

X-ray the Invisible

Hidden Identities in Museum Objects

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I used chat GPT to assist in the scene rendering environment.



Museums store objects, but many stories remain hidden.

Most museum collections are kept in storage, where objects are separated from their context, and their stories become incomplete.

PROBLEM

The Communication Gap

What is shown is not always what is communicated.

01

Context is removed

Objects are separated from their original people, places and use.

02

Narratives are selected

Museum labels often simplify complex histories into fixed descriptions.

03

Identities become invisible

Marginalised identities, including LGBTQ+ histories, can remain unrecorded, hidden or erased.



Reading the Objects

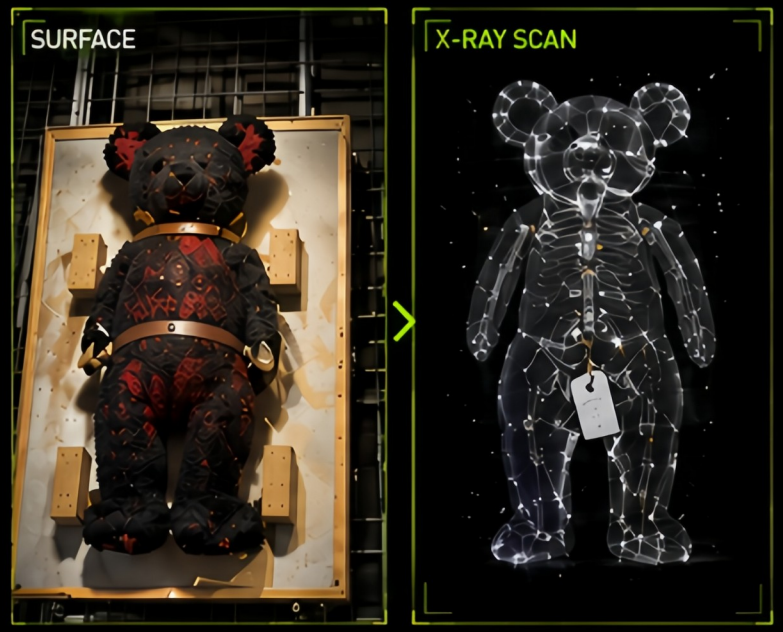
Identifying hidden layers in museum collections.

INTERACTIVE EXPLORATION

Hover or select an object to scan.
Reveal what remains unseen.

SURFACE — SCAN — REVEAL

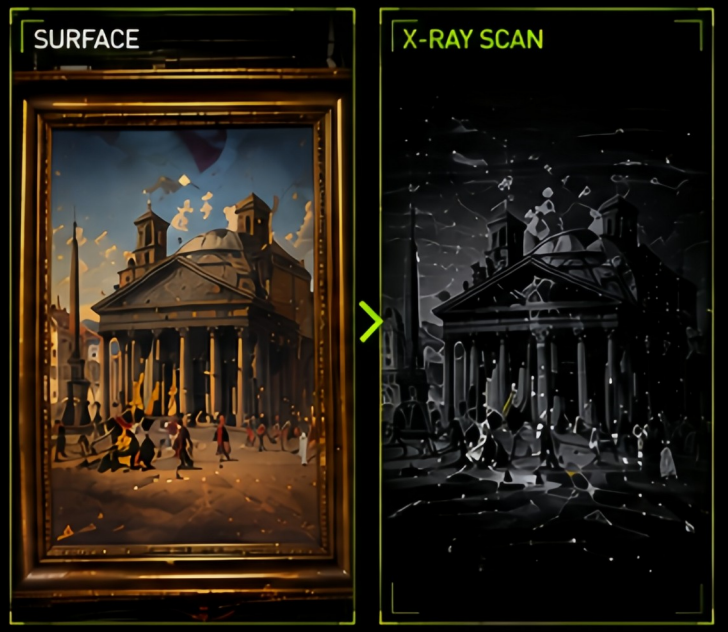
01 MEMORY — Personal traces



A personal object carrying traces of emotional memory and absence.

SCAN

02 POWER — Constructed narratives



An idealised image that reflects constructed history and hidden labour.

SCAN

03 IDENTITY — Unseen narratives



A garment suggesting presence, while identity—including LGBTQ+ narratives—remains invisible.

SCAN

LEVEL L1 L2 L3

L1 Surface
What is visible

L2 Context
What is partially told

L3 Hidden
What remains unseen



X-RAY INTERFACE

Revealing what is stored, questioned, or erased.

