

Presenting Design:
a reflection on the Museography of Industrial Objects

by

Erica Manetta

A thesis presented to OCAD University
in partial fulfillment of the requirements
for the degree of
Master of Fine Arts
in

CRITICISM AND CURATORIAL PRACTICE

Toronto, Ontario, Canada, April 2016

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ABSTRACT

Title: *Presenting Design: a reflection on the Museography of Industrial Objects*
by Erica Manetta
Master of Fine Arts in Criticism and Curatorial Practice, 2016
OCAD University

This thesis investigates exhibition strategies and display criteria in design museums. Design collections require a different approach and attention from contemporary art and other museum artifacts. This is why the emergence of a museography specifically dedicated to design is fundamental. What are the processes and negotiations involved in constructing a contemporary arrangement of an industrial design collection? How does the content and style of a specific installation inform public understanding? And how might a renewed approach to the display of design provide for a fuller experience of these objects? Outlining the limits of traditional approaches to the exhibition of industrial products, this thesis proposes that design museums could look to other models for exhibiting design, those found in architecture exhibitions, science centers, and company museums. The intent of the project is to allow a development of a critical appreciation of the issues pertaining to the presentation of industrial objects.

Key words: industrial design, presentation methods, display criteria, design museography, design museums, design exhibitions, company museums, architecture exhibitions, science centers.

ACKNOWLEDGEMENTS

I would like to thank my primary supervisor, Dr. Michael Prokopow, for his insightful and profound thoughts during the research process of this complicated and vast subject, and for his patience and meticulous editing work during the writing phase. Also, I extend my gratitude to my secondary advisor, Dr. Keith Bresnahan, who has given me clear and direct suggestions and attentively revised my final draft. Finally, I would like to express my special appreciation to my colleagues who have often encouraged me during the most stressing moments of my thesis writing, and throughout the whole program.

*To my parents,
patrons of my education.*

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1. INTRODUCTION

Design as a discipline, as a subject of critical study and university research, emerged in Europe and North America from other relative disciplines in the 1970s; the appearance of ‘design history’ specifically as distinct from ‘art history’ or ‘design’ more broadly, can be traced in the West to 1977, when a group of British design researchers founded the first professional organization devoted to design, the *Design History Society* (Walker 1990:2). Although its institutional recognition is thus relatively recent, philosophical debates about design began to take shape with the emergence of the industrial era, and rapidly increased in the period following the Second World War, when these inquiries became more scientific. The major concerns at this point were the identification of key figures and artifacts in design history, the codification of practice, and an awareness (and promotion) of the contributions that design was able to offer to the problems facing humanity. Such investigations also encouraged a reflection on the identification of design as a specific category of cultural patrimony. While museums and museological practices played a significant role in shaping these debates, and in elevating design’s separate status from other modes of material practice, the role of design museums and of the museography of design exhibitions in this process has remained under-recognized and under-theorized.

As design museums continue to expand, and grow in cultural prominence, questions concerning the musealization of design and the museographic models

utilized in such institutions, deserve to be investigated. The term *design museum* currently describes a varied group of institutions with varied approaches to the display of industrial goods. Besides the museums of decorative arts (*Victoria & Albert Museum, Museum of Applied Arts in Vienna, Cooper Hewitt Museum*, and so on) and contemporary art inclusive of design (*MoMA, The Montreal Museum of Fine Arts*, etc.), whose interest in design has experienced alternate phases over the 19th and 20th centuries, the last four decades have seen the emergence of a number of museums exclusively devoted to industrial design or design in general (*Vitra Design Museum, Design Museum, Triennale Museum*, etc.). All these types of institutions operate as resources for research and documentation, centers of inspiration and information for students and designers, and spaces that stimulate the public to understand the role of design through history, thanks to exhibitions and educational programs. Each design museum has elaborated a different approach toward these objectives, mostly in terms of display criteria and the arrangement of objects, which are the subjects of this thesis.

Design museums define their objectives in their official mandates, which variously express the centrality of a common goal, namely their didactic mission. For this reason, the construction of a specific museography of design must likewise be based in an understanding of the pedagogical function of the museum, as an institution that spreads knowledge of design's history and culture. Every museum combines the duty of preserving cultural patrimony, with the mission of making it accessible to diversified groups of consumers. This is largely brought to fruition

through the presentation of objects in situ (rather than through the production of texts or web-based materials, as important as these are), which is an integral – if not the most important – part of the museum’s *raison d’être*. The presentation has as objectives the legibility of a work, its individual valorization, its connection and relations (differences, oppositions, similarities, and interactions) with other objects on display, suitability of the physical supports, relation of the objects to the space, and adequacy of informative and didactic materials.

By considering both historic and more contemporary examples of design museums and their approaches to display, it is apparent that they have been deeply influenced by traditional art historical museography that removes the work from its context, places it in an impersonal space, marks its presence through dedicated lighting, and places a caption next to it. This methodology, while well-established for the display of art (though one whose validity remains highly debatable), accentuates the difficulty of interpreting a design object that is situated in a semantic and spatial system that is neither sufficiently critical nor pedagogically appropriate. This thesis challenges this type of procedure for design by claiming two key points: the necessity to differentiate the way museums treat design from the way they treat art, as they are different; and the necessity to work against the isolation of the object on display through a recontextualization that helps to tell its multiple stories. These are both necessary because typical, art-based approaches to exhibiting designed objects runs the risk of distorting the true identity of design, concentrating the attention mostly on its aesthetics while neglecting those aspects – such as the

design-production-marketing process – which are an essential part of the design product.

In recent years, some museums have begun to step outside traditional presentation methodologies in exhibiting design, most prominently in the Furniture Gallery at the V&A, and in the New Cooper Hewitt Experience, where new media technologies are used to enhance the visitor's experience. In these institutions, we see experimental solutions at work that try to situate the design object inside a new and more coherent context (and exhibition system) that keeps the object from being associated only with its fetishized formal properties. As significant as these cases are, they remain isolated examples that which do not seem yet able to replace the more conventional *modus operandi* that is still strongly present in most design museum display. As well, they present certain limitations that are worth noting, below. Drawing on the example set by these institutions and others, while acknowledging their limitations, this thesis analyzes some challenges and opportunities in finding a powerful and appropriate model for presenting design, one that would truly be capable of fulfilling museums' educational aims and the needs of the design discipline more broadly.

As Paola Antonelli states, contemporary curatorial practice within design cannot start from “the retrieval of existing proofs of pre-established generating rules” (2003:15), namely those that originated from the art museum, because design is different from art and each type of cultural assets must receive a diversified treatment. From here arises the desire to find alternative models that better fit the

multifaceted essence of design, which requires continuous evolutions and shifts in perspective. To design implies the collaboration of many disciplines and the comparison of multiple points of view: the design product is the result of a dynamic chain of events (conception, planning, production, consumption, use) being subject to continuous and persistent economic, social, and cultural oscillations. For this reason, I envision a museum that is able to put in conversation a vast range of different materials and different sources (prototypes, components, sketches, photos, catalogues, marketing information, videos, etc.) that constitute the physical and conceptual evidence for the recontextualized design object.

To this end, this project proposes that design museums look at different possible models in the way they display design, not only at these recent developments but more broadly at other exemplars of exhibiting design, in architecture exhibitions, science museums, and company museums. I think that these alternative museographic models can be sources of rich ideas on how to exhibiting design artifacts, and how a design installation could be reconceived. Their specific approach to exhibits and visitors could help rethink the design museum, and its current difficulties in *historicizing* an ever-changing and constantly evolving category of material culture, alongside the challenge of including in the display of the object its varied contexts and interpretative models (sociological, technological, anthropological, aesthetic, and others).

This thesis is not intended to be a museographic manual, nor a guide of practical instructions, but rather a theoretical speculation on this subject and its

possible future development. Within this broader problematic, this thesis will exclusively focus on industrially made objects, excluding other design branches, because of my interest in this specific kind of design production, and because other types of design would require different considerations pertaining their particular identity and necessities. All the cases examined here are the result of a personal selection and constitute a partial vision of the history and current practice within design museology. They have been taken into consideration as exemplary cases illustrating one facet or another of the problematic of exhibiting design, and do not represent a complete account of design museums and their exhibition strategies. It is important to note – particularly given the importance I place in the thesis on a primary, embodied encounter with designed objects – that I did not visit any of the institutions outlined here during the writing of this thesis, and my previous experiences with these sites were not of sufficient depth to be useful here. Thus, my analysis throughout the thesis is based on information retrieved from museums' web pages, published reviews, catalogues, photographs, illustrations, and other sources.

2. CONTEMPORARY DESIGN MUSEOLOGY AND LITERATURE

While scholars have intensively written about display problematics within museum installations in general, there are few texts or manuals specifically dedicated to the practical aspects of design museography. The relevant scholarly literature is for the most part related to art museums or art exhibitions, while design has received scant attention. Although, some authors have covered both the theory and the practice required in the management of museums to encourage reflection on the experience of the spectator (Thompson 1992; Barker 1999; Macdonald 1997; Bogle 2013), this discourse primarily concerns the display of art, rather than design (Vogel 1991; Noordegraf 2004; Turpinen 2005).

Other scholars have engaged in constructing a system of museographic principles taking into account a few design cases, but they have been too vague to be of much use. Margaret Hall, in *On Display: A Design Grammar for Museum Exhibitions* (1987) talks about her experience as Head of Design at the British Museum in London and her considerations offer very significant and technical elements of discussion by including checklist information, diagrams, and illustrations about materials, lighting, labeling, preservation, practical advice, what to avoid, and so forth. In truth, the major focus of the project still pertains painting and sculpture; the few examples that can somehow remotely interest my analysis are armors and jewelry from the British museum's collection, which are treated in

the books as art and archeological exhibits. Another example is *Collecting and Displaying* (McAlpine and Giangrande 1998), which narrates the history of collecting from ancient times to the present and the psychology of collecting. In terms of presenting artifacts the book offers an aesthetic, formal vision of displaying ceramics, toys, and scale models, and includes information on how to light, frame, mount, and hang objects to exalt only their formal and decorative features, being useful primarily for private collectors rather than museum collections.

A contemporary text that deserves mention here is *Design Objects and the Museum*, which gives an overview on design museology of the last 30 years, through 17 essays by different contributors: academics, curators, other museum professionals, archivists, and designers (Farrelly and Weddell 2016). Focusing on design in a more general sense (including applied arts, crafts, fashion), rather than on industrial design per se, it provides conceptual thinking and notable exhibition examples that demonstrate a number of recent attempts of changing the way design is presented in the museum space. The most significant sections of the book for my own discussion here are those that discuss the positioning of contemporary design within and beyond art galleries, debates about design versus art, and the role of curators and visitors in shaping experience and creating meaning. But, the emphasis here is mostly on theoretical questions and problematics of design's place within museums, rather than with questions of the physical display of objects (a theme that remains under-represented in existing literature). One exception to this is an

acknowledgment that the way in which artifacts are presented can link design to larger political movements and serve the development of identity recognition among museum visitors (Chapters 3, 4, 5, 7, and 10). Finally, this text supports my claims in this thesis through its argument for the necessity of transparency regarding the construction of displays, and the necessity to see the design object beyond its purely aesthetic qualities. In her chapter *Towards an Uncensored history of design: Ideal Homes and Constance Spry at the Design Museum*, Deborah Sugg Ryan talks about her experience of guest-curating the 1993 edition of the *Ideal Home exhibition* at the *Design Museum* in London, and her idea to challenge the established approach of the institution to design history by building room sets to show the artifacts (2016: 51). She states that the *Design Museum*, from its foundation, has collocated objects on white pedestals accompanied by simple captions, a curatorial practice that reflects the dominance of a modernist emphasis of form over process or other features, as established by Alfred H. Barr Jr. at *MoMA* in the 1930s (2016:53). Ryan suggests that as we move away from reading objects through aesthetic considerations, we can see them instead as bearers of other values.

