In order to fully unpack how object lessons work in museums and within digital media, we need to understand fully how knowledge is built up from objects, what interpretive frames we use, and the ways in which they bring particular views of the object into being. We need to be scholars of material culture, understanding the social significance of objects and the ways in which the organisation of things mirrors the epistemologies and classificatory principles that enable us to understand the world. We also need to understand collections as materials – as forms and substances that generate sensuous and embodied knowledge. It is for this reason that I chose to start my explorations of contemporary object...
lessons in front of a simple wooden box. The box was manufactured by
Johnsons of Hendon; it was made of carefully jointed pine, held together
with brass hinges and was kept closed using small brass hooks. The box
is papered inside with lined and numbered cards, allowing an interior
cataloguing of a numbered collection of lantern-slides held within the
pine grooves. From the picture, you can see the box may seem empty,
but as I will discuss, it is in fact remarkably full. This wooden box is a
contact zone, a material mediator between collections and ideas, people
and things, modes of analysis and forms of experience. It is a container of
knowledge and a provoker of questions.

I had never looked at the box until the project Sawdust and Threads,
initiated by the artist Caroline Wright. Working with the Scott Polar
Institute of Cambridge University, and across the museums and collec-
tions of University College London, Wright asked to be given deacces-
sioned artefacts from each of these collections. She proceeded to make
delicate pencil drawings of each of the objects on uniformly sized paper,
and then, sitting in public spaces within the university and museums and
using only hand tools, she took apart the original artefacts, until all that
was left was ‘sawdust and threads’. Wright’s project was an explicit exca-
vation of value and meaning, asking if they are located within the form of
objects or in the systems of classification and museum protocols that sur-
round them. By tracking between objects, drawings and back to (decom-
posed) objects, the project also explored the materiality of objects over
time and across different media. In the following sections I explore how
collections-based research builds up very particular forms of knowl-
dge around objects, drawing out our assumptions about the relations
between meaning and matter, form and content. These object lessons,
I argue, are vital for understanding the resonance of digital objects.

How do we know things?

It is time to see a materially focused, material culture studies back in
the centre of museum practice and museum studies. It has not held such
a place since the late nineteenth century and it deserves to return – not
in the positivist, static form and role it held in the past, but through a
gentle twenty-first-century revolution in which the object is once more
at the heart of the museum, this time as a material focus of experience
and opportunity, a subtle and nuanced, constructed, shifting thing,
but also physical, ever-present, beating pulse of potential, quickening
the museum and all that it is and could be.¹
The object lesson, as it emerged in the nineteenth-century ethnographic collection, drew together material form and theory into seemingly cohesive narrative form. Twentieth-century museologies have focused on unravelling these narratives, exposing the power relations, collecting practices and, often, the colonial injustices that underpinned them. Objects have been reconnected to communities who have been given opportunities to present, and represent, their own ideas and narratives. However, over the course of the twentieth century, following the dominant ways of thinking about interpretation and representation, anthropology and other disciplines separated words and objects. Museums by definition have resisted this divorce, notwithstanding Brown Goode’s invocation to make all displays a collection of well-written labels illustrated by objects (see p. 11 of this volume). As multisensory environments, where words jostle with things, museums make an implicit argument that knowledge emerges out of objects, experience and interpretation. In the twenty-first century, this interpretive complexity has returned to our understanding of how knowledge is created in the world, and museums and collections have been re-centred as sites of investigation within a new interdisciplinary framework, that draws together this renewed attention to the interpretive entanglements of form and meaning.

The end of the twentieth century generated a number of new museologies. The first signalled a re-exploration of museum publics and visitors, opening up the collections and exhibitions to new communities of interest and new stakeholders. There was also a shift of understanding of the museum visitor, from the nineteenth-century model of the public citizen to a twentieth-century rendition of the citizen as consumer. Digital media has been deeply implicated within this museology, used as a tool of participation to better integrate the museum visitor within a consumer experience and within new social frameworks. The resurgence of interest in materiality, and emphasis on consumerism, has also precipitated another museology – one that pays renewed attention to valued objects as well as their constituencies. The publication of popular books such as Neil MacGregor’s *A History of the World in 100 Objects*, the growing popularity of craft and maker-movements and the continued debates over repatriation insist on an epistemological focus on objects as well as people but also show us how salient consumer culture is to this perspective.

