Pen

It lets you collect everything. Use it on our tables to learn and play. Return the Pen before you leave but keep your ticket so you can see what you’ve collected. Any time, anywhere.

The empty lantern-slide box, now decomposed into a pile of dust plus a drawing, is an object lesson in understanding the complex entanglement of matter and meaning, and the role that remediation and visualisation play in this process. The project’s focus on handwork and craft (Wright’s skilful drawing and the physical dissolution of the box) is helpful in signalling how I think we should be looking at the production of digital objects: as skilled, culturally located material practices of objectification.
My second object instantiates this perspective, highlighting how an entirely ‘new’ digital object – a device aimed at creating a new form of interactivity for the museum visitor drawing on the power of museum databases, web interfaces and digital imaging – embodies long-standing ways of looking at collections and thinking about design.

The Pen has become integral to the visitor experience at the Cooper Hewitt Museum of Design in New York, extending the object lessons of the decorative arts museum. When the Cooper Hewitt Museum, now a part of the Smithsonian Institution, reopened after a massive overhaul in spring 2015, the Pen was a focal point for the recalibration of the collections. This sleek black wand was presented as a saviour of the collection, making an artefact out of the visitor experience, bringing coherence to the design project that was started more than 100 years ago.

Designing design

Housed in the former mansion of Andrew Carnegie on Fifth Avenue, part of New York City’s Museum Mile, the Cooper Hewitt Museum houses a collection gathered by the family of Peter Cooper, who established a Museum for the Arts of Decoration in downtown New York City at the Cooper Union

Figure 23  Cooper Union Museum’s Metalwork Gallery, c. 1945. © Smithsonian Institution Archives. Image # SIA2011-2177. Reproduced with permission.
in 1895. Like the Victoria and Albert (V&A) Museum in London and the Musée des Arts Décoratifs in Paris, the Cooper Hewitt was established as a working collection for the modern designer – a storehouse of techniques and forms to be used as both inspiration and object lessons in understanding, style and modes of production of artists, craftspeople and designers. These collections define design as both a creative and an industrial exercise, bound up in the transformations of craft in the nineteenth century, and referencing the imperial and colonial appropriation of materials and traditions in order to develop new national styles. Design and decorative arts in this museum world were presented as the careful balance between handwork, machine-work, authorship and practical knowledge, all in the service of bettering national trajectories of manufacture, and by extension of encouraging the taste of a new generation of consumers.

Museums of decorative arts (many are now also called museums of art and design) emerged in the nineteenth century at the nexus of industrial manufacture and presented a nationalist retelling of histories of artisanal skill in this emerging reconfiguration of craft. At the moments when many critics, led by the writings of John Ruskin and William Morris, perceived handcraft to be under threat from modern machines, the decorative arts museum reinvented craft for the machine age, balancing notions of the artisanal with the emerging field of industrial design. Museums such as the Victoria and Albert in London were expressly designed to expand the scope of collecting in the dual contexts of industrialisation and imperialism, to be used actively in the training of new manufacturers and designers, and to build the taste of middle-class consumers. Many understood the South Kensington Museum complex in London, and the Government Schools of Design attached to it, as a palimpsest of art and industry. Tim Barringer describes it as, ‘redolent of the modernity of international exhibitions, the department store, liberal economics, technical design education and utilitarian reform ideology’, alongside the more traditional functions of museums.

When the Cooper Union, a free school for adults dedicated to both science and art, was founded it was Peter Cooper’s intention that it include a museum. At that time (1859), the only other museums in New York were the New York Historical Society and P.T. Barnum’s Museum downtown on the Bowery, both of which had a very different flavour and ethos. Cooper wanted to establish a teaching museum that would enable, in practical terms, the perpetuation of the craft and decorative arts traditions. The museum was finally opened by Cooper’s granddaughters in 1897, and was co-located on the fourth floor of the Cooper Union with the Women’s Art School. From its inception, the Cooper Hewitt Museum was conceived
as a ‘visual library’ and a ‘practical working laboratory’ in which ‘objects could be touched, moved, sketched, photographed, and measured’. The Hewitt sisters travelled regularly to Europe and drew on their circle of friends and philanthropists such as J.P. Morgan to support their collecting activities. They not only collected objects, but also made ‘encyclopaedic’ scrapbooks in which they collated pictures of all forms of the decorative arts, with the intention that they be used as source books for design.

