

Figure 2.14 System of Classification devised by Georges Lafeneestre (1877) for the Musée des Arts décoratifs and adopted Eleanor Garnier Hewitt and Sarah Cooper Hewitt for the Cooper Union Museum of the Arts of Decoration (1896). Published in Elizabeth Bisland, *Plan of the Proposed Cooper Union Museum for the Arts of Decoration*. New York: Cooper Union, 1896.

to be a purely academic problem, the two primary systems in question were imbricated in a web of considerations that lay at the heart of the organization's aims and identity, such as the audiences they wished to address and the improvements they hoped to effect in the French decorative arts industry.

One group, led by Louvrier de Lajolais, argued for the classification of museum objects by their *material*. This organization ordered objects in a way that was most convenient for workers, artisans, and designers, in that it reflected the organization and labor-specialization of industry itself. A tradition inherited from the pre-Revolutionary guild system, individual workshops typically focused their efforts on one primary material. Objects that entailed more than one material were produced cooperatively by multiple workshops, each contributing their specialized skills and knowledge. Workers visiting a museum organized by material could thus target the collections relevant to their own endeavors, which would be grouped together for direct comparison.

Further, proponents of classification by material argued that it ensured a kind of decorative propriety. The physical nature of individual materials and the techniques appropriate for the working of these materials limited the decorative motifs that could be properly applied to them. By collecting together all the objects made of wood or stone, the museum visitor could plainly visualize the limits of both the possible and the perceived proper decoration applicable to those materials.¹¹⁶ Louvrier de Lajolais thus proposed that “all productions of industrial art” would be arranged in the following nine categories: wood, stone, metal, ceramic, glass and enamel, textiles, materials of animal origin, paper, and reproductions.¹¹⁷

On the other side of the debate, partisans led by Georges Lafenestre argued for a classification system ordered by *use* or *object-type* [Fig. 2.14]. Targeting the materialists' core arguments, Lafenestre proposed that although materials may accept certain motifs with greater and lesser difficulty, this did not mean that materials actively determined the

¹¹⁶ Conversely, by not mixing materials and their corresponding motifs together in one gallery or display, the museum avoided tempting or inspiring the worker to create novel or “improper designs,” so that they would “no longer be driven only by the fantasy of a hasty and unsteady imagination,” a fault evidently found in contemporaneous production. Georges Lafenestre, *Musée Des Arts Décoratifs. Projet D'organisation Et De Classification Du Musée* (Paris: A Chaix, 1877). 6.

¹¹⁷ This last category included techniques such as plaster casting and electrotyping, referred to methods of reproduction by which objects that the museum did not own, whether because of expense or rarity, could be copied.

transformations applied to them. Rather, he accused them of “inverting the logical order of production in subordinating fabrication to material,” ultimately asserting that “form is commanded by use.”¹¹⁸ While he agreed that material classification better reflected existing industrial organization, Lafenestre argued against industry as the primary audience of the museum on a number of fronts.¹¹⁹ In his perception, industry was overspecialized and the segregation of techniques it engendered limited the potential development of the decorative arts. Classification by use would more directly address an audience of collectors and consumers, who were ultimately responsible for driving the production of industrial art and determining its success. Rather than a technical education, classification by use would offer a primarily aesthetic education, helping to shape the public’s taste by “developing their intelligence through the study of the best specimens of decorative art.”¹²⁰

The system articulated by Lafenestre was far more complex than the nine evenly weighted material categories proposed by Lajolais, in that it was conceptually organized by the relationship of the decorative arts to architecture. Objects were grouped according to their relationship to the building, imagined specifically as a domicile. This allowed for three primary articulations for all decoration: decoration applied to the exterior, applied to or belonging in the interior, or as autonomous objects housed by the building for interaction with the body. Within the overall categories, the sub-categories are a curious mix of materials (wood, metal, ceramics) and object types (clothing, weapons, sculpture) that could be rendered in a variety of materials. Lafenestre’s description of this system as organized by “use” therefore emerges as something of a misnomer, since objects are arranged more precisely according to the spatial positions they are imagined to occupy in the dwelling of their hypothetical private owner.

Ultimately, the SMAD voted to adopt Lafenestre’s system, most likely in an attempt to distinguish themselves and their aims from that of the UCBAI. At that time of course, the UCBAI represented a rival organization which had been staging expositions for fifteen years, organized largely by material.¹²¹

¹¹⁸ Lafenestre. 6.

¹¹⁹ Lafenestre found organization by material to be too technical and overly focused on fabrication.

¹²⁰ Lafenestre. 8.

¹²¹ For instance, the Exposition of 1876 was divided into twelve classes. Six of them were defined as material groups (wall-coverings, domestic textiles, common metals, precious metals, glass, ceramics) while others were defined in terms of their object type or use (original works by artists, architecture, monumental sculpture,

Urmotiven:

Gottfried Semper, the Primitive Hut, and the Classification of the Decorative Arts

Lafenestre's system of classification by use, structured as it was around architecture, is interesting not only for its relative complexity, but also because of its similarities to other nineteenth-century systems of classification. The understanding of architecture as that which gathers, orders, and temporally precedes the decorative arts as a whole is important. It is in fact an aspect shared with the most influential decorative arts classification system of the time, developed by Gottfried Semper while working on the Great Exhibition of 1851.

In reaction to the system that Henry Cole and the Royal Commission employed, Semper considered the four major divisions of the Great Exhibition—raw materials, machinery, manufactures, and fine art—to be “upside down” in emphasis, arguing that “in an industrial exhibition the products of the applied arts, because they come from the need for nourishment, shelter, protection, the measurement of space and time, and so forth, should serve as the first and most essential items of consideration.”¹²²

The Great Exhibition's system of classification emphasized the industrial process and its successive levels of refinement: the input of raw material, the machines which acted upon it, the goods that were manufactured from those materials, and finally the fine arts, which bracketed out industrial production altogether. Semper, in contrast, turned to the origins of human production as a way to understand and order contemporary output. In three successive texts, Semper developed and articulated a system based on the primitive hut as an originary piece of architecture. This was, in Semper's view, the basic prompt and source of the decorative arts, as well as their unitary site.

furniture, art applied to various objects, reproductions). The categories are not purely material in part due to pressure from industry, who complained of being grouped and consequently judged against others working in dissimilar objects, techniques, or materials. They advocated against conceptually pure systems (organization strictly by material or strictly by use) and for a system that most closely reflected the contemporaneous organization of industrial production. See Camille Minoret, "Rapport De La Commission Consultative Au Conseil D'administration," in *Cinquième Exposition [De L'union Centrale Des Beaux-Arts Appliqués À L'industrie], 1876 Catalogue Monuments Historiques, Vues De L'ancien Paris, Histoire De La Tapisserie De Louis XIV À Nos Jours* (Paris: impr F Debons, 1876).

¹²² Gottfried Semper, "Science, Industry and Art: Proposals for the Development of a National Taste in Art at the Closing of the London Industrial Exhibition," in *The Four Elements of Architecture and Other Writings* (Cambridge [England] ; New York, NY, USA: Cambridge University Press, 1989). 132.

Semper's *The Four Elements of Architecture*, written in 1850 before he began work on the Great Exhibition, aimed to counter the view that material properties determined form and ornamental motif. Instead he sought to demonstrate how the cultural importance of certain motifs prompted the application of their associated technique to multiple materials. In this way, culture actively impressed itself upon nature. Semper argued that for this reason objects are better categorized according to "motive," or the conceptual approach to acting upon materials, rather than material itself. He found the origin of this approach in *Urzustände*, or the primitive dwelling and its elements: the hearth, the roof, the enclosure and the mound. These, in turn, became the conceptual poles by which human production was organized.

"At the same time the different technical skills of man became organized according to these elements: *ceramics* and afterwards metal works around the *hearth*, *water* and *masonry works* around the *mound*, *carpentry* around the *roof* and its accessories. But what primitive technique evolved from the *enclosure*? None other than the art of the *wall fitter* (*Wandbereiter*), that is, the weaver of mats and carpets."¹²³

Semper argued for the primacy of these four elements in another essay, referring to them as "the fundamental motives of all human work."¹²⁴

The following year, in an essay entitled "Wissenschaft, Industrie, und Kunst," Semper addressed the organizational structure of the museum more directly. Written as a pedagogical statement to attract the attention of Henry Cole, the new head of the Schools of Design, the essay also contained reflections on the Great Exhibition. Semper courted Cole's concerns in the hope of desperately needed employment. He complained that its organizational system, with its sole focus on material, had produced illogical groupings of objects. Retrospectively, he proposed a plan that was "architectural and based on the elements of the domestic settlement: hearth, wall, terrace, roof. A fifth main division should comprise the working together of these four elements and embrace high art, and in a symbolic sense, high science."¹²⁵

¹²³ "The Four Elements of Architecture: A Contribution to the Comparative Study of Architecture," in *The Four Elements of Architecture and Other Writings* (Cambridge [England] ; New York, NY, USA: Cambridge University Press, 1989). 103.

¹²⁴ Mari Hvattum, "A Complete and Universal Collection': Gottfried Semper and the Great Exhibition," *Mac journal* 4 (1999). 43.

¹²⁵ Semper, "Science, Industry and Art: Proposals for the Development of a National Taste in Art at the Closing of the London Industrial Exhibition." 132.

Elaborating his vision for British arts education, Semper envisioned a museum and study center combined as the centerpiece of his proposed system, whose collections would help to shape national public taste. Here he articulated more direct connections between the architectural elements of the primitive hut and decorative arts classifications, listing ceramics, glass and metalwork, textiles, woodwork, and masonry as the four basic divisions, echoing his four elements. His primary innovation, however, was his location of their unity and synthesis: the “fifth division” in which the decorative arts come together as none other than architecture. Monumental architecture becomes the site where the decorative arts converge, the context where they are most at home. Just as the primitive hut is assembled from the hearth, wall, terrace and roof, so too is architecture the sum total of the decorative arts and the locus of its meaning.

Many art historians have argued that Semper’s system was widely influential in continental Europe, especially in German-speaking regions.¹²⁶ More recently, Ian Wolfenden has argued that Semper’s structure was attractive, particularly to the South Kensington Museum with whom Semper was affiliated for several years, because it reflected the contemporaneous structure of craft industries in England.¹²⁷ However, other more in-depth scholarship on the South Kensington has rejected such claims, suggesting that the museum was motivated by pragmatics rather than theory.¹²⁸

In the French context, there is no archival evidence to suggest that UCAD members were aware of Semper’s writings, and they did not find the institutions that scholars have linked most directly to Semper’s influence, the South Kensington Museum or the Berlin Kunstgewerbemuseum, to be particularly useful models for their own endeavor.¹²⁹ And yet architecture forms the center and the structure of both classification systems, though ironically it is an artform that can never be fully and completely present in the museum.¹³⁰

¹²⁶ See, for example, B. O. Lagercrantz, "A Great Museum Pioneer of the Nineteenth Century," *Curator: The Museum Journal* 7, no. 3 (1964); Julius Lessing, "Gottfried Semper and Die Museen," *Mitteilungen des Mährischen Gewerbe-Museums* 21 (1903).

¹²⁷ Ian Wolfenden, "The Applied Arts in the Museum Context," in *Museum Studies in Material Culture*, ed. Susan M. Pearce (London; New York: Leicester University Press, 1989). 27.

¹²⁸ Anthony Burton, *Vision & Accident: The Story of the Victoria and Albert Museum* (London: V&A Publications, 1999). 112-113.

¹²⁹ Germain Bapst, *Union Centrale Des Arts Décoratifs. Commission Du Musée. Rapport Présenté Au Nom De La Commission Du Musée Des Arts Décoratifs Au Conseil D'administration De L'union Centrale Des Arts Décoratifs* (Paris: impr de A Lahure, 1885). 5-6.

¹³⁰ Rather, it is fated to be represented in salvaged fragments, through drawings, or in reproductions.

Rather architecture functions as an alibi for other, more fundamental museological concerns. Despite this connection, Semper's and Lafenestre's systems also differed in important ways. Utilizing the model of the collector's home, the French system emphasized the role and interests of the consumer, structuring objects in the museum in a way that aligned with the domestic geography of the objects' use and circulation in everyday life.

Semper's system, in contrast, approached architecture from the architect's or the builder's point of view, distributing the decorative arts according to their affinities with the various labors of construction. In this way, the classifications tended to align with the realities of production from the perspective of the maker rather than the consumer. The conceptual centrality of architecture manifested in both Lafenestre's and Semper's classification systems was, however, short-lived.

**Towards a Common System:
The UCAD returns to the question of classification (1882)**

The question of classification re-emerged only five years later in 1882 when the SMAD and the UCBAI merged to form the Union Centrale des Arts Décoratifs. Foremost at issue was the clash of classification systems between the two groups. While the SMAD had adopted the architecturally based classification system proposed by Lafenestre, the UCBAI utilized a system based on material. The disjunction between them forced the leadership back into negotiations to settle on one system that would organize both their major temporary expositions as well as the unrealized permanent museum installations. The Comte de Ganay, one of the two vice-presidents charged with the newly formed institution, was asked to prepare an analysis and a recommendation. His proposal was overwhelmingly accepted.¹³¹

Ganay argued that under Lafenestre's system some forms of production confusingly appeared in multiple categories of use, as in the case of textiles appearing in both of the separate categories of furniture and clothing. A textile designer visiting the museum would have to study more than one section to find relevant materials, and would thus be unable to compare them side by side. In Ganay's view, the museum classified by use would ultimately

¹³¹ Despite the fact that Ganay, a wealthy aristocratic collector, had come into the UCAD from the Société and not the UCBAI, he came down on the side of material rather than use.

fail to achieve its “technological goal,” since it did not optimize the collection for use by the worker or industrial artist.¹³²

Lafenestre, responding to Ganay to defend his ousted system, was critical of the return to the primacy of material and what he perceived as a disproportionate concern with the worker. In Lafenestre’s opinion, the education of workers was belonged in the professional school, and he believed it was the taste of the consumer that drove developments, rather than the genius of the worker. The museum should not just organize itself for the convenience of the consumer, but rather for his active edification. While the skills and knowledge of the artist or artisan needed to be developed, the collector or consumer too had to be trained not only in the selection of individual objects but also in their assemblage.¹³³ In this way Lafenestre elevated the editorial or curatorial work of the consumer in decorating his domestic environment, to the same level of the artist, and thus a significant audience competing for the attention of the museum’s directors.

It was on this point that Ganay agreed with Lafenestre, since as an *amateur* himself, he recognized the importance of the collector and the consumer as a significant sphere of influence for the museum. Ganay writes, “The ignorance of consumers is fatal to the industry, whose standards are lowered if the worker is forced to follow through the vagaries of fashion, the fantasies of a public ignorant of the beautiful models provided by historical art traditions.”¹³⁴ Toward this end, Ganay proposed a solution that evaded the problem of classification altogether: the ninth category, the *ensembles décoratifs* (decorative ensembles).¹³⁵ This new category would address not only producers, but also consumers and artists.

¹³² “Extrait de la Séance du Conseil d’Administration du 14 mars 1883,” *Bulletin Officiel de l’Union Centrale des Arts décoratifs*, Supplement au numéro de la Revue des Arts Décoratifs du 20 avril 1883. 134.

¹³³ Lafenestre argued, “If on one hand, he added, it must necessarily by a progressive series of samples of worked material, provide the most complete examples of technical education, it must just as carefully by the methodical comparison of objects of the same use fabricated with various materials, teaches by what standard and following which principles these various materials could be applied, associated, modified according to an aesthetic intention.” *Ibid.* 137.

¹³⁴ *Ibid.* 136.

¹³⁵ In fact, modifying the materially based system proposed by Lajolais, Ganay added two new categories—decorative ensembles and decorative painting and sculpture—to the previous material categories of wood, stone, metal, earthenware and glass, textiles, paper, reproductions, and various materials (including those from animals). These, he hoped, “will make our museum a precious source of information; if we can succeed in developing at the industrial concerns the taste for the beautiful types of decorative art, if we augment the number of amateurs, who encourage by their enlightened choices the intelligent efforts of the industrials; if, finally, we convince the painters and the sculptors to take the support of their talents to industry, as has been done by the painters and sculptors of centuries passed, we would have attained our aim and done for our country a useful work and fertile in results.” *Ibid.* 136.

Akin to what we might today call a “period room,” a decorative ensemble collected together multiple types of decorative arts objects to assemble a curated group illustrating “the ornamental relationships that one must observe between the decoration of walls and the decoration of furniture, and the relationship of color that must exist between the wall-coverings and the chairs.”¹³⁶ The decorative ensemble was convened not only on aesthetic grounds, but was also motivated by a common-sense notion of use, in which galleries were set up not just as displays of things but arranged as a model for a wall or room in the viewer’s home, and also according to art historical concerns, congregating objects that originated in the same region and period and were thus, in effect, the same style. It is here that the desires of the *amateur*, the erudite scholar-collector, could be best satisfied.

From the Ideal to the Real: refining the system for use (1885)

Three years later, as the museum continued to collect objects and the prospect of a permanent home seemed imminent, the scholar-collector Germain Bapst was asked to elaborate on the schematic classification system proposed by Ganay, partly as a means to guide future acquisitions. Bapst reiterated the primacy of the worker as the museum’s target audience in its original goal of “directing [the public] taste by, above all, elevating through education the artistic level of all French production.”¹³⁷ However, in Bapst’s report, there is a clear manifestation of the UCAD’s shift in orientation within the tensions between the institution’s traditional association with industry and the worker and its increasing tendency toward an art-historical orientation entwined with the values of connoisseurship.

Bapst’s report revealed some of the controversies at play in the development of a permanent museum. These included the relative proportion of modern to historical objects, with the majority of stakeholders preferring a strong focus on the latter, and the question of collecting non-French production, which was not only a matter of cost but also of national pride. It also revealed how self-consciousness the UCAD leadership had become during their attempt to create a museum in a milieu where many similar and competing institutions had recently emerged. The commission sought to learn from their competition, by visiting

¹³⁶ Ibid. 136.

¹³⁷ Bapst. 3.

and reporting back on the structures of organization found both at home and abroad.¹³⁸ This research led the Commission to reaffirm Ganay's proposal, but also to shift their perspective from an idealist position to a pragmatist one, in which the conceptual purity of the classification system is abandoned as an ideal in favor of a conceptual elasticity that could accommodate the vicissitudes of creating a working museum. Bapst elaborates,

It is not useful to emphasize the importance of classification. The utility of our museum will depend solely on the discriminating taste with which it is created. A precise and simple classification system will perform a necessary task for our museum, long called for and awaited. Without a system that responds to the desired goal, the Musée would just be another museum lacking any real utility.¹³⁹

This value of "real utility" over conceptual purity led Bapst to modify Ganay's proposal in a continuation of a trajectory that would ultimately eclipse the early goals of the institution.¹⁴⁰ The most important modification placed even greater emphasis on the category of decorative ensemble as the culmination of the material categories and a means of transcending them. Recalling a curious metaphor in which the nine (mostly) material categories were like avenues arranged as rays converging upon a great intersection, Bapst described the decorative ensembles as occupying the point of junction, as "the conclusion of the previous series.

In effect, the view would embrace in one fell swoop the human genres, first seizing on material and its transformation after many trials and studies, arriving at the final and complete application of art and industry assembled together."¹⁴¹ These galleries were certainly to be organized by period and style for the benefit of art historical scholarship, but also "in order to reconstitute the milieu in which our fathers had lived."¹⁴² Thus the universalizing impulse of stylistic codification was tempered by an interest in preservation, domesticity, lifestyle, daily habits and practices, and the objects that facilitated and reflected

¹³⁸ These included the Musée des Arts et Métiers and the Musée du Cluny, as well as the South Kensington Museum in London, the Kunstgewerbemuseum in Berlin, and the Germanisches Museum in Nuremberg.

¹³⁹ Bapst. 7.

¹⁴⁰ In one major modification, Bapst eliminated the category of "processes of popularization," arguing that it was not the materiality of the plaster casts or engravings that comprised that category that was important, but rather the objects that were represented by them. As such, the reproductions would join the category of the thing it represented, so an engraving of a tapestry would join the textiles and a galvanoplasty reproduction of a bronze candelabra would join the metals themselves.

¹⁴¹ Bapst. 9.

¹⁴² Ibid. 39.

them. What this type of gallery offered to the viewer was nothing like the technical education on material, fabrication, or decorative propriety intended for the worker. Rather, they addressed the general public—the consumer—seeking to educate their taste in the one realm they could fully control: their home.

Ensembles Décoratifs and Period Rooms

The *ensembles décoratifs* installed in the Musée des Arts Décoratifs when the museum opened in 1907 were a forerunner to the more familiar “period room” that made an appearance in American museums in the mid-1920s.¹⁴³ However, while the period room strove for an authentic and accurate depiction of an historical convergence, in that multiple object types were unified by space, use, period, and region, the decorative ensemble was convened on the basis of taste and was ultimately a strategy of escape from the rigid classification systems imposed upon the museum’s collections.

The period room purports to depict a room in its historically accurate totality. This includes the many elements of interior architecture as well as the objects of everyday use as appropriate to the room’s original usage.¹⁴⁴ Because of the difficulty in obtaining rooms in their entirety with the furnishings original to them, museum period rooms are often created from items believed by curators to be appropriate rather than original. Objects must be not only stylistically and regionally coincident, but also credible in terms of the class, position, and even tastes of the owners insofar as they are known.¹⁴⁵ Scholars have attributed the rise of curatorial and popular interest in period rooms in the early twentieth century, in part, to what Neil Harris has called a “turn to context” born out of American exposure to European

¹⁴³ Dianne Pilgrim dates the first period room in an American museum to 1924, when the American wing of the Metropolitan Museum of Art in New York opened. See Dianne H. Pilgrim, “The Period Room: An Illusion of the Past,” in *American Interiors, New England & the South: Period Rooms at the Brooklyn Museum*, ed. Donald C. Peirce and Hope Alswang (Brooklyn, N.Y.: Brooklyn Museum, Division of Publications and Marketing Services: New York, N.Y., 1983), 2.

¹⁴⁴ This includes floor, wall and ceiling treatments, and objects such as furnishings, including furniture, carpets, window treatments, light fixtures, paintings, instruments, vessels and utensils.

¹⁴⁵ Bruno Pons has also pointed out the agency of unscrupulous European dealers who sold mismatched sets of boiseries to unsuspecting collectors and even museums as another source of period rooms’ inauthenticity, a problem taken up by museums in more recent decades. Bruno Pons, *French Period Rooms, 1650-1800: Rebuilt in England, France, and the Americas* (Dijon [France]: Éditions Fatou, 1995).

museums.¹⁴⁶ These examples included institutions where artworks could be viewed in the collector's native habitat—the private country house or palace turned public museum.¹⁴⁷

While an American visitor to the Musée des Arts décoratifs may have understood the decorative ensembles as period rooms, the former was, in fact, a distinct museum installation type. The decorative ensemble allowed multiple types of objects in a variety of materials to be installed together in one tableau, assembled on the force of the collector's or curator's taste and knowledge within the loose bounds of period, region, and/or style, and limited by the museum's holdings. Decorative ensemble displays conveyed information not only about individual objects, but emphasized the manner of their assembly, and how their assembly formed an aesthetic unity. While some galleries in the Musée were organized by material, such as the collections of ironworks or textiles, most of the collections were installed as decorative ensembles.

One of the Musée's galleries [Fig. 2.15], ostensibly a collection of fragments of *boiseries* (interior wood paneling), actually displayed furniture, painting, drawing, and carved mouldings and medallions in a single view. Some galleries [Fig. 2.16] combined the decorative ensemble with a focused collection (here a collection of *moutardiers*, vessels for mustard, identified by its collector, not individual provenance) encased in a vitrine. The majority of the decorative ensembles were not spatialized into a hypothetically inhabitable room, but rather were comprised of a condensed display that protruded thickly from the wall yet rarely turned the corner. These seem intended to simulate, though not replicate, the model domestic scene of the collector-*amateur's* home. Occasionally a more spatial effect occurred when the items on display were large freestanding pieces of furniture, as in one gallery that contained an early 18th century bed and canopy [Fig. 2.17]. However, this

¹⁴⁶ See Neil Harris, "Museums, Merchandising, and Popular Taste: The Struggle for Influence," in *Material Culture and the Study of American Life*, ed. Ian M. G. Quimby (New York: Published for the Henry Francis du Pont Winterthur Museum, Winterthur, Del. [by] Norton, 1977).

¹⁴⁷ Historians John Harris and Neil Harris, along with curators such as David Barquist and Dianne Pilgrim, have acknowledged the debt American museums owe to their European counterparts with respect to the period room. However, they also point to domestic developments as important to understanding their emergence and popularity, including the use of decorative ensembles in commercial displays, both in department stores and in the commercial expositions so beloved in the nineteenth century, and the emergence of the sumptuous motion picture palace. See David L. Barquist, "'The Interior Will Be as Interesting as the Exterior Is Magnificent' American Period Rooms at the Philadelphia Museum of Art," *Winterthur Portfolio* 46, no. 2/3 (2012); John Harris, *Moving Rooms: The Trade in Architectural Salvages* (New Haven [Conn.] ; London: Yale University Press for the Paul Mellon Centre for Studies in British Art, 2007); Harris, "Period Rooms and the American Art Museum," *Winterthur Portfolio* 46, no. 2/3 (2012); Pilgrim.



Figure 2.15 Fragments of *boiseries* (from the end of the sixteenth century), bequest of E. Peyre. From: *Les Chefs-d'œuvre du Musée des Arts Décoratifs*. [Paris]: Vieux Paris artistique et pittoresque, 1907. Plate 53.

ensemble was *not* organized by period, as it contained tapestries from the 17th century, the 18th century bed, and interior wood doors from the early 19th century.

The aesthetic lessons that these were designed to impart were many.¹⁴⁸ Certainly the curators valued symmetry, and created symmetrical arrangements both overall and locally, where the overall display required asymmetry. For example, in the display of *boiseries*, the roundels and drawings are arranged around a central axis, downplaying the slight differences in size between them. The museum wall itself is treated as a neutral substrate and the portal's lintel, the vaguely pediment-shaped fragment above it, and the band of carved shells on top imply a coherent architectural architrave-like assemblage to be mentally filled in by the viewer. The portal itself becomes a frame of frames, allowing the whimsical staggered arrangement of the drawings and paintings to appear as a personal and charming choice, rather than a clinical or taxonomic selection.

The collection of moutardiers and its ensemble offered visitors an object lesson in combining a series of unlike things. This photograph shows only a part of a larger symmetrical grouping, as one can note the portion of a tall ornamental panel and a chair cut off at left, an arrangement that would have been appreciated with a wider view. Here, the vertical triplets of engravings also help to create local two symmetrical groupings visible to the visitor when nearer to the display: one centered around the vitrine and the other around the rightmost tall ornamental panel. This display also demonstrates how panels of vastly different sizes can be arranged according to visual convenience, so that smaller and more detailed images are closer to eye level, while larger ones occupy the wall's higher reaches. Both of these images also suggest proper spacing of objects, visual hierarchies, and a display of three dimensional objects which is highly orthographic, allowing viewing from the front or side, but rarely admitting a three-quarter view.

While a concern for historically- and geographically-accurate groupings did motivate some curatorial decisions, the desire for art-historical accuracy was tempered by an equally

¹⁴⁸ While there are certainly many that can be gleaned from a visual analysis of the photographs, some are obscured and likely impossible to recover. Seeing the ensembles in color would certainly add another layer of information, and an expert in the French decorative arts would undoubtedly be able to uncover meaningful stylistic pairings or groups that are not discernable to my eye.



Figure 2.16 Panels by Leriche. Color engravings (from the 18th century) donated by Audéoud. Collection of moutardiers created by Mr. Hébert, given by Mr. Fitz Henry. From: *Les Chefs-d'œuvre du Musée des Arts Décoratifs*. [Paris]: Vieux Paris artistique et pittoresque, 1907. Plate 97.



Figure 2.17 Doors from the Chateau of Versailles (Regency period) Base and canopy of the bed in embroidered silk (Beginning of the 18th century) Tapestries representing scenes from the Education of Achilles (17th century). From: *Les Chefs-d'œuvre du Musée des Arts Décoratifs*. [Paris]: Vieux Paris artistique et pittoresque, 1907. Plate 56.

strong belief commitment to demonstrating the principles of assembling objects according to good taste. Because the decorative ensemble collected objects together of various materials, techniques, periods and uses, it was thus a method of escape from the rigid ideality of the classification system, demonstrating a faculty to visitors that could not be accounted for by a scientifically rigorous system—taste.

Transplanting the system to New York: The classification system of the CUMAD

How the Hewitts interacted with their Parisian mentors in 1894-5 and returned to New York with a system only used by the Société between 1877-1882 remains a mystery. This is especially so, given the Hewitts' primary concern with the producers rather than the consumers of decorative arts. In the French context, Lafenestre's classification by use was geared towards consumers, while the classification by material promoted by Lajolais and Ganay was more useful for the worker. While Bisland's *Plan of the Proposed Museum* emphasized the audience of workers and Lafenestre's architecturally-based system, the Hewitts soon realized that a more complex approach was required. This approach led them to drop the architectural system almost immediately, replacing it with a hybrid of technique and object type.

On one hand, the Hewitts were concerned with the collections' accessibility and usefulness for tradespeople and students. For this reason, organizing the museum according to decorative art-type, combining material and technique, was an important strategy for grouping materials from disparate periods and regions together. On the other hand, the Hewitts wanted the arrangement of the collections to offer an art-historical narrative of stylistic development that could be *visually* understood without explanatory or interpretive text. At the outset, this art-historical narrative was subsumed within the larger categories of decorative art-types. For example, as the museum received increasing donations of textiles, it also required new cases for the materials. As such, it was decided to group the textiles by century, combining pieces from different countries, so that they might be displayed “following logically the development of designs, styles and weavings.”¹⁴⁹

¹⁴⁹ Cooper Union for the Advancement of Science and Art, *Thirty-Eighth Annual Report* (New York, N.Y.: Cooper Union for the Advancement of Science and Art, 1897). 28.

In a further complication, the Hewitts were also concerned with illustrating the diversity of the decorative arts across national boundaries and the stylistic differences that proliferated within even narrowly defined periods. They had decided that “objects will be collected belonging to the same class but to different countries, to show these national differences of styles, with the hope that by this means designers and artisans who wish to acquire a thorough grasp of this subject will be enabled to avoid the error of confounding periods and styles with each other.”¹⁵⁰

By 1904, a fourth consideration in the museum’s organization emerged when J. Pierpont Morgan gave the museum its first major gift of textiles, made up of three European collections that he had purchased for them. Despite the fact that gifts of textiles made up a significant portion of donations to the museum, the Pierpont Morgan Collection, as it was called, was displayed separately from the rest of the textile collection. These four primary organizational considerations—decorative art-type, art history, national origin, and donor—continued in a tense coexistence throughout the history of the museum.

As time passed, the Hewitts recast art-historical narrative as a mode particularly useful for workers because of its legibility to the uneducated.

The Trustees having kindly accorded the Museum additional space, the Directors have been enabled to re-arrange a considerable portion of the collections, so as to form a consecutive chronological exhibition of the development of decorative design as applied to each trade, and rendered it more instructive to both students and workmen, for should they not read labels or examine individual objects, they nevertheless can obtain some knowledge of the sequence and artistic history of various trades and manufactures.¹⁵¹

Desiring to convey an art-historical narrative of development to an audience of workers and students, rather than specialists, the Hewitts imagined an organization that was visually, rather than textually, explanatory. To execute this vision, they adopted a left-to-right chronological organization of the collections, making the historical succession of styles “as easy to study as a primer.”¹⁵²

¹⁵⁰ Ibid. 29.

¹⁵¹ *Forty-Fifth Annual Report* (New York, N.Y.: Cooper Union for the Advancement of Science and Art, 1904). 46.

¹⁵² The Hewitts elaborated, “Each series is disposed as in a book, from left to right, from earliest to latest times; the subdivisions of the periods plainly and alphabetically placed as to countries. Where possible, other subdivisions show more: for instance, in furniture mounts, designs with the same motive are placed together to

The kind of art-historical information made legible by this form of organization—styles, periods, national differences, motives—were not in fact emphasized because the Hewitts valued art history as a scholarly or even an amateur pursuit. Rather, historical objects were valued as “an untold mine of wealth for suggestions for decorative ideas, for the sequence and development of the decorative arts, for beauty and style, [and] for the manner, method and treatment of rendering various artistic media.”¹⁵³ History was a robust and valid source for the production of new work. New designs were not required to be novel or original, but were rather expected—even in the early 20th century—to maintain visual continuity with historical styles through the use of familiar and well-established decorative stylistic language.

The spatial organization of the museum illustrates the competing claims of the CUMAD’s multiple categories of classification. Examining the 1913 plan of the CUMAD reveals that the institution had not enacted the French classification system in the spatial organization installation of the collections [Fig. 2.09]. As described in a previous section, the museum’s collections were arranged according to a number of competing concerns, including period (century), country, material, object type, and occasionally donor. None of these categories took precedence as the overall determining factor of organization, though for each collection, one category would emerge as its primary defining characteristic. For example, on the plan one can variously see objects categorized by material (leathers), by use (arms), by period (18th century room), technique (wood carving), region (Egyptian), provenance (Decloux, the collector who sold his collection of drawings to the CUMAD), and donor (Pierpont Morgan, who purchased a number of textile collections for the CUMAD [Fig. 2.18]).

The Hewitts clearly put classification categories to work, though not in a rigid or systematic way. Rather, objects were categorized according to whatever quality appeared to define it best, whether that was its material, age, use, or the technique that produced it. These provisional and local decisions had to do with a variety of concerns: the organization of labor and production, the organization of markets, the shifting fashions of how objects

show the variety of treatment possible from simple idea.” *Fifty-First Annual Report* (New York, N.Y.: Cooper Union for the Advancement of Science and Art, 1910). 23.

¹⁵³ *Fifty-Third Annual Report* (New York, N.Y.: Cooper Union for the Advancement of Science and Art, 1912).



Figure 2.18 Installation of mixed materials, including furniture, metal work, wallpaper, boiseries, and prints. Cooper Union Museum of the Arts of Decoration, 1921. Wurts Brothers (New York, NY), photographer. From: *The Cooper Union 1859-1921*, The Cooper Archive, Cooper Union for the Advancement of Science and Art.

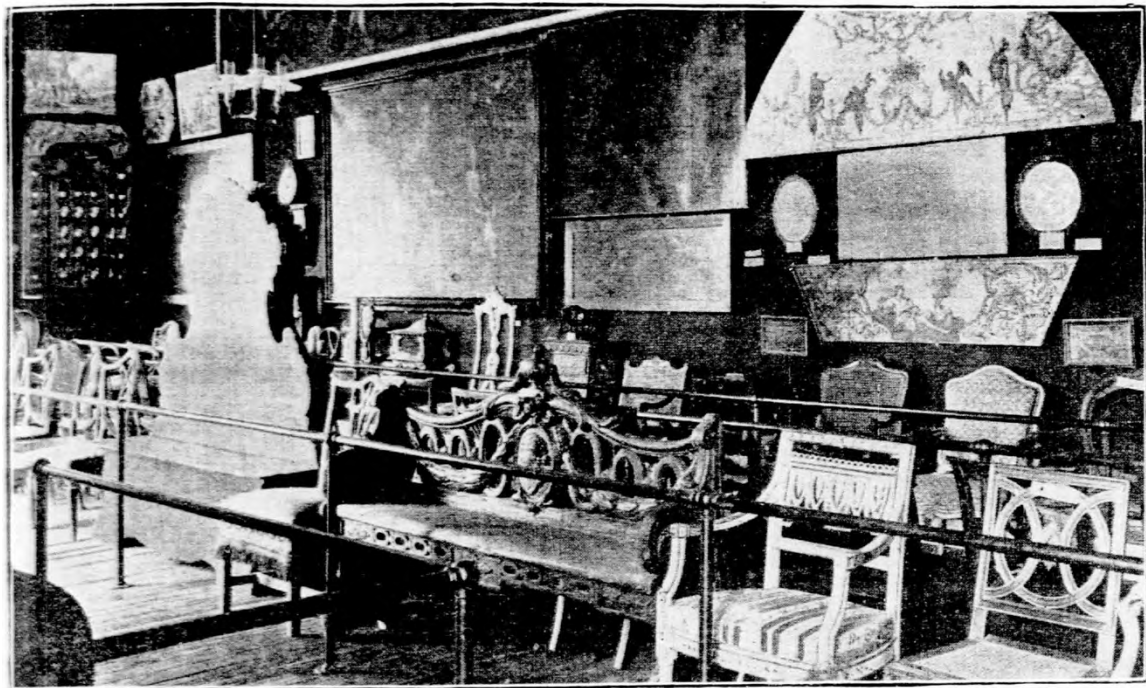


Figure 2.19 Display of Furniture, Cooper Union Museum of the Arts of Decoration, 1903. From: "Two Sisters Devotedly Carrying Out a Philanthropic Idea of their Grandfather and Father," *The New York Tribune Illustrated Supplement*, June 7, 1903. p. 5.

were used and displayed, and the changing degree to which objects of use had slowly become objects of aesthetic appreciation.

The disorderly and provisional nature of the Hewitts' classification was reflected in the spatial organization of the museum and the installation strategies they employed. As described above, the relatively small size of the museum required the efficient use of floor and wall space in the installation of the objects. Because the museum did not maintain deep storage, the sum total of the collection was always on display. Unlike the open gallery spaces we normally associate with museums today, the Hewitts created a carefully arranged but extremely dense storehouse of materials in which disparate collections were layered in front of and above one another [Fig. 2.19]. This created a visual and physical crowdedness that caused one later observer to describe it as a "research archive in the European sense rather than an exhibit and educational center in the practice of American museums."¹⁵⁴

While the thickened display created by the layering of collections bore a superficial resemblance to the decorative ensembles installed in the Musée, there is little connection between them. The French curators sought to teach its museum-going public not only to recognize aesthetic qualities in individual objects, but also the importance of their assemblage, thus addressing both producers and consumers. Just as the worker employed in his craft could benefit from the good taste produced by the study of historical objects, the consumer of the decorative arts could learn to express his or her taste through not only the choice of object but also their assembly and arrangement.

There were also multiple factors at work in the organization of the CUMAD, so in contrast to the Musée taste could not be the sole priority. Even when one category or another provided an overall logic or structure for the collections assembled in a gallery, other decisions complicated rather than supported that logic. For example, period was often used to organize galleries. The "17th century room" located in the northeast corner of the building included decorative paintings, furniture, laces, and silversmith work from England, Flanders, France, Germany, Italy and Spain. However, in one corner it also included some 12th-15th century objects (type unclear from the plan). In other areas, national origin took precedence as the organizational principle of a gallery. In the westernmost part of the museum, plaster

¹⁵⁴ William M. Miliken, *Report of Evaluation of the Museum of Decorative Arts, February 1958*, Records of the Cooper Union Museum, Cooper Union Archives, 1.

casts of sculptural groups from Versailles were joined by other French decorative arts such as *boiseries* and painting. In still others, there seemed to be a complete absence of organizational logic. Another gallery in the northeast corner south contained an apparently random assortment of goods, including some drawings from the Decloux collection, items from the Pierpont Morgan textile collection (15th and 16th centuries), costumes, faïence (pottery) from Marseilles, leathers, *passementeries* (tassels), musical instruments, and a collection of slippers lent by the famous interior designer Elsie de Wolfe.

The unsystematic assemblage of objects highlighted by these examples is characteristic of the museum's overall organization. Decisions about the groupings of collections were based on pragmatic concerns about display and access, and a highly localized logic concerning period, material, national origin, or use was applied wherever possible. These decisions, however, were not motivated by the primary concern for taste embedded in the decorative ensemble. In the French context, the Musée's founders took pains to address an audience of consumers—wealthy established and aspiring collectors—by instructing them in areas where their agency could take effect: in the purchase, assembly, and use of decorative objects. While the Hewitts did care greatly about the improvement of the visitor's taste, theirs was an audience of workers and professionals, and thus their engagement was primarily with individual objects or groups of similar objects.

Eschewing the ideality of the classification system they acquired Paris, the Hewitts created a museum according to the audience they wished to serve, the collections they were able to obtain, and the contingencies and limitations of the available space. The centrality of architecture in Lafenestre's classification system, reflective of the position of objects in the collector's home, was subsumed by the primacy of the Hewitts' primary audience of producers. Architecture, by way of the plaster casts and drawing collection, was given pride of place in the largest gallery, but it no longer conceptually informed the organizational logic of the museum. Instead, the existing structures of labor-specialization, as well as spatial limitations and an idiosyncratic collection, all contributed to the museum's physical organization. This organization combined art-historical groupings of period and national origin with the efficient spatial layering of different object types.

As a place where “the decorative arts applied to all trades”¹⁵⁵ could be studied, the meta-categories used by the Hewitts to organize the museum were a way to emphasize decoration as a separate sphere of thought and activity to that of trade and the realities of manufacture. The Hewitts certainly valorized the pre-industrial division of labor, in which the distinction between the “artist designer and the artist handicraftsman” was collapsed into one person whose “infinite knowledge of classical literature, history, and the arts, [allowed them] the power to adapt and idealize homely everyday objects.”¹⁵⁶ However, given the structure and content of the decorative design courses they sponsored, the Hewitts were well aware that the industrial division of labor, which distinguished between designer and maker, or even between designer and machine, no longer supported such a mode of practice.

In this way, the art-historical mode of organization spoke most to the designers, decorators, and draftsman whose work was distanced from the actual making of objects, while the use of decorative art-types ensured the museum’s utility for those workers or tradespeople who directly produced finished works. In other words, the complexity and seemingly provisional classification system was, in fact, a way to ensure the greatest legibility for the disparate needs and abilities of its diverse audiences.

Technique versus Invention: The Pedagogy of Design

One of the most important debates about the distinction between art and design at Cooper Union revolved around relative values of technique and invention. Cooper’s vision for men revolved around the elevation of the laborer. The laborer was understood as a person whose knowledge was limited to manual skill and media- or job-specific technique, and he was to become a skilled artisan, professional, or industrial artist whose manual skill was supplemented by knowledge of scientific principles, the capacity for abstract thought, and the ability to manifest his ideas and the products of his imagination through drawing. In the social logic of the period, an education that provided these to the manual laborer transformed him into a *skilled* laborer—from a man always teetering on the edge of financial ruin, at-risk of slipping into criminality, and the primary source of social unrest into a

¹⁵⁵ Cooper Union for the Advancement of Science and Art, *Fifty-Second Annual Report* (New York, N.Y.: Cooper Union for the Advancement of Science and Art, 1911). 50.

¹⁵⁶ *Ibid.* 54.

productive citizen and a functioning member of the nation's Republican institutions, insulated from economic precarity.

John C. Zachos, serving in the top administrative position under the Trustees, argued that neither manual skill nor abstract knowledge alone was sufficient to produce good citizens.¹⁵⁷ On one hand,

mere culture, knowledge of languages, the facts of science, and theories and principles of philosophy, cannot supply the practical need of which we are now speaking; it is the *trained hand* that can alone turn all these to practical account, and secure the means of physical prosperity. A good carpenter, blacksmith or shoemaker, is seldom to be found in prison; still less a good machinist or watchmaker. An imperfect knowledge of a trade, or a poor trade, will keep thousands hovering over the verge of want and crime; the employment not much valued is easily lost. The “tramp” comes from the poor workman, and the criminal from the tramp.¹⁵⁸

He continues, “It is not enough for our schools to equip the pupils with fine words and great ideas, nor the refinements of taste and culture; they must learn how to be happy and successful at *some work*.”¹⁵⁹ On the other hand, pure manual labor “*divorced from skill and regular training* must be distasteful or repulsive, servile and degrading, except to the dull and brutish nature without any tincture of cultivation.”¹⁶⁰ Rather, it is “intelligent skill,” gained through a combination of manual technical skill as well as abstract scientific or theoretical knowledge which is, in Zachos' view, “a resource against sudden destitution, or the accidents of fortune, but as promoting individual independence, happiness and true endeavor, worth of the most gifted intellect and natural endowments.”¹⁶¹

For those students of science and engineering, the abstract knowledge that Cooper offered came in the form of courses on mathematics, physics, chemistry, and geology. For the art students—especially *women* art students—the school's conceptualization of abstract knowledge was quite different. Students were educated from the school's inception in the

¹⁵⁷ Zachos served as Curator from 1874-1883, a position that would be replaced by directorships in later years and served mainly to carry out the directives of the Trustees. After Cooper's death, the position of Curator was reshaped into one whose primary responsibility centered on the Free Reading Room and Library. Zachos served in that position, and as a Professor of Oratory, from 1884-1897.

¹⁵⁸ *The Twenty-Second Annual Report of the Trustees of the Cooper Union for the Advancement of Science and Art*, (New York; New York: M. Lowry & Co., 1881). 16.

¹⁵⁹ *Ibid.* 17.

¹⁶⁰ *Ibid.*

¹⁶¹ *The Nineteenth Annual Report of the Trustees of the Cooper Union for the Advancement of Science and Art*, (New York; New York: G A Whitehorne, 1878). 6.

techniques of their chosen medium, with the aim of creating the most apt likeness or imitation of their subjects.¹⁶² As was the common practice in art and design schools in the 19th centuries, the study and careful imitation of great historical works was the primary mode of artistic training. This served the two-fold aim of helping students hone their mimetic skills as well as exposing students to works that were widely accepted as the great products of human civilization, thereby enculturating them into the accepted culture of taste.¹⁶³ However, some of the school's leadership pushed back, equating purely mimetic work with the kind of rote, unskilled manual labor that the school sought to eradicate in the working class. These parties argued for the inclusion of theoretical or abstract artistic principles in artistic instruction, as well as for more emphasis upon the importance of 'invention', or original design work, alongside the entrenched practices of imitation.

Dr. William Rimmer, newly appointed as the Director of the Woman's Art School in 1866, argued strongly for a reorganization of women's arts education according to design principles rather than specific media and their attendant techniques. Rimmer disdained "mechanical skill" and argued that students should only engage in as much practice working in their chosen media "as will enable the pupils to apply these principles readily in the direction and on the subject, to which they are impelled by their own tastes and artistic ideas."¹⁶⁴

The principles of Art have no necessary connection with the personal or technical methods of artists, more than the principles of harmony or instrumentations in the science of music have a necessary connections with the style of the composer [...] The highest exercise of intelligence in Art consists in the embodiment of the greatest number of elementary principles.¹⁶⁵

¹⁶² At times, various techniques were even connected to particular subjects, which were to be recreated as closely as possible to the original: Form Drawing was the name given to the course in free-hand drawing from bas-relief, "representing architectural and plastic ornaments of different historical periods;" Cast Drawing directed students attention exclusively to the antique, while Ornamental Drawing trained students to draw "from copies of picture of ornamental forms." Cooper Union for the Advancement of Science and Art, *Thirty-Fifth Annual Report* (New York, N.Y.: Cooper Union for the Advancement of Science and Art, 1894). 25. The Annual Reports prior to 1894 did not contain descriptive text of the school's courses.

¹⁶³ Indeed, following accepted pedagogy, the art schools at Cooper Union purchased a great number of plaster cast copies of canonical historical sculpture and ornament in the 1880s.

¹⁶⁴ *The Seventh Annual Report of the Trustees of the Cooper Union for the Advancement of Science and Art*. 16.

¹⁶⁵ *Ibid.* 18. These elementary principles included form, proportion, size, motion, expression, composition, color, light and shade, perspective, and subject.

Rimmer railed against the practice of drawing from casts, and argued that it was more important that students pursue originality than to mime obsequy to the authority of the past. “[N]o person is expected to copy any work, part of principles of a work of another as such; but on the contrary, whether right or wrong, best or not best, to take an original view of, and have an original purpose in her work, be the result of a knowledge of abstract principles.”¹⁶⁶

In Rimmer’s 1864 book, *Elements of Design*, he expands on these views. In this book, an unusual sort of drawing manual of the human figure, Rimmer argued that drawing should not seek to reproduce forms in an objective sense. Instead, it should aim to reproduce the artist’s perception of those forms—the nature of the form’s expression *for* the artist. The eye of the artist was thus understood to be unique and individual, and it was the artist’s perception that was to be valued above empirical accuracy. Copying, in his view, is “the substitution of another person’s conception and rendering of expression and effect, at the fourth or the hundredth remove, for one’s own.”¹⁶⁷ Rimmer’s views were not shared by the Trustees of Cooper Union, who insisted that the school’s primary goal was to graduate students equipped to obtain remunerative employment, and as such they supported a pedagogical approach that was pragmatic rather than ideal.¹⁶⁸

Eventually, however, the Trustees began to view originality, or the ability to produce a new or original solution to an artistic or design problem, as commercially valuable and an important faculty to employ alongside manual technical skill.¹⁶⁹ Unlike Rimmer’s more radical proposal, which would have tied specific media to particular concepts—such as

¹⁶⁶ Ibid. 19.

¹⁶⁷ William Rimmer, *Elements of Design: Book First. For the Use of Parents and Teachers* (Boston: Printed by J. Wilson and Son, 1864). 6.

¹⁶⁸ Rimmer only remained at Cooper for four years as a result, no doubt, of these differences.

¹⁶⁹ Curator Zachos described this shift in orientation in his 1877 Curator’s Report, published in that year’s Annual Report. “There are two instrumentalities in Art that have to be made objects of special instruction. The imitative, manual and constructive skill which is in a great measure mechanical, and the originating, designing, and imaginative power which works by principles and general rules. The constructive and the designing elements of art are equally necessary in the practical application of art, and both deserve a special attention; but if the instruction is confined to the first, it makes a servile, unprogressive and merely imitative artificer; if, on the other hand, design and invention be the whole study of the pupil, the practical execution of art has to be entrusted into the hands of the artificer. This is done in some of the fine arts, but it cannot be done in the practice of art for a living, as taught in the Cooper Union. It is the purpose of the instruction in the Art departments of the Cooper Union to unite the two instrumentalities in the production of Art—both designing and careful execution.” *The Eighteenth Annual Report of the Trustees of the Cooper Union for the Advancement of Science and Art*, (New York; New York: G A Whitehorne, 1877). 6-7.

sculpture to form, painting to color, and drawing to light and shade—Zachos described a more cautious introduction of the value of invention into Cooper’s arts curriculum. Design would be emphasized in lectures, and especially in the instruction given to the women’s Normal Class, where students were trained as teachers of drawing and other forms.¹⁷⁰ That instruction sought to simultaneously develop their technical skill, bolster their historical knowledge, and provide them with theoretical knowledge in the form of ‘design principles.’

This combination of familiarity with historical decorative styles and plant forms was viewed as essential in the creation of quality decorative arts. Design professionals who were brought into the school in 1878 to judge the year-end exhibition explained,

To-day, many people are rushing into decorative design, as though it were an occupation in which success depends mainly on a lively fancy, and a little manipulative skill with the pencil and the brush and imitating nature. Such people have yet to learn that decorative design, in any department of industry, is a broad field; and that excellence can come only through patient study and hard work. They have also to learn that their efforts can reach the character of art work, and be a permanent value, only by being the expression of ideas derived from a careful study of nature, and a thorough knowledge of the scientific principles involved in the representation of color, combined with the taste, cultivated by an acquaintance with the great decorative styles of the past.¹⁷¹

Here, it becomes clear what kind of preparation was considered appropriate for students intending to become designers, who were authors of original compositions, rather than “artificers” in the exercise of purely technical skill. ‘Design’ or ‘invention’ was not yet thought of a problem-solving skill, but a faculty that could be trained, honed and educated through a familiarity with historical works as well as with scientific knowledge about nature. History provided a wealth of good models, while scientific models ensured some modicum of accuracy or realism while helping to prevent overly fanciful or bizarre works. The faculty of invention was not asked to produce novelty in this context. On the contrary, it was

¹⁷⁰ The Normal Class had been introduced in the women’s school during the previous academic year in an effort to expand its students’ marketability beyond the practice of industrial art into its instruction. In addition to the techniques of free-hand drawing, perspective, “geometrical” drawing, and water color, Normal students also studied historical ornament and styles of decoration, as well as methods of “conventionalizing” botanical forms for use in industrial contexts. Students in the Normal Class did not receive pedagogical instruction directly.

¹⁷¹ *The Nineteenth Annual Report of the Trustees of the Cooper Union for the Advancement of Science and Art*. 40.

required only to innovate slightly from known models and to otherwise ensure that new designs were well grounded in tradition.

