METADATA
HOW WE RELATE TO IMAGES
Lethaby Gallery
10 Jan – 3 Feb 2018

The exhibition "Metadata: how we relate to images" is just one of many products from a collaboration between the International Research Group "Bilderfahrzeuge. Aby Warburg’s Legacy and the Future of Iconology", funded by the German Federal Ministry of Education and Research and located at the Warburg Institute, and the Art Programme at Central Saint Martins in London. Inspired by specific aspects of the work of the cultural theorist Aby Warburg (1866–1929) the research group investigates, in a number of individual case studies, the significance of the mobility of certain images within cultural history. This exhibition, however, forms a collective product of the group's work for which the researchers based in London and at other European institutions teamed up with artists from Central Saint Martins. The exhibition engages with the task of combining academic research and artistic practice. The result is a pronounced focus on the actual objects, doing particular justice to Warburg's concept that gave
the research group its name: "Bilderfahrzeuge", understanding images (Bilder) as automobile "vehicles" (Fahrzeuge), not only loaded with ideas to be transported by them but also driving them with their own dynamic.

The collaboration between the "Bilderfahrzeuge" and Central Saint Martins dates back to 2014 when the research group’s coordinator, Johannes von Müller, met with Mick Finch and Martin Westwood from Central Saint Martins. The pretext for this meeting was Westwood’s "Headstone to Hard Drive" project that had many potential overlaps with the foundational interests of the "Bilderfahrzeuge". The first project realised together was a small exhibition, "Experiencing Images at the Warburg Institute", that took place in the Institute’s reading room in late 2014. A series of seminars followed where faculty from Central Saint Martins and members of the Bilderfahrzeuge presented their research to each other. Further collaborations were stimulated,
for example in the context of the "Annihilation Event" organised by Louisa Minkin and Elizabeth Wright. The exchange facilitated in that context added a further dimension to the project and illustrates well how the interdisciplinary dynamic has worked between the two institutions. In June 2016 a colloquium, "The Warburg-Haus: apparatus, inscription, data, speculation", was organised at the Warburg-Haus in Hamburg, the former home of the institution that would become the Warburg Institute. The colloquium was led by Mick Finch, Uwe Fleckner, Johannes von Müller and Martin Westwood and brought together an international group of academics and artists, among them also Bernard Stiegler and members of l’institut de recherche et d’innovation, Paris.

Thus, in so many ways Central Saint Martins' Lethaby Gallery seemed like the logical host for "Metadata". The path toward the exhibition has brought us into even closer and fruitful proximity.
The Bilderfahrzeuge group has worked closely with Sarah Campbell and Judy Willcocks from the Central Saint Martins Museum and Study Collection and many objects from the museum are featured in "Metadata". Also along this path was the aforementioned "Annihilation Event". Its premise of being between an exhibition and an event has been a useful touchstone in how to negotiate the question of metadata in the exhibition that is now on display and that will also feature a series of events bringing together academics, artists, students and the wider public.

"Metadata" is the culmination of an exciting period of dialogue, exchange and concrete projects that we hope will continue beyond the temporal borders of the lifespan of the Bilderfahrzeuge project. The cooperation has proved rewarding for both Central Saint Martins and the Bilderfahrzeuge and the encounter, in a way, brings to mind notions of serendipity and Warburg’s "principle of the good neighbour". "Metadata: how we
relate to images", a manifestation of our collective endeavour, is, we hope, the beginning of yet another stage in this relationship.

ANDREAS BEYER
Speaker, "Bilderfahrzeuge. Aby Warburg's Legacy and the Future of Iconology"

MICK FINCH
Reader in Visual Art Practice and BA Fine Art Course Leader, Central Saint Martins
One might justly claim that metadata is ubiquitous, structuring our interactions with the world in manifold ways. As data about other data, metadata describes and classifies information; among its best-known applications are, for example, library catalogues, maps, or, possibly most familiarly today, the information set — location, time, device — that comes with the simple act of taking a picture on a smartphone.

This essay too is metadata. It provides an introduction to the exhibition this booklet accompanies. It will thus influence and inform the way visitors encounter the exhibited objects by providing background information on artworks and suggesting potential links that can be established between them.

The term itself is fairly young. It dates from the late 1960s and was coined within the disciplines of information and computer sciences. As a phenomenon, however, metadata existed long before the digital age, starting probably as early as the cuneiform
inventories of the royal Hittite chanceries from the second millennium BCE, or the (lost) tablets cataloguing the holdings of the library of Alexandria in ancient Egypt, amongst many other examples. Where there is information, there is metadata.