Another essay goes in the same direction towards the idea of changing the standard curatorial strategies. Virginia Lucarelli explores the decision of the *Triennale Design Museum* in Milan of changing the display of exhibits every year by repositioning them according to chosen themes (2016:83). For example, in 2010 the collection was organized in four taxonomic groups – experimental objects, mass-produced objects, limited editions, and custom-made products, while in 2012

it was organized in twelve sections devoted to different manufacturing companies, indicating the ‘flops’ and ‘bestsellers’ of each (Lucarelli 2016). This dynamic model rejects the usual static display of design museums and allows a consideration the same objects through different keys of interpretation and from different angles year after year. But, it must be noted, the changes in the arrangement are not accompanied by a similar modification of the physical mode of presentation of the products themselves: in this sense, the *Triennale* remains in line with the tradition of the modernist ‘white cube’ (*MoMA*).

All the contributors of the book acknowledge the specific and diverse identity of the designed object; Helen Charman, whose essay *Just what is it that makes curating design so appealing?*, recounts a series of conversations she had with curators and visitors at the *Design Museum* in London. (2016:137). Charman affirms that curatorial choices within design tend towards an emphasis on aesthetic or stylistic properties, which can be deeply problematic. Namely, this interpretation tends to support a framing of designed objects as works of art, and suppresses questions relating to the processes of its creation, integral to its existence as a functional discipline: “design needs context, it needs personal relevance, even if it’s just being able to imagine how it works” (2016: 143).

Alongside this singular collection, while many monographs have been produced about single museums and their activities – the *MAK* (Noever 1995), the *MoMA* (Staniszewski 1998), *the V&A* (Burton 1999) for example – they tend either to focus on non-industrial exhibits or provide few practical and technical details

about presentation criteria, focusing instead on information more related to the ideological aspects, cultural contextualization, or content of specific exhibitions. The same can be said about exhibition catalogues that inform the reader about the background, the intent, and the content of a specific exhibition, but do not typically include specific information about the presentation strategies employed in these exhibitions ((Johnson and Barr 1934; Ambasz 1972).

Taking a wider view of this problematic, David Raizman and Carma Gorman's recent book *Objects, Audiences, and Literatures: Alternative Narratives in the History of Design* (2006) highlights the way that literature (scholarly texts, exhibition catalogues, museum monographs) helps to contextualize design, and the way in which scholars' writing about objects partially shapes our understanding of them. In the context of this thesis, which hopes for a recontextualization of the object on display through the presence of supportive material, the question remains: to what extent can a catalogue or other textual narrative help the public in understanding an object? Can textual documentation stand in for, or replace, the lack of contextualization in exhibition display itself? Coming out of a session presented at the College Art Association's 2005 annual conference in Atlanta, the book tries to understand what role, if any, literature can play in a greater historical comprehension of design objects among the readers. The writers discuss 'Japanned' furniture, Tiffany lamps, an artistic dress, modernist architecture at the 1925 Expo, and the association between masculinity and home building. Their emphasis is on specialist genres of literature: manuals, catalogues, criticism, or designers'

descriptions of their work published in the art press – alongside more secondary sources, such as novels, poems, advertising, movies, and other visual material. The authors are specifically interested in the reaction of non-professionals, usually middle to upper-middle-class consumers, in understanding various kinds of design. Consulting a greater number of different genres, the authors reveal how more populist sources – fashion magazines, home decoration manuals, and movies – are more able to capture the attention of the broader public, which is less interested in specialist texts (Raizman and Gorman 2006). Given this situation, I feel that the display of the object itself in a museum should remain the primary source by which viewers come to understand the context of an object, through additional material exhibited with the object in question. Catalogues, although useful, are typically accessed by few visitors (who usually have to buy it); the benefit of the catalogue, that one can revisit it at later points and in the absence of the objects, is also its shortcoming, making it a complementary tool to the exhibition, rather than an essential element of the object's contextualization.

The preference of the general public for these alternative (or mainstream) sources, as expressed by the contributors of the book, is in line with the idea of building an exhibition system that features enticing visual materials rather than textual ones, in order to meet the interest of the visitors by getting them engaged in a more sensory and dynamic experience. This conclusion connects with my proposal to consider the science centre/museum as a model for exhibiting industrial objects. The necessity of looking at this type of institution as an alternative model

of design was also expressed by Maddalena Dalla Mura in her article *Design in Museums: Towards an Integrative Approach: the Potential of Science and Technology Museums* (2009). Firstly, she states that display is one of the most significant tools through which design can be represented, defined, and read critically; and secondly that, in this regard, well-established design museums should integrate and explore the potential of science and technology museums to discover if and how these institutions can help to provide a more varied understanding of design's cultural and social meanings. She examined three European museums, the *Science Museum* in London, the *Technisches Museum* in Vienna, and the *Leonardo da Vinci National Museum of Science and Technology* in Milan (2009). Those museums display design, even though it is not explicitly included in their institutional objectives and mission statements, and feature – in their permanent installations – collections of unquestionable interest to the history of design. What Dalla Mura tries to point out is that this type of institutions presents design as a process and a practice that shapes the life of products, rather than just their form, and that design should not be isolated but always incorporated and explained within contexts, in connection with other phenomena. However, she does not go into details when it comes to describing the actual display of each museum and how these museums' presentation methods practically operate in shaping the public perception of design. One of her examples, however, is worth mentioning. Dalla Mura notes that two Viennese institutions, the *Technisches Museum* (a museum of technology) and the *MAK* (well-established as a design museum) both display Greta

Schütte-Lihotsky's *Frankfurter Küche*, with curatorial approaches that are significantly different: the kitchen at the *MAK*, which is a replica, is displayed alone, while the original kitchen at the *Technisches Museum* is contextualized thanks to many other artifacts, documents, and photos that help to understand its functions and characteristics (2009: 265). Dalla Mura acknowledges the differences between design museums and museums of science and technology in terms of specific missions and curatorial aims, but because of this diversity she also sees the potential for their collaboration to reach a broader public and discuss design issues from different points of view. She imagines a sort of ideal bridge that crosses Exhibition Road in London joining the *Science Museum* and the *Victoria & Albert Museum* so that the former can help the latter to go beyond the stereotype of the object developed from a merely aesthetic point of view, and consider a more scientific-technological perspective (2009:264).

Some three years after Dalla Mura's article, the V&A opened the Furniture Gallery, an interesting museographic experiment in experience and didactic purpose. The Furniture Gallery is part of a long and ongoing renovation project called *FuturePlan* that started in 2001 (V&A Press Office 2012). Over the past 15 years, the majority of the V&A's space has been transformed and developed by introducing new architectural interventions that tried to combine contemporary facilities with the original identity and characteristics of the museum. In the next years, the institution will also see the construction of a new grand entrance, a courtyard, and an additional gallery for temporary exhibitions (Vam.ac.uk n.d.).

The Furniture Gallery, which opened on December 2012, is part of this intensive project and specifically of the plan of redisplaying the museum collections (Vam.ac.uk n.d.). Curators selected pieces of furniture from existing installations, mostly objects that have not been on display for more than 30 years, and created a new permanent setting inside the Dr Susan Weber Gallery. It constitutes the first ever V&A gallery exclusively dedicated to furniture and has been conceived as an encyclopedic, albeit condensed, history of furniture production from the Middle age to the present day, by showing around 200 exemplary pieces from Europe, American, and Asia (Vam.ac.uk n.d.). The gallery is divided into three main displays: a central chronological display with 25 examples of basic furniture typologies which serve as an introduction and feature key pieces of the furniture history; sixteen displays divided by techniques of production; and seven smaller displays dedicated to individual designers (the last two sections are both situated along the two sides of the gallery) (V&A Press Office 2012).

This thematic structure creates some interesting historical juxtapositions, but what is special about this new exhibition space is that it is (as the V&A website states) “the only gallery worldwide to tell the story of furniture production through the way each piece was made and the people who made it” (Vam.ac.uk n.d.). The museum has incorporated innovative and interactive technologies to provide additional content and context for each object, and has specifically focused on telling the stories behind the objects through an explanation of the technical process of manufacturing. Prior to this, the museum has displayed furniture by emphasizing

aspects like historical period, style, and geographical origin; in this Gallery, there is a shift in focus towards the importance of the production process as a fundamental part of the design object. To achieve this goal, the V&A has replaced the conventional labels with digital ones that allow viewers to decide what, and how much, they want to know about an object (Rossi 2013). The technique-themed displays are enriched by videos that explore different methodologies of furniture construction and decoration, like joinery, moulding, upholstery, digital manufacturing, carving, marquetry, gilding, and lacquer, and include examples of how conservation and analysis have revealed previously unknown information about the way in which the objects were made (Rossi 2013). Finally, the gallery features large interactive tables: on the edges of the tables there are thirty-two 3-D material samples that, if touched, show the visitors, through the large digital screen of the tables, information on the unique qualities and characteristics of each single material while allowing a tactile experience and understanding of the textures (V&A Press Office 2012). The Furniture Gallery represents a critically important achievement and a unique museological example within the exhibition of design, and especially within the V&A. It is a notable change in the way an established decorative arts museum is setting new museographic standards within design that seek to improve the visitor experience. The gallery tells the objects' story from the useful perspective of the processes of their making, focuses on questions of techniques of construction that, if they are absolutely important to understand how

a hand-crafted piece of furniture is made (the majority of the exhibits in the gallery is craft), are much important as well in the case of industrial design.

Despite these achievements, limitations within this approach remain, from my perspective. The contact with the object is shielded by technology and digital interfaces while the physical display still reflects the old standards of the *Victoria & Albert Museum* that collocate the exhibits in a solitary position behind big glass walls. Also, the digital labels consist of only one screen per display so they allow visitors to look at only one object at a time, being used only by one person at a time (Rossi 2013). Overall, The Furniture Gallery exemplifies a remarkable and ambitious model for transforming museographies of industrial objects. Instead of focusing only on the formal, stylistic, or chronological aspects of the exhibits, the Furniture Gallery explores the stories of their making through techniques and materials. This approach leads the visitor to discover the object in depth, beyond its surface, and towards a fuller knowledge of it. It would be desirable that such curatorial choice could be applied more broadly in the museum, including that section dedicated to industrial products.



