SunoikisisDC Spring 2024: Digital Approaches to Cultural Heritage

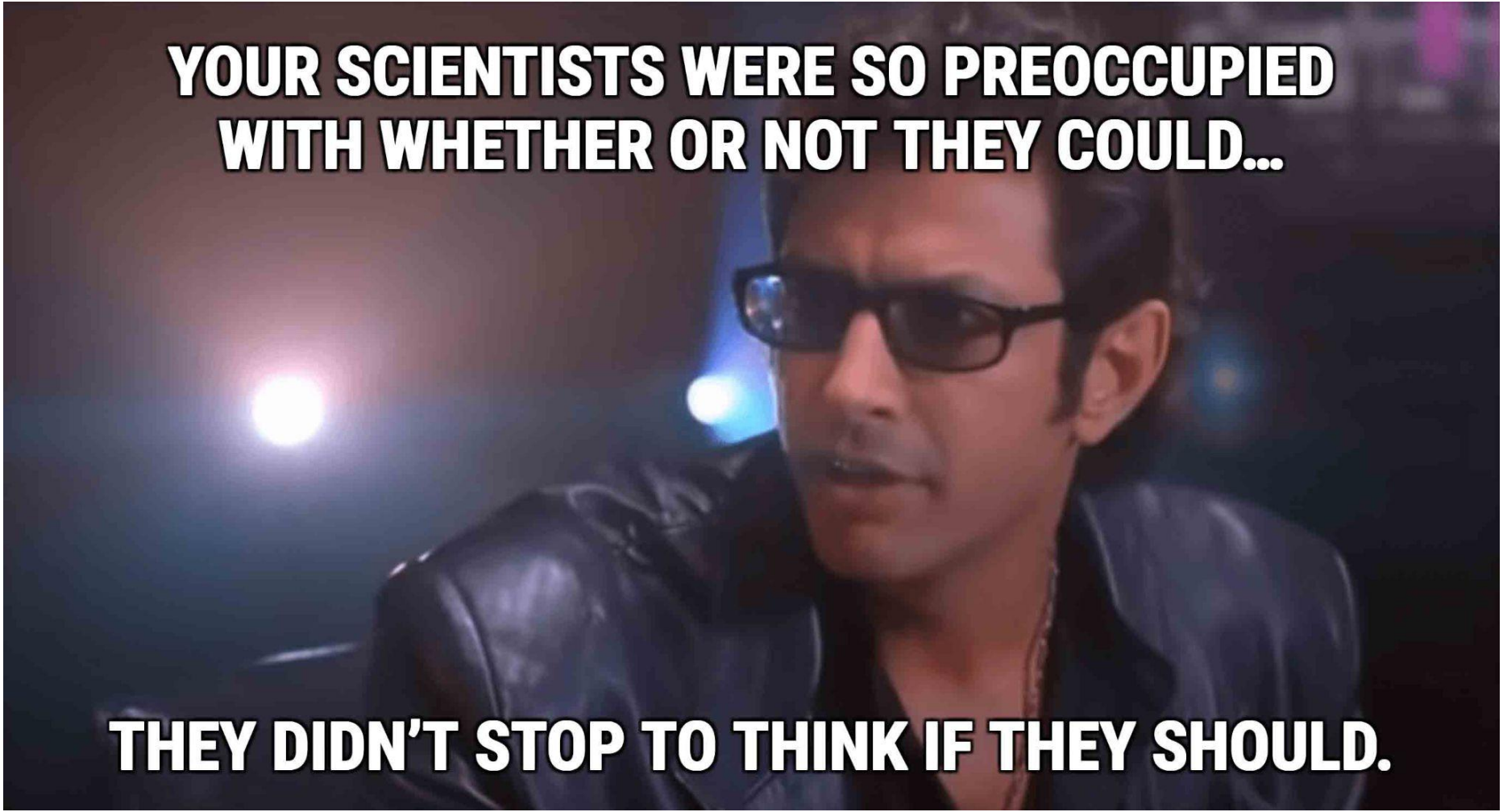
Ethical Responsibilities & 3D Approaches to Cultural Heritage

A Living White Paper and Resource

Gabriel Bodard, Paula Granados García, Tala Rahal, Andrea Wallace

1. Introduction to the white paper and workshops
2. Indigenous and Community Knowledge
3. IP and Equitable Access
4. Disability Accessibility
5. Environmental Impact and Sustainability
6. Where next?

