

Documenting heritage in 3D

by the people and for the people

Karina Rodriguez Echavarria,
University of Brighton

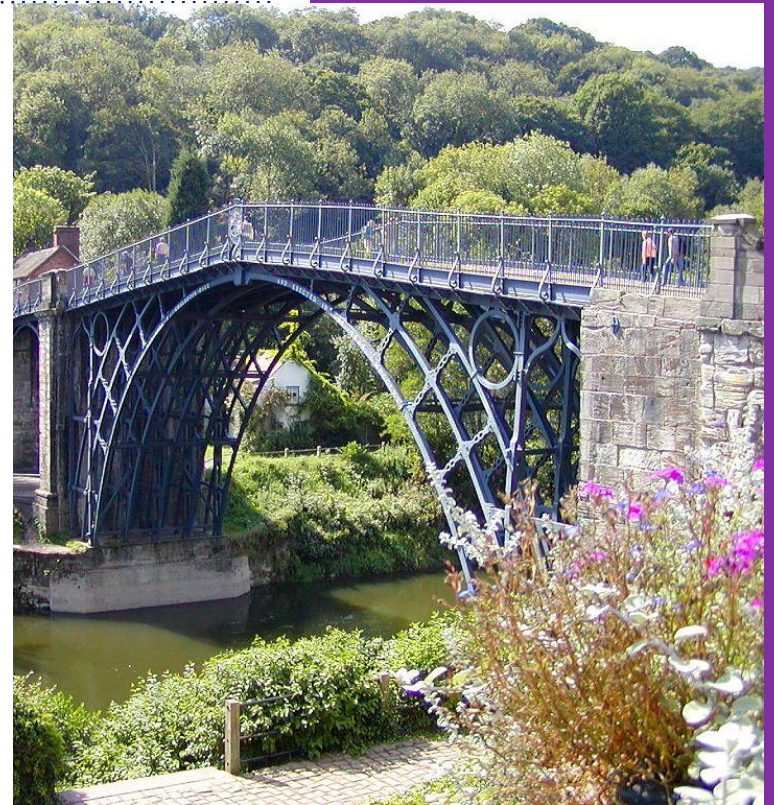
21 November, Creative CH workshop VAST 2012



University of Brighton

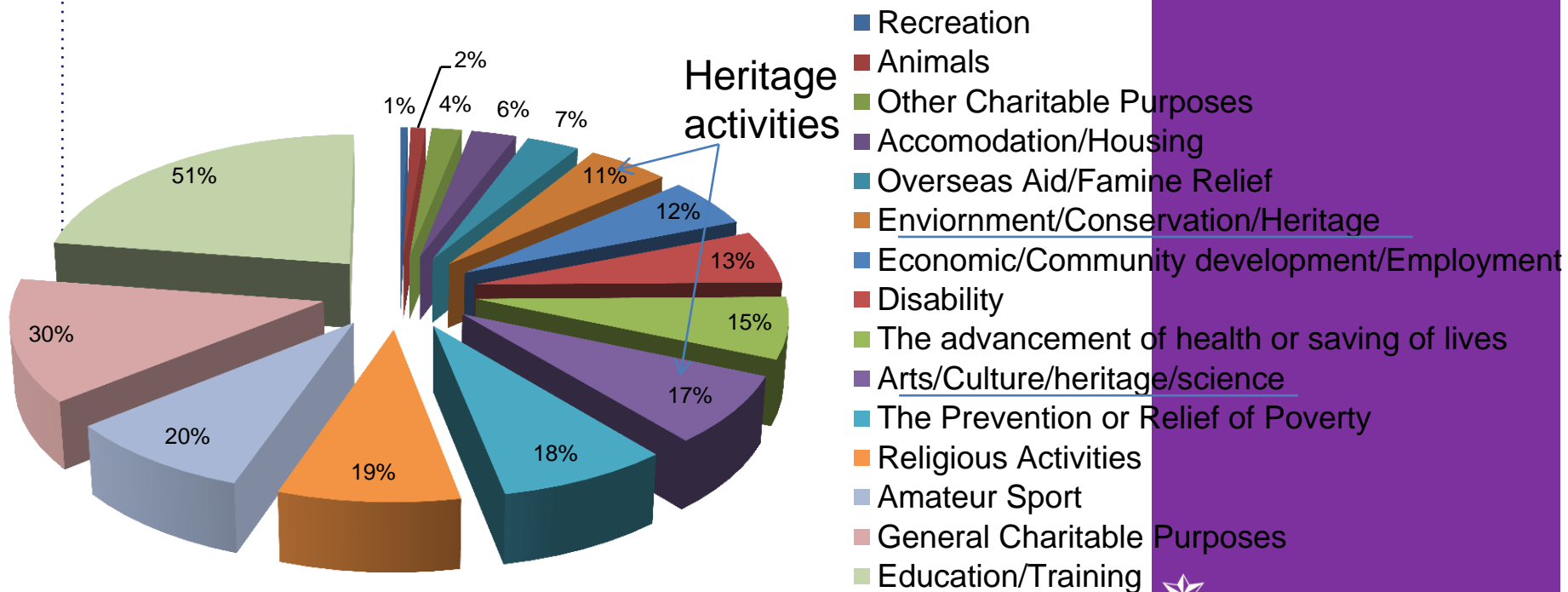
Introduction

- Not all European tangible heritage is located within museums or curated by professionals.
- Large amount of our tangible heritage lives amongst us.
- This heritage is overseen by a large number of small non-profit heritage organisations.