Frederick Dielman was hired in 1905 from the Academy of Design to become the school's Art Director. He oversaw both the men's and women's school, and also argued for the economic and intellectual importance of design ability or the faculty of 'invention'. Like Rimmer, Dielman viewed invention as that which distinguished the artist and his or her higher level of thinking from the purely mechanical skill that was useful only for reproduction.¹⁷² Unlike Rimmer, however, Dielman still believed that students must be technically proficient, and that manual skill in drawing was a prerequisite, rather than a distraction, for the practice of design. During Dielman's tenure as Art Director, he shifted the focus of drawing classes away from the production of highly detailed presentation drawings, which were always copies of an historical design and could take months to complete, and instituted "a more systematic course in what is properly called design."¹⁷³ This included the study of geometrical patterns and historical ornament through copying, but culminated in adapting those models for new contexts, spaces, forms or production techniques.¹⁷⁴

Design pedagogy at Cooper Union during the founding and operation of the museum by the Hewitts thus struck a balance between techniques of imitation and stylistic innovation. While history and nature were not absolute authorities, they served as both visual sourcebooks as well as the subjects of analysis which uncovered their underlying principles. The era of pure imitation had waned and in its place remained an ethos that valued both tradition and innovation. Design education at Cooper continued its commitment to drawing,

¹⁷² "The purpose of these schools being to make their students practically effective, and fitted for actual work, one aim should be kept steadily in view: that of cultivating the power of invention. The ability to design, that is, to originate, is the quality that distinguishes the artist and the artist-artisan from the mere workman, and infinitely enhances the value of his work, both to himself and his community. To this end, practice in designing should be encouraged and required; it should go hand in hand with drawing and modeling from nature and from works of art, as soon as the student has acquired some degree of proficiency in the latter. With facilities already fully developed in the schools for acquiring skill in drawing, painting and modeling, and with the wealth of historic material offered for study and guidance in the building, only a full utilization of these opportunities is needed to insure for our students a high degree of efficiency in the practice of the various Arts of Design." Frederick Dielman, Cooper Union for the Advancement of Science and Art, *Forty-Sixth Annual Report* (New York, N.Y.: Cooper Union for the Advancement of Science and Art, 1905). 35.

¹⁷³ *Forty-Seventh Annual Report*. 29.

¹⁷⁴ Students enrolled in the decorative designing course balked at this development, believing the time spent on design principles and basic elements to be a distraction from the design problems that they were eager to set upon, and a delay in the possibility of gainful employment.

though it shifted over the latter half of the nineteenth century from a terminal practice to an intermediary between conception and production, reflecting contemporaneous professional divisions of labor.

The Utility of History: Impacts of the CUMAD in Cooper Union Arts Education

When the Hewitt sisters began installing their museum on the fourth floor of the Cooper Union Foundation Building in 1895, they had already been deeply involved with the school for years through the Advisory Council of the Woman's Art School.¹⁷⁵ The Advisory Council was a structure mandated by the school's charter, and it was populated by women from a variety of backgrounds: the wives of the Trustees, friends of the Cooper and Hewitt families who regularly supported Cooper Union, as well as the wives of wealthy art collectors and Trustees of other arts institutions, such as the Metropolitan Museum of Art.

The role of the Advisory Council, especially during the early years when the school had no administrative head of its own, was to oversee the educational practices of the Woman's Art School and to make suggestions for its development and improvement. Its members often subsidized the school by providing money for end-of-term prizes, by purchasing books, plaster casts, fresh flowers or hiring live models for use in the studios, and by hiring teachers for experimental courses, an expense that would be taken on by the Trustees once the pedagogical worth of a given activity or investment was proven.

The Hewitt sisters' involvement with the school undoubtedly shaped the initial plan for their museum and conversely, the museum also greatly impacted the direction of the school in both the women's and the men's arts education courses. The presence of the museum in the school seems to have influenced its pedagogy in ways that were beyond the immediate purview of the Hewitts. In 1901, as changes to the administrative structures of the school were being considered, such as creating the position of 'Art Director' who would administer both the men's and women's schools of art, Cooper began to envision itself not as an art school, or even an industrial art school, but rather as a school of *applied art*.

This decision came at a moment when the school realized that it was not enough to offer technical training. The school recognized it also had an obligation to expand their students'

¹⁷⁵ The oldest sister, Amy Hewitt Green, joined the Advisory Council of the Woman's Art School in 1877, and Sarah Cooper Hewitt and Eleanor Garnier Hewitt joined a few years later, in 1884.

knowledge and familiarity with decorative styles, and to actively support the elevation of their taste. Towards this end, the Trustees envisioned a reorganization of the school “with a special reference to the various industries which require artistic knowledge on the part of the workmen. In other words, the school will be made, more than it has ever been, an artisan’s college, organized with a special reference to the application of art to industry.”¹⁷⁶ The Trustees were explicit that this development was both prompted by the museum’s existence, as well as a way to utilize it more effectively.

The following year, the courses of study available in the Woman’s Art School were divided into two categories: Art classes and Industrial classes. Although these categories were only utilized for four years, they illuminate how the school had evolved pedagogically. The courses included in the “Art Classes” category included drawing from cast, drawing from the Antique, life drawing, oil painting and modeling in clay. “Industrial Classes” included the design class (which covered historic ornament, scale drawing, watercolor, and designs for book covers and repeating patterns), a class in decorative composition, architecture, interior decoration, furniture, stained glass and metal work, an illustration class, the retouching of photographic prints, porcelain painting, miniature painting, and drawing from photograph in watercolor, ink or crayon. With the exception of the first design course, whose skills could be applied to a variety of media, all of the subsequent courses each taught skills specific to a particular medium, material, or product. The art classes were unencumbered by the specificity of their end-product, teaching skills that could be utilized towards the creation of fine artworks (drawings, paintings, sculptures) or applied to industrial art productions. These were not limited to mass-produced objects but also included commercial art, such as illustrations or advertisements.

The aim of the Cooper Union was focused on the training of artists and designers and as such, on the creation of new works. However, in the late nineteenth century, even the most ardent advocate for originality, novelty, and innovation contextualized the desire for newness within historical styles, known allegories and motifs, and in the bounty of forms in the natural world. The call for absolute novelty and a complete break with the past, associated with early twentieth century avant-gardism, was still unthinkable in this period.

¹⁷⁶ Cooper Union for the Advancement of Science and Art, *Forty-First Annual Report*. 14.

Students were expected to create new works, made on new machines and consumed within lifestyles whose norms and practices were rapidly changing. Yet even they were trained to draw plaster casts of antique works, to study and produce works within historical decorative idioms, and to innovate very conservatively, if at all. In the museum's early years, the primary mode of interaction with the collections was the *copy*: working visitors came to make tracings from the illustrations in its scrapbook collection, to study individual objects and to reproduce their designs [Figs. 2.20 & 2.21]. The impulse towards copying, towards the repetition of historical styles and even individual objects, was reinforced in many ways by the museum and the advisory council, often in genteel conflict with the school's directors.

The Cooper Union's curriculum for art and design students involved very little art-historical training until the turn of the century. The school began to incorporate occasional lectures on art and architectural history as a part of its public lecture series held in its famous Great Hall. Over time, the school slowly began to offer a greater breadth of lectures to the students of the Woman's Art School, addressing topics such as perspective drawing, botany, anatomy and art history.¹⁷⁷ The first organized lectures on art history, arranged and funded by Eleanor Hewitt, was not introduced until 1903 and became permanent the following year.

The Hewitt sisters were instrumental in other ways for the promotion of an historical consciousness among the art and design students at Cooper Union. While the museum explicitly aimed its efforts at an audience of industrial art workers, designers, and decorative artists, students of these endeavors were an important secondary audience. As the museum grew in size and as the school's instructors grew familiar with its offerings, students from both Cooper Union and other area schools became the museum's largest constituency.

One major strategy for the promotion of historical repetition was through the mechanism of competitions and prizes. The school had a long tradition of awarding students in each course awards based on their submissions to the end-of-term exhibition by a panel of invited judges, and the funds for these prizes were supplied by donors. However, the Hewitt sisters and their museum-supporting friends then began to offer prizes for work done outside of courses in response to a particular theme or project brief that required the use of museum collections. Responding to what they viewed as negative developments in

¹⁷⁷ These were first only offered to the students in the Normal Class, but were later expanded to accommodate all students.



Figure 2.20 Cooper Union art student working in the museum, 1921, Wurts Brothers (New York, NY), photographer. From: *The Cooper Union 1859-1921*, The Cooper Archive, Cooper Union for the Advancement of Science and Art.



Figure 2.21 Cooper Union art students working in the museum, 1921, Wurts Brothers (New York, NY), photographer. From: *The Cooper Union 1859-1921*, The Cooper Archive, Cooper Union for the Advancement of Science and Art.

contemporary interior design and the decorative arts—especially the trend towards over-decoration—the Hewitts emphasized the study of quality historical examples. Towards this end, Mrs. J. Woodward Haven and others began offering cash prizes for copies of items held in the Museum, the subjects of which would change yearly.

Over the first decade of the twentieth century, Mrs. Haven offered prizes for the best copy of a Louis XVI “Camaïeu” painting in blue and white (1902), the best copy of the ceiling in the Palace of Madrid by G. B. Tiepolo, of which the museum had acquired a reduced-sized sketch (1904), and for the best screen panel in oil or water color whose subject was an enlargement of one of four panels by the *ornemanistes* Rousseau de la Pottiere (1906). Over time, Haven moved away from requiring exact copies of museum objects and instead asked entrants to create designs in a particular historical style that used museum holdings as a central motif in the composition. In 1908, for example, Haven offered prizes for the best upright decorative panel in the style of the 17th century, whose subject was “The Terminal Figure of the Bacchante Museum as the central motive, arranged with suitable arabesques, ornaments, and frame mouldings of the period.”¹⁷⁸ Others soon followed Haven’s example, offering prizes for textile pattern design based on fragments held in the museum, a prize for the best drawing of the staircase from the Little Trianon, Versailles, of which the museum owned a cast, for the best fan painted in the style of Louis XVI, and for the best design of a corner of a room drawn in perspective and designed in the style of Rousseau de la Rottiere, de la Fosse, Cauvet or Prieur [Fig. 2.22].

These sorts of prize competitions required students to closely study particular museum objects, to become familiar with period style—most often that of 18th century France—and to exercise their own creativity in the assembly and composition of the required motifs or color schemes in the proscribed media. Furthermore, it enticed students to spend time in the museum where they, surrounded by “quality historical specimens,” would find their taste and artistic proclivities improved.

The Hewitts helped to shape the pedagogy of Cooper Union even more directly through their sponsorship of experimental classes and by hiring supplemental instructors in areas of

¹⁷⁸ Cooper Union for the Advancement of Science and Art, *Fiftieth Annual Report* (New York, N.Y.: Cooper Union for the Advancement of Science and Art, 1909). 42.

the curriculum they felt needed to be strengthened.¹⁷⁹ Eleanor Hewitt was more targeted in her sponsorship practices, viewing it as another way to promote her vision of design education. Through Hewitt's efforts, the first course in design tied to the museum, entitled "Style of Decoration," was offered in 1900. Open to both men and women, the course was taught by Emmanuel Louis Masqueray, a French Beaux-Arts-trained architect, and covered the major stylistic periods, including the antique, medieval, and Renaissance. The students were

made to copy and thus thoroughly familiarize themselves with the larger collection of casts of well-known European decorations of the most important styles of the past centuries, will, by this method, together with the constant association with decorative objects of various kinds, become far more quickly and thorough grounded in the different styles and periods of decoration than if they depended entirely on text books and their own observation for studying their subject.¹⁸⁰

The class met in the museum, which they used as a "working studio," and it trained students in the representational skills of drawing, painting, and modeling that they needed to work efficiently as architects, decorators and designers. Direct exposure to quality historical objects, accompanied by the explanatory remarks of a learned instructor, was viewed as the most efficient way to familiarize students with a historical style. The course was also understood as a way to acculturate students into the proper and regular use of a "working museum," a regular practice in European museums generally unfamiliar to American students.

As the course developed in the first few years, a tension arose between the school's insistence on technical drawing skill and the students' desire for pragmatic instruction tailored to particular media or decorative art types. The instructor of the museum class, along with the course's patrons, began to insist that the students first develop their representational skills and become familiar with the art-historical trajectory of stylistic development *before* specializing in one or another branch of the decorative arts. In particular,

¹⁷⁹ The sponsorship of new courses was not entirely without precedent. The women of the Advisory Council, and even outside benefactors, occasionally funded the salary of instructors before the Trustees agreed to take on the expense. The salary of the Normal Class instructor, for example, was supported for years by donations from a Boston-area printer, Louis Prang.

¹⁸⁰ Cooper Union for the Advancement of Science and Art, *Forty-First Annual Report*. 23.

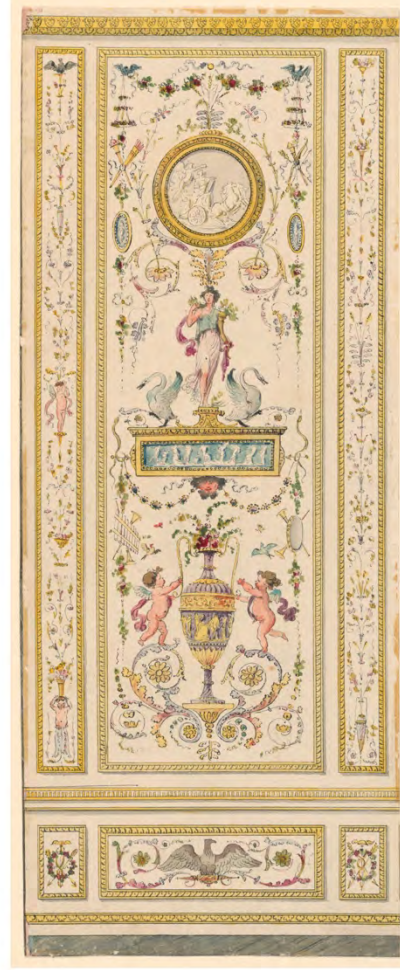


Figure 2.22 Decorative panels in the collection of the Cooper Hewitt that may have formed the basis of the Decorative Design competition of 1909: *above left*: Drawing, Design for a Carved Panel, 18th century; Designed by Gilles Paul Cauvet (French, 1731 - 1788); France; black and red crayon on paper; Sheet: 59.4 x 22.6 cm (23 3/8 x 8 7/8 in.); Purchased for the Museum by the Advisory Council; 1911-28-30
above center: Drawing, Ornamental Panel, 1775–1800; Jean-Siméon Rousseau (1747 – 1820); France; pen and black ink, watercolor, ruled border (at left only) in support: white laid paper; 42.9 x 17.1 cm (16 7/8 x 6 3/4 in.) Mat: 55.9 x 40.6 cm (22 x 16 in.); Purchased for the Museum by the Advisory Council; 1911-28-18-1
above right: Drawing, Arabesque Panel, ca. 1770; Attributed to Jean Louis Prieur, French (1732 - 1795); France; pen and brown ink, brush and brown wash, white gouache on white laid paper; 43.1 x 12.4 cm (16 15/16 x 4 7/8 in.) Mat: 55.9 x 40.6 cm (22 x 16 in.); Purchased for the Museum by the Advisory Council; 1911-28-257
Left: Drawing, Design for Doorway and Panel, ca. 1765; Jean-Charles Delafosse (French, 1734–1791); France; graphite, pen and black ink, brush and wash on laid paper; Mat: 45.9 x 35.7 cm (18 1/16 x 14 1/16 in.) (irregular): 37.1 x 22.6 cm (14 5/8 x 8 7/8 in.); Purchased for the Museum by the Advisory Council; 1911-28-57.vFrom: Cooper Hewitt, Smithsonian Museum of Design, www.cooperhewitt.org (accessed August 9, 2016)

the course began requiring its students to have a familiarity with the architectural orders and experience in architectural drawing and drawing from cast.

In support of these goals, Eleanor Hewitt was responsible for creating the first systematic course of art history lectures for the students of the Woman's Art School in 1903, whose goal was to broaden the students' cultural horizons beyond the technical training offered by the existing curriculum. She also recognized the lack of training in architectural design available for women, and in 1909 funded an experimental course taught by David Varon, another Beaux-Arts trained architect. Varon lectured twice weekly on the orders, utilizing a set of plaster casts that had been specially obtained as illustrations.

In subsequent years, Eleanor Hewitt created additional courses that supported her pedagogical aims: a preparatory drawing class as a prerequisite to the design course, an afternoon life class allowing students to practice drawing outside of the academic style taught in their morning studios, an intermediary course on the principles of design designed to bridge the drawing courses and the course in design, and finally the extension of the design course from three to four years, with the new fourth year devoted to “the higher branches of decorative design”—that is, architecture and interior design. By the mid-1910s, design training had become a major focus of the Cooper arts curriculum with increasing specialization available to students. For example, in 1917 the school offered six different courses in design, including the preparatory course, historical decorative art, interior design, design applied to the arts of printing, and jewelry design.

The study of drawing had always held a central place in the Cooper Union curriculum, but as the decorative design course developed in the first decades of the twentieth century, drawing began to be viewed as an indispensable tool in the designer's skillset. It was drawing that allowed him or her to supersede the particularities of media or product types, and gave the designer's inventiveness a more universal applicability. As early as 1877, the expansion of drawing courses to include life drawing was argued to have not only a specific yet limited *artistic* value, but also more particularly an *industrial* value. This value lay in the idea that a student accomplished in life drawing could market themselves as comfortable with complex combinations of form and comfortable with the curved line. While drawing throughout the nineteenth century was utilized primarily toward the goal of *imitation*, by the first years of the

twentieth century it began to be viewed as a tool to be deployed toward invention once a student's technical skills had reached a certain level.

The men's decorative designing class was described in 1906 as involving "the study and practice of what is sometimes called *inventive drawing*. The student first acquires facility in the use of the pencil by copying designs, then he is taught to exercise his skill in combining simple forms to produce complex ornamental designs."¹⁸¹ Not only does drawing allow new designs to come into being, it is also the fertile ground where the design thinking necessary for such a creativity takes place.

By 1915, many of the artistic media prominent in the first half-century of education at Cooper had become obsolete. Such obsolete media included engraving, china painting, and photo-crayon. However, it is clear that drawing had emerged as foundational "as a means of developing the student's knowledge and appreciation of form, his taste and technique, it cannot be supplanted by other agencies; such development of the faculties is essential to all real ability in artistic work, and this it is that should be striven for, rather than "representative drawing" as an end in itself."¹⁸²

By the middle of the teens, the forms of free-hand drawing that were previously disparate courses of study, such as drawing from cast or drawing from life, had been collapsed into one preparatory course that was mandatory for all art school students. This preparation was viewed as essential for design training, particularly in learning design principles through artistic practice.

The ability, however, to produce a fair representation of an object, and the mastery of technique required for such representation, are but a small part of the aims covered by such exercise and study. To awaken the student to a just appreciation of form, proportion and values; to a realization of the difference between mechanical, trivial imitation and the seizing and recording of the large, essential, visual truths; to help him acquire the power of discriminating between what is called beautiful and its opposite: these are among the higher objects aimed at. Without a store of knowledge regarding the structure and aspect of natural forms, the imitation of which, more or less close, enters into almost all artistic work, the designer must remain hampered or dependent on borrowed material: whether his work involves the human face or figure, forms of plant life, historic ornament or abstract forms—to use

¹⁸¹ *Forty-Seventh Annual Report*. 72

¹⁸² *Fifty-Sixth Annual Report* (New York, N.Y.: Cooper Union for the Advancement of Science and Art, 1915). 34.

these in design he must have that intimate acquaintance with them which can be gained only from the study and keen observation necessitated by drawing.¹⁸³

The relationship constructed in the nineteenth century between history and the present—a relationship perpetuated by the CUMAD throughout the first decades of the twentieth century—is thus one structured in the absence of propriety’s ethical regulations, moving towards a *creative* engagement with tradition. The authority with which past styles, motifs and compositions are imbued does not lie in their appearance, but sits rather deeper in the underlying structures they utilize. The exercise of creativity lies in each designer’s analysis and interpretation of historical example, as well as in their performance and their elaborations upon historical knowledge and insight.

Drawing, then, becomes a twofold tool. During a designer’s education, it becomes a tool of seeing, analyzing and interpreting the world in a way that makes nature, history and the everyday a source for new design. It becomes the lens that pierces through appearance to see its underlying structures. Later, drawing functions similarly to the machine as it becomes an intermediary between the human hand and industrially produced objects in a way that redefines the professional identity of workers. Drawing was the means by which “decorative designing” could be applied to each trade, refiguring design as a distinct professional endeavor separate from the trade itself. Finally, drawing was a defining skill that produced a distinct product of labor possessing a unique agency as a medium of communication.

¹⁸³ Ibid. 40.

Chapter 3: Between the Antiquarian and the Modern: The CUMAD at Mid-Century

In the 1938 issue of the museum's yearly publication, the *Chronicle*, the CUMAD published a survey and catalog of its extensive wallpaper collection, in part documenting an exhibition of those collections from earlier that year [Fig. 3.01].¹ In response to the catalogue, every major manufacturer of wallpaper in the region sent a representative to the museum to examine the collections directly, in order to create new patterns based on the historical designs they found there. As a new strategy to address the museum's historical primary audience, museum staff were pleased with the activity the exhibition and catalog stirred.

The response from prospective purchasers of wall-paper was equally gratifying in proving a thesis of the Museum: that accurate presentation of facts about the collections, presented to specialists, will meet an existing need that can be met in no other way. [...] Several other questions, even more basic, have been answered by this one publication. Any doubts that may have existed about the present-day applicability of historic design are no longer valid; the collections do not have to be considered useful to no one but stage-designers and collectors, as some of our modernist friends have implied. The necessity for completeness of collections was affirmed.²

The reaction of the wallpaper industry thus not only reaffirmed the importance and continued relevance of the historical collection, but it also demonstrated to museum leadership that its traditional mode of use—imitation—was alive and well in the late 1930s.

By the early 1950s, however, dwindling professional and industrial attention began to concern museum staff, precipitated in particular by the response to the 1950 exhibition *Leather in the Decorative Arts* [Fig. 3.02]. The exhibition gathered together leather items of all types from antiquity to the present day, including shoes, boxes and other containers, bags, hats, book bindings, decorative hangings and clothing. Endeavoring specifically to arouse the

¹ The *Chronicle of the Cooper Union Museum of the Arts of Decoration* was inaugurated in 1935 and was an annual publication. The 1938 issue was the museum's first published catalog of its collections.

² Calvin Hathaway, Untitled (Museum Development Proposal), December 11, 1938. Series III Cooper Union, Calvin Hathaway Papers, Philadelphia Museum of Art, Archives. 3-4.

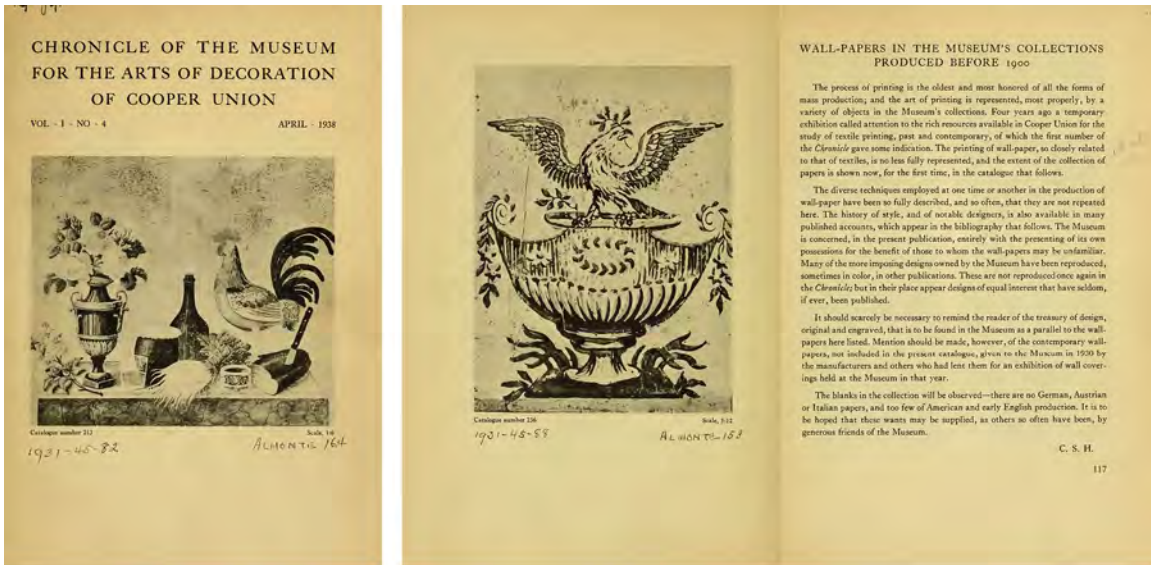


Figure 3.01 Cover and spread from "Wall-Papers in the Museum's Collections Produced Before 1900," *Chronicle of the Museum for the Arts of Decoration of the Cooper Union* 1 4 (1938). pp. 116-117.

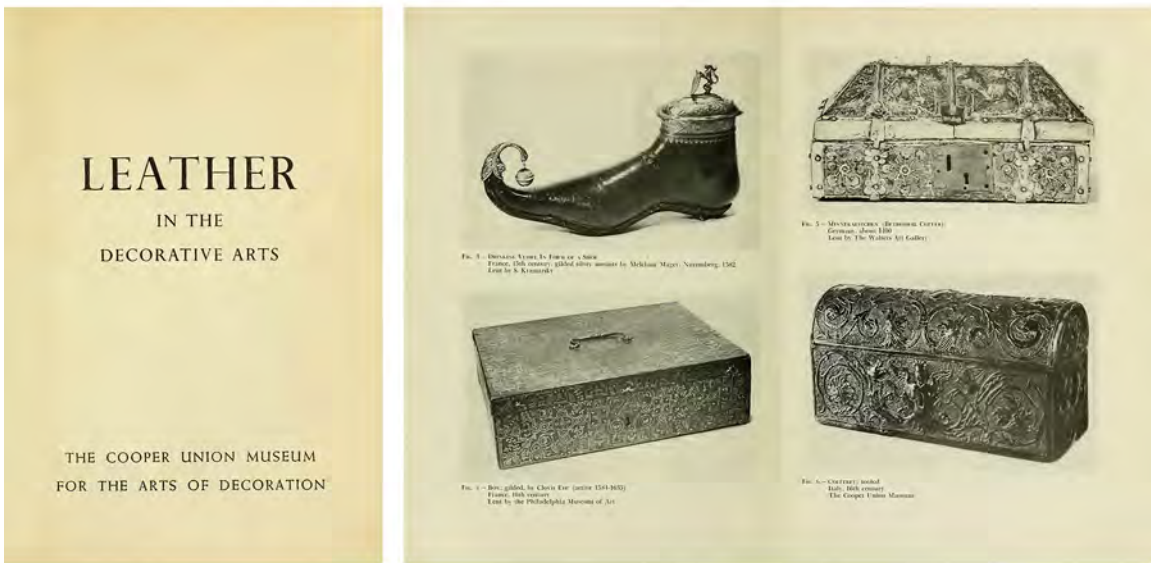


Figure 3.02 Cover and spread from *Leather in the Decorative Arts*. New York: Cooper Union Museum for the Arts of Decoration, 1950. n.p.

interest of New York-area leather goods manufacturers, the museum provided diverse informational pamphlets to exhibition visitors, such as “The Story of Leather,” “A Trip through the Plant,” and “The Romance of Leather,” to exhibition visitors. To alert interested parties, the museum staff sent one-hundred letters to leather firms and leather workers’ labor unions announcing the show, but received only three responses. Mystified by the lack of interest, museum staff followed up by telephone, only to confirm “the indifference of their secretaries to the history of artistry in this craft.”³

In the twelve years between an expected positive response from the CUMAD’s traditional professional and industrial audience and one of nearly total indifference, the museum as well as the world of design education, production and consumption around it had undergone profound changes. These changes required the museum to reconsider the organization, operation, and mission bequeathed to it by its founders. The museum was forced to reconsider its foundational approach to the decorative arts, which was still essentially based upon a nineteenth-century conception of design. In order to formulate a new approach, the museum would need to adopt a new design paradigm that obviated the old categories of material, technique, use, period region and style in favor of new abstract and ahistorical classifications. This would inevitably disrupt the taxonomic structure that had hitherto underwritten most of its activities, and would also require a recalculation of how best to maintain the relevance of the historical collections for contemporary and future audiences.

This chapter examines the second phase of the Cooper Union Museum’s existence, spanning from the death of Sarah Cooper Hewitt in 1930 until the early 1960s, when the Cooper Union began actively pursuing the closure of the museum and a divestment of its collections. This phase marked the first intervention of professional curatorial management into the museum’s collecting, practice, and decision-making. Here, I continue to inquire after the museum’s conceptions of the ‘decorative arts’ and ‘design’, examining the varying forms of instrumentability of the museum’s collections engendered by those conceptions. In addition, I will seek to determine the audiences the museum sought to cultivate in this period, and the forms of engagement with its collections of historical objects that the

³ “The Cooper Union Museum for the Arts of Decoration Annual Report 1950-1951,” June 30, 1951. Henry Francis du Pont Papers, Winterthur Archive, HF 279. 5.

museum sought to facilitate. I will examine these questions with respect to the external cultural and aesthetic conditions that developed in the world around the museum as well as the pedagogical and ideological changes that occurred within Cooper Union itself—both of which exerted pressures on the museum that were addressed and ignored to varying degrees.

Toward this end, Chapter Two interrogates the particulars of the museum’s activities during the second three decades of its existence in order to understand its refashioning during that time. Ultimately, this chapter argues that the nineteenth century “working museum” was transformed by the early 1940s into an institution pulled in two opposing directions. On one hand, the professionalization of the museum staff and the inauguration of many new programs and initiatives engendered an antiquarian tendency oriented to the interests of specialists, historians, and collectors. On the other hand, the historical mandate of utility—the usefulness of the museum for contemporary production—as well as pressure from the school imposed a modernizing impulse upon the museum. This impulse prompted the museum to consider “design” as an interpretive paradigm that would allow it a renewed relevance. Exploring this tension, and the debates, programs, and policies that emerged from it, this chapter will trace the museum’s adoption of the new design paradigm by the end of the 1950s. In doing so, it will provide articulation of the range of possibilities and limitations inherent to the midcentury notion of ‘design’.

A Museum in Transition: Post-Hewitt Recalibrations

When the founders of the Cooper Union Museum for the Arts of Decoration [CUMAD], Eleanor Garnier Hewitt and Sarah Cooper Hewitt, passed away in 1924 and 1930, respectively, they left behind an idiosyncratic institution that was as much a product of its time as it was of the Hewitts’ own personal taste and intellectual orientations. During their lifetimes, the museum was well integrated into its parent institution, the Cooper Union, well supported by the Hewitts’ personal fortunes, and aided by numerous wealthy friends who donated money, objects and time to the endeavors. As active members on the Advisory Council of the Woman’s Art School, the Hewitts helped shape the pedagogy of arts education at Cooper Union and positioned the museum as an important resource within the curriculum. As such, particular courses of study in the Art School were housed within the Museum, and over half of the museum’s annual visitors were Cooper Union students.

As a “working museum” for designers, artisans, decorators, as well as students of those professions, the Hewitts shaped its collections for the benefit of a professional audience. Indeed, their very conception of the “decorative arts” was heavily influenced by their understanding of the activity of “design” as pursued by its practitioners. Continuing to promote a historicist approach to design, even through the emergence of avant-gardism and Modernism in the teens and twenties, the Hewitts viewed the objects in their collection as *specimens* of decorative arts production and as *models* to be studied and copied.

While ‘design’ always implied some measure of invention, their nineteenth century view did not account for the Romantic values of originality, innovation, or personal expression. Rather, historical objects were imbued with a cultural and aesthetic authority—legitimized by the good taste of the museum’s founders and donors—and any designerly invention was secondary to historical style and recognizable motifs. While the Hewitts simultaneously considered their collections as both “decorative arts” and “industrial arts,” the ‘industrial’ moniker was more closely related to their audience of producers than to the growing mechanization of production. Throughout the three decades of museum operation under the Hewitts’ direct purview, the category of the decorative arts took center stage in the design training offered by the museum. As such, it was wholly focused on style, motif, surface pattern, and color, rather than on the pragmatics of fabrication technique, tools, and mechanized industrial processes.

After the death of Sarah Cooper Hewitt in 1930, the Cooper Union Museum transitioned from an institutionally protected, privately funded project of the founders’ family into a professionally managed institution almost completely dependent on the Cooper Union for support. During this time, however, the museum’s mission and relevance came increasingly under question by the school’s administration. Mary S. Gibson, hired by the Hewitts in 1904 as the museum’s first professional curator, remained after their deaths to direct the museum until her retirement in 1945. Intellectual leadership of the museum was provided in this era by Calvin S. Hathaway, who was hired by Gibson as Assistant Curator in 1933 and promoted to the top position of Curator in 1946, upon his return from the war and his work as one of the “Monuments Men.”⁴

⁴ Hathaway became Director of the museum of 1951, but this was a change in title only.

In order to maintain oversight and continuity with the Hewitts' ethos, the Cooper Union Trustees formed a Board of Directors for the Museum, made up of close friends of Eleanor and Sarah who were well acquainted with the museum both as long-time donors and volunteers.⁵ The Board was charged with managing the museum, and operated as the authority to which the curators reported. This state of affairs did not continue for long; in 1939 the Board of Directors was officially transformed into an Advisory Council which advised but did not oversee the museum. This empowered the curators to run the museum independently, remaining answerable only to the school's Board of Trustees.⁶

Having undertaken professional management of the museum, Gibson and Hathaway worked to balance its historical aims and traditions while also introducing the reforms necessary to maintain relevance in a changed context. Once a "working" decorative arts museum that emphasized the instrumentability of its objects—their ability and availability to be utilized in the production of new work via imitation—the second phase of the museum's life involved a reinvention of its usefulness through the paradigm of design. Increasing pressure from the school and the changed nature of artistic practice and production pushed the museum toward design as an interpretive lens. However, at the same time other factors created a competing tendency towards antiquarianism and specialization.

As a practice and an intellectual orientation that dates back centuries—some would say even to antiquity itself—antiquarianism has taken on various interests, characteristics, and affiliations over time. When I suggest the emergence of an antiquarian tendency or a reversion to antiquarianism at Cooper Union Museum, I refer generally to several trends. The first is a concern with old things irrespective of their material or conceptual value in the present.⁷ The second is the distinction made by Winckelmann between *Gelehrsamkeit* and *Wissenschaft*, or erudition and knowledge. The antiquarian emphasis rests upon erudition, understood as a deep familiarity with historical fact associated with erudition, rather than on

⁵ This Board was not unlike the Museum Council, active from 1907 to 1927, which functioned to raise funds, solicit donations, and provide advice to the Hewitt sisters

⁶ In the ensuing decades, the Advisory Council acted as the primary solicitor and conduit of gifts to the museum as well as a sounding board for its major decisions. The Advisory Council continued to issue its own reports to the Cooper Union Board of Trustees, and it occasionally lobbied the Trustees on the museum's behalf.

⁷ A sentiment described in Norman Morrison Isham, *In Praise of Antiquaries* (Boston: The Walpole Society, 1931).

knowledge and the analysis or narrative it implies.⁸ Finally, there is the development of connoisseurship and classification, perceived as the antiquarian's greatest strengths.⁹

As Alexandrina Buchanan has described, an antiquarian can be productively understood as someone whose "relationship with the past [...] seeks rather to describe and categorize its physical remains rather than to draw from them any wider message or moral."¹⁰ Ultimately, the antiquarian eschews any instrumentalization of his or her efforts, or indeed of the objects themselves. Instead, they focus on deepening their knowledge of objects, building up collections, and refining their classification and arrangement of those collections.

To describe a tendency of the museum as antiquarian, I mean to suggest that there was an undercurrent of resistance to the mandate of instrumentability. This trend championed the museum's objects as valuable in-and-of themselves and perceived the object-centered museum work of curation, preservation and scholarship as of the highest importance. It also increasingly distinguished such curatorial activities from the museum's tradition of assistance to visiting professionals, and its pedagogically orientated interpretive work addressed to students. This manifested itself in the museum's new inclusion of the historian and the specialist as a target audience whose interests and needs took on a heightened relevance, in addition to those of students and professionals.

At the same time, the museum negotiated a modernizing tendency centered around a concept of design that was museological, aesthetic, and intellectual in nature. This tendency or impulse was motivated from within as well as from without the museum, through pressures exerted by the Cooper Union and the Art School faculty and students. It was also undoubtedly accelerated by the broader changes in the American scene regarding the design, production and consumption of objects once classified as decorative arts.

Internally, the museum staff was called upon to modernize and professionalize its practices and procedures after thirty years of the Hewitts' rather idiosyncratic operations. This process ranged from changes in collections management to the creation of a program

⁸ Thomas DaCosta Kaufmann, "Antiquarianism, the History of Objects, and the History of Art before Winckelmann," *Journal of the History of Ideas* 62, no. 3 (2001). 529.

⁹ Arnaldo Momigliano, "Ancient History and the Antiquarian," in *Studies in Historiography* (London: Weidenfeld & Nicolson, 1966). 25.

¹⁰ Alexandrina Buchanan, "Science and Sensibility: Architectural Antiquarianism in the Early Nineteenth Century," in *Producing the Past: Aspects of Antiquarian Culture and Practice, 1700-1850*, ed. Martin Myrone and Lucy Peltz (Aldershot, England; Brookfield, Vt.: Ashgate, 1999).

of temporary special exhibitions, and included an overall updating of classification systems, spatial arrangements and display strategies. Pointing to the museum's historical mandate of instrumentability, the school encouraged the museum to refashion its interpretive efforts to support the continuing utility of the historical decorative arts collections as models in the changed conditions of design education and practice.

Design education and practice in the early- to mid-twentieth century continued to develop along the trajectories initiated in the nineteenth century and outlined in the previous chapter. After the decline of historical and natural authority, which emphasized visual continuity with past traditions and motival sources, twentieth century design theorists embraced the *Zeitgeist* view of the present as fundamentally different than the past, requiring a distinct visual language to represent those changes.¹¹ In American design discourse, design educator and American Arts and Crafts artist Ernest Batchelder reiterated the need for objects and buildings “to express without affectation, in a clear, straightforward way, something of our lives, our times, and our environment.”¹² Towards this end, the study of the past was no longer enough to ensure good design.

In setting mind and hand to the solution of a definite problem, we meet and overcome questions which no amount of reading can foresee. We may attend lectures and indulge in critical discussions of design in terms of language; we may become well versed in the history of art, and in biographical data pertaining to the lives of artists; yet find ourselves far removed from any true appreciation of the work of the past, or at quite a loss when confronted by a simple problem in constructive design demanding artistic invention.¹³

While study had its place, Batchelder's viewed learning to design as the process of learning to think apart from material or technique, a process that drew upon a creative rather than observational faculty. This involved the personal expression of original ideas through the abstract language of line, form and tone.¹⁴ In an extension of late nineteenth-century design theory, design continued to maintain its independence from production as a discrete practice

¹¹ The view that each era had its own intellectual or even aesthetic character is an early nineteenth century one that can be attributed to G. W. F. Hegel, but the sentiment that the modern, industrial nature of twentieth century culture could not be authentically engendered by historicism was articulated at the turn of the century, notably by Otto Wagner in his 1896 *Moderne Architektur*, among others.

¹² Batchelder did not refer only to the period or era as requiring a new form of design response, but to the United States in particular. Ernest Allen Batchelder, *Design in Theory and Practice* (New York: Macmillan, 1912). 9.

¹³ *Ibid.* vi.

¹⁴ “To design is to give tangible and definite expression to an idea.” *Ibid.* 5.

and profession. In working with historical style or natural motif, it was the artist's creativity and aesthetic ideas that were of interest and of value, rather than the work's natural or historical source.¹⁵

Though nineteenth-century design practice was sometimes framed in terms of industrial art, mechanized mass production had proliferated to such a degree by the first decades of the twentieth century that the new specialty of "industrial design" emerged as a professional discipline. As Sheldon and Martha Smathers Candler Cheney declared in their 1936 book, *Art and the Machine: An Account of Industrial Design in 20th Century America*,

Industrial design is rightly determined by and geared to industry as it is. The machine is the foundation fact as well as the shaping tool; i[t]'s influence and inspiration. Much of the confusion of authorities and the public alike seemed to arise from the failure to recognize industrial design as a new form of art separate from that of the manual age, produced by separate forces in accordance with a new aesthetic.¹⁶

While late nineteenth century design theory was predicated on the notion that designs could be rendered in various materials or techniques with relatively little adjustment, twentieth century design theory insisted that the machines used in industrialized mass production required a more fulsome consideration in the design process.

In his 1940 book *Design This Day: The Technique of Order in the Machine Age*, celebrated industrial designer Walter Dorwin Teague elaborated on the machine's impact. Whereas craftsmen or artisans could improve designs through trial and error, improving objects as they made them one by one, the machine could not admit such an iterative process but instead supplied "unvarying repetition."¹⁷ Completing the separation between design and production that grew throughout the nineteenth century, the nature of the machine required once and for all a design process that severed the connection between mind and hand.

¹⁵ Batchelder quotes the British designer and design educator Lewis Foreman Day's 1904 *Ornament and its Application*: "There is little in nature that is ready made to the hand of the artist. A masterpiece of art is what it is in virtue of a something which was not in the natural motif of the artist, but in his treatment of it." Lewis F. Day, *Ornament & Its Application; a Book for Students, Treating in a Practical Way of the Relation of Design to Material, Tools and Methods of Work* (London: B. T. Batsford, 1904). 13. Quoted in Batchelder. 130.

¹⁶ Sheldon Cheney and Martha Smathers Candler Cheney, *Art and the Machine: An Account of Industrial Design in 20th Century America* (New York ; London: Whittlesey House, 1936). vii-viii.

¹⁷ Walter Dorwin Teague, *Design This Day: The Technique of Order in the Machine Age* (Harcourt, Brace and Co., 1940). 30.

The new design process, then, required a great deal of knowledge and synthesis on the part of the designer, drawing upon his or her predictive capacity to an extent that had previously not been required.¹⁸ The education required to build up this capacity drew upon history, not to imitate its surface appearance or even glean its underlying principles, but to examine “those forces that have controlled the endless variation of men’s work.”¹⁹ While the nature of such forces change over time, Teague suggested approaching them as analogous to contemporary problems. To this end he reminded readers that “the solution of any problem is good only for that problem, but the method of working out the solution may have a lot to teach us.”²⁰

The break with stylistic traditions and the implications of machine production joined a shift in aesthetic preferences towards simple forms and unadorned surfaces. Perhaps most exuberantly articulated in his 1925 book *L’Art décoratif d’aujourd’hui*, Le Corbusier couched the modern aesthetic in the need for functional objects and buildings, for standardized types of objects and building elements most efficiently produced by machines, and for new modern forms that avoided “plagiarizing” the past. Celebrating the smooth, geometric, machined forms produced for engines, turbines, propellers and automobiles [Fig. 3.03], Corbusier’s manifesto culminated in the “Law of Ripolin” which advocated for a literal and figurative whitewash of architecture and interior design [Fig. 3.04]. This cleansing would purge decoration, pattern, and historical and representational forms from the domestic experience of modern life.²¹ This radical shift in production processes and aesthetic expectations made it difficult for students and designers to approach historical objects by avenues other than analogy.²²

Amidst these changing conditions, the CUMAD would revisit its aims and mission many times over the course of four decades. In the mid-1930s, Calvin Hathaway undertook the

¹⁸ As Teague described it, “Our problem is defining itself as the art of synthesizing a great many varied activities and operations so that the combined output has a unity which appears to—and does—proceed from one creative impulse and serves a specific human end: we see it as the art of producing serviceable order out of our great variety of sources and diversity of impulses.” Ibid. 37.

¹⁹ Ibid. 39.

²⁰ Ibid. 230.

²¹ Le Corbusier, *The Decorative Art of Today* (Cambridge, Mass.: MIT Press, 1987). 188-189.

²² Indeed, Corbusier explicitly addressed the relevance of museums, arguing that “it becomes clear that everything has its time and place and that nothing from the past is directly of use to us. [...] [I]n their tendentious incoherence, the museums provide no model; they offer only the elements of judgement. The strong in spirit always get out of them, they understand and recognize the poison, and the opiate does not interest them; they see clearly, and do not slide pitifully down the precipice.” Ibid. 16.

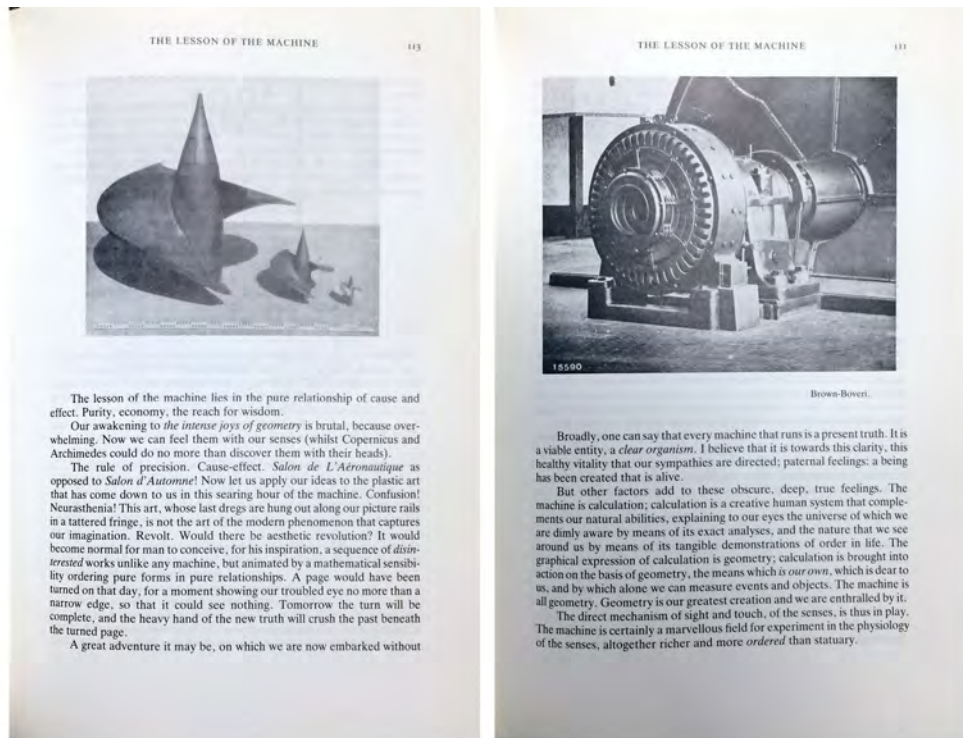


Figure 3.03 Pages from Le Corbusier, *The Decorative Art of Today*. (1925) Cambridge, Mass.: MIT Press, 1987. pp. 111, 113.



Figure 3.04 Pages from Le Corbusier, *The Decorative Art of Today*. (1925) Cambridge, Mass.: MIT Press, 1987. pp. 185, 191.

first of many stocktaking exercises on behalf of the museum, reflecting on how the museum would grow, develop, and react to the changes taking place both within the Cooper Union and in the surrounding world —changes that made it impossible to continue operating as it had during its first four decades. When Hathaway joined the museum in 1933, the staff was fast becoming aware of a number of internal problems. Firstly, the CUMAD had maintained a rich yet idiosyncratic collection with some strengths and many weaknesses, and now had few financial resources to fill in gaps or add new materials. The museum also had no catalogue or accession system, so there was no comprehensive record of its holdings. The museum's role in the school had waned and it maintained no educational programs for the benefit of either students or the public, nor any practice of staging temporary exhibitions. Its relationship with the school had simply grown distant, and its yearly attendance numbers were also in steep decline. Finally, despite the fact that the collections had already outgrown the space available on the fourth floor of the Foundation Building, the curators could not update the means of display and the viewing experience, lacking funds for new equipment such as storage systems, vitrines, and lighting.

Questioning the future of the museum's relationship with its primary traditional audience of professionals, the museum struggled to fulfill its mission in a condition of changed ideas about the decorative arts. The museum was, after all, existing in a world that conceptualized, produced, consumed, and valued objects in way that the Hewitts of 1896 would not have recognized. Founded at a time when *imitation* of historical objects was widely accepted as the proper way to create new works, the museum foundered as Modernism and mass machine production spread, and innovation and novelty eclipsed historical authority as a basic value of design. The category of the decorative arts itself began to wane as applied decoration became less common and the objects of daily use that the category traditionally gathered together were increasingly mass produced and more commonly understood as 'designed' rather than 'decorated'.

Under these new circumstances, the museum felt obliged to justify the relevance of its historical orientation, and to reconsider how its objects might continue to be of use to its traditional audiences. Recognizing these changes, Hathaway underscored the presentist aims

under which the museum was founded, and under which it continued to operate.²³ “[N]othing is more lifeless than a collection of objects in which no one is interested, which has no real connection with contemporary thought.”²⁴ In the Hewitts’ time, relevance stemmed from the availability of the museum’s objects to be imitated—even copied—something that placed emphasis on individual works, chosen from a collection made up of carefully selected periods, regions and styles. For Hathaway, the relevance of the collections continued to be found in the lessons they offered to contemporary design.

The Museum’s ‘philosophy’ looks to a continuation in the future of its direct usefulness and service to designers of all kinds, to classes of students from all specialized schools, and to research workers who are engaged in recreating on the basis of historic art. Regardless of the extent to which machine production is pushed by economic necessity, there will always be a need for training in the elements of design; and the lessons to be learned from a knowledge of the past will remain no less valid in the field of art than in that of any other human endeavor.²⁵

While Hathaway similarly valued the contemporary utility of the museum’s objects, his view differed from the Hewitts’ nineteenth-century attitudes. Historical objects were no longer directly copied, a practice that focused on their surface, but were rather examined and analyzed for their “lessons.” This implied that intellectual rather than manual labor was required to extract their ideas. For Hathaway, this shift from surface appearance to underlying idea was closely associated with the activity of design.

While this view may ring modern to our twenty-first century ear, Hathaway’s approach to design and his specific ideas concerning the collections’ professional use were rather conservative. He was certainly influenced by the late nineteenth-century aim of public art museums such as the Metropolitan Museum and the Boston Museum of Fine Art, which was to present a coherent and comprehensive art historical narrative through the selection and display of their objects. Hathaway did however modify this approach, shifting the

²³ In characterizing the museum’s aims as “presentist,” I draw upon François Hartog’s use of the term to refer to a “regime of historicity” in which the past is valued, understood, and engaged with wholly through the lens of present-day concerns, beliefs and desires. See François Hartog, *Regimes of Historicity: Presentism and Experiences of Time*, trans. Saskia Brown (New York: Columbia University Press, 2015).

²⁴ Letter, Calvin Hathaway to Cooper Union Museum Board of Directors, November 27, 1937. Series III Cooper Union, Calvin Hathaway Papers, Philadelphia Museum of Art, Archives. 2.

²⁵ Letter, Calvin Hathaway to Cooper Union Museum Board of Directors, November 27, 1937. Series III Cooper Union, Calvin Hathaway Papers, Philadelphia Museum of Art, Archives. 2-3.

purpose of the art historical narrative of stylistic development from a claim of cultural inheritance to a form of design inspiration.

In any study of the fine arts, one of the most important elements is that of historical perspective. By means of it the student obtains a conception of the relationships and developments of artistic movements and also acquires a sense of values which is applicable to any field. For this reason it is important that a museum should have representative material from all the periods included in its scope. By the contrast and juxtaposition of objects and designs of different eras the student arrives at new conclusions, sees new comparisons, and is stimulated more effectively to original productions.²⁶

While the Hewitts had formulated a similar view of the utility of art-historical narratives for workers, their perception was predicated on the lesson of evolution and stylistic development, which the worker was imagined to continue. Hathaway's emphasis on juxtaposition and difference celebrated variety and multiplicity, equalizing objects from different periods rather than adhering to a teleological view in which each development superseded its predecessor. In his ongoing efforts to rationalize the physical organization of the collections within the space of the museum, addressing the ad-hoc distribution of materials according to multiple criteria left by the Hewitts, Hathaway continued to focus on art-historical themes of development and progress as that which would most benefit the museum's users.

The principles of arrangement should be threefold, to develop chronological, cultural and psychological syntheses. Historic sequence within the limits of separate crafts should be shown, by demonstrating successive stages of design and technique. Some idea should be presented of the cultural levels that have existed in the past, as they are revealed in their artifacts. And conclusions should be drawn from the foregoing as to the underlying reasons for the forms which progress takes, and its meaning in terms of human character.²⁷

While Hathaway often referred to the professional and student users of the museum as those that drove his decision making, his continued concern with historical narrative indicates a continuing acknowledgement of the place of the specialist or scholarly user. This was in no small part based on the interests of the museum staff members themselves. His introduction

²⁶ Calvin S. Hathaway, "Cooper Union Museum," January 15, 1935. Series III Cooper Union, Calvin Hathaway Papers, Philadelphia Museum of Art, Archives. 3.

²⁷ Calvin Hathaway, Untitled (Museum Development Proposal), December 11, 1938. Series III Cooper Union, Calvin Hathaway Papers, Philadelphia Museum of Art, Archives. 4.

of cultural and psychological lenses into the narrative of stylistic development reflected developments in art-historical scholarship.