The collection was framed as a ‘laboratory’ for the designer/craftsperson, and as such was arranged for ease of comparison across styles, periods and media. Visitors were encouraged to learn by drawing on pads and pencils that were scattered throughout the collection, and the museum was kept open in the evenings to allow for working people and students to visit. Objects were displayed chronologically and by styles of ornamentation, with the explicit intention that even if the labels were not read, a visual progression was obvious. This sense of progression was intended to influence the work of designers who visited the collections, following the models of the museum’s counterparts in London and Paris. Such display strategies also echoed the typological display and influence of ideas about social evolution that were being developed at around the same time in ethnographic museums such as the Pitt Rivers and the United States National Museum in Washington D.C., and at world’s fairs and expositions, all of which were collectively influential in founding the ethnographic, scientific and art collections of the mid-nineteenth century.

Over time, the museum amassed an enormous collection of prints, drawings, textiles, furnishings, furniture, jewellery and other decorative arts, becoming the largest such collection in the USA. By the 1960s the Cooper Union could no longer sustain the collection and it was transferred to the Smithsonian’s care on the condition that it remain in New York City. By 1976 the collection of more than 210,000 objects was installed and opened to the public in the Andrew Carnegie Mansion on 91st street and Fifth Avenue.

**Surface images: Object lessons of the decorative arts**

The so-called arts of decoration, as they are imagined within museums such as the Cooper Hewitt, might be argued as pre-empting the digital era in the ways in which they create lateral connections across time and space by visually tracing surface patterns across objects. This emphasis on surface pattern, and the inscription of image into material, is one way in which the process of design has come to be defined. The Hewitt sisters
were just as interested in books and prints as they were in textiles and bird cages. For instance, they went out of their way to collect volumes such as Audubon’s *Birds of America*, to be used as a reference work for the bird motif across textiles, china, architectural mouldings and so on.\footnote{In many ways, the notion of the decorative arts draws an object lesson out of the image library: understanding museum collections as a gathering of images that could migrate across media in the service of design. Seen in this way, the genre of decorative arts fuses a past-oriented fine-arts aesthetic with a commitment to industrial modernisation and consumer capitalism rippling through the surface of the image. The Cooper Hewitt and other decorative arts collections combined the civic intentions of museums with the enthusiasms of industrial innovation.\footnote{In his account of the industrial art and design education program at the Metropolitan Museum of Art in New York in the 1920s, Trask argues against this theory of influence in describing the collection of decorative arts: ‘whilst attempting to break new aesthetic ground, the museum was simply a resource library, rather than an industrial art or craft academy like the Deutscher Werkbund or Bauhaus Schools in Germany’.\footnote{Trask highlights how, rather than being blueprints for manufacture, the image of design presented in museums was one primarily for consumption by the middle classes, training them to appreciate designed objects and aspire to collect them at home. Objects were understood as images, their designs and colours appropriated from the surface of one object onto another (from a textile to a lamp, or a curtain to a carpet). The Cooper Hewitt collection may be read as sitting somewhere in between these two types of museum, although it could also be argued that the move uptown pushed the collection’s ethos more towards reifying}}

Over time, the collection has expanded to include photographs and slides and, later, digital images and software.