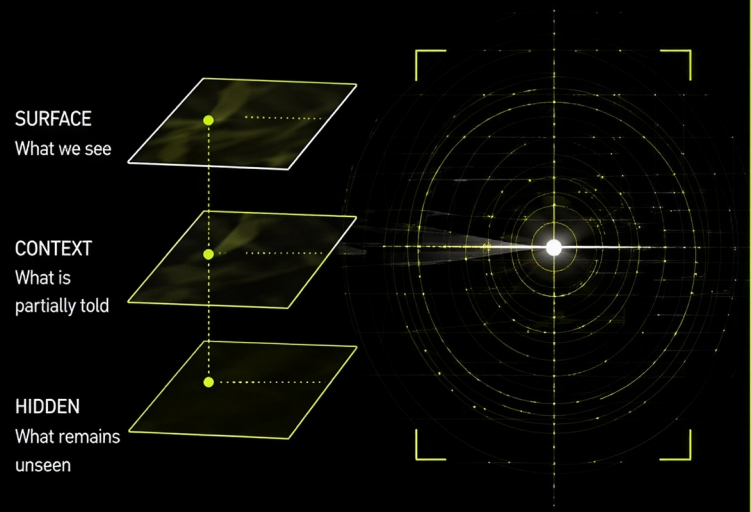
How Might We

Design questions that guide the creation of interactive experiences for hidden narratives.

We move from observation to intervention.

01 Reveal Hidden Stories

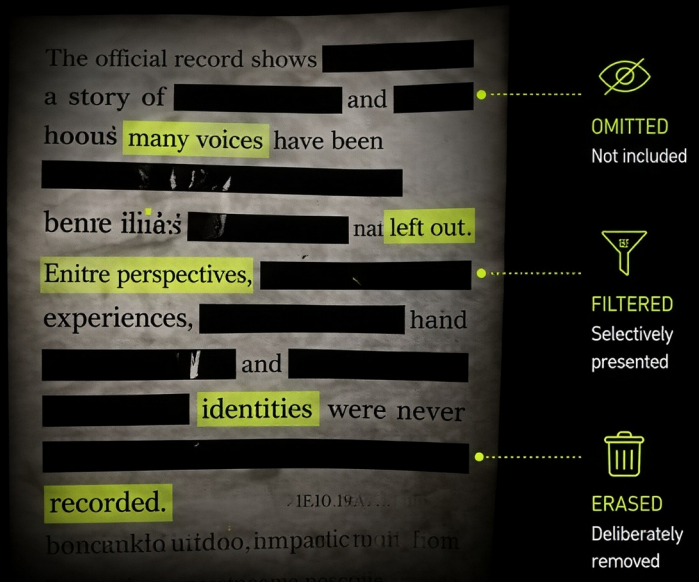
How might we reveal hidden stories behind stored objects?



SCAN • DETECT • REVEAL

02 Expose Filters

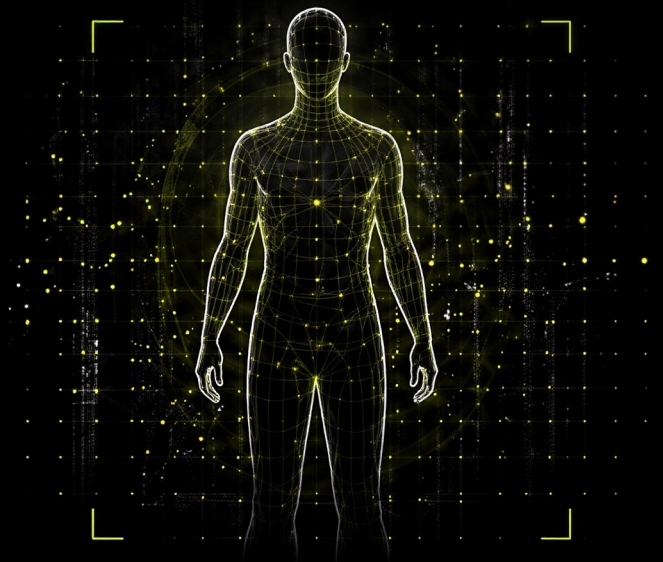
How might we expose what museum narratives filter or erase?



QUESTION • CHALLENGE • UNCOVER

03 Make Identities Visible

How might we make marginalised identities visible through interaction?



RECOGNISE • EMPATHISE • EMPOWER

X-ray as an Interface

Revealing hidden narratives through interaction.

The X-ray interface allows users to scan museum objects and uncover hidden layers of meaning.

THE CONCEPT

X-ray is used as a metaphorical interface to uncover invisible narratives embedded in museum collections.

MULTI-LAYERED
Objects hold multiple hidden narratives.

INTERACTIVE
Users actively scan to reveal and explore.