Figure 2.1: Display of Frank Lloyd Wright at the V&A's Furniture Gallery (Source: Kotomi_2013)



Figure 2.2: V&A's Furniture Gallery (Source: Kotomi_2013)

The new model of presenting design represented by the V&A's Furniture Gallery may have influenced the curatorial choices behind the *Cooper Hewitt Museum's New Experience*, which opened in March 2015 following an extensive renovation. This renovation, which provided for more gallery space, also introduced the so-called *New Experience*, a new technological and interactive apparatus to transform and enrich public visits based on the introduction of different hands-on activities and special equipment that let people engage with the museum and its collection: seven large size high-resolution multi-touch tables, interactive pens, the Immersion Room, and the Process Lab (Cooperhewitt.org n.d.). The touch-screen tables can accommodate up to 6 simultaneous users and function in combination with the pen, which visitors receive with their admission ticket. The interactive pen allows to virtually "collect and save" objects on display by pressing the flat end on the exhibits' labels; then the selection of objects can be transferred into the interactive tables at the end of the visit in order to explore them in more detail by zooming on the various parts of the objects and listening to commentaries by curators and experts (Cooperhewitt.org n.d.). Visitors can also retrieve their experience and objects selection at home using their ticket code on the museum's website dedicated page (collection.cooperhewitt.org/visits), so they can continue to interact with the collection outside the museum and access their personalized visit. The Immersion Room and the Process Lab require as well the use of the pen. Inside the former the public can select wallpapers from the museum's graphic design collection, have them projected on the entire walls of the room, as well as create

new graphic patterns of their own and see them projected. The Process Lab is based on the same principle of giving visitors agency for what they see (or experience): they can brainstorm design solutions about given queries, play, and perform through digital activities (Cooperhewitt.org n.d.).

The *Cooper Hewitt Labs* blog has recently reported statistical data and results about the impact on the visitors of the *New Experience*, one year after its introduction: while they affirm that the new approach requires some improvements, visitors are spending incredible amounts of time engaging with the new interactive tools and are responding positively (2016). The *New Experience* represents an important step forward for the exhibition of design, and in engaging the public with the particularities of design as a discipline; based on the findings of the museum and on my own research into the public videos and feedback (Cooperhewitt.org n.d.; Cooper Hewitt Labs 2016), it seems that inviting visitors to learn about design by allowing themselves to become designers, can make them aware that design is a way of thinking, planning, and problem solving.

At the same time, and to a much greater degree than at the V&A's Furniture Gallery, the entire experience is filtered and seen through the technology: visitors can see minute details of the artifacts, but this vision is always mediated through a screen; while enabling an at-home experience as well, this does appear to almost totally replace the sensory and more personal contact with the objects in the museum. Rather than a moment of cognitive enrichment, the museum visit itself may become mostly a moment of entertainment and game, wherein the only way

the public can acquire information about the actual objects on display (not all of them, only a few) is through the commentaries provided while at the touch-screen tables, i.e., at the end of their visit when they are no longer in the presence of the physical objects. Only a limited number of artifacts have videos showing particular characteristics of their structure and function, while the rest are supported by audio recordings only, without visual documentation (and even here, only 6 people per table at a time can enjoy this enriched component). The *New Experience* definitely enhances the museum visit and guides the audience towards a greater understanding of what it means to make design, but the educational potential here remains limited and independent of broader changes in the exhibition of the objects themselves (which remain, in their physical presentation, tied to the traditional display models I am questioning here). Ultimately, what people can do at the multi-touch tables (zooming and retrieving some contextual information through audio files) is nothing more than what other digitized museum collections are comfortably allowing us to do in our homes.

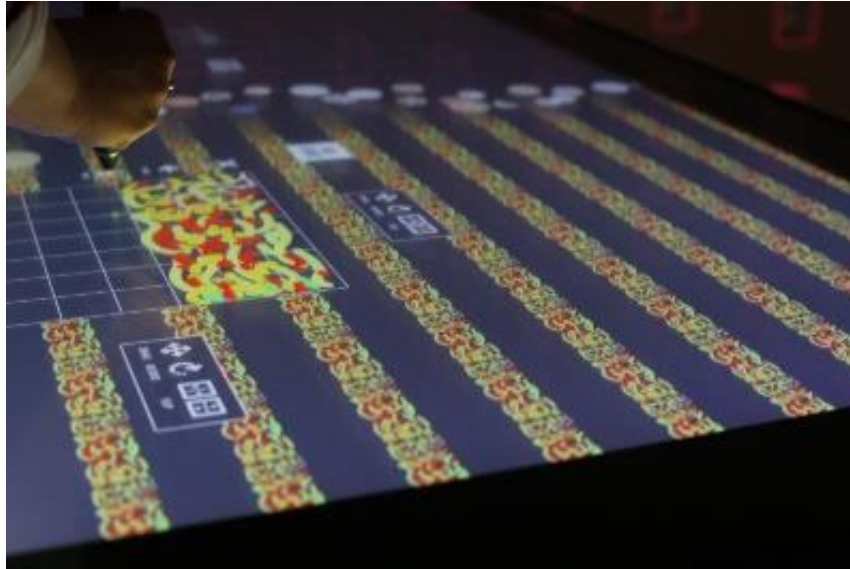


Figure 2.3: The interactive Pen at the V&A (Source: D_M_D 2015)



Figure 2.4: The Immersion Room at the V&A (Source: D_M_D 2015)

The *V&A* and the *Cooper Hewitt* are not the only institutions whose approach to the exhibition of design is currently undergoing radical transformations. The *Museum of Modern Art* (or *MoMA*) in New York City, an institution that has historically contributed to crucial shifts in the way industrial objects have been exhibited, has recently decided to close its Architecture and Design Galleries (Wood 2016). *MoMA* announced in mid-April 2016 that these galleries will be reorganized in view of the expansion of the museum, which is planning a 30% increase of the exhibition space for its collection (Menking 2016). Martino Stierli, Chief Curator of Architecture and Design has stated that the renovation will see the current galleries reopening and being repurposed in early 2017, whereas the new building is expected to be completed in 2019 (2016). In the meantime, the architecture and design collections will be subject to a new configuration that consists of exhibiting them in other museum spaces next to pre-existing installations (Menking 2016), while special exhibitions and programs dedicated to both architecture and design will continue to have a strong presence (Moma.org n.d.). The *MoMA* does not provide any other information about how it will concretely achieve this temporary configuration in terms of display, how the two collections will be presented once the expansion project will be completed, or if there will actually be again a designated space for them. If not, as seems likely, this will probably constitute another turning point in the exhibition of design, whereby designed objects are re-integrated into a broader sphere of material culture and visual artifacts. What this will mean for the pedagogic function of the museum

in terms of design, and for a future recognition of design's separate and autonomous character, remains to be seen.

MoMA's Architecture and Design Department was the first (1932) to be exclusively devoted to a permanent collection of industrial design; this distinct presentation has surely contributed to the recognition of design's autonomous status in public consciousness, and has permitted the museum to forward a raising of standards and the promotion of modernist principles in design for almost a century. This Department has also, through significant exhibitions discussed later in this thesis, been at the forefront of identifying and highlighting developments in design before they captured the interest of historians and scholars: one can point, for example, to the 1938 *Bauhaus 1919-1928* exhibition, which shortly followed the closure of the school and recognized the influence and substantial contributions of the school for years to come; or to its hosting of competitions for emerging designers that gave visibility to objects that are now considered cornerstones of design history (Eames and Saarinen's *Side Chair* in 1940, for instance); its role in defining the standards of a new architectural movement, the International Style (1932); and its much more recent role in keeping pace with (and helping the public understand) technical innovations in design as culturally significant, in its being the first major museum to acquire and display videogames (Antonelli 2012). While one can debate the positive or negative balance of its influence, what is indisputable is that for some 80 years *MoMA* has established standards and models for the presentation and display of design.

On the one hand, exhibiting design next to art and other media will result in the creation of multidisciplinary spaces that will likely allow a greater public access to the design collection – something Stierli has publicly expressed hope for (Stierli 2016) – as well as potentially producing fertile encounters and comparative possibilities between distinct material expressions. On the other hand, it will likely reduce the perception of differences among the diverse forms of production, and tend to make them conform to similar display strategies and interpretations. The introduction of a separate department dedicated to design, was intended to give autonomous dignity to the industrial objects, and represented an absolutely important step in design museology. The differentiation of museum sections, I would suggest, allows for a more correct interpretation of the different objects displayed, according to their characteristic field and corresponding values. Design and art living together at *MoMA* in future will likely reinforce a more aesthetic perception of the industrial object; something already present from the outset in the museum's presentation of design, but which will now be furthered by its co-presence with paintings and sculptures.



Figure 2.5: Philip Johnson Architecture and Design Galleries – Display of Slinky and LEGO Building Blocks (Source: Wally Gobetz 2007)

The lesson of *MoMA*'s historic approach to design, stemming from Alfred H. Barr's formalist vision, has also influenced the approach to industrial products of the *Design Museum* in London and the *Vitra Museum* in Weil am Rhein (Germany) (Charman 2016), both founded in 1989. In 2012, the *Design Museum* unveiled the decision to move to a new home in the Kensington's cultural quarter, where it will join the *V&A*, the *Science Museum*, and the *Natural History Museum* (Etherington 2012; Mairs 2016). The new building will open to the public on November 2016 and triple the museum's current exhibition space to almost 10,000 square metres, allowing the museum to accommodate the first permanent display of its collection, alongside two temporary exhibitions (New Design Museum n.d.). In fact, the *Design Museum*'s collection has been so far shown in ever-changing

temporary displays and arranged each time according to different thematic orders. Beside exemplary or rare objects, and designer's prototypes, these displays have featured containers and bottles of dish soap, wrapping for fast food, and other sorts of packaging (Design Museum n.d.). The museum has used this expedient in order to narrate the evolution of industrial production and the seriality of design products, and to make the visitor aware of chronological changes in design (Design Museum n.d.). The institution has not yet specified what the plans for the permanent display of the collection will be; the only thing that was revealed was the renderings of the renovated building, which will have a distinctive shape due to the "hyperbolic paraboloid roof" (Mairs 2016). While the structure will no doubt be impressive, there is no mention made of any corresponding shifts in thinking around the exhibitionary strategies to be applied within.



Figure 2.6: Packaging of Braun 550 – Dieter Rams Retrospective at the Design Museum (Source: toby__ 2009)

The *Vitra Design Museum* is, similarly, undergoing an expansion of its spaces. It is a privately owned museum founded by the Vitra company itself, but which operates independently from the company, self-financing its cultural initiatives (Vitra Design Museum n.d.). In its current form, the museum is known for its promotion of interactivity and entertainment for visitors, with its museum gardens, Slide Tower, and shops in addition to the Museum's displays (Vitra Design Museum n.d.). On June 2016, a new building will open on the Vitra Campus, which will provide a new venue for presenting its extensive collection to the public, complemented by a new café and a shop (Vitra Design Museum n.d.). Like the *Design Museum* in London, the *Vitra* will be finally able to showcase its collection in a permanent arrangement (Frearson 2016). The building by Frank Gehry will continue to be used for temporary exhibitions, while the new space will display approximately 400 key pieces of modern furniture and recent 3D printed designs (Vitra Design Museum n.d.).