While ‘design’ would eventually become a modernizing paradigm that competed with the museum’s antiquarian tendency in the ensuing decades, Hathaway’s conception of design in the late 1930s and early 1940s was less definite and thus allowed him to simultaneously promote tradition and innovation. Central to his early conception of design were the values of beauty, propriety and authenticity as criteria by which historical objects could be evaluated as well as imitated.²⁸ Hathaway’s mid-1930s proposal for a lecture series aimed at a non-specialist audience supports this reading. Envisioning a series of lectures designed to answer the basic question “What is Design?”, Hathaway imagined weekly lectures addressing questions such as “What distinguishes good design from bad?”, “What elements constitute the appropriateness and the greatness of past styles?”, and “What can be learned from the styles of the past that will be of help in present-day designing?”²⁹ Hathaway believed that addressing these questions would fulfill the museum’s educational aims in teaching “students of design, workers, sightseers, [and] housekeepers” about “historical facts, aesthetics, [and] techniques.”

The proposal’s underlying emphasis on aesthetic judgment, propriety, and authenticity continued to treat the collection as a set of specimens and models, and maintained the authority of the curators via their connoisseurship. However, in admitting these abstract ideals as both criteria of judgment and the lessons available to the contemporary designer, a chink opened in the armor of imitation: by suggesting these ideals as interpretive categories by which a designer could read objects of the past, the museum slowly started to consider the instrumentability of historical objects as something requiring translation rather than repetition. In this way, old things could retain their relevance to new production.

It should nonetheless be noted that Hathaway’s process of intellectual development concerning design would not in fact affect the museum’s activities for some years. While the museum underwent this process of self-evaluation, however, Hathaway became convinced

²⁸ In a 1939 report to Mary Gibson, Hathaway described his ideal for objects that would be added to the museum’s collections as those that “embody principles of beauty and suitability in authentic form.” Letter, Calvin Hathaway to Mary Gibson, May 24, 1939. Series III Cooper Union, Calvin Hathaway Papers, Philadelphia Museum of Art, Archives. 4.

²⁹ Calvin Hathaway, “Education in CUMAD,” ca. 1936. Series III Cooper Union, Calvin Hathaway Papers, Philadelphia Museum of Art, Archives.

that new programs could ensure the continued relevance of older objects in the traditional mode of imitation.

New Initiatives: Modernizing the Museum

Confronted with the museum's physical and intellectual deficiencies, Gibson and Hathaway undertook a number of major initiatives intended to strike a new path that honored the spirit of the Hewitts' original mission while eschewing many of their methods. Starting in 1933, the museum embarked upon a major campaign to accession the tens of thousands of objects in its collections, and the compilation of a card catalogue followed in 1935.³⁰ Prior to that time, the lack of any such central record had been purposefully maintained. As an informational leaflet ca. 1930 described, "No catalogues are necessary, as every object is labeled distinctly, stating its nature, origin and history, and the grouping and arrangements are such that the student has no difficulty in seeing at once the place of the object he is studying in the history of manufacture or art."³¹ This method relied upon the immediate visibility of every object in the collection and the considered spatial relationships of sub-collections, conditions that were increasingly rare as the collections grew and required storage. With only a handful of staff and thousands of new objects joining the collections every year, the museum's registration project was a massive undertaking that would take over two decades to complete. Further, the project was a major catalyst in the formation of the museum's antiquarian tendency, as it required curators to spend long periods of time with individual collections, examining them for the first time in a systematic and non-instrumental way.

³⁰ In comparison to nearby and similar institutions, the Cooper Union Museum was certainly behind the times but not egregiously so. In Rebecca Buck's essay, "History of Museum Registration, we learn that the predecessor to museum object catalogs, library organizational systems such as the Dewey decimal system, only emerged in the late 1870s. Influenced by these systems, Metropolitan Museum of Art administrator Henry Watson Kent, trained by Dewey in library science at Columbia, created a system of registration and accession at the Met and, indeed, the position of registrar by 1905. Similarly, the Museum of Fine Arts in Boston established such a position the following year. With the founding of the American Association of Museums in 1907, the professionalization of museum management and the creation of museum worker training programs by the mid-1920s, makes it clear that the CUMAD's lack of accession records and a card catalog were fast becoming anachronistic. While Mary Gibson may have remained unaware of these professionalizing developments, due to his previous experience at the Philadelphia Museum of Art as Curator of Decorative Art, Calvin Hathaway could not have been. Rebecca A. Buck, "History of Registration," in *Mrm5 : Museum Registration Methods*, ed. Rebecca A. Buck and Jean Allman Gilmore (Washington, DC: AAM Press, American Association of Museums, 2010). 3-5.

³¹ "A Museum for the Arts of Decoration," informational leaflet, ca. 1930. Box 46, Smithsonian Institution Archives, Record Unit 267, Cooper-Hewitt Museum, Records.

The museum also inaugurated the *Chronicle for the Museum of the Arts of Decoration*, a journal published annually from 1935 until 1963. Originally conceived of as a marketing tool to communicate with the museum's Friends and to acknowledge donors' support, the *Chronicle* also served to publicize the collections' holdings and to provide a venue for scholarly writing on the collections, primarily authored by the curators. Finally, it served to document the museum's activities and history. Indeed, much of the *Chronicle's* content was directly related to the museum's registration project, as most issues contained catalogues of recently accessioned collections or long, descriptive, scholarly articles by the individual curators who led the cataloging efforts in a particular sub-collection. Addressed to a specialist audience of donors, collectors, historians, and curators at other institutions, the *Chronicle* was a second endeavor motivated by the museum's antiquarian tendency. With few exceptions, its contents largely consisted of detailed descriptions of collections that eschewed any larger cultural context, art historical narrative, or interpretive lens that could have piqued the interest of design students.

Finally, in the 1930s, the museum began a program of temporary exhibitions, an activity that was made possible by changes to the museum's architecture. The spatial conditions of the museum had grown quite cramped by the early 1930s due to its growing collections and the limitations of the Foundation Building. The floor plate of the fourth floor in the building's original construction was doughnut-shaped, as the floor below had a double-height space thus creating a gallery or a mezzanine within the museum space [Fig. 3.05]. In 1933 the space issues were temporarily ameliorated when the double height space of the third floor library was eliminated by filling in the museum's floor plate, creating a new space where larger temporary exhibitions could be staged. Around the same time, the museum renovated the entry gallery adjacent to the school's monumental stair, moving the offices housed there to create a temporary exhibition space for smaller displays.

Facilitated by the newly acquired floor space, the museum's program of exhibitions worked to satisfy a number of aims, both antiquarian and modernizing in nature. They were



Figure 3.05 A late 19th century engraving is reproduced showing the 3rd floor of the foundation building, the mezzanine floor above is the museum's 4th floor, which was filled in 1933, becoming the "Centre Gallery" where temporary exhibitions were staged. From: "Designed for Use: The Cooper Union Museum." *Museum News* 39 6 (1961).

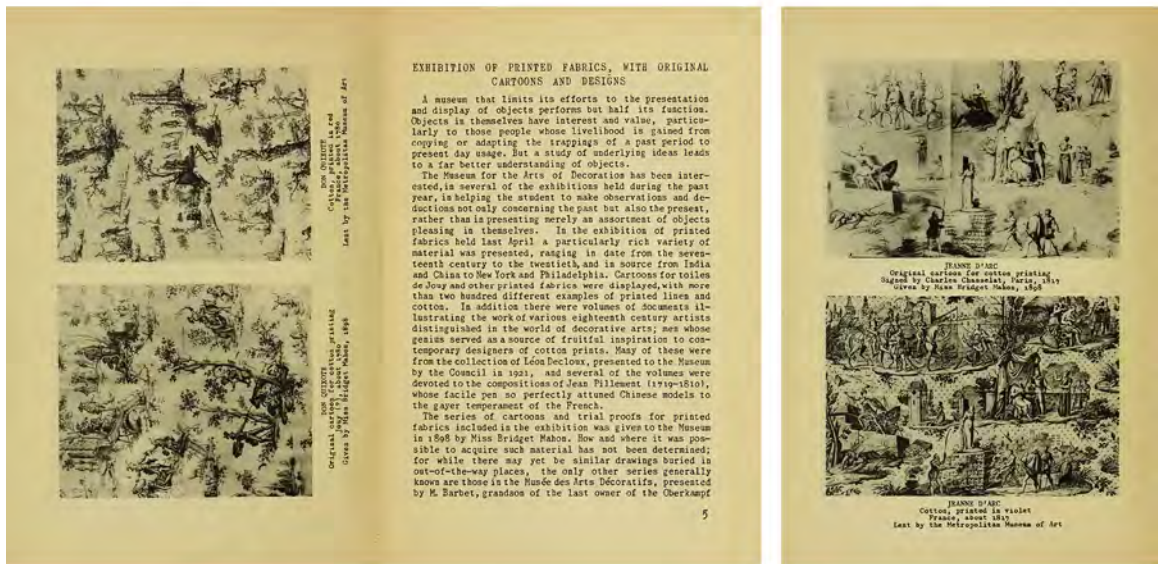


Figure 3.06 Spread and additional page from "Exhibition of Printed Fabrics with Original Cartoons and Designs," *Chronicle of the Museum for the Arts of Decoration of Cooper Union* 1 1 (1935). pp. 4-5, 10.

used to highlight particular areas of the existing collections, and often brought in additional material borrowed from collectors or museums to further illustrate a particular decorative art type. The museum began to hosting traveling exhibitions deemed to be of special interest to students, often at the request of Art School faculty itself.

Temporary exhibitions allowed the curatorial staff to apply new interpretive lenses to existing collections, allowing visitors (and themselves) to examine objects according to criteria *other than* those dictating their permanent installation, such as technique, style, motif, and material. Finally, temporary exhibitions allowed the museum staff to continue pitching the usefulness of the museum's collections to increasingly skeptical art students. Generally maintaining its conception of student interaction with historical materials as one of imitation, the exhibition program was one of the first in which the modernizing tendency towards design crept in. Objects continued to be viewed as subjects for imitation, but the *aspect* to be imitated was slowly shifting away from surface appearance and towards underlying structures and logic. Unlike the late nineteenth-century shift to underlying principles, however, the mid-century view invited designers to choose just one aspect of an historical object to carry forward, rather than its ensemble of structures and ideas.

The exhibitions staged during the 1934-1935 academic year are representative of the museum's competing aims, missions and tendencies. The initial steps towards the 'design' paradigm were manifested most clearly in those exhibitions explicitly oriented to the interests of students and designed to support the art and architecture curriculums. An exhibition mounted in April 1934, entitled *Exhibition of Printed Fabrics, with Original Cartoons and Designs*, was designed specifically for Decorative Design students. This course of study had narrowed its focus from interior decoration and decorative arts of all sorts to an exclusive focus upon the design of textiles over the preceding two decades [Fig. 3.06]. Thus the aim of that exhibition was to display not only the end product of printed fabrics, but also the design work that preceded them in the form of drawings from which the prints were made. This allowed textile design students to access the design process as well as the finished work, and to see how drawn designs were handled and translated by the technical particularities of the printing process. Francis Morris, a donor and textile collector who helped organize the exhibition, described the museum's hope for its reception by students.

Objects in themselves have interest and value, particularly to those people whose livelihood is gained from copying or adapting the trappings of a past period to the present day usage. But a study of underlying ideas leads to a far better understanding of objects. The Museum for the Arts of Decoration has been interested, in several of the exhibitions held during the past year, in helping the student to make observations and deductions not only concerning the past but also the present, rather than in presenting merely an assortment of objects pleasing in themselves.³²

As Walter Dorwin Teague suggested, this exhibition offered evidence and information about the translation from design to machine that students could learn from, even if the particularities of the designs and the machines had changed.

As early as the mid-1930s, then, the museum began its slow transition towards the presentation of historical objects for purposes other than direct imitation. This required the addition of an interpretive lens to support students and other visitors in their reading of the ideas, systems or character underlying a given object. What was to be learned and applied to new work was no longer its visual quality, but something underneath that had to be analyzed and parsed by the viewer in order to be understood.

If *Printed Fabrics* attempted to address the presentist interests of designers, the exhibition report in the *Chronicle* was representative of the competing antiquarian tendency of the Museum. Detailing the provenance of the objects, the development of particular production houses, the motifs found in the prints as well as the nature of their cultural borrowing—Asian motifs in French textiles, for example—the article provided a wealth of information of little interest to the designer no longer making reproductions, but of great interest to the collector or the scholar textiles.

The following month, the museum staged a temporary exhibition of contemporary architecture, borrowed for the benefit of the art school's architectural design students. The exhibition presented drawings and photographs by eighteen contemporary American architects and architectural firms, including the Philadelphia-based Howe and Lescaze, designers of the PSFS building, and New York-based Raymond Hood, designer of Rockefeller Center. New York architect and theorist Michael Meredith Hare prepared the résumé for the exhibition, and his interpretive suggestions revealed a subtle yet profound

³² Frances Morris, "Exhibition of Printed Fabrics, with Original Cartoons and Designs," *Chronicle of the Museum of the Arts of Decoration of Cooper Union* 1, no. 1 (1934). 5.

shift taking place in art and architectural education. It was a shift that exerted significant pressure on the museum's conception of its utility and modes of instrumentalization.

In every exhibition of architecture there are drawings which demonstrate that, be the architect's philosophy good or bad, according to one's own opinion, he at least follows it. [...] Therefore it is to be hoped that all those who see this exhibition, who have an absorbing interest in architectural development or who, in addition to this, hope to build buildings, will not painfully remember this detail or that; but that, scrutinizing the scheme and the form they will read in some cases a blank page, in others a possible philosophy which the building at hand tries to express. This judgment will determine for each thinking critic the exhibits which he would have eliminated. Those remaining can then be judged as answers to the question: does this philosophy of architecture seem to me to fulfill the requirements of living conditions today?³³

Rather than play the role of the authoritative arbiter of good taste presenting works as models to be repeated, the exhibition showed a range of projects that students were asked to view critically. The designs were framed as the result of the architects' personal philosophies and as responses to their understanding of contemporary needs. According to Hare, the exhibition visitors were asked to consider the architects' underlying ideas, approaching them with the presentist concern for their utility in tackling contemporary design problems. While the buildings' forms were presented as manifestations of ideas, Hare suggested that the designs were merely instantiations of these ideas and that students and other designer could utilize them further in new projects of their own. In other words, an idea might take on multiple appearances.

Other exhibitions held that academic year were more antiquarian in nature, presenting museum sub-collections alongside loaned objects. As a result, they held little appeal to students or designers. For example, *Original Designs for French Silversmiths' Work* drew upon the Museum's extensive collection of French 18th century drawings of decorative arts, particularly candelabra, vessels, furniture mounts and even sword hilts designed to be produced in silver, pewter, gilt or gold [Fig. 3.07]. The accompanying article published in the *Chronicle* described the exhibition's contents entirely in terms of art history and connoisseurship. It therefore concentrated exclusively on issues of provenance, the history of the objects' designers, motifs found within the design, and the overall stylistic

³³ "Contemporary Architecture," *ibid.* 13.

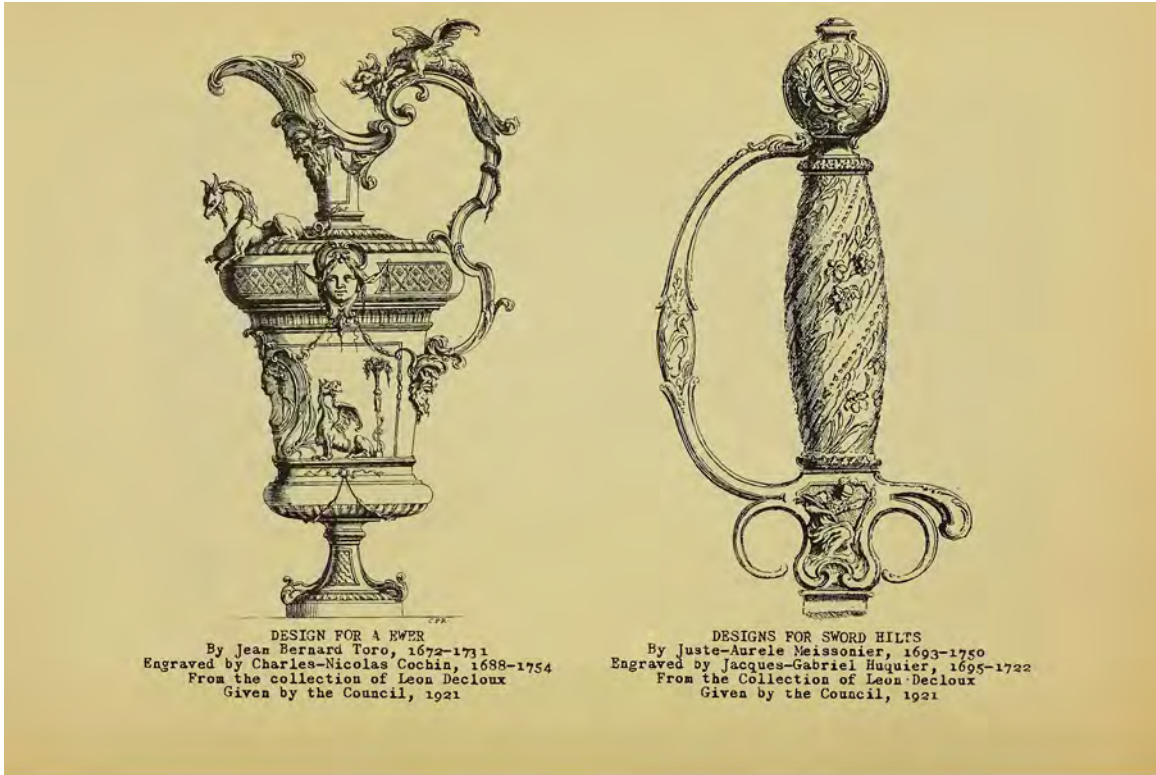


Figure 3.07 Spread and additional page from “Original Designs for French Silversmiths’ Work with Examples from the Craft,” *Chronicle of the Museum for the Arts of Decoration of Cooper Union* 11 (1935). pp. 16, 20.

development within the period. The prioritization of this kind of information over any discussion of design process or fabrication technique or the objects' place in a larger art-historical narrative reveals that the exhibition's intended audience were specialists and collectors. This was the group primarily interested in such esoterica, as opposed to students or even silversmiths who would have found little that was applicable to their education or practice respectively.

The Road Not Taken: Visions for the Museum's Future at its Fortieth Anniversary

In 1937, on the occasion of the Cooper Union Museum's fortieth anniversary, the museum published a special issue of the *Chronicle* that contained many of the addresses given at its anniversary celebration. In addition to Curator Mary S. Gibson's account of the museum's activities since 1919—the year that Eleanor Garnier Hewitt published her account of the museum in *The Making of a Modern Museum*—two notable contemporaries, Royal Cortissoz and John Dewey, were also invited to present their comments. These comments proved to be prescient for the development of the museum in articulating the pressures the institution would come to face, going so far as to propose a radical revision of the Museum's mission according to 'design'—one that might in fact have changed the course of its relationship with Cooper Union, had it been heeded. The proposed revision was predicated on the changed realities of mechanized production, shifting approaches to learning from the past, and the need for a new system of classification that could highlight relevant aspects of the collections.

Another address was given by Cortissoz, an art historian and critic for *The New York Herald Tribune* (active 1891-1948) whose traditionalist and historicist views were sympathetic to those of the Hewitts. Yet his words demonstrated how much even the conservative view had come to be influenced by the demands of novelty and originality.

Nothing is more foolish, as I have been repeating, in season and out of season, for many years, than to think of tradition as an academic formula. It is simply the tribute which the genuine artist pays to the wisdom of the finer spirits in the art of all ages, a striving toward perfection that filters down from generation to generation. It germinates creative ideas. Also it subtly inculcates a feeling for restraint and measure. It discloses ideals of sound proportion. It stabilizes judgment and purifies taste. It is of these things that

the collections at the Museum speak, and, through them, the spirit of the Hewitt ladies, constructively helpful.³⁴

Addressing the relationship contemporary artists should maintain with the past, Cortisoz eschewed the model promoted by the Hewitts in which the historical objects were models to be repeated. Rather he presented tradition as something to be approached abstractly—through its characteristics and structures, rather than its particulars.

The guest of honor at the anniversary proceedings was American philosopher and psychologist John Dewey, who published his treatise on aesthetic experience, *Art and Experience* (1934), just four years prior. Dewey presented a lecture entitled “The Educational Function of a Museum of Decorative Arts.” Here, he addressed the core problem of the museum’s identity with respect to Modernism’s changed conditions of artistic production. Acknowledging the educational aims that were at the forefront of the Hewitts’ efforts, Dewey argued that the museum must change its focus and orientation in order to maintain broad relevance. The alternative, he warned, was a dwindling specialist audience of antiquarians and historians.

The Cooper Union Museum has always been an educational agency. But changed conditions of social life, including changed methods and aims in the industrial arts, give rise to new educational problems. Even collections as rich and extensive as those found in the Museum of Cooper Union come with passage of time to be of chief interest to the antiquarian and historian unless they are organized to be adapted to service under new conditions.³⁵

While the Hewitts often described their nineteenth century museum as a collection of “industrial arts,” Dewey argued that the twentieth century explosion of mechanized mass production had changed the landscape of decorative arts by creating “a veritable flood of ugly objects made in the interest of providing cheap objects of ordinary use.”³⁶ The technical requirements of industrialized production had changed the nature of design work, and designers could no longer take the techniques and quality of hand-craftsmanship as a given. Further, in Dewey’s view machine production rendered historical motifs either obsolete, or ersatz, and in response he encouraged designers to engage with the specific limitations and possibilities inherent to the machine as their central design problem.

³⁴ Royal Cortisoz, “The Hewitt Ladies,” *ibid.*, no. 3 (1937). 79-81.

³⁵ John Dewey, “The Educational Function of a Museum of Decorative Arts,” *ibid.* 93.

³⁶ *Ibid.* 97.

The time has gone by when one of [the museum's] chief functions is to provide objects in the various arts as models to be copied with a view to mechanical reproduction. It is more and more recognized that instead of providing designs to which the operation of the machine must accommodate itself, the problem for the designer is now to provide designs that are constructed with references to the capacities and limitations of the machine, and also that this construction does not necessarily mean sacrifice of artistic qualities. The situation has almost revolutionary possibilities for the production of artistic products which bear an organic relation to the conditions of actual social life. But it also involves an almost revolutionary change in the educational use of the art products that are found in museums.³⁷

The museum's mission could not remain static in a time of industrialization and mass-production, but rather had to devise new ways of connecting contemporary design to the heritage of historical objects and traditions.

For Dewey, this meant a replacement of the decorative arts paradigm with that of design. Rather than present historical objects whose motifs were inappropriate to industrial production as models for imitation, the museum needed to instruct visitors on how to read the objects' underlying structure of design.

Just as a painting is made to be a pictorial work of art by the plastic design that controls all its parts and their relations, so with a brocade, a tile or a chair. Design is the important thing, and design is a matter of composition, of the integrated relation of all constituent parts in forming a whole. To learn to see for artistic purposes is to learn to detect organizing design, whether the object seen be a statue, a picture, a tapestry, a pitcher, or a roll of wall-paper.³⁸

According to Dewey, design was an organizational structure regulating the visual aspects of an object and therein describing an ahistorical set of qualities and characteristics. These were accessible via objects from any period or origin and applicable to any new work, thus maintaining a connection to tradition but not to specific appearance. Dewey insisted change was necessary in order for the museum to reposition its collections in this new paradigm and facilitate this new form of engagement with its objects. Specifically, he proposed that the museum's classification system and its spatial organization of objects according to period

³⁷ Ibid. 97.

³⁸ Ibid. 98.

and region had to be restructured so that objects could be quickly regrouped according to any design characteristic that was of interest.

Despite Dewey's sibylline proposal for the Museum, which echoed the modernizing pressure exerted by the school, the museum continued to operate with a powerful internal antiquarian tendency. Whether due to force of habit, ingrained values, or the prioritization of internal projects, such as the registration system and reorganization of the collections, the museum would not act upon Dewey's views for another fifteen years.

Waning Museum-School Relations: Decorative Design

During the Hewitts' decades of active involvement with the Cooper Union through the Art School Advisory Council as well as the museum, they had exerted a powerful influence over its pedagogy and curriculum. The strength of their vision as leaders, and their power to control any posthumous bequest to the institution, meant their insistence on historicism and imitation as well as their continued support for the decorative design course remained highly influential. That influence temporarily delayed the Art School's transition to modern design approaches and Modernist idioms. Similarly, the Hewitts' integration of the museum's collections into design-related courses of study served to bolster its usage by students despite their waning interest. The evolution of the decorative design course, which was the focus of their efforts and interest, reveals most clearly the strength of their influence.

The relationship of the museum and the Cooper Union Art Schools was complex and constantly evolving, even prior to the Hewitts' deaths. As members of the Woman's Art School Advisory Council—and as the granddaughters of the school's founder—the Hewitts exerted significant influence on the school's pedagogy. Prior to 1933, arts education at Cooper was delivered under the auspices of three distinct entities: the Woman's Art School, the Night Art School, and the Day Art School. The latter of these two were primarily for men. The faculty of each art school remained in large part distinct, and the curriculum offered in each was tuned to the needs of the students to which each school appealed.

The Woman's Art School, for example, remained focused on the more genteel pursuits of drawing and painting until the turn of the century when it introduced courses geared more specifically to professional work, such as illustration, decorative design, and interior decoration. The Night School of Art held courses from 7:30pm to 9:30pm on weekday

evenings to allow working men to take courses in the vocations in which they labored. The Day School of Art, the newest part of the school made possible by a \$300,000 gift from Andrew Carnegie in 1900, was aimed towards a higher socio-economic class of student—one whose families could afford to support them during their studies rather than working during the day.

In the first three decades of the twentieth century, the school's curriculum made ample use of the Cooper Union Museum, something that was supported and encouraged by the Cooper Union Trustees. As the Trustees reflected on the newly opened Day School in 1901, for example, they looked to the museum as an important supplement to the curriculum. "It has been found by the experience of the best schools in England, France and Germany that a museum is not merely an essential, but is probably the most important part of the scheme of instruction. The use of the museum, however, must be under proper direction, and Classes must be organized with particular reference to this end."³⁹

The most direct point of contact between the museum and the art schools was undoubtedly the range of courses offered in Decorative Design. Introduced in the late 1890s to the Night School of Art and offered by the Day School when it opened, Decorative Design began as a course on style and ornament that relied heavily on the imitation of objects and prints in the Museum's collection.

The Museum has already been and will continue to be used as a sort of atelier for Mr. Masqueray's pupils, who, working under his supervision, being made to copy and thus thoroughly familiarize themselves with the larger collection of casts of well-known European decorations of the most important styles of the past centuries, will, by this method, together with the constant association with decorative objects of various kinds, become far more quickly and thoroughly grounded in the different styles and periods of decoration than if they depended entirely on text books and their own observation for studying their subject.⁴⁰

The Decorative Design courses addressed not only decoration applied to household objects and textiles, but architectural ornament and interior decoration as well. Class meetings of Decorative Design were held in the Cooper Union Museum, where students were allowed direct access to the collections.

³⁹ *The Forty-Second Annual Report of the Trustees of the Cooper Union for the Advancement of Science and Art*, (Albany, NY: The Union, 1901). 15.

⁴⁰ *Ibid.* 23.

As early as the mid-aughts, however, the pedagogical emphasis began to slowly shift away from imitation towards design and an interest in underlying principles. Frederick Dielman, the Art Director from 1905-1916, enacted this shift upon his arrival.

The making of close copies of lithographs and plates of ornamental forms,-- that is, the production of show-pieces, requiring a great expenditure of time,-- has been discouraged; and instead, the beginner is being led into a more systematic course in what is properly called design; first by study and practice in the geometrical arrangements that form the bases of decorative design; next to the study of historic ornament by the copying of good originals; and, finally, the adapting of the forms and elements studied, to given forms and spaces.⁴¹

Students enrolled in the three-year course in Decorative Design utilized the museum's objects as exemplars that could be analyzed to ascertain underlying principles, and as models whose surface appearance could be copied or used as a starting point for cautious innovation. Students studied historical ornament and natural forms in this way, applying the motifs they developed primarily to the decorative arts most closely associated with building: mosaic, stained glass, ironwork, textiles, and wallpaper.⁴²

Throughout the teens, the courses in Decorative Design became increasingly codified. A foundational Principles of Decorative Design course was developed as a prerequisite to further specializations in interior decoration, in one of the architectural decorative arts described above, or in two-dimensional printed media such as book and magazine covers. Coursework throughout the Art Schools emphasized drawing over handicraft, requiring free-hand drawing as a prerequisite for most courses of study and training "decorative designers" to work with carvers and other craftsmen via drawing.⁴³ In the late teens the museum initiated a separate course required for Decorative Design students and available to architecture students, "Historic Decorative Art," and in 1920 the school instituted a

⁴¹ *The Forty-Seventh Annual Report of the Trustees of the Cooper Union for the Advancement of Science and Art*, (Albany, NY: The Union, 1906). 29.

⁴² *Woman's Art School Circular of Information, 1906-1907*. The Cooper Archives, Cooper Union Library, New York, NY.

⁴³ Indeed, the architecture course offered in the men's Night School of Art from 1914-1934 was called "Architectural Drawing" and emphasized drawing as the primary means of communication between designer and tradesmen.



Figure 3.08 Students studying furniture in the Encyclopedic Scrapbook Library. From *Cooper Union In Action* (1945): a set of marketing images utilized in Art School course catalogs, Cooper Union Annual Reports, and other promotional materials, Architecture Archive, The Cooper Union for the Advancement of Science and Art.

supplementary summer course in Decorative Design that took place entirely within the Museum.

The Hewitts' influence was so strong in the school that in 1919, Decorative Design came under the larger auspices of a newly formed Decorative Arts department, joining the existing departments of Free-Hand Drawing, Modeling, and Architectural Drawing. The Decorative Arts department gathered the Decorative Design class together with courses in costume design, in decorative and pictorial composition, in interior design, and in "commercial design," an early graphic design course. Furniture design was added in 1921, and was also maintained in the museum to allow students access to the collections of furniture, casts, and carved panels [Fig. 3.08]. While the wholesale historicism of the aughts was tempered by the more abstract terms of design, the museum and its objects remained at the core of the Decorative Design curriculum through the 1920s.

The involvement of the museum in the Art Schools' curriculum seems to have persisted on the force of determination of the Hewitt sisters, as well as their willingness to personally fund curricular changes and additions. The deaths of Eleanor Garnier Hewitt in 1924 and Sarah Cooper Hewitt in 1930 marked a turning point in the Art Schools curriculum, and subsequently in its utilization of the museum. In 1933, the curricula of the Art Schools were overhauled and modernized: the Woman's Art School was discontinued, and women were folded in to the Day and Night Art Schools; the curricular offerings were streamlined and organized into the three newly created departments of Painting, Sculpture and Architecture; and the course sequences were reconceptualized according to 'design'. As an abstract approach to creative work, the school seized upon 'design' as that which would allow students the best foundational training prior to their specialization in the three available majors.

The desire to design is the real indication of creative talent. There are a great number of and variety of industries capable of utilizing the services of competent designers, as well as a great variety of opportunities for employment in designing. The student applying for training in a specific art vocation is frequently ignorant of these facts and is often more concerned with the betterment and apparent perfecting of an isolated vocational skill than in devoting himself to education and training in design with the object of discovering his real ability.⁴⁴

⁴⁴ Course catalog, *Day Art School, 1936-1937*. The Cooper Archives, Cooper Union Library, New York, NY. 7.

Prior to choosing a specialization, students in the 1930s took a two-year preparatory course that introduced design through the basic approaches of the architectonic, graphic and plastic. This introductory course focused on drawing and modeling skills as well as broadly applicable formal and compositional concepts. In so doing, the lens of ‘design’ was thought to provide students with a visual and formal vocabulary, enculturating them into the values of good composition, craftsmanship, and innovation.

In this changed context, Costume Design became the only course that regularly consulted the Museum’s historical collections [Fig. 3.09]. Decorative Design was now also taught through the abstract terms of design, focusing on pattern, line, form, tonal contrast, and color. As the 1936 Day School of Art course catalog described, Decorative Design was an

Introduction to the study of light and dark pattern; the study of natural forms and the rhythms which control them; the study of abstract breaking of planes with angles, curves and accents; development of the color sense through emotional experiment in color composition; exercise in the use of clear strong color, execution of design problems in simple crafts, such as block textiles, hooked rugs and needlepoint.⁴⁵

It maintained its historical focus on drawing as a medium of communication between designer and craftsman. However, it also required students to work in simple or relatively unskilled crafts to engage them with problems of translating design to particular media. Finally, the taste and authority with which the museum’s historical objects had been imbued while they served purely as models for imitation was dispatched. In its place, a view of the decorative arts as a vehicle for personal, emotional expression developed. Thus released from the historicism that characterized arts education at Cooper during the first three decades of the twentieth century, students were no longer required to utilize the museum, but were rather “advised to make free use of the Museum for their own enjoyment and inspiration.”⁴⁶

⁴⁵ Course catalog, *Day Art School, 1936-1937*. The Cooper Archives, Cooper Union Library, New York, NY. 17.

⁴⁶ Course catalog, *Night Art School, 1933-1934*. The Cooper Archives, Cooper Union Library, New York, NY. 14.



Figure 3.09 Students hand printing textiles. From *Cooper Union In Action* (1945): a set of marketing images utilized in Art School course catalogs, Cooper Union Annual Reports, and other promotional materials, Architecture Archive, The Cooper Union for the Advancement of Science and Art.

Values Engineering: Rethinking the Decorative Arts in a Bid for Continued Institutional Relevance

One aspect of the museum's antiquarian tendency was the reconceptualization of its holdings from the earlier category of "industrial art" to, simply, "art," which was then interpreted as evidence of broader cultural-historical trends. The objects in the collections were no longer considered "specimens" of technique, material, or good taste from which a worker or a student could learn through the direct interaction of copying or, at most, slight innovation. Rather, the "decorative arts" were asserted to be just as "artistic" as the fine arts of painting and sculpture and to be an important component of past cultures' artistic output. As Alice Baldwin Beer, Keeper of Textiles, argued in her 1955 article "Why Textiles?",

'An art museum,' writes one who should know, 'is usually thought of as a gallery for the display of masterpieces. But possibly we should think of it rather as a visual reference collection of cultural history. Now, contrary to popular belief the history of culture is not written about the isolated masterpiece, but is drawn from the study collections.'⁴⁷

Textiles in particular, Beer suggested, are important documents of cultural history, functioning "as an exemplification of advance or decadence, as well as an expression of the psychology, the taste of the moment."⁴⁸ In this approach to the decorative arts collections, objects were valued for their representation of the breadth of human artistic production, and as invaluable evidence of an otherwise intangible cultural history.

This approach proved to be a useful one for the museum with respect to its position in the school. The pressure on the museum from the Art School to modernize itself according to a 'design' paradigm waned in the 1940s, as the school slowly divested itself of decorative arts-related programs. The curriculum narrowed in that decade, shifting from a broad range of offerings in the fine arts, architecture, interior decoration, crafts, industrial arts and advertising in the early 1940s to a choice of just three majors by 1951: architecture, the fine arts and the graphic arts. Inversely, the arts curriculum grew to include a variety of liberal arts courses during the 1940s, which made up nearly half of the courses required for each art major by the early 1950s. The liberal arts courses were taught by instructors from the Engineering School's Humanities Department and included classes in philosophy, literature

⁴⁷ Alice Baldwin Beer, "Why Textiles?," *Chronicle of the Museum of the Arts of Decoration of Cooper Union* 2, no. 7 (1955). 204.

⁴⁸ *Ibid.* 216.

and cultural history, such as Elements of Aesthetics, American Literature, Social and Economic Institutions, Contemporary Thought, and Cultural Traditions.

Within the span of one decade, the Art School was transformed from a professional and vocational school into one that “prepare[s] its selected students best by creating an environment conducive to the development of aesthetic sensitivity, the ability to think, and the power to act.”⁴⁹ This shift from a vocational to a professional and intellectual approach to architecture and art reduced the relevance of the museum and its collections to the Art School curriculum in the absence of a new interpretive lens that would shift their interest from a visual to an intellectual form.

In light of such developments, the Museum began to invest in a cooperative relationship with the Engineering School (particularly the Humanities Department). This was a constituency with which the museum had rarely enjoyed any great shared interest. Throughout the 1940s and 1950s, the museum experienced its most regular use by engineering students taking courses on art appreciation and cultural history. For this audience, the museum provided regular tours, lectures, and special temporary exhibitions, each of which reinforced a view of its collections as either artworks to be approached as aesthetic objects, or as the material issue and evidence of culture [Fig. 3.10].

The Humanities Department’s use of the museum began in the academic year 1940-1941, when it initiated a course in art appreciation for engineering students entitled “The Approach to the Arts.” The course met in the museum’s Winslow Homer room and was taught by George Gates Raddin, Jr. It was designed to expose engineering students, whose education was suspected of a disproportionate technical focus, to a variety of cultural forms in music, literature, and art. Students were taken on field trips to art museums and music venues, and they wrote up reports on their impressions to be published in a monthly bulletin produced by Raddin, entitled *The Approach to the Arts* [Fig. 3.11]. Alongside their reports, Raddin published brief articles written by instructors and museum staff, notices about upcoming performances and exhibitions, and bibliographies on art-historical topics prepared by the school’s librarians.

⁴⁹ Course catalog, *The Cooper Union Art School, 1950-1951*. The Cooper Archives, Cooper Union Library, New York, NY. 9.



Figure 3.10 Calvin S. Hathaway displaying objects from the museum's textile collections to engineering students. From *Cooper Union In Action* (1945): a set of marketing images utilized in Art School course catalogs, Cooper Union Annual Reports, and other promotional materials, Architecture Archive, The Cooper Union for the Advancement of Science and Art.

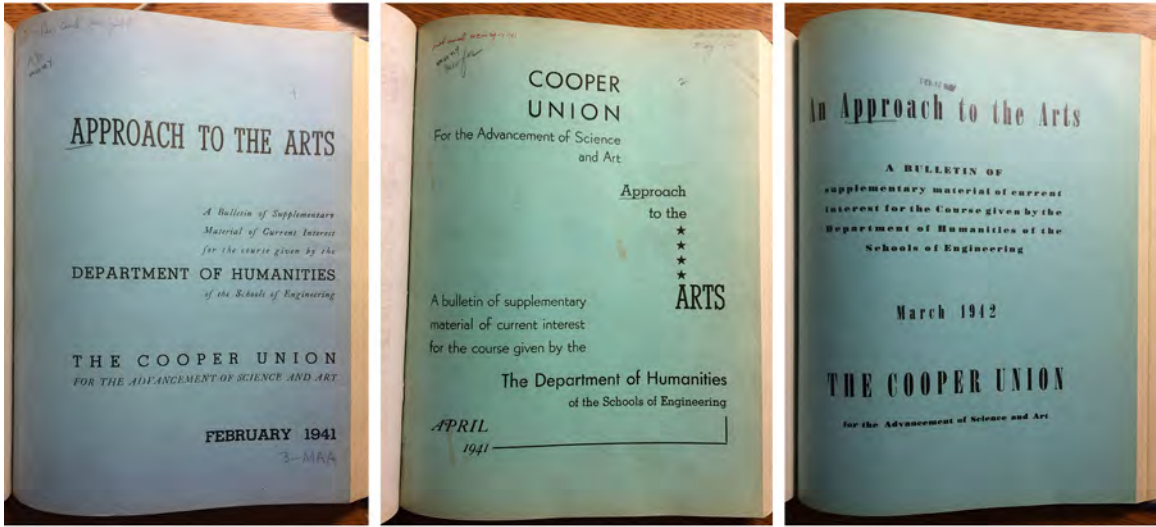


Figure 3.11 Selected covers, George Gates Raddin, Jr., Ed., *An Approach to the Arts; a Bulletin of Supplementary Material of Current Interest for the Course Given by the Department of Humanities of the Schools of Engineering, the Cooper Union for the Advancement of Science and Art*. New York: Cooper Union. February 1941, April 1941, and March 1942.

Visits to the Cooper Union Museum were treated similarly to those taken to the Whitney or the Metropolitan Museum of Art—all were described as “field trips.” While the “Approach” students occasionally visited a decorative arts exhibition, they primarily called upon the Museum to view drawings, prints, and paintings by fine artists such as Childe Hassam, Winslow Homer and Frederick Church. The aim of the course, as one student described it, was to “dissipate the mental attitude which prevents the layman from regarding art as a factor in his everyday life.”⁵⁰

Towards that end, Raddin taught the students how to engage with art by outlining the types of questions and categories necessary for its interrogation and analysis. Raddin began with the concepts of technique and materiality, as well as providing basic typological divisions such as “storytelling art,” “representational art,” “folk art,” and “abstract art.” Further, he taught students to consider the relationship between an artwork and “the dominant cultural forces at work during the period in which the particular arts have been produced.”⁵¹ Indeed, Raddin felt that cultural relevance was an important quality in a work of art, and he encouraged his students in this attitude.

The world today asks and has the right to ask of the artist, ‘What have you done? What does your work express? What do you stand for? Have you worked for and from humanity, or have you only refined on the styles of your predecessors; turned the human organism into an abstraction; and in your defense, erected an esoteric apology upon an ingenious pattern?’⁵²

Just as the museum and the “Approach to the Arts” course viewed past art as evidence of cultural character, Raddin’s instruction in apprehending contemporary art similarly questioned the degree to which it compellingly represented the spirit of the present day.

The insistence on art as a visual key to decoding culture pervaded the Humanities Department’s dealings with the Museum. While “The Approach to the Arts” course was only offered for three years, other Engineering courses continued to utilize the museum’s staff and collections throughout the 1940s and 1950s. As early as 1941, the staff arranged a “Humanities Alcove” in the museum outfitted with display cases. In this space, the staff

⁵⁰ E. Frost, “Report on the Annual Exhibition of the National Society of Mural Painters,” *The Approach to the Arts*, vol. 1, no. 2. December, 1940. Collection of the New York Public Library. 5.

⁵¹ George Gates Raddin, Jr., “16th century French painting,” *The Approach to the Arts*, vol. 1, no. 3. January, 1941. Collection of the New York Public Library. 8.

⁵² George Gates Raddin, Jr., “Editorial Notes,” *The Approach to the Arts*, vol. 1, no. 4. February, 1941. Collection of the New York Public Library. 45.



Figure 3.12 Display of Egyptian objects, assembled by the Cooper Union Museum for the Arts of Decoration for the Department of Humanities, Schools of Engineering, ca. 1950s. From: Box 8, Smithsonian Institution Archives, Record Unit 267, Cooper-Hewitt Museum, Records



Figure 3.13 Display of Antique objects, assembled by the Cooper Union Museum for the Arts of Decoration for the Department of Humanities, Schools of Engineering, ca. 1950s. From: Box 8, Smithsonian Institution Archives, Record Unit 267, Cooper-Hewitt Museum, Records



Figure 3.14 Display of glass objects, assembled by the Cooper Union Museum for the Arts of Decoration for the Department of Humanities, Schools of Engineering, ca. 1950s. From: Box 8, Smithsonian Institution Archives, Record Unit 267, Cooper-Hewitt Museum, Records

were asked to provide objects illustrative of the periods covered in courses such as “Western Civilization”. In the academic year 1941-42, for example, the museum was scheduled to produce sixteen different exhibits on subjects as diverse as Ancient Egyptian, Greek, and Roman culture, the Middle Ages and the Renaissance, materially based topics of ceramics, wallpaper, iron, copper and bronze, as well as eating utensils⁵³ [Figs. 3.12, 3.13, 3.14].

In addition to the biweekly special exhibits and visits to the museum by “The Approach to the Arts” classes, the museum began regularly scheduled orientation tours for engineering students in Western Civilization in the mid-1940s. The museum’s relatively cramped spaces required smaller tours groups, a situation demonstrated in the extreme in 1947, when demand was so great the museum staff had to provide two tours per day over the course of seven or eight days to accommodate all of the Humanities Department’s students.

This view of the museum’s collections as ‘art’ rather than ‘decorative arts’, serving primarily as a useful illustration of cultural history, was one that was shared by both the Humanities Department and the school’s administration. Two Humanities professors, Weller Embler and Kingman N. Grover, suggested as much in 1953 when they argued that the museum’s primary value for the school was no longer as a provider of models to art students.⁵⁴ Rather, they argued that the museum was most valuable as a source of objects to illustrate lectures on western civilization, treating periods from antiquity through the Baroque. They even went so far as to suggest that the museum be reorganized with this purpose in mind. Embler and Grover were not alone in their interest in the museum as a supplement for engineering education. This was reflective of the attitudes of with school’s administration, particularly that of Edwin S. Burdell, Director of the Cooper Union from 1938-1960.

Burdell was trained as a sociologist and served as Dean of Humanities at the Massachusetts Institute of Technology prior to his appointment at the Cooper Union. He was known at MIT for his advocacy of the integration of humanities study into the training of scientists and engineers. Indeed, his departure from MIT was marked by an editorial in the student newspaper, *The Tech*, that called his directorship at Cooper Union an indication

⁵³ “Schedule of Humanities Room Exhibits for the season 1941-42, as arranged with Mr. Raddin,” March 11, 1941. Box 8, Smithsonian Institution Archives, Record Unit 267, Cooper-Hewitt Museum, Records.

⁵⁴ Embler and Grover published a statement to this effect in the 1953 issue of the *Chronicle*, entitled “Engineering Students in the Museum.”

of “the academic world’s increasing awareness of the intimate relationship between the work of the engineer and the social life of the community.”⁵⁵

Reacting to the charge that engineering education was too technical and vocational in nature, Burdell sought to infuse engineering education at the Cooper Union with humanities and social science coursework. This aimed to produce well-rounded graduates, with “sensitivity to the human values of freedom and individuality,” thus saving “our civilization from the irresponsible technologist and the scheming politician.”⁵⁶ It was Burdell’s consuming interest in the engineering school (and corresponding lack of interest in the art school) that led him to appraise the museum—and art in general—in terms of its ability to broaden the intellects of future engineers and provide them with cultural orientation.

Describing his administration’s project of encouraging engineering students’ interest in arts and culture, Burdell explained,

Our aim is twofold: to help the student achieve the social intelligence demanded increasingly of engineers; and to open cultural paths which may be pursued by the student later in life. Our School of Engineering accepts the responsibility for creating in our students fuller, richer personalities, so that they may contribute more to society than professional competence, and that they may enjoy for themselves a wider range of cultural experiences.⁵⁷

One effort he instituted towards this end was a new program of displaying artistic representations of large-scale engineering projects. A gift enabled the school to purchase lithographs and etchings by Joseph Pennel and others of subjects such as the Panama Canal under construction. Art, in Burdell’s view, no longer had the power to affect contemporary production, nor was it a source of improvement for character or virtue. The value of art lay instead in its modest contribution to a person’s ability to engage socially and culturally in society, or its ability to confer social capital. For Burdell, the value of art lay solely in the realm of leisure, not work.

The use of the museum by the Humanities Department partially supported its antiquarian tendency, if only in the absence of pressure from the Art School toward the paradigm of ‘design’. Otherwise it was a distraction from the staff’s professional duties, in that the Humanities courses rarely utilized the staff’s decorative arts expertise. Many members of the

⁵⁵ "Dean Burdell: New Fields to Conquer (Editorial)," *The Tech* March 1, 1938.

⁵⁶ Cooper Union for the Advancement of Science and Art, *Eightieth Annual Report* (New York, N.Y.: Cooper Union for the Advancement of Science and Art, 1939).

⁵⁷ Edwin S. Burdell, "The Wonder of Work," *Chronicle of the Museum of the Arts of Decoration of Cooper Union* 2, no. 1 (1949).

staff experienced requests for tours and biweekly displays as an inconvenience. For the most part, however, they gladly obliged the sole sector of the school requiring their services.

Rethinking the Union: The Museum amid changing institutional priorities

The 1950s was a decade of self-evaluation throughout the Cooper Union, and the Museum was no exception. As the school approached its centennial in 1959, it wrestled with the meaning and implications of its founding mandates in a social and educational landscape that bore little resemblance to its original context of Reconstruction Era New York. As the school continued to invest in its strengths—its educational programs in the Art and Engineering Schools—the Museum struggled to find its place in the changed institution. The museum suffered the internal conflict between dual antiquarian and modernizing tendencies, and during this decade it remained in constant flux between the two. The museum alternated between schemes to redefine its mission and collections according to the categories of design in an effort to appeal to Cooper art students, and plans for reinvesting in its traditional professional audiences and deepening its commitments to the decorative arts.

By the 1950s, the Museum saw a sharp decline in both of its historical audiences—students and professionals. A series of articles that came out in the trade press during this time were sponsored by the museum to drum up interest. For example, a 1949 article in the magazine *Interior Arts and Decoration* entitled “Cooper Union: A Designer’s Museum” was essentially an advertisement for the Museum. It emphasized the Museum’s “large study collection, as freely available to the public as it is to students at Cooper Union.”⁵⁸ Of especial note were the evening hours, the study rooms where objects could be examined and handled by visitors, as well as its publically accessible card catalogue, all of which were unusual at the time. Similar efforts were directed towards students, once the museum’s largest source of visitors. A 1959 article in the Cooper Union student newspaper, *The Pioneer*, encouraged renewed interest in the museum. Suggesting how a student might utilize the collections, its unnamed author (presumably Calvin Hathaway) explained that

The collections and the staff help you in your work and your study, providing material for your primary interest and suggested related material in diverse categories. The museum serves in the study of design and production, of the evolution of style and taste. Its collections, arranged for use, help you

⁵⁸ Cooper Union Museum for the Arts of Decoration, “Cooper Union a Designer's Museum,” *Interior Decoration and Design* 20.7 (1949).

compare designs in different media, to analyze the use and combination of materials, to discover design relationship. The collections offer you a springboard to new ideas.⁵⁹

The need to promote the museum, which was housed together with the rest of the school in the Foundation Building and was therefore eminently accessible, is illustrative of how reduced student use of the museum and its collections had actually become.

One of the first steps taken towards an institution-wide re-evaluation was a statement created by Director Burdell at the behest of the school's Trustees, entitled "Aims and Scope of the Cooper Union at Midcentury" (1952). While decisions at Cooper had been driven since its inception by the school's *Charter, Deed of Trust*, and Peter Cooper's *Letter to the Trustees of April 29, 1859*, Burdell acknowledged that many of the goals articulated by Peter Cooper in the mid-nineteenth century had been achieved in the intervening decades by the emergence and proliferation of public and private institutions such as libraries, museums, and free public secondary education. In light of this changed landscape, some of the Cooper Union's programs had become anachronistic and Burdell thought it important to reassess the institution's mission and outline a plan for its next phase of development.

In the 1950s, the school as a whole felt a keen shortage of financial resources, staff, and space. Proposals that had been made prior to WWII to expand the school's educational offerings were rejected postwar in favor of focus upon the improvement of its core educational programs while maintaining, rather than increasing, enrollment numbers. While Cooper's engineering programs had been accredited since the early 1940s and conferred a bachelor's degree upon graduation, the art and architecture school was not accredited at the time and continued to award a "certificate" into the 1950s.

A bachelor's degree in architecture was not yet a requirement for professional licensure, but as Burdell reported, two-thirds of those applying for licensure were degreed, and a degree had increasingly become a prerequisite for entry into professional practice.⁶⁰ The day programs in art and architecture were only three years in length, and students often transferred to other schools in order to earn an accredited degree. Thus, one of the school's

⁵⁹ "The Cooper Union Museum," *The Pioneer*, November 2, 1959, 4.

⁶⁰ Edwin S. Burdell, "Aims and Scope of the Cooper Union at Mid-Century," May 1, 1952. Box 8, Smithsonian Institution Archives, Record Unit 267, Cooper-Hewitt Museum, Records. 5.

priorities was the development of an accreditable five-year program in architecture and a four-year program in art.

The Museum also came under scrutiny during this time. Burdell's short section in "Aims and Scope" on the Museum was cribbed from a longer report by Museum Director Calvin S. Hathaway, "Toward an Eight-Year Plan," which was attached as an appendix. In it, Hathaway noted that the museum's massive cataloging effort, begun in the 1930s, was finally close to completion. This meant the Museum would soon have resources and man-hours free to dedicate to other goals that he hoped to achieve in the eight years leading up to Cooper Union's centennial in 1959.⁶¹ Hathaway's stated priorities indicate how the museum's modernizing tendency was increasingly holding sway in its own self-conceptualization.

It is the belief of the Museum administration that the policy of the Museum remains as valid as it was in the beginning: to assemble works of the decorative arts that will illustrate fundamental principles of design, of scale, of color, of choice or means that it can command; and to make every effort to guarantee that its collections will be seen and used by the maximum number of persons whom they would benefit.⁶²

In a moment of revisionist history, Hathaway projected the interpretive lens of design back upon the museum's early years as a way to emphasize continuity in its mission. While the abstract and ahistorical categories such as color and scale were certainly not in play during the Hewitts' tenure, Hathaway raises them here as categories of classification that would heighten the relevance and accessibility of historical objects.