The consequences of metadata for our perception and use of art objects become clearer when looking at an example such as the case of a plaster cast listed in the collection catalogue of the Central Saint Martins Museum and Study Collection as a "Griffin type creature. Crouching lion. Cast of Assyrian Lion similar to those in the British Museum". This is evidently a case of mislabelling, as this is a cast of a famous Archaic Greek sculpture, the Nereid Monument which is indeed on display in the galleries of the British Museum.

This mislabelling as "Griffin" might not merely be an error, but also speak of the intended functions of the cast itself (No.30). As part of the teaching collection of an art school, the
piece was probably not first and foremost intended for teaching students about ancient iconography, but about certain formal traits of an ancient masterpiece. While the cast records the sculpture’s form and dimensions, it omits other information such as its actual material, weight or haptic qualities. The cast’s status is that of an example, not an artwork, which might also account for the badly damaged state it is in, and the graffiti left on its surface by generations of students. Commenting on this object’s history beyond its status as a mere copy, this metadata makes the cast a multi-layered third object, an imaginary one, existing somewhere between the British Museum, Central Saint Martins and the beholder.

These frictions in the process of transmission and tradition also attract numerous contemporary artists to the theme of data and metadata. In doing so, they consciously align their own work with an intervention into the data sphere.
Griffin

COLLECTION:
CSM

DIMENSIONS:
1524 x 508 x 965 mm (152.4 x 50.8 x 96.5 cm)

MEDIUM:
Plaster

DESCRIPTION:
Griffin type creature. Crouching lion. Cast of Assyrian Lion similar to those in the British Museum

OBJECT NUMBER:
S.1.CC
Questions of data and metadata, "original" and "commentary" allow artists to engage with the classical issue of imitation and the role of models for an aesthetic process. They also shed new light on the line between commenting and making.

This dialectic is negotiated prominently in works like Henrietta Simson's (Don't) Fall on Me, Arena Chapel (No.2). One of the most famous artworks of western tradition, Giotto's frescoes in the Arena Chapel in Padua (around 1305), is printed on a silk parachute, inflated periodically by a fan, thus forming a dome that recalls the original architectural space.

Clearly, the frescoes (or rather: the photos of the frescoes taken by the artist) are the source material, the "data" forming the base for Simson's work. While being comparatively accurate in the reproduction of the chapel, Giotto's masterpiece appears markedly skewed – the inflation constantly distorts the images, with the fan also adding a very manifest "noise" to the process.
Keeping Giotto's majestic frescoes in constant movement, the work liberates itself from the weight of tradition alluded to in the title, and opens a space for appreciating Simson's work as a sensuous experience in its own right.

While transmitting some information about Giotto's work – e.g. the colours and iconographies – the artist is consciously omitting others such as the static, perspectival composition. In this respect, the new work also becomes a commentary on the Arena Chapel itself – a piece of artistic research, serving as metadata, feeding back into our perception of the pictorial and architectural spaces of the Renaissance. In some respects, Simson's work might allow us to reflect on Giotto’s art once again in the context of historical ideas, such as the Christian "pneuma", the union of breath and spirit, which a medieval beholder might have perceived but which art historical tradition has stifled.

At this point, the heuristic potential of metadata for art history
might become clearer. Commentary is per definition a non-invasive way of engaging with artworks and artefacts, allowing us to think about histories of reception from a fresh perspective. Yet this commentary is not exclusively secondary, but the crucial framework for understanding how we define our interactions with objects. Consequently, metadata affects the "data" itself. As the examples of the Griffin and (Don't) Fall on Me, Arena Chapel show, certain sets of information and classification ascribed to an object influence its material handling. From this vantage point, metadata addresses the crucial question of how information about images determines how we relate to them.
Beyond the studios and the classrooms, an essential part of many art schools has been a collection of exemplary artworks and objects for the students to imitate and copy: a teaching collection. These collections frequently consist of versions of famous artworks, as well as of new works by students and staff, representing an archive from which the practising artist can pick and choose. This process of selection and translation enables the creation of new art by drawing upon established models, which serve as points of orientation to work with and against.

One such example is the Central Saint Martins Museum and Study Collection, from which many works in this exhibition are drawn. It was formed through the merger of the earlier teaching collections of London’s Central School of Arts and Crafts and the Saint Martin’s School of Art. The items collected are accessible specimens of earlier traditions that can be drawn upon by teachers and students. In this respect, the collection enables
a very pronounced "aspect-seeing": art objects are scanned for elements that are suitable for appropriation, and regarded as formal models rather than historic artefacts. This principle determines what is collected: amongst the holdings we find a modern reproduction of an iconic engraving by the German Renaissance artist Albrecht Dürer. This particular sheet bears a stamp "L.C.C. ART EXAMPLE 736" (No.3). This stamp, being metadata, identifies the object not as an original print but as a specimen for educational purposes, thus making the print in itself metadata. A similar constellation can be observed in the modern publication of compositions by Giovanni Battista Piranesi (No.6) that, famous in their own right, represented canonical ancient Roman monuments.