MULTI-PERSPECTIVE
Multiple truths emerge from one object.

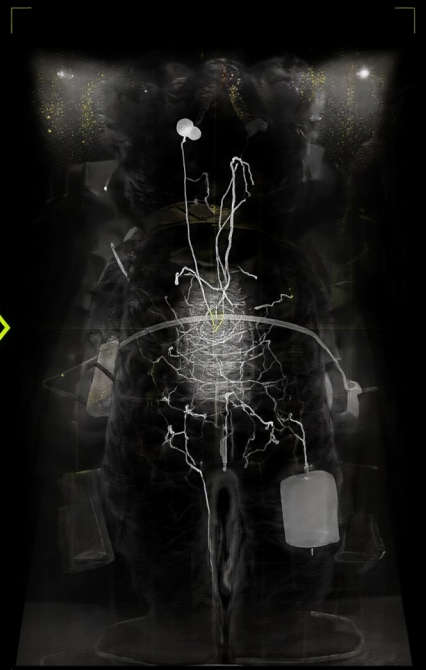
NORMAL VIEW



SCANNING...



X-RAY VIEW



HOW IT WORKS

01 SCAN
Users scan objects to activate hidden layers.

02 REVEAL
Hidden stories and narratives are gradually uncovered.

03 INTERPRET
Users interpret multiple perspectives beyond the official narrative.

THE EXPERIENCE FLOW

OBJECT
Encounter an object in the collection.

SCAN
Use the interface to scan and activate the X-ray.

REVEAL
Explore hidden layers and untold stories.

UNDERSTAND
Form new understandings and connections.

07 Interface Design

Designing the X-ray interaction experience.

An interactive interface that allows visitors to scan museum objects and explore hidden narratives through layered visualisations.

REVEAL
Uncover what is hidden.

EXPLORE
Navigate multiple layers.

UNDERSTAND
Gain deeper perspectives.

REFLECT
Form new meanings.

OBJECT INFO



OBJECT
Teddy Bear

ORIGIN
Museum Storage

MATERIAL
Fabric, Stuffing, Thread, Metal

DATE
Unknown

ABOUT THIS OBJECT

A well-loved teddy bear, showing traces of repair and wear. It represents intimate memories and personal attachments that are often left out of official museum narratives.

THEMES

Memory · Attachment · Care · Absence

X-RAY INTERFACE

SCAN MODE

NORMAL VIEW



X-RAY VIEW



SCANNING... 64%

SCAN · REVEAL LAYERS · NEXT LAYER

LAYERS

01 Surface
The visible outer appearance.



02 Internal
The hidden structure and materials.



03 Memory
Emotional traces and personal histories.



HOW TO USE

01 ALIGN
Place the object within the frame and adjust the position.

02 SCAN
Tap 'Scan' to activate the X-ray scanning process.

03 EXPLORE
Use 'Reveal Layers' or 'Next Layer' to navigate through different views.

04 UNDERSTAND
Read the layer information to discover hidden narratives.

08

USER JOURNEY

From passive viewing to active interpretation.

The interface guides visitors through seeing, scanning, exploring and reflecting, turning hidden narratives into personal understanding.

SEE Notice what is visible.

SCAN Reveal what is hidden.

EXPLORE Navigate multiple layers.

REFLECT Form new meanings.

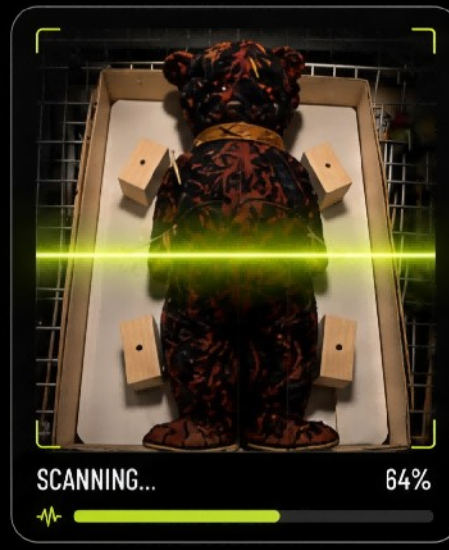
01 APPROACH > 02 SELECT > 03 SCAN > 04 EXPLORE > 05 REFLECT



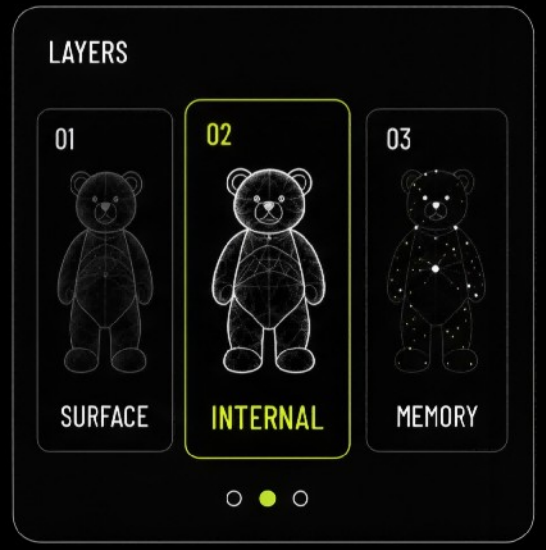
Visitor approaches the interactive display.