Primarily concerned with attracting a greater proportion of that ideal "maximum number," Hathaway's report centered on questions of audience. While he acknowledged the museum's traditional audience of students, designers and industry, Hathaway argued for the importance of research workers and students of art history as a museum audience, as well as the non-specialist layman who "wishes to maintain at least a bowing acquaintance with the arts."⁶³ To appeal to all of these audiences, Hathaway proposed a suite of educational programming ranging from specialist lectures to live demonstrations. Further, he

⁶¹ "We have done wonders in bringing the Museum up to date, but comparatively little in carrying it forward. I feel most strongly that we must now lay our plans for the next period of the Museum's growth." Calvin S. Hathaway, "Toward an Eight-Year Plan," January 31, 1952. Box 37, Smithsonian Institution Archives, Record Unit 267, Cooper-Hewitt Museum, Records. 10.

⁶² Ibid. 3-4.

⁶³ Ibid. 5.

recommended hosting annual exhibitions of local craft societies as well as preparing small traveling exhibits aimed at high schools.

In addition to its inclusion in Burdell's report, Hathaway also forwarded his "Eight-Year Plan" directly to the Union's Board of Trustees for their approval and support. Gano Dunn, Chairman of the Board, responded supportively but skirted any commitments, deferring to an evaluation of the entire Union already underway under the authority of the Carnegie Corporation of New York.

James A. Perkins, Vice-President of the Carnegie Corporation, and the writer Elling Aannestad, were asked prepare an evaluation of the school and all of its divisions, including the Museum. In preparation, the Museum was asked to respond to a questionnaire detailing its purpose, programs, and needs. In it, Hathaway presented a more sober picture of the museum's primary aims, one that revealed the degree to which antiquarianism and the historical model of imitation continued to underwrite the museum's efforts.

The purpose of the museum, as I have been led to believe by the written and verbal reports of those who have preceded me in its direction, and as in turn I conceive it, is to furnish information in the field of the decorative arts to that segment of the community that needs such information for the successful prosecution of its work, and to extend its offerings to the unprofessional but interested amateur. The stated purpose for which the Museum was established was the education of the designer, of the artist-artisan, and of the consumer, looking toward the development of artistic perception in the United States, toward the improvement in quality of the objects of everyday life, and toward the increased earning capacity of designer and producer alike.⁶⁴

Here, Hathaway seemed to admit the museum's narrow specialist appeal. If the museum viewed its role as a source of information, then the constituencies requiring such information had undoubtedly diminished in the intervening decades—particularly designers and manufacturers who no longer looked to the past for such data. Indeed, Hathaway's account of the museum's service to industry, and his conception of the visiting professional's needs, continued to be structured around imitation.

A textile designer, to start with the most populous category of consultant, may be looking for flower patterns or stripes, or may wish to see brocades or

⁶⁴ Calvin S. Hathaway, "Data for Cooper Union Review. The Cooper Union Museum Reply to questionnaire presented to the Museum by Dr. James A. Perkins and Mr. Elling Aannestad, March 25, 1953." Box 37, Smithsonian Institution Archives, Record Unit 267, Cooper-Hewitt Museum, Records. 1.

double cloth; or again, linear or color-area design qualities are wanted. One may be interested in types of color-scheme, another in Peruvian motifs that would lend themselves to the requirements of today's market demands.⁶⁵

While the museum had some idea that the relevance of its historical collections could only be found in translation through the abstract concepts of design, its antiquarian tendency continued to hold fast to nineteenth-century modes of interaction. The latter was, perhaps, the primary reason for the almost total lack of interest of art school students in the museum, something Hathaway regretfully admitted.

The Perkins report responded to the Museum's lack of clarity in its identity and mission, describing the future of the museum as "one of the most difficult problems before the Union."⁶⁶ Comparing the Museum to Cooper's engineering and art schools, both of which were extremely well regarded and highly selective, the report pointed out its major deficiencies and suggested that if Cooper was going to have a museum it should be "a leading institution in its field."

The report pointed out that the Museum's visitorship was in decline, from 12,000 to 8,000 annually over the three years prior to the report, and attributed the trend to two problems. Firstly, there was the growing geographic divide between the museum and the industries it traditionally served—the museum's East Village location was inconvenient to uptown decorators. Secondly, they noted the Museum's lack of unique collections that would otherwise draw users. Further, the report acknowledged the Museum's limited role in the educational programs of the school, as well as the difficulties posed by its spatial and budgetary constraints. Given that additional financing from the school seemed unlikely, Perkins and Aannestad ultimately recommended that the Trustees seek "other auspices for the Museum," by placing the collections with a larger area institution.⁶⁷

While the Trustees did not immediately act on these recommendations, the Perkins report seems to have been the start of a decade-long process of reevaluation and divestment from the museum. Viewing the report's suggestions with respect to its educational programs as more actionable and urgent, Cooper Union formed an Educational Committee designed

⁶⁵ Ibid. 8.

⁶⁶ *Report by James A. Perkins, Vice-President, Carnegie Corporation, and Elling Aannestad, June 1953*, Box 1, Folder 1, Records of the Cooper Union Museum, The Cooper Archives, Cooper Union Library, New York, NY. 1.

⁶⁷ *Report by James A. Perkins, Vice-President, Carnegie Corporation, and Elling Aannestad, June 1953*, Box 1, Folder 1, Records of the Cooper Union Museum, The Cooper Archives, Cooper Union Library, New York, NY. 3.

to address its recommendations. Hathaway was invited to join, and he took every opportunity to assert the museum's role in the school, proposing a variety of museum programs designed to support various initiatives in the art and engineering schools, most of which were politely ignored.

In 1954, the Museum issued an "Action Report" to the Education Committee, which presented an apologia for its contemporary operations and detailed a series of proposals designed to transform the museum into an institution with renewed relevance. In this document, Hathaway conceived of 'relevance' with respect to its traditional audiences as a specialist audience rather than broader appeal to the school. He defended the Museum against criticisms that it had not done enough to evolve with changing times, asserting the Museum's significant adjustments in response to the changing nature of design production despite its lack of spatial and financial resources. "Recognizing that designers are no longer interested primarily in the sequence of development of historic styles, the Museum has reinstalled every one of its galleries, and has provided a still larger number of work tables and study room facilities for visitors than had previously been available."⁶⁸ Further, the museum endeavored to influence contemporary production "by presenting studies of craft techniques and of special categories of design in fields where public knowledge and taste appear to require suggestive guidance."⁶⁹

Hathaway described the pedagogical relevance of the museum in entirely modern terms, suggesting that its newly modernized presentation of the historical collections allowed it to "supply the designer's alphabet, in presenting analyses of form, of color, of light, of surfaces, of texture."⁷⁰ Despite this seemingly modern framing, Hathaway's antipathy toward Modernist design was clear throughout the document, particularly when he referred to the "artistic impoverishment of our day" and "the sterile banality of concept that too often is fobbed off as 'modern design'." Rather than shift to support the kind of work being produced by the Art and Architecture School's faculty and students, Hathaway proposed other forms of modernization that involved expanding the collections into new areas. He

⁶⁸ Calvin S. Hathaway, "Action Report of the Education Policy Committee from the Museum of the Arts of Decoration," February 10, 1954. Box 8, Smithsonian Institution Archives, Record Unit 267, Cooper-Hewitt Museum, Records. 6.

⁶⁹ Ibid.

⁷⁰ Ibid. 8-9.

reported a missed opportunity that arose when the Costume Institute had broached the possibility of a partnership with the Cooper Union Museum prior to joining the Metropolitan Museum of Art. Hathaway was also enthusiastic about a recent joint proposal by the American Institute of Decorators and the Illuminating Engineering Society to develop a modern lighting collection in the Museum. Hathaway himself was interested in developing a photographic reference collection of industrial design, particularly focused on street furniture, following the example of the London-based Council of Industrial Design. Each of Hathaway's proposals were however stalled in early phases of development, held back by the Museum's spatial and financial constraints and the lack of additional institutional support.

Five years later, in February of 1958, the school underwent an accreditation evaluation by the Middle States Association of Colleges and Secondary Schools' Commission on Institutes of Higher Education. This would enable the school to begin awarding accredited bachelor's degrees. The large evaluating committee was made of nineteen men who were academics, university administrators, and university museum directors, from backgrounds in both arts and engineering education, and a member of the National Architecture Accrediting Board (NAAB) joined the group as an observer. Similar to the procedure followed by the Carnegie Corporation evaluation a few years earlier, each division was asked to prepare a self-evaluation prior to the committee's visit.

Though similar in many respects to Hathaway's response to the Perkins questionnaire, the Museum's self-evaluation five years later shows movement away from the antiquarian tendency towards the design paradigm. This is apparent not only in Hathaway's emphasis on the abstract categories of design, such as form and color, but also in museum's newly stated aim to teach its visitors how to "see" its historical collections—that is, how to interpret historical objects in a way that made them relevant to contemporary design questions.

The educational activities of a museum are distinguished by the fact that they are based upon objects. It is the artifact that serves as a starting point in museum teaching—the object created by man's imagination, knowledge and skill. A museum aims to teach its audience to see, to increase its perception, to enrich its experience, to enlarge its knowledge and to develop its creative imagination. In keeping with its objectives, the educational activity of the Cooper Union Museum is concerned with the elucidating of design elements as illustrated by the decorative arts of the present and the past: pattern and

ornament, color, form; techniques of production in so far as they contribute to an understanding of design; purpose and use.⁷¹

To support such educational activities, Hathaway's articulation of the museum's needs focused on the lack of modern and contemporary collections, and on his desire to include natural substances such as wood, shells, stone and vegetable forms as "source material for studies of form, color and texture."⁷² Finally, the Museum's modernizing tendency had infiltrated and updated its persistent late nineteenth-century focus on taste and connoisseurship, shifting its focus from historical styles to a unifying notion of design.

Beyond nourishing connoisseurship in the work of earlier periods, earlier decorative artists, the Museum's displays should develop among those who see them discrimination and taste based upon comprehension of the sum of all the elements that are fused by *design* into the finished object. The nature and attributes of materials, the properties of color, the qualities of texture, the characteristics of scale and space relationships—such didactic displays are seldom if ever attempted, even in teaching museums; and they would be most useful to a wide range of audiences.⁷³

Seeming to abandon grander plans of entirely new collections as well as his disdain of modern design, Hathaway was slowly coming around to the paradigm of design as that which could save the Cooper Union Museum from complete institutional irrelevance. Towards this end, Hathaway described plans to install the museum's first-ever "didactic display," *Elements of Design* (1960), which joined a second important exhibition, *The Logic and Magic of Color* (1960), as a turning point in the museum's efforts.

The response by the Evaluating Committee of the Middle States Association was primarily positive, lauding the strengths of the school, its educational programs, and its graduates. Indeed, the group reserved its criticism for one of the major problems plaguing the Museum: the widespread lack of coordination among the Union's divisions. The report criticized the segregation of art and engineering students, which remained even in the Humanities courses where integration could be easily achieved.

With respect to the Museum, the Committee was sympathetic. Describing the museum as "a Research Archive in the European sense rather than a public exhibit and educational

⁷¹ "Report of Self-Evaluation, Part B: Museum for the Arts of Decoration," January, 1958. The Cooper Archives, Cooper Union Library, New York, NY. B-M-13.

⁷² Ibid. B-M-24.

⁷³ Ibid. B-M-24-25.

center in the practice of American Museums,” the report’s authors noted that the museum’s primary users were designers of textiles and other trades, interior decorators, and students of the decorative arts from the greater New York area.⁷⁴ Estimating its value more favorably than the Perkins Report, the Middle States Evaluation made a series of recommendations to improve the Museum and increase its use by the school. The school was urged to give the Museum more space, to increase the salaries of its staff, and to pursue funds from industrial and private sponsorship. Further, they chided the school for not utilizing the Museum in its instructional programs. To ameliorate this condition, they proposed the creation of a position, a Curator of Museum Education, jointly appointed to the Museum and in General Studies who would utilize the collections in teaching courses on art history, theory and criticism.

Despite the volume of attention paid to the museum problem during the 1950s, the Perkins’ Report and the Middle States Report had little impact on the administration, then led by Edwin S. Burdell, who served as Director (then President – the title of the position changed in 1950) for over two decades. Burdell’s President’s Reports from his last years in office spoke glowingly about the Museum, recounting its increasing attendance numbers, the high quality of its collections, and its innovative exhibitions. In short, Burdell painted a portrait of the Museum as an active and vital part of the institution. Indeed, in his last report before retirement, Burdell wrote of the Museum with unabashed fondness, seeming to answer the criticisms and warnings implied in the evaluations.

It has been gratifying during my twenty-one years as head of the Cooper Union to see constant improvement in the condition and quality of the collections, in the staff’s experimental approach to new types of activity, and in their educational service to the community. But education in a museum is not the classroom concept of teaching. A museum can educate through the selection of its collections, the quality of its displays, the answering questions by trained staff members, the provision of good catalogs and publications, and the sharpening of its scholarly equipment for public service. [...] The past year has witnessed the Museum’s accelerated progress in nearly all of these activities.⁷⁵

⁷⁴ Report of Evaluation, Middle States Association of Colleges and Secondary Schools, Commission on Institutes of Higher Education, February, 1958, Box 1, Folder 1, Records of the Cooper Union Museum, The Cooper Archives, Cooper Union Library, New York, NY. 1.

⁷⁵ Cooper Union for the Advancement of Science and Art, *The President's Report* (New York 1959). 27.

Burdell's support of the Museum, which appears to understand and accept its antiquarian tendency, may have arisen from his concern for the interrelationship of the science and arts. It is also possible that a lingering reverence for an institution hand-fashioned by granddaughters of the institution's founder prevented Burdell from any deep criticism. However, after Burdell's retirement, the Union hired a very different sort of President—a scientist—to face its mounting financial problems and to tackle the question of the museum's place in the school.

Wooing an Old Beau: Museum-Industry Relations

While the Museum struggled to improve its relationship with the Art and Engineering Schools during the 1950s, it also attempted to lure the other primary constituency of its traditional audience—professional decorators, designers and artisans—back into regular attendance. The museum tried numerous strategies designed to replicate the early success of the 1938 *Wallpaper Design and Production* exhibition in attracting designers in for research. A statement of museum policy from 1946 reiterated that one of its top priorities was “to concentrate on the originators of the Decorative Arts, such as students, craftsmen, designers, and manufacturers.”⁷⁶ The primary activities undertaken in pursuit of this goal were the staging of historically oriented exhibitions and efforts to improve the study rooms and live storage such that objects could be quickly accessed and assembled according to an individual

⁷⁶ “Museum Advisory Council Report 1945-1946,” June 30, 1946. Henry Francis du Pont Papers, Winterthur Archive, HF 537. 1.

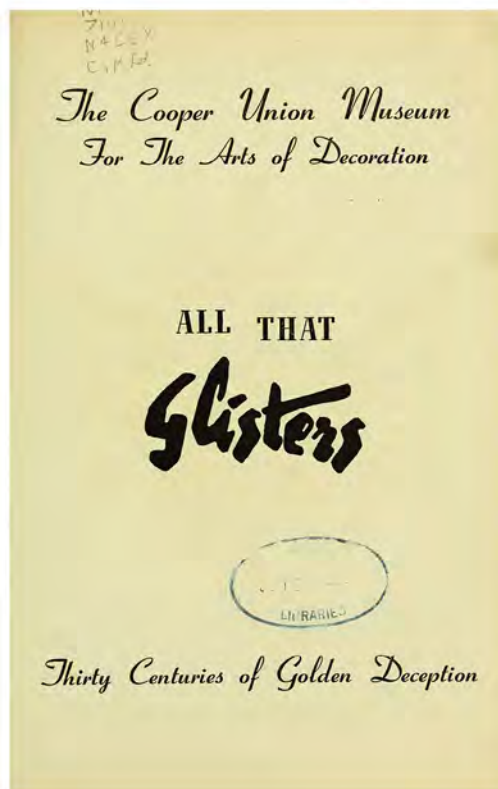
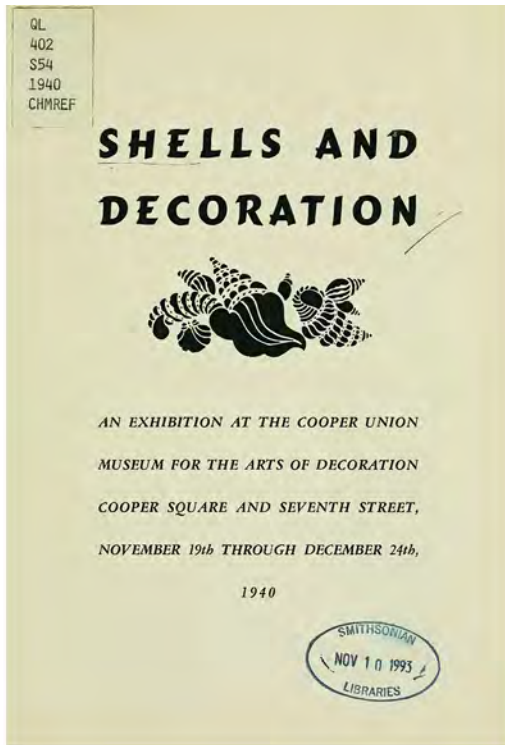


Figure 3.15 Exhibition catalog covers: *Shells and Decoration: An Exhibition at the Cooper Union Museum for the Arts of Decoration, November 19th through December 24th, 1940*. New York: Cooper Union, 1940; "Trimmings in The Museum's Collection: Fringes, Tassels, Gimps and Galloons," *Chronicle of the Cooper Union Museum for the Arts of Decoration* 19 (1942); *With Hammer and Tongs: Malleable Metals in Diverse Designs: An Exhibition at the Cooper Union Museum for the Arts of Decoration, February 4th through March 22nd, 1941*. Boston: Merrymount Press, 1941; *All That Glisters: Thirty Centuries of Golden Deception*, New York: The Cooper Union Museum for the Arts of Decoration, 1950.

patron's needs. The exhibitions staged in this period ranged from those organized by motif, such as the 1940 *Shells and Decoration*, by object type, as in the 1942 *Fringes, Tassels, and Galloons*, by technique, such as the 1941 *With hammer and tongs: Malleable Metals in Diverse Designs*, or by material, namely the 1950 exhibition of gold and gold-tone objects *All that Glitters*—all of which limited themselves entirely to historical objects [Fig. 3.15].

Textiles was one of the few collection areas that continued to reliably draw a regular professional audience during this period. The museum's 1942 *Collars and Cuffs* exhibition was one of many aimed explicitly at the fashion industry. Noting that the industry had been cut off by the war from Paris, its traditional source of inspiration and new designs, the museum timed the show "to meet the demand for new designs for the fall and spring markets."⁷⁷ The museum invited fashion designers to examine its large collection of old lace and embroidery in advance of the exhibition, allowing them time to produce new designs based on the old, which were shown alongside the historical collections in a juried show.

This structure aimed to recreate the imitative modes of museum engagement in a reflection of the nineteenth-century model. However, Edgar L. Jones, a staffer in the Cooper Union's publicity office and regular commentator on the museum's activities in the Humanities Department's bulletin *The Approach to the Arts*, described the designers' interaction in starkly changed terms. Taking stock of the designers' responses to the museum's collections, Jones contrasted their responses with the proliferation of simple historical repetition he perceived in American fashion design since the war's start in 1939.

The creation of a modern design based on a much earlier piece of decorative art requires to a remarkable degree the same imaginative, skillful, sympathetic treatment demanded of good swing music, and the latter, one must realize, is rarely heard except in a few unrehearsed instances. Just as a true swing musician improvises on an old Melody which inspires him, enlarging upon the basic theme without destroying the prevailing mood, the designer takes the essence of past artistry and uses it as a subject for a new project. In both fields, the artist is stimulated often by only a single aspect of the original piece. The designer, for example, is excited by the color, or texture, or form of an antique model. He feels an urge to execute a modern meditation which develops more fully than one aspect. In the swing parlance, a particular phase

⁷⁷ "Monthly Calendar: The Museum," *The Approach to the Arts*, vol. 2, no. 1. November, 1941. Collection of the New York Public Library. 36.

of someone else's work "sends" him. He is filled with the desire to add his own ideas to the basic theme.⁷⁸

The approach Jones described treats historical objects as a sort of non-binding authority, providing themes and motifs as a point of departure for innovation. Established stylistic rules fall away, as do the strictures of propriety that would narrow the designer's choice of source material as a precondition for demonstration of good taste. Reflecting the changing approaches to history in modern design, Jones' conception of the design process and the negotiation of historical tradition is illustrative of attitudes in the Cooper Union Art School and of design practice more broadly. However, the Museum itself had yet to embrace these new attitudes.

Instead, the museum continued to conceive of historical reference in the nineteenth-century mode of imitation. For example, in a reprise of the strategy utilized in *Collars and Cuffs*, the Museum invited members of the International Ladies Garment Workers' Union [ILGWU], the National Women's Neckwear and Scarf Association [NWNSA] and the manufacturer-members of the Pleators', Stitchers' and Embroiderers' Association to view *Stitches in Time*, a 1947 embroidery exhibition, organizing a special lecture and lunch buffet for the latter group.⁷⁹ In a throwback to the museum competitions of the 1900s-1910s to design new objects based on the historical collections sponsored by the Hewitts, the museum also offered a contest open to Art School students in conjunction with the ILGWU and the NWNSA. The competition required students to produce embroidered costume accessories based on those shown in the exhibition, earning three students cash prizes and two others jobs in the industry.⁸⁰

A rare exception to the museum's use of an historical interpretive lens in their attempts to gain appeal in industry was the 1948 exhibition *2500°F: The Art and Technique of Modern Glass*. Presenting both a technical section on the production of glass and a large display of "glass as a medium of artistic expression,"⁸¹ the exhibition was primarily composed of contemporary pieces from artists and manufacturers in eleven countries, with loans from

⁷⁸ Edward L. Jones, "Artistry and Old Embroidery," *The Approach to the Arts*, vol. 2, no. 2. December, 1941. Collection of the New York Public Library. 56.

⁷⁹ "The Cooper Union Museum for the Arts of Decoration Annual Report 1946-1947," ca. June 1947. Henry Francis du Pont Papers, Winterthur Archive, HF 537. 4.

⁸⁰ *Director's Report for the Eighty-Ninth Year Ending June 30, 1948*, (New York: Cooper Union for the Advancement of Science and Art, 1948). 58.

⁸¹ *2500 F., the Art and Technique of Modern Glass*, (New York: Cooper Union Museum, 1948). 9.

over forty different manufacturers, constituting “a remarkably complete survey of modern and contemporary work.”⁸²

Industry response to all of these exhibitions was in decline, culminating in the dismal response to *Leather in the Decorative Arts* described at the outset of this chapter. Deeply concerned by the museum’s inability to attract what he previously considered to be a dedicated audience, Hathaway presented a proposal in late 1950 to the Museum Advisory Committee that signaled a major shift in approach to its traditional patrons.

It must not be thought that the large holdings of the Museum in the decorative arts of earlier periods have deadened its response to the requirements of twentieth-century living. At this late date there can be neither withdrawals from the benefits of mass production nor indifference to the mass needs for well-designed products. In its thematic exhibitions—of ceramics, for example, of wallpaper, of embroidery, glass, metalwork, and other subjects covered with successful loan shows—the Museum has illustrated the relationship between contemporary production and the output of earlier generations. What has not until now been possible, excepting in a small exhibition of women’s neckwear, is the direct conjunction, through Museum effort, of designer, manufacturer and buyer.⁸³

Pointing particularly to the changed conditions of mechanized mass production and to new divisions of labor, Hathaway recognized the starkly waning interest in the museum by design professionals.

A mid-1950s essay explaining how the museum library’s historical collections were used by visiting designers reflected both the museum’s hopes for its wider utility as well as the limitations of its viewpoint. Gerd Muehsam, the museum’s librarian and a lecturer in art and music in the school’s Division of Adult Education, described an approach to the imitation of historical forms that was made modern through translation of pattern or motif from one technique, material or object type to another.

Stage designers, costume designers, advertising artists and especially textile designers constantly draw on the Library’s resources for their ideas. Its materials are adapted and transformed into workable designs that can be sold and manufactured. Indeed, the most amazing transformations take place in the course of this process. Job’s illustrations of a children’s book become stage costumes for a college drama department; the Pantheon in Rome

⁸² “Cooper Union Museum Annual Report 1947-1948,” ca. June 1948. Henry Francis du Pont Papers, Winterthur Archive, HF 279. 4.

⁸³ “A New Museum Activity,” ca. November 1950. Henry Francis du Pont Papers, Winterthur Archive, HF 279. 1.

makes a backdrop for a department store's advertisement of marble top tables; an old New England well-head turns into a design for a letter head. Lace patterns become printed cottons; calligraphic scrolls, design motifs on mass-produced porcelain plates; a *directoire* urn, a fancy perfume bottle.⁸⁴

This novel notion of translation between media and techniques was new for the museum's traditional concept of imitation, but it continued to rely on surface repetition rather than innovation and offered little dialogue in the modern language of unadorned surfaces and simple forms.

The confusion over how the historical objects might gain renewed relevance continued in an internal 1956 conversation between museum staff and the Advisory Council. The discussion was led by Richard F. Bach, who served as the Director of Industrial Relations at the Metropolitan Museum of Art from 1918-1941, where he worked to facilitate the use of the collections by designers and industry.⁸⁵ In it, he argued that imitation had become an anachronism and framed the usefulness of the historical collections in terms of "inspiration."

The Museum should never forget that its reason for existence is to aid in the development of design; not merely to amass collections, but to implement their use. [...] The formal duplication of museum objects steadily loses interest in the open market, while the inspirational use of these collections has greatly increased. Museums such as ours need no longer expect, as they might have done in the nineteenth century, to collect objects for reproduction, but they should by all means collect objects that will spark the imagination of contemporary designers.⁸⁶

The optimism and simplicity of Bach's suggestion—to appeal to designers with inspiring material—belied a real sense of pessimism about the endeavor, something that appeared in an untitled diagram he presented to the group [Fig. 3.16]. On one side lay a graphic representation of the museum and its Advisory Council and, on the other, the successive layers of the school's administration and Board of Trustees, the various committees that supported the school, and the general body of professionals and craftsmen that the school

⁸⁴ Gerd Muehsam, "A Designer's Library," *Chronicle of the Museum of the Arts of Decoration of Cooper Union* 2, no. 6 (1954). 176-177.

⁸⁵ I discuss Bach's work at the Metropolitan Museum of Art in greater detail in the following chapter.

⁸⁶ "Minutes of the Meeting of the Advisory Council," February 9, 1956. Henry Francis du Pont Papers, Winterthur Archive, HF 280. 1-2.

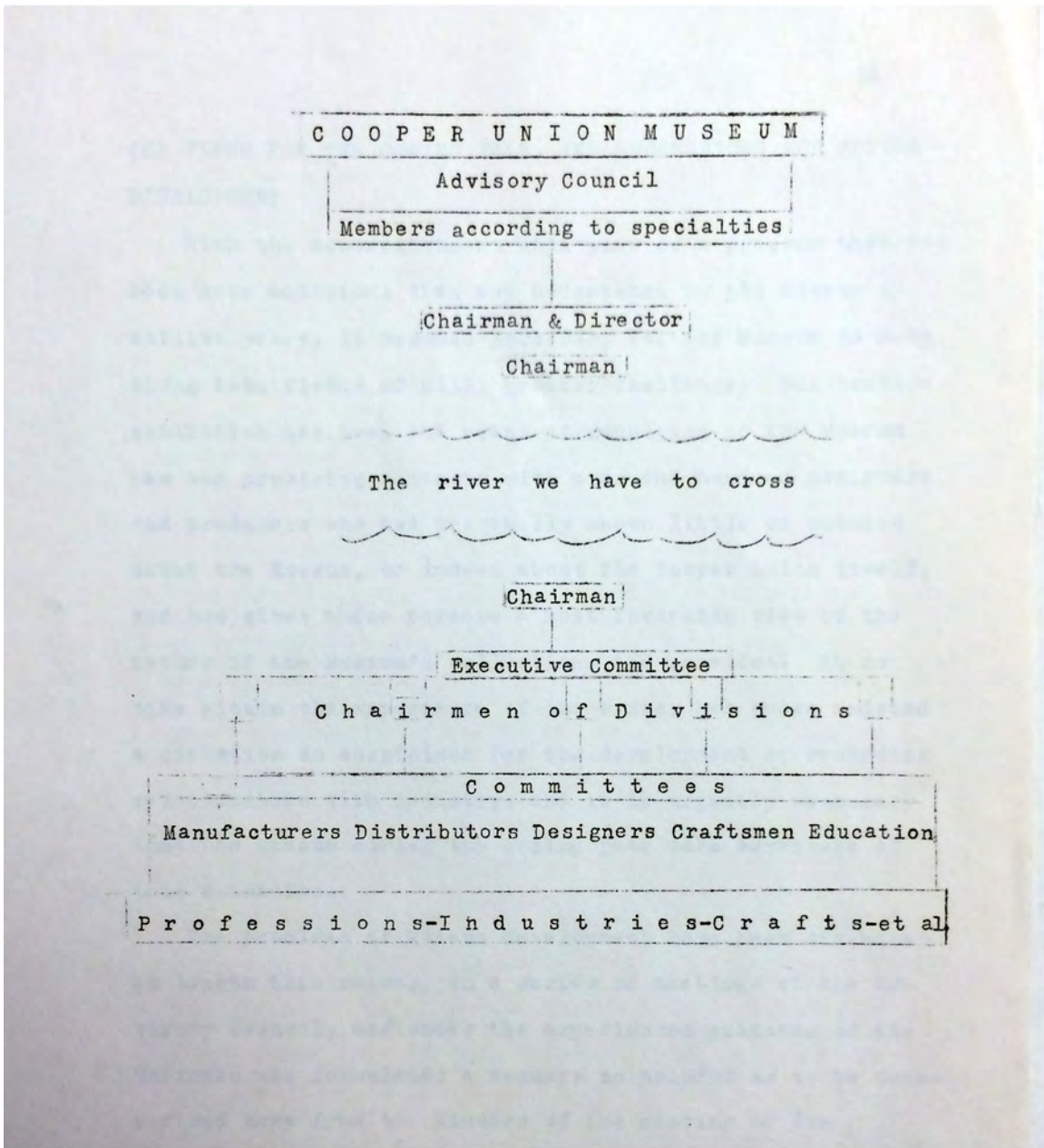


Figure 3.16 Richard F. Bach, “The River we Have to Cross” (1956). From: The Cooper Union Museum Annual Report 1955-1956, Henry Francis du Pont Papers, Winterthur Archive, HF 870. p. 35.

produced. In between them lay two wavy lines, representing “the river we have to cross.”⁸⁷ In other words, Bach acknowledged a chasm between the museum and its core audiences, and the difficulty in surmounting it.

In this context of acknowledged difficulty in attracting its historical audience of workers and professionals, the museum began reaching out to industry within industry’s home territory. Put simply, the museum began to install displays in off-site trade shows. Since the late 1940s, the museum had participated in annual events such as the International Textile Industries Exposition and the American Institute of Decorators National Home Furnishings Show, as well as in the New York Design Center, a wholesale showroom for interior design professionals that opened in 1958. There, the museum provided displays of historical materials assumed to be of interest given the show’s topic, exhibiting objects with floral motifs to the International Flower Show, for example [Fig. 3.17]. However, the 1958 Design Center booth provided an opportunity for Hathaway to test an idea he had under development since 1955: an exhibition using the abstract concepts of design to organize a wide variety of historical and contemporary materials. This would be the strategy that would eventually be developed into the *Elements of Design* (1961) exhibition.

Installed from September 1958 through January 1959, the museum’s display at the Design Center brought together a variety of object types from a wide swath of periods [Fig. 3.18]. An ornamental bracket sat above a classical urn and an eighteenth-century birdcage. Furniture, tapestries, drawings, and glass vessels were arranged into careful groupings doubly designated by a set of three dimensional words—‘form’, ‘line’, ‘texture’ and ‘color’—alongside a set of illustrative objects for each category specially fabricated for the installation. These included a smooth cone form, a wireframe polyhedron, a rough-hewn distorted cube, and an elongated multicolored pyramid, respectively.

The designations served to de-historicize and re-categorize the museum’s historical collections through the abstracting function of design. The terms directed the viewer’s attention to those qualities in the assembled objects, suggesting that the chair was most profitably examined for its color scheme, while the form of the glass flutes were presented as their most salient characteristic. Gone was the overriding interest in historical stylistic

⁸⁷ Included as an illustration in “The Cooper Union Museum for the Arts of Decoration Annual Report 1955-1956,” June 30, 1956. Henry Francis du Pont Papers, Winterthur Archive, HF 870. 35-36.



Figure 3.17 Cooper Union Museum booth at the International Flower Show, March 11-17, 1956. From: The Cooper Union Museum Annual Report 1955-1956, Henry Francis du Pont Papers, Winterthur Archive, HF 870.



Figure 3.18 Cooper Union Museum booth at the New York Design Center, September 1958-1959. From: The Cooper Union Museum Annual Report 1958-1959, Henry Francis du Pont Papers, Winterthur Archive, HF 280. p. 17.

development, in the illustration of cultures, or in the exercise of good taste. Instead, the design categories bracketed out a good deal of the objects' history, context, techniques, and even visual and material qualities in order to focus on a single characteristic translatable to present-day concerns.

Finding the experiment a success, Hathaway and his staff quickly ramped up plans to install a larger version of the exhibition in the museum's entry gallery. It seemed they had finally hit upon a strategy with which they could reasonably hope to attract Cooper students and bridge the divide between the historical decorative arts and modern design. This exhibition illustrated most directly the extent to which the notion of design had evolved from its nineteenth-century usage. Design now constituted the orchestration of characteristics as independent variables, creating new taxonomies that cut across history, origin, use type, material, technique, or aesthetic value.

Affirming Design: The Jubilee Anniversary of the CUMAD

The implementation of this strategy could not have come sooner, as both the external and internal critiques and evaluations of the museum and the modernizing pressure from the museum's parent institution received public validation during the sixtieth anniversary of the Museum and its festivities in 1957. The milestone was commemorated by a day of speeches by Richard F. Bach, chairman and longtime member of the museum's Advisory Council, the public intellectual August Heckscher, Museum Director Calvin S. Hathaway, and Arthur A. Houghton, Jr., the President of Steuben Glass, a Trustee of Cooper Union and a man heavily involved in arts organizations in New York. Houghton would in fact later go on to Chair the Board of Trustees at the Metropolitan Museum of Art.⁸⁸ Despite the distance of two decades from the fortieth anniversary celebration, the assessments of the museum were remarkably similar to those made by Dewey and Cortisoz in their focus on the question of the museum's continued relevance. Each speaker, in their own way, encouraged the museum to remake itself in the paradigm of design and to reject the imitation-based approach to the museum's collection to which its staff in many ways continued to cling. While the comments in the 1940s were aspirational in nature, the Sixtieth Anniversary remarks took on a more recuperative tone in the changed circumstances of the late 1950s.

⁸⁸ The addresses were published in the 1957 issue of the *Chronicle*.

Richard F. Bach took aim specifically at the idiom of classicism as a model of historical repetition, suggesting that its objects could still be sources of learning in terms of their abstract characteristics.

The day has long since departed when copying of stylistically pure design motives could be considered adequate to meet the needs of contemporary society. Although refinements of classical orders of architecture no longer limit the design vocabulary of today's architects, it seems clear that design in its broad lines of development today, and as already promised for tomorrow, finds its main home in the harmonies of form, mass, line, color, that have been sung from time to time in the history of design.⁸⁹

Unlike Dewey, who could not be specific about the particular characteristics defined by 'design', Bach articulated a collection of qualities (i.e. form, color, etc) that formed the basis of design education at Cooper. Quoting Ralph Waldo Emerson, Bach described the attitude towards history and tradition that ought to be imparted to students through their engagement with the museum.

We cannot overstate our debt to the past, but the moment has the supreme claim. The past is for us, but the sole terms on which it can become ours are in subordination to the present. Only an inventory knows how to borrow, and every man is, or should be, an inventor. The divine gift is ever the instant life which receives, and uses, and creates, and can well bury the old in the omnipotency with which Nature decomposes all her harvest for recomposition.⁹⁰

In this presentist view, the past was no longer seen as an authority to be obeyed, its heritage no longer stood as a debt to be paid, but rather it was something available and consumed for the satisfaction of present-day needs and desires.

Arthur A. Houghton, Jr.'s address, entitled "The Function of Museums in Improving Man's Environment," similarly grappled with how the museum might recapture its audience of students and professional designers. Like Dewey, Houghton took pains to articulate the changed conditions of production and consumption, admitting that the agency of consumers had diminished.

The craftsman, with rare exceptions, has completely disappeared. [...] Our environment today is a composite of articles that are made by industry; and we as individuals play no part in designing those objects. That is entrusted to

⁸⁹ Richard F. Bach, "Six Decades," *Chronicle of the Museum of the Arts of Decoration of Cooper Union* 2, no. 9 (1957). 285.

⁹⁰ *Ibid.* 287.

others. All we can do is to select those, provided that they give us the utility we want, that appeal to us most or, in many instances, are the least repulsive in appearance. We are dependent upon the maker and on his designers.⁹¹

Unlike nineteenth-century consumers, who would have found occasion to commission decorative arts objects such as furniture, midcentury consumers could exercise their taste only by choosing from the mass-produced goods available on the market. Merely repeating the Hewitts' view, however, Houghton suggested the museum continue to serve as a source of good taste by exhibiting objects of high quality and thereby influencing consumers to make good choices.

Designers, on the other hand, required a two-pronged training: first, in the tools and techniques of design via drawing, and secondly in the history of design. "For that," he suggests,

the great reference material is in the research collections of the museum and in the libraries of the museum. The students combine their techniques with this knowledge of history until finally they are able to do original creative work. In other words, we are not asking them to copy old design, but simply to understand it, so that they are based in the history and tradition of great design. Then, with the knowledge of technique, and the knowledge of history and tradition, they are free to do the best of modern creative design.⁹²

Articulating what was ultimately the sticking point in the museum's evolution, Houghton repeated the idea that a technical proficiency in drawing and historical knowledge would produce good designers—unfortunately without any specific advice as to *how* design students would incorporate familiarity with historical objects into their work. The reality of arts and architectural education at Cooper Union was such that this proposal was anachronistic and practically improbable.

Calvin Hathaway delivered a long address on the museum's activities since 1937, touching on many aspects of the institution's operations, very few of which were connected to the school or education: the museum's recent acquisitions, its program of specialist exhibitions that served as a "vigorous exploitation of its possessions," the reorganization of the museum's physical space allowing for two study rooms devoted to drawings and textiles, as well as its publication of catalogs. Addressing the museum's future plans, Hathaway

⁹¹ Arthur A. Houghton, "The Function of Museums in Improving Man's Environment," *ibid.* 296.

⁹² *Ibid.* 297.

introduced the notion of design as that lens which could reframe the collections as pedagogically relevant.

Besides maintaining collections representative of the good design of today, yesterday and the day before that, a teaching and working organism such as the Cooper Union Museum should develop displays illustrative of the elements of design—form, color, texture, spatial relationship, illumination. These concepts, sometimes difficult to convey even experimentally in classroom and laboratory, still seem imperfectly understood by designers and producers of much that is offered in today's market. They are all aspects of that elusive idea, *quality*, recognition of which is often described under the indefinable term, *taste*.⁹³

Here Hathaway names the abstract categories of design, such as form and color, categories that are shared by *all* designed objects regardless of historical, national or cultural origin. However, he continued to render them as markers of quality and a means of exercising taste. In this view, Hathaway was likely influenced by the famed connoisseur and decorative arts educator, Charles F. Montgomery.

Montgomery, a long-time antiques dealer and later an educator, administrator and research fellow at the Winterthur Museum,⁹⁴ articulated his method for the apprehension and evaluation of decorative arts in an essay entitled "The Connoisseurship of Artifacts." This paper was also colloquially referred to as "The Fourteen Points."⁹⁵ In a series of steps, Montgomery guided readers from an initial approach to an object, focusing on its overall appearance, form, color, and ornament, through a more intensive analysis of its material, fabrication techniques, function, style, and trade practices,⁹⁶ to ultimately evaluate its attribution, provenance, condition, and monetary value.

⁹³ Calvin S. Hathaway, "Development of the Museum, 1937-1957," *ibid.* 304.

⁹⁴ The Winterthur Museum, located just outside of Wilmington, Delaware, was founded by Henry Francis du Pont, a scion of the wealthy du Pont family. Du Pont inherited the family estate, radically enlarged the mansion where he was raised, and converted it entirely into a museum of early American decorative arts in 1951. Du Pont joined the CUMAD Advisory Council in the mid-1940s, and invited museum staff to visit his museum a number of times. Hathaway would have been perfectly familiar with the museum, its staff, and its educational program, the Winterthur Program in American Material Culture, initiated in 1952 in conjunction with the University of Delaware.

⁹⁵ This essay was originally written for the American Walpole Society a men's club of wealthy collectors and antiquarians, of which du Pont and Montgomery were members. First published in the organization's *Notebook* in 1961, the approach it describes formed the basis of Montgomery's instruction for Material Culture students and it is reasonable to assume that, in the course of many visits and dinners at Winterthur, that Hathaway would have become familiar with the perspective of his peer and contemporary.

⁹⁶ By "trade practices," Montgomery referred not only to visible trademarks but also to visual or physical manifestations of historical trade conditions or tariff laws that provided clues about its national origin, workshop, or period. Charles F. Montgomery, "The Connoisseurship of Artifacts," in *Material Culture Studies in*

The connoisseur's exercise of taste was not a purely aesthetic one, centered around the assemblage of objects as it was sometimes framed in the nineteenth century, but it required the employment of a keen eye and the application of a great deal of knowledge. The "quality" of an object was not an ineffable attribute, but rather was methodically determined through the consideration of discrete characteristics. This culminated in an appraisal of its aesthetic value, the value of its labor and workmanship, and its monetary value. "The connoisseur must ask himself: Is it important as a thing of beauty? Is it rare, typical, or illustrative of the culture that produced it? Is it worthy of purchase? And, if so, at what price?"⁹⁷

Another important aspect of mid-century connoisseur culture centered on the relative quality of objects among multiple examples of a single type. The system by which Albert Sack classified early American furniture in his classic, *Fine Points of Furniture: Early American* (1950), was concerned with quality. "There is, however, one key and one key only to collecting antiques—quality. Neither age nor rarity nor historic association can be considered until the test of quality has been satisfied."⁹⁸ Quality was to be measured by one of three categories: 'good', 'better' and 'best'.⁹⁹ In appraising the quality of an object, Sack took as given many of the categories introduced by Montgomery. In settling upon a judgment, he collapsed other categories. Comparing only objects of known origin and familiar well-codified types, "quality" was a means to discriminate between versions of the same basic design.

Both Montgomery and Sack's systems of evaluating objects were undoubtedly geared towards the collector, consumer, or connoisseur and utilized categories of analysis to ascertain value. Hathaway's repetition of terms such as "taste" and "quality," particularly with respect to categories such as form and color and in the service of designers and design students, are revealing. They demonstrate a tension between the antiquarian tendency of a museum curator, entrusted with the safe-keeping and study of historical collections, and the

America, ed. Thomas J. Schlereth (Nashville, Tenn.: American Association for State and Local History, 1982). 148-149.

⁹⁷ Ibid. 152.

⁹⁸ Albert Sack, *Fine Points of Furniture: Early American* (New York: Crown Publishers, 1950). 3.

⁹⁹ 'Good' examples ranged from poor to mediocre or average. 'Better' examples were made by a good craftsman, but maintained weakness in proportion, design or workmanship. 'Best' examples were produced by a superior craftsman and bore none of the deficiencies of the 'better' category. Ibid. 6-7.

modernizing pressure that demanded new avenues of approach that would refigure the collections' relevance.

From exemplar to example: “The Challenge of Design” (1958), *The Logic and Magic of Color* (1960), and *Elements of Design* (1961)

Immediately following the Museum's Jubilee celebration, the museum began to finally engage the interpretive lens of design in earnest. In the last few years of the 1950s, the museum took on the categories of design as a central concern through a series of programs and exhibitions. These shifted the curators' approach from one focused on historical, typological, technical and stylistic attributes to one that gathered heterogeneous objects together according to a single, abstract interest or characteristic. Further, the traditional aims of the museum—to authoritatively educate its visitors in good taste—shifted to encourage visitors to see and judge objects for themselves towards the ultimate goal of developing a personal, rather than a “good,” taste.

One of these activities was an adult education program entitled “The Challenge of Design” held in 1958-59. Conceived of as three-part series of panel discussions that involved both museum staff and outside experts, the program was aimed at an audience of consumers, offering “basic principles of design and of consumer choices in the design and fitting-out of domestic interiors,”¹⁰⁰ addressing the topics “A Space to Fill,” “The Material Available,” and “A Style of One's Own.”¹⁰¹ The first lecture dealt with the design opportunities as they were distributed throughout a home, and described basic design concepts such as two and three dimensional space, human perception, and compositional characteristics like scale and symmetry. The second lecture addressed the materials of domestic furnishings and finishes along with a more conceptual discussion about function, suitability and aesthetics.

The third lecture concluded the series with a discussion of style, shifting the antiquarian taxonomic approach to ‘style’ as a category of classification and ‘information’ to one

¹⁰⁰ “Cooper Union Museum Annual Report,” June 30, 1958. Henry Francis du Pont Papers, Winterthur Archive, HF 280. 45.

¹⁰¹ The list of possible expert panelists the museum created is a veritable who's who of east coast architects in the 1950s, including Marcel Breuer, Gordon Bunshaft, Walter Gropius, Philip Johnson, Jean Labatut, Richard Neutra, Eero Saarinen and Edward Durell Stone. It is unclear who, if any, they engaged to speak. “The Challenge of Design” ca. 1958. Box 7, Smithsonian Institution Archives, Record Unit 267, Cooper-Hewitt Museum, Records. n.p.

affiliated with personal preference and identity. The emergence of past styles was attributed to a variety of factors, including “strong civilizations” and their “philosophy of life,” individual artistic personalities, or major historical events.¹⁰² These lectures encouraged attendees toward the development of a “personal style” as a form of self-expression. Described as an exercise of artistic creativity, personal style was “the crystallization of the knowledge and experience of the individual, and his wish to express these factors by means of some outward form.” The factors that shaped individual identity included not only personal preferences but also race, gender, occupation, class, and hobbies. The museum proposed that the styling of one’s home to reflect the identity and preferences of its occupant was also an important primary outlet of self-expression.

Unlike the nineteenth-century collector or connoisseur, who collected and assembled objects in order to construct his or her identity as a discriminating, learned aesthete, the mid-century home owner or apartment dweller was confronted with a large choice of commercially available goods. Confronting this nearly limitless choice, Hathaway directed their selection and assemblage in the pragmatic terms of budget, use, needs, and the general disposition of their domestic spaces, rather than by any particular aesthetic criteria, suggesting that one’s means and needs were more closely tied to one’s identity than one’s aesthetic preferences.

In shifting from an art-historical notion of style as classification of past objects and artworks to an individual concept of style as personal manner and expression, Hathaway drew upon two distinct discourses. First, he recalls the Renaissance use of the term style by authors such as Giovanni Bellori to refer to the individual manners of expression of great artists like Raphael or Michelangelo.¹⁰³ Secondly, in utilizing the term style as something to be actively constructed rather than identified, Hathaway also participates in the early twentieth century art and architectural *Zeitgeist* theories. These rejected historical stylistic languages in the absence of a new one to replace it. However, the notion that style was a function of identity was new to the mid-century.

¹⁰² In an interesting turn, Hathaway warned the audience away from what he termed Romanticism, or the emulation of past style that no longer resonated with contemporary life.

¹⁰³ Giovanni Pietro Bellori and Hellmut Wohl, *The Lives of the Modern Painters, Sculptors, and Architects* (New York: Cambridge University Press, 2004). Originally published 1672.

In undertaking this reconceptualization, Hathaway thus adopted the primary characteristics of the mid-century design paradigm—the systematic approach to design as a form of problem-solving, the appeal to design as a form of personal expression, and the use of abstract design and compositional concepts to underwrite the Museum’s program, displacing earlier notions of taste, historical authority and imitation.

The clearest manifestations of Hathaway’s belated move toward ‘design’ were the museum’s staging of two exhibitions: *The Logic and Magic of Color* in 1960 and *Elements of Design* in 1961.¹⁰⁴ These exhibitions constituted the first major public efforts to rethink the collections through the modernizing paradigm of design, and a significant step towards jettisoning of the specialist antiquarian orientation they had developed since the deaths of its founders. While these efforts ultimately proved insufficient to recuperate the museum’s position in the school, the exhibitions illustrate the implications of reinterpreting the historical decorative arts in terms of design.

Planned in 1959 and staged in 1960 on the occasion of the Cooper Union’s centennial, *The Logic and Magic of Color* was the result of a rare collaboration between the Museum and the Cooper Union Art and Engineering Schools, with contributions from industry and manufacturers as well as loans from other museums. The exhibition, organized by Assistant Curator Edward Kallop, focused on color as a unifying concept that cut across disciplines and epistemologies, that drew both academic and commercial interest, and could be explored

¹⁰⁴ Calvin Hathaway began conceptualizing *Elements of Design* as early as 1955 when he presented a relatively unformed idea for the exhibition to the museum’s Advisory Council. “Minutes of the Meeting of the Advisory Council,” November 10, 1955. Henry Francis du Pont Papers, Winterthur Archive, HF 280. 2-3.



Figure 3.19 Installation view, *The Logic and Magic of Color*, April 20-August 31, 1960 at the Cooper Union Museum for the Arts of Decoration, showing color use in medieval heraldry compared to contemporaneous systems of color. From: "The Logic and Magic of Color." *Interiors* 119 11 (June 1960).



Figure 3.20 Installation view, *The Logic and Magic of Color*, April 20-August 31, 1960 at the Cooper Union Museum for the Arts of Decoration. In the foreground sits an optical illusion apparatus. From: "The Logic and Magic of Color." *Interiors* 119 11 (June 1960).

“The Logic and Magic of COLOR”

An exciting exhibition of color in all its phases is currently on display at the Cooper Union Museum in New York City. Under the promising title of “The Logic and Magic of Color,” the exhibit is a feature of the Centennial Anniversary celebration of The Cooper Union, and will continue through August 31 of this year. Thanks to the imaginative arrangement of the vast amount of material, the visitor is treated to a stimulating tour through the world of color theory and practice as few people have ever been able to see it in one place before.

It is pleasant to report that there is nothing stodgy or dull about this exhibit. The people who have staged it made sure that their approach to “The Logic and Magic of Color” would be as much fun for the general visitor as it is scientifically sound in every way.

Of special interest to the designer, dyer and printer of textiles is the section on dyes and pigments. Here is shown the evolution of dyes and pigments from earliest primitive origins. Included in this wing of the show are not only dyed fabrics, prints showing ancient techniques and samples of dyestuffs used in modern processes, but also an eight-foot scale model showing the workings of the modern Pad Steam System. CIBA, as one of its many contributions to the exhibit, adapted the basic design to show the continuous sequence from white goods to the finished dyed cloth. Set up within two panels made of transparent Plexiglas, the viewer can see the miniature construction from all sides and appreciate exactly how the dramatic color changes occur. CIBANONE Microfined Vat Dyes are widely favored for the light and wash fastness dyeing results they provide in this process.

“The Logic and Magic of Color,” brings together all of the varied forms of manufacture and use through which color affects our lives. Scientific displays demonstrate why and how the human eye sees color and how the human eye’s response to color can be misleading. Color “tricks” blend, match and contrast shades in textiles and other materials to reveal some of the many ways in which color affects our emotions, habits, and tastes in paintings, textiles, ceramics, and other related art objects of historic and contemporary interest.

One of the features attracting great attention is the exhibit on the psychological



A thirty-six page booklet printed for the occasion using specially colored paper stocks and printing inks selected and applied in accordance with the Faber Birren studies to provide 80% contrast for maximum efficiency in readability and minimum eye fatigue.

Shown below is the CIBA schematic construction of the Pad Steam System.



ence, polarization, and selective absorption of light waves. This portion of the exhibit was prepared by the Physics Department of the Cooper Union School of Engineering.

The art section would make a very interesting exhibit by itself, for it contains several hundred examples of the uses of color, ranging from 4,000-year-old Peruvian textiles to abstract paintings by contemporary artists. Ceramics, glass, fabrics, painted objects, and plastics, representing the artistic production of many of the world’s cultures, illustrate the manufacture and use of pigments, dyes, and glazes.

Cooper Union has produced for its Centennial celebration an outstanding display, vivid and interesting, with appeal for the color and dye expert as well as

effects of color. Fifty colors are presented in the order of rating in “word association tests” given to almost four thousand people. The colors are rated on the basis of forty-eight contrasting word choices such as thrilling or soothing, weak or strong, empty or full, relaxed or tense, etc. You will probably be as surprised at the results as we were, and no help from the audience, please!

Symbolism in color, with special emphasis on color in dress and home furnishings, shows how new color fashion trends develop.

The production of color is shown by dispersion, diffraction, refraction, interfer-

the general public. “The Logic and Magic of Color” is heartily recommended to all.

The exhibit was planned under the supervision of Calvin S. Hathaway, director of the Museum, Christian Rohlfing, curator, and Edward L. Kallop, associate curator, of exhibitions.