In this museological context, the notion of design was underwritten by ideas about prototype objects or plans for future objects; was defined as a practice of making; established a blueprint for makers; and a form of curation (a bringing together of styles, motifs and materials). The anthropology of design and decoration has defined design as a social technology, linking ‘the material basis of things, their material qualities … or affordances, and their social context’.\footnote{In many ways, the notion of the decorative arts draws an object lesson out of the image library: understanding museum collections as a gathering of images that could migrate across media in the service of design. Seen in this way, the genre of decorative arts fuses a past-oriented fine-arts aesthetic with a commitment to industrial modernisation and consumer capitalism rippling through the surface of the image. The Cooper Hewitt and other decorative arts collections combined the civic intentions of museums with the enthusiasms of industrial innovation.\footnote{In his account of the industrial art and design education program at the Metropolitan Museum of Art in New York in the 1920s, Trask argues against this theory of influence in describing the collection of decorative arts: ‘whilst attempting to break new aesthetic ground, the museum was simply a resource library, rather than an industrial art or craft academy like the Deutscher Werkbund or Bauhaus Schools in Germany’.\footnote{Trask highlights how, rather than being blueprints for manufacture, the image of design presented in museums was one primarily for consumption by the middle classes, training them to appreciate designed objects and aspire to collect them at home. Objects were understood as images, their designs and colours appropriated from the surface of one object onto another (from a textile to a lamp, or a curtain to a carpet). The Cooper Hewitt collection may be read as sitting somewhere in between these two types of museum, although it could also be argued that the move uptown pushed the collection’s ethos more towards reifying}}
Figure 24  Greek no. 7: Ornaments from Greek and Etruscan vases in the British Museum and the Louvre. From The Grammar of Ornament by Owen Jones (1856). Illustrated by examples from various styles of ornament; 100 folio plates, drawn on stone by F. Bedford; and printed in colours by Day and son. The Miriam and Ira D. Wallach Division of Art, Prints and Photographs: Art & Architecture Collection, The New York Public Library. Retrieved from https://digitalcollections.nypl.org/items/510d47da-3a97-a3d9-e040-e00a18064a99, out of copyright.
design rather than supporting the work of craftspeople. The complex fusing of the object as image within the decorative arts collection was part of a broader museological move towards the image as object, underpinned by the emerging technologies of reproduction. Photography, electrotyping and casting all created new ways of collecting, circulating and knowing objects in museums. 

Alongside the object lessons that these projects can teach us about the migration of images across forms and their role in producing patterns of culture, the collection of copies, both in the form of images and objects, has long been perceived to be part of a project to democratise access to museum collections. In contrast to the trajectory of the fine arts, which over the course of the twentieth century used the foil of authenticity, originality and artistic genius to value collections, techniques of industrial manufacture gave rise to a new genre of museum collection explicitly realised as collections of copies. In a similar vein to the ways in which we talk about websites and online collections databases as opening access to museum collections, plaster casts and other reproductions were understood in the nineteenth and early twentieth centuries as means to provide access to world heritage that would otherwise be fixed in place. In 1867, the V&A’s director, Henry Cole, drafted the ‘International Convention of Promoting Universally Reproductions of Works of Art’ and persuaded several European princes to sign up to a project that involved sharing reproductions of important works as they gathered at the Paris International Exhibition of that year. The convention paved the way for the establishment of new ways of understanding the value of reproductions in museums. Plaster casts enabled access to the ‘old world’ in the ‘new world’, breaking down divides between the centre and the periphery. Not every regional museum could provide its visitors with access to the great canonical masterpieces of European art unless it was accepted that the plaster cast was not just a substitute but an indexical conduit to the real thing. The architectural hall, or Cast Courts, of the V&A museum is one of the most celebrated examples of this drive to collect reproductions, with life-size casts of classical antiquities, some – such as the copy of Trajan’s Column in Rome – so large that they had to be displayed in two parts and dictated the architectural construction of the hall itself. These reproductions aimed to further political projects that used the visibility of global (read imperial) connections in object form to create new national public spheres and ideologies of universal knowledge.

Like casting technologies, photography also emerged in the nineteenth century as an important collecting tool. The vast nineteenth-century photographic archive was drawn upon in the twentieth century to bring new kinds of collections and new types of knowledge into being. One of the most renowned, and provocative, image archives is Aby Warburg’s *Mnemosyne
project, which he began in 1927 with the intention of collating a world atlas of images from his archive, now housed in the Warburg Institute in London. Warburg’s ‘iconology’, a ‘science of culture’ (Kulturwissenschaft), his collection and comparative study of the world through images, was closely allied to the nineteenth ethnological imperative of salvage collection that used the process of collecting to inscribe timeless forms of knowledge on what was perceived to be a moment of rapid global transformation.\(^{19}\)