Introduction


YOUR SCIENTISTS WERE SO PREOCCUPIED WITH WHETHER OR NOT THEY COULD...
THEY DIDN'T STOP TO THINK IF THEY SHOULD.

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Events ›

Ethics of 3D and Cultural Heritage

Event type: Seminar

Series: Seminar

Address: Online- via Zoom

Speakers: Saima Akhtar (Barnard College), Abira Hussein (Nomad Project), Jelena Porsanger (RiddoDuottarMuseat), Chao Tayiana (African Digital Heritage Foundation)

Event dates: 23 November 2022, 4:00PM - 5:00PM
Add to calendar

Contact: sas.events@sas.ac.uk
Email only

Book now →

Nov 2022

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Events ›

Ethical Responsibilities and 3D Practices in Cultural Heritage

Event type: Workshop

Address: Woburn Suite, G22/26, Ground Floor, Senate House, Malet Street, London WC1E 7HU

Speakers: Gabriel Bodard (University of London), Paula Granados García (Endangered Material Knowledge Programme, British Museum), Andrea Wallace (University of Exeter)

Event dates: 9 May 2023, 10:30AM - 5:00PM
Add to calendar

Contact: digitalhumanities@sas.ac.uk
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Book now →

May 2023

Chapters

1. Preface
2. Indigenous and Community Knowledge
3. IP and Equitable Access
4. Disability Accessibility
5. Environmental Impact and Sustainability
6. Glossary

Structure of a chapter

1. Introduction and definitions
2. Questions (not commandments)
3. General resources
4. Specific studies or examples

Indigenous/Community Knowledge(s), Heritage and Data

Indigenous/Community Knowledge(s), Heritage and Data

Formed over centuries and adapted to local cultures and environments, “traditional knowledge” refers to the knowledge, practices, and behaviours of indigenous and local communities all around the world. It is passed from generation to generation both orally and through practice.

Traditional knowledge can also be referred to as local or indigenous knowledge although in the latter case it specifically refers to traditional knowledge held by indigenous peoples. Traditional knowledge is gained over time by people engaging with their local context.

The *Words into Action: Using Traditional and Indigenous Knowledges for Disaster Risk Reduction* guide.

Indigenous/Community Knowledge(s), Heritage and Data

- Failed to recognise the **rights, expertise, and diversity of communities** of origin and knowledge holders.
- Neglected Indigenous Peoples and knowledge holders the **access and rights to share and benefit** of the outputs of the application of this technology.
- What decisions can we make before using 3D methods to address these imbalances?

3D model of an Opo homestead showing the open space occupied by the different huts and activity areas that make up the domestic space.

Guiding Questions

- Who are we doing this for?
- Do we have permission?
- Is the community involved?
- What are the benefits?
- What is the impact?
- Who is the author/creator?
- How will it be shared?

Indigenous/Community Knowledge(s), Heritage and Data

- One of the most complex sections
    - Hard to delimit (Indigenous/traditional knowledge holders/community)
    - Multivocality within one same community.
    - Dependent on context.
    - It engages with all other four sections.
    - It involves the whole data cycle.
- It has to emerge directly from the relationship with the community of origin/ knowledge holders.

CARE PRINCIPLES

CARE Principles for Indigenous Data Governance (Research Data Alliance International Indigenous Data Sovereignty Interest Group, 2019).

Collective Benefit

- Who’s heritage?
- Who is making the decisions?
- Who will benefit from this?
- Who will take long ownership?
- How will you enable multiple voices to be reflected in the creation and presentation of 3D models?

Workshop on 3D methods for cultural heritage documentation in collaboration with EMKP and the Centre for Digital Skills in Visual and Material Culture at University of Brighton .