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Figure 3.21 Page from “The Logic and Magic of COLOR,” a pamphlet produced by the Ciba Fast Dye News for distribution at the exhibition, *The Logic and Magic of Color*, April 20-August 31, 1960 at the Cooper Union Museum for the Arts of Decoration. From: Cooper Union Museum Annual Report, 1959-1960. Henry Francis du Pont Papers, Winterthur Archive, HF 981. Attached as appendix.

scientifically, artistically and politically.¹⁰⁵ As a review explained in the June 1960 issue of *Interiors*, “The exhibition explores the myriad meaning of color—physical, chemical, physiological, psychological, esthetic, cultural, sociological, religious, commercial, philosophical—even political.”¹⁰⁶

The exhibition attempted to account for this multiplicity of perspectives by combining scientific demonstrations of color measurement and the raw materials of color production, with paintings, decorative arts objects, and commercially produced textiles that used color meaningfully [Figs. 3.19, 2.30, 3.21]. Color served as a lightning rod gathering together the internal institutional components of Cooper Union—the schools of art and science, as well as the museum—with professional institutions such as regulatory agencies, corporate scientific laboratories, design houses and manufacturers and other museums.

The museum, as the site of the exhibition and the source of many of the objects on display, took the opportunity to assert its place in Cooper Union as an important contributor to the school’s intellectual life and as a key resource that could provide relevant materials. The deployment of its objects in this exhibition was certainly completely unlike that of any exhibition staged since Sarah Cooper Hewitt’s death in 1930. In one section of the exhibition on “Color and Light,” scientific demonstrations mounted by Professor Stecher of the Physics Department sat side by side with a Wedgewood cut-glass candelabrum from the late eighteenth century.

In another section on “Visual Phenomena and Color Perception,” color charts from the Cooper Union Art School were displayed alongside a color perception test by the American Optical Company, a set of paintings by Ben Cunningham called *Five Aspects of Scarlet*, and a fifteenth-century Spanish silk textile fragment. The heterogeneous assemblage of scientific apparatus, fine art, raw materials, printed regulatory standards and decorative arts objects was disciplined by an imposed interpretive frame, in this case color. The result was entirely unlike the period-, region- and type-specific decorative art exhibitions the museum had staged for the past three decades. The museum objects were detached from their historical

¹⁰⁵ The exhibition catalog outlined the multiple approaches to and understandings of color in a rather disheveled fashion, skipping around from optical to physical to artistic or cultural understandings of color within one paragraph. *The Logic and Magic of Color: An Exhibition Celebrating the Centennial Anniversary of the Cooper Union, 20th April-31st August, 1960*, (New York: Cooper Union Museum, 1960).

¹⁰⁶ “The Logic and Magic of Color,” *Interiors*, June 1960. 20.



Figure 3.22 Installation view, *Elements of Design*, a permanent and changing installation at the Cooper Union Museum for the Arts of Decoration, 1961-1963. From: Box 7, Smithsonian Institution Archives, Record Unit 280, Cooper Union Museum for the Arts of Decoration, Dept. of Exhibitions, Records.



Figure 3.23 Installation view, *Sources of Design*, a permanent and changing installation at the Cooper Union Museum for the Arts of Decoration, 1963-1967(?). From: Box 17, Smithsonian Institution Archives, Record Unit 280, Cooper Union Museum for the Arts of Decoration, Dept. of Exhibitions, Records.

particulars of period, style, motif, technique, region or their status as exemplars of the production of their period. They were instead transformed into instantiations of various color phenomena, chosen for inclusion due to their use of a particular dye or glaze, their production of certain optical sensations, or their use of color towards particular cultural meaning.

This new frame positioned the museum's objects, originally assembled in the late nineteenth-century for the benefit of students and workers and later reoriented toward an audience of antiquarian-specialists, within a third system of circulation. Here, they became interesting and valuable for reasons that were totally outside of their identity as decorative arts types or as historical data. In some ways, this effected a return to the instrumentability that inaugurated the museum, but it was an outwardly directed one in which the objects no longer contributed to the perpetuation of their own category of the decorative arts or of specific object types.

The following year, the Cooper Union Museum assembled an exhibition entitled *Elements of Design* for permanent installation in their central gallery [Fig. 3.22]. Here at last was a display of objects that were collected together not because of their similar provenance, period, region, or even decorative art type, but rather on the basis of the abstract, ahistorical characteristics of design. The characteristics used to organize the exhibition included surface, form, line, color, and rhythm, each of which occupied a discrete space in the museum's exhibition space.

Each category displayed disparate types of objects, including furniture, carved panels, vessels, textiles, wallpaper, among others. The objects chosen from the collections were used to illustrate the range of potential values for each of the characteristics. In the display on surface, for example, a carved wood panel and an earthenware vessel were presented as natural, unworked or unfinished surfaces.¹⁰⁷ A collection of textiles that included both cut and uncut velvet, silk embroidery on linen, and a chiffon made of both silk and metal were used to illustrate a range of textures possible in the textile medium. A collection of painted

¹⁰⁷ The gallery guide to the exhibition included brief descriptions of each design characteristic and an explanation of what aspects the included objects sought to emphasize. *Cooper Union Museum Gallery Guide to Elements of Design: A Guide to a Permanent Changing Exhibition Suggesting the Nature of the Museum's Collections and the Uses They Serve*, (New York: Cooper Union Museum, 1961).



Figure 3.24 Installation view, *Sources of Design*, a permanent and changing installation at the Cooper Union Museum for the Arts of Decoration, 1963-1967(?). From: Box 17, Smithsonian Institution Archives, Record Unit 280, Cooper Union Museum for the Arts of Decoration, Dept. of Exhibitions, Records.

and glazed ceramic and porcelain vessels and statuettes served to exemplify possible man-made surface conditions. In the category of “Form,” objects as old as 3000 B.C. and as new as 1925 were gathered together to demonstrate the multiple influences on shape, including historical period and stylistic tradition, functional necessity, and the imitation of shapes found in nature.

Just as in *The Logic of Magic and Color* exhibition, the objects were transformed from decorative arts exemplars into examples of abstract characteristics that transcended the museum’s old categories. Characteristics such a particular surface condition, a form, a proportion or a rhythm could be applied then to a new design problem without the transfer of specific historical data that copying, or the imitation of *all* characteristics of appearance, would entail.

Elements of Design was such a success that the museum was asked to prepare a traveling version of the exhibition that visited seven different universities and art museums during 1963-64. Further, in 1964 the museum expanded *Elements of Design* into additional galleries, rebranding it as *Sources of Design*, which opened in 1963 [Figs. 3.23 & 3.24]. To the original categories (form, color, etc) the curators added a section on ‘pattern’ but rejected the category of ‘movement’ as one the collections could not adequately illustrate.¹⁰⁸ The largest addition to *Elements* was a large section installed in the galleries along Fourth Avenue that dealt with the sources or the motivations of design, as the museum staff understood them. In a conscious attempt to appeal to Cooper Union art students, the museum identified the origins of design through four primary categories in the exhibition proposal: imitation, representation, structure, and material and technique. Here, the practice of imitation that had long occupied a central place in the museum’s conception of the services it provided was historicized and placed alongside other concerns of equal importance.

If the exhibition presented imitation as a traditional repetition of natural forms and structures, representation was understood as the inverse of that process, representing non-visual ideas in visual form.¹⁰⁹ The latter categories of structure and material and technique

¹⁰⁸ Memorandum from Museum Staff (likely Edward Kallop) to Calvin S. Hathaway, July 14, 1960. Box 7, Smithsonian Institution Archives, Record Unit 280, Cooper Union Museum for the Arts of Decoration, Dept. of Exhibitions, Records.

¹⁰⁹ Untitled (Proposal for *Sources of Design*), ca. 1962. Box 17, Smithsonian Institution Archives, Record Unit 280, Cooper Union Museum for the Arts of Decoration, Dept. of Exhibitions, Records. 1.

were not historicized, but were rather existing conditions or problems to be solved or potentially exploited for interesting effect. When *Sources* was installed, however, the categories of imitation and representation were collapsed into ‘nature’, referring both to nature as a ubiquitous source of form as well as its regular use as allegory to represent religious or cultural ideals.¹¹⁰

¹¹⁰ Transcript of gallery talk during the *Sources of Design* Special Preview event, dated January 11, 1963. Box 17, Smithsonian Institution Archives, Record Unit 280, Cooper Union Museum for the Arts of Decoration, Dept. of Exhibitions, Records. 11.

Chapter 4: A New Kind of Design: Cooper Hewitt, Smithsonian Museum of Design

If a museum's esteem for a permanent collection object were measured by the regularity of that object's exhibition, then dedicated visitors to the Cooper Hewitt museum could be forgiven for assuming its most prized possession was a rather squat, visually busy 18th century Chinese birdcage [Fig. 4.1]. Donated to the museum by a friend of the Hewitt sisters in 1916, the birdcage was produced during the reign of the Emperor Ch'ien Lung (1711-1798), the sixth emperor of the Qing dynasty who was known as a great patron of the arts. Made of inlaid lacquered wood, as well as carved ivory, ebony, jade, and amber, the birdcage was a luxury status symbol that boasts a dense landscape of portals, perches, and provisions for the songbird imprisoned within it.

Exhibited in three different exhibitions over the past fifty years, the particularities of the object itself, the techniques used to produce it, and the cultural context from which it came have never been subjects of curatorial interest. As discussed in the previous chapter, the cage was first installed in the CUMAD's *Elements of Design* exhibition (1961), the museum's first major attempt at reinterpreting its historical collections through the ahistorical lens of design. The curatorship for this exhibition focused on abstract concepts such as form, color and rhythm, thus allowing designers and design students to better utilize objects from the decorative arts collections as precedents for new modern objects.

The birdcage was included in a section on the 'Line', or linear design. This section explored two-dimensional designs emphasizing outline or three-dimensional objects that utilized linear elements. The birdcage joined an 18th century metal grille, 17th century lace, a Turkish calligraphic composition, Saul Steinberg-designed wallpaper, and an upholstered wrought iron rocking chair designed by Peter Cooper himself. [Fig. 3.22] Cast among these diverse objects, *Elements of Design* asked its visitors to consider how the overall form of the birdcage was composed by the repeated linear elements of its bars. In other words, the viewer was asked to focus on one visually foregrounded aspect of the object's design rather than its invisible historical data.



Figure 4.01 Birdcage (China), 1735–96 and 1880–1910; lacquered wood with inlaid bone, ivory, and ebony (base); carved and cut ivory, carved wood, carved jade, carved amber, cloisonné enamel, glazed porcelain; H x diam. (a): 56.5 x 33 cm (22 1/4 x 13 in.) H x diam. (b): 6.5 x 33 cm (2 9/16 x 13 in.); Gift of Thomas F. Ryan; 1916-26-1-a/jj, Cooper Hewitt, Smithsonian Museum of Design, New York. From: Cooper Hewitt, Smithsonian Museum of Design, www.cooperhewitt.org (accessed July 28, 2016)

Fifty-three years later, the birdcage made its most recent appearance in an exhibition currently on display entitled *The Hewitt Sisters Collect*, installed on the occasion of the museum's reopening in 2014 after a three-year renovation.¹ As one of a slate of exhibitions formulated to highlight new curatorial directions and technological initiatives, *The Hewitt Sisters Collect* aimed to draw visitors' attention to the institution's own storied history. Underwritten in part by a multi-part blog series from museum trustee Margery Masinter on the Hewitts' biography and activities, the exhibition acknowledged the museum's origins in a celebration of its founders' exuberance and idiosyncraticity, as well as the rich network of well-heeled collaborators and patrons they nurtured to aid the museum's collections.²

In this exhibition, the Chinese birdcage appears with 19th century French wallpaper, a 19th century side chair, and most importantly four other birdcages, which are displayed as evidence of the Hewitts' foresight in collecting an object type that was considered neither central to the decorative arts nor design in the early twentieth century [Fig. 4.2]. Installed alongside a full range of the object types acquired by the Hewitts during their lifetimes, including candelabra, wallpaper, tiles, jewelry, porcelain, metalwork, and architectural terra cotta, in this context the birdcage challenges visitors to envision the cultural and biographical conditions of its acquisition, rather than the original conditions of its fabrication or use [Fig. 03].

The third exhibition in which the Chinese birdcage appeared, the 1976 *MANtransFORMS*, is sandwiched chronologically between *Elements of Design* and *The Hewitt Sisters Collect*. Like *The Hewitt Sisters Collect*, *MANtransFORMS* was also an inaugural show, celebrating the reopening of the Cooper Union Museum as the Cooper-Hewitt, National Museum of Design, after it was legally transferred from the Cooper Union to the Smithsonian and moved from the Cooper Union Foundation Building to the newly-

¹ The installation was curated by Sarah Coffin, Curator of Product Design and Decorative Arts at the Cooper Hewitt.

² See Margery Masinter, "Meet the Hewitts," *Cooper Hewitt, Smithsonian Museum of Design*, accessed June 13, 2016, <http://www.cooperhewitt.org/category/meet-the-hewitts/>



Figure 4.02 Installation view, *The Hewitt Sisters Collect*, December 12, 2014 – Ongoing, Cooper Hewitt, Smithsonian Museum of Design, New York.



Figure 4.03 Installation views, *The Hewitt Sisters Collect*, December 12, 2014 – Ongoing, Cooper Hewitt, Smithsonian Museum of Design, New York.

renovated Carnegie Mansion. There the birdcage appeared in a room curated and designed by the Japanese architect Arata Isozaki under the supervision of museum director Lisa Taylor and the Austrian architect Hans Hollein, the latter of whom served as the exhibition’s “conceptualizer.”

In Isozaki’s “Cage Room,” the museum’s Chinese birdcage appeared as one of ten examples that were placed on pedestals under glass and arranged along three walls of Mrs. Carnegie’s former bedroom [Fig 3.04]. While the room’s ornamental pilasters and wainscoting remained visible, Isozaki filled the panels in between them with a wallpaper of clouds floating in blue sky. Above each birdcage hung a photograph of a treetop beheld through the bars of a cage, simulating its inmate’s view [Fig. 4.05]. The most striking part of the installation was the quarter wedge of a human-scale cage he installed in one corner of the room, which was visually completed by the mirrors it abutted [Fig. 4.06]. Visitors entered the cage from a break in the corner and found themselves encircled by a screen of sinuously deformed brass bars, sharing their captivity with an angel reproduced from a Fra Angelico painting.³

In the context of this installation, the ensemble in which the Chinese birdcage appeared worked to draw attention to the spatial experience of the cage by rendering that experience both in image via the photographs, and in lived experience by means of the human-sized cage. It drew connections between human and animal experience through the architectural proposition of the gilded cage, allowing visitors to connect sensorially and corporeally with the nearby birdcages that would have otherwise been apprehended as objects. In this instance, the historical specificity of the individual birdcages was refigured as an example of perennial object types that satisfied unchanging human needs, drawing visitors’ attention to the diversity of design solutions that developed in various periods to meet an enduring human practice. Finally, the ensemble nature of the installation mimicked the everyday, real-world experience of design as made up of myriad types and formats drawn together in a composite environment to be engaged with visually, spatially and haptically.

In thinking about the various ways a single object—the bird cage—has been exhibited and discursively positioned throughout its time in the Cooper Hewitt’s collections, the

³ Isozaki reported that the profile of the cage’s deformations was based on the curves of Marilyn Monroe’s legs, a geometry he claimed to have also utilized in his 1973 Marilyn chairs.



Figure 4.04 Arata Isozaki, "Cage Room," *MANtransFORMS: Aspects of Design*, October 7, 1976 – February 6, 1977, Cooper Hewitt, Smithsonian Museum of Design. From: Hollein, Hans, et al. *Hans Hollein, Design: Man Transforms: Konzepte Einer Ausstellung = Man Transforms: Concepts of an Exhibition*. Wien: Löcker, 1989. p. 146.



Figure 4.05 Arata Isozaki, "Cage Room," *MANtransFORMS: Aspects of Design*, October 7, 1976 – February 6, 1977, Cooper Hewitt, Smithsonian Museum of Design. From: Hollein, Hans, et al. *Hans Hollein, Design: Man Transforms: Konzepte Einer Ausstellung = Man Transforms: Concepts of an Exhibition*. Wien: Löcker, 1989. p. 148.



Figure 4.06 Arata Isozaki, "Cage Room," *MANtransFORMS: Aspects of Design*, October 7, 1976 – February 6, 1977, Cooper Hewitt, Smithsonian Museum of Design. From: Hollein, Hans, et al. *Hans Hollein, Design: Man Transforms: Konzepte Einer Ausstellung = Man Transforms: Concepts of an Exhibition*. Wien: Löcker, 1989. p. 147.

questions that have driven the inquiry of this dissertation continue to be productively mined: how does the museum define the categories of the ‘decorative arts’ and ‘design’, and to what end? How is the historicity of the collections utilized or suppressed, what agency does the institution seek to exert, and what audiences does the museum attempt to enroll in this effort? Finally, what forms of alliance and affiliations with the discipline of architecture does the museum construct?

In this fourth and final chapter, I explore the contours of design as they were articulated by the newly formed Cooper Hewitt museum after its transfer from the Cooper Union to the Smithsonian Institution, primarily under the directorship of Lisa Suter Taylor. Towards this end, I examine the museum’s early efforts to redefine itself, its turn to the ‘environmental’ as a key concept in the reframing of design, and most importantly the museum’s articulation and museological manifestation of design in its inaugural exhibition, *MANtransFORMS*.

In so doing, I elucidate how the institution eschewed its former professional audience and its corresponding notions of design as historically situated material or technique in the early twentieth century, its midcentury antiquarianism, and its early 1960s use of ahistorical abstract concepts such as form and line. The new approach focused instead on a broader lay audience of non-specialists, one that took up a renewed notion of ‘use’ by framing it in terms of timeless human activities and paradigmatic everyday situations, one that applied an environmental logic that was more interested in design’s interdependence with larger, invisible systems and structures, and one that attempted to enroll its lay audiences as active designers rather than passive consumers. I argue that these institutional and conceptual aims were underwritten by the institution’s renewed interest and affiliation with architecture and architects, drawing upon disciplinary expertise and techniques to effect its transformation.

Rethinking the Museum: The Cooper-Hewitt Think Tanks and User Surveys

When the official transfer of the Cooper Union Museum of the Arts of Decoration from the Cooper Union to the Smithsonian Institution took place, it occurred not with a bang, but a whimper. After the signing ceremony on October 9, 1967, there was little that changed immediately for the institution. The museum remained on the fourth floor of the Cooper Union Foundation Building, its staff largely intact, but with Richard Wunder, the museum’s

longstanding curator of prints and drawings, taking up the first directorship.⁴ Wunder, however, served in this capacity for less than two years. Preferring curatorial work and research to the demands of administration, Wunder departed the Cooper-Hewitt for a research position at the National Collection of Fine Arts (today known as the Smithsonian American Art Museum) with the intention of returning as a curator once another director was ensconced.⁵ Christian Rohlfing, the museum's Curator of Exhibitions, was named Administrator and Acting Director until a new leader could be found.

S. Dillon Ripley, Secretary of the Smithsonian Institution, had in fact already tapped a replacement: Lisa Suter Taylor. Taylor, trained in art history and studio art at the Corcoran School of Art, worked for the President's Committee on Fine Arts prior to joining the Smithsonian Institution to develop and launch the Smithsonian's Residential Associates Program, now known as the Smithsonian Associates. Targeted at local communities in and around Washington, D.C., the Residential Associates was the Smithsonian's educational outreach program. From 1966 to 1970, Taylor created the program from the ground up. By the time of her departure, the program boasted a membership of nine thousand families and an annual offering of one hundred and fifty classes in fifty subject areas, taking such varied formats as luncheon lectures, weekend seminars, musical performances and field trips. This success earned Taylor the Smithsonian's Exceptional Service Award, and also resulted in Ripley offering Taylor the directorship of the Cooper Hewitt in 1969.⁶

Taylor took up her post in 1970 with the institution still housed in the Cooper Union's Foundation Building, but with a lease on the Carnegie Mansion secured and a clear mandate from Ripley to take on three major tasks: "curatorial and conservation work with the collections; education at all levels; and the exploration of contemporary design, the

⁴ This was a job that Wunder lobbied strenuously to obtain, primarily urging Henry Francis du Pont to recommend him for the job to S. Dillon Ripley, which he did. Letter, Henry F. du Pont to S. Dillon Ripley, June 26, 1967. Henry Francis du Pont Papers, Winterthur Archive, HF Box 280.

⁵ Letter S. Dillon Ripley to Lisa Taylor, July 9, 1969. Box 3, Smithsonian Institution Archives, Accession 09-068, Taylor, Lisa, 1933-1991, Lisa Taylor Papers. This plan did not come to fruition. Wunder became an academic after his research appointment at the NCFCA expired, teaching at Middlebury College in the 1970s, and later became the President of Appraisals at the auction house Christie, Manson and Woods (now, Christie's). "Obituaries; Passings; Richard P. Wunder, 79; Curator at Smithsonian and Art Historian," *Los Angeles Times* August 8, 2002

⁶ "Smithsonian names director for Cooper-Hewitt Museum," Press Release, Smithsonian Institution, September 12, 1969. Box 37, Smithsonian Institution Archives, Record Unit 267, Cooper-Hewitt Museum, Records.

stimulating of good design, and the creation of taste and pride in design.”⁷ Taylor, now a seasoned administrator but with little experience in decorative arts or design, recognized the Museum’s need for a thorough reevaluation and reorientation if it was to transform from a small, historical, and rather idiosyncratic collection into the Smithsonian’s national museum of design. This reevaluation would be a major undertaking, one that would need to draw on the expertise and perspectives of the museum’s long-standing constituencies as well as that of contemporary designers, architects, and other external experts.

Taylor clearly viewed the Cooper Union Museum’s collections as the nucleus of the future museum, but it was a nucleus which needed reinterpretation and enlargement. Thus Taylor set out reconceptualize the museum, aiming to simultaneously create a plan for the museum’s reorientation as well as the further development of its collections. As a non-specialist in the realm of the decorative arts and design, Taylor approached the problem by seeking the input of multiple constituencies, including museum staff, designers, critics and scholars, and the museum-going public. Beyond her own relative lack of experience, this project also had a financial impetus. Because of the nature of the agreement with the Smithsonian Institution, the Cooper Hewitt had access to far less federal funding than its new sibling institutions in Washington, and the pledged seed money from the Cooper Union and the Committee to Save was only anticipated to last a few years. Thus, the reinvented Cooper Hewitt was charged with appealing to as broad an audience as possible to secure its own economic survival.⁸

Taylor’s program of reassessment was multi-pronged, and utilized a variety of user surveys, in-person interviews, and “think tank” meetings. In some ways inventing a new museum type, Taylor cast a wide net to consider how the museum might approach its legacy collections and how those approaches might appeal to new audiences.

It is important to survey the landscape of museum institutions in the late 1960s and early 1970s in order to understand why Taylor sought to survey such a wide variety of opinions on the Cooper Hewitt’s direction. While architecture and design museums are today a recognized and familiar type, in the 1970s Taylor had very few models on which to draw.

⁷ Letter S. Dillon Ripley to Lisa Taylor, August 8, 1969. Box 3, Smithsonian Institution Archives, Accession 09-068, Taylor, Lisa, 1933-1991, Lisa Taylor Papers.

⁸ The Cooper Hewitt, from the outset, was the only Smithsonian museum to charge admission—something that remains true today.

While museums of decorative arts, applied arts, and industrial arts were widely established in the nineteenth century, museums that conceptualized themselves in terms of *design* were rare in the late 1960s. Of the many nineteenth-century decorative arts museums that would eventually reorient themselves toward design, the Cooper Hewitt was undoubtedly among the first.⁹ The earliest new museums of design, such as Vitra and the Design Museum in London, were not founded until 1989. Only the Museum der Dinge—a museum of design associated with the Werkbund Archiv in Berlin—was nearly contemporaneous with the Cooper Hewitt when it was established in 1973. Similarly, the Smithsonian Institution’s Renwick Gallery, known today for its decorative arts collections, was in fact established as a museum of contemporary craft when it opened in 1972.

With respect to museums of architecture, the Cooper Hewitt was similarly peerless. While national museums of architecture were founded in Russia and Finland in 1945 and 1956 respectively,¹⁰ institutions devoted to architecture did not emerge on a broader international scale until the late 1970s and 1980s.¹¹ Ultimately, on the national and international stage, the Cooper Hewitt had few institutions that could serve as models for its reinvention. Quite the opposite—the Cooper Hewitt was to pioneer a new form of museum.

Locally, both the Metropolitan Museum of Art and the Museum of Modern Art may have seemed like natural lodestars for the Cooper Hewitt, as both did in fact maintain design collections: the former under the curatorial auspices of Twentieth Century Art and the latter in a department of Architecture and Design.¹² Both museums had programs of exhibitions that undoubtedly influenced the reception of modern design as well as its museology, but by the late 1960s the approaches to design for which they were best known had become anachronistic.

⁹ These include the Victoria and Albert (f. 1852), the Museum für angewandte Kunst in Vienna (f. 1863), the Kunstgewerbemuseum in Berlin (f. 1868), and the Finnish Museum of Applied Arts (f. 1873). Today these museums describe their activities primarily in terms of design, but the transitions of interpretive lens they undertook from decorative and applied arts to design occurred in the late 20th century. The Cooper Hewitt was an early adopter in this respect.

¹⁰ I am referring to the Schusev State Museum of Architecture in Moscow and the Museum of Finnish Architecture in Helsinki.

¹¹ The Deutsches Architekturmuseum in Frankfurt was founded in 1977 and opened its doors in 1984; the Canadian Centre for Architecture was founded in 1979 and opened in 1989; the Netherlands Architecture Institute was not established until 1988, relocating to Rotterdam in 1993.

¹² Both of these specifically handled modern, twentieth century design. MoMA did not maintain collections of historical decorative or industrial art. The Met’s stock of historical decorative arts were not reframed as design, and were collected and shown in separate European and American departments.

The industrial design *Annuals* at the Metropolitan (1917-1940), organized by Richard Bach, began as modest displays of products that were inspired by existing objects in the museum's collection. However, they soon grew to become large exhibitions of American design that utilized department store display techniques, including complete architect-designed showroom-style interiors. MoMA's *Good Design* exhibitions (1950-1955), created in collaboration with the Chicago Merchandise Mart, staged elaborate installations that utilized the same commercial showroom language whether installed in the museum's galleries or the floor of the Merchandise Mart. The agenda of *Good Design* was, according to museum director René d'Harnoncourt, to "stimulate the appreciation and creation of the best design among manufacturers, designers and retailers for good living in the American home."¹³ Even more explicit was Edgar Kaufmann Jr.'s description of the shows as a "buying guide" for the public.¹⁴ Both the *Annuals* (particularly the popular ones staged in later years) and the *Good Design* exhibitions were unabashedly commercial in nature, addressing audiences as consumers and encouraging them to exercise their "good taste" in the purchase of the displayed objects.¹⁵

By the early 1970s, when Taylor joined the Cooper Hewitt and began reconsidering its direction, the examples provided by the Met and MoMA were no longer viable as models for two reasons: first, both the institutions and their collections were too dissimilar for any useful comparison. The Met and MoMA were first and foremost art museums, and while architecture and design were areas of collection, and the size and nature of their collections differed significantly from that of the Cooper Hewitt. Taylor's task was to reinvent a small museum whose collections were almost wholly made up of the historical decorative arts. Secondly, the baldly commercial nature of the earlier Met and MoMA design exhibitions was

¹³ *Good Design*, ex. pamphlet (Chicago: Merchandise Mart; New York: Museum of Modern Art, 1953), n.p., cited in Mary Anne Staniszewski, *The Power of Display: A History of Exhibition Installations at the Museum of Modern Art* (Cambridge, Mass.: MIT Press, 1998). 176.

¹⁴ Edgar Kaufmann, Jr., and Finn Juhl, "Good Design '51 as Seen by Its Director and by Its Designer," *Interiors* 119, no. 8 (March 1951), 100, cited in *ibid.* 176.

¹⁵ The *Annuals* are described in detail in R. Craig Miller, *Modern Design in the Metropolitan Museum of Art, 1890-1990* (New York: The Museum : H.N. Abrams, 1990). In her 2008 dissertation, Antoniette Guglielmo demonstrates how both Bach's rhetoric and the structuring of his *Annual* exhibitions sought to cultivate good taste in American consumers through exposure to expert-selected quality objects. See Chapters 2 and 3, Antoniette M. Guglielmo, "Workbench of American Taste: Richard F. Bach, Industrial Art, and Consumerism at the Metropolitan Museum of Art, 1917--1940" (Ph.D., University of California, Santa Barbara, 2008). Chapter 3 of Mary Anne Staniszewski's 1998 book *The Power of Display* addresses the Museum of Modern Art's history of design exhibitions.

no longer viewed as appropriate to the museum as a cultural institution. While Taylor also sought to appeal to laypeople as her primary audience, she addressed them not as consumers but rather as cultural actors and participants.

To generate ideas and strategies for the museum's reinvention, Taylor and her staff embarked upon a program of self study that involved identifying the institution's core constituencies and their needs, reassessing its "philosophical" approach to the collections through the new paradigm of design, and revising its mission statement to realign the museum's aims with its projected constituencies.¹⁶

The first phase of the Cooper Hewitt's program involved a series of "user surveys" or questionnaires targeted at the museum's major constituencies. The museum polled its historically primary constituents of design professionals, surveying 187 architects, planners, designers, design educators, and critics, both by mail and in person about the types of museum-offered services they might find useful. In a nod to its earlier educational role in the Cooper Union, the staff surveyed the curricula and programs of local design schools to consider what they might offer to students and teachers. Next, they sent a printed survey to 800 people from the CUMAD's mailing list, which included decorative arts and design professionals, collectors and decorative arts aficionados, and members of the Committee to Save.

The survey was both retrospective and forward-looking, asking recipients how they utilized the museum in the past and what they hoped it would offer in the future. The museum staff sent another version of the survey to residents around the Carnegie Mansion in an attempt to ascertain what the local community might find valuable in their new neighbor. Finally, the staff made contact with one hundred museums across the United States that maintained a decorative arts or a design collection to learn about the range of programs they offered. The survey of the CUMAD's former users revealed a desire for a less specialized institution that was aesthetically modernized and provided a range of activities in

¹⁶ To complete this project of reassessment, in 1970 Taylor and her staff appealed to the New York State Council for the Arts [NYSCA], submitting an application for their annual program of assistance to cultural organizations. While their funding request included proposals for the development of a museum shop and the creation of programs such as a conservation lab, a picture library and a theatre space, the NYSCA funded what it viewed as the museum's most pressing needs: a study of its financial situation, an examination of its collections and their new spatial distribution in the Carnegie Mansion, and its program of self-study. "Request for assistance to cultural organizations," Cooper-Hewitt application to the NYSCA, August 27, 1970. Box 48, Smithsonian Institution Archives, Record Unit 267, Cooper-Hewitt Museum, Records.

which the larger community could participate.¹⁷ While many of the respondents in the former group were design professionals and decorators, they were largely uninterested programs targeting professional practice. In fact, both former CUMAD users and local residents were most enthusiastic about offerings such as live demonstrations, art classes, social events, and other participatory programming befitting a cultural institution oriented to a general audience rather than a specialist or industry-focused one.

The survey of design professionals elicited much more future-oriented and imaginative responses, due in no small part to the provocative framing of the survey's questions. The wording of these questions attested to Taylor's inclination towards not just design, but *environmental design*, indicating a concern for both the large or *environmental* scale of design, such as architecture and urban planning, as well as concern for design's impact on the natural environment.¹⁸

Omitting any reference to its history as a decorative arts museum, recipients were asked a variety of open-ended questions about the museum's agency regarding environmental issues, how it could contribute to the improvement of environmental design, what programs would broaden public knowledge about design, what sorts of technical information it should gather and disseminate, and the ways it could serve as a catalyst between architects, industrial designers, builders, interior designers and others. The collected responses were enthusiastic and imaginative, suggesting new programs, approaches, and roles for the museum that had to do with everything *but* the museum's traditional concerns of collection and exhibition.¹⁹

Further, respondents recommended that the museum take on an activist role as an environmentalist organization *and* as a clearinghouse of information for both students and

¹⁷ While respondents were largely positive about the museum's collections, exhibitions and services, they hoped the Cooper-Hewitt would provide a better facility, location and ambiance, improving on the CUMAD's poor lighting, its densely cluttered space, and outdated techniques of display. "Untitled (User Survey Report)," ca. 1970. Box 50, Smithsonian Institution Archives, Record Unit 267, Cooper-Hewitt Museum, Records.

¹⁸ "Untitled (Professional Survey Report)," ca. 1970. Box 50, Smithsonian Institution Archives, Record Unit 267, Cooper-Hewitt Museum, Records.

¹⁹ Proceeding from an anticipated reorientation to environmental design, respondents suggested that the museum serve as "a meeting place for the environmental sciences," holding symposia, providing space for research teams, and sponsoring films, awards, and community action groups. They encouraged the museum to become a design educational center: to build up libraries of materials, process literature, product catalogues, and audio-visual material; to hold lectures, workshops, and courses for professionals; they asked that museum curators be trained as "sophisticated librarians" of contemporary design, able to point professionals to contemporary resources and objects. *Ibid.*

professionals in the fields of architecture, planning, ecology and behavioral science.²⁰ So, while the utility of the museum had waned for the primary users of the CUMAD—industrial designers, textile designers and other decorative artists,²¹ a new subset of those users, namely architects and planners, were enthusiastic about the Cooper Hewitt’s potential new roles. It seemed that while design professionals no longer viewed the museum as central to their core practices, they hoped it could fulfill an important secondary role as a clearinghouse of information and a site of intellectual debate.

Throughout 1970, Lisa Taylor and her staff processed, analyzed and reflected upon the copious responses to their surveys, forming provisional opinions and tentative plans that would be vetted more thoroughly by a narrower selection of experts in two intensive design conferences, or “think tanks” taking place in 1971-72. Both were moderated by George Nelson,²² the first think tank taking place on October 18-20, 1971 at the Musée des Arts Décoratifs in Paris, and the second on February 14-15, 1972, in the Cooper Hewitt’s offices in the townhouse adjoining the Carnegie Mansion, whose renovation was then barely underway.²³

²⁰ Some also encouraged the museum to take on an activist role in the local urban environment. For example, New York architect David Todd suggested the museum turn its attention to its local environment, addressing the city’s urban design and infrastructure through exhibitions on its parks and subway system. Letter, David Todd to Lisa Taylor, June 12, 1970. Box 50, Smithsonian Institution Archives, Record Unit 267, Cooper-Hewitt Museum, Records.

²¹ Some of the contemporary designers who continued to be devoted users of the museum submitted more moderate suggestions that drew upon the museum’s historical strengths. Industrial, jewelry and furniture designer John Van Koert was one of few voices who discouraged the museum’s engagement with larger environmental issues, suggesting instead that the museum stage “tandem exhibitions linking successful design solutions of the past with effective solutions of the present” as well as those “that isolate and describe the impulses that generate design.” Celeste Hayward, fashion coordinator of Home Furnishings for the Associated Merchandising Corporation, envisioned the museum in a taste-making role as a “meeting place of the exchange of design ideas and design concepts that will have far-reaching effects on man and his mode of living for years to come.” John Van Koert, completed Professional Survey, May 5, 1970. Box 50, Smithsonian Institution Archives, Record Unit 267, Cooper-Hewitt Museum, Records; Cele Hayward, completed Professional Survey, ca. 1970. Box 50, Smithsonian Institution Archives, Record Unit 267, Cooper-Hewitt Museum, Records.

²² The idea to hold the conferences as a method of rethinking the museum seems to have been Nelson’s. He submitted the idea to Taylor, along with proposal to run them, in a letter dated August 14, 1970. Box 1, Smithsonian Institution Archives, Accession 87-024, Cooper-Hewitt Museum, Public Information Office, Press Releases. Perhaps due to Nelson’s relatively high price tag, Taylor requested a second proposal from Ronald Beckman of the Providence-based REDE: Research and Design Institute. Beckman’s proposal included a list of suggested participants, none of whom were design professionals. Rather, he proposed two museum directors, two experts in primary education, and a learning theorist. It is unlikely that Taylor found them suitable as participants. Letter, Ronald Beckman to Lisa Taylor, July 22, 1970. Box 48, Smithsonian Institution Archives, Record Unit 267, Cooper-Hewitt Museum, Records.

²³ “Curatorial Studies and Design Conference,” ca. 1972. Box 39, Smithsonian Institution Archives, Record Unit 267, Cooper-Hewitt Museum, Records.

The primarily European participants of the Paris think tank included Lisa Ponti, editor of *Domus*, the Helsinki-based industrial designer Kaj Franck, Milan architect Marco Zanuso, London-based architect Cedric Price, Francois Barre, head of the Industrial Design Center at the Musée des Arts Décoratifs, and Belgian artist Jean-Michel Folon. In addition, Lee Nordness of S.C. Johnson and Son and a representative from Olivetti attended as “auditors” on behalf of corporations considering sponsorship of the museum’s inaugural exhibition. The second think tank held in New York assembled Berkeley urban planner Richard Bender, George A. Dudley, Chairman of the New York State Council on Architecture, Dr. Richard Duke, Director of the Environmental Simulation Laboratory at the University of Michigan, Chicago industrial designer John Entenza, Mexican architect Eduardo Terrazas, and Richard Weinstein, Director of the Office of Lower Manhattan Planning and Development.

The Paris think tank participants were asked to think speculatively about design as an organizing concept for the museum and what it meant for the institution’s form, aims, audience, and programs. “Participants of both sessions were to discuss the place and function of design and of museums in today’s world and for the future, and how these two spheres of activity can be related.”²⁴ From the assembled cohort, Taylor and Nelson sought ideas that would transform a historical museum of decorative arts into a “vital contemporary institution” and “an ideal museum of design.”²⁵

Toward this end, the conference attendees were provided with a list of questions for discussion, each of which invited them to jettison their assumptions about the museum as an institution and to think creatively about its potential new roles, methods, programs, and modes of operation.²⁶ The questions were crafted to encourage participants to think

²⁴ Ibid.

²⁵ George Nelson, “Cooper-Hewitt Museum Preliminary Notes: Agenda, Paris,” September 30, 1971. Box 50, Smithsonian Institution Archives, Record Unit 267, Cooper-Hewitt Museum, Records. 3.

²⁶ The list of questions given to the participants seems to have been generated collaboratively, assembled from lists submitted by the museum staff, Nelson and Taylor herself. Participants were asked to consider the *raison d'être* of a design museum, as distinct from an art, science or history museum, and whether the traditional notion of the museum as a repository of objects and space for their display was the right ambition. Further, they were asked to articulate the very definition of design. The think tanks participants were charged with thinking through the types of audiences at whom the museum should target its efforts, as well as how the museum should address and develop its collections. At the outset, the museum staff felt that limiting design to the products of professionals would not be sufficient, so they asked participants to consider how design related to other spheres of concern, as they sought to avoid presenting it as isolated and pertaining only to certain objects or events. Finally, proceeding from the educational mandate that was so central to the CUMAD, the conference participants were asked to consider what sort of educational role the Cooper-Hewitt might undertake.

expansively about design and the internal connections between its myriad forms. Recognizing that design was not limited to objects, but involved “entire landscapes, cities, systems, ecological complexes,” and that the “issues are no longer esthetic or functional, but social and political,” the museum posed questions about how to reconcile its contemporary concerns and values with the historical legacy left to them by the Hewitts.²⁷

The Paris participants responded enthusiastically, though quite differently in tone from the largely American respondents to the earlier professional survey. “Environmental design” was temporarily bracketed out of the conversation by virtue of Taylor and Nelson’s framing of the discussion prompts. Rather, the conferees focused on the question of design *process* and the forces and motivations that shape designed objects. They viewed the museum as “an open laboratory where the visitors are introduced in the most imaginative way to the process of design. This should be a global approach to the problems posed by the man-made environment, with social, economic, and human factors of design serving as the matrix.”²⁸ It was not aimed at a professional audience, but rather proposed that the museum should enhance the public’s “understanding of past, present and future design problems in terms of society and nature.” The group emphasized the museum’s contemporaneity, suggesting that its greatest relevance was to be found in its focus on latest developments, upcoming designers, new products, and most importantly the present-day social and economic forces that shape them.

Taylor was excited by the Paris results, and the ideas generated there became the nucleus of the museum’s mission statement. The second New York-based think tank was therefore tasked with examining museum operations more closely and producing a plan to enact the general program outlined in Paris. George Nelson described the aims of the conference, reintroducing the idea of the environment, as “To help create a more humane environment by heightening public awareness of design as a creative force. To work towards the enhancement of life through the use of objects and systems, including intangible systems.”²⁹

²⁷ The museum asked whether to emphasize high design or everyday objects in building their collections, and whether the traditional categories of the decorative arts, bequeathed to them by the CUMAD, were the right ones going forward. “Untitled (Think Tank Questions for Participants),” ca. 1971. Box 41, Smithsonian Institution Archives, Record Unit 267, Cooper-Hewitt Museum, Records. 3.

²⁸ “Think Take Conferences,” ca. 1972. Box 39, Smithsonian Institution Archives, Record Unit 267, Cooper-Hewitt Museum, Records.

²⁹ George Nelson, “The Cooper-Hewitt Conference, February 14-15, 1972,” March 6, 1972. Box 50, Smithsonian Institution Archives, Record Unit 267, Cooper-Hewitt Museum, Records.

Towards these ends, the conferees made a series of museologically radical suggestions. While they agreed that the historical collections should be maintained, they proposed that future collections remain entirely non-physical. Emphasizing a turn to the environmental scale of design, and recognizing the difficulties in collecting works of architecture or infrastructure, the think tank participants recommended an electronic database to collect, store, and disseminate information. They imagined the city itself as a museum, with the Cooper Hewitt acting as a sort of administrative center and a catalyst for public participation. Reimagining the museum as an institute for the advanced study of large, complex systems, the participants agreed that the Cooper Hewitt's primary role would be to contextualize objects and ideas as interconnected elements within those systems.

While the conversations that took place at each think tank imagined different primary audiences and were framed by different terminologies, they were united by their focus upon the *non-visual* aspects of design. While the European conversation largely concentrated on the issues of design process and the forces that shape designed objects, the Americans approached design from an environmental perspective, particularly focusing on the invisible systems that regulated and shaped the man-made urban environment. Both perspectives effected a turn away from the designed object as a singular, authored, aesthetic commodity. This notion was replaced by an interest in the larger cultural and social context of design, an understanding of objects as registers of the myriad forces and interests that motivated them, and an expansion of types of objects and activities that were traditionally understood as 'designed' to include the largest scales of infrastructure and cities. This shift mirrors developments in contemporaneous environmental and ecological movements, particularly Deep Ecology.

Deep Ecology, at its root, encouraged a shift from an anthropocentric paradigm to a "geocentric" one,³⁰ as Thomas Berry has termed it. In the geocentric view, the human species is no longer the privileged measure of environmental health or the sole beneficiary of its resources, but rather stands as one of many equally important constituents whose survival is understood as completely interdependent. Similarly, Arne Naess argued many forms of environmentalism privileging living creatures still tended to underestimate the value of non-

³⁰ Thomas Berry, "The Viable Human," in *Deep Ecology for the Twenty-First Century*, ed. George Sessions (Boston: Shambhala, 1995). 8.

human life and supposedly non-living systems, such as riverbeds and other overlooked landscapes. Naess proposed to recast the “biosphere” as the “ecosphere” to better account for the health of ecosystems.³¹ Rejecting the scientific approach utilized by an anthropomorphic worldview when dealing with the natural world, Naess encouraged the consideration of political, ethical, and philosophical issues as well.³² Deep Ecologists largely viewed industrialization as a source of alienation from nature, and were deeply skeptical of notions of “progress” it entailed, preferring to find meaning in the traditional, primitive, and persistent aspects of human culture.

Similarly, the Cooper Hewitt’s turn to environmental design as an institution-wide interpretive lens meant eschewing the decorative arts as a special sector of human endeavor in favor of a much more catholic view of design. This view jettisoned notions of aesthetic value and the primacy of individual aesthetic experience to understand designed objects as creating and existing in a larger ecology of visible and invisible systems and structures.

As a corollary to the “scientific” view found wanting by the Deep Ecologists, the Cooper Hewitt similarly rejected the antiquarian and specialist orientation of the CUMAD to approach design in terms of its myriad social, cultural, material, and technological contexts. And while the museum did not share the Deep Ecologists’ negative view of man-made objects or urban environments, they certainly agreed that a form of alienation had arisen between humans and their environment. In this museum’s view, this alienation took the form of a visual illegibility in which the very nature of designed objects and environments had been rendered inaccessible as forms of design—that is, as the result of human choices, desires and socio-cultural or economic forces. To ameliorate this problem, the museum imagined itself in both a didactic and a democratizing role, seeking not only to educate its visitors but also to reveal to them their pre-existing and continuing participation in design activities.

Both the difficulty of shifting from a specialist to a popular institution and of applying the environmental design lens to the uneven and idiosyncratic historical collections were raised in the process of carrying out the museum’s surveys and think tanks. An early draft of the think tank questions revealed both conceptual and pragmatic concerns. Early staff

³¹ Arne Naess, “The Deep Ecological Movement: Some Philosophical Aspects,” *ibid.* 68.

³² Stephan Bodian, “Simple in Means, Rich in Ends: An Interview with Arne Naess,” *ibid.* 27.

discussions considered maintaining them as they were for specialist use, disbanding them, or whether they could be “reinterpreted, organized and displayed more effectively so that they are relevant for the principles of design which they embody.”³³

Further, the staff wondered how they could bolster the relative strengths and weaknesses of the existing historical collection, short of an extensive program of acquisitions for which no funds were available. They struggled to imagine how contemporary material could be integrated into the historical collections to produce a coherent display. Finally, they questioned the validity of the inherited historical classification system, and sought alternatives that would avoid its resulting “rigid, artificial” compartmentalization of objects.

Taylor found a provisional solution to these concerns in a vision for the museum that combined populism with an emphasis on the design process as a way to take pressure off of the uneven historical collections. “What is significant about [the collection] is not any given artifact in itself but the various human forces that called it into being and the myriad ways in which it touches human lives.”³⁴ In this way, the museum could present objects in terms of their social, political or economic contexts—in terms of their environmental circulation—without making claims about aesthetic qualities or the comprehensiveness of the collections.

What’s in a Name? Reimagining the Museum’s Mission

The conceptualization of the Cooper Hewitt as a *design* museum rather than as a museum of *decorative arts* seems to have been in place from the outset of the institution’s transfer from the Cooper Union to the Smithsonian, though it was not without controversy. Debates over the identity of the Museum are revealed through recorded discussions concerning its name and the crafting of its mission statement, and these illuminate the institution’s struggle to reframe its historical legacy in a bid to gain renewed relevance and access to new audiences.

While the historicity of collections was heavily instrumentalized by the Hewitts, who encouraged their study and imitation as a direct source of good taste and authority, and by Calvin Hathaway and his staff in the service of antiquarian scholarship, the paradigm of *design* necessitated an *ahistorical* approach. Hathaway’s attempts in the late 1950s and early

³³ “Untitled (Preliminary list of think tank questions)”, ca. 1971. Box 50, Smithsonian Institution Archives, Record Unit 267, Cooper-Hewitt Museum, Records. 3.

³⁴ Letter, Lisa Taylor to Lucy Kostelanetz, NYSCA, June 26, 1972. Box 48, Smithsonian Institution Archives, Record Unit 267, Cooper-Hewitt Museum, Records.

1960s to reinterpret the collections through the abstract design categories of form, line, and color sought to leverage their physical and visual characteristics towards a renewed relevance for professional audiences. The new Cooper Hewitt sought to address much broader audiences with a more expansive and accessible conception of design—but this conception also necessitated the continued suppression of its collections’ historicity.

Immediately upon its transfer in 1968, the Cooper Union Museum of the Arts of Decoration was renamed the Cooper-Hewitt Museum of Design.³⁵ However, the very next year, the Cooper Hewitt’s Advisory Board unanimously voted to change the name of the museum to the “Cooper-Hewitt Museum of Decorative Arts and Design, Smithsonian Institution.”³⁶ Many of the members of the Advisory Board had been affiliated with the CUMAD, and to their ears the decorative arts label was “more inclusive and presented a better image to the general public, since design seems technical and professional.”³⁷

This perspective did not persist, however, under the directorship of Lisa Taylor when she arrived in 1970. In an early draft of the Museum’s mission statement, Taylor sought to drop the decorative arts label in favor of ‘design’ because of the former’s overly historical associations. Responding to a draft, Taylor explained her position to her colleagues:

I have not meant to eliminate or put down the past, but I want the past (the museum's permanent collection or other changing exhibitions of historical material) to give fresh insight into the relation of historic material to contemporary ideas, needs or production. In other words, with several outstanding decorative arts collections in New York museums and over 800 antique shops in Manhattan alone, we can't just show things because they are old, we either have to relate them to today or the future or to present them with some historical point-of-view.³⁸

For Taylor, the ‘decorative arts’ referred primarily to pre-twentieth century objects and therefore implied an exclusively historical orientation. And because the museum’s collections were the result of a highly uneven and idiosyncratic program of acquisitions, and were

³⁵ Smithsonian Institution, *Smithsonian Year: Annual Report of the Smithsonian Institution* (Washington: Smithsonian Institution Press, 1968), 21.

³⁶ Richard P. Wunder, letter to S. Dillon Ripley, 30 April 1969, box 304, Record Unit 99, S. Dillon Ripley Papers, Smithsonian Institution Archives (Washington, D.C.).

³⁷ This is ironic, given the wholly professional orientation of the museum in its early years. Minutes of the Advisory Board of the Cooper-Hewitt Museum of Design, 9 April 1969, box 305, Record Unit 99, S. Dillon Ripley Papers, Smithsonian Institution Archives (Washington, D.C.).

³⁸ Lisa Taylor, Feedback to employees regarding Cooper-Hewitt brochure, box 32, Record Unit 267, Smithsonian Institution Archives (Washington, D.C.).

therefore ultimately subpar in comparison to other local institutions, Taylor shied away from emphasizing the historical decorative arts. Rather, Taylor recognized the museum's need to offer a novel approach to objects that would resonate with but not center on the historical collections. 'Design' offered that approach, because it allowed historical objects to be revisited through the lens of contemporary concerns in ways that downplayed their historical specificity.

The museum published its new mission statement as a brochure in order to publically establish its new identity and aims. This required a precise elaboration of what was meant by 'design'. 'Design' was carefully defined not as an activity or a class of objects, but as "that faculty by which men shape matter to a purpose arising from any of an infinite number of human needs and desires."³⁹ One of the most important aspects about the Museum's perspective on design was the relationship posited between design and environment.

Good design has always had to satisfy two requirements. The first is functional: the object should do well that which it is intended to do. The second is esthetic: the object by virtue of its form should possess some quality that is pleasing in itself, apart from the material end which it serves. Today there is a third element that has no precedent in history. Design must encompass the whole of human environment. its ultimate effect on life must be considered in relationship to form, materials, methods of manufacture and use.⁴⁰

While the first two criteria could easily describe characteristics of decorative arts, the third concern with the man-made environment radically expanded the universe of objects that the museum would collect and exhibit from the primarily domestic decorative arts to "entire landscapes, cities, systems, and ecological complexes."⁴¹

In this way, the museum sought to foreground the ubiquity of design, emphasizing the fact that everything in the man-made environment, and not just high-design objects, is in fact designed. In this way, museum objects become far more relevant to the non-specialist. A longer unpublished version of the brochure expanded upon the Museum's populist conception of design. Rather than view the realm of design as a professional endeavor highlighted by star talents producing "high design," the Cooper-Hewitt sought to frame it as

³⁹ *Smithsonian Institution: A National Museum of Design*. (New York: Cooper-Hewitt Museum, 1976), 3. <https://archive.org/details/nationalmuseumof00smit>.

⁴⁰ *Smithsonian Institution*, 3.

⁴¹ *Smithsonian Institution*, 6.

a pervasive condition that occurred across disparate scales and aesthetic manifestations. This unpublished brochure explained,

...most of the world's design is done by people who are not architects, industrial designers, city planners, graphic artists, textile designers or members of any of the other professional classifications. The stunning electronic circuitry of a computer system is designed by physicists and engineers; the street layouts of most communities are designed by politicians and businessmen; most living rooms are designed by the men and women who choose and arrange the furniture in them; for that matter, most offices are finally designed by the people who work in them and make them their own.⁴²

This view recognized the man-made environment as a product of design, which was itself understood as a universal, commonplace, and often anonymous activity. Within this perspective, the opacity of the design process thus became an important condition to unpack. By extension, the function of the Museum, for Taylor,

is not merely to show the myriad end products of international design activity, but to show the process by which those products come to assume the forms they do. We are concerned not just with what gets designed, or with who designs it professionally, but with the way in which design affects and is affected by the life styles, aspirations, and needs of people. The Museum is to be, in other words, a museum of design process -- a process rooted in the vital interactions of people with nature, technology and historical events.⁴³

With this emphasis on design process rather than product, the museum again raised issues of use and instrumentality.