By the time of Warburg’s death in 1929, he had curated 63 black hessian-covered screens upon which were mounted nearly a thousand photographs.\(^{20}\) This method of display, devised by Warburg’s colleague

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**Figure 25**  Aby Warburg, *Picture Atlas Mnemosyne*, 1928–9, Panel 79. © The Warburg Institute. Reproduced with permission.
Fritz Saxl, ‘presented an easy way of marshalling the material and reshuffling it in ever new combinations’. Warburg’s Atlas mapped the movement of enduring icons across time and space, highlighting the recursive psychological elements and motifs within global art forms, captioned with epigrams (‘Beneath the dark flutter of the griffon’s wings we dream – between gripping and being gripped – the concept of consciousness’). Warburg’s collection of photographs overcame the boundaries of media, uniting images gleaned from museums, advertising, photography, coins and stamps, making visible a genealogy of images, as they migrated across materials, uniting key forms within art and history. Warburg saw the collating of images as a powerful tracing of (cultural) memory. His project pushed the poetics and the philosophical underpinnings of the picture library into new territory, recognising the collection of images as the foundation for a new kind of knowledge practice and a new way to understand the ways in which images are embedded themselves within the reproduction of human culture.

Another key touchstone for the role of image libraries as museums in their own right is Andre Malraux’s Musée imaginaire (translated in English as Museum without Walls). This virtual project, published by Malraux in book form, argued for the collation of reproductions as a way to image and imagine new global connections and forms of art historical knowledge in the mind of the viewer. Malraux’s understanding of knowledge in his imaginary museum emerges from acts of juxtaposition and analogy, revolving around the visual comparison of photographic images, which transcend the specificities of the original objects they reference. It could be argued that this perspective has been fundamentally internalised in the processes of digitisation, for instance in the online museum catalogues that present all objects in standardised form, focusing on novel methods of connecting and searching among them internalising the algorithmic capacities of digital media to extend the comparative epistemology developed in the archive of image-objects in the nineteenth-century museum.

Design objects in the museum

The decorative art museum brings together an understanding of objects as images, but also as technologies, drawing explicit attention to the ways in which things emerge but are not purely defined by particular materials. From their inception, museums of decorative arts were to inspire the production, and consumption, of objects for everyday life as well as
special objects of ‘high’ or elite culture. Despite, or perhaps because of, the entanglements between the commercial, the industrial and the colonial, museums of decorative art are still developing their commitment to understanding the museum as a place of making and doing, a place in which art and craft come together. For example, the Cooper Hewitt has a ‘process lab’, which focuses on unpacking the practice of design (rather than the making of objects):

> Embracing our motto of ‘Play Designer,’ the Process Lab is a dynamic new way to enjoy the museum and experience the creative process of design firsthand. Here you can participate in design thinking as though you were a designer, by engaging in a series of digital and physical activities based in four categories: getting ideas, prototyping with materials, critiquing, and evaluating everyday design solutions.26

Design is presented as a process of ‘thinking’ through images towards objects. Digital media, with its recursive constitution of object and image, becomes the perfect form to articulate this vision of making and to enable very specific forms of visitor participation.

**Design into the digital**

There is a marked continuity between the discussions about design that emerged in museums of decorative arts in the nineteenth and early twentieth centuries and the ways in which twenty-first-century digital technologies are understood to bring together craft, capitalism and design. This latter occurs within a program of accessibility and democratisation achieved through processes of translation and reproduction across different media. While programmes to gather together reproductions and ensure the continued reproduction of museum collections in new design industries made technologies of copying visibly part of museum collections, the digital processes of reproduction are generally presented by museums as supplementary, or outside of the museum collection – as part of the visitor experience, but not as collections in their own right. In turn, the growth of digital production across numerous sectors provides museums with a series of conceptual problems for collecting, curating and conserving.27 Museums have conventionally struggled with collecting the immaterial, and in the museum context the digital shifts between being a technology that enables the collection and reproduction of new kinds of
artefact to being a social tool of accessibility, largely through imaging (and
to a lesser extent through the production of other embodied states). 28