The Central Saint Martins Museum and Study Collection has grown and evolved in many ways over the years. The metadata assembled over the course of this history reflects the changing
status of the objects collected. The full-scale plaster cast after the fifteenth-century Florentine portrait bust of the physician Giovanni Chellini (No.4), for example, reproduces in a cheap material a specimen of a very specific Renaissance take on a classical art form. Until recently, this cast was firmly believed to derive from the collection of Saint Martin’s School of Art, on the basis of the perception that this fine art institution, rather than the Central School of Arts and Crafts, was also the source of all "fine art" objects in the collection. The photograph, reproduced here, of the Central School’s now largely lost cast collection, documents, however, that a cast like the present one existed in that institution. This metadata might be suitable to undermine the earlier narrative.

The collection now includes objects relevant to all disciplines taught here: among them textile design, graphic design, calligraphy, printing and fine art. The objects chosen from the
collection for this exhibition speak to the transmission of designs, such as lettering and linear ornaments; they also give insights into the workshop practices of the art school. British textile designer and teacher Joyce Clissold records both her recipes for fabric dyes and the material traces of her experiments with dye and colour in her Dye Book (No.12). By now this book has become an object of aesthetic appreciation in its own right, as well as the inspiration for a contemporary reproduction of 1920s textile dyes (No.13).

The black and white photographs by Violet Hawkes (No.8), which record Edward Johnston's teaching of calligraphy on blackboards in this school, may originally have been intended as a convenient pedagogical tool. Johnston's lettering and use of ornaments demonstrate a selective approach towards late medieval and early modern manuscripts, some of which are also part of this teaching collection.
By studying metadata in the context of an art school’s collection one of our key interests is techniques of inscription: the annotation and classification of objects and how historic data is described and presented in order to encourage imitation. This does not mean, of course, that their creation in turn is metadata alone, although they undoubtedly comment upon the models appropriated. At this point it becomes clear that the boundaries between data and metadata oscillate continuously. Metadata makes images and forms accessible, in order for them to become the raw material, the data, allowing art students to develop their own approaches.
For many centuries paper has been the primary carrier of metadata. Books, maps and money are the obvious examples of how paper has enabled us to gather stories, to collate, cascade, organise, store and – crucially – to transmit information across the world, across the centuries. It is the very material qualities of paper – its lightness, flexibility, relative affordability and durability – that have allowed it to become such an enduring vehicle for recording and transporting metadata.

Adopting the aesthetic qualities of its predecessor parchment, which is used, for example, to record the musical notation of the Antiphonal (choir-book) (No.7) on display, paper has become the material on which we have come to rely. Only in 2017, the House of Lords agreed to record new UK laws on paper instead of the traditional parchment that had been in use since 1497. It may seem anachronistic, but illustrates that in our digital age paper has acquired an even more auratic quality, guaranteeing the
stability of what it records. While digital standards of conversion are not yet universally agreed, paper is still perceived as the ultimate failsafe.

Despite this, paper is frequently the material of choice not because of its stability, but because of its mutability, another property that makes it an ideal transmitter of information. As such the material had a true renaissance in nineteenth-century archaeology. Thus paper was even used to copy the facades of monuments that were considered far away and foreign – Persepolis in Iran, Palenque in Mexico and the Alhambra in Spain, for example. Archaeologists like Alfred Maudslay exploited its material qualities in the paper mould technique. This method uses layers of wet paper to create a negative impression of the surface of a building or object, from which a positive could be cast in plaster.

Paper moulding enabled an imprint of a monument to be
brought with all its details back to the museum, in the age before both digital reproduction and cheap and reliable photography. A French archaeologist, Lottin de Laval had written and published a pocket-sized guide to the technique, Manuel de Lottinoplastique (No.16), to be used by the amateur explorer, with the idea that anyone could copy details of buildings and make reproductions for their home. Maudslay’s application of the technique is testament to its success.