Figure 2.7: Chairs on display at Vitra Museum (Source: Leonora Giovanazzi 2006)

From this brief survey, it is apparent that a considerable number of important museums devoted to design are engaged in a period of transformation, with consequences for future design research. The *Vitra* and the *Design Museum* will have their collection collocated in a permanent setting for the first time, which will no doubt lead to specific curatorial choices; the *MoMA* is undergoing a revolutionary integration of industrial objects alongside artworks through its surprising decision to dissolve the separate Architecture and Design department; while the *V&A* and the *Cooper Hewitt* are setting new standards in design exhibition through the introduction of new media and technology in their installations. What the impact of these changes will be, will unfold in coming years.

3. HISTORICAL OVERVIEW ON EXHIBITING INDUSTRIAL DESIGN

The origin of modern design museums dates back to the 19th century, in spaces that sought to facilitate or improve technical education, the taste of designers, and of the general public. The coming of the Enlightenment introduced an emphasis on learning through observation and direct contact with any phenomenon. This allowed a greater devotion to the empirical study of nature, and to science and its innovations, promoting the birth of scientific, botanical, technical, and natural history collections and museums that became places of information and concrete investigation for farmers and artisans. This newly-established empiricism, which emphasized learning through visual experience and practical experimentation in museums, constituted the base of the education process for artists and other technical professions.

Based on these principles, the *Conservatoire des Art et Métiers* was founded in Paris in 1794. Located inside the former church of St. Martins des Champs, it offered to French craftsmen and manufactures a small encyclopedic collection of sketches, machine components, designs, and industrial patents (Amari 1997). That was revolutionary: the objects were exhibited not to be contemplated but to be touched. Until then, the vocational training was exclusively based on the transmission of knowledge and expertise inside the workplace and reserved to the members of the guilds (Fontanon 1992). Because of its character, the Conservatoire

can be considered the prototype of the first industrial museum. With its intent to improve the manufacturing production, it additionally granted an interactive experience for the public in approaching the machineries and tools on display: thus serving as a precedent for the contemporary idea of museum interactivity (Fontanon 1992).

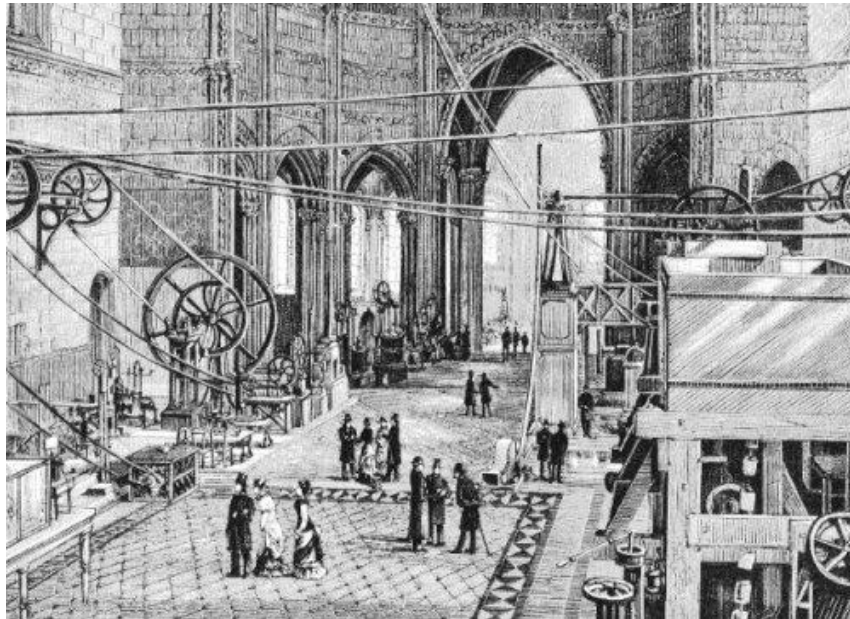


Figure 3.1: Conservatoire des Art et Métiers in Paris (Source: Seaus.free.fr)

In France, Enlightenment thinking encouraged the dissemination of knowledge through the establishments of the national fairs, whose goal was to show the State's technical and cultural achievements after the monarchy's decline. The French fairs turned out to be successful and pushed the other major European

powers to take on the same initiative. This led to the emergence of the world's fairs, the first of which was the *Great Exhibition* in London 1851. Without an adequate system of professional training, the world's exhibitions assumed a meaningful pedagogic value: if in general the fairs were recognized as an important step in the process of discovery and assimilation of the new technologies in the industrialization era, they also represented a precious occasion of learning. Even though speaking of a *curatorial practice* for design at that time would be hazardous, the organizers of the first international exhibitions understood the importance of classifying the goods on display and recognized classification as a factor that influences every aspect of an exhibition's design. Here the intent was to create a "transparently organized classified landscape of commodities" (Giberti 2002) but the size and complexity of the fairs made it difficult to accomplish. Fairs even constituted a significant opportunity of comparison and self-celebration for the European nations, which is why each nation paid special attention to the installation and presentation of their own pavilions. They also had commercial intents, thus the world's fairs acted as trade fairs rather than temporary exhibitions. For this purpose, the display of the objects was enhanced by explanations and demonstrations of the items' operation or technical performances (Giberti 2002).



Figure 3.2: William Simpson's lithograph of the Great Exhibition 1851 (Source: Wikipedia Commons)



Figure 3.3: Fur Display at the Great Exhibition 1851 (Source: Wikipedia Commons)

The experience of the *Great Exhibition* led to the founding of the first industrial and decorative arts museum in 1857, the *South Kensington*, renamed *Victoria & Albert Museum* in 1899 and sited in the West end of London. Henry Cole (1808-1882), the organizer of the *Great Exhibition* and the first director of the *South Kensington*, believed firmly in the role that the museum could play in influencing and transforming the taste of the entire nation (Bonython and Burton 2003). Cole's intentions were to show that art and science could coexist in relation to the industrial production, and to attract the widest possible audience: he indeed hoped to reach both the educated middle class and the uneducated working class for the desire to contribute to the moral and intellectual refinement of all (Bonython and Burton 2003). The *South Kensington* exhibited for the first time a systematic collection of applied arts and industrial products that until then were excluded both from the mechanism of preservation and academic study. The collection was composed of objects and patents from the craftsmanship and industrial manufacturing that have represented the base for a new type of production that was flooding the market with affordable and accessible goods (Burton 1999).

From this point on, an intense debate on this kind of production drew a more conscious questioning and reflection about the function of the objects and the mutual influences between art and industry. This reflection also included the relative implications on the education field and the establishment of appropriate museums for the presentation of the artifacts. The methods of arrangement, lighting, maintenance, and classification of the *South Kensington* created the basis for the

modern display of design, and represented one of the first steps of curatorial practice within the design museum history. Cole laid the foundations for an appropriate installation of the exhibits, which at that time he divided in departments based on typology (following the same arrangement adopted in the *Great Exhibition*) (McClellan 2003). The works in each department were ordered by geographical origin and materials, placed under glass cases, carefully numbered, and distinctly described, with the intent to illustrate the development of determined techniques (Burton 1999). Because the museum had to deal with many different types of objects, and because the collection grew over the time, the placement and organizational principles of the works tended to alter from time to time.

In the early 20th century, the *Victoria & Albert Museum* was reorganized into five curatorial departments – ceramics, woodwork, metalwork, textiles, and sculpture – but the display remained confusing (Vam.ac.uk n.d.). Despite numerous efforts to modernize, these divisions were retained up to 1945, even if the building's structure and the functions of each section changed (Baker, Richardson, and Burton 1997). Currently, the collection covers some of the major moments in the history of design and crafts, and its division in rooms broadly reflects periods and themes within manufacturing (Vam.ac.uk n.d.), but the chronology is not strict and the periods overlap. Despite the adjustments and the transformations over the time – for the purpose to respect the historical and cultural changes in the way design was conceived – the V&A maintains a sort of adherence to the standard approaches of the traditional museum: dozens of objects, situated one next to the other and

chronologically ordered, are placed inside transparent cases or on tall pedestals and exposed to the public. This also applies to the installation of the more modern sections (rooms 74 and 76, which respectively display industrial objects made before 1945 and in the second half of the 20th century) that feature the same arrangement of the rooms showing art and crafts, or exclusively decorative artifacts: the components and gears of a laptop, a toaster, and a microwave oven are exhibited in an identical display context to the religious sculptures in room 26, the Rococo ceramics in room 53, and the Gothic silver in room 69 (Vam.ac.uk n.d.).

Six years after the South Kensington's opening in 1863, the *Imperial Royal Austrian Museum of Art and Industry* was founded in Vienna. It was conceived as a modern museum in the sense that it had innovative objectives and did not originate from a royal or noble collection: it did not actually possess any object at all at the beginning (Mak.at n.d.). The collection started to grow up extensively by gathering objects of various origin – from handicrafts to industry production, devoting a whole section for documenting the history and significance of the *Wiener Werkstätte*. The extant literature does not offer particularly useful information about the display criteria applied in these early years, except that the museum's rooms hosted peculiar works from single epochs and styles, ordered in chronological sequence and in conformity with geographical origins (Noever 1995). Despite the differences from the English model, the experience of the V&A deeply influenced the choices of what today is called the *MAK (Museum für angewandte Kunst or Museum of Applied Arts)*, for the emperor Franz specifically promoted the

establishment of the Viennese museum after the model of the English one (Mak.at n.d.). Like the V&A, the predominance of crafts and decorative arts in the collection of the MAK limits a more contemporary approach towards the industrial products.



Figure 3.4: Furniture display at MAK (Source: Kotomi_ 2015)

In the early 20th century – after the decline of Art Nouveau – design embraced a new aesthetic that lent itself both to a more artistic vision of the design object and to a greater connection between artists and artisans (De Fusco 1985). This attitude was then also emphasized by the artistic avant-garde movements and their influence on the production of furnishing. Such tendencies started to be overcome thanks to the emergence of the Bauhaus that brought design toward the modernist trends and a better equilibrium between the formal and functional

elements (De Fusco 1985). In the meanwhile, the interest towards the value of machines began to mature. The United States took a leading role in the era of mechanization thanks to the introduction of the assembly line within the canning industry, Frederick Taylor's work management theory, and the evolution of the domestic environment. Peter Behrens's design work at the *AEG* in Berlin and Henry Ford's contribution at the Detroit *Ford Motor Company* were two signals that industrial design was about to become one of the most sensitive indicators of this change. The mechanized world largely replaced nature as the new reference point for design.