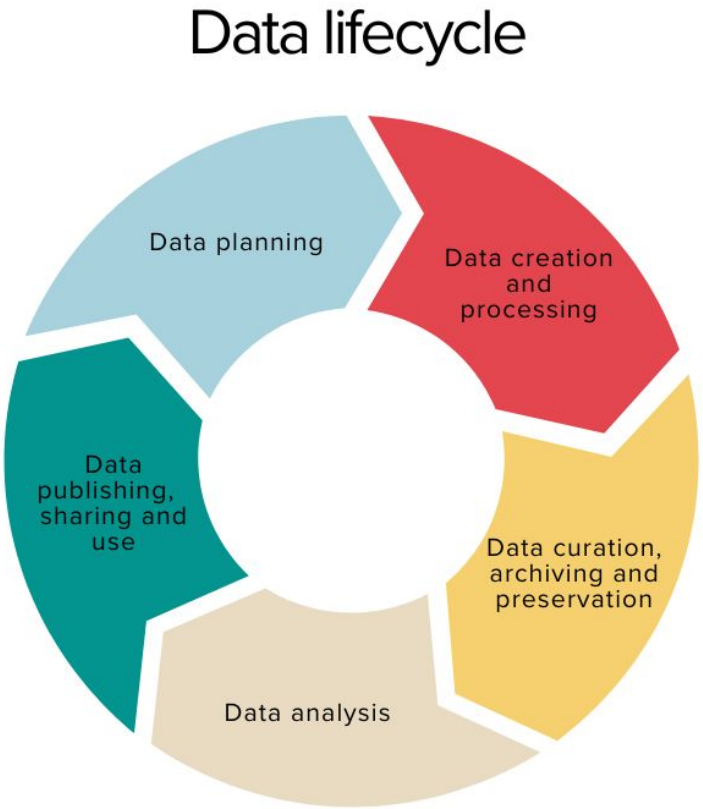
Authority to Control

- Whose consent is required?
- Who is taking the lead?
- Who are you planning to involve/consult with?
- How will you ensure long-term control once the materials have been published/released?
- If you are considering publishing results in open access, how are you communicating the implications of open access to your participants?

Doriano Morales taking photos of an object to create a 3D model as part of his EMKP project, Makers Space, Digital Humanities Research Lab, University of London.

Responsibility and Ethics

- How are you going to ensure the development of positive relationships with the knowledge holders, grounded in respect, reciprocity and mutual understanding as defined by the communities of origin?



Intellectual Property and Equitable Access

What is copyright?

- Copyright arises automatically in any “original” content that you or others create, like text and visual works, sound recordings, database content and computer programs.
- The term of protection typically lasts for the author’s lifetime + 70 years after their death.
- Copyright may be held by more than one party (joint authorship), transferred to another party (assignment) or waived.
- Rightsholder is entitled to a monopoly during the term of the copyright and can leverage access for fees.
- Public may access the work via exceptions and limitations in national copyright law.
- Copyright is territorial, but has been gradually harmonised over the decades (or centuries) by international conventions.
- Accompanied by moral rights, like the right of attribution and the right of integrity.
- Always assume a work is in-copyright unless you have evidence otherwise.
- Other rights might also arise, like performers’ rights, database rights, contractual rights, privacy and data protections, and so on.

Why copyright is important

- Layers to copyright: originality threshold, jurisdiction, moral rights, commercial usage, etc.
- Open access and the imbalance of uses
- Privacy and sensitivity issues
- Slow digitisation: a more critical and ethical approach to digitisation
- Main consideration: who owns the data created by 3D technologies?

Guiding questions

Copyright ownership:

- Who owns the data and the digital 3D copies of cultural objects?
- Who gets to decide on the ownership of the data?
- Are indigenous communities involved in projects concerning their own culture?

Open licensing tools and solutions:

- Will informed consent be taken from the originating community?
- What is being done with licensing to help ensure fair use?
- What type of licences will be used?