These paper moulds were cheap to make and very light and easy to transport to Europe. The casts made from them were used to study the artefacts, for display and teaching, as well as to reconstruct entire monuments from what were considered "exotic" places. The British Museum has a rare collection of these original paper moulds and their plaster casts made by Maudslay from the Mayan monuments of Guatemala and Mexico, examples of which are on display for the first time in this exhibition (No.15).
These paper moulds were never meant to endure, they were ephemeral transmitters. However, the moulds together with the plaster casts made from them bear the physical imprints of the objects they touched, transmitting not only the shapes of the monuments but also their flaws, traces of their makers and the places where they were made. In some cases, they carry the metadata for monuments that in their original form have deteriorated and become illegible. Today, practitioners of Digital Humanities use metadata sources like these to construct digital versions of the original built structures.

This technique is not only of interest for researchers but also for contemporary artists, such as Nicola Lorini. His work investigates how objects and narratives from the past travel and mutate their conditions. In Hôtel Culny (No.17), Lorini has adapted the paper mould technique of Lottinoplastique to instigate a dialogue between material production and the interpretation
and transmission of information through paper. The paper mould technique also informs the subject matter of Lorini’s work: his ephemeral sculptures are taken, not from ancient monuments, but from the vans used by museums for art transport.

A similar strategy is deployed by artist and fashion designer Hussein Chalayan, like Lorini a Central Saint Martins graduate. In his Paper Dress (No.14), Chalayan plays with these qualities of flexibility and portability. He created a piece of actually wearable clothing made from a toughened fibre paper. This piece is in fact its own airmail envelope and can be folded and sent in the post, to be opened and worn by the recipient. Styles in fashion travel; and displacement and migration are one of the designer’s recurrent themes.
The modern term "data" goes back to the Latin word "datum": something that is given. But can we legitimately claim to access things that are just that: a "given"? History is made of layer upon layer of commentary. We all act in the frameworks of habits, structures, traditions, the parameters set for our actions by past events. As also established in the other essays, there is "nothing original" under the sun. All meaning and facts seem historically contingent and constructed. Consequently, one might conclude that there is no such thing as "data" anyway. In this sense, our perception of the world is metadata.

Yet, in the digital age, this old configuration seems to have been at least partially overturned. The data paradigm allows for the describing and decoding of information in a binary code of ones and zeros, translating reality into an abstract numerical code. Artist Louisa Minkin brings digital code to the foreground by exploiting differences in the data from various reproductions.
of a well-known painting in the National Gallery in her work Holbein Glitch (No.28). These differences, key to the work, remain invisible to the viewer and can only be accessed through her research material.

Coding is not a concept that is exclusive to the digital age; for instance, the seventeenth-century philosopher Gottfried Wilhelm Leibniz attempted to derive a binary numeral system from the essence of Christian theology — God and creation represented by one and zero — and his contemporary Francis Bacon undertook to encode the alphabet in a binary "cipher". But modern information technology has implemented this concept to an unprecedented degree. We are surrounded by digital code — ones and zeros loom behind all the shiny forms and icons that govern our daily existence. Recently, this analytic decomposition was even extended to the natural world. With the astonishing advancements in the sequencing of genomes since
the 1990s, life itself can be expressed in terms of data units. Several works in this exhibition reflect on these properties of data, aiming on the one hand to visualise this dissolution of form in the process of encoding and decoding while also highlighting the degree of information and metadata that necessarily is created through this process. The analysis, one might conclude, results in metadata itself. Among the most active participants in these debates are textile designers and artists who work on the border of art and science. This is maybe unsurprising, given that technologies such as the loom are frequently considered as precursors of modern computing. The Jacquard machine, invented in 1804, is only the most prominent example of a new generation of looms that were controlled by punch cards, with the "code" recorded on these cards determining the operations of the machine. Such punch cards were eventually also used to input data for the first computers. Contemporary textile
designers such as Rosemary House combine these technologies by using digital looms for producing their intricate weaves. In MIDAS (No.21), a modern computer feeds the data commands to the loom, replacing the older punch cards. The wide-meshed weave subtly alludes to the digital technologies it is based on by exposing a grid-like structure associated with digital aesthetics.

In such cases, code enables the creation of new forms. This is most pertinent in the case of DNA, the binary structure of which can be employed, literally, to programme the building blocks of life – but equally to deconstruct them. Carole Collet works along this dialectic, using technological advancements in DNA sequencing to develop new, biodegradable textiles – both sustainable and perishable. Their death is, indeed, programmed. Collet’s work reflects on the insights and data provided by DNA sequencing. This becomes particularly evident in the research material featured in the exhibition (No.20). In the green textile,
reminiscent of both a Petri dish or the cinematic visualisation of data in the movie "The Matrix" (1999, USA, Warner Bros.), Collet exhibits sequences of numbers and depictions of C. elegans, the parasite whose decoded DNA forms the basis for her product development. The work hints at the analogies between the threads of the DNA sequence and the thread used for weavings: they bring into existence the very forms that in turn will produce the superstructures that allow them to be decoded.