**Material museologies**

This dual orientation towards objects has engendered a renewed interest in materials as sites of both production and consumption. In 2012, the
UCL Faculty of Engineering opened the Institute of Making, a workshop and idiosyncratic materials library, available for use by anyone at the university. The Institute of Making is part laboratory, part make-space, part artist project and part archive. The materials library draws together a collection of materials both new and old, and hosts ‘materials of the month’ in which large quantities of materials, such as coal, are made available for experimentation. Its shelves hold bells cast in different metals, lumps of latex plus small glass vials containing such delights as radioactive material, as well as the baby teeth of one of the founders, Zoe Laughlin. The objects are displayed on open shelving so that they can be touched and picked up, and many can be used experimentally: chipped, smashed, heated, frozen. The materials library is the gateway to a make-space, and as such it aims to encourage the exploration of materials through making, to embed materials and making into a wide variety of research contexts, to encourage making as a constituent component of academic practice. Where the Pitt Rivers Museum’s typological strategy was curated in order to theorise evolutionary hierarchy within the relationship between technology and society, the Institute of Making is an argument for embedding materials knowledge and workshop skills within academic research and enquiry and promotes the frame of material science – of understanding the nature of materials – as an experimental and creative approach towards the production of new kinds of object.\(^5\)
This material museology argues in many ways against many of the traditional values of museums: collections are seen as dynamic, unfolding and subject to repeated interpretation. Their meanings are constantly evolving. Knowledge is not fixed within narrative, nor does it need to be located in cultural or historical context. In the Institute of Making, materials precede artefacts. They generate knowledge through what Tim Ingold has described as ‘sensory perception and practical engagement’, rather than through the engagement of a detached ‘mind with the material world’, which presumes an overly determined divide between a dis-embodied mind and an external reality.6

What are the consequences to this analytic move from material culture studies (and the relationship between people and material that it suggests) towards a focus on materials (in which culture is suddenly rendered outside of materials)? Is it possible to translate this vanguard of anthropological theorisation into a way of understanding collections, and can it help us to understand the place of digital objects in museums? This shift away from the ‘context’ to the ‘form’ of the object mirrors current trends in scholarship that focus on ‘materials’ and ‘materiality’ rather than ‘material culture’, and by extension on doing and making as well as looking. This perspective is strongly argued for by Tim Ingold, who has critiqued the notion of ‘material culture’ in favour of an emphasis on ‘materials’, which he defines as being better focused on ‘the stuff that things are made of’.7 Ingold’s position has engendered a series of lively debates around the methodology and practice of interpreting objects.8 Ingold wishes to move away from an understanding of materials as entirely encircled by human culture, advocating for an a priori perspective on materials, which then become entangled with people, generating material experiences and the transformative processes of making.

The decomposition of material cultures into materials acts as a kind of distillation, purifying the historical trajectories of individual artefacts into generic materials, which exist a priori as somehow ‘raw’ material that we may then transform into worthy things. For instance, a well-received book by Mark Miodownik, Professor of Material Science and one of the founders of the Institute of Making, entitled *Stuff Matters*, starts with the single image of the author drinking afternoon coffee on the roof of his apartment building in London.9 Miodownik breaks down this tableau into its material components, dedicating chapters of his book to concrete, glass, chocolate and porcelain. In each chapter, he explores the development of these materials into the artefacts on his rooftop tableau and he traces the emergence of these materials into human projects. Within this narrative, humans are presented as romantically enthralled
by the possibilities of material science. Miodownik celebrates the transformational capacity of human ingenuity to work with raw materials. This kind of focus on materials ignores a grand tradition in anthropology, from Sidney Mintz’s paradigmatic exploration of sugar, through to Anna Tsing’s work on Matsutake mushrooms in which materials are understood to be deeply embedded within human lifeworlds – not simply part of raw nature, but themselves embedded as much in culture, implicated in broader political or global systems in which human subjectivity and matter continually make and remake each other.¹⁰