It was in these same years that the *MoMA* started to introduce industrial products to its collection, as a result of a growing recognition of design's aesthetic value (Kantor 2010). The first curatorial department devoted to architecture and design was established in 1932. At this time, Alfred H. Barr Jr. and Philip Johnson's interest in the aesthetics of machines led to the opening of the famous 1934 exhibition *Machine Art*. Barr and Johnson selected 400 objects for display that included several types of industrial components and equipment, and scientific tools. Every object in the show, isolated from the others, and placed against a white wall and on a white plinth, was elevated to the status of art. In the exhibition catalogue, Johnson and Barr claim to have chosen the objects for their merely formal quality (1934), which made this exhibition a key instance of the modernist tendency to consider non-artistic pieces such as industrial machines, for their aesthetic value alone. As stated in the press release, "for the first time the museum was giving as

much importance to the installation as to the exhibition itself, designed to concentrate maximum attention on each object individually” (MoMA 1934a). This essentially marked a unique kind of approach towards design, different from the arrangements of permanent collections or trade fairs.¹

Over the following decades, and especially after the war, designers were called on to remodel the domestic environment and to improve housing standards. The contest *Organic Design in Home Furnishing*, held by MoMA in 1940, taught some lessons about the use of new materials and the construction of low-cost products (MoMA 1940), while the *Good Design* exhibitions similarly promoted modernist furnishings in the home. Among others, one could point to the promotion of Scandinavian design and its nature-inspired production in the traveling exhibition *Design in Scandinavia*, which was installed in 24 locations in North America from 1954 to 1957. The exhibition was physically organized in four theme sections: inexpensive household goods; contemporary handicraft and domestic industry; exclusive arts and crafts in ceramics, glass, and metal; and furniture, textiles, and lighting in combination with photos of houses and interiors (Guldberg 2011). The items were placed one next to the other according to typological order or positioned inside small thematic installations in an anticipation of later attempts at recontextualizing the exhibits’ function.

¹ Image of *Machine Art* at http://www.moma.org/wp/moma_learning/wp-content/uploads/2014/06/IN0034_002_post_as-469x356.jpg



Figure 3.5: Design in Scandinavia exhibition at the Brooklyn Museum (Source: Wikipedia Commons)

From this point of view, the later 1972 exhibition at *MoMA* curated by Emilio Ambasz, titled *Italy: The New Domestic Landscape*, served as an innovative example of display configuration for domestic design. The exhibition aimed to report on design developments in Italy at that time, with 180 household objects and 11 environments, commissioned by the museum itself (MoMA 1972). The exhibition was divided in two sections, the first of which was devoted to single objects that were placed in the garden wing (because of the lack of indoor space) onto special modular cases (Collard 2012). The second section instead was devoted

to prototypes of housing environments. The environments were offering a vision of the world in which the isolation of a single object was replaced by interactive and dynamic relationships with the viewer, able to create new *domestic rituals*. In fact, Ambasz stimulated the designers to conceive environments and furniture that could allow users to activate new habits throughout the day, in spaces capable of hosting objects that are always changing in form and function (MoMA 1972). In order to show the ability of the environments to change, each designer was asked to make a video and project it next to the relative installation (Viapiranesi 2009). Besides illustrating and explaining how the objects and furniture worked, the videos carefully narrated the designers' different points of view. For the first time ever museum installations were animated by audiovisual material (Viapiranesi 2009), a choice which implied that the museum put the visitors in the position to experiment with and evaluate the environments' performances. The experience of *Italy: The New Domestic Landscape* let the world look at design exhibitions as places of social experimentation beyond the pure observation of the aesthetic, and understand the necessity to create installations that are more suitable for the specific character of design.²

In 1976, the *Cooper Hewitt Museum* inaugurated *MAN transFORMS*, the first exhibition at the new renovated home in Carnegie Mansion, after having been closed for 13 years. Hans Hollein curated the show with the help of other 9

² See image of *Italy: The New Domestic Landscape* at <https://kitchenofthefuture.files.wordpress.com/2012/04/furn-4-future.jpg>

architects and designers (Smithsonian Institution 1976). The aim was to explore how everyday objects are transformed by people in different times and places, and how even common items are likely to feature endless variations and to convey several messages. Unlike the aforementioned design exhibitions, for this exhibition Hollein did not select the best and the most innovative objects, but instead gathered the most ordinary things from various parts of the world without distinction of culture and time, developing the exhibition's narrative through symbolism and metaphor, and creating a poetic vision of design (La Pietra 1976). The way the ordinary objects were presented was supposed to surprise the viewer by evoking unusual mental connections among the exhibits. Hollein wanted to build a show that did not necessitate a theoretical mediation to be understood, but that was directly comprehensible for everybody in order to let the viewers make their own discoveries (Smithsonian Institution 1976). For instance, inside the *Star Dome*, he placed a huge quantity of *stars* with different meanings – movie stars, stars as celestial objects, Christmas stars, and so on – made of diverse materials, dimensions, and shapes (La Pietra 1976).³ This setting, while allowed mental associations, also led the viewers far from the reality of the objects and did not let them focus on each single artifact, but on the unusual gathering, especially because the exhibits were hanging from the roof and so not easy to look at. The *Bread Table* featured a vast selection of pieces of bread with various shapes, testifying that function is not necessarily tied up to form; on the contrary, another installation

³ See image at http://siarchives.si.edu/oldsite/siarchives-old/history/exhibits/historic/95_20305.gif

presented a sledgehammer and a surgical hammer, demonstrating that shape does correspond to function (La Pietra 1976). This approach, while tried to teach the audience the difficult relation between functionality and form, ran the risk of disorienting and confusing the audiences. Finally, the addition of the work by Japanese architect Arata Isozaki, a life-sized statue of an angel inside a cage, and of the *Plexiglass Sacred Room* by Nader Ardalan and Karl Schlamminger,⁴ which was a dark room full of plexiglass abstract sculptures, revealed a certain degree of artistic inclination on the part of curator. This approach impeded the initial goal that was to connect each object with its historical and geographical processes of transformation. Holbein's overly creative approach posed a limitation here.

The *Cooper Hewitt Museum* experienced a more orthodox attempt of contextualizing the design object for the exhibition *Mechanical Brides: Women and Machines from Home to Office*. The show, which ran from August 1993 to January 1994, posed the relation between gender and technology through objects. Telephones, typewriters, desks, washing machines, and irons were displayed next to ads, pictures, graphic materials, film stills, TV commercials, and other documents, with the aim of presenting “the social, sexual, and economic meaning of objects” (Smithsonian Institution 1995). One year later, the Smithsonian Institution conducted a specific study about the educational outcome of the exhibition. The goal of the project was to investigate the degree to which visitors recognized and responded to the exhibition theme, as well as the relative

⁴ See image at http://siarchives.si.edu/oldsite/siarchives-old/history/exhibits/historic/95_20302.gif

effectiveness of the exhibition contents and display strategies. What the study proved was that all the supportive visual materials that enriched the items on display effectively allowed a greater understanding, and the public positively responded to those visual stimulations (1995).⁵

⁵ See image of *Mechanical Brides* at http://elupton.com.s73045.gridserver.com/wp-content/uploads/Mechanical_Brides_1993.jpg

4. REFLECTING ON PRESENTATION ISSUES OF DESIGN

It is clear that every museum and every exhibition establishes strategies to apply on the basis of its mission, its theme, its character, and the type of research it carries out: those differences understandably affect the way design is perceived each time and even lead to misconceptions. The general public, based on common linguistic usage ('designer' clothing, 'added design features,' etc.), seems to think of design as an added formal quality (the sleek metal external body of a car not the car as a whole) or as something that refers to style and taste. It also carries connotations of a luxury object for rich consumers and collectors, which erroneously strengthens the elitist value of design. The way design is presented in museums frequently encourages such bias. This is why an exhibition is not only a form of presentation but also a form of representation: it recalls a more complex reality and deeper meanings than the individual and physical works on display, and makes claims about the status and nature of the objects displayed (Barker 1999).

Design refers to any part of the construction of an industrially made object and to any feature of the physical object itself, but also to the process by which these features were arrived at. It ideally represents a connecting link between art and engineering, between style and invention, between creativity and rigorous planning. The discipline opens up into different fields of culture and society, on the one hand by referring to technical matters, and the other hand, by adopting meanings and strengths from the world of the humanities: industrial technology;

chemistry, performative characteristics, and the relative procedures of transformation of different materials; economy and trade market; style and aesthetics; psychology and sociology; social history and customs; and many others. Designing a product means to consider all those functional, technical, formal, and cultural elements that revolves around the realization of an idea, that determine the quality of the product, and make it suitable for practical use. Given this essentially multiple/multidisciplinary nature of design, every object or group of objects for display in a museum setting can equally be arranged and interpreted according to one or more of these elements. The chosen classification criterion imposes a meaning on the exhibits as the display setting is a *way of seeing* an object, related to a particular moment in history, culture, progress of knowledge and of its critical development (Alpers 1991).

The world's fairs were the first to face the problem of giving industrial exhibits some form of order that was systematic, scientifically correct, and that could make the display look different from a mere accumulation of things. The organizers of the *Great Exhibition* in 1851 asked men of science and manufacturers to create a system that was able to support the intents of the fair: showing each nation's technological developments and informing the public of advances in industrial production. The artifacts were geographically divided so every country was in charge to install its own exhibition space and to order the objects by type (Giberti 2002). Arguably, the *Great Exhibition* and the following fairs ended up as sites experimentation rather than decided order, owing to (among other elements)

the huge dimensions of certain pieces and the unpredictable extension of the exhibition space. During the 1855 *Exposition Universelle* in Paris, Henry Cole, who was appointed commissioner for the British section, complained that the geographical division made it difficult to compare goods of the same type. That is why the first fairs failed in having a unitary character. A vast improvement was achieved in this respect for the following Paris *International Exposition* of 1867, when a new system was adopted: the comparative tables permitted for the side-by-side display of similar goods from different countries, which viewers could compare as the works of a single class of objects (Giberti 2002).

Unlike fairs, design museums do not show only the most recent innovations but collections that contain objects made in different times in the past, which makes the temporal factor necessary to consider in any criterion of classification or ordering. A huge collection like that of the V&A Museum obviously creates many problems in finding an appropriate classification method that can also be always consistently applied. The museum's order is not at all uniform combining chronological, geographical, typological, and material based elements of classification: sculpture from 1300 to 1600, the silver galleries, the 20th century Modernism, Japan production, Rococo style, the ceramics galleries, furniture from 1945, and so on (Vam.ac.uk n.d.). Each method provides the viewer with only one key of interpretation determined by the chosen classification principle, which means that each display criterion is likely to be relative and reductive, overwriting the multiple meanings of the object with a single or perhaps double frame, which

then suffices for the visitor to have ‘understood’ the artefact in question. Thus, whatever the classifying principle is, even though a necessary and valid one, it is not sufficient to fully describe the objects.

For this reason, the use of other tools and materials related to the objects can help to fill in the semantic blanks and ensure that other important elements are clearly expressed and perceived by the visitor. This is necessary since objects, in being displayed, have been disconnected from their primary function. In fact, one direct consequence of the musealization of an object is its being completely decontextualized, set in a condition of solitude, and totally cut out of its original background, which was made of other objects, environments, uses, practises, and transitions. In *Objects of Desire*, Adrian Forty argues that this phenomenon can have a trivializing effect on the object and he proposes too to place it within its socio-cultural and industrial contexts in order to “convey the agency of design as an active force shaping human behaviour and the world” (Forty 2005:6). Given that design objects predominantly fall within the category of the everyday, or even the mundane, the act of plucking design from its utilitarian context and representing it within the museum space fractures the viewers’ relationship with the object, and misrepresents the object itself (Charman 2016).