Supporting statistics

- In the United Kingdom, 28% of charities identify their activities as heritage related.



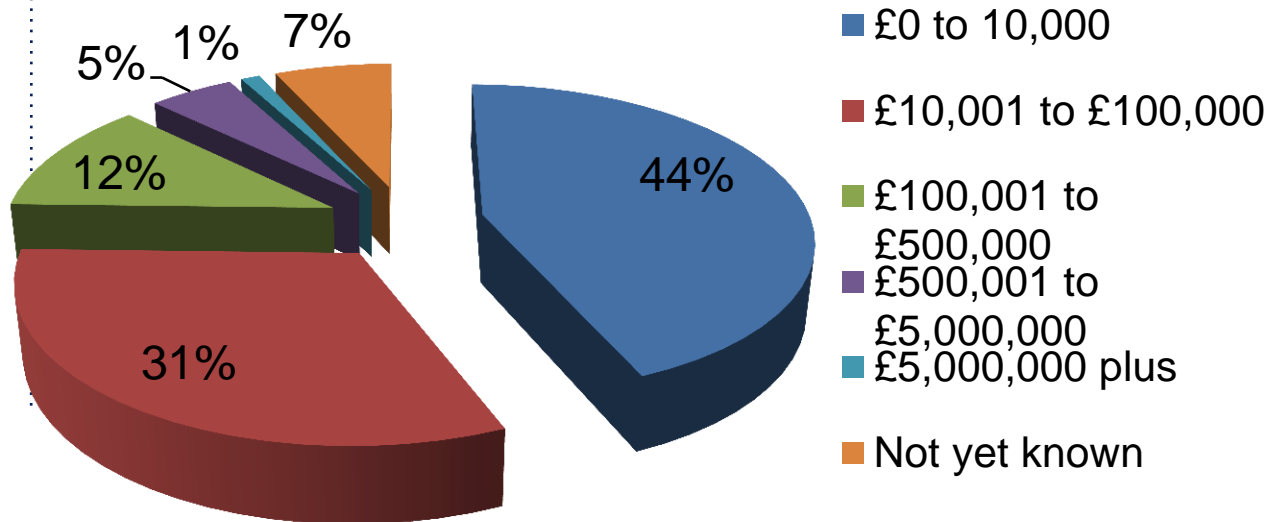
Source: 2011, http://www.charity-commission.gov.uk/library/about_us/more_than.pdf



University of Brighton

Supporting statistics

- 75% of charities of a total of 161,649 have an annual income of less than £100,000 (~€120,000).
- Implications on technological investment.



Hypothesis

- Involving the public might be a suitable mechanism in order to allow small organisations to build 3D collections to digitise the cultural heritage they oversee.
- Based on:
 - Volunteerism is already a key component.
 - In the UK, 450,000 volunteers in the area of the historic environment.¹

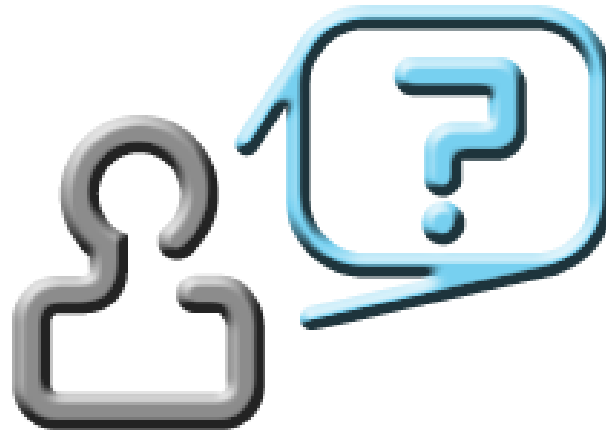


1. Source: 2011, English Heritage. Heritage Counts



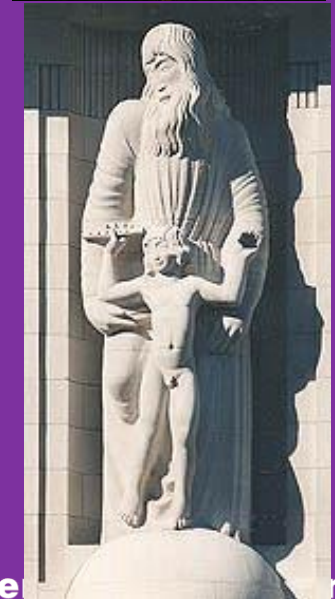
The experiment

1. Engagement with the Public Monuments and Sculptures Association in the UK.
2. Sample of heritage objects.
3. Engagement with the wider public using the 3D-COFORM technology.
4. Evaluation



The organisation: PMSA

- Aims to heighten appreciation of Britain's public sculpture and to contribute to its preservation.
- Board of trustees, limited staff and relies on the voluntary work of its members.
- Core activity is to oversee survey of objects including statues, monumental works, war memorials, sculpture, clocks towers and fountains.



PMSA sample of objects