In a recent volume, *The Social Life of Materials*, Adam Drazin and Susanne Küchler argue for a perspective on materials that sees materials not as ‘the raw stuff from which people would be able to shape cultural and social life’ but as social, embedded within culture as much as within nature.¹¹ Mintz’s classic account of our taste for sugar, *Sweetness and Power*, emphasises the mutuality of relationships between peoples and things, arguing that the excessive consumption of sugar is both the symptom and the cause of plantation capitalism and that our taste for sweetness is as much cultural and political as it is biological. Tsing’s account of Matsutake mushrooms explores a highly valued fungal form that is a consequence of plantation capitalism and the impact of human consumption on forest ecologies that have in turn created new political economies and conditions for nature.

**Teaching through things**

The oscillation of analytic focus from the meanings embedded within material forms (or platforms), or those that emerge from their participation in wider social worlds, long predates the digital age. If the received history of museum object lessons focuses on the public entanglement of collections and exhibitions, teaching collections provide us with a very different perspective on object lessons, one in which there is less preoccupation with formal narratives of exhibition, and a greater emphasis on knowing through making, doing and use. A teaching collection imparts a very different kind of object lesson to those experienced from the vantage point of the exhibition hall. Instead of presenting a curated narrative of objects to educate the visitor, the teaching collection is a material entanglement of complex discussions and affords more intimate engagements with objects as they may be handled, taken apart, put together, played, worn or used as they were first intended to be used. In the UCL Ethnography Collections, such intimacies, combined with a lack of context, provenance
or external information about the collection have pushed us to explore what we can learn through the surface encounter with the form of the object itself, rather than the usual contexts within which we situate objects (cultural, archival or collection contexts). Teaching collections can allow us to denaturalise many of the narratives that form part of exhibitions and that structure our more spectacular engagements with collections.

The Ethnography Collections were created by the first chair of anthropology at UCL, Darryl Forde, and were from the start intended primarily for teaching. The collections, comprising nearly 2,500 objects from all parts of the world, were drawn together from a number of disparate sources. In a 2008 collections survey it was discovered that only 32 per cent of the collections have any clear provenance. Since it was founded in the 1940s, the Ethnography Collections have continued to grow through donations and gifts from missionary and learned societies, alumnae, and anthropologists and students working in the department. Its curators are academics and it is very much a working collection, a part of every student experience from their first year in the department. Until very recently there was no formal exhibition space: the collection was stored within a seminar room where students and staff could interact with objects far away from the eyes of professional curators or conservators. Now, following contemporary trends in material culture studies, we are more likely to be teaching courses focusing on the poetics of different materials, or welcoming source communities to the collection than we are to be using the objects to learn about ‘primitive modes of production’, one of the signature courses established by Forde.

The Ethnography Collections’ character is perhaps best encapsulated by one distinct group of objects, which in fact were all deaccessioned from another collection. This group comprises nearly 300 objects from around the world that were given to UCL between 1951 and 1964. These were part of the ‘ethnographic collection’ of the Wellcome Institute, objects that were understood to be disconnected from the Institute’s mission of collecting medical culture and history in a global context but that formed part of Henry Wellcome’s ambition to create a ‘Museum of Man’. Many of these objects were dispersed after Henry Wellcome’s death, in 1936, to a wide range of universities and museums in a series of gifts. Somehow, upon their dispersal, many of the objects were separated from their catalogue details, so all we know about them comes from the circular handwritten labels carefully fastened to each one. These labels indicate that one object is a ‘Māori cloak’, another a ‘Kuba knife’. When objects entered the collection, Forde classified them according to his teaching taxonomies, so the cloak became part of a selection of...
‘textiles’, and the knife part of ‘knives, swords, spears, spearthrowers’. As object lessons, the Ethnography Collections were largely unmoored from their location within both fieldwork methodologies and collection histories. Rather, they were drawn together as three-dimensional illustrations for lectures and classes, and were also used to instantiate an underlying theory about objects and embodied forms of knowledge through the process of production or making. The motley assortment of objects from the Wellcome Collection was certainly one strand underpinning the emergence of material culture studies at UCL. The collection was used by scholars such as Forde, Mary Douglas and Michael Rowlands to teach courses focused on the technologies of specific regions, and was often used to instantiate a Marxist perspective on production as a lens to understanding culture and society. The artefacts were used as exemplars of agriculture, locomotion, ironmaking and weaving. They were understood to exemplify ‘modes of production’ that were seen as constitutive of diverse forms of social organisation and of aesthetic traditions. Objects in this context were understood as meaningful because of what they were...