Contracts and other policies:

- Will licensing agreements be implement? And how will they be structured?
- Will restrictions be implemented?
- Will terms and conditions be applied for models available for download?
-

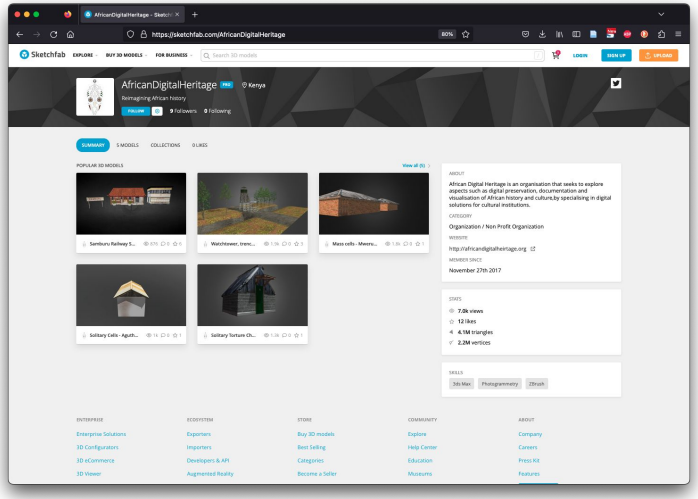
Nefertiti Hack

BUST OF NEFERTITI, FOIA Results by CosmoWenman on Sketchfab

Nefertiti Bust, housed in Neues Museum
Berlin, Germany

African Digital Heritage
Aguthi Works Camp

3D reconstruction of the Mau Mau detention camps



https://sketchfab.com/AfricanDigitalHeritage

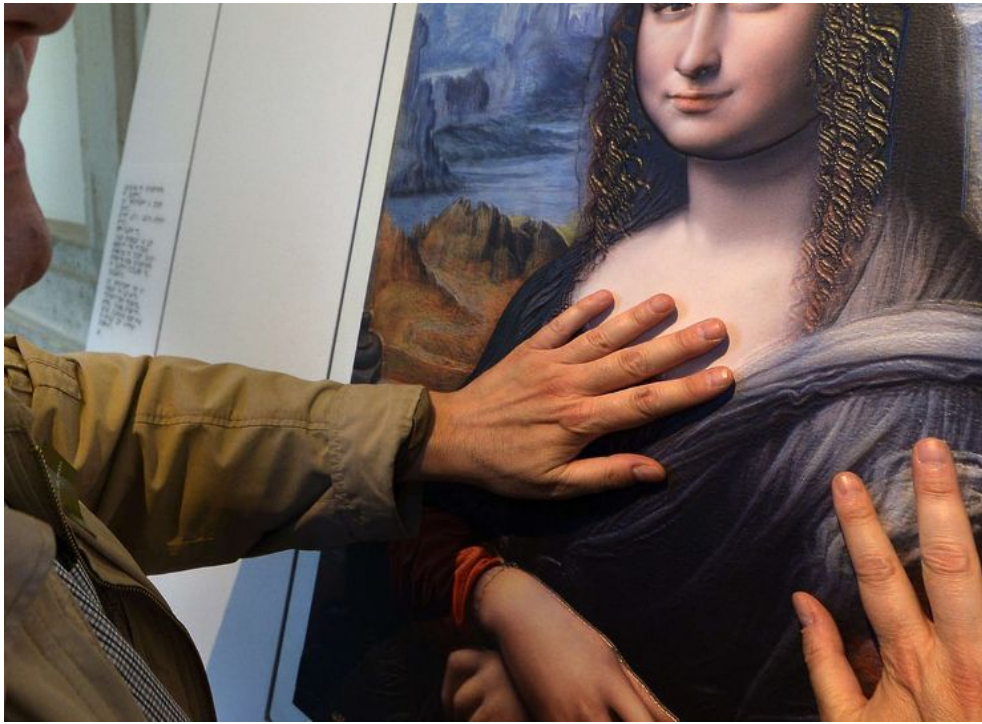
Disability Accessibility

What is disability accessibility?