The relationship between analysis and making is a complex and interwoven one, that sometimes even leads to the dissolution of the original source. Metadata provides information about the structure of data, but also contains the means to take it apart.

Sarah Craske explores this dynamic in one of the classical realms of metadata – the library. In the library the catalogue and readers' register keep record of the current location and usage of books. Craske's project Biological Hermeneutics (No.22)
OVIDII NASONIS

METAMORPHOSON

LIBER III.
applies this principle to a type of metadata that is invisible to the naked eye: the marks left by readers over time on an eighteenth-century copy of Ovid's Metamorphoses. Setting aside the conventional literary metadata, the artist focuses on biological traces: sweat, skin and spores transmitted from the reader onto the page. Craske extracted the bacteria by taking the book apart and cultivating the bacterial colonies on each single page; although literally deconstructing the book, this analysis forms the basis for constructing an entirely new library, a genetic library of bacteria. The outcome is a set of metadata providing a wealth of information on the volume, Ovid's Metamorphoses being itself a book about the mutation of forms.
Transmission, in its broadest sense, is the act of transferring information from a source to a receiver. The information travelling in this way can be differentiated into two categories: it either consists of the actual source data or it refers to the source data, while the latter remains stationary. In the second case, in order to be transferred, the data must be transformed into a signal. The process of the transmission of a signal is considered successful when the information that was sent off by the source arrives at and is comprehended by the receiver. This is true both for a conversation in which one person is communicating directly with another, as well as for indirect conversations such as written correspondence. Indirect communication, however, increases the possibility of a misinterpretation of the information that is being transferred. This increase is proportional to a loss of data. Thus a letter carries words but lacks the additional information provided by gesture, facial expressions or tone. Moreover,
it does not allow for an immediate reaction by the receiver and deprives the source of the possibility of, if necessary, adjusting their original statement in relation to such a reaction. If such a loss of data amounts to a critical level, the receiver may find themselves incapable of processing the information and thus there is ultimately a failure in transmission.

"Noise" is used in semiotics, the study of communication based on signs, to describe a factor that interferes with the transmission of a signal. This interference can be additive, for example a loud sound, such as traffic noise, that impedes a dialogue between two people, or subtractive, the absence of a signal that interrupts a telephone call caused by bad reception. Both are located at opposite ends of a spectrum and can eventually make the transfer of information impossible. "Noise", however, is not always disruptive, but can be a necessary part of a successful transfer. Staying with the example of telephonic communication, when
the acoustic signals of a human voice are transformed into electronic signals, their radio spectrum is reduced. This reduction, while a loss of data, facilitates the transferability of the essential information.

The ambiguity of the quality of "noise" concerning the transfer of information becomes evident in a work like Jeremy Wood's 15 Years of Mowing (No. 23). Describing his practice as "GPS drawing", the artist has equipped himself with a GPS device and, for almost two decades now, has constantly recorded his movements – between countries, within London and even at home, mowing his lawn. Wood processes the information about the tracks his body is making through space, the digital traces that this physical movement leaves behind in varying ways in his artistic practice. The works informed by the accumulated data differ in focus and emphasis. Where did the recorded movement take place? Over what amount of time? How are differences in frequency of
this movement represented? These decisions affect the originally recorded information, or rather the visual signals that it is being transformed into. In that sense, the artistic decisions act as "noise", for they interfere with the transfer of those signals. A number of lines shine bright against a dark background, crossing each other with varying density and adding up to a graphic form. This form can no longer be understood as a visual journal of Wood’s tours on the lawn in his backyard, hardly fulfilling, even inverting the usual purpose of a map – to provide orientation in space. By corrupting the transfer of a signal, the artist has dissociated the process of transmission of information from the constraint of comprehensibility. The artist has taken on the role of "noise". The art work, however, does not represent a failure in the transmission of information, but opens the transferred signal for interpretation.

The context in which this work appears, the gallery, forms
part in this productive distortion. As a referential system, it determines the spectrum of potential interpretations. This poses questions regarding the role of institutions in the transmission of information. Can an institution like a museum be regarded as a medium through which information, encapsulated in its holdings, is communicated not so much through space but time? If so, it too is susceptible to the corruptive, but also the facilitating qualities of "noise" in the process of such a transmission.