What Ambasz attempted in 1972 at the *MoMA* was a partial recontextualization of design. He did not only want to promote and introduce Italian design to the American consumers but make them familiar with the way Italians conceived design at that specific moment in history (Ambasz 1972). For *Italy: The*

New Domestic Landscape, Ambasz invited Italian designers and architects from three different cultural groups – reformist, conformist, and contestatory – which also corresponded to three distinct political thoughts in Italy in the Seventies (Ambasz 2001). His intent was to somehow think of design not as production of objects but as a way to explore the society and its existential problems relating to how people live and think of design. The idea of building the 11 environments, as a sort of utopian housing units, allowed a certain degree of public engagement that a display of single objects would not have been able to offer. People were able to test, change, and critically interpret the environments and their use, which represented a way to lead them back to the functional values of those inventions. This was facilitated by the videos displayed alongside the environments that illustrated their technical features and experimental possibilities. In all these ways, we can see Ambasz trying to overcome the limitations of the conventional model of displaying design.

The conventional model usually implies a process of partial recontextualization that only reflects temporal and spatial factors, or an art-historical attribution to a stylistic movement; but the context of an object does not exclusively refer to time and space, nor to its place within the internal histories of design. The placement of an exhibit inside an *historical frame*, which is usually so comforting for a curator, is partial and limiting both for an exhibition about the history of the industrial machines or one on the history of Renaissance painting. Ellen Lupton, curator of *Mechanical Brides* in 1993, has gone beyond those

contextual elements. Influenced by her background in graphic design, she approached design in relation to how ads have altered the perception of some objects (Sellers 1994). She not only displayed industrial products, but linked them to marketing and promotional illustrations and videos that helped producers reach consumers, and so formed a fundamental part of the object's life. Lupton selected items from the domestic and office environments that had associations with women's work (washing machines, telephones, typewriters), showing the way that ads fetishized commodities, stereotyped women's roles, and promoted gender identifications among young girls, all of which took place in and through these objects and their marketing (Sellers 1994). The way the exhibition was organized allowed the objects to be related to economic (consumption), political, and social (gender biases and sexism) aspects of industrial production. The provided context in the display allowed a remarkable degree of understanding, as indicated by the aforementioned Smithsonian study (Smithsonian Institution 1995).

This is exactly what distinguishes the display of the *Frankfurter kitchen* at the *Technisches Museum* from that at the *MAK*: at the former, the addition of other artefacts, documents, and photos to the display of the kitchen give various interpretations and narratives of the object to the public eye and highlights the potential of diverse resources in the explanation of an exhibit; on the contrary the display at the latter limits any possible discourse about the kitchen and does not expand the visitor's awareness in the same manner (Dalla Mura 2009). The Furniture Gallery at the *V&A*, like the *Technisches Museum*, does not only display

furniture but tells the story of how it was made and decorated over 600 years, exploring a thematic range of materials and techniques instead of the usual historical context or the pure aesthetic appreciation. The objective here is the recreation of the product's background for the purpose of the educational configuration of the exhibition setting.

What usually happens, instead, when the object is decontextualized and displayed in the traditional way, is its inevitable *aestheticization*. The philosopher Krzysztof Pomian states that an object or a group of objects, exhibited in a museum for a conservative purpose, undergo two fundamental transformations: the loss of every practical function, as well as the establishment of the only objective to be displayed and beheld (1990). The second condition concerns the idea of “passing over the limit”, namely the entry of the object inside a “holy fence”, within which the object is deprived of its use value (1990). The concept of sacredness of the exhibit inside a museum have been further highlighted by Carol Duncan, who speaks of the exhibited artifact as an object of adoration that has the power to enlighten the viewer through an aesthetic experience and the contemplation of its beauty (1995). In all these ways, then, display elevates form over function – a critical loss, in the case of the designed objects. They are subject to devotion, not judgement; they are interpreted as aesthetic referents not consumer products; and they indicate an abstract ideal and creativity, not an aware and informed planning. The renouncement of the original context and function is compensated by the

acknowledgment of an aesthetic aura that promotes them to art pieces, but only with the effect of distorting their identity.

This tendency has long been associated with *MoMA's* 1934 *Machine Art* exhibition. In the catalogue of the exhibition, Barr says to have identified the exhibits because of their “abstract and geometric beauty, kinetic rhythms, beauty of material and surface, and visual complexity” (1934). It is no accident, in fact, that the term *art* was used in the title: Johnson and Barr wanted to stress the beauty of industrially manufactured objects, those created without any artistic intention, which is a quality that it is usually associated to artworks. This idea was further emphasized by the display setting. The exhibition extended for the entire three floors of the *MoMA* and the objects were divided according to six categories: industrial units, household and office equipment, kitchenware, house furnishing and accessories, scientific instruments, and laboratory glass and porcelain (MoMA 1934b). Typewriter carriage springs, an outboard propeller, pots and pans, a microscope, a compass, and other pieces were placed on pedestals, isolated from each other “like a Greek statue” (MoMA 1934a) to concentrate maximum attention on each object individually, and against movable screens and walls covered by oilcloth and canvas and painted with neutral colors (pastel blue, pink, and gray) (MoMA 1934a; Staniszewski 1998). This kind of installation strategy highlighted the exhibits as sculptures or exemplars of modern art by making the audience focus only on their aesthetic characteristics and preventing any consideration of their usefulness and identification as design that would have detracted from this view.

Johnson and Barr rightly believed that industrial objects deserved aesthetic appreciation but their totally formalist vision obscured the actual efficiency and functionality of the exhibited products and misled the viewers.

Of course, there is no doubt that design has remarkable formal qualities and many works, because of their particular aesthetic characteristics, deserve to be considered beautiful from an aesthetic standpoint. Style and form are essential features of the design object and as such they must be recognized and appreciated. Design's history has always been marked by the dichotomy between function and form and the difficulty of combining the instrumental needs of the objects with the aesthetic pleasure that they would be able or should be able to provoke. The desire to join the creative dimension with the requirements of the economic world of production, historically emerged from the ideologies of the Arts and Crafts Movement and then the Bauhaus, while the artistic avant-gardes from Duchamp to pop art and postmodernism have blurred the borderline between everyday objects and artistic works by the introduction of the consumer products in the realm of art. If the lines between art and design have been productively blurred within these developments, the important work of the design curator is nonetheless to make clear once more the distinction between the two (while maintaining awareness of these historical changes).

5. POTENTIAL MODELS FOR PRESENTING DESIGN

In order to find different reference models for presenting design, this thesis interrogates three exhibitionary modes or case studies that provide valuable lessons for the exhibition of design in museum settings. Architecture exhibitions as a genre, science museums as institutions with specific mandates and pedagogical goals, and company museums as entities seeking to profile work and achievement, represent approaches to display and the transmission of information that can be beneficially applied to the problem of exhibiting industrial design. This is due to the tools and resources they possess (and in one case, the way in which they negotiate a structural absence of the object itself), and to their special approach towards the object that is coherent with the characteristics of design. The first two modes provide useful practical examples because of the way they treat their exhibits. A special attention will be paid to company museums as they already display industrial products and have special features that can represent a meaningful starting point and a solid base on which to build a credible model of design exhibition.

5.1 ISSUES OF REPRESENTATION IN ARCHITECTURE EXHIBITIONS

Exhibitions do not only have to show objects, but, above all, have to be able to represent them. The issue of representation of any exhibit inside the museum will

always be problematic and often not satisfactorily solved. It is even more difficult if a curator does not exclusively want to represent the object but also its contextual connections, and poses the problem of the relationship between what is represented and its reality. This is why the gesture of representing within an exhibition is so challenging and needs a certain degree of attention. Working through this problem becomes more urgent in the case of the installation of an architecture exhibition. In fact, the idea of representation is based on the need to substitute something missing through its image: in other words the representation replaces the reality. Indeed, architecture exhibitions are always *representation exhibitions*: since the object to be shown (buildings themselves) must be physically absent from the museum, something else – sketches, photos, models, and other sources– must represent it.

The first architecture exhibitions date back to the 19th century at *the École des Beaux-Arts* in Paris, when the dominant type of apprenticeship for architects in France was replaced by a more academic system structured in courses, exercises, and architectural projects (Cret 1941). Those courses culminated with contests where the most talented students had the chance to win the school awards. The students drew building plans, sections, and perspectives of their projects on rectangular boards that were all gathered in huge exhibitions for the purpose of the final contest (Cret 1941). Thus, the importance of the exhibitions as means of communication for the architecture was intrinsically tied to the presentation of technical drawings. Accordingly, these representational images, even though they were not explicitly architecture in material form, became accepted and celebrated

substitutes for the architectural works within exhibitions until today. Then, other forms of representation were also introduced, and the experience of the Bauhaus is particularly illustrative of the issues. Students were asked – following a series of seminars – to take part in operative group for the purpose to plan different kind of housing models, which were then displayed in exhibitions using not only sketches but also scale models of the buildings, alongside some model interiors (Chan 2010). Current architecture exhibitions have enlarged the supportive apparatus of documentation so that it allows a more complete recontextualization of the works and their production process: at international events like the Venice Architecture Biennale, where beside sketches and perspectives that prove the conception of the project, curators often try to also document the physical realization of an architectural structure (evidence about the construction, techniques and materials employed), or its use, its transformations, and its inclusion in the cultural and physical environment (Guccione 2009). This setup helps to recreate a spatial, formal, and contextual representation of the architectural work.

Concerns around architectural representation were surely crucial for the famous *MoMA* exhibition *Modern Architecture: International Exhibition*, inaugurated in February 1932. The goal of the three curators – Alfred Barr, Henry Russell Hitchcock, and Philip Johnson – was not simply to put on display architects' works: they wanted to define the *International Style* within the modern architecture, codify the whole movement and the participating architects, and clarify their objectives and values (Kantor 2010). With the aim of recreating an appropriate

setting, the curators asked the architects – Le Corbusier, Walter Gropius, Ludwig Mies van der Rohe, J.J.P. Oud, and others – to build some special reduced-size models of their buildings (MoMA 1932). The models were positioned next to enlarged photographs of the structures, drawings, plans, elevations, and perspectives. The show was carefully curated so that it provided the public with a clearer idea of the new style as “characterized by flexibility, lightness and simplicity” (Elderfield 1998). This was made possible thanks to the special crafted models and all the additional materials that Hitchcock and Johnson spent two years researching and collecting in Europe (Elderfield 1998). All of these materials permitted audiences to make comparisons (something not possible otherwise, given the disparate locales of the buildings themselves), lending credence to a ‘category’ or ‘style’ bound by shared formal properties and conceptual underpinnings.⁶

What makes possible the use of additional sources within architectural exhibitions is the relation between archives and museums. This relation is central for an architecture exhibition, because buildings, absent from the display, are evoked, described, or variously interpreted by archival documentations. Sketches, photos, drawings and other forms of representation usually come from archives and thanks to them this material is traceable. Archival records, therefore, restore architecture’s vitality by activating its visual representations and contextual connections. Architecture and design exhibitions share the same representational

⁶ See image of *Modern Architecture: International Exhibition* at http://images.adsttc.com/media/images/51f8/2342/e8e4/4e62/5700/015c/large_jpg/BullocksSmall.jpg?1375216446

problem, even though from different perspectives. Unlike a building, the design object is always physically present but its unwieldy context is seldom well represented, something that cannot be simply ignored. The absence of the buildings in an architectural exhibition can be compared to the impossibility of an industrial object to speak by and for itself: the object is not able to communicate its multifaceted essence without other sources. This lack needs to be filled as much as possible with what is related with the story of the object. For this purpose, the archives contributions would absolutely be useful even in this case.