Figure 16  A Māori flint adze, once part of the Wellcome Collection. E.0062. UCL Ethnography Collections. Photograph by Haidy Geismar. © UCL Reproduced under a CC-BY licence.
made to do within societies around the world, illustrating the functionalist approach that underpinned this nascent Marxist museology.

In 2012 we convened a group of staff and students at UCL to explore the different ways of understanding and interpreting objects in a research group called *Properties and Social Imagination*. Working with the Ethnography Collections, we chose three artefacts, selected specifically because they were perceived to fall into three discrete categories of material: stone, cloth and wood. We divided into three groups, each focused on one of the artefacts: a prehistoric greenstone adze from Papua New Guinea, a piece of nineteenth-century barkcloth from Sulawesi and a wooden spearthrower made in the nineteenth century by Aboriginal Australians. Our brief was to explore the nature of research, starting with the object, challenging the idea that meaning and context could be projected from other sources. We asked what could be known from the form itself, testing Ingold’s hypothesis about materials. Each group explored how they might generate culturally specific knowledge, from the starting and vantage point of the object itself, imagined for the project as defined by an outwardly apprehended material form.

I was part of the team working with the barkcloth. We explored the nature of barkcloth as a laid rather than woven fabric, comparing it to both Tyvek and to the paper dresses of 1960s Carnaby Street. We found out about a conservation project at UCL that examined paper objects by monitoring their smell, deducing their stability through their interaction with their environments by analysing the molecules that they emit. We took the barkcloth to the research laboratory in the UCL Institute for Sustainable Heritage and left it in one of their bell jars for several days. We found that even at a molecular level it had no smell. The chemical printout from the project confirmed a property of the material: that it was remarkably absorbent and inert. This property resonated quietly with the ways in which barkcloth has been traditionally put to use in places such as Indonesia and the Pacific Islands, where its qualities of absorbency (through its lack of smell) and strength (through the laid nature of the textile) produce a material that, as a wrapper for the body, mediates the living and the dead, and is drawn into exegetical discourses that describe barkcloth as a kind of second skin.

This conceptual, pedagogical and methodological shift back and forth from material culture to materials critiques the tendency of previous interpretive projects to incessantly convert objects into symbols,
understood through representational projects, and described through language, and more recently code. By taking objects seriously ‘in their own terms’, a materials-oriented perspective implicitly critiques the hermeneutics of museum processes of working with collections, which starts with singular artefacts collected in particular historical and social moments, absorbs them into wider collections and in so doing constitutes ‘generic’ knowledge about culture and society that transcends the moments of their collection and, in turn, draws further objects, no matter their provenance, into this context. A specific cloak comes to stand for all cloaks, and therefore defines the next cloak that is collected.

Figure 17  Barkcloth being measured for emissions at the UCL Institute of Sustainable Heritage. Photograph by Haidy Geismar.
However, a focus on materials has the potential to evacuate the specificities of the interpretive moment of encounter and naturalise all kinds of cultural assumptions, privileging an unchallenged analytic authority rather than a culturally and located process of interpretation. Within the Properties project we quickly discovered that our original definitions of materials as properties had all sorts of assumptions built into them. We learned that our division of objects into three ‘natural kinds’ – stone, cloth and wood – was misleading and unhelpful when we came to think about what we as anthropologists rather than as materials scientists could bring to a greater understanding of these artefacts. In fact, our focus on materials undid our own categories. We discovered that barkcloth was strong like stone, that stone was soft like wood, and that wood was shiny like stone. We discovered this not simply through a sensuous engagement with the materials, but through a renewed attention to material culture in which we explored the uses to which these materials had been put and their resonance in different social and cultural settings. It is no coincidence then that the industrial laid textile Tyvek is used not only in industrial contexts, where it is valued for its strength, but that it has also become the material used for surgical scrubs and paper underwear. Its unique strength and absorbency make it ideal to be laid next to the human body, just as barkcloth is used as mortuary wrapping in the Pacific Islands. It was challenging for the students and staff alike to rethink our understanding of the relationship between objects and their contexts and to understand how useful knowledge could emerge from artefacts alone without locating them in multiple contexts of scholarly literature, collection histories and local environments of production, use and care. The attention to materials was productive only in as much as it led us to unpick the assumptions that were built into our classificatory systems and ways of understanding the collections, relocating them in a more expansive social and material context.