This raises questions which are, among others, addressed by the work of Nora Al-Badri and Nikolai Nelles (No. 26). They claim to have scanned the world-famous bust of Nefertiti, currently held in the Neues Museum in Berlin. Once they had acquired the data, they released it to the public. As an open source, the Nefertiti can now be reproduced, redesigned and readapted by anyone – an ancient sculpture propagated into a multitudinous digital offspring. By evoking the idea of a "digital art theft", their
work speaks to the ways in which digital innovation is reshaping both practices of art and the circulation of cultural goods. An institution, responsible for the curation of an archaeological object and the facilitation of its research and public display, reveals itself as being primarily the owner of the copyright to a design whose author is long-since dead and that is, at least ideally, considered as part of a cultural heritage belonging to all of humanity.

For us the museum is a hub of cultural knowledge and its transmission. But within this context new problems arise: who acts as "source", who as "receiver"? What defines the success of the transfer in question? What agency is to be attributed to the medium of the transmission? Hence, for example, the necessity of restoration while sustaining the durability of an object is also an act of interference in its material history. Thus the conditions of the curation of cultural goods can be described in terms of
"noise". Acknowledging this is not a call to "clear the signal". It points to the necessity of becoming aware of the existence of such "noise" and making it another source of observation and interpretation.
LIST OF IMAGES

Reading room of the Kulturwissenschaftliche Bibliothek Warburg in Hamburg with an image display by Aby Warburg on Ovid, 1927, photograph. Courtesy of The Warburg Institute Archive.

Entry for "Griffin" from the Central Saint Martins Museum and Study Collection online catalogue, screenshot.

(Don't) Fall on Me, Arena Chapel by Henrietta Simson, exhibited at the Slade School of Art, 2016. Photograph: Henrietta Simson.

A drawing class at the L.C.C. Central School of Arts and Crafts displaying the collection of plaster casts, including the bust of Chellini, early twentieth-century, photograph. Courtesy of the Central Saint Martins Museum and Study Collection.

Alfred Maudslay and his assistants at Palenque in Mexico, 1890s, photograph. Copyright: Trustees of the British Museum.

Part of a van used in the work of Nicola Lorini, 2017. Photograph: Nicola Lorini.

Research material for Holbein Glitch by Louisa Minkin, 2017. Courtesy of the artist.

This booklet accompanies the exhibition "Metadata: how we relate to images". It functions as an archive, storing the metadata relating to the works and documents on display. By adopting the format of a sketchbook, the booklet’s design merges the act of cataloguing with a practice of incidental documentation.
Henrietta Simson
(Don’t) Fall on Me, Arena Chapel
2016
Digital image on silk, polyester rope, carabiners, industrial fan
Courtesy of the artist

Simson took photographs of the thirteenth-century fresco cycle by Giotto in the Arena Chapel in Padua and printed them on a silk parachute. The parachute is inflated by a fan, creating a new version and animation of this pictorial space.
As the stamp makes clear, this modern reproduction of Albrecht Dürer's famous engraving "Melencolia I" was part of the London County Council art holdings. It was transferred to the Central School of Arts and Crafts to serve as a teaching model for students.
ANTONIO ROSSELLINO
Bust of Giovanni di Antonio Chellini
Nineteenth century
Plaster cast after marble original
Courtesy of Central Saint Martins Museum and Study Collection

This cast was acquired by the art school even though the original marble of 1456 was and is on display at the Victoria and Albert Museum. Plaster casts like this were an accessible means to disseminate three-dimensional forms in original dimensions. The Renaissance bust merges older models: classical portrait busts and medieval Christian head reliquaries.
NOEL ROOKE
Portrait of William Lethaby
1920s
Black ink on paper
Courtesy of Central Saint Martins Museum and Study Collection

Lethaby appears before the Central School of Arts and Crafts which he founded and Westminster Abbey where he was surveyor. Brockhampton Church, in the foreground, was also built by Lethaby. The fall of light and staging monumentalise the sitter and allude to classical busts.
Roman architecture sculpture and ornament
1900
Title page
Courtesy of Central Saint Martins Museum and Study Collection

The twentieth-century publication of compositions by Piranesi from which this loose sheet is taken, adopts the title page of his 1761 Della Magnificenza e d'Architettura de' Romani. Regarded as works in their own right, the eighteenth-century prints were collected and used by antiquarians, architects and artists.
This page from a choral score was once used by monks. While the black lettering is the text of the Psalm, "Domine in tua misericordia speravi...", the red lettering functions as an index, helping the monks in finding the appropriate page. In the context of an art school, the main focus will have rested on calligraphy and ornamentation.
VIOLET E. HAWKES
Edward Johnston's Blackboards
1900–1944
Photographs
Courtesy of Central Saint Martins Museum and Study Collection