5.2 INTERACTIVITY IN SCIENCE MUSEUMS

In determining new forms and courses of action for the elaboration of design exhibition settings, science museums can be usefully considered. Dalla Maura, as already specified, has also examined this category of institutions and their valuable potential. She considers the approach of these museums towards their exhibits an opportunity to enrich and increase the interpretative tools for design as there is a mutual dependency between design and science (2009). In fact, these institutions preserve the historical heritage related to the scientific and technological knowledge, applications, and productions, which means that among their exhibits, these museums frequently display industrially-produced artifacts. This makes these undertakings closely connected to design museums.

Looking at science museums from the point of view of exhibition planning brings out some significant aspects that curators might consider when dealing with design and its display. Besides placing the emphasis on the history of science through the presence of collections of historical objects and documents linked to its evolution, these institutions have become especially known for their dynamic approach to exhibiting and audience involvement. This approach is certainly advantageous for design, in two respects: firstly, the focus on material and technical developments, and secondly, in the emphasis on hands-on experimentation, which would likewise bring to the fore the functional nature of design.

The history of scientific museums has oscillated between a rigorous discipline and a certain tendency to emphasize spectacle and wonder: according to Willem Hackmann, former assistant curator at the *Oxford Museum of the History of Science*, this ambivalence led to the separation between museums of science history (with static arrangements of objects) and museums of scientific education (with dynamic and interactive exhibitions) (1992). In truth, the two aspects have often informed each other: in fact, science museums express the profound and ancient desire of the human spirit to instinctively combine the rational and objective side of the scientific research with the fascination for mystery and magic. This ancestral necessity have generated models like those of the *wunderkammern* where the urgency of giving an accurate order and classification to the scientific knowledge met the aspiration of showing the marvels of the universe. Following the scientific revolution, these premises gave birth to exhibition archetypes on

which the current models are based (Peressut 2011). Thus, science museums place themselves in the point of convergence between the need to preserve and present historical finds and scientific innovations, and the ability to spark interest and direct attention to the changing world.

Another point of this discussion is that science museums have long had a strong educational inclination that obligingly manifests itself in ways different from other cultural places: more precise communication tactics and strategies of engagement. From this perspective, the *Exploratorium* in San Francisco has been an important model for later, similar structures (Rothstein 2013). Founded in 1969 on the directive of physicist Frank Oppenheimer, the *Exploratorium* was among the first interactive scientific museums in which the objects on display were not supposed just to be looked at, but rather manipulated for the purposes of experimentation (Cole 2009). Museum goers, from purely contemplating/observing subjects, become protagonists who interact with the exhibits and the installations, and who are enabled to explore them according to a method that is typical of science: the experimental and empirical method. Oppenheimer's opinion was that a more diffused level of scientific education was necessary in a democratically organized and advanced society (like that of the postwar U.S.A.) whose approval was related to the control of the correct use of the scientific research final products: a control that could not responsibly be practiced without a greater basic knowledge (Cole 2009). *Exploratorium's* techniques and methodologies for communicating science through interactive and hands-on tools became a model of experience-based

learning for other institutions, even thanks to special manuals – the *Exploratorium Cookbooks: Construction Manuals for Exploratorium Exhibits* – that allowed other museums to equip themselves with analogous systems (Hein 1990).



Figure 5.2.1: Interactivity at the Exploratorium in San Francisco (Source: Yung-Luen Lan 2007)

The *Exploratorium* was the first example of a *science center*, a new category of scientific museums. These institutions differ from the traditional museum in their strategies: while in the classical vision viewers read *don't touch* next to the exhibits, science centers, Alessandra Drioli writes, believe in the idea of *pushing the button*, encouraging the active participation of the public (2006). Another difference is that, in those centers, collections are not the only fundamental protagonists: beside the

objects, ideas and concepts are the most meaningful exhibits, which cannot be perceived other than through experiment. Thus, each of these institutions focuses on the relation experience/interpretation that is activated during the demonstration of experiments or the interactive possibilities of installations. Through such educational methods, science museums produce an emotional and empathic impact on the visitors' sensory perception, stepping outside of the model of *collection museums* to concentrate their attention on their social and, above all, educational role.

Science museums frequently combine education with entertainment. For example, the *Deutsches Museum* in Munich hosts 28,000 objects, permanently displayed in 47,000 square meters. Visiting the five floors of the building, visitors can look at original artifacts like the first electric power transmission telephone, the Magdeburg hemispheres, the first diesel vehicle and the authentic machine thanks to which the nuclear fission was discovered (Deutsches-museum.de n.d.). Besides, the museums provides hundreds of reproductions of the same exhibits that the public can make them work. The presentation of each object or group of objects is then enriched by informative panels, pictures, and instructions, along with testing activities and live events: the high-voltage demonstration, acoustic experiences with musical instruments, the observation of the planetarium, demonstration of foundry techniques, and many others (Deutsches-museum.de n.d.). The museum's interactive permanent installations and exhibitions covers a huge part of diverse science and technology fields.



Figure 5.2.2: Interactivity at the Deutsches Museum (Source: Alf Igel 2009)

The same idea of educating the viewers while they are having fun, constitutes the basis of the *CosmoCaixa* in Barcelona, which houses fossils and ancient finds in permanent or temporary exhibitions, while allowing visitors to live unique experiences. For example, the museum has reconstructed the Amazonian ecosystem with living plants and animals where every 15 minutes the public can experience real tropical rains; while in the Room of the Matter the museum recreates experiments that explain the evolution of the life and matter on the planet (La Caixa n.d.).



Figure 5.2.3: Amazonian ecosystem at the CosmoCaixa (Source: Francis Rahe 2012)

Museums like the ones just described and other similar institutions do not only benefit from the interactivity but also from the power of contextualization in the form of immersive experience. As design is also based on the direct encounter between theory and application, between the artistic experimentation and the technological world, design museums could benefit from the scientific and educational approach of the science centres: they can advise design institutions because of the similarity of the represented objects and the similarity of their purposes. Science museums' displays are specifically created for communicating multidisciplinary concepts, and characterized by the experimental and interactive

quality of their structure and contents, different from the commemorative implications and the old and conventional display criteria of the traditional museum.

5.3 COMPANY MUSEUMS

Among the institutions that deal with the preservation and promotion of the industrial heritage, company museums are particularly relevant for this inquiry. Those institutions are the result of the raised historiographic interest in material culture that has brought historians to reconsider industrial heritage, and companies to particularly rethink of the cultural value of their production: in these museums, design is a symbol of human creativity and genius, a concrete witness to the cultural, social, and economic status of a society, a promotional material for a particular company, and even a force in defining the identity of a nation. Also, corporate museums enable the reconstruction of the past economic development in the contemporaneity. Despite the absence of specific legislative systems that regulate their existence and function as a fully recognized genre of museums, corporate museums can do much to reconstruct economic and technical histories of design in the present, and thus serve as a model for a renewed vision of design museums more broadly.

A company museum qualifies itself as an institution that was created for the initiative of entrepreneurs or managers – often members of the founder’s family (Piaggio, Alessi); that has a name that coincides with or evokes that of the enterprise or the founder (Bell’s Telephone Historical Collection, Ferragamo, Harley-Davidson); that legally belongs to the company or its creator (Ferrari, Siemens, Toyota); that is usually located inside the spaces of the company itself or near the headquarters or the factories (Kartell, Ducati); and where the presentation of its products has a clear and definite link with its reality and philosophy. These significant aspects distinguish corporate museums in the panorama of similar institutions of culture and public pedagogy. Enterprises have disparate intentions when they start their museums. Often there is a desire for self-promotion, to collect for the purposes of showcasing the company’s historical lineage, for consolidation of the company’s public image, for the growth of employee loyalty (and ‘team spirit’), the creation of an inspiring source in order to ensure the continuity of the production in the future, or to honour special events (Bulegato 2008). For example, the *Kartell Museum* was founded by Claudio Luti in 1999 in a small town close to Milan to celebrate the fiftieth anniversary of the company’s birth (Kartell.com n.d.), while the *Siemens Museum* (the oldest company museum in Germany) was inaugurated in 1916 because of the idea of the *Siemens Archive* to install an exhibition to commemorate the 100th birthday of Werner von Siemens (Siemens.com n.d.).

The *Baltimore and Ohio Railroad*, often cited as the first company to assemble an industrially produced collection specifically for public display, started to systematically gather its own goods in 1890 and to exhibit them in 1893. But it was only in 1953 that the collection was incorporated as the *B&O Railroad Museum*. The first true company museum, thus, was instead the *Rudolph Wurlitzer Company* in Cincinnati, which opened in 1892 and exhibited musical instruments (Danilov 1991). While company museums are particularly diffused in the USA (which has housed the largest number of these structures till the Nineties), Germany, Great Britain, Switzerland, Japan, and France (Bulegato 2008), currently the phenomenon is particularly relevant in Italy because of the number of museums, the presence of companies with long historical tradition, the museums' reputation over the world, but especially because of their strong identity within the national territory.

Company museums have the possibility to contribute to the development of the reflection around alternative models for the design museum. Comprehending this potential requires a deepened analysis of the function and nature of such museums. What distinguishes the company museums from other sites where industrial design is displayed, is first of all that often their collections have a more defined, systematic, and structured organizational form because are constituted by very similar elements, related to each other, and deriving from the same both material and ideological matrix: this make the products more readable – in case of a public presentation – because of the connections among them. A more general

museum of design, craft, and decorative arts frequently lack the unitary character of the company museum, whose rationale and selection of objects is naturally limited. For instance, the *Cooper Hewitt Museum* holds approximately 80,000 objects from 84 different countries, divided in 6 curatorial departments, and includes architectural drawings and models, decorative arts, interiors, jewelry, graphic design, and textiles (Cooper Hewitt Smithsonian Design Museum, n.d.). Despite its very remarkable gathering of objects, every arrangement implies overlaps with other areas. In contrast, the *Knoll Museum* exhibits only house and office furniture pieces made by the same company with a common thread that links, if not all the collection, at least groups of objects. This allows a clearer exhibition setting and the possibility for the viewer to make simpler and more evident connections.