The example of the Victoria and Albert’s purchase of a 3D-printed
gun, ‘The Liberator’, by American activist Cody Wilson, part of the muse-
um’s new ‘rapid response’ collecting initiative, works through many of
these issues. The debates that emerged around this acquisition, including
anxiety about what in fact was being collected, highlighted the complex
ways in which digital technologies continue to be effaced or dissolved,
even as they constitute new kinds of objects and new regimes of collec-
tion and care. The museum questioned whether it should collect the first
fired prototype of the gun, or the code that produced it. Legal, customs
and ethical constraints meant that the museum eventually printed a ver-
sion of the gun in the UK, but with certain components printed in plaster
so that the printed gun was in fact not useable. 29 For the gun’s creator,
Cody Wilson, ‘The Liberator’ was part of a radical libertarian/anarchist
challenge to the authority of the state to regulate a citizen’s right to bear
arms. The 3D print collected by the museum was modified to render it
useless, making it a very different kind of object. 30

The questions raised by these new kinds of replicable objects both
depart radically from previous issues concerning reproduction and bring

Figure 26 ‘The Liberator’, a 3D-printed handgun, in plaster and plastic, printed by Digits
2 Widgets, manufactured from the CAD designed by Defense Distributed, 2013. CD.1:1 to
new issues to the table. Performance art and conceptual art, alongside photography, video and film have all long provoked conversation in museums about the relationship between the artwork and its documentation, the boundaries of the collected artefacts, the property regimes that underpin the materials used, and the appropriate conditions of care, collection and display. As I have been exploring throughout this book, many of these questions are not in fact new, but are re-emerging as new technologies appear and interact with older forms of collection. Museums are still recognised as platforms for and practices of objectification, stalwarts of materiality, places that fix and freeze the immaterial, the social and the performative in object form. This implies a set of very distinct identities for digital objects in museums, which span the ephemera of documentation or audio-visual supplement through to the conversion of digital projects into a series of new kinds of object forms – valued, perhaps, not for their digital qualities, but for the ways in which they can be translated into museum languages of collection.

The Pen

In 2011, the Cooper Hewitt closed for total renovation in order to rethink the relationship between the opulent Upper East Side mansion within which it was housed and the history and intention of the collection. Technology and media were crucial parts of the re-imagination of the space, with an extravagant budget underpinned by sponsorship from Bloomberg Philanthropy. Alongside expanding the gallery spaces and extending the café, gift shop and education rooms, a newly mediated visitor experience was designed. At the reopening in 2015, visitors experienced several interlocking digital interventions into the space. The house itself was presented through an interactive large-screen multimedia display that allowed the visitor to explore the architectural features and original layout of the house (based on a large-scale and high-resolution three-dimensional scan of the entire building). Similar flat screens, mounted as tables, are positioned throughout the galleries, to be used in conjunction with the Pen as portals into the digitised collection. One table was dedicated to the history of the collections, allowing the visitor to explore which objects were given by whom, and to learn about the background of the museum’s founding collectors from high-society New York City. Another table in a small room of its own, ‘The Immersion Room’, was dedicated to highlighting the wallpaper collection of the institution. Visitors can use the touch-screen table to select
wallpaper samples that may be projected onto screens comprising two full walls of the small room, allowing the wallpaper to be seen not just as a swatch but as it would look on a wall. Visitors can also use the Pen to design their own wallpaper, using a simple painting program, and project their own design onto the walls around them.

The touch screens throughout are linked not only to the digital collections but also to the objects on display through the interface of the Pen. The Cooper Hewitt is the only Smithsonian museum to charge admission and this plays into the sense of value for money received by visitors when, upon purchasing a ticket, they are given a smooth, thick black rod, with a

![Image of visitors in the Immersion Room]

**Figure 27** The Immersion Room at the Cooper Hewitt, October 2015. Photograph by Haidy Geismar.
lace to put over the wrist. They are then shown very briefly how to press down the tip of the Pen onto marked cross signs on object labels throughout the gallery. Pressing the Pen onto these marks ‘saves’ the objects in a virtual collection storage space; these are private and unique to each visitor and, through the creation of an account, can be saved from visit to visit. The saved objects can also be accessed through the tables, where they may be explored in relation to other objects in the collection and linked to objects designed by the visitor themselves. The Pen unites a number of different digital and interactive experiences: The History of the Mansion, the Immersion Room and the Process Lab, as well as the exhibits, collections database and the interactive tables throughout the galleries.