**Box**

*Sawdust and Threads* posed a conceptual challenge from the start, challenging the history of defining and valuing objects in the collection by focusing on the value of objects that had been deaccessioned. As far as I am aware, the Ethnography Collections have never formally deaccessioned an object, and being a collection without a museum, we have no formal criteria for how this could be done. Indeed, as the Wellcome Collection dispersal demonstrates, the Ethnography Collection is a place
that has welcomed deaccessioned objects from other places. Shifts in our collections management towards a greater interest in conservation, alongside the contemporary interests of material culture studies, mean that every dropped fibre or flake gets put in its own bag or box, and becomes part of the collection. As objects slowly disintegrate over time, so the collection expands infinitely, limited only by space.

Our conundrum, then – that we have no experience of deaccessioning and that every object has some research potential in our collection – initially seemed to mean that we would not be able participate in Wright’s project. But, as I looked around the collection, I started to think more carefully about the ways in which collections and institutions define the boundaries of what is even recognisable as part of a collection. The object I selected for Wright to work with, a simple wooden box, demonstrates not just the fragility of objects and their value, but also the fragility of the classificatory schemes and taxonomies that underpin them.

![Figure 18](https://i.imgur.com/3Q5k.png)

Figure 18 Fragments of UCL Ethnography Collection. Part of a project by Jasmine Popper, MA student in Material and Visual Culture at UCL. Reproduced with permission.
Figure 19, 20, 21  Transforming the lantern-slide box. Caroline Wright, Sawdust and Threads, 2015. Mixed media, pencil on paper. © Caroline Wright. Reproduced with permission.
The wooden box, constructed to hold glass lantern-slides, is one of several identical boxes currently sitting on a high shelf in the collection. Lantern-slide lectures can be seen as early PowerPoint presentations. They gathered together photographs from the field, photographs of objects and photographs of photographs, as well as photographs of pages from books. They did the work of image libraries, intensifying the relationship between material, visual and discursive knowledge. In the form of the lantern-slide, all of these images become uniform on the visual plane of the square glass plate. Lantern-slides were used in lecturing and teaching well into the 1950s, when they were gradually supplanted by smaller transparencies, acetate film and, eventually, digital projectors. At UCL we have copies of lectures that provide the caption list for some of the lantern-slides that show us how our forebears made sense of the objects in the collection by providing contexts – the slides show objects in use, in place, in relation to similar artefacts, and situate them within broader cultural worlds through magical projections.

The wooden slide boxes now sit empty on high shelves in the collection. The slides themselves have shifted in our value system from being reproduced and reproducible images to being unique and singular historical artefacts. Because of this they have been catalogued and now rest in individual acid-free mounts and boxes, next to their original homes. Our box itself is currently caught in an out-of-time moment. In ten years, when we have perhaps moved to bigger premises and have more space, it might also become an ‘object’ valued for the historical resonances it holds as an artefact of material culture theory and teaching. At this time, I suggest that it has been conceptually deaccessioned. It has been studied carefully by our student volunteers, and all of the information deemed relevant or important – the handwriting on the inside of the lid that indicated what slides went where and in what order – has been digitally transcribed and added to the digital catalogue. The materiality of the box – its colour, its feel, its texture, its own geometry – is currently of little interest (although interest has, paradoxically, grown out of Wright’s project). Its materiality has been negated (just as the materiality of the slides within has been recognised anew). I say this provocatively, because it was with some difficulty that I took the decision to give the object to Caroline’s project (with appropriate consultation within the department and with UCL Museums and Collections). I am slightly appeased by the knowledge that we have other, similar boxes, still sitting on the shelves. But my commitments to the material form of objects still whisper in my ear, asking: ‘But what of this specific box? Its singularity, its own form?’ and my own experiences as a museum researcher have taught me that
we may yet have much to uncover about this box. We have yet to discover whose handwriting recorded the order of the slides (it was only after the project that someone whispered in my ear that it was probably Darryl Forde’s) and in what academic debates this material manifestation of an academic lecture participated. We have yet to discover interests we cannot at this time imagine.