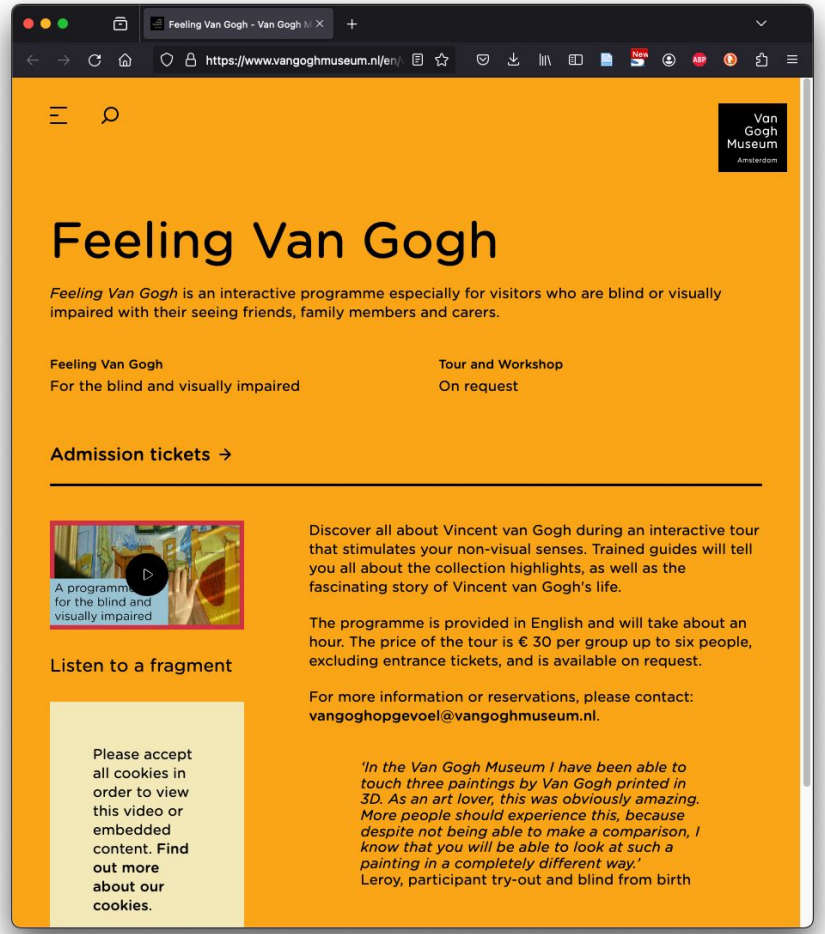
- An important subset/lens of accessibility
- Required by the Equality Act 2010, access and “reasonable accommodations”
- A type of access potentially in tension with intellectual property rights
  - Marrakesh Treaty to Facilitate Access to Published Works for Persons Who are Blind, Visually Impaired or Otherwise **Print Disabled** (entered into force September 2016)
- What is an “accessible format copy” and who can make it?
- Some national implementations have extended the exception to visual artworks
- Many collections are not protected by copyright, *i.e.* in the “public domain”

Guiding questions

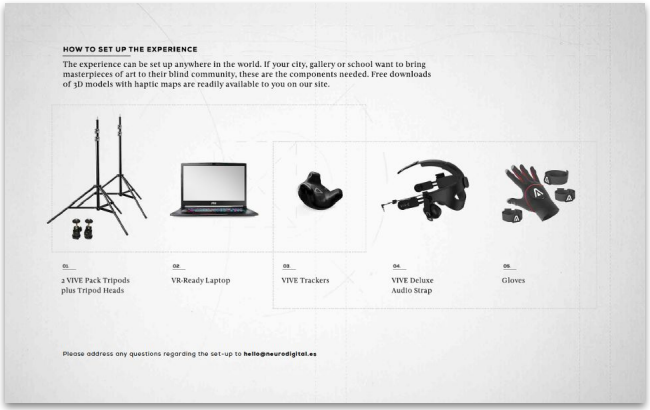
- What does 3D add? What are its limitations? What does it take away?
- How accessible are 3D projects for disability accessibility?
- Who should be involved in projects?
- How can 3D be optimised and differentiated for universal design and multiple audiences?
- How does copyright enable or disable disability accessibility?
- And what about copyright in the new accessible format copies?