These photographs document the lessons of one of the most famous calligraphers of his day, Edward Johnston. They exemplify the different styles and ornamentation he taught students and are intriguing documents of his classroom practice. Taken at different stages, they trace the successive accumulation of writing samples.
WILLIAM MORRIS
A note by William Morris on his aims
in founding the Kelmscott Press
1934 edition
Book
Courtesy of Central Saint Martins
Museum and Study Collection

This book presents the different types and
ornamentations designed and used by
the press, founded in 1891, whilst the text
narrates its history. Morris draws on
medieval manuscripts and early printed
books. His designs would become
models for students at the Central School
of Arts and Crafts.
Jones highlights examples of pattern and ornament from global architecture and decorative arts in his hugely successful publication. He intended the book as a source of design principles rather than as a model for copying, though it was used as both. This is one of multiple copies of this work owned by Central Saint Martins, highlighting its importance.
Early wallpapers by Morris and Co., were printed in multiple colours from wood blocks. The designs draw on natural forms of plants, often mediated through patterns the designers found in medieval illuminated manuscripts, early modern prints and pattern books, such as the Grammar of Ornament.
This book was used by Clissold, an artist and teacher at Central Saint Martins, to record her design ideas and recipes for fabric dyes. Splashes of dye are testament to its practical function: a laboratory for testing the visual effect of colouring formulas.
MATTHEW CLARK
Real Dirty Blue
2016
Research material: Dye sample, paper
Courtesy of Central Saint Martins
Museum and Study Collection

Real Dirty Blue is the name of one of the dyes from Joyce Clissold’s Dye Book. The research exhibited here, originally undertaken for an exhibition at the Lethaby Gallery, shows Matthew Clark’s attempt to recreate the dye from the original recipe.
HUSSIN CHALAYAN
Paper Dress
2013
Tyvek
Courtesy of Central Saint Martins Museum and Study Collection

Made from a synthetic fibre used for airmail envelopes, Paper Dress embodies transportability by assuming the shape of this very envelope. Labels instruct how to handle the delicate item and to unfold it into a wearable dress.
These paper moulds were made by the British archaeologist Alfred Maudslay for documenting the Mayan monuments of Palenque in Mexico. Using this light and cheap technique, he made imprints of the surfaces of the ruins; these were subsequently cast in plaster in London for study and display.
This pocket-sized manual, written by a French explorer of the Middle East, describes a method of making impermeable paper moulds (Lottinoplastique) while researching abroad. Easy to transport, these moulds can later be cast in plaster.
Reviving the technique of Lottinoplastique, Lorini created paper moulds of vans used by museums for transporting artefacts: a reflection exploring affinities between two techniques for making art mobile. The ethereal quality of the shells underlines the fragility of this process.
NICOLA LORINI
Hôtel Culny (Le Danse Du Monde)
2017
Archival c-print
Courtesy the artist

Together with the sculptural casts, Lorini presents two photographs from a self-published book that juxtaposes original photographs taken of Mayan sites in the nineteenth century with photographs of vehicles' body shells taken by the artist.
HENRIETTA SIMSON
Spectre
2013
HDV Projection, 13 mins (loop)
Courtesy of the artist

Spectre is an installation consisting of two projections layered on top of each other — a photographic one of Ambrogio Lorenzetti’s small landscape panel Castle by a Lake, painted c.1340 and an HD video of a paper boat sinking in the Regent’s Canal, London. A reflection on becoming and unbecoming, and the fragility of the medium paper.
CAROLE COLLET
Research material for Nobel Textiles;
Suicidal Textiles
2008
Woven polyester, ring-bound notebook
Courtesy of Central Saint Martins
Museum and Study Collection

This research material illustrates how Collet, an experimental product designer, uses advancements in DNA sequencing to create new, biodegradable textiles. While the genetic code structure of DNA allows for the production of life, it also contains an inbuilt mechanism for self-destruction, an unravelling of the threads.
ROSEMARY HOUSE
MIDAS
1990s
Gold and silver soft-annealed copper wire, dobbý woven on 24 shaft electronic loom
Courtesy of Central Saint Martins Museum and Study Collection