The box, even emptied of its contents, thus sits out of time but pregnant with poignancy and potential. It is both an object and a source of information, although its status as an object is currently precarious. In the present moment, information can migrate into digital catalogues and descriptions, and this supplanted materiality can be discarded. Indeed, Caroline herself has taken apart the box, grinding it down to a pile of red dust and a handful of rivets. Yet, in her drawing we have a lifeline to that materiality, and also an expression of the tension around recognition, classification and value that sits in the very form of objects themselves.

What will be recognised from that drawing in the future? Can the drawing become the object? How is the drawing different from the digital notes now representing the box in the database? The hesitant ephemerality of pencil on paper seems to contrast to the original solidity of the wooden box, yet we had already dismantled that box before we gave it to Caroline. We had stripped away its meaning, separated meaning from form, dissolved writing into digital text, and stripped away both wonder and resonance from the box itself. Indeed, while it may not be attached to a complex bureaucratic process, we have thoroughly conceptually deaccessioned this particular box.

Wright’s drawing coexisted with the box for almost a year. Both were displayed in the project’s final exhibition at Norwich Castle Art Museum, alongside the other objects in various stages of decomposition. Then, Wright returned to UCL, where she sat in the lobby of the anthropology department for several days at a makeshift workbench, and slowly worked the object out of its form. It took her a long time to muster the resolve. Students and staff walking to exams, lectures and supervisions might have caught a glimpse of the moments in which she smashed the glass slide with a small hammer, or were drawn into conversation with Wright as she sanded the well-made box down into a red dust.

The archaeologist Severin Fowles has suggested that within the so-called ‘material turn’, objects have been made subject to a kind of interpretive colonisation. He goes so far as to suggest that objects have emerged within anthropology as the new subalterns – a silent, disempowered constituency over which we, as analysts, assert academic supremacy,
whether it be around the process of interpretation or the methodologies
we use to undertake research. The oscillation of focus between mate-
rials and material culture therefore speaks to a series of much broader
issues of interpretation that are extremely important in museums and
are also equally important in the ways in which we make sense of digital
media. Do we focus our attention on the form of the box or its contents?
Where do we draw the line between the two? How do we define the dif-
ferences between a reproduction and an original? Is this a material or
social distinction? These questions challenge us to consider the politics
of our analytic framework, the terms of engagement with both artefacts
and the people and ideas that we believe them to represent, and the ways
in which we locate context both in and out of the collection. The idea of
affordances has been appropriated instrumentally into design practice,
and a host of disciplined frameworks that focus on ‘users’ (e.g. human–
computer interaction, interaction design, design thinking). The co-option
of this concept as instrumental to the creation of new and better prod-
ucts should not blind us to the way in which James Gibson developed the
notion of affordances within an ecological perspective, in which artefacts
are understood to have specific potentials situated in material and social
environments. For Gibson, an affordance is the interaction between an
object, its user and its environment, all of which determines the possibil-
ity of its use. This is also fundamentally a contextual approach demand-
ing an understanding of two scales (the social and material).

At the end of the project, all that was left of the box was a framed
drawing and a pile of dust and rivets. Wright plans to mix the dust into
paint to create new images. The box now sits wrapped in paper in my
office as we wait for our collection space to be improved. I will use this
drawing as a warning: it will sit in the collection as a continued reminder
that in every material form there is value, even if we cannot, at that
moment, see it. As the first object lesson of this book, the box teaches us
that debates about shifting value, visual perception and materiality long
predate the digital. In the chapters that follow I track how the forms of a
pen, an effigy and a cloak are refracted across different media, instantiat-
ing different cultural values and perspectives. Each of these, following
the example of the box, is an object lesson into the limits of materials,
and the continued oscillation of object and information, that produce
knowledge in museum collections.