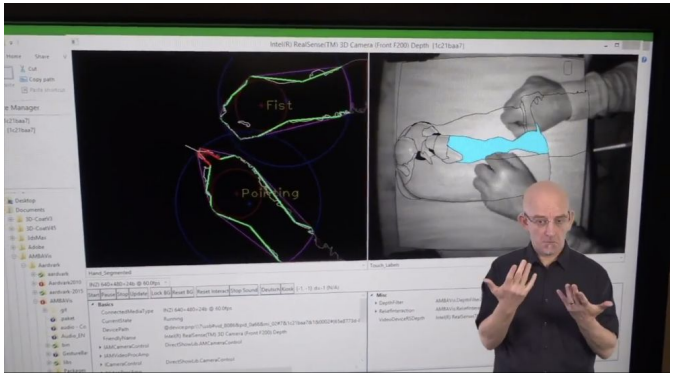
Feeling Van Gogh

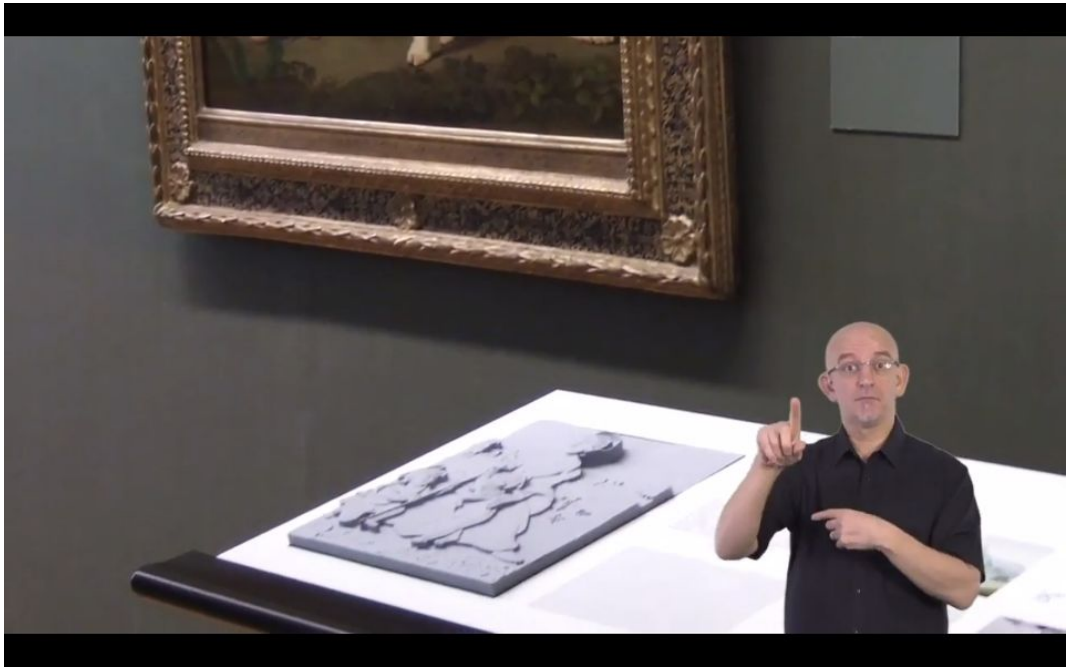


Touching Masterpieces

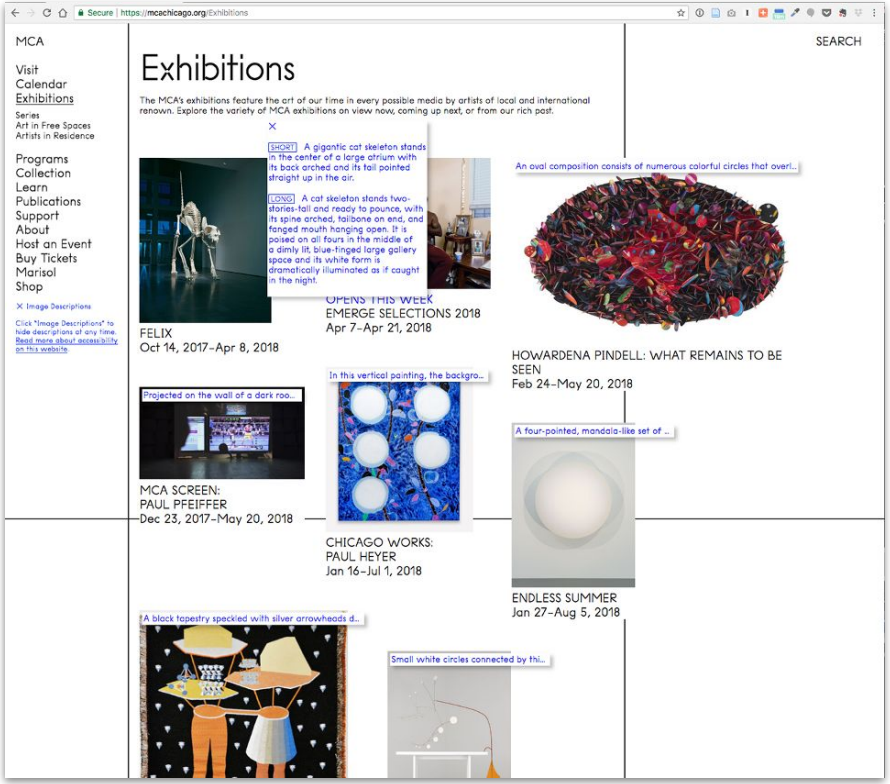


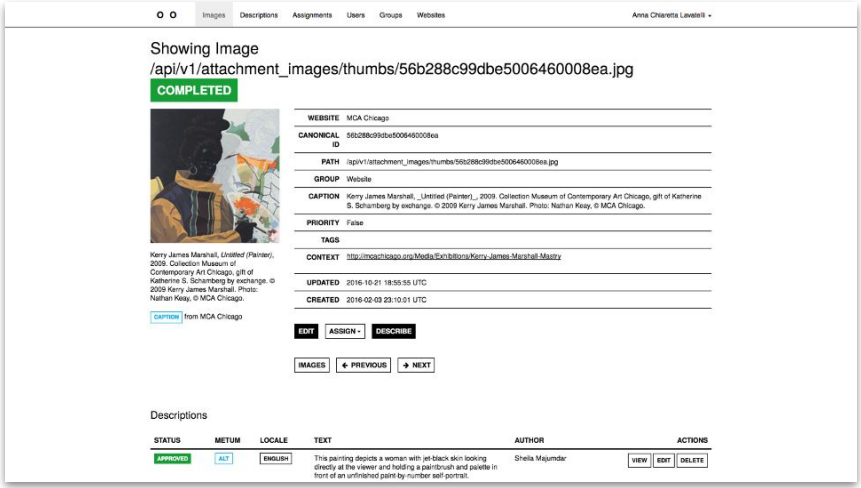
ARCHES





COYOTE, MCA Chicago & Prime Access Consulting





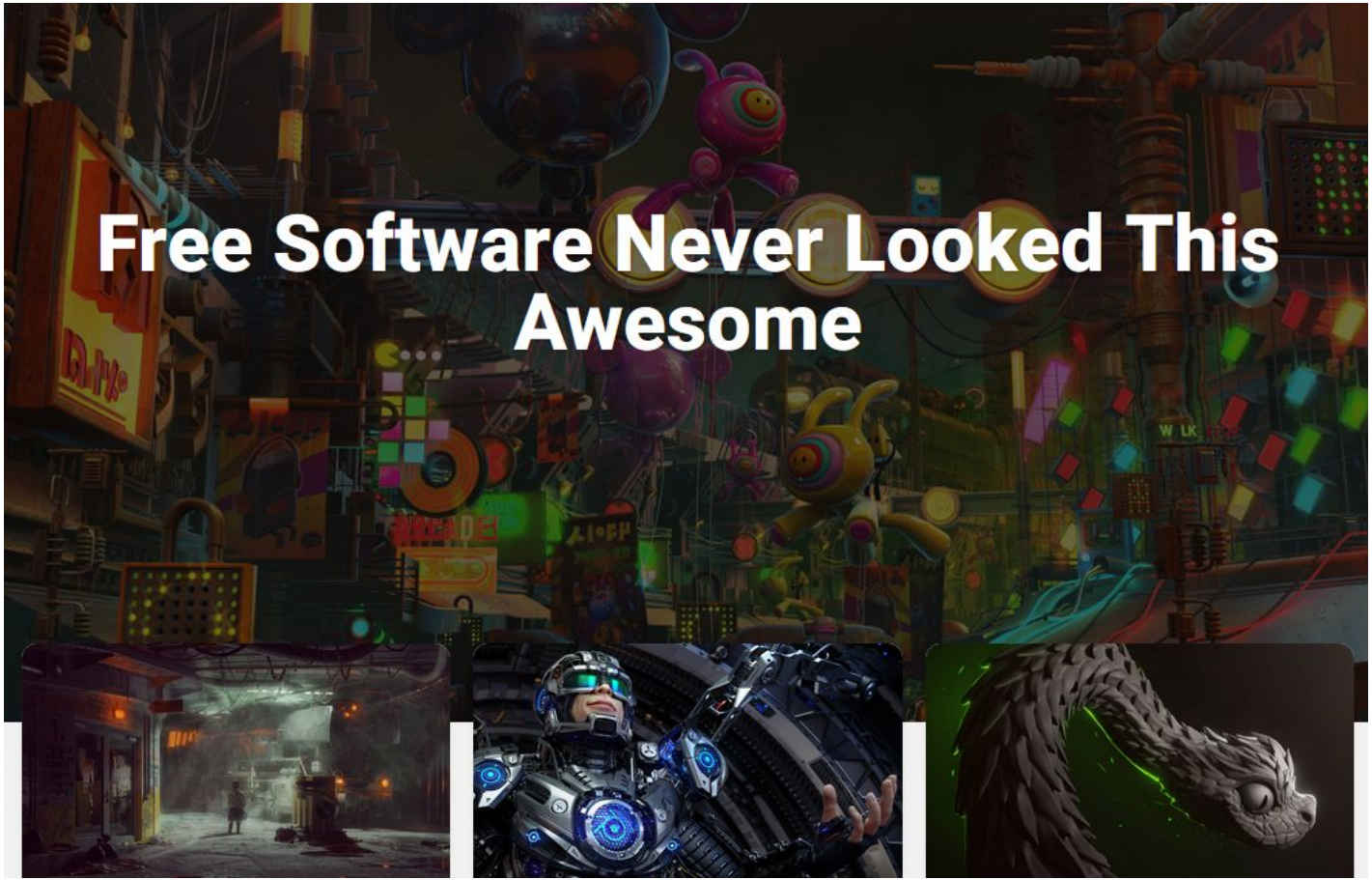
A more holistic understanding of [disability] accessibility

- Whose voices are represented when designing digital projects, policies, and programming?
- What types of projects can reach the widest audiences for disability access? Are they 3D projects, or do they enable 3D by disabled audiences?
- What alternative uses, marginalized voices, and more transparent innovations for disability access can help us rethink access, copyright and digital media accessibility?