Unlike many museums, more than 90 per cent of the Cooper Hewitt’s collection has been digitised and made available online through a searchable web interface. The objects saved through the Pen are not images of the object as seen in the gallery. Instead visitors are taken directly to the digital catalogue entry, which typically presents a disembodied, high-resolution image that can be zoomed into on the table, or at home, allowing them to explore the surface texture of the object. Saved objects can be accessed through a user account and web interface. Here, visitors may add their own comments, and choose if they want to make their collections public, in the process curating their own pathway through the digital database.

Figure 28  Installation view of ‘David Adjaye Selects’. Photograph by Allison Hale © 2015 Cooper Hewitt, Smithsonian Design Museum. Reproduced with permission. Source: http://cooperhewitt.photoshelter.com/image/I0000mHenen5iODc.
In an example drawn from one of my visits to the museum in 2015, a textile, selected by architect David Adjaye, hangs in one of the lavish reception rooms from a gilded rail, allowing you to catch the interplay of warp and weft. In the catalogue, however, it appears flatly in two dimensions, losing all sense of its sensuous tactility, its potential to be draped around the body, to be used as cloth (see the chapter in this volume on our attempts to visualise a Māori cloak). We see here the flattening effects of long histories of museum display, the powerful impact they have had on museum processes of visualisation and the way we look at objects in digital space.

The digital design team at the Cooper Hewitt, working with the design company Local Projects, devised five concepts for the digital interface in the galleries: play; social interactive experiences (not just interaction but engagement through interactive devices, e.g. watching others); a discouragement of the app experience (in which visitors

![Figure 29](image_url)

Figure 29 Screengrab of Adire wrapper (Gambia) from the Adjaye exhibition in the collection management system. Reproduced from website under fair use.
spend more time on their personal devices than they do looking at the galleries); extending the visit itself (termed ‘persistence of visit’); and allowing for collecting in a scrapbooking-like manner to maintain an ongoing engagement with the museum after the visit.\textsuperscript{35} Chan and Cope, leading the Cooper Hewitt digital redesign, explicitly picked up on Ross Parry’s definition of a ‘post-digital museum’, in which Parry argues that digital technologies are now so deeply normalised and embedded within all museum operations that they have ceased to be a distinct category of artefact and practice.\textsuperscript{36} As an object lesson in design, the Pen creates a very particular series of experiences of the collection. Indeed, Seb Chan, then Head of Digital at the Cooper Hewitt, has argued that the museum has been reconceptualised around the Pen as a portal into the API drawn from the collections management system. He comments that the ‘requirements demanded by the Pen and Pen-related infrastructures impacted every layer of the museum’s staff, its physical plant, its budgeting process and its day-to-day operations’.\textsuperscript{37}

The Pen, as an object lesson, is a hybrid digital analogue artefact that emphasises the importance of technologies of reproduction in museums. It is explicitly intended by its creators to provide a ‘looking up’ experience – it is not an app, in which the focus of visitor attention is drawn to the screen of a mobile device. It aims to allow visitors to navigate exhibitions via their own act of collecting. Its materiality – as an object both bulky and light – which within the first week of its launch was working somewhat erratically (in part due to user errors in holding the Pen at the correct angle to the table and for long enough to be able to sync the two and have your collection emerge onto the touch screen), provides a digital interface between the visitor and the collection. It acts as an extension of the museum catalogue – providing the visitor with an alternative way of navigating through the museum database. The Pen ensures that digital media is both used to expand the physical visit and that the visitor’s digital collection feeds back into the collections database, ensuring ‘that nothing would be held back artificially from the web’.\textsuperscript{38} The physical space of the museum therefore becomes an extension of the virtual collection as much as vice versa.