Rather than instrumentalize history as it once did—to improve contemporary products through exposure to quality historical examples—the museum aimed to instrumentalize everyday spatialized experience for a primarily exegetical and didactic effect. The aim of this was to assist the layperson in becoming aware of and understanding the world of design all around them. A draft of the brochure explained, “Design exhibitions are usually made up of objects or pictures of objects, and some of our exhibitions will surely take that form. But our exhibit policy is interpretive rather than merely presentational. Our aim, as described

⁴² Draft of *Smithsonian Institution: A National Museum of Design*, box 6, Accession 09-068, Taylor, Lisa, 1933-1991, Lisa Taylor Papers, Smithsonian Institution Archives.

⁴³ Draft of *Smithsonian Institution*.

previously, is not to show objects, but to show what the objects mean in human terms—how they were made, how they are used, and how they affect the people who use them.”⁴⁴

Everyday experience was that which could elucidate the invisible, intangible aspects of design, particularly those whose effects occurred in the interrelation of their environmental context. “Design is everywhere and people already see it -- on the streets, in stores, in their own homes and in existing museums. The role of the National Museum is to help them see it differently, to show why things look the way they do, to show how things get designed and how they are used.”⁴⁵ Design for the Cooper Hewitt was simultaneously an all-encompassing condition and one that was profoundly *illegible*. Drawing on the familiarity of everyday experience was one primary strategy to combat that lack of visual legibility resulting from the invisible aspects of design—the design process, and the motivations, use, and meaning that could be derived from it.

The Legibility of Environment: Gaming-Simulation and *Immovable Objects* (1975)

The Cooper Hewitt’s concern with the legibility of environment was an idea that had already been persuasively articulated in both the architecture- and art-theoretical literatures of the 1960s. Kevin Lynch’s seminal 1960 book, *The Image of the City*, refigured the city as a designed environment made up of both its fixed objects as well as its moving parts, including both the living (people) and the non-living (cars, trains, etc). Lynch argued that due to its scale such an environment can never be apprehended as a coherent whole.

One of the most important interactions between an individual and their urban environment, in Lynch’s view, had to do with the city’s *legibility*, or the ease with which one could organize his or her perceptions of the city into a coherent pattern or an “environmental image.”⁴⁶ This image functioned as an interpretive framework not only for movement and navigation, but also more broadly as “an organizer of activity or belief or knowledge.” In constructing this mental map, urban dwellers are aided or hindered by the relative “imageability” of the city—the degree to which its physical and visual characteristics

⁴⁴ Draft of *Smithsonian Institution*.

⁴⁵ Draft of *Smithsonian Institution*.

⁴⁶ Lynch also described this as a “generalized mental picture of the exterior physical world that is held by an individual.” Kevin Lynch, *The Image of the City*, Publications of the Joint Center for Urban Studies (Cambridge [Mass.]: Technology Press, 1960). 4.

lend themselves to the creation of a strong, articulated environmental image.⁴⁷ Concerned with what he viewed as the growing difficulty of urban inhabitants to understand the totality of their urban environment, Lynch's study focused on how environmental images are constructed. He also identified the urban features that best facilitated the formation of such images, thus encouraging a greater degree of legibility.⁴⁸

Gyorgy Kepes, a colleague of Lynch's at MIT who helped him perform the research for *The Image of the City*, extended Lynch's concern with environmental legibility in his "Vision+Value," a series of collected essays published between 1965 and 1972.⁴⁹ Unlike Lynch, who focused on the physical traits of the environment, Kepes explored human perception of the physical world through concepts such as vision, motion, structure, proportion and sign. Kepes was more pointed in his critique of the modern urban environment, highlighting its illegibility and the resulting alienation this caused, citing the "environmental chaos" of pollution and poor living conditions, the "social chaos" resulting from a lack of collective identity, and the "inner chaos" that constituted the psychological effect of such structural conditions.⁵⁰ Kepes elaborated on the last point:

Our contemporary art and literature reveal a menacing picture of contemporary man's inner chaos and self-alienation. We are displaced persons, not only historically and socially but within ourselves. Our feelings are intercepted and inhibited by cold reason; the joy in the richness of the sensual world is stifled by sentimentality; our thoughts are muddled by our emotions. Divided, corner, and discredited within, we are hardly able to mobilize our faculties to cope with problems from without.⁵¹

⁴⁷ Lynch described the act of constructing an environmental image as "a two-way process between the observer and his environment. The environment suggests distinctions and relations, and the observer—with great adaptability and in the light of his own purposes—selects, organizes, and endows with meaning what he sees. The image so developed now limits and emphasizes, while the image itself is being tested against the filtered perceptual input in a constant interacting process. Thus the image of a given reality may vary significantly between different observers." Ibid. 6.

⁴⁸ Lynch posited that environmental images had three components: "identity, structure, and meaning." By "identity" he referred to the function of iconic signification that individual elements (such as buildings or monuments) served in marking nodes in the mental map. "Structure" referred to the spatial or structural pattern of the city that allowed an individual to have an overall schematic of a city, which could then be populated by iconic nodes. The third component, "meaning," was the least well-defined of the three, as it was personal and individual, and the least of the three determined by the environment. Ibid. 8.

⁴⁹ This series grew out of fifteen years of seminars Kepes gave at MIT in which artists, architects and scientists came together to consider problems endemic to all three fields, to share knowledge that would aid in pursuing solutions, and to collaborate on projects. Kepes described this origin in his introduction to Gyorgy Kepes, *Structure in Art and in Science*, Vision+Value Series ;[V. 2] (New York: G. Braziller, 1965). v.

⁵⁰ See Kepes' "Introduction" in *Education of Vision*, vol. 1, Vision+Value Series (New York: G. Braziller, 1965). ii.

⁵¹ Ibid. iii.

It was not only the physical characteristics of the urban environment which caused such alienation, but a world of overly specialized knowledge in which no one person could claim mastery, thus producing “a fragmentation of experience, an explosion of knowledge into many self-contained disciplines, each with a wildly growing and increasingly private language.”⁵²

In a twentieth century condition of mass urbanization, industrialization and intellectual specialization, Kepes argued that the nineteenth century Marxist understanding of the world as defined by relationships between *things* had to be revised in terms of the *environmental*. In this way, our understanding of these foundational relationships would be recast in terms of the invisible processes and systems that shaped and distributed individual objects.⁵³ The “Vision+Values” series’ topics—vision, structure, module, motion, and so on—were, according to Kepes, the categories of analysis allowing for a new form of legibility. This new form was necessary in a world where the truth of the environment was no longer discernible from visual phenomena and culture no longer provided adequate interpretive categories.

For Taylor and the staff of the Cooper Hewitt, the problem of environmental legibility loomed similarly large.⁵⁴ However, rather than Lynch’s “environmental image” or Kepes’ environmental categories, the museum naturally believed that ‘design’ was a key concept for understanding the environment. That is, the museum found that one of the key yet misunderstood characteristics of the man-made environment was precisely that it was *designed*—that is, shaped by intentional individual and collective decisions. To interrogate the environment as designed was thus to inquire after its complex motivating factors as well as its reception and utilization.

In the early 1970s, as the Carnegie mansion was undergoing renovations and the staff operated out of the adjacent townhouse that still constitutes the institution’s primary office space, the museum pursued its agenda of increasing environmental legibility through a series of off-site programs. Two of the museum’s activities in particular help to illustrate the Cooper Hewitt’s conception of design as a clarifying category for environmental illegibility:

⁵² See Kepes’ “Introduction” in *Structure in Art and in Science*. i.

⁵³ “Art and Ecological Consciousness,” in *Arts of the Environment* (New York: G. Braziller, 1972). 11.

⁵⁴ While Taylor’s personal knowledge of Lynch remains unknown, the archival record suggests that she knew Kepes and his work, and conversely that Kepes was familiar with the museum. In 1959, the CUMAD staged a showing of Kepes traveling exhibition “The New Landscape in Art and Science.” In 1974, Taylor asked Kepes to submit a proposal to design its inaugural exhibition.

the series of gaming-simulations it held in 1972-1973 at IBM's New York headquarters, and a site-specific exhibition in lower Manhattan entitled *Immovable Objects* (1975).

Prompted by the survey of professionals a few years prior in which respondents expressed the desire to see the museum host participatory events,⁵⁵ Taylor hired Richard Duke's University of Michigan-based Environmental Simulation Laboratory to run two weekends of games.⁵⁶ The games were essentially large-group role-playing exercises in urban planning, in which participants were assigned to various roles, given a scenario, and asked to play out their decisions and experience the consequences of those decisions.⁵⁷ Choosing from among a larger list of possible games, Taylor and Duke settled on METROPOLIS and CLUG [Fig. 4.07], two of the earliest and most well-developed games.⁵⁸ Groups of players were assigned to play roles such as city administrator, politician, community activist, or speculative developer. They were then provided with a scenario of a developing city, and given guidelines and information for taking certain actions according to their role. As I have written elsewhere,

The point of playing METROPOLIS was not to test out real decisions facing the city it simulated, but rather for players to come away with an appreciation for the complexities of decision-making at the urban scale, including the types of information that come to bear on such decisions, to understand the motivations and values that drive various constituencies, and to realize the value of communication and negotiation.⁵⁹

⁵⁵ It was particularly encouraged by Ronald Beckman, head of the Rhode Island-based REDE (a research and design institute), who Taylor originally considered hiring to run the think tanks, ultimately choosing George Nelson for the job. Responses to Questionnaire, ca. 1970. Box 50, Smithsonian Institution Archives, Record Unit 267, Cooper-Hewitt Museum, Records.

⁵⁶ The games took place on November 17-18, 1972 and January 12-13, 1973. They were held at the IBM headquarters because the games required the use of a computer to model a collection of variables, such as population growth, property value appreciation, etc.

⁵⁷ For a general history and context of urban design-focused gaming-simulations, see Jennifer Light, "Taking Games Seriously," *Technology and Culture* 49, no. 2 (2008). For more extensive descriptions of METROPOLIS and CLUG, see Elizabeth Keslacy, "Fun and Games: The Suppression of Architectural Authority and the Rise of the Reader," *Footprint*, no. 17 (2015).

⁵⁸ METROPOLIS was designed by Richard Duke, while CLUG was authored by Allan Feldt, Professor of Urban and Regional Planning at the University of Michigan, and Duke's collaborator in the Environmental Simulation Laboratory.

⁵⁹ Keslacy. 105.



Figure 4.07 Alan Feldt at the CLUG game board, ca. 1965. Image courtesy of Alan Feldt, <http://www.clug.co/2013-fifty-years-of-simulationgaming.html> (accessed August 24, 2015).

In other words, the games functioned to reveal the urban environment as the product of a complex, invisible process rather than as the vision of a single designer or, an even worse misconception, as *fait accompli*. The museum hoped these games would allow their players to extrapolate sufficient impulses from the game experience to understand their actual urban environment in those new terms. It might even prompt them to take on an activist role, following the revelation of the extent of their own agency in that milieu.

Unfortunately, the intensive nature of the games only permitted a relatively small number of participants. The museum sought to reach a far larger audience with their 1975 exhibition *Immovable Objects*, designed by Los Angeles architect Robert Mangurian in collaboration with curator Dorothy Globus [Fig. 4.08]. Because the museum renovations were not yet complete, the exhibition's subject—Lower Manhattan—was also its site. Occupying various sidewalks, plazas and building lobbies, visitors purchased a newspaper-like catalog available for fifty cents at local newsstands that provided a walking tour itinerary through the various installations [Fig. 4.09]. The exhibition utilized multiple strategies to direct viewers' attention to the buildings, spaces and urban history of Lower Manhattan.⁶⁰ First, the area's architecturally significant buildings were richly described by the catalogue. Secondly, it recounted the history of a block across from the World Trade Center, detailing the successive series of buildings that occupied it as a result of increasingly powerful economic forces. Thirdly, viewers learned about the impact of the bulky Equitable Building on the creation of zoning laws that consequently shaped the city. Finally, the tour took visitors through a block of nineteenth century buildings that managed to evade redevelopment.⁶¹

Ultimately, *Immovable Objects* attempted to transfer the kinds of attention reserved for objects in a museum gallery onto the city itself, asking viewers to take a second look at surroundings that were for most familiar, even banal. The additional historical narrative provided by the catalogue actually narrated the spatial experience of moving through the city, supplementing that journey with information that allowed visitors to reconsider individual

⁶⁰ The exhibition was well documented by a young Paul Goldberger, writing several years before he joined the staff of the New York Times. Paul Goldberger, "Lower Manhattan Makes a Fine Exhibition of Itself," *New York Times* July 14, 1975.

⁶¹ Additionally, the catalogue also included a number of essays on the histories of zoning, the skyscraper, and urban design, among others, for further reading.



Figure 4.08 Poster, *Immovable Objects*, 1975; Designed by Keith Godard and Robert Mangurian; screenprint on paper; Gift of Unknown Donor; 1980-32-1083. From: Cooper Hewitt, Smithsonian Museum of Design, www.cooperhewitt.org (accessed July 31, 2016).

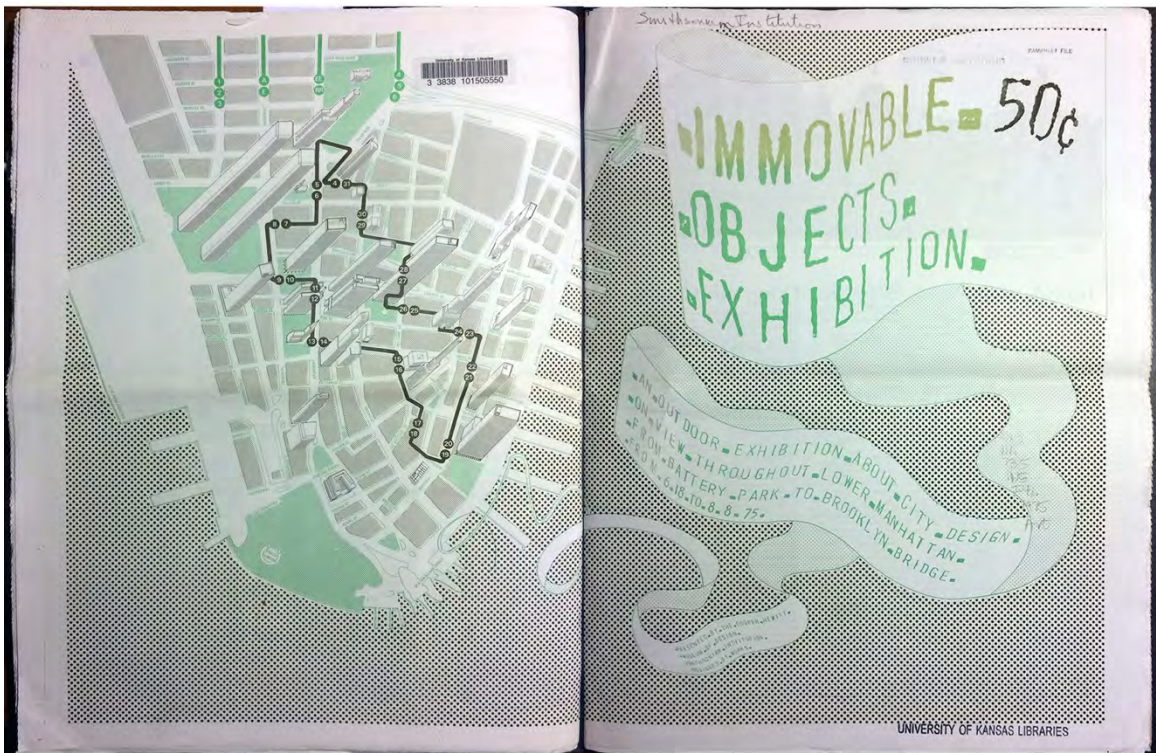


Figure 4.09 Cover, *Immovable Objects Exhibition: An Outdoor Exhibition About City Design on View Throughout Lower Manhattan, from Battery Park to Brooklyn Bridge, from 6-18 to 8-8-75* [Catalog]. New York: Cooper-Hewitt Museum, 1975.

buildings and plazas in terms of the environment they created as an ensemble, and as the result of complex historical, economic and political processes.

Both *Immovable Objects* and the museum's program of urban games decisively turned away from design as *appearance* and instead explored the design *process* as a way of encouraging viewers or consumers to consider both the character of objects, and the forces, decisions, and motivations that influenced their creation. Further, it encouraged viewers to understand design as a network of things that circulate and participate in much larger interdependent systems rather than as isolated or autonomous objects.

A New way to think about Architecture: Environmental Design

As the museum concluded its program of gaming-simulations, it immediately continued to pursue the implications of the environmental lens first raised in the original think tanks. In 1973, Taylor and her staff began to consider in more pragmatic terms what an “environmental” orientation might mean for the museum, and began work to establish a new curatorial Department of Environmental Design. While the CUMAD had collected architecture in the form of prints, drawings, and plaster casts, the Cooper Hewitt sought to treat architecture more expansively through the larger category of environmental design, which also included urban planning, advertising (and other environmental graphics), and infrastructure. As Taylor argued,

The contemporary designer can no longer design a single product without reference to its surroundings and use, but often must take responsibility for the consequences of his work. For this reason we wish to expand the scope and interpretation of our collections in order to draw attention to the whole design process. A **Department of Environmental Design** is needed to encompass design material of all kinds, and to reflect our interest in the problems, the process and the results of design at all levels.⁶²

The Department, alongside a dedicated advisory committee, would be responsible for defining the scope and assembling an Environmental Design Collection.

The adjective ‘environmental’ in this case had a dual meaning: first, it referred to large-scale design: the objects, graphics, buildings or infrastructure that made up the total design

⁶² Letter, Lisa Taylor to Charles Blitzer, Director of the Office of Education and Training, Smithsonian Institution, June 24, 1974. Box 40, Smithsonian Institution Archives, Record Unit 267, Cooper-Hewitt Museum, Records. 5.

of man's environment; secondly, it implicated the natural environment and the threats against it as a result of human action. While these two concerns could be weighted variably, depending on audience and context, the combination had a number of interesting results. First, environmental design served to aestheticize infrastructure, such as highway networks and subway systems. Secondly, it prompted the layperson to see the world around them as designed—as resulting from design intentions and decisions, and chosen from a set of alternatives, rather than as purely pragmatic or *fait accompli*. Finally, it forged a connection between those design decisions and their negative impact in the natural world, such as poor air quality and increased noise pollution.

Many strains of environmentalism developing during the 1960s and 1970s were undoubtedly concerned with environmental degradation, and many pointed to industrialization and urbanization as the primary culprits of such damage. While the museum too shared their concern with the human effects on the natural environment, their choice of an environmental design approach encompassing architecture, infrastructure and urban planning indicated their faith in the capacity of design to solve and ameliorate environmental problems as well as their recognition of its capacity to cause and exacerbate them. Further, it tacitly accepted and even celebrated the man-made environment of the city as a valid human habitat rather than mourning the city as an estrangement from an authentic natural or wilderness setting.

In this way, the museum's approach to environmental design shared a great deal with Reyner Banham's contemporaneous ecological account of Los Angeles. His ground-breaking 1971 book, *Los Angeles: The Architecture of Four Ecologies*, was harshly criticized by many environmentalists for his use of the term 'ecology' to describe a man-made urban condition, as well as by fellow architects and urbanists for his seeming celebration of a city that, to many, exemplified the worst kind of kitsch and sprawl. As Anthony Vidler has argued, Banham produced the first urban history to consider architecture as an ecological phenomenon—that is, as an integral part of a larger ecological system.⁶³ Banham's choice of the term 'ecology' was important, in that it accounted not only for the given natural conditions denoted by the term 'environment', but also included the interaction of its

⁶³ Anthony Vidler, "Los Angeles: City of the Immediate Future," Foreword to the 2000 Edition of *Los Angeles: the architecture of four ecologies*, by Reyner Banham (Berkeley, Calif. ; London: University of California Press, 2009) xxxiii-xxxvi.

organisms (humans) with those conditions, whose activities shaped and in some cases wholly created the resulting physical environment. Banham also understood the cultural norms and practices associated with each ecology to be central to their definition, viewing the city as “produced by an extraordinary mixture of geography, climate, economics, demography, mechanics and culture.”⁶⁴

For example, “Surfurbia” was defined by its natural features, such as the beach, canyons and inlets, by human constructions such as ports, piers, boardwalks, palisades, and oil rigs, and by the cultural responses to the environment, including surfing and the sociality of the boardwalk. Another ecology identified by Banham, “Autopia,” was entirely man-made, consisting of the freeway system, the automobiles that occupied it, the visual experience of its signage, physical sensations of speed, the atmosphere of smog it created, and the particular culture of the road.

Like Banham, the Cooper Hewitt embraced the man-made environment as an ensemble condition created by a multitude of contributors whose activities were understood as design, and comprising objects of various scale and form existing in a web of interdependence held together by human use and meaning-making. Though the museum did not use the term ‘ecology’, their multi-scalar understanding of designed objects was fundamentally ordered by the cultural, social and economic roles those objects played, and by their integration into larger systems and practices. That is to say, the Cooper Hewitt understood environment to account not only for physical objects and conditions, but the human creation of and interaction with those objects.

Although the museum initially considered engaging in more activist forms of environmentalism, both with respect to environmental degradation and towards improving local urban conditions,⁶⁵ and even began to think of itself as “the only museum in the United

⁶⁴ Reyner Banham, *Los Angeles: The Architecture of Four Ecologies* (Berkeley, Calif. ; London: University of California Press, 2009). 6.

⁶⁵ For instance, one proposal drafted for inclusion in the 1970 NYSCA application was an urban environmental design “Feasibility Study.” Mary Donnelly, a member of the museum staff, proposed the study to examine how the museum could “investigate and coordinate the human, material and financial resources available for improving and developing the ‘visual environment’ of our cities.” Towards that end, she outlined a program of identifying and documenting the “eyesores and environmental needs” of New York City, packaging and presenting them to the design community, and exhibiting the design proposals produced in response. Donnelly hoped that a program of interventions could be assembled and distributed statewide. Another 1971 proposal for an Environment Center within the museum was likely written as an appeal for grants made available through the 1970 Environmental Education Act, signed into law by President Nixon, which designed federal

States devoted exclusively to [the] man-made environment,”⁶⁶ environmental design became a category that Taylor felt could be utilized to organize new collections of contemporary materials. The first major step that Taylor took towards the establishment of a curatorial Department of Environmental Design was to begin assembling the Friends of the Environmental Design Department, which would help guide the staff in an advisory capacity and provide financial support for a dedicated curator and its acquisitions.⁶⁷ Towards this end, Taylor asked Emily Stillman, a member of the museum’s Advisory Council, to recruit and assemble the group. Stillman proposed to focus largely on design professionals, educators and critics for membership in the committee, and to create a collection that was both available for exhibition purposes and accessible to scholars. As a primary criterion for their selection, Stillman emphasized that members had to be interested in actively participating in the assembling of a collection “of architectural drawings, models, photographs, film or other media which will illustrate The Changing Landscape as it has evolved through new concepts in architecture, building materials and techniques, use of space, etc.”⁶⁸

Providing the initial intellectual leadership for the shape and aims of the Department of Environmental Design and its collection, Stillman extended Taylor’s interests in design process, the forces that shape design, and the agency that designed objects exert on their users, conceptualizing the Environmental Design collection as one that would focus on the designed nature of the urban environment, and explore its effects.

Through this Collection, we hope to be able to heighten public awareness of design as the most pervasive force in the environment in which society lives, works, and plays. We want to be able to relate change created through man-

funds for the development of environmental curricula. One of the museum’s major responsibilities, it claimed, was to educate its visitors about “the hazards we have come to accept and must now learn to reject in our man-made environment.” The Environment Center would act as a clearinghouse of information and exchange for ecological and environmental problems, and its educational outreach would target schools and local advocacy groups. While neither of these proposals was pursued, the museum continued to investigate the landscape of environmental advocacy by compiling an extensive set of dossiers on a variety of local and state environmental groups. Mary Donnelly, “Feasibility Study Proposal,” ca. 1970. Box 41, Smithsonian Institution Archives, Record Unit 267, Cooper-Hewitt Museum, Records.

⁶⁶ “Untitled (Environment Center Proposal),” ca. 1971. Box 33, Smithsonian Institution Archives, Record Unit 492, Cooper-Hewitt Museum, Office of the Director, Subject Files. 1.

⁶⁷ This group was variously referred to as an Advisory Council, a Committee, and as a Friends group. In contrast to the other Friends groups that were established for the museum’s curatorial departments (decorative arts, drawings and prints, and textiles), by which donors helped the museum with acquisitions and fundraising, the Environmental Design group would also provide intellectual leadership for a department that did not yet have a curator nor any models at other institutions from which to work.

⁶⁸ Emphasis in original. Letter, Emily Stillman to Lisa Taylor, September 12, 1973. Box 42, Smithsonian Institution Archives, Record Unit 267, Cooper-Hewitt Museum, Records.

made technological and design techniques to its impact on the social environment and psyche. Through our programs, we hope to help people see that the towns and homes they grow in, the campuses they live in as students, the places they work in, the cities they journey through, the surroundings in their daily lives is mostly man-made design--the end product of the thinking, skills, talents of many people.⁶⁹

The aim of such an endeavor was ultimately to produce awareness and change in design practices, and to advocate for “a more thoughtful, sane approach to humane design—whether it be through renovation, restoration, or new concepts in land use and total design.”⁷⁰ The museum would not serve solely as a repository, but viewed itself as an agent of change in contemporary design.

Stillman began by compiling an extensive list of possible committee members, and she sought recommendations from experts and friends of the institution, most notably the Yale architectural historian Vincent Scully. By 1975, Stillman and Taylor had assembled a group of over forty people into the Friends of the Environmental Design Collection, and divided them into subcommittees on architecture, interior design, environmental design, popular culture, and exhibits and communication.⁷¹ It was a diverse group that included architects, urban planners, interior designers, educators and scholars, as well as the heads of government agencies related to these fields and the editors of important trade magazines. Participants included Vincent Scully, Denise Scott Brown, Edward Larrabee Barnes, Paul Rudolph, C. Ray Smith, Lawrence Halperin, and August Heckescher, to name a few.⁷²

⁶⁹ Emily Stillman, “Collection of Environmental Design, or documenting ‘the changing man-made landscape,’” ca. 1974. Box 42, Smithsonian Institution Archives, Record Unit 267, Cooper-Hewitt Museum, Records. 1-2.

⁷⁰ *Ibid.* 2.

⁷¹ “Friends of the Environmental Design Collections,” ca. 1975. Box 33, Smithsonian Institution Archives, Record Unit 492, Cooper-Hewitt Museum, Office of the Director, Subject Files.

⁷² Archival evidence suggests that the committee met in person only once: on May 8, 1974, for what was by all accounts an unproductive disaster. Having received in advance only the two-page document describing the aims of the collection in general and speculative terms written by Stillman, attendees were unclear as to what was expected of them. Indeed, the majority of the meeting was spent educating the committee members about the history of the museum and the relative strengths of its historical collections. The conversation reopened questions that had long been settled internally by museum staff, such as whether the museum should retain its historical collections at all. The meeting ended after Taylor and Stillman distributed a questionnaire, responses to which participants were asked to submit by mail. The archival record falls silent after 1975, and to my knowledge the Cooper-Hewitt did not ultimately establish Environmental Design as a curatorial department. “Minutes and Comments on the Meeting of the Environmental Design Committee of the Cooper-Hewitt Museum held at CUNY, May 8, 1964 (sic) at 2 p.m.” ca. 1974. Box 33, Smithsonian Institution Archives, Record Unit 492, Cooper-Hewitt Museum, Office of the Director, Subject Files.

At an initial meeting of the Friends group, participants were asked to respond to a questionnaire in order to elicit a deeper understanding of what the environmental design paradigm might mean for the institution. The responses to the questionnaire are illuminating and appear to have influenced the trajectory of the museum's inaugural exhibition. Denise Scott Brown's response emphasized the nature of 'environmental design' as an interpretive category overlaid onto existing object types rather than one that designated an entirely new class of objects. Environmental design referred to "almost anything from doorknobs to the structure of cities," and it collected together "parts of the environment which do not fit easily into High Art definitions of architecture, interior design, decorative design painting, sculpture, etc."—referring to objects and buildings that were excluded from those categories by virtue of their association with popular culture, unfashionable styles, or the everyday.⁷³

Other respondents proposed narrowing the scope of an environmental design collection based on objects' roles in everyday life, particularly within the domestic interior, as a way of bridging the historical collections with contemporary interests. For interior designer Jack Lowery, a successful environmental design collection would include "the design objects and plans that have been created, or that have 'happened'; that, through their physical presence, shape and influence the quality of our life today."⁷⁴ Interior designer Louis Tregre and architect Peter Blake emphasized the human habitat as a unifying structure for objects, architecture and space, one that allowed specialists and laypeople alike to access and understand design from the perspective of shared experience.

These suggestions, which took on a great deal of resonance in the institution, suggested two primary museological shifts: First, while the same object types collected under the auspices of the decorative arts were included under the new lens of environmental design, the conception of the nature of those objects radically changed. The objects of interest were no longer rare, expensive examples of high design, admired for their beauty, materiality and workmanship as a representation of elite culture. Rather, the category of environmental design privileged ubiquitous, everyday, commonplace objects and spaces, which, by virtue of their visual quietness or pervasive presence, structured their own use and effected human

⁷³ Letter, Denise Scott Brown to Lisa Taylor, July 19, 1974. Box 33, Smithsonian Institution Archives, Record Unit 492, Cooper-Hewitt Museum, Office of the Director, Subject Files.

⁷⁴ Letter, Jack Lowery to Lisa Taylor, July 22, 1974. Box 33, Smithsonian Institution Archives, Record Unit 492, Cooper-Hewitt Museum, Office of the Director, Subject Files.

experience and behavior inconspicuously. Secondly, the museological narratives that the CUMAD relied upon to give the historical collections meaning—art historical narratives of stylistic development, didactic narratives of connoisseurship and taste, and antiquarian narratives of technical or material development—were jettisoned in favor of the everyday experiences of the domestic environment as a structure of access and understanding. Central to this new approach was the *ensemble* nature of the domestic environment, in which individual objects were structured by their context and the everyday practices of that context, and took on meaning within a network of human use and engagement.

Exhibition as Self-Definition: The Cooper-Hewitt plans its inaugural exhibition

With the Carnegie Mansion renovations underway, Taylor and her staff began to imagine the long-awaited opening exhibition that would inaugurate the museum in its new permanent home. This would be a key avenue by which they would elaborate and enact their new identity. In internal discussions, the ideas generated by the think tanks were developed and nuanced in preparation for their first major public presentation. In particular, the interest in design process and environmental design was distilled into an agenda aiming to explore design as ubiquitous, universal, and agentic. It sought to expand earlier definitions of design to include new types and scales of objects and activities, to reframe design as a common faculty and activity rather than a specialist or professional enterprise, and to explore how design shapes and is shaped by everyday life and experience. As the museum sought to appeal to a broad audience of non-specialists, the imagined exhibition took on a particularly populist cast in an effort to enroll new constituencies into the sphere of design.

Towards this end, the identity of the designer was refigured to include more than just professionals, and the design process was radically expanded beyond the designer's activities to encompass the needs and desires that motivate design as well as the use and effects of designed objects:

People, not products, are at the center of the design process, for people design, people use design, people affect and are affected by design. We want to show that design reflects the efforts of many kinds of people, most of

whom do not consider themselves designers. More importantly, we want to show how design affects and is affected by almost everybody.⁷⁵

The particular interest in design process as centered on design's motivating factors led the curatorial staff to emphasize paradigmatic situations of everyday life that transcended time, place, and cultural difference:

The Museum is interested in design as the result/product of Man's needs, both real and imagined. All men have the same basic needs – for food, clothing, and shelter – to defend themselves and to travel from one point to another – to communicate, record and measure – as well as the need for play, ritual, dreams and embellishment. The Museum is interested in the myriad of designs in different times, places and societies generated by these needs and in how they have been influenced by natural, technological, cultural and other forces. It is interested (concerned) not only with the artifacts and systems but with how they have assumed their forms and particularly with how they affect and are affected by the lifestyles and aspirations of people both on an individual and on a community level. Above all the Museum is interested in exploring the possibilities of Man's creating an environment that is humane and in harmony with nature.⁷⁶

The use of paradigmatic situations from everyday life, such as eating, sleeping or socializing, would serve as a useful structure by which myriad objects—whether historical or contemporary, foreign or familiar—could be accessed and understood by the non-specialist. This approach allowed the museum to celebrate the variety, complexity and specificity of design responses across time and space while simultaneously claiming the layperson as an integral part of the process.⁷⁷

Indeed, the design critic Ralph Caplan, a valued mentor and advisor to Lisa Taylor, suggested “Beyond the Designer” as a possible framing for the inaugural exhibition as a way to help the museum's audiences to recognize and claim their own identities as designers and demand greater control over design in their daily lives.⁷⁸ Caplan's perspective, well-

⁷⁵ "The Design Process: Opening Exhibition of the National Museum of Design, Smithsonian Institution," (Smithsonian Institution Archives, Record Unit 531, Cooper-Hewitt Museum, Department of Exhibitions, Exhibition Records, ca. 1973).

⁷⁶ Dorothy Globus, "Untitled Notes," (Smithsonian Institution Archives, Record Unit 531, Cooper-Hewitt Museum, Department of Exhibitions, Exhibition Records, ca. 1973).

⁷⁷ "The point is to show that design is the result of the effort, lifestyle, aspirations and needs of a great many people, most of whom are not architects, industrial designers, graphic designers or city planners." "The Design Process: Opening Exhibition of the National Museum of Design, Smithsonian Institution."

⁷⁸ Ralph Caplan, "Beyond the Designer: A Preliminary Outline for the Opening Exhibit at the National Museum of Design," (Smithsonian Institution Archives, Record Unit 531, Cooper-Hewitt Museum, Department of Exhibitions, Exhibition Records, ca. 1973).

documented in his published design criticism, influenced the shaping of both the exhibition and the museum in a variety of ways. In an unpublished essay entitled “What to do when the designer comes,” Caplan emphasized design’s concerns with *things*, systems of things, and “how people make and use them.”⁷⁹ He attempted to domesticate design by likening it to commonly performed activities. “The odds are that every day you are involved in a number of design decisions --- deciding when to get a haircut, setting a dinner table, arranging a conference room --- that are so personal or so routine as not to seem like design decisions at all.”⁸⁰ Caplan also included the design of social interactions in this category of non-physical design.

In another essay entitled “The Design of Possibilities,” written for the exhibition’s catalogue, Caplan refocused design away from individual objects to their ensemble in context—“the circumstances in which things are used.”⁸¹ First discussed by Edgar Kaufmann, Jr. as “situation design,” Caplan preferred Ettore Sottsass’ notion of the “design of possibilities” as a way to utilize a known and familiar design process to create real changes in social interaction and lifestyle. Pointing to novelists, marriage brokers, comedians, coaches, educators and therapists, Caplan encouraged designers to learn from other professions whose work was centered around the design of situations that were meant to both satisfy needs and open up new possibilities.

Some of those needs and aspirations are downright prosaic, as are some of the designs that help satisfy them. But we ought not to disparage the means just because it can achieve ends that are not lofty. The same process that shapes our useful objects—cameras, buildings, furniture, bicycles, knives and forks—can be a tool for shaping how we live with them and with each other.⁸²

⁷⁹ Caplan worked to define ‘design’ for a non-specialist audience in this essay, which was specifically written for members of the Federal government who might have occasion to commission or oversee a design project. Caplan wrote this essay for the Second Federal Design Assembly, sponsored by the *Federal Council on the Arts and the Humanities*, which took place in 1974. For some reason, it was not included in the Assembly’s proceedings, which was published as a double issue of *Design Quarterly*, no. 94/95. It is clear from the archive that he passed this essay on to Taylor as a source of ideas for the inaugural exhibition. Ralph Caplan, “What to do when the designer comes,” ca. 1974. Box 9, Folder 9, Smithsonian Institution Archives, Record Unit 287, Cooper-Hewitt Museum, Dept. of Exhibitions, Exhibition Records. 9.

⁸⁰ *Ibid.* 15.

⁸¹ It is clear that Caplan was involved to some extent in the discussions around the inaugural exhibition, yet this essay was, for reasons unknown, not included in the printed exhibition catalogue, but rather later published in Caplan’s 1982 book, *By Design* Ralph Caplan, *By Design: Why There Are No Locks on the Bathroom Doors in the Hotel Louis XIV, and Other Object Lessons* (New York, N.Y.: St. Martin’s Press, 1982). 135.

⁸² *Ibid.* 182.

Suggesting that “some situations can be redesigned only through objects and visa versa,” Caplan emphasized the reciprocal and interdependent nature of human needs, desires, practices, and the objects and spaces used to facilitate and satisfy them.

A second contemporaneous design theorist, Victor Papanek, also influenced the early identity of the Cooper Hewitt. His elaboration and legitimization of lay forms of design activity particularly influenced the notions of design expressed in the inaugural exhibition. Defining design as simply “the conscious and intuitive effort to impose meaningful order,” Papanek contrasted the approach of trained designers, marked by intellectualization, research and analysis, with that of the layperson, who engaged in design through intuitive processes.⁸³

All men are designers. All that we do, almost all the time, is design, for design is basic to all human activity. The planning and patterning of any act toward a desired, foreseeable end constitutes the design process. Any attempt to separate design, to make it a thing-by-itself, works counter to the fact that design is the primary underlying matrix of life. Design is composing an epic poem, executing a mural, painting a masterpiece, writing a concerto. But design is also cleaning and reorganizing a desk drawer, pulling an impacted tooth, baking an apple pie, choosing sides for a backlot baseball game, and educating a child.⁸⁴

While professional designers might be concerned with the shape and functioning of objects, design could also describe everyday activities and the choices they engendered, which similarly relied upon the human intellect’s design faculty to solve problems.

In addition to his expansion of ‘design’ to everyday activities, Papanek elaborated two other important ideas: firstly, that the narrow criteria of function had to be eschewed in favor of design’s polymorphous possibilities, and secondly, that designed objects were agentic and had the power to affect daily life and its practices. Unlike earlier notions of “good design” that required evaluatory judgments as to an object’s relative aesthetic or functional merits, Papanek celebrated design as a process that elicited “an infinite number of right answers, some ‘righter’ and some ‘wronger’.”⁸⁵ He did so by radically expanding the

⁸³ Papanek’s widely read book, *Design for the Real World*, was first published in 1971 and it appeared on a reading list for the museum staff working on the exhibition. Victor J. Papanek, *Design for the Real World: Human Ecology and Social Change* (Chicago, Ill.: Academy Chicago, 2009). 4.

⁸⁴Ibid. 3.

⁸⁵ The wide variety of possible responses, and the difficulty of simple positive or negative evaluation had to do with what Papanek called “the functional complex” that broke down six ways that objects could be said to function. Rejecting the “form follows function” dictum that was so influential for designers of many stripes, he instead proposed a more complex notion of “function” that included not only the issues of use and aesthetics, but also considerations of production and material, an object’s ability to engage with individual and cultural

notion of function to include not only narrow use criteria, but aesthetic and cultural considerations as well. In this way he moved from “function” to a “functional complex” concerned not only with a design’s motivations and determinants, but also its effects. “The ongoing dimensions of what we design, make, and use lie in the consequences. All of our tools, objects, artifacts, transportation devices, or buildings have consequences that reach out into such diverse areas as politics, health, income, and the biosphere.”⁸⁶

Drawing upon and distilling ideas from Caplan, Papanek and others, Taylor tentatively titled the exhibition “Design has Consequences,” and articulated three primary concepts that it was to convey: “Design is everywhere,” “Design is the work of everyone,” and that “Design has consequences.”⁸⁷ The exhibition thus aimed to recast the rarified, whether it be historically rarified decorative art or materially/culturally rarified high design, as ubiquitous and commonplace. It refigured daily activities as design decisions, and the layperson who enacted them as a designer. In this way design was posited as both a universal activity, and one that nevertheless produced infinite variety and complexity. The activity and its results were determined at least in part by the many and varied considerations and conditions that design responded to and accounted for. Finally, the exhibition sought to demonstrate the agency of design—that is how designed objects facilitated beliefs and practices, both for individuals and larger socio-cultural groups.

In the course of creating the opening exhibition, Taylor and her staff also interrogated the exhibition format, the media it would utilize, and the experience it would offer visitors. They conceived of the show as philosophical but not academic, avoiding didacticism by presenting ideas “interstitially,” and utilizing participatory forms of engagement to allow viewers to read between the lines.⁸⁸ The exhibition was to communicate visually and sensorially, but not verbally—Taylor was explicit about her desire for walls free of interpretive text. Eschewing the primary channel by which museums typically narrated their

associations, a design’s ability to solve larger scale needs, as well as an object’s timeliness or the degree to which a design was adapted to the norms and customs of a particular time and place. Ibid. 5-6.

⁸⁶ Ibid. 24.

⁸⁷ "Theme Statement for Opening Exhibition: Exhibition 'Design Has Consequences'," (Smithsonian Institution Archives, Record Unit 531, Cooper-Hewitt Museum, Department of Exhibitions, Exhibition Records, ca. 1973).

⁸⁸ They envisioned a show that operated both emotionally and intellectually, a show that would communicate ideas about design at multiple levels, making some concepts available both for the casual visitor and others for the visitor who would spend more time and attention. "The Design Process: Opening Exhibition of the National Museum of Design, Smithsonian Institution."

exhibitions, the Cooper Hewitt instead appealed to everyday *spatial experience* as the main structure of reception. This meant visitors would draw upon their own embodied experiences of paradigmatic situations such as eating or dressing as a common denominator for the interpretation of design.

Indeed, Taylor sought to explicitly downplay the historical specificity of the collections. While one advisor proposed that the exhibition not lose sight the value and meaning of historical objects, even while it focused on design process, Taylor determined that in order to be universalizing the exhibition must frame displayed objects as generic, common, duplicable things.⁸⁹ For example, she instructed the staff to “discuss seating as opposed to a 17c. Conn. chair.”⁹⁰ In negating historical specificity, the museum instead approached design in terms of the basic needs that prompted it and which it satisfied, needs that were to a great extent geographically and temporally omnipresent and which served to unify fairly disparate objects. It was imagined that museum visitors could in this way transcend chronology and topology through their participation in shared experiences, making the anachronistic and the anatomic appear newly contemporary and domestic. Variations in the design of familiar objects, such as chairs or vessels, are thus accounted for by the variations in practices of the paradigmatic situations to which they belong, rather than by art-historical categories of style.

A Search for Collaborators: Proposing the opening show

In the search for possible collaborators for the inaugural show, Lisa Taylor and curator Dorothy Globus were expansive and exhaustive in their search for designers and thinkers. The candidates were drawn from both domestic and foreign talent, and included seasoned

⁸⁹ This decision had both a conceptual and a pragmatic impetus. From the start, Taylor rejected a ‘greatest hits’ approach that would have presented a selection of objects from the museum’s collections. Because the bulk of the collections were packed away in off-site storage during the Carnegie Mansion’s renovation and were not planned to be moved into the permanent on-site storage until after the exhibition was installed, it could not utilize them to any large degree. Further, as the newest member of the Smithsonian Institution, Taylor sought to strengthen institutional ties and advertise that association by borrowing widely from other Smithsonian museums. From an ideological perspective, the opening exhibition was meant to articulate a new direction for the Cooper-Hewitt, not only philosophically but also in terms of collecting. Desiring to depart from the relatively narrow band of periods, regions and object types to which the CUMAD historically restricted its acquisitions, the use of new forms of media and the inclusion of more recent and non-decorative arts object types helped to set the tone for its future collecting activities.

⁹⁰ "Design Show Notes December 2, 1973," (Smithsonian Institution Archives, Record Unit 531, Cooper-Hewitt Museum, Department of Exhibitions, Exhibition Records).

professionals, innovators and novices.⁹¹ Narrowing the field, Taylor requested six full proposals. These requests were made to designers Charles and Ray Eames, to the artist, educator and design theorist György Kepes, to the Philadelphia architects Venturi and Rauch, to designer George Nelson, to Austrian architect Hans Hollein, and to the Philadelphia-based architecture and planning firm of Murphy, Levy and Wurman. Kepes and the Eames ultimately declined to submit a proposal, on the basis of other commitments. Kepes had won the Rome Prize in 1975, and the Eameses had committed to the American Revolution Bicentennial Administration to design and produce *The World of Franklin & Jefferson*, a large exhibition celebrating the United States bicentennial that traveled throughout Europe and the United States in 1975-76. Venturi, Nelson, Hollein and Wurman submitted proposals in 1974-75 after receiving preliminary documentation describing the Museum's aims for the exhibition (described in the previous section).⁹² While the proposals differed in method and content, they were unified by concerns with everyday experience, the environmental scale, invisible and intangible aspects of design, and the design agency of the layperson.

Richard Saul Wurman and Joel Katz, submitting for Murphy, Levy, and Wurman, proposed a show that read design entirely through the notion of *performance*. Concerned with both the performativity of objects in use as well as the commonality of performing design activities, Wurman and Katz were eager to highlight systemic aspects of design that were normally hidden from view. In contrast to 'styling', which they understood as the practice of re-skinning obsolete or inefficient objects in new surfaces, truly *designed* objects in their view answered real needs by facilitating a functional performance—something that cannot be seen, only experienced.

⁹¹ Among those they considered were the graphic designers Paul Rand, Ivan Chermayeff, Herb Lubalin, Saul Bass, Lou Dorfsman, Keith Goddard, Sam Antiupit, Lance Wyman, and Milton Glaser, artists Jean-Michel Folon, Peter Blake, and Varujan Boghosian, furniture designers Douglas Deeds and Nicos Zographos, industrial designer Arthur Pulos, architects James Polshek, Cedric Price, Eduardo Terrazas, Hugh Hardy, Rem Koolhaas, Robert Mangurian and Craig Hodgetts, the Cambridge Seven, Herman Hertzberger, Kisho Kurokawa, Archigram, and Ant Farm, planners Oscar Newman and Constantinos Doxiadis, planning scholar and creator of gaming simulations Richard Duke, *Domus* editor Lisa Ponti, writer and "futurist" Alvin Toffler, historian of scientific instruments Silvio Bedini, anthropologist Margaret Mead, *New Yorker* cartoonist James Stevenson, novelist Louis Auchincloss, political scientist Jivan Tabibian, and even actor Rip Torn.

⁹² Unfortunately, I have not been able to locate the text of Nelson's proposal in any of the archives that I have consulted.

Wurman and Katz bemoaned the inability of the public in general and clients in particular to clearly articulate the performance they required from the objects they commissioned, purchased and utilized. They therefore proposed an exhibition that would instruct and empower visitors to actively contribute to the design process. Described as “simultaneously fable, workbook and primer,” the exhibition began with the conceit of a fairy tale recounting the story of a far-off land where the King empowered his people as designers, celebrating the agency and self-knowledge with which the people were thus gifted.⁹³ Through a visual strategy combining image and word, Wurman and Katz envisioned an exhibition that would provide the layperson with the language and imagery to “fantasiz[e] a better-performing future.”⁹⁴ The exhibition catalog sought to translate fiction into reality by prompting visitors to think more deeply about the sorts of designed objects that could improve their lives materially and emotionally. This was ultimately aimed at prodding them to take not only the opportunity but also the responsibility to participate in the shaping of their environment through design.

Denise Scott Brown, writing for Venturi and Rauch, addressed design primarily at the scale of architecture and the city. She framed the office’s proposal around the general concept of environment, seeking to expose the connections between individual decisions and their physical consequences. Tentatively entitled “The Design of the Environment,” the proposal outlined specifically programmed rooms devoted to defining basic design concepts such as the “determinants of designed form” and the “everyday environment.”

Scott Brown proposed to utilize experiential and mass-media forms of installation, including films, photographic collages, rooms staged with objects, and even operable installations. One proposed room was to be installed with mechanically movable walls and ceilings that allowed visitors to shape space in real time. Another installation would be made up of an urban-scale model that could be manipulated to show the effects of various zoning and building regulations, such as setbacks or the requirement of pitched roofs. A third installation compared American “everyday environments” such as the suburban commercial strip and residential subdivision with their European and Asian counterparts. These allowed

⁹³ Richard Saul Wurman and Joel Katz, "Untitled Exhibition Proposal," (Smithsonian Institution Archives, Record Unit 531, Cooper-Hewitt Museum, Department of Exhibitions, Exhibition Records, September 13, 1974). 3.

⁹⁴ Ibid.

visitors to not only visualize the results of possible future decisions that they might make themselves, but also to understand the built environment of the city as resulting from past decisions. In other words, by collapsing cause and effect into one experience, the exhibition would make visible what was normally invisible as a way of increasing environmental legibility.

In response to the museum's prompt, Hans Hollein submitted a series of proposals that demonstrated the greatest degree of intellectual alignment with Taylor's aims and gradually offered specific installation ideas.⁹⁵ Hollein's proposal also centered on human environments, but instead of the macro-environment of the city, Hollein focused on the micro-environments of everyday activities. Starting from the paradigmatic situations of daily life, Hollein built the exhibition up using the objects and spaces from which the basic units of human habitation are formed.

Reflecting the museum's thesis of design as a universal activity, Hollein described the design impulse as a primitive and basic human faculty, and one that was exercised in a wide array of activities. Earlier architectural theorists such as Vitruvius and the Abbé Laugier had utilized the conceit of the primitive hut to theorize architectural production. Echoing these ideas, Hollein conjured the specter of a primitive man creating a clearing in the woods as enacting the first design decisions, by creating space and by exerting agency in the natural environment. While classical architectural theory utilizes the physical characteristics of the imagined primitive hut to determine the bounds of architectural propriety, Hollein draws parallels between primitive man's and contemporary man's activities—whether or not they result in space-shaping and form-building—to expand the notion of design. Following from this primal condition, Hollein thus defined design broadly, not just as those acts of creating objects such as clothing, buildings or cities, but also as activities that would be considered performances, such as cooking, singing or having sex.

Design is therefore understood by Hollein as a manifestation of value inherent to the satisfaction of a particular need or desire. In this way, the primitive is not evoked as originary

⁹⁵ Hollein's first proposal, submitted on June 17, 1974, followed on the heels of a meeting between Hollein and Taylor that took place earlier that year in Vienna. Hollein submitted a revised proposal a month later, on July 24, 1974, and a third on September 15, 1974, which was the version discussed and evaluated by Taylor in conversation with the representative of the show's sponsor, New York gallerist Lee Nordness on behalf of Sam Johnson of the Racine-based S. C. Johnson Wax.

and distant from contemporary experience, but rather as contiguous and persistent. It becomes a means of recuperating the presence and relevance of the past—indeed, its contemporaneity—by recognizing the fundamental continuity inherent to the basic practices of human everyday life.⁹⁶

Following Taylor's request to avoid interpretive text, Hollein outlined a structure for the exhibition that drew upon its audience's familiarity with paradigmatic situations of everyday life as an interpretive lens to guide its reception. These included such situations as eating and sitting, common types of furniture and tools, and universal rituals such as those surrounding birth and death—what Hollein described as “timeless,”⁹⁷ “basic even atavistic behavior.”⁹⁸ “This show will be a show on life and situations of life, and as it is not a book but a show which can and has to be experienced.”⁹⁹ Hollein envisioned an exhibition that communicated through the experiences of object, image and space, both visually and haptically, intellectually and affectively, to circumvent the need for traditional forms of narration. Drawing on his earlier exhibition design experience, including a furniture exhibition in the Austrian Pavilion at the 1968 Milan Triennale, contributions to the 1972 Venice Biennale, and graphic work for the 1972 Munich Olympics, Hollein proposed utilizing similar design strategies, such as de-familiarizing common objects and situations, emphasizing direct experience by engaging multiple senses, and utilizing interrelated yet autonomous units of installation that could be experienced in any order.

In evaluating the proposals, Taylor considered a number of issues in conjunction with museum staff and Lee Nordness, representative of the exhibition sponsor.¹⁰⁰ They were not

⁹⁶ As such, Hollein explicitly eschewed historical narratives of development. “This exhibition should not be a didactic one, it should not be a history of design, nor should it try to show man's development in the mirror of design products.” Hans Hollein, “General Concept for an Exhibition “Design”,” (Smithsonian Institution Archives, Record Unit 492, Cooper-Hewitt Museum, Office of the Director, Subject Files, June 17, 1974). 4.

⁹⁷ “Further Development of a Proposal for an Exhibition “Design” for the National Museum of Design, New York,” (Smithsonian Institution Archives, Record Unit 492, Cooper-Hewitt Museum, Office of the Director, Subject Files, September 15, 1974). 3.

⁹⁸ “Proposal for an Exhibition on “Design”,” (Smithsonian Institution Archives, Record Unit 492, Cooper-Hewitt Museum, Office of the Director, Subject Files, July 24, 1974). 1.

⁹⁹ “General Concept for an Exhibition “Design”.”

¹⁰⁰ How Sam Johnson of S.C. Johnson Wax came to sponsor MANtransFORMS is an interesting account, though not one directly pertinent to the theoretical inquiry of this dissertation. The Johnsons were brought into the Cooper Hewitt's orbit by Lee Nordness, a New York City-based gallerist specializing in contemporary painting, sculpture, and crafts, who became the Johnson family's advisor on art and arts-related charitable giving.