- How might copyright and commercialization desires inhibit mission-critical and open access activities for disabled audiences?
- Does open GLAM account for disability accessibility? How can it better promote disability accessibility?
- How does centering disability improve accessibility for all constituent groups?

Environmental Impact and Sustainability

1. Hardware

2. Software



3. Data formats

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     vertex  1.810890e+01  3.115552e+00 -9.829731e+01
     vertex  1.843882e+01  2.103426e+00 -9.826284e+01
     vertex  8.995500e+00  2.053164e+00 -9.957342e+01
   endloop
 endfacet
 facet normal  1.373223e-01  2.146829e-02 -9.902937e-01
   outer loop
     vertex  1.843882e+01  2.103426e+00 -9.826284e+01
     vertex  9.505604e+00 -2.328202e-15 -9.954719e+01
     vertex  8.995500e+00  2.053164e+00 -9.957342e+01
   endloop
 endfacet
 facet normal  1.423148e-01 -2.314727e-05 -9.898214e-01
   outer loop
     vertex  1.892512e+01 -4.635319e-15 -9.819287e+01
     vertex  9.505604e+00 -2.328202e-15 -9.954719e+01
     vertex  1.843882e+01  2.103426e+00 -9.826284e+01
   endloop
 endfacet
 facet normal  2.191827e-01  9.645626e-02 -9.709043e-01
   outer loop
     vertex  2.312833e+01  1.347072e+00 -9.727932e+01
     vertex  1.843882e+01  2.103426e+00 -9.826284e+01
     vertex  2.718126e+01  3.177033e+00 -9.618256e+01
   endloop
 endfacet
```

4. Storage

5. Disposal /recycling

Whither next?