At other points on both the first and second floors, large touch-screen tables allow visitors to upload their collections, look at artefacts from the database and ‘design’ a series of iconic objects using the Pen or their fingers. The Pen is therefore both a portal into the collections and a tool enabling visitors to look at ‘design’ and attempt to become
the ‘designers’ of a preordained series of objects (hat, lamp, table, chair, building, wallpaper) in a series of materials (textile, stone, ceramic, metal). Finger and Pen are interchangeable in this design process – both are fairly clumsy instruments with only a limited range. Visitors can draw lines or circles and select from a preordained series of options. A final interface between the Pen/finger and the collection comes from the table itself. Any mark made on the black screen of the table is mapped onto a line within an item from the collection. Circles find circles, and squares, squares. More complex shapes are ironed out into preprogrammed lines that find their correlate from a sample of objects in the database.

The Pen was launched in March 2015, and in the first 75 days the take-up rate was more than 90 per cent across all age ranges and demographics. Visitors collected objects more than 700,000 times, engaging with over 3,600 distinct objects. Some 31 per cent of the visitors went on to create museum accounts, allowing them continued engagement with their collected content. During a conversation I had at one of the digital tables, a Pen user talked explicitly about how he was saving objects to reflect upon back at home as part of his own woodcarving practice, a link that the early collecting initiatives of the Cooper daughters aimed to inspire. But for many people, the Pen effects a simulation or an image of design itself by encouraging a kind of ‘design thinking’, which here is experienced as something quite different from understanding design as a set of skilled practices.

What then are the object lessons imparted by the Pen? The user experience of the Pen provides an object lesson in values around design, and around a designed visitor experience. For visitors, the instructional video positions the Pen as a collecting tool, which provides an interface between viewers and the table that can also help them to learn and play. The Pen proposes the museum experience be seen as a form of design practice as well as the presentation of a design collection. The Pen is so well established as a mode of engagement with the objects on display that the pristine white labels of the temporary exhibition on the top floor were smudged with black rubber as visitors had attempted to ‘collect’ and click on object labels, even those not marked as compatible with the requisite cross mark. In this way, the Pen provides an experience of collecting, and continues the trajectory of the decorative arts museums, to underscore the commodity status of design objects.

This digital/analogue interface around the Cooper Hewitt collections continues the trajectory of the decorative arts collection and the
photo library in shaping the underlying epistemology of the design museum. The Pen renders objects to be experienced as standardisable, comparable, ahistorical and abstracted. The digital materiality of the combination of Pen and table (and later, at home, the computer screen) renders design as reduced to two dimensions and to the surface of things: style becomes reducible to a graphic linearity. The design process itself is experienced through the opportunities to play on the table. Through this interaction, the collections are experienced through a linear process of recognition, selection and standardisation. Techniques specific to materials are flattened by software – and indeed the object itself is flattened into metadata, the image reduced to standardised motifs and a series of classifications that then link it to other objects. These classifications are both the standard museum classifications of form, time period and function, but they also incorporate the more social aspect of the database. As visitors upload their own comments and categories, they may in the future be included in the searchable metadata for objects.

The digital artefacts in the Cooper Hewitt (tables and pens) therefore allow for a degree of interaction with the very concept of design itself. Design is both presented as a recursive practice between object and image, but also as a mask or cipher, hiding elements of making in favour of a final product or image. Throughout the exhibit, design is framed as a process of formal comparison, of relating through the body of the visitor (and attendant forms of scale). The Pen was developed to be active, reading tagged objects and amalgamating the viewer experience through a recorded pathway in the museum. In this remediating process, the digital image library’s efficacy is cast in terms of social networks and of the expansion of the visibility of the collections. However, the focus on the user, and on the creative capacities believed to be inherent within digital technologies, obscures the ways in which the collections management system in fact develops very particular ways of looking at the collection; ways that are embedded in the history of how to see, and do, in the decorative arts museum. The Pen exemplifies the ways in which digital tools are part of broader trajectories of thinking, forms of engagement and engagement with form, tied to historically located genres of collection, exhibition and museological theory. Both the Pen and the box highlight the ways in which digital media must be understood in the broader histories of technologies and techniques of collection and display and in relation to wider forms of classification, knowledge and value that have developed over time and
long predate the digital. In the following two chapters I explore the possibilities for rupturing the seamless transition between digital and analogue museologies, exploring the possibilities of digital media to presence multiple forms of knowledge about and within ethnographic collections.