Nordness' intellectual project was the popularization of fine arts, seeking to both broaden its audiences and markets as well as to correct what he viewed as the overly narrow interests of the museum establishment.

Best known for two landmark exhibitions, ART:USA:Now (1962) and OBJECTS:USA (1969), Nordness' first excursions beyond art dealership were his 1958 and 1959 public exhibitions of contemporary art at Madison Square Garden and the New York Coliseum. These were designed "to introduce Mr. Citizen to Mr. Fine Artist in the hope of making them everlasting friends." Lee Nordness, *Art: USA: 59: A Force, a Language, a Frontier* (New York: American Art Expositions, 1959). 8.

In 1962, Nordness was hired by Herbert Fiske Johnson, of the Racine, Wisconsin-based corporation S.C. Johnson & Son, to curate and purchase a collection of contemporary American art. Nordness was invited by Mrs. H.F. Johnson, a contemporary art enthusiast, to speak at The Johnson Foundation, the charitable arm of S.C. Johnson. There, he presented his current project, a survey of contemporary American art commissioned by the Swiss publisher Alice Bucher. Gaining the support of Samuel C. Johnson, Jr., the Johnsons' son and company chief from 1967 onwards, Nordness convinced the Johnsons to invest in "the American artist" as a part of the company's public responsibility program. With their funding, Nordness assembled 102 paintings by living American artists into an exhibition that toured widely, sharing "American creative wealth" both domestically and abroad. Lee Nordness and Allen Stuart Weller, *Art, USA, Now* (Lucerne, Switzerland: C.J. Bucher, 1962). 5-6.

In his selection of works, Nordness sought to broaden the narrow focus of museums and influential critics, whose attention to Abstract Expressionism tended to exclude artworks painted in representational or realist idioms, thereby distorting the public's view of American art production. Upon its return, the collection was donated to the Smithsonian National Museum of Art with the exception of only two paintings. Viewing the project as a success, Johnson was receptive a few years later when Nordness proposed to repeat it, focusing on American craft. Collaborating with Paul J. Smith of the Museum of Contemporary Crafts in New York, Nordness toured the country, ultimately purchasing some 300 objects in diverse media such as enamel, ceramics, jewelry, glass, wood, and fiber. These objects formed the basis of OBJECTS:USA, which traveled to over twenty venues in the United States, and ten throughout Europe. One of Nordness' primary concerns here was dismantling the arbitrary division of crafts and fine arts, which in his view ghettoized certain media (wood, metal, glass, etc) outside the realm of aesthetic contemplation and as a corollary, outside contemporary art collecting. Defining crafts as objects that had been made from start to finish by a single person as dictated by their own the taste and "spiritual satisfaction," Nordness rejected functionalism as a criteria that distinguished craft from art. Lee Nordness, *Objects: USA, A Studio Book* (New York: Viking Press, 1970). 7.

Instead, he argued that craft was also motivated by conceptual aims, its products capable of being "apprehended intellectually." This was a relatively recent development, created in large part by the embracing of craft by university art programs, recently enlarged to accommodate the influx of veterans benefiting from the G.I. Bill. Indeed, this was a departure from Nordness' own views of less than a decade prior. The essay included in the *ART:USA:59* catalog written by Just Lunning emphasized the intelligence of the craftsman's hands as they physically worked with raw materials, imbuing his products with a humanism that "bring people into communion" with their fellow man. Nordness' later views would maintain the importance of the craftsman's physical act of making, but this would be tempered by an emphasis on his intellectual labor. *Art: USA: 59: A Force, a Language, a Frontier*. 77.

In his 2011 essay "Gatherings: Creating the Studio Craft Movement," Glenn Adamson argued that the ideal of the working craftsman that emerged in the 1950s was that of the *designer-craftsman*. See Glenn Adamson, "Gatherings: Creating the Studio Craft Movement," ed. Jeannine J. Falino, Jennifer Scanlan, and Glenn Adamson, *Crafting modernism: midcentury American art and design* (New York: Abrams, 2011). 42. The designer-craftsman created prototypes for industrial reproduction in a mode of working some described as "pure research." While some in the craft community rejected this ideal in favor of a view of craft as personal expression, Nordness put forward a third view that was modeled after the fine artist in terms of the craftsman's economic and stylistic independence. However, design as a constitutive activity of the craftsman remained.

Acknowledging the work of industrial designers and production designers—the craftsman who designs objects to be produced by a workshop of artisans—Nordness upheld both the ideal of the studio object maker, and the artist who works alone. However, the craftsman differed from the fine artist in one important respect: his concern with *design*. Design as a category of endeavor was not well regarded in the art world. "Painters and sculptors speak of composition and form; *design* connotes a surface or shallow expression: in other words, decoration." Nordness, *Objects:USA*, 19.

In contrast, Nordness suggested that design was better understood as the ideation of the work, the conceptual planning that takes place prior to its fabrication. It was then indeed something that developed or changed in the process of making, the transformative action taking place between hand and material. Quoting the Cranbrook-educated sculptor Fred Meyer, Nordness elaborated: "...its definition has now evolved so that

‘design is that which remains which a given piece of craft or art work after the technical aspects of the craftsmanship have been exempted. Design, as creativity, is the soul of the piece... Design must therefore be defined as a religious or philosophical matter.’” Design as a form of conceptual labor was joined with the physical intelligence of the craftsman in conversation with his tools and materials, together producing what Nordness termed a “haptic happening.”

The *OBJECTS:USA* exhibition proved to be a popular, if not critical, success, and brought Lee Nordness into initial contact with the Cooper Hewitt and Lisa Taylor.. Perhaps introduced by Milton Sunday, a textile curator at the Cooper Hewitt who assisted Nordness with the textile entries for the *OBJECTS:USA* catalogue, Nordness first met Taylor to discuss the possibility of showing *OBJECTS:USA* at the Cooper-Hewitt in 1970. Planned for 1972, the show was canceled in late 1971 due to delays with the Carnegie Mansion renovations. However, during these initial conversations Nordness became aware of the museum’s nascent inaugural exhibition, and the museum’s need for a sponsor. *OBJECTS:USA* was by this time complete and the majority of its tour venues were set; Nordness was in the market for a new project, and an exhibition about design seemed to be a logical development in his trajectory from the fine arts to crafts.

The initial volley—a proposal entitled “An Art Program for S.C. Johnson and Son, Inc”—was submitted to the Johnsons in July 1971, and framed the importance of design as a subject worthy of investment in terms of the increasing urbanization and growing role of technology in everyday life. Design—good design, as curated by the museum—could impart a conscience to technology and unify unruly urban plans, and the proposed exhibition would situate the best of contemporary design within the lessons of the past, drawing on its collections documenting 3,000 years of the man-made environment. Drawing on the model employed in *ART:USA:NOW* and *OBJECTS:USA*, Nordness proposed that S.C. Johnson purchase a collection of contemporary design that would be exhibited and ultimately donated to the Cooper Hewitt at a cost of \$300,000-400,000, which was also to cover the design and installation of the exhibition.

Gaining no immediate response, Nordness pitched the benefits of involvement from other angles. First, he suggested that a design exhibition was a logical extension of their previous exhibition projects, offering even wider appeal and greater relevance via the intellectual and economic accessibility of its constituent objects. Nordness continued to describe potential sponsorship investment in “a philosophy of quality living for Americans,” empowering citizens to influence the shape of their own environments. Letter from Lee Nordness to Samuel C. Johnson, Jr., December 16, 1971. Box 6. Lee Nordness business records and papers, circa 1931-1992, bulk 1954-1984. Archives of American Art, Smithsonian Institution.

As Nordness wrote to Johnson, “As Mrs. Taylor rightly points out, the entire globe is now concerned with environment—but that is compassion over an end effect: the concern must be redirected to design. And it will be: the whole world is going to become so design conscious in the next few years that a whole new aesthetic will materialize. I have my ear to the ground, and I don’t think the people’s pulse is with fine art anymore: it is moving into more unpretentious and relational statements, which accounts for the explosions of interest now in objects; and from there it will move into design. In other words, man’s synthetic environment will be his new art.” Letter from Lee Nordness to Samuel C. Johnson, Jr., April 6, 1972. Box 6. Lee Nordness business records and papers, circa 1931-1992, bulk 1954-1984. Archives of American Art, Smithsonian Institution.

Indeed, corporate sponsorship of an exhibition that would provide “a whole new way to think about environment” would also be a way, according to Nordness, to demonstrate the possibility of ethical corporate behavior. “It is time responsible corporations, such as Johnson’s Wax, turned some tables on Nader and Papanek.”

Although Johnson would not officially become the show’s sponsor until 1974, his interest was sufficient to fund Nordness’ trip to Paris for the first museum think tank in October 1972. Acting as an observer and “auditor” of the proceedings (and joined by a second auditor from Olivetti, who was also considering sponsorship), Nordness returned energized and excited about the museum’s new direction, redoubling his efforts to encourage Johnson’s investment.

His own concept of design was dramatically influenced by the think tanks, shifting from a concept of design as the intellectual work of the craftsman that precedes the object’s making, to one positing design as a special category of objects deeply entwined in daily life. “The great misconception is to think of design in terms of objects, fallacious thinking because the designed object does not stand by itself: it is part of a system, a connection, a problem. Perhaps the easiest way to clarify this is to illustrate the difference between a designed object and a work of art: the latter does exist by itself and can be placed on a wall or a lawn without having to relate to anything except aesthetic sensitivities; the design object cannot so exist by itself; it must relate to living by its functioning and by its juxtapositioning to the other objects and systems and philosophies in its environment. (When a designed object ceases to ‘live,’ when it is no longer used, it can then be looked at

only concerned with the conceptual and experiential content, but also with the pragmatic considerations of cost and the political implications of their choice as a New York institution. The proposals from Wurman and Katz, from Venturi and Rauch, and from George Nelson all appeared overly biased towards the architectural and urban scales. They also privileged either the perspective or the audience of design professionals over that of laypeople.¹⁰¹ Ultimately, however, it came down to a decision between Hollein and Venturi and Rauch. Hollein's proposal was viewed as the best choice for a variety of reasons: though he was an architect, they felt confident that he could address all scales of design evenly. His tendency towards the spiritual also seemed more interesting than Venturi's perceived pragmatism. Finally, Taylor found the notion of choosing an American to be politically

aesthetically, e.g., milk pails, cast iron stoves, weather vanes which not 'decorate' homes.)" Letter Lee Nordness to Samuel C. Johnson, Jr., November 8, 1971. Box 29. Lee Nordness business records and papers, circa 1931-1992, bulk 1954-1984. Archives of American Art, Smithsonian Institution. 1-2.

For Nordness, it was precisely that designed objects were *not* just distanced aesthetic objects, but rather functional objects of daily use whose characteristics shaped the lifestyle of those who used them, that gave them such interest. The Cooper Hewitt, as the first museum of design in the country, would take on the task of revealing this importance and power of design by framing exhibitions not around objects but rather design *problems*. Further, in bringing the world of design to the public's attention, the museum would empower the layperson to be active in determining his or her own environment, and in choosing and shaping the designed objects they admitted into their sphere. Finally, in developing a collection of contemporary design—one that included not just objects but also the larger scale of the designed environment—the museum would become a “storehouse of design information” that could be utilized by designers themselves, thus improving the quality of design at every level.

Contrasting the Cooper-Hewitt's unprecedented approach to design with older, more conventional orientations such as that of the Museum of Modern Art, Nordness framed Johnson's involvement as “image-forming” for the company, and as an opportunity to address urgent environmental issues. “While former treatments of design focused “on the object, its line, its aesthetic appeal—the WHAT, the WHY and HOW, however, concern the designer and eventually the public. [...] And these concerns must be those of every one on the planet as pollution and overpopulation (to mention only two gloomy clouds) threaten multiplications of environmental maladies.”

Sponsorship of the museum's inaugural exhibition would allow Johnson to “be associated with a revolutionary and timely concept: the National Museum of Design will present major design problems, presenting alternatives for the public, with the ultimate purpose of showing society that it actually has the alternative of designing itself.” Rather than continue to mindlessly consume the products of industry, contributing to further environmental degradation, the museum sought a heightening of consciousness enabling and empowering the everyday person through a self-fashioning of themselves through their surroundings and possessions. Nordness' enthusiasm proved to be infectious, and Samuel C. Johnson, Jr. agreed to sponsor the museum's inaugural exhibition. Due to delays in the renovation of the Carnegie Mansion, however, work on the exhibition would not begin in earnest for two more years. In the interim, Nordness continued to attend museum think tanks and other events, and he was involved in the selection of the exhibition conceptualizer.

¹⁰¹ For instance, Venturi and Rauch's proposal included a section entitled “Norms, Oughts, Prescriptions” that was to communicate a few ideas that reflected their position as professional designers: that designs produced by an architect could meet individual needs better than those produced in other contexts; that designs could elicit a huge range of emotions and responses, but that professional designers were bound by propriety to a higher level of responsibility that included not only the client but society as a whole; and lastly that history was a valuable source of design inspiration—not only valuable or high art but also the everyday productions of past eras.

fraught, in that the choice might appear to signal an alliance with one domestic faction over others.¹⁰² Choosing Hollein, a foreigner who planned to recruit an international group of collaborators, was viewed as a way to escape charges of preference and simultaneously a way to infuse the New York scene with fresh faces and ideas. Despite the rejection of his own proposal, Nelson remained on the team as an advisor, and was charged with designing the exhibition catalog.¹⁰³

Design by Committee: Developing a vision of *MANtransFORMS*

Once the museum settled on Hollein to lead the exhibition as “conceptualizer,” he began to assemble the design team and to collaboratively refine the many unsettled details of the show. This process was undertaken at two major meetings : the first in Paris, July 5-8, 1975 and the second at Wingspread in Racine, WI in October of that year.¹⁰⁴ The Paris meeting—involving the collaborators that had thus far been recruited: Nadar Ardalan and Karl Schlamminger of the Tehran-based Mandala Collective, Italian architect and industrial designer Ettore Sottsass, Japanese architect Arata Isozaki, and German design critic Peter Bode—settled large scale philosophical questions about the exhibition, while the Wingspread conference provided an opportunity to deal with unfinished details, and to bring the remaining collaborators on board: Buckminster Fuller (with his collaborator Shoji Sadao),

¹⁰² For example, the choice of Venturi could have been seen as an affiliation with the “Grays” over the “Whites,” some of whom were based at the nearby Institute for Architecture and Urban Studies.

¹⁰³ Hollein originally proposed that Peter Bode, architecture design critic for *Der Spiegel*, serve as the designer and editor of the exhibition catalogue. Taylor, concerned about the difficulties the language barrier and the distance could impose, instead chose the New York-based George Nelson. Lisa Taylor, "Letter to Hans Hollein, July 18, 1975," (Smithsonian Institution Archives, Record Unit 492, Cooper-Hewitt Museum, Office of the Director, Subject Files).

¹⁰⁴ The show’s sponsor, Sam Johnson of the S.C. Johnson Company, and his agent Lee Nordness, invited the museum staff and the exhibition collaborators to Wingspread, the Frank Lloyd Wright-designed Wisconsin home of Herbert Fiske Johnson, who also commissioned Wright to design the Johnson Wax Headquarters in Racine, WI. Donated to The Johnson Foundation in 1959, the home had become a conference facility where the meeting participants could both lodge and convene. It continues to operate in this fashion today. While many of the installations that eventually made up the exhibition were discussed in Paris, Taylor’s concern that the specifics of the exhibition had not yet been sufficiently decided led her to call for a second meeting just a few months later in October 1975. Titled “The Nature of Design,” the Wingspread conference was intended to serve as a planning session for the inaugural show, allowing participants to “focus on how to communicate the complexities of the design process to the public by means of the forthcoming exhibition.” “Conference Program, the Nature of Design, Wingspread, Racine, Wi, October 7-9, 1975,” (Smithsonian Institution Archives, Record Unit 492, Cooper-Hewitt Museum, Office of the Director, Subject Files). 1.

German architect O.M. Ungers, American architect Richard Meier, filmmaker Murray Grigor, and George Nelson.¹⁰⁵

While Hollein served as the “conceptualizer” and overall designer of the show, the contributors had wide latitude to determine the form and the content of their contributions. Taylor and Hollein had long agreed that the exhibition would read as a series of independent units that coalesced around the fundamental problems of design. The units were expected to approach these problems from very different perspectives and to even contradict each other at times. Nevertheless, Taylor was concerned for the exhibition’s overall message as well as the lack of specificity from Hollein’s initial proposals, and thus staged the two meetings of the entire group. During the Paris and Wingspread meetings, discussions about the exhibition’s name and its message helped to hone in on the general goals of environmental legibility and enrolling lay audiences in the importance of design through the lens of everyday action and experience.

The Paris meeting officially initiated the project. One of the first orders of business was the title of the exhibition. While “Design has Consequences” and “The Design Process” had served as early working titles, the group now sought a name capable of articulating the exhibition’s perspective with greater compulsion. The suggestions varied widely: to emphasize the idea of design without designers, Arata Isozaki suggested “De-Design” or “A-design.” Ettore Sottsass, while not proffering a specific title, argued that the name should reflect the notion of design as language, as a carrier of social and cultural meaning. Nader Ardalan picked up on Taylor’s wish for the exhibition to increase design legibility for its visitors, and suggested “Seeing More.” Other unattributed suggestions utilized the term ‘design’, such as “Design Consequences,” “Design Encounter,” “Design is In-between,”

¹⁰⁵ While Nelson did not attend the Paris meeting, the archival record indicates his ongoing informal participation in the exhibition project during this time, something that was formalized by the Wingspread conference. The second wave of collaborators seem to have been recruited to better balance the design perspectives represented on the team. Hollein and his initial choices were viewed as very “poetic,” and Taylor felt that the “structuralist” or “rationalist” strain of contemporary thought should also be represented, accounting for Fuller, Ungers and Meier. Grigor was added, I believe, in order to ensure the inclusion of the film medium, and Nelson’s role was formalized because of his long association with the project, his diplomatic personality, and his ability to encourage consensus amongst a contentious group. Taylor was also eager to include a South American architect on the team. Brazilian architect Lina Bo Bardi was recommended, but as Nordness recalled, “Hans, no woman’s libber, has ignored all mentions of female designers; but Ms Bo Bardi evidently has an exceptional reputation (not to mention name).” Letter, Lee Nordness to Jim Jones (public relations at S.C. Johnson Wax), October 8, 1977. Box 6. Lee Nordness business records and papers, circa 1931-1992, bulk 1954-1984. Archives of American Art, Smithsonian Institution. 2.

“Apropos Design,” “Design Everybody,” and “Design Bitte.” Others avoided using the word ‘design’ in order to propose names that were less specific and more capacious, such as “So What?,” “Ripples,” “Vibration,” “Sense,” “Choice,” “To be with it,” and “Resonance.”

While none of these was eventually chosen, they were unified by an interest in broadening traditional notions of design, as well as by the promise of revealing theretofore unexplored truths or ideas about design. The last group of titles was particularly concerned with evoking the image of invisible, ephemeral phenomena that could in some ways be sensed but required greater exploration to fully understand. In other words, the collaborators sought a name that both painted design as an only-partially-understood phenomenon and promised greater legibility.

Another primary aim of this initial set of meetings was to unify the contributors’ understanding of the exhibition’s message. Starting from Taylor’s conception of the Cooper Hewitt as a “museum of ‘Man’ rather than a museum of ‘objects,’” Hollein proposed that the exhibition’s driving idea should be to present “design as a complexity of decisions that effect our life.”¹⁰⁶ In contrast to design exhibitions that focused on objects through the lens of their professional designers or aesthetic legitimization, the exhibition was to center on everyday objects that seemed to have developed “by themselves.” Stressing the banal quotidian origin of most designed objects, Peter Bode elaborated, “Design, as we understand it, are subjects and certain experience of life, which have developed nearly by themselves and which satisfy physical or psychic needs, situations and matters people are going through daily and which they handle daily without realizing them as design.”¹⁰⁷ Expanding traditional definitions of design, Bode suggested that the exhibition could be productively thought of as an analogy to Hollein’s famous manifesto, “Alles ist Architektur,” and its title could even be “All is Design.”

¹⁰⁶ Minutes of Meeting, Contributors Meeting, National Museum of Design Opening Show, July 5-8, 1975. Box 12, Smithsonian Institution Archives, Record Unit 287, Cooper-Hewitt Museum, Dept. of Exhibitions, Exhibition Records. 13, 16.

¹⁰⁷ Ibid. 26.

Hollein and “Alles ist Architektur” (1968)

The connection between Hollein’s earlier polemical work and his ambitions as “conceptualizer” for the inaugural exhibition pointed out by Bode was prescient.¹⁰⁸ A closer examination of Hollein’s 1968 manifesto “Alles ist Architektur” (“Everything is Architecture”) reveals some of the origins of *MANtransFORMS*’ conceptual positions as well as many of its exhibition strategies. First, the radical expansion of architecture effected by “Alles” forms a clear precedent for the exhibition’s argument for the ubiquity of design—and indeed the dissolution of its traditional boundaries—particularly through Hollein’s use of an environmental logic in his project of “everythingizing,” as Liane Lefaivre has termed it.¹⁰⁹ Secondly, Hollein’s use of tools and concepts particular to the architectural discipline is a strategy that he drew upon in the design of *MANtransFORMS*, particularly his visual, non-narrative forms of argumentation.

In 1968, at the beginning of his third year as co-editor of the Austrian architecture journal *Bau*, Hans Hollein published “Alles ist Architektur,” a manifesto calling on the profession to rethink its disciplinary boundaries by radically expanding the category of architecture [Fig. 4.10]. With only one page of text and twenty-eight pages of photographs, drawings, artwork, advertisements, and collages, Hollein’s manifesto primarily employed visual argumentation to target some of architecture’s defining characteristics. Architecture could no longer be defined by its end product—building—but rather by way of the problems it was historically called upon to solve. For Hollein, architecture not only provided shelter and physical comfort, but also traditionally served as a representation of identity and cultural meaning, a mechanism of spatial and social ordering, and a primary determinant of mood and psychological well-being.

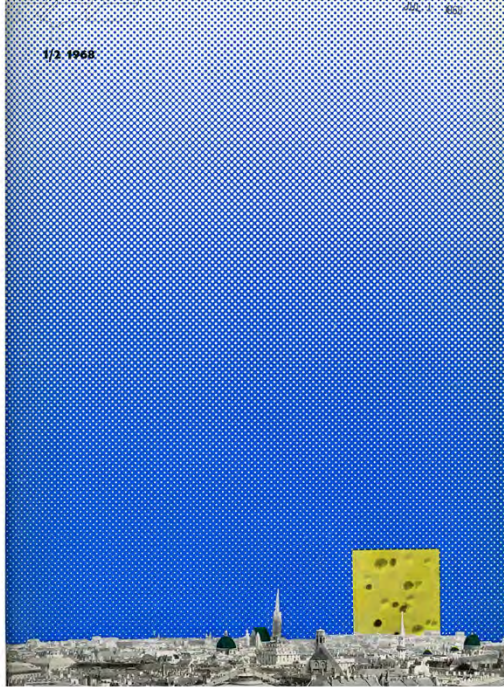
¹⁰⁸ Hollein himself acknowledged the connection in his introduction to the exhibition catalogue: “Design is here understood as an approach to a problem, as an attitude towards action, towards shaping life and environment. Seen as such ‘everything is design,’ parallel to a dictum I forwarded some years ago that ‘everything is architecture—all are architects.’” Hans Hollein, “Concepts for an Exhibition,” in *Man Transforms: An International Exhibition on Aspects of Design*, ed. Hans Hollein ([Washington]: Smithsonian Institution, 1976). 12.

¹⁰⁹ ‘Everythingizing’ for Lefaivre is a rhetorical device that, on its face, appears to radically expand categories, making them so capacious as to be almost meaningless. She shows how ‘everythingizing’ draws equivalencies between typically bounded practices or ideas, thereby appealing to interdisciplinarity. And this, she seems to imply, is done strategically or polemically, rather than earnestly. Lefaivre reveals the wide variety of precedents that Hollein’s “everythingizing” draws up, from Vitruvius and Alberti to the *gesamtkunstwerk* to the turn-of-the-century European design movements, such as the English Arts and Crafts and the German Werkbund. Liane Lefaivre, “Everything Is Architecture: Multiple Hans Hollein and the Art of Crossing Over,” *Harvard Design Magazine*, no. 18 (Spring/Summer 2003).

ALLES IST ARCHITEKTUR

Bau

1/2 1968



Begrenzte Begriffsbestimmungen und traditionelle Definition der Architektur und ihre Mittel haben keine vorgehend an Gültigkeit verloren. Der Umwelt als Gesamtheit gilt unsere Aufmerksamkeit und also Medien, die sie bestimmen. Den Fortschritt wie den künftigen Klima, den Transportationen wie der Kleidung, dem Telefon wie der Bekleidung. Die Erweiterung des menschlichen Bewusstseins und die Mittel der Bestimmung der Umwelt geht weit über eine bauliche Fortsetzung hinaus. Heute wird gewissermaßen alles Architektur. „Architektur“ ist eines dieser Medien. Unter den verschiedenen Medien verleiht heute unser Verhalten und unsere Umgebung definiert — als auch als Lösung bestimmter Probleme — in „Architektur“ eine Möglichkeit.

Der Mensch schafft künstlich Zustände. Dies ist die Architektur. Physisch und psychisch wiederholt, transformiert, erweitert er seinen physischen und psychischen Bereich, bestimmt er „Umwelt“ im weitesten Sinne. Seinen Bedürfnissen und seinen Wünschen gemäß setzt er Mittel ein, diese Bedürfnisse zu befriedigen und diese Wünsche und Träume zu erfüllen. Er erweitert sich selbst und seinen Körper. Er folgt sich mit. Architektur ist ein Medium der Kommunikation.

Der Mensch ist beides — selbstbestimmtes Individuum und Teil der Gemeinschaft. Dies bestimmt sein Verhalten. Von einem gewissen Niveau hat er sich selbst mittels Medien kontinuierlich erweitert, ausweitet diese Medien, kann, erweitert.

Der Mensch hat ein Gehirn. Seine Sinne sind die Grundlage zur Wahrnehmung der Umwelt. Medien der Definition, der Festlegung einer (gewollt gewählten) Umwelt beruhen auf der Verlangsamung dieser Sinne.

Dies sind die Medien der Architektur.

Architektur im weitesten Sinne.

Einger gefüllt könnte man für den Begriff Architektur etwa folgende Rollen und Definitionen insumieren:

Architektur ist kulturell, wie ist Mal, Symbol, Zeichen, Expression.

Architektur ist Bestimmung — Festlegung, des Raumes, Umwelts.

Architektur ist Kontrolle der Körperwärme — schützende Bekleidung.

Architektur ist Bestimmung — Festlegung, des Raumes, Umwelts.

Architektur ist Konditionierung eines psychologischen Zustandes.

Interessante erdige künstliche Veränderung und Bestimmung der Umwelt, als auch Klima- und Witterschutz, primär durch Jenseits, wie auch das Bauwerk wesentliche Manifestation und Expression von Bauern war, verstanden als Krönung eines zeitlich-räumlichen Gefühls, das den Erdkreis als Definition des Raumes, als schützende Umhüllung, als Grotte und Werkzeug als psychisches Mittel und als Symbol entsprang. Die Entwicklung der Wissenschaft und Technologie, wie auch der Gesellschaft und ihrer Bedürfnisse und Fortschritte hat uns mit ganz anderen Gegenständen konfrontiert. Andere und neue Medien der Umweltbestimmung entstanden.

Sind dies erneut vielfach nur technologische Verbesserungen technischer Prinzipien und Erweiterungen der physischen „Bau-Materialien“ durch neue Materialien und Methoden, so werden darüber hinaus etwa nichtbauliche Mittel zur Raumbestimmung entwickelt. Eine Anzahl von Aufgaben und Problemen werden heute nur noch traditionellweise durch Bauen, durch „Architektur“ gelöst. Ist jedoch für viele Fragen die Antwort noch „Architektur“, wie sie verstanden wurde, oder stehen uns nicht geeignete Medien zur Verfügung?

Architekten könnten in dieser Hinsicht einiges von der Entwicklung der Strategie lernen. Wie diese denselben Schweren Mühsal anderswo greifen wie die Architektur mit ihrer Kommunikation, so würde man heute noch immer Mauer und Türe bauen. Die Strategie hat jedoch die Bindung an das „Bauwerk“ weitgehend verlassen und zur Bewältigung ihrer Aufgaben und Funktionen neue Möglichkeiten herangezogen.

Ganz offensichtlich fällt es auch niemandem mehr ein, etwa Abfallkanäle zu bauen oder astronomische Geräte aus Stein zu errichten (Japan). Viel weitgehend jedoch sind die Kommunikation, die von der neuen Medien der Kommunikation (wie es Telefon, Radio, Fernsehen u.a.) mit sich bringen, und es wird es ein Begriff wie der des Lehrs- und Lernfähigkeit (Bildung) oder Umstände ganz verschieden und durch diese Mittel ersetzt worden.

Architekten müssen aufhören, nur in Bauwerken zu denken.

Erweitert sei auch die Verlangsamung der Geschwindigkeit von Bedeutung. Anzeichen hat einen „Erdbeben“. So wird auch die Art und Weise der Information, der Verwendung eines Objektes im weitesten Sinne wichtig. Ein Gebäude kann ganz Information werden, seine Bestehen könnte ebenso nur durch die Medien der Information (Presse, TV u.dgl.) existieren. Tatsächlich existiert es fast unmöglich, ob etwa die Abgesandten oder die Pyramiden physisch existieren, da sie der Majorität der Allgemeinheit sowieso nicht durch eigenes Erleben, sondern durch andere Medien bewahrt werden, zu ihrer Rolle eben auf ihrem Informationsfeld beruht.

Ein Gebäude könnte also sinnlos werden.

Frühe Beispiele der Extensionen der Architektur durch Kommunikationsmedien und Telepresenzen — ein Gebäude mimmalr Größe, doch eine globale Umwelt direkt einschließend. Umwelten dieser Art in noch engem Bezug zum Körper und noch konzentriertere Form liefern auch zum Beispiel die Helme der Diakonissen, die durch ihre telekommunikative Anaxilose die Sinne und Sinnesorgane erweitern, als auch weite Bereiche mit ihnen direkt in Beziehung bringen. Eine Synthese entgegen und zu extremen Formulierungen des Staates einer „bestimmten“ Architektur, führt schließlich die Entwicklung der Raumkapazität und insbesondere des Raumausbaus. Hier wird eine „Bekleidung“ geschaffen, die seinen psychisch als „Gebäude“ aufweisen soll eine umfassende Kontrolle der Körperwärme, der Nahrungszufuhr und Fäkalienverwertung, des Wohlbefindens und dergleichen in extremen Umständen bietet, verbunden mit einem Maximum an Mobilität.

Diese weitestgehenden physischen Möglichkeiten leiten dann über, psychische Möglichkeiten einer künstlichen Umwelt vorzuziehen (es liegt zu fassen, als auch Vielfalt der Notwendigkeit gebauter Umwelten (etwa Lichtschutz, Klimatisierung und Raumdefinition) ganz neue Funktionen erhalt werden. Der Mensch wird nun echt Mittelprodukt und Ausgangspunkt der Umweltbestimmung sein, die Einzelaktionen durch eine geringe Zahl vorgegebener Möglichkeiten nicht mehr unterstützen. Die Erweiterung der Medien der Architektur über den Bereich reinen telekommunikativen Baus und seiner Abhängigkeiten beginnt mit Versehen, insbesondere mit Zielstrukturen. Das Verlangen, einer „atmosphärischen“ nach Wunsch zu gestalten und nicht als möglich zu verhindern und es zu transportieren, ließ zum ersten Mal über einen weiteren Bereich von Materialien und Möglichkeiten hinaus — zu Mitteln, die etwa in anderen Gebieten zum Teil schon seit langem Anwendung fanden. So haben wir heute „gestaltete“ Architektur, wie es auch „aufgebaute“ Architektur gibt. Dies alles sind jedoch Mittel der Architektur, die im Grunde noch material, noch „Bau-Materialien“ sind.

Wenig Versuche wurden jedoch gemacht, mit anderen als physischen Mitteln (etwa Licht, Temperatur, Geruch) unsere Umwelt zu definieren, Raum zu bestimmen. Hat hier schon die Verwendung telekommunikativer Verfahren weitgehende Erweiterungsmöglichkeiten in sich (deswegen der Laser (Holograph) noch kaum vorausgesetzt. Schließlich und praktisch überhaupt keine Untersuchungen für die gezielte Verwendung von Chemikalien und Drogen sowohl zur Kontrolle der Körper- und Körperfunktionen, als auch zur künstlichen Schaffung einer Umwelt angestellt worden. Architekten müssen aufhören, nur in Materialien zu denken.

Die gebaute und physikalische Architektur wird, da nun im Gegensatz zu den wenigen und beschränkten Mitteln vorgegangener Epochen eine Vielfalt solcher zur Verfügung nicht, sich intensiv mit Raumausbau und der Befriedigung psychologischen und physiologischen Bedürfnisse beschäftigen können und einen anderen Bezug zum Prozess der „Erlebung“ einnehmen. Räume werden deshalb weit bewusster, etwa lapidare, optische und akustische Qualitäten besitzen. Informationsreichtum bei Inhalten, wie auch wesentlichen Bedürfnissen direkt entsprechen können.

Eine echte Architektur unserer Zeit ist daher im Begriffe, sich sowohl als Medium aus zu definieren, als auch den Bereich ihrer Mittel zu erweitern. Viele Bereiche außerhalb des Baus greifen in die „Architektur“ ein, wie ihrerseits die Architektur und die „Architektur“ weitere Bereiche erziehen.

Alle sind Architekten. Alles ist Architektur.

Hans Hollein

Alles ist Architektur



Figure 4.10 Top, cover, bottom, spread from pp. 2-3, “Alles ist Architektur,” *Bau: Schrift für Architektur und Städtebau*, no. 1/2, 1968.

In Hollein's view, new forms of technology had gradually superseded architecture in serving these traditional functions. However, he saw technological innovations such as climate control, the telephone and television, psycho-pharmaceuticals, and the spacesuit as "perfected" forms of architecture, both sheltering the body and augmenting it. These allowed humans an extended reach through time and space, as well as a new level of control over their immediate environment—something that architecture, within its traditional limitations, could not furnish.

Hollein exhorted architects to look beyond their traditional purview of building, shifting their definition of architecture from a particular form of production to a set of problems and desires that could now be met in other, more effective ways. The implications for architects were nothing short of radical, serving to dislodge the profession from the authority derived from its traditional areas of expertise.

A true architecture of our time will have to redefine itself and expand its means. Many areas outside traditional building will enter the realm of architecture, as architecture and 'architects' will have to enter new fields.

All are architects. Everything is architecture.¹¹⁰

In his shift from the physical structures of architecture to various forms and mechanisms of environmental control—including the control of human *perception* of the environment—Hollein introduced a form of environmental logic that he utilized to supersede traditional definitions of architecture. This logic emphasized spatial and sensorial experience, use, and ritual rather than the physical forms that housed or facilitated them. This attitude presaged the similar move from designed objects to the motivations, uses, and cultural reception of design effected by the Cooper Hewitt.

Limiting his textual polemic to only one page, "Alles" was a primarily *visual* manifesto that eschewed narrative argumentation for an image-based polemic, drawing on collage, juxtaposition, and the repetition of known visual genres, such as advertising. Some scholars have suggested that the visual argument in "Alles" was created through difference, via a series of disparate images held together only through juxtaposition and bricolage. However,

¹¹⁰ Hans Hollein, "Everything Is Architecture," in *Architecture Culture, 1943-1968: A Documentary Anthology*, ed. Joan Ockman and Edward Eigen ([New York]: Columbia University Graduate School of Architecture, Planning, and Preservation : Rizzoli, 1993). 462.

a closer look shows how the individual pages and spreads operate together as a whole through similarity and affinity rather than difference.¹¹¹

“Alles” opens with a collection of portraits under the heading “Architects Ex-Architects,” assembling together eleven men who were trained and professionally experienced architects, but were also writers, artists, fashion designers, filmmakers, activists, and political leaders [Fig. 4.11, top]. Paired with its facing page featuring the 18th century astronomical architecture of the Jaipur Observatory and a critical portrait of Lyndon B. Johnson as a monumental edifice constructed from mechanical tubing, Hollein telegraphed a claim about generative and expansive nature of architectural enculturation and architecture’s deep imbrication with political and scientific endeavors: Architects have always gone on to make contributions in a variety of other fields; architecture has always been deeply imbricated in other societal pursuits, both the scientific and the spiritual. Perhaps everything *has always been* architecture, he seems to suggest. Similarly, Hollein’s appeal in *MANtransFORMS* to the primitive as a surrogate for timeless human activities functioned to suggest that everyone has always already designed.

In the construction of his visual polemic, Hollein utilizes a number of architectural concepts and disciplinary tools, such as scalar translations, evocations of the body in spatial terms, and enclosure. However, he often refashioned them in ways that both drew upon and de-familiarized their typical operation. For example, Hollein targeted the notion of *scale* as a defining factor of architecture by showing how easily form could be perceived simultaneously at multiple scales. One of his collages, “High-rise Building,” features a spark plug set into a rural landscape where it is refigured as a tower [Fig. 4.11, bottom]. Similarly, a wing nut forms the basis for a monumental sculpture in Claes Oldenburg’s proposal for an urban plaza. On the facing page, a Christo collage and a Robert Morris sculpture play with the perception of scale, suggesting that “huge” and “tiny” are not absolute categories but rather relative judgments of perception. Unlike the traditional use of architectural scale as a rigid device used to translate between drawn representation and the full scale of bodily experience, Hollein remakes scale as uncertain and multivalent, a generative concept that utilizes the limitations of human perception to imagine multiple forms of physical and visual

¹¹¹ See Craig Buckley, "From Absolute to Everything: Taking Possession in "Alles Ist Architektur"," *Grey Room*, no. 28 (2007); Lefaivre.

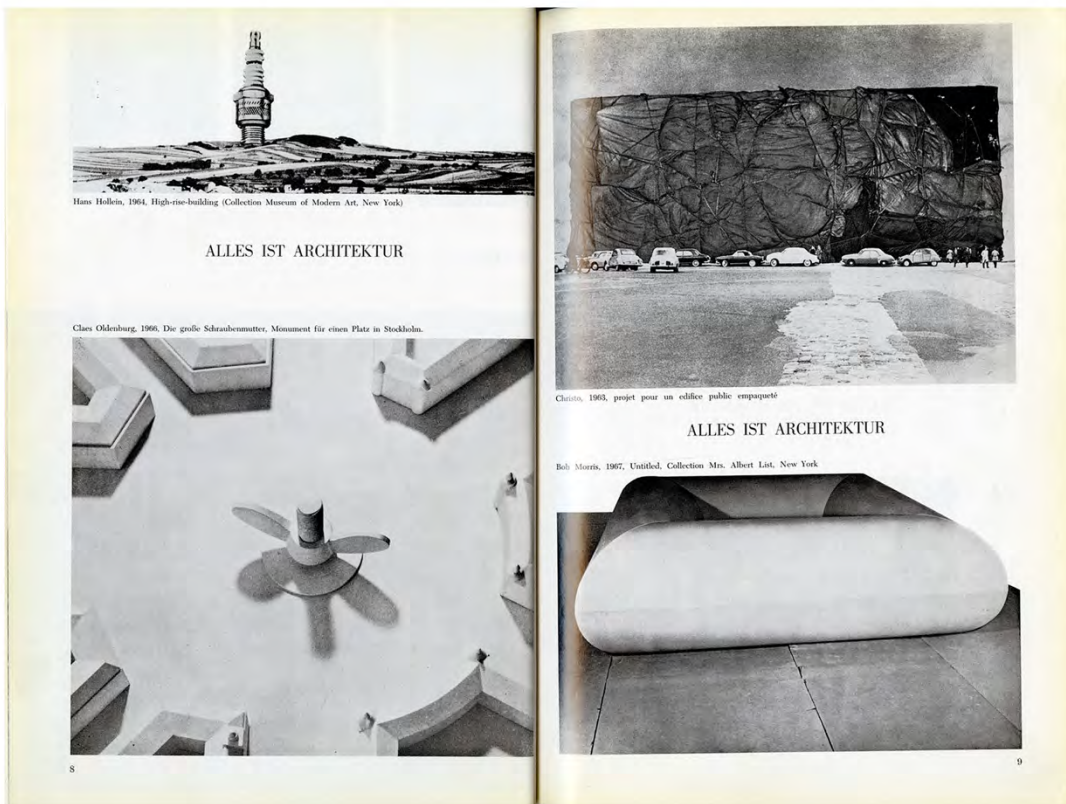
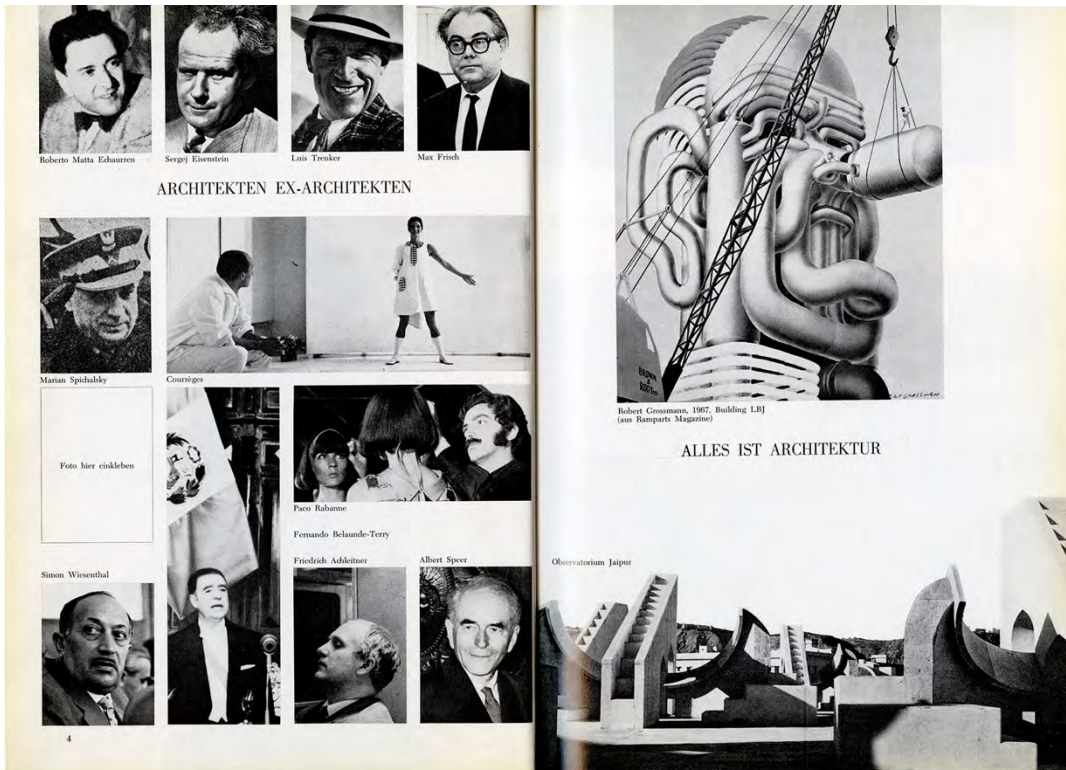


Figure 4.11 Top, spread from pp. 4-5, bottom, spread from pp. 8-9, "Alles ist Architektur," *Bau: Schrift für Architektur und Städtebau*, no. 1/2, 1968.

engagement. In *MANtransFORMS*, Hollein returned to scale, but there it became a register for the immense variety within familiar types produced by human needs and ingenuity, as well as a way to note the persistence of shapes, techniques and motifs across vastly different scales of production. That is to say, scale became a category to recognize sameness within difference and difference within sameness, rather than to experience their elision.

Another plank of Hollein's polemic returns to the familiar image of the body in architecture. Once conceived as an important *model* for architectural proportion, organization and ornament, Hollein remakes the body as itself a *site* of architecture. Sunglasses and fashion are recast as forms of environmental and psychological control—the sunglasses as a kind of micro-architecture of environmental conditioning, and fashion as a communicative medium that alters how the (social) environment responds to the body [Fig. 4.12, top]. Photographs and drawings of Niki de Saint Phalle's "Hon" literally conflate the female body with architecture in the form of a large-scale sculpture, a reclining nude whose interior spaces are accessed through a vaginal opening [Fig. 4.12, bottom]. Just as the body has grown metaphorically larger, architecture is shown to have shrunk down around the body, contouring itself more closely to its needs. Photographs of Haus-Rucker-Co.'s project, "Balloon for Two," depicting a platform extending out from a Vienna apartment window enclosed by a clear plastic bubble, are paired with a faux-advertisement for canned air that promises to eliminate such scourges as pollution, depression, and even boredom [Fig. 4.13, top].

While the body was an important form of *imagery* in "Alles," Hollein shifted his approach in *MANtransFORMS* to consider the body as an important vehicle of *embodied experience*. This was facilitated by the shift in format from magazine to exhibition, and Hollein took full advantage of the spatial and temporal nature of the exhibition to expose visitors to objects visually, as well as to spatial and haptic experiences that were only possible at the scale of architecture.

Two examples demonstrated for Hollein the greatest advances in the solution of architectural problems through the simultaneous appeal to physical and psychological enclosure and the supersession of architecture *qua* building: first, he posited the spacesuit as a fully-integrated bodily support system that replaces architecture as the ultimate form of protection—as a kind of building that provides a fully customizable and mobile



Figure 4.12 Top, spread from pp. 6-7, bottom, spread from pp. 12-13, "Alles ist Architektur," *Bau: Schrift für Architektur und Städtebau*, no. 1/2, 1968.

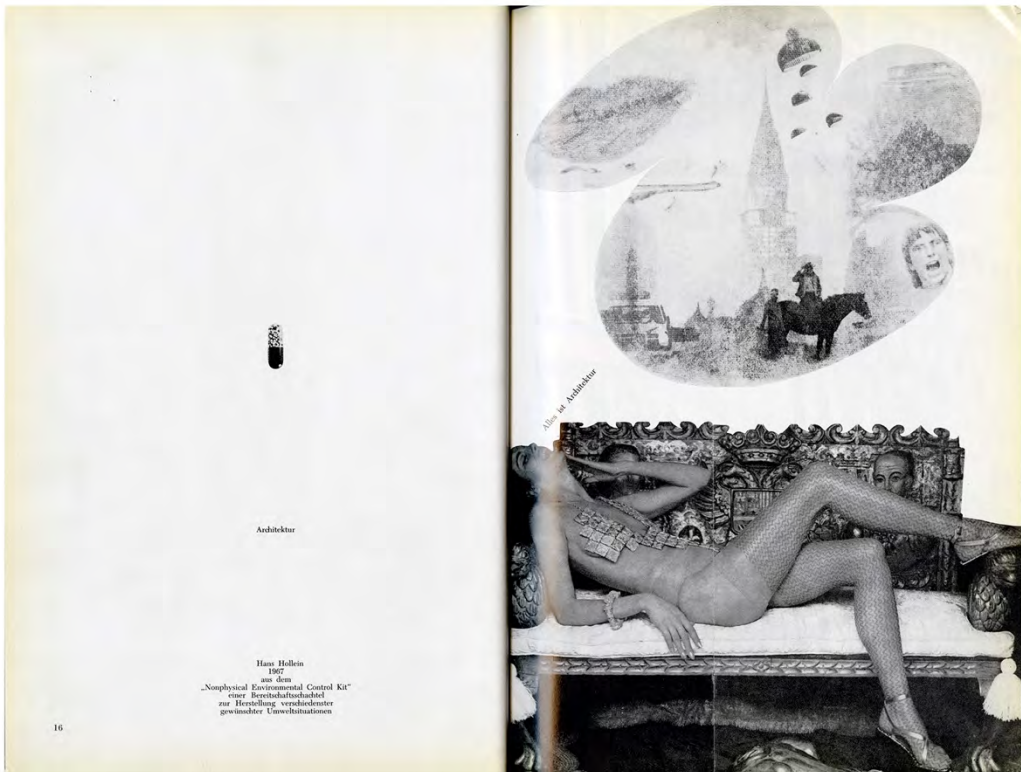


Figure 4.13 *Top*, spread from pp. 20-21, *bottom*, spread from pp. 16-17, "Alles ist Architektur," *Bau: Schrift für Architektur und Städtebau*, no. 1/2, 1968.

environment. Secondly, a blank page containing nothing but a gel capsule at actual size faces a reclining woman enjoying a reverie [Fig. 4.13, bottom]. Though she is dressed in a fantastical costume consisting of a metallic breastplate and delicately patterned stockings, lying supine on an intricately carved bench, the psycho-pharmaceutical has transported her to another place and time, to an experience more real as the one she is living physically. Between the spacesuit and the head trip, Hollein simultaneously reasserts the centrality of the body and the mind's embodied experience into the architectural problematic and the fact that building has been superseded by other forms in responding to that problematic. A body-centered notion of architecture privileges the agency of the individual to modulate their environment over architectural notions of form or structure. In the same way, the Cooper Hewitt's approach to design emphasizes users' ability to articulate and satisfy their needs rather than the quality of the solution found embedded in objects.

Hollein's polemic in "Alles" has been typically understood as a call for the dissolution of architecture's disciplinary boundaries, "the removal of all boundaries between it and other fields," as well as a dissolution of its physical fact. This was a move likened by Liane Lefavre to contemporaneous developments in conceptual art in which the physical object was deemphasized in favor of its cognitive underpinnings.¹¹² Similarly, Craig Buckley has interpreted "Alles" as recasting architecture into a "connective device" that gathers up more of the physical and social world into an *idea* than it can effect as a *physical object*.¹¹³

The dissolution of architecture's physical character and the corresponding dissolution of traditional notions of design found at the Cooper Hewitt reveal both the radicality and the irony of his proposal: *disegno* may once have been the practice of articulating outline to clearly mark the boundary between body and space, or between the effable and the ineffable. However, Hollein turns this logic on its head in his emphasis on design's boundlessness and non-object-based aspects—its performance, the satisfaction of needs or desires, and lay participation via reception and use in initiating or completing the work.¹¹⁴

¹¹² . 2.

¹¹³ Buckley.

¹¹⁴ In an earlier piece of writing, Hollein suggested that architecture could not be programmatically defined in advance, but rather that a building became architecture when it was incorporated into daily life, suggesting that architecture attained its fullest expression in its reception and use. "The shape of building doesn't develop out of material condition of its purpose. A building shall not show its purpose. It is not an expression of structure and construction, it is not an enclosure or refuge. A building is itself. Architecture is without purpose. What we build will find its usefulness." Hans Hollein, "Forms and Designs," *Arts and Architecture* 80, no. 8 (1963). 14.

When Hollein proposes that “everything is architecture,” rather than “architecture is everything,” we can understand his hyperbole as a rhetorical device by which he maintains architecture as an *interpretive lens* through which to view and understand the world. To say everything is architecture is to thus structure everything *in terms of architecture*. In other words, architecture’s particular logics, techniques, structures and histories become an ordering system for reception meant to expand architects’ conception of their work, responsibilities, tools and media. In a similar vein, Hollein and his *MANtransFORMS* collaborators asked exhibition visitors—this time appealing to a general rather than professional audience—to understand everything as design. The viewer was asked to interrogate the phenomena around them through the lens of design, and in doing so was encouraged to recognize and not merely claim but actually seize their own design agency.

MANtransFORMS: Alles ist (a very particular kind of) ‘design’

October 7, 1976; New York City: on a warm and cloudless evening, invited guests strolled down Fifth Avenue, the wide sidewalks bordered on one side by the green wall of the park, starting to hint at autumnal orange and red, and on the other, by the museums that squarely paraded down their mile, interrupted only by the cool curve of the Guggenheim. Reaching Ninetieth, tuxedoed men and gowned women passed through the Carnegie Mansion’s stone and wrought-iron fence festooned with banners bearing strange symbols. Above the dull hum of traffic rang the sound of brass – a trill composed by Stephen Sondheim in honor of the opening of the Cooper Hewitt National Museum of Design [Fig. 4.14].

Ascending the steps into the museum’s inaugural exhibition, *MANtransFORMS: Aspects of Design*, visitors came upon an arresting if puzzling sight: a room-sized vitrine erected on a marble podium, containing an impossibly long, heavy table on which lay one hundred and forty-four different loaves of bread, arranged like specimens about to undergo classification [Fig. 4.15]. Gazing over their sensuous forms, hues and textures, one could not help but wonder: Why is *bread* here posited as an exemplary object of design? Indeed, why is bread

This essay is a partial translation of an originally German text entitled “Architektur” that was written by Hans Hollein and Walter Pichler on the occasion of their May 1963 joint exhibition of the same name, held at Galerie St. Stephan in Vienna. The text is available in the original German on Hollein’s website: <http://www.hollein.com/ger/Schriften/Texte/Architektur>



Figure 4.14 Visitors queuing at the entrance to *MANtransFORMS: Aspects of Design*, October 7, 1976 – February 6, 1977. From: Hollein, Hans, et al. *Hans Hollein, Design: Man Transforms: Konzepte Einer Ausstellung = Man Transforms: Concepts of an Exhibition*. Wien: Löcker, 1989. p. 157.