User selects an object from the collection.



User activates the scan to reveal hidden layers.



User moves between Surface, Internal and Memory layers.



User reflects on what is missing, erased or unrecorded.

PASSIVE VIEWER Observes what is shown. → **ACTIVE EXPLORER** Interacts, discovers and connects. → **CRITICAL INTERPRETER** Questions, interprets and forms new meaning.

09

APPLICATION SCENARIO

The X-ray interface integrated into the museum environment.

Installed as a large-scale interactive display, the interface invites visitors to explore hidden histories behind objects and question what is unseen.

IMMERSIVE

Draws visitors in through scale and atmosphere.

INTERACTIVE

Enccurages touch, control and exploration.

REFLECTIVE

Opens space for multiple voices and stories.

V&A MUSEUM – LEARNING & RESEARCH CENTRE (LEVEL 2)

A space for discovery, dialogue and reflection.











> Objects hold more than what is shown. They hold what is hidden, missing, and forgotten.

10

REFLECTION

Museums do not only
preserve objects.

They also preserve decisions:
what is shown,
what is hidden,
and whose stories
remain invisible.

X-ray the Invisible invites visitors
to question institutional narratives
through interaction, scanning
and layered exploration.

V&A MUSEUM – LEARNING & RESEARCH CENTRE (LEVEL 2)
A space for discovery, dialogue and reflection.



STORED
NOT FOR DISPLAY

CAT. B.874-2022

Acquired 1987
Donated anonymously

ARCHIVE COLLECTION

“WHAT REMAINS UNSEEN
CAN STILL SHAPE CULTURAL MEMORY.”

X-RAY THE INVISIBLE

V&A MUSEUM - LEARNING & RESEARCH CENTRE (LEVEL 2)



Objects hold more than what is shown.

NOT EVERYTHING PRESERVED IS FULLY REVEALED.

A space for discovery, dialogue and reflection.

I used chat GPT to assist in the scene rendering environment.

END OF PRESENTATION

Design Statement

X-Ray the Invisible is an interactive museum interface that reveals the hidden narratives behind objects. Using the visual metaphor of X-ray, the project invites visitors to go beyond the surface and explore the stories, memories and traces that are normally unseen.
X-ray does not just show what is inside the object — it represents a different way of seeing. It encourages visitors to question what is displayed, what is omitted, and whose stories are being told.

The interface combines scan animation, layer switching and spatial interaction to create a process of discovev. Visitors can select an object, scan it, and uncover multiple layers including its physical structure, history and emotional meaning. The experience turns passive viewing into active exploration.

This project is designed for the V&A Museum context, connecting research, design and space. By integrating digital interaction into the exhibition environment, it creates a deeper and more personal museum experience.

Ultimately, X-Ray the invisible is not only an interface, but also a reflection on visibility, memory and power. It asks: what remains hidden in museums, and how can design help reveal it?

Core Findings

1. Museum objects carry hidden stories beyond their visible form.
2. Traditional labels and displays often simplify or omit important narratives.
3. Multisensory and layered interaction enhances understanding and connection.
4. Digital interaction in physical space makes the invisible more accessible.

Reflection: Design can reveal what is concealed and create space for more voices.

References

REVISION · EDITED

Theoretical Framework

- Foucault, M. (1977). Discipline and Punish: The Birth of the Prison
- Hooper-Greenhill, E. (1992). Museums and the Shaping of Knowledge
- Bennett, T. (2010). The Birth of the Museum: History, Theory, Politics

Case References

- V&A Museum Exhibitions
- The V&A LGBTQ+ Display and Collections
- Tate Modern – Digital Interaction Installations

Data Sources

- V&A Museum Collection Database
- Museum Association (UK) Reports
- Visitor Studies and Interaction Design Research

Territories & Interfaces
Museum · Objects · People
Physical Space · Digital Layer

MA Comm Design 2026
X-Ray the Invisible
Interactive Museum Project

V&A Museum, London, UK
51°29'11.7"N 0°10'44.0"W