Made on a digital loom, the weaving contemplates affinities between weaving and data processing, epitomised by the Jacquard loom – the origin of modern computing. The coarse weave and the use of two colours evocate the grid-like structure often associated with binary code.
Craske is interested in the biological metadata left by readers on a copy of Ovid’s Metamorphoses: sweat, epidermis and spores. While necessitating a partial destruction of the book, her analysis eventually allows a biological profiling of the object’s intricate history.
Over fifteen years, the artist recorded his movements with a GPS receiver while mowing his lawn. In his "GPS drawing", Wood visualises this accumulation of geographic data from the past, the frequency of his movements denoted by the colour and density of the lines.
ALEXANDER BURGESS
Gulf II
2015
C-type photographic print on aluminium
Courtesy the artist

Burgess’ work explores the frictions and fringes of satellite-based map making. The artist sifts through commercial online mapping services for liminal spaces, e.g. on the high sea, where actual photography borders a schematic placeholder: data meeting metadata, representation meeting noise.
Documenting an ephemeral arrangement in landscape, Long’s work reflects on the immediacy of our experience of nature. The photograph records the transient scene, at the same time aestheticising it through compositional interventions and formal correspondences between circle and landscape. The artist leaves open the share of chance in the process of finding/making this composition.
The artists claim to have scanned the ancient Egyptian bust of Nefertiti, one of the masterpieces in the Neues Museum, Berlin. They made the resulting data publicly available, enabling anyone to use it for their own purposes. It is used for a variety of works and performances by the artists, who also collect "remixes" made by others.
LAUREN JETTY
Suspended Animation
Hand-sewn cross stitch on aida cloth

The Ambassadors #2
Hand-sewn cross stitch on aida cloth
2015
Courtesy of the artist

Jetty converts images of old-master paintings to stitched, quasi-pixelated canvases: digital aesthetic meets traditional technique. The compressed colour blocks in the stitching clearly suggest that the artist’s source data are not the actual paintings, but digital image files.
Minkin employs computer programmes used by archaeologists to reconstruct sites in 3D on the basis of their photographic documentation. She fathoms their creative potential by uploading found data: e.g. various 2D representations of Holbein’s Ambassadors (1533, National Gallery, London) from the internet. The highly contingent products are geometrical forms and their skins from which she makes objects of varying nature, including metal and silk.
MATTHEW DARBYSHIRE
Captcha No. 42 – David
2015
Multiwall polycarbonate and stainless steel
Courtesy of Herald Street Gallery

Matthew Darbyshire painted, cut and stacked layers of polycarbonate by hand, using a 3D printer blueprint of one of the most recognisable sculptures in art, Michelangelo’s David. Similar to the synonymous Captcha programme, his work aims to reassert the primacy of human input in an era of increasingly mechanised artistic processes.
"Griffin"
Nineteenth century
Plaster cast
Courtesy of Central Saint Martins
Museum and Study Collection

Although catalogued as a "Griffin type creature", this is a plaster cast of an ancient Greek lion sculpture from the Nereid monument in the British Museum. The wear and tear and graffiti are witness to the changing status of the once substantial plaster cast collections held at art schools.
Metadata is stored in different media through various technologies of recording. These have, however, changed radically over the last century, from casting and photography to scanning and 3D printing. What does this development mean and how does it affect the working practices of both artists and researchers?
How is data affected by the categories that are created to structure it? What agency does, for example, a catalogue have? And how do acts of systematisation of information determine perceptions of reality? These questions will be addressed by scholars and museum professionals working on encyclopaedism, histories of knowledge and the curation of objects.
PANEL DISCUSSION: Practices of Production
Thu 25 Jan 2018
5pm, Lethaby Gallery
Free. Limited places, please arrive early

The acts of copying, commenting and reproducing have always been central to artistic practice. It has long been established that there is "nothing original under the sun": metadata and its manipulation is at the core of how we relate to images and how images relate to us. But what does that mean in the everyday practice of artistic production? This panel discussion will bring together a selection of artists and curators to think about how these issues inform their work today.
The rapid expansion and proliferation of digital technologies led to a vast increase in the amount of data being recorded, stored and broadcast. Inevitably, control and ownership of this data – and its metadata – has become a much-debated topic in political and economic, but also cultural arenas, raising questions concerning the status of cultural goods and museum collections. This panel discussion brings together artists commenting on these issues in their practice as well as museum professionals whose collections are the object of these discussions.
The International Research Project "Bilderfahrzeuge. Aby Warburg’s Legacy and the Future of Iconology"

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Metadata: how we relate to images
10 Jan – 3 Feb 2018
Lethaby Gallery, Central Saint Martins, University of the Arts, London

Curated by the International Research Project "Bilderfahrzeuge. Aby Warburg's Legacy and the Future of Iconology".

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The International Research Project "Bilderfahrzeuge. Aby Warburg's Legacy and the Future of Iconology" includes:
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