Figure 4.15 Hans Hollein, "Daily Bread," *MANtransFORMS: Aspects of Design*, October 7, 1976 – February 6, 1977, Cooper Hewitt, Smithsonian Museum of Design. From: Hollein, Hans, et al. *Hans Hollein, Design: Man Transforms: Konzepte Einer Ausstellung = Man Transforms: Concepts of an Exhibition*. Wien: Löcker, 1989. p. 42.

appearing as the centerpiece of an exhibition articulating the museum's new design-centered conceptual orientation? Why would Hans Hollein, an architect, deploy it as such? And, most importantly, who could be credited with bread's design?

Indeed, *MANtransFORMS* both puzzled and excited its visitors, eliciting questions, compliments and criticisms. This is hardly surprising, made up as it was by over twenty different installations by ten contributors working in a constellation of ideas that were developed over the course of five years. While no one installation engendered the totality of the museum's message, in aggregate *MANtransFORMS* compellingly articulated a new and unique approach to design. This approach emphasized everyday experience as its primary locus and everyday activities as its central practice; it elaborated that practice as generative and multivalent, celebrating multiplicity and variation rather than the narrowing tendencies of taste; and finally it that gathered together various types and scales of design under the larger umbrella of environment, utilizing embodied spatial experience to address problematics of environmental legibility.

One set of installations, designed by Hollein in collaboration with museum curator Dorothy Globus, set the tone for the exhibition by displaying everyday objects in their multiple forms. *Daily Bread* presented one hundred and forty-four types of daily bread from countries and cultures around the globe in a dizzying array of shapes, colors, techniques and textures on a long table reminiscent of well-known painted depictions of the Last Supper [Fig. 4.16]. The table was enclosed in a bronze and glass vitrine that sat atop a marble base, which lent an air of the sacred to the most common and profane form of human sustenance. Bread, an ephemeral and ubiquitous thing, was posited here as a designed object. The myriad types of bread presented were not produced by trained design professionals in response to a client's brief, but rather by a series of equally valid process variations developed over long periods of time by way of collective consensus.

Similarly, another installation entitled *Hammers* displayed some 160 types of hammers, from the most delicate jeweler's hammer to the most brutal sledgehammer, hung on the wall in ascending size [Fig. 4.17]. This display was also a depiction of the large variation possible within familiar types, presenting objects in daily use that were rarely associated with a "designer" but whose forms developed according to the needs and preferences of their users across centuries of refinement.



Figure 4.16 Hans Hollein, "Daily Bread," *MANtransFORMS: Aspects of Design*, October 7, 1976 – February 6, 1977, Cooper Hewitt, Smithsonian Museum of Design. From: *MANtransFORMS* Exhibition File, Cooper Hewitt, Smithsonian Design Library.



Figure 4.17 Hans Hollein, "Hammers," *MANtransFORMS: Aspects of Design*, October 7, 1976 – February 6, 1977, Cooper Hewitt, Smithsonian Museum of Design. From: Hollein, Hans, et al. *Hans Hollein, Design: Man Transforms: Konzepte Einer Ausstellung = Man Transforms: Concepts of an Exhibition*. Wien: Löcker, 1989. pp. 40-41.

At its most fundamental, these installations made the case to their viewers that design had always already been deeply woven into their everyday practices, and that—by virtue of preparing food or utilizing tools—they already operated as designers in their daily lives. Further, rather than legitimizing a few examples as the most aesthetically successful object types, the installations bracketed out questions of taste in favor of encouraging and celebrating a diversity of responses within known types from various cultures and climates, uses and needs. Finally, the museum’s approach to design eschewed typical interests in innovation or new technologies to instead highlight the *longue durée* of design practice across the centuries.

Another of Hollein’s installations, entitled *Stars*, picked up on the theme of multiplicity and diversity. In it, a multitude of star-shaped objects and drawings—plans of ideal cities, sheriff’s badges, light fixtures, cut glass plates, and corporate logos—were installed on a deep blue fabric dome [Fig. 4.18]. Here, the exhibition’s argument about the value of variation was paired with a second idea about the persistence of shape or motif across multiple scales, periods and cultures, in both two and three dimensions. In the same way that human sustenance and human labor were portrayed as pan-cultural and pan-historical in *Daily Bread* and *Hammers*, so too did *Stars* depict aesthetic phenomena as similarly persistent. And, by including architectural drawings alongside objects, architecture was seamlessly integrated as but one of many scales of design.

Other installations expanded on these ideas, drawing attention to the centrality of embodied experience in creating and utilizing design. *MANtransFORMS* took special pains to foreground not only the variety found within object types, but also the range of human ingenuity that was involved in their creative utilization. In recognition of the museum’s substantial textile collections, Hollein designed a wide-ranging installation that explored the huge variety of uses to which fabric has been employed. At its most elementary, *A Piece of Cloth* illustrated the myriad ways a simple white square of cloth could be employed. From the doo-rag to the scarf to the blindfold to the hobo’s sack, the richness and range of cultural meanings called up by the series of photographs was striking [Fig. 4.19].

In another section, Hollein explored cultural differences in clothing production, contrasting a Japanese kimono and an Indian sari, in its flexibility and drape, with western tailored clothing such as the suit or the brassiere [Fig. 4.20]. Next, Hollein displayed



Figure 4.18 Hans Hollein, "Stars," *MANtransFORMS: Aspects of Design*, October 7, 1976 – February 6, 1977, Cooper Hewitt, Smithsonian Museum of Design. From: *MANtransFORMS* Exhibition File, Cooper Hewitt, Smithsonian Design Library.



Figure 4.19 Hans Hollein, "A Piece of Cloth," *MANtransFORMS: Aspects of Design*, October 7, 1976 – February 6, 1977, Cooper Hewitt, Smithsonian Museum of Design. From: Hollein, Hans, et al. *Hans Hollein, Design: Man Transforms: Konzepte Einer Ausstellung = Man Transforms: Concepts of an Exhibition*. Wien: Löcker, 1989. p. 63.



Figure 4.20 Hans Hollein, "A Piece of Cloth," *MANtransFORMS: Aspects of Design*, October 7, 1976 – February 6, 1977, Cooper Hewitt, Smithsonian Museum of Design. From: Hollein, Hans, et al. *Hans Hollein, Design: Man Transforms: Konzepte Einer Ausstellung = Man Transforms: Concepts of an Exhibition*. Wien: Löcker, 1989. p. 84.

architectural-scale uses of cloth in the context of windmills, sailboats, and tent structures to show how fabric was used to harness or resist natural forces toward human ends [Fig. 4.21].

Finally, two other sections presented the world's national flags and a selection of embroidered cloth from the museum's historical collection to raise issues of symbolic representation and cultural signification [Figs 3.22]. The broad category of textiles became a site of unification where disparate historical and cultural productions could be collected together and made equivalent under the banner of 'design'. Both the act of making clothing and the act of dressing become design activities, and the range of garment fit, from tailored to loosely draped, is extended to the architectural scale, where the body is clothed by enclosure.

Embodied experience was even more directly addressed in Arata Isozaki's *Cages* installation, described in detail in the introduction to this section and roundly considered to be one of the best-received rooms by visitors and critics alike.¹¹⁵ Extending the exhibition's larger argument about the pervasiveness of design in daily life across multiple scales, Isozaki's installation bridged the historical with the contemporary as well as the scale of the bird with the scale of the human. He achieved this through an experiential continuity again facilitated by a room within a room—this time an occupiable one. Combining object, image and spatial experience, the installation hinged on the architectural proposition of the gilded cage and the experience of imprisonment that it facilitated, allowing visitors to connect sensorially and corporeally with the nearby birdcages that would have otherwise been apprehended as objects.

The extent to which *MANtransFORMS* utilized and included architecture, or otherwise engaged in disciplinary discourse, is best understood in comparison with what was the most important recent exhibition of architecture and design at that time. The 1972 Emilio Ambasz-curated *Italy: The New Domestic Landscape*, staged at the Museum of Modern Art, perhaps forms the most important precedent and foil to *MANtransFORMS*. An exhibition of contemporary Italian design sponsored by its biggest manufacturers and the Italian Ministry of Foreign Trade, the show was divided into two sections: the first focused on

¹¹⁵ Paul Goldberger called it the "finest single section of the exhibition," and Ada-Louise Huxtable described it as "delightfully installed," mentioning only Hollein and Isozaki, of all the collaborators, by name. Goldberger; Ada Louise Huxtable, "The 'Miracle' of Cooper-Hewitt," *ibid.* October 3, 1976.



Figure 4.21 Hans Hollein, "A Piece of Cloth," *MANtransFORMS: Aspects of Design*, October 7, 1976 – February 6, 1977, Cooper Hewitt, Smithsonian Museum of Design. From: Hollein, Hans, et al. *Hans Hollein, Design: Man Transforms: Konzepte Einer Ausstellung = Man Transforms: Concepts of an Exhibition*. Wien: Löcker, 1989. p. 77.



Figure 4.22 Hans Hollein, "A Piece of Cloth," *MANtransFORMS: Aspects of Design*, October 7, 1976 – February 6, 1977, Cooper Hewitt, Smithsonian Museum of Design. From: Hollein, Hans, et al. *Hans Hollein, Design: Man Transforms: Konzepte Einer Ausstellung = Man Transforms: Concepts of an Exhibition*. Wien: Löcker, 1989. p. 66..

industrial design, displaying household objects in production over the previous decade; the second section exhibited “environments” or museum-commissioned dwelling prototypes by leading Italian designers.¹¹⁶ The largest and most expensive exhibition staged by MoMA up until that time, *Italy* had an end budget of \$1.5 million dollars, and sought to fulfill a two-fold aim: to raise awareness and appreciation of contemporary Italian design, which was considered to be both aesthetically and technologically advanced compared to American production, and to present the multiple theoretical perspectives on architecture and design that had reached maturity in the Italian context.

While *Italy* and *MANtransFORMS* shared many ideological traits, the differences in orientation toward their topics and in their museological approaches are particularly instructive. *Italy* made a strong distinction between architecture and design, ironically swapping their typical loci in the museum. The designed objects were presented in MoMA’s courtyard in vitrines designed to recall wooden crate shipping containers with large windows, recalling their status as industrial products as well as the activity of window shopping, rather than the usual domestic site of their consumption and use [Fig. 4.23].

The environments, on the other hand, were installed in the museum’s galleries thereby allowing them to remain as speculative as possible [Fig. 4.24]. Designers were asked to “search for the meanings of the *rituals and ceremonies* of the twenty-four hours of the day, and to design the *artifacts and spaces* that give it structure.”¹¹⁷ If the prompt reflected concerns and interests that *MANtransFORMS* would go on to share, then the responses certainly diverged. The majority were constituted by prefabricated self-contained units, some of which were designed to be mobile and others of which provided forms of flexibility that allowed inhabitants to shape space according to their individual needs. Other installations, termed “counter-design,” stood as critiques of various aspects of contemporary society: its focus on the consumption of objects, the negative psychological effects of modern society, or the decline of personal creativity in the capitalist system. These critiques were rendered not as full-scale architectural objects, but as speculative drawings, “microstructures,” events, and even leaflets.

¹¹⁶ These included Ettore Sottsass, Jr., Joe Colombo, Marco Zanuso, Gaetano Pesce, Archizoom, and Superstudio, among others.

¹¹⁷ Emphasis in original. Emilio Ambasz, *Italy: The New Domestic Landscape; Achievements and Problems of Italian Design* (New York: Distributed by New York Graphic Society, Greenwich, Conn., 1972). 139.



Figure 4.23 Installation view, *Italy: The New Domestic Landscape*, May 26 - September 11, 1972, The Museum of Modern Art, New York. From: *Disegno: The Quarterly Journal of Design*, <https://www.disegnodaily.com/article/italy-the-new-domestic-landscape> (accessed July 31, 2016).



Figure 4.24 Gae Aulenti, "House Environment," *Italy: The New Domestic Landscape*, May 26 - September 11, 1972, The Museum of Modern Art, New York. From: Ambasz, Emilio. *Italy: The New Domestic Landscape; Achievements and Problems of Italian Design*. New York: Distributed by New York Graphic Society, Greenwich, Conn., 1972. p. 155.

While *Italy* and *MANtransFORMS* shared the interest in the environments and ubiquitous objects in the way that they facilitated and shaped the practices of everyday life, *Italy* was a future-oriented exhibition. It displayed new types and configurations, utilizing new materials and new media, to suggest how daily life might be changed or improved in their adoption. *MANtransFORMS*, in contrast, addressed the question of individual agency through its concern with environmental legibility and its appeal to the timelessness of design activity rather than the novelty of any particular solution.

The Italian architect and industrial designer Ettore Sottsass contributed to both *Italy* and *MANtransFORMS*. For the former, he created a series of engineered closet-sized modules that could be arranged by their user, each of which addressed a particular domestic function, like storage, cleaning, cooking or resting—a speculative and technological response to the problem of contemporary living [Fig. 4.25]. In contrast, his installation for *MANtransFORMS*, entitled *Design for the Destiny of Man*, explored the basic conditions of sitting, sleeping, and marking threshold with a minimal (and decidedly low-tech) palette of wooden poles, string, and fabric [Fig. 4.26].

While his installation for *Italy* assumed an existing enclosure, he installed *Design* directly into natural landscapes, creating as minimal an intervention as possible while still inscribing human inhabitation. The resulting photographs, displayed in a gallery alongside a single slender column tied in place by three guy ropes and secured by rough-hewn stones, do not depict architecture so much the fundamental situations of daily life to which both architecture and other forms of design respond in the most rudimentary and basic of ways [Fig. 4.27]. Perhaps influenced by some of his “counter-design” co-exhibitors in *Italy*, *Design* seemed to eschew the professional activity of design that made up the bulk of his career and instead represented design as a basic and timeless human impulse.

If Sottsass’ installation addressed the minimal conditions of architecture through the demarcation of space, Hollein was interested in the design of archetypal architectural elements as a way to direct the visitors’ attention to “design all around them.” One installation, called *Environmental Prototypes: Doors*, presented a series of operable doors that the visitor could either circulate around or move through [Fig. 4.28]. Starting with a typical door, the doors to either side were manipulated formally to illustrate design operations such as

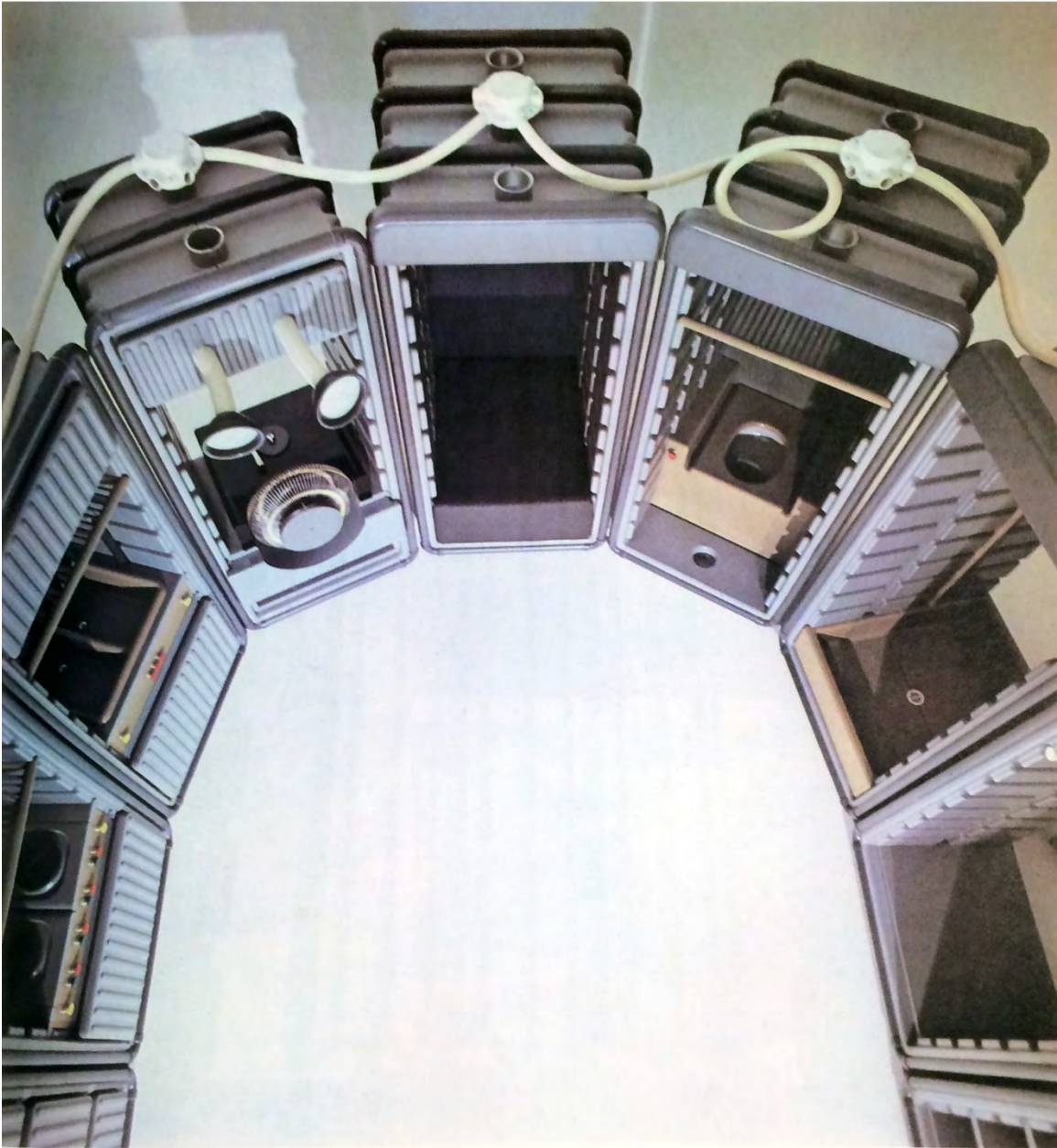


Figure 4.25 Ettore Sottsass, "House Environment," *Italy: The New Domestic Landscape*, May 26 - September 11, 1972, The Museum of Modern Art, New York. From: Ambasz, Emilio. *Italy: The New Domestic Landscape; Achievements and Problems of Italian Design*. New York: Distributed by New York Graphic Society, Greenwich, Conn., 1972. p. 167.

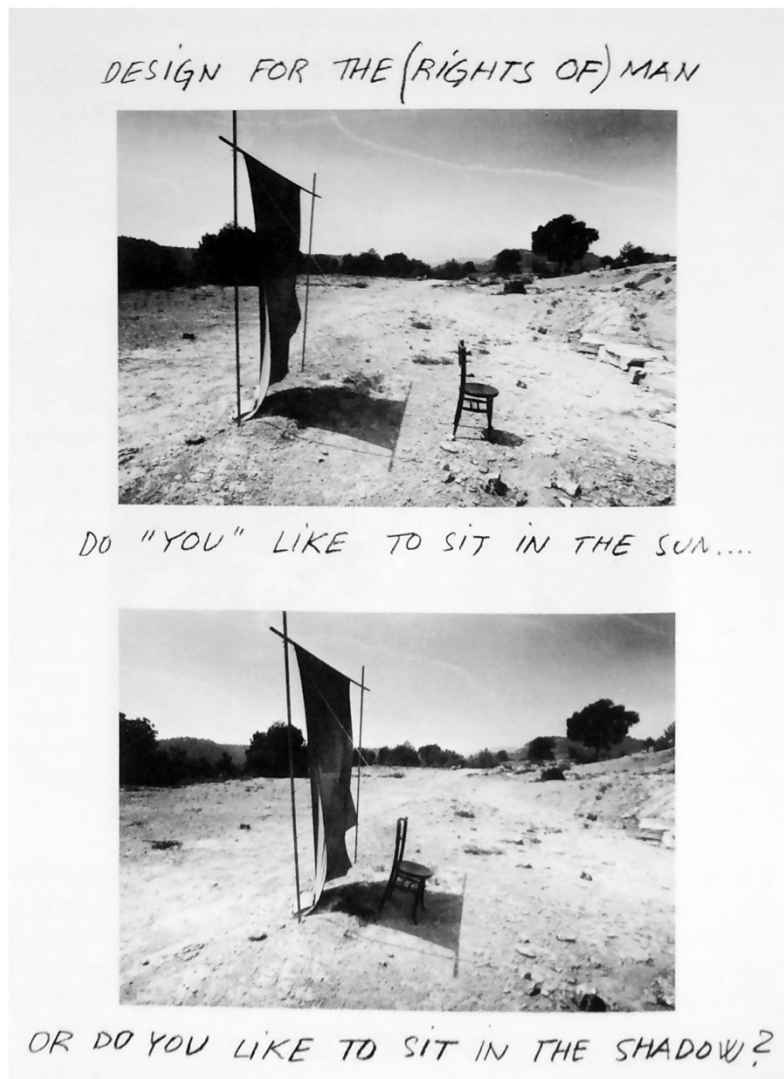


Figure 4.26 Detail, Ettore Sottsass, "Design for the Destiny of Man," *MANtransFORMS: Aspects of Design*, October 7, 1976 – February 6, 1977, Cooper Hewitt, Smithsonian Museum of Design. From: Hollein, Hans, ed. *Man Transforms: An International Exhibition on Aspects of Design*. Washington: Smithsonian Institution, 1976. p. 40.



Figure 4.27 Ettore Sottsass, "Design for the Destiny of Man," *MANtransFORMS: Aspects of Design*, October 7, 1976 – February 6, 1977, Cooper Hewitt, Smithsonian Museum of Design. *MANtransFORMS* Exhibition File, Cooper Hewitt, Smithsonian Design Library.

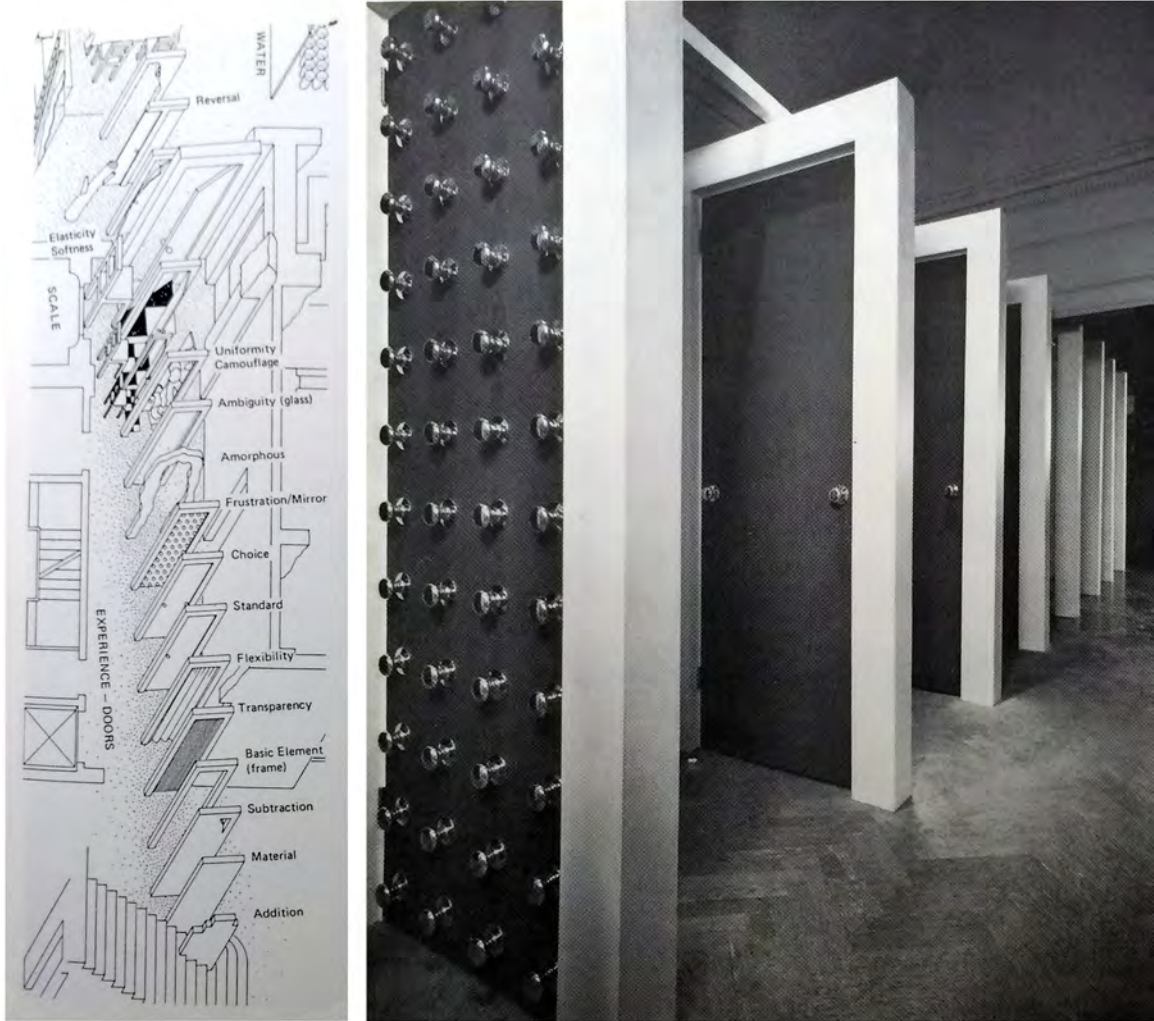


Figure 4.28 Hans Hollein, "Environmental Prototypes: Doors," *MANtransFORMS: Aspects of Design*, October 7, 1976 – February 6, 1977, Cooper Hewitt, Smithsonian Museum of Design. Hollein, Hans, et al. *Hans Hollein, Design: Man Transforms: Konzepte Einer Ausstellung = Man Transforms: Concepts of an Exhibition*. Wien: Löcker, 1989. pp. 100-101.

subtraction, addition, enlargement, multiplication of choice, flexibility, camouflage, dematerialization, and so forth.

The long series of doors were installed at a slight angle to the walls of the Carnegie Mansion, stretching from the lobby, where they intersected uncomfortably with the grand staircase, through a hallway, and into an adjacent gallery. Thus, in order to circulate through the ground floor, the visitor was forced to intersect with the doors, and their disruptive siting served to highlight the strangeness of Hollein's design manipulations. Utilizing such a commonplace element as doors, the installation foregrounded the design potential inherent in the familiar, the opportunity to manipulate those objects according to a creative impulse, and the ability to recognize and read the manipulations created by others.

Focusing on the largest scale of environmental design—the city—the German architect O.M. Ungers' installation presented a way to view and understand the structure of the built environment [Fig. 4.29]. *City Metaphors* argued that the functionalist paradigm no longer served to explain or illuminate the city, suggesting that sense was made of the city through Gestalt, morphology, and metaphor. That is to say, by the shapes of its structures and their similarities to other known forms. *City Metaphors* presented three ways to look at the city: through its 'factual reality' of the city, as understood through plan, its 'perceptual reality' presented through visual metaphor, and its 'conceptual reality', as manifested in language.

For example, an artfully cropped version of Raymond Unwin's *Satellite City* plan (1935) was paired with a photograph of a woman with her hair in curlers and the word 'appendages'. Bruno Taut's *Utopian City* (1919) was displayed alongside a photograph of a rose and the term 'blooming' [Fig. 4.30]. In each instance, Ungers seized upon a notable formal characteristic of an urban plan, likening it to a familiar object and a term of formal manipulation or identification. It was not that the images and terminology revealed underlying motivations for the plans' designs. Rather, Ungers demonstrated how one might creatively engage with the urban environment by analogizing between the unknown and the known.

The format of Ungers' installation was not unlike Joseph Kosuth's *One and Three Chairs* (1965), a conceptual work of art that displayed an actual manufactured chair, a black and white photograph of the chair printed at life size, and the dictionary definition of the chair [Fig. 4.31]. Kosuth's art work interrogates the various modes in which we encounter and



Figure 4.29 O.M. Ungers, "City Metaphors," *MANtransFORMS: Aspects of Design*, October 7, 1976 – February 6, 1977, Cooper Hewitt, Smithsonian Museum of Design. Hollein, Hans, et al. *Hans Hollein, Design: Man Transforms: Konzepte Einer Ausstellung = Man Transforms: Concepts of an Exhibition*. Wien: Löcker, 1989. p. 140.

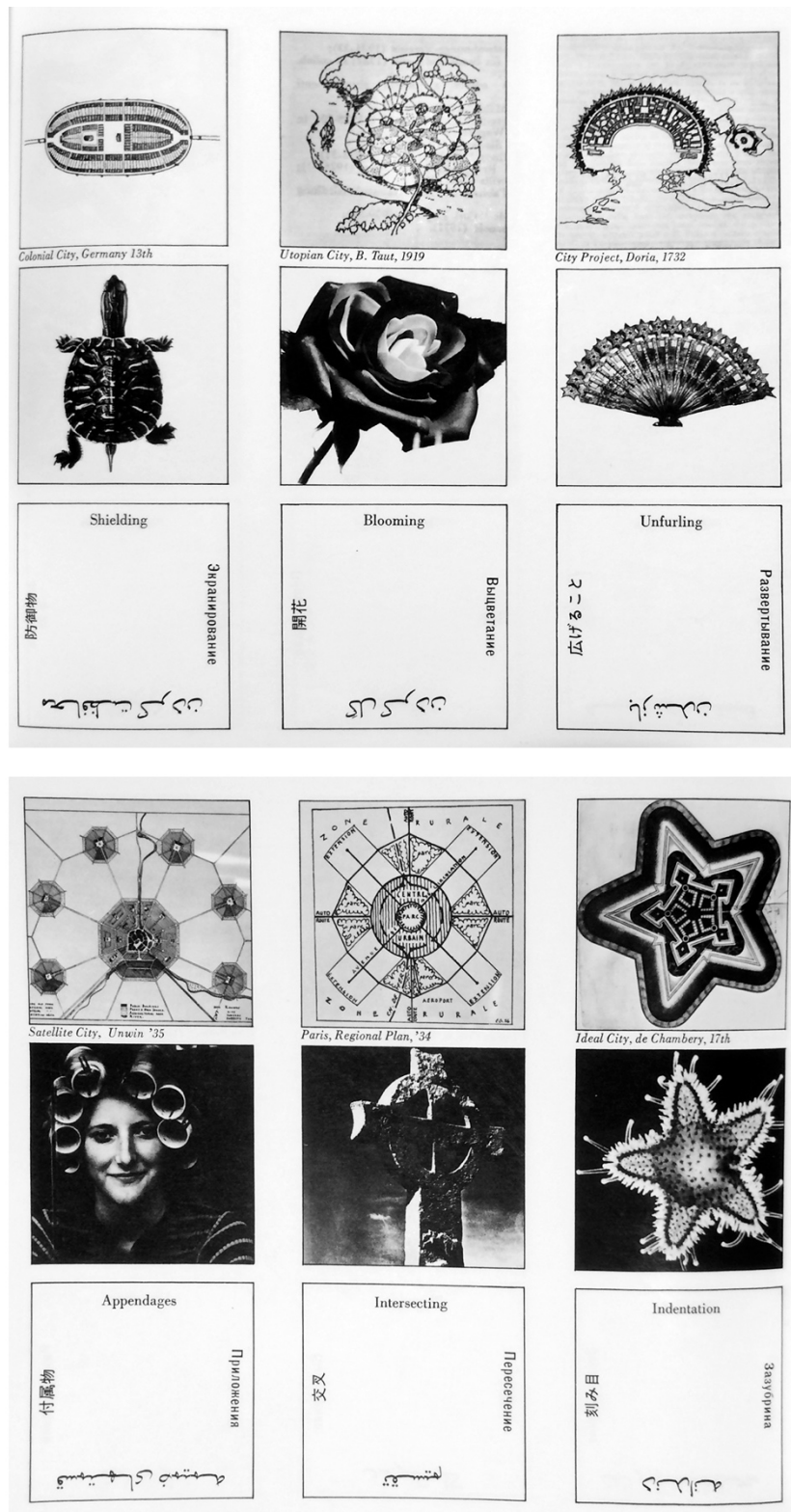


Figure 4.30 Details, O.M. Ungers, "City Metaphors," *MANtransFORMS: Aspects of Design*, October 7, 1976 – February 6, 1977, Cooper Hewitt, Smithsonian Museum of Design. From: Hollein, Hans, ed. *Man Transforms: An International Exhibition on Aspects of Design*. Washington: Smithsonian Institution, 1976. pp. 106-107



Figure 4.31 Joseph Kosuth, *One and Three Chairs*. 1965, wooden chair, gelatin silver print and text, 118 x 271 x 44 cm. Musée National d'Art Moderne, Centre Georges Pompidou, Paris, France. From: ARTSTOR, www.artstor.org (accessed July 31, 2016).

understand objects, suggesting that representations of objects have a power and agency that has as much to do with their format and context as it does with the object itself. In contrast, Ungers utilizes the tripartite structure to instead illuminate the role of interpretation and translation in the cognition of the city. In other words, his installation encouraged visitors *by example* to make connections between environmental forms and other phenomena as way of making those environments legible.

Both *Italy* and *MANtransFORMS* engaged with environment as an important category that directed attention away from individually, historically defined objects such as architecture. Instead, they focused upon the totality of everyday experience through the webs of interdependence stretching in all directions between the spatial, the material and the cultural. If *Italy* discussed ‘environment’ variously as a climatic condition, a natural condition apart from the man-made, an experience of culture, and even a mediatic form of communication, it was for the Cooper Hewitt, particularly in *MANtransFORMS* a dialogic condition that shapes and is shaped by man. In other words, as the title of the exhibition itself promised, it explored how man transformed the physical world of objects and buildings through his design ingenuity, creating a man-made environment out of nature. In so doing, man also transformed *himself*—his circumstances, his experiences, his desires, and his ambitions—through the production of objects and the alteration of his surroundings, forever changing what was possible to do and see in the world.

Chapter 5: Conclusion:

Ideas as Interpretive Metaphors and the Future of the Cooper Hewitt

Over the course of eighty years, the Cooper Hewitt developed and maintained three clear conceptualizations of the decorative arts and design over the course of the eighty years and the three periods of its existence that this dissertation treats. These often deviated from the dominant views of their era, and contributed to the larger development of those ideas in ways that were variously forward-thinking, reactionary and idiosyncratic. Indeed, the wide adoption of the “decorative arts” as a category of objects in the nineteenth century can be attributed to a handful of key developments: first, to the philosophy of aesthetics and its corollary elevation of the fine arts as the sole province of independent beauty, thereby creating an underclass of “minor” arts subject to “interest” of function; secondly, to the development of increasingly industrialized decorative arts industries; thirdly, to the emergence of exhibitions and museums dedicated to decorative arts production; and fourthly to the development of the decorative arts education and discourse. To conceive of objects as “decorative” was to emphasize their surface characteristics, particularly with respect to any applied pattern or motif. Some of the most important debates around the category of the decorative arts focused on its sources, its conventions, and its classifications. While historical style had been an important source in the nineteenth century, it was eclipsed by an interest in the natural world. While collector-oriented classification systems utilized the conceptual structure of architecture—particularly the domicile—to arrange subcollections according to their site in the home, producer-oriented systems emphasized material and technique, as well as the contemporaneous divisions of production.

While the “decorative arts” was utilized to categorize objects, “design” in the nineteenth century referred more broadly to a creative activity utilized not only in the visual, fine or decorative arts, but also in response to mechanical and engineering problems. Over the course of the nineteenth century, design developed into a specialized discipline distinct from the materially based manual production of artisans or industrial producers. The medium of design, rather, included drawing and the skills needed by the designer increasingly centered

around the abstract principles of composition and graphic design. The ability to conventionalize natural forms was a particularly important skill.

In keeping with contemporaneous notions of the decorative arts, the CUMAD emphasized surface appearance and the techniques of applying decoration rather than form-making. Similarly, they conceived of design as the creative activity of ideating new works, and the primary form of output for their students was through drawn representations rather than working in the craft. However, the Hewitts departed from mainstream thought in important ways. Eschewing the wide embrace of the natural world as sourcebook, the museum emphasized historical style and existing objects as key objects of study. In the production of new works, museum instruction set aside problems of conventionalization and instead emphasized direct copying of objects as well as designing within codified stylistic languages. The CUMAD, under the Hewitts guidance, conceived of the decorative arts as a living, contemporary practice and product. Though they limited the museum's collections to objects made prior to 1825, they viewed those historical objects as things to be lived with, their styles and forms subject to replication. Contemporary production was to be situated in historical idioms in such a way that did not acknowledge them as old, foreign, or anachronistic, but rather as a form of continuity within an unbroken chain of tradition.

As the CUMAD transitioned into the second phase of its life, the “decorative arts” had widely become a historical category tantamount to pre-Modernist production. Museums retained historical objects in decorative arts collections, but began to present exhibitions of contemporary objects under the aegis of “industrial design” or simply “design.” Early twentieth-century design theorists vociferously rejected historicism and instead argued that objects must be styled to embody the *Zeitgeist*, or the particular character of the present age—one imagined to be dissimilar and discontinuous from the recent past. And though design had long developed its own disciplinary practices that were independent from the specificities of craft production, design theorists of this period asserted that the changes in production wrought by mechanized mass production were significant enough to radically change the design process.

The Cooper Union Museum, as I argued in Chapter 3, began to approach its own collections through a particular art-historical lens. I describe that lens as “antiquarian” in its focus on the minutiae of its subcollections, such as in the particularities of workshops,

historical fabrication technologies, and the nuance of motival variations, rather than in broad, civilizational art-historical narratives. This kind of specialist interest in the museum's collections, shared only by scholars and collectors and no longer designers, foreclosed on the presentism with which the Hewitts approached them. Objects were no longer understood as having cultural continuity with present day concerns, but rather were viewed as being from a fundamentally different time and milieu.

Since the museum no longer had a substantial acquisitions budget, and its donors' interests remained historical, the CUMAD was unable to amass a collection of twentieth-century objects. Rather, its conception of "design" was guided by "modernizing" pressures exerted by the Art School of the Cooper Union. Because the idioms of artistic and architectural practice had changed so substantially, the historical objects could no longer be directly accessed in terms of their appearance. Thus, the museum adopted a conception of design that was based in formal and visual categories that were abstract and ahistorical. Characteristics such as form, color, texture, and line could be used to analyze any object, drawing out a single quality that could be applied to a new work that was otherwise different from its source. Design thus becomes an interpretive paradigm that allows designers the ability to access historical objects while accounting for their anachronism and the chasm between changed object types, materials, fabrication techniques, and processes of production and distribution.

By the late 1960s and early 1970s, design had evolved from the mid-century ahistorical yet appearance-centered conception into one that was fascinated with often-invisible systems, ecologies, structures, and processes. One major consequence of viewing the world of objects as affected and connected by broader systems was that the large-scale practices of architecture, infrastructure and urbanism became important constituents of design—indeed prompting the development of "environmental design" as both a museological and pedagogical category. Many design practices were led by designers trained in schools of architecture, and those practices were often multi-scalar, stretching from that of architecture and urban design to the smaller scale of furniture and utensils. The mid-century concern with formal novelty shifted into an interest in new responses to familiar program types, the structuring of new social relations, and the creation of new opportunities for participation and engagement in design.

When the museum was officially reestablished as the Cooper Hewitt, Smithsonian Museum of Design, it was confronted with the necessity of developing a concept of design that would allow its historical collections to regain relevance. The museum took on many ideas about design developed in the larger discourse, particularly the turn to environmental design and the interests in underlying systems and processes. However, through its inaugural exhibition, it contributed a complementary yet distinct concept of design that was able to bridge the historical and the contemporary. Emphasizing the ubiquity and everydayness of design as an activity and a cognitive faculty shared across cultures and periods, the museum re-presented historical objects in terms of those desires that motivated design as well as the consequences it effected in daily life. Design was no longer the province of the trained designer, but rather the whole of the man-made environment was identified as design, a product of millions of anonymous design decisions, many of them made by laypeople. Sharing a particular interest in the domestic sphere with the dominant design discourse of the period, the museum rejected the avant-garde reimagining of domestic space and its social relations, instead inviting its general lay audience to recognize their own daily activities as a legitimate form of design practice.

If Stephan Parcell's book *Four Historical Definitions of Architecture* can be understood as the pre-history of this project, then Penelope Dean's 2008 dissertation *Delivery without Discipline: Architecture in the Age of Design* functions well as its postscript. Treating architectural and design discourse from 1980 to 2005, Dean argued that architecture prior to 1980 viewed design as a by-product of its own interests and practices. The 1980s, in contrast, saw the beginning of a process in which design developed as its own fulsome discipline under whose auspices architecture was gradually subsumed. In other words, Dean suggests, architecture "de-disciplined" into a species of design. Further, the subspecialties of design, such as industrial design or graphic design, themselves coalesced under the larger disciplinary umbrella of design—"No longer domesticated by architecture or contained within specializations, design has become pervasive: every-thing has become pan-design."¹

The findings of this dissertation, however, suggest two important alternative arguments. First, I show that design was already an overarching discipline with its own rules,

¹ Penelope Jane Dean, "Delivery without Discipline: Architecture in the Age of *Design" (Ph.D., University of California, Los Angeles, 2008). 25.

conventions, concepts and terminology by the mid- to late nineteenth century. Secondly, architecture's relationship to design was a great deal more complex than Dean admits: its direction of design was far more tenuous and uneven than Dean proposes prior to the 1960s, and its embrace of the larger category of design occurred earlier than Dean proposed.

While the "mother art" model of architecture continues to loom large in the contemporary view of nineteenth and early twentieth century design history, the category of architecture itself as codified by its education, professional organization and its responsibilities relative to other fields, was largely in the process of formation during this period. While architectural theory maintained a relative independence and, at times, a form of intellectual leadership for other modes of design, in other quarters architecture was treated as a decorative art subject to the same design activity. Architectural practice and education, particularly as manifested at the Cooper Union and in its Museum, was deeply imbricated with the decorative arts. Later, after the museum was reestablished as the Cooper Hewitt, architects were complicit in the subsumption of architecture as a form of design. First utilizing the category of environmental design, and later celebrating design as a non-specialist, pervasive, everyday activity, architecture struck a bargain that downplayed its internal, disciplinary interests in order to celebrate its cultural and social relevance.

The Aptest Metaphor? Lens, Frame, Category, Paradigm

One aim of this dissertation has been to treat the decorative arts and design as *ideas*. That is, to approach them not as objective, ahistorical, static facts, but rather as concepts with historicity that emerged to account for persistent objects and practices in order to satisfy some cultural, intellectual, economic or technological change. Towards this end, I have utilized a variety of metaphors in an effort to describe the operations of these ideas, or something of the nuance of their application. I have variously described the "decorative arts" and "design" as lens, frame, category, structure and paradigm. While I have used these metaphors of interpretation somewhat interchangeably, it is important to parse what is at stake in their use.

The *lens* is perhaps the most ubiquitous metaphor used to describe the interpretive operations of an idea. To describe the decorative arts as a lens by which objects are understood and interpreted is to utilize an optical metaphor to represent cognition. Lenses

perform many functions: lenses can be used to view the minute or the distant, augmenting the naked eye by allowing it visual access to the previously inscrutable. Lenses can also be used correctively to focus an otherwise distorted gaze. Tinted lenses, such as the proverbial “rose colored glasses,” do not so much serve to change what we see, but rather to change how we feel about what we see by transforming the atmosphere of the view. In this way, lenses can simultaneously reveal new information, clarify the overly muddled and complex, and suggest new attitudes towards the already familiar.

A similarly visual device, the *frame* functions to circumscribe boundary. Most often understood to be the frame of an artwork, the metaphor functions to demarcate the area in which certain rules and assumptions are in effect from its surroundings, where other rules and assumptions govern. While the frame of a painting serves to distinguish the aesthetic space of the artwork from the real space of the gallery, we can look to other kinds of frames to better understand its interpretive metaphor. The window frame, the mirror frame, or even the photographic frame works to limit view by bracketing out what is otherwise spatially and visually contiguous. Similarly, Elizabeth Grosz has argued that it is the frame that creates a defined territory out of an undefined chaos.

[I]t is the architectural force of framing that liberates the qualities of objects or events that come to constitute the substance, the matter, of the art-work. The frame is what establishes territory out of the chaos that is the earth. The frame is thus the first construction, the corners, of the plane of composition. With no frame or boundary there can be no territory, and without territory there may be objects or things but not qualities that can become expressive, that can intensify and transform living bodies.²

The interpretive frame thus transforms ideas and objects that are adjacently positioned on a conceptual topology into the jurisdictional binary of inside and outside, identified or unidentified, or into a constituent of the framing idea or an unaccounted-for non-citizen.

The frame, then, is a visual means of producing the *category*. To suggest that an idea is a category is to give up specificity in order to gain capaciousness. The most useless category is that which contains only a single constituent. Categories gain their utility and their power through a careful balance of openness and boundedness, desiring to engender the maximum amount of meaning and information while also admitting the greatest number of individuals.

² Elizabeth A. Grosz, *Chaos, Territory, Art: Deleuze and the Framing of the Earth*, Wellek Library Lectures in Critical Theory (New York: Columbia University Press, 2008). 11.

Today “category” refers to ideas or characteristics that name a class, group or division. However, its Greek etymological origin, *kategoria*, denoted an accusation or a prediction. This shift in sense is useful for understanding the operations of categories: naming an object or an idea to a category is actually an assertion, an argument, or a proposition. However, the nature of the category is a way of masking uncertainties in the irrefutability of simple identification. This sense of irrefutability is hegemonic. By resisting alternatives, the category also conceals its ideological construction. It is only in the substitution of one set of categories for another that their underlying assumptions and biases become apparent.

The final interpretive metaphor used to discuss the decorative arts and design is that of *paradigm*. Larger and more complex in scope than lens, frame or category, paradigms, as Thomas Kuhn has argued, are the “body of concepts, phenomena and techniques” that bind intellectual communities together.³ For Kuhn, paradigms are not easily learned, but are rather adopted through a process of enculturation that involves the study and analysis of those exemplary achievements. To develop his account of paradigms and their competition, Kuhn drew upon the ancient Greek *paradeigma*, a rhetorical device that outlined a past scenario in order to apply its lessons to a similar problem at hand. In this way, *paradeigma* asked listeners to utilize analogical thinking to transfer the relationship of conditions, values and conclusions from one example to another. As Ian Hacking pointed out in his introduction to Kuhn’s book, “a paradigm is not only an achievement but also a particular way of modeling future practice upon it.”⁴ Of the four metaphors of interpretation, paradigm is perhaps the most explicit in its expectation of reproduction and perpetuation.

To refer to the decorative arts or design as an interpretive lens, frame, category or paradigm is thus to draw fruitfully upon the particular operations of these metaphors as well as to accept their blindspots and limitations. At different moments in the narrative, each metaphor functions aptly to describe the use of the decorative arts and design by the museum, the school or its related protagonists. In elaborating their operations, two things

³ Thomas S. Kuhn and Ian Hacking, *The Structure of Scientific Revolutions* (Chicago; London: The University of Chicago Press, 2012). 13. Originally published in 1965, Kuhn wrote specifically of the development of paradigms and their role in creating *scientific* communities. However, the use of the term has expanded and become more generalized in contemporary usage to account for communities in non-scientific disciplines as well. Paradigms develop from major achievements that are significant enough to attract adherents from competing paradigms, while simultaneously maintaining enough open-endedness to permit other lines of inquiry to be creatively pursued.

⁴ Ian Hacking, “Introductory Essay,” *ibid.* xxiii.

become clear: first, the decorative arts and design are imperfect concepts in that they, like any concept applied to an unruly set of objects and practices, can never fully account for their totality. Their limitations are simultaneously their power—to direct our attention to the aspects that are of value and to ignore or even conceal those aspects that are devalued. Secondly, while the “design” paradigm continues to resonate even today, the relative ease with which the “decorative arts” were replaced suggests that a third category may eventually emerge as the successor to design.

Epilogue: The End of Self-Reflexivity: Design at the Cooper Hewitt in the Twenty-first Century

When the Cooper Hewitt reopened in 2014 after three years of renovations, it did so with an exhibition that was reminiscent of *MANtransFORMS*. Joining the *Hewitt Sisters Collect*, the Cara McCarty and Matilda MacQuaid-curated exhibition, *Tools: Extending Our Reach*, constituted the main feature of the museum’s opening program, inaugurating the newly created Morton and Barbara Mandel Design Gallery on the third floor of the Carnegie Mansion [Fig. 5.01 & 5.02]. Comprised of one hundred seventy-five objects from nine Smithsonian museum and research collections representing 1.85 million years of human production, *Tools* reframed the design paradigm established by *MANtransFORMS*. Inflecting design anthropologically, the exhibition looked to objects as reflections of its makers’ and users’ humanity and as the intermediaries by which humans have engaged our environments.⁵ As museum director Caroline Bauman explained, “Through these objects of design assembled from encyclopedic collections, we are able to encounter moments of discover and surprise, and better appreciate the common humanity that connects us across diverse cultures, time periods and places.”⁶ Rather than view objects as manifestations of a common and timeless design faculty, designed objects were reinterpreted as evidence of a common and timeless human nature stemming from our production and use of tools.

At the center of the exhibition was an installation by Mexican artist Damián Ortega, entitled *Controller of the Universe* (2007), which utilized a plethora of hand tools hung to simulate a spectacular explosion of sharp, pointed objects hurtling menacingly outwards in a

⁵ Cara McCarty and Matilda MacQuaid, *Tools: Extending Our Reach* (New York: Cooper Hewitt, 2014). 13.

⁶ Quoted in Cooper Hewitt, Smithsonian Museum of Design, *Cooper Hewitt, Smithsonian Design Museum to Present 1.8 Million Years of Innovation in the Special Exhibition “Tools: Extending Our Reach”*, 2014, https://www.cooperhewitt.org/wp-content/uploads/2014/12/CH_Tools_Release_20141209.pdf.



Figure 5.01 Installation view, *Tools: Extending our Reach*, December 12, 2014 – May 25, 2015, Cooper Hewitt, Smithsonian Museum of Design, New York. From: Thinc Design, www.thincdesign.com (accessed August 22, 2016).



Figure 5.02 Installation view, *Tools: Extending our Reach*, December 12, 2014 – May 25, 2015, Cooper Hewitt, Smithsonian Museum of Design, New York. From: Thinc Design, www.thincdesign.com (accessed August 22, 2016).

perfectly spherical trajectory. A cruciform path is cut through the cloud of tools, allowing the viewer to stand at the center of the explosion, where each tool appears to be speeding away but is actually static and close at hand. The sharp edges and points of the tools are thereby tamed when the viewer steps into the center of the work, restored to a condition of “ready-to-hand,” unbroken and requiring no theorization for its use.⁷

Articulating the Bauman’s concept of common humanity in complementary terms, Ortega described the aim of his work in noting something common to both science and art. “The invention and imagination of the scientist is creative and playful and experimental and joyful, like the artist. It is difficult to separate science and technology from art, or scientific tools from art tools.”⁸ Ortega points to the emotions, drives and motivations shared by two paradigms, science and art, often described in oppositional terms. Highlighting the similarities between art and science—and by implication, design—Ortega emphasizes the continuities between various disciplines of human endeavor, downplaying design as simply one species of human exertion.

While the Cooper Hewitt circa 1976 embraced a general, rather than professional audience, it still clung to the idea that design primarily should be utilized self-reflexively to comment on its own practice and function. By 2014, design for the Cooper Hewitt, whether understood in a mode of scientific problem-solving or in an aesthetic mode, is celebrated as evidence of a timeless and noble human character. In this way, design is no longer used to think *about* design, but rather, is used as evidence of a larger set of questions having to do with human nature. Whether or not this is a third paradigm that might supersede design to remake the Cooper Hewitt as a “museum of man” has yet to be seen.

⁷ Here I am referring to Heidegger’s concept of ready-to-hand, which describes the seamless condition of use between human and tool that facilitates use rather than thought. A tool’s thingness falls away as we utilize it as a conduit for our own ends. This is contrasted with his notion of present-at-hand, referring to a more distant and contemplative approach taken when a tool breaks or is no longer useful. When this occurs, its thingness reappears as that which persists when its utility ceases to exist. Martin Heidegger, *Being and Time*, Sein Und Zeit.English (New York: Harper, 1962). 98.

⁸ Cooper Hewitt. “Damián Ortega on Controller of the Universe.” YouTube video, 1:34. Posted November 21, 2014. https://www.youtube.com/watch?v=ROWjynziY_M



Figure 5.03 Damián Ortega, *Controller of the Universe*, 2007. Found tools and wire. Collection of Glenn and Amanda Fuhrman, New York. Courtesy of the FLAG Art Foundation. Installed in *Tools: Extending our Reach*, December 12, 2014 – May 25, 2015, Cooper Hewitt, Smithsonian Museum of Design, New York. From: Thinc Design, www.thincdesign.com (accessed August 22, 2016).

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