Another distinctive feature of company museums is their relation to past, present, and future: because the company itself builds the objects it exhibits, it is able to recreate a visual path through the chronological development of its technologies and can adjust the display accordingly with the production and introduction to the marketplace of new items. Additionally, the museum has easy access to other supportive materials coming from the company's archival records, which spans from sketches to the finished object. Belonging to the company itself and being produced by it, the archive resides in the same facility and so all the documentation is easily traceable and retrievable. The Italian *Alessi Museum* in Enna (a small town in the Sicilian island) houses a huge archive that include

drawings, photographs, press releases, publications, monographs, periodicals, catalogues, industrial equipment, prototypes, the company's correspondence, color samples, research, etc., which belong to Alessi itself and even other companies that have collaborated with it or that don't exist anymore (Alessi.com, n.d.). Thus, the Alessi archive holds documents concerning the history of the brand and of Italian design as well. The archive represents the physical version of the company's history, narrating the events that revolve around the enterprise and its productions from different points of view – conceptual, productive, technological, economic, social, and so on. Each document is interpretable in relationship with its context and the other documents or objects. This whole group of materials can become the subject of an exhibition and of a multidisciplinary interpretation that needs specific and differentiated contributions. Thus, on the one hand the link between company archives and museums gains an evident importance, on the other hand all the documentation can help people that operate and collaborate within the company for the development of new products. In fact, archives are useful resources from which designers can look at old designs and projects and access all the information and the phases of an object construction. They are places of research, knowledge, and education that could be used as source of all that paper and graphic materials that concern the history of each designed item.

Another positive aspect of the company museums is that they pay particular attention to the display installation since they are presenting their own products. Their concern is to enhance the legibility of the exhibits and to find the best way to

highlight their features. For these purposes, some museums recreate a coherent atmosphere and multisensorial communication codes through the way they decide to present the exhibits. In fact, very often the exhibition setting reflects the enterprise identity and culture so that it induces mental associations that hint at the enterprise itself: for example, the *Guglielmo Tabacchi Gallery* (Italy), which is an optical company, has built all the display supports out of clear and see-through materials to evoke the transparency and lightness of the glass (Galleriaguglielmotabacchi.com n.d.); similarly, the *Chicco Village* (Italy), a baby apparel and toys manufacturer, has displays accessible for children. Barriers do not exist and kids are safely encouraged to touch the exhibits and to play in their midst (Gilodi 2002; Museodelcavallogiocattolo.it n.d.). Adopting such expedients is already a kind of contextualization of the object, not to mention the fact that the product is still living inside its primary context, inside the company that has conceived and produced it, and so it is tied up to the building and to the other products in it. Therefore, inside a company museum the visitor can breathe the real history of the object through the history of the company: in such way, the corporate message immediately reaches the viewers who, being immersed in an intentionally prepared physical environment, are more inclined to receive it. The audience comes into contact with the world of the company and its cultural dimension. The result is a more composite and multifaceted experience than that found in a traditional museum.



Figure 5.3.1: Guglielmo Tabacchi Gallery (Source: Galleria Guglielmo Tabacchi 2011)



Figure 5.3.2: Tornese Room at Chicco Village (Source: Museo del Cavallo Giocattolo 2010)

Thus, company museums do not just exhibit their heritage but give the public keys to interpretation. While propagandistic, the results are important. They refuse the kind of musealization of the objects and the uniform way of representation typical of the art museum tradition, and rather prefer solutions that actively involve the user and that are referable to the both conceptual and practical *modus operandi* of the science museums (Danilov 1991). In fact, they have wisely decided to concentrate their efforts on the didactic and educational aspects, utilizing labs or workshop spaces, hands-on exhibitions, and simulations. The *Corning Glass Center* (Corning, NY), along with its collection of glass objects, introduces the visitors to the world of glass, its chemical principles, and its multiple uses via interactive exhibits, audiovisual programs, and live demonstrations: in the amphitheater inside the museum the audience can attend the $2300^{\circ}F$ show that features live glassmaking demonstrations by guest artists, or can also participate in more than 70 different workshops including glassblowing, introduction to cane-working and stained glass, fusing Murrine, and many others (Cmog.org n.d.). The *BMW Museum* (Munich, Germany) leads the viewers through the industrial, technical, and social history of the brand by displaying some of the most valuable and attractive automobiles, motorcycles and engines, and explaining the background information on the special architecture and the complex logistics of the automobiles. During these tours visitors can sit in the vehicles and experience some of their features. Also, in the *BMW Group Plant*, the public can look behind the scenes of automobile manufacturing and visit the production areas from the press

works to assembly, while in the *BMW Group Recycling and Dismantling Centre* can learn about the research that is conducted about environmentally compatible and efficient recycling of BMW vehicles (Bmw-welt.com n.d.). Finally, in a futuristic style of presentation, the museum shows three-dimensional models and slides demonstrating possible automobile designs of the future (Bmw-welt.com n.d.; Danilov 1991).



Figure 5.3.3: Italian master teaching glass technique at the Corning Glass Museum (Source: Jordan J. Miller 2011)



Figure 5.3.4: Interactivity at the BMW Welt Museum (Source: Ole.Pophal 2008)

All of these initiatives, installations, and programming details function together to create a didactically significant narration of corporate culture. Thus, it is evident that one of the main characteristics of a company museum that does not belong to a traditional institution is its ability to be dynamic, to be a museum *in progress* (Amari 1997). Due to this nature, it pushes for continuous updates and changes in terms of display methodologies in accordance with the evolution of the company's activities. Also, in comparison to other museums that generally assume that the visitor should adapt to the environment and the exhibit (Hirschman 1983;

Colbert 1994; Kotler and Kotler 1999), company museums have shown themselves to be decidedly more sensitive to the needs of the public and to have a stronger inclination to provide a social service.

In short, company museums have all the resources to successfully carry out the tasks a museum is supposed to accomplish: it would offer a correct and suitable documentation of industrial production, powerfully evoking the context of the objects' production (in this case, by not letting it leave its primary home in the first place, something that is obviously not possible in other kinds of museums). Such considerations show the company museum responding proactively to the social and didactic responsibilities of museums more broadly, and attest to the desire in such spaces to establish a link between past and present, between historical memory and contemporaneity, through a recontextualization of design's proper function and meaning.

6. CONCLUSION

With the analysis of the three potential models for presenting design, this thesis proposes a reflection on the ways in which design exhibitions could be reconceived, in order to create a more specific system of presentation that confirms and illustrates the true nature of industrial design, that informs its meaning through different languages (not only the aesthetic one), and that activates connections that make different elements communicate each other: objects, designers, producing companies, marketing strategies, scientific discoveries, technological evolutions, stylistic decisions, and other different disciplines and knowledge fields.

The opening of the Furniture Gallery at the *Victoria and Albert Museum* in 2012 with its innovative approach (for a museum of decorative arts), represents a notable example in this sense. Likewise the New Experience at the *Cooper Hewitt Museum*, despite its noted limitations. Alongside these, we might note some temporary exhibitions that have partaken in the same principles, to create settings more suitable for displaying design, such as the 1993 *Ideal Home* exhibition, curated by Deborah Sugg Ryan, where reconstructed room sets were used to contextualize the artifacts in the show. But this museographic model is not yet systematic and fully theorized, and has yet to fully emerge.

Also, the way the *V&A* and the *Cooper Hewitt* have encouraged new presentation standards through the introduction of digital and new media systems, raises some important queries. What is the role of technology in constructing a

museology? Liz Farrelly, in *Museums online and digital*, examines the evolution of digital technology, and how it has shaped the offer of the museum and new opportunities for public engagement. She sees it as a way to contextualize exhibits, enhance interpretation, enable engagement, and make collections and archives accessible outside the physical museum (2016). But she also asks herself “how would the founder of the *Victoria and Albert Museum*, Henry Cole, have responded to social media and digital interactive tools?” (2016: 169). When the museum was founded, Cole’s intent was the cultural enlightenment of all the social classes. The use of technology for improving interactivity seems to be seeking for a democratization of the museum experience and a growing interest of the broader public. Jason Cleverly sees technology too as a way to intensify the didactic apparatus of a museum. He tackles this subject in *Design and Museum Interpretation*, where he highlights the positive aspects of the use of new technologies as interpretative tools of the museum installations, and as solutions able to transform the formal object-based museum learning in a more engaging experience (2016:149).

What I see at work in these institutions that utilize digital devices, is a recognition of the need to transform the relationship between the spectators and what is on display: the technology pushes away the visitors from the object and reconnects them in a virtual space that is not anymore the physical location of the museum. This undermines the hope to recreate a more direct contact between the public and the exhibit, which is at the core of this text: overcoming the detached

condition of the public in the traditional museum that only allows the viewer to passively observe the displayed object. Screens, digital labels, multi-touch tables, interactive interfaces are entertaining and communicative, but the information passes to the public exclusively through a highly mediated physical experience, substituting images of the object for a physical co-presence in real space and time between the objects and their viewers. Company museums, and especially science museums, use technology to enhance interactivity, but in all the examples in this thesis (*Corning Glass, BMW Welt, Deutsches Museum, CosmoCaixa*, etc.) interactivity is first of all intended as a more material and physical connection with the exhibits through hands-on and testing activities, real time demonstrations, experiments, and the use of replicas to touch. Of course, we have experienced the transition from a post-industrial to a digital society that is making technology predominant in many aspects of our lives, and this will probably mean that new media will take up more space within museums as well, as it has already done through the emergence of institutional websites, digitized collections, digital applications, and social media profiles. But it would be desirable a distinction – in the way technology could positively transform the relation with the public – between its use inside the museum during the visit and its use outside as a way to create a communicative model to keep up with the contemporary innovations.

The objective of this thesis was to survey historical and contemporary exhibition practices for displaying industrial design, and to foster awareness of specific issues and implications facing the display of such objects, with an aim to

develop tools of analysis and assessment for an improvement in the way that museums approach design. Design museums represent a superb opportunity for the visitor to reflect upon the fact that material culture is a fundamental part of our daily experience, and to recognize the cultural and historical value of those common objects as physical symbols of the connections between the industrialization process and broader systems of behaviour and consumption. The complexity of an exhibition grows as the complexity of the answers it wants to offer improves. And thus, curating an exhibition is not just about the display of the works but about the development of critical meaning.

In addressing the issues facing the development of a design museography, this thesis has been confronted with other, numerous questions: what problematics does the education to design within museums raise? How they can encourage a more active participation of the public? What kind of role do they have in relation to university design education? How can they serve as a valuable resource for the enlightenment and training of future design professionals? What interactions are possible between design museums and other institutions (archives, company museums, etc.)? How can new technologies contribute to the design museum's objectives and to the communication with the public? And first of all, on what basis can design museums found and communicate their identity? All these questions, and others besides, deserve solutions – or at least, concerted efforts at an answer – if future design museums are to realize their potential and rethink their position from a pedagogic point of view. The responsibility of institutions to steward

cultural patrimony remains sacrosanct. Likewise, the way of serving the public – to educate and contribute to social well-being – is a matter of constant consideration and revision. Industrial design, as a specific aspect of modern culture, requires an exhibition strategy that can elucidate in effective and accessible ways the complexity of its existence (ideas rendered tangible for use). Accordingly, the question of how best to exhibit the mass-produced objects – design in all its complexity – is a pressing topic for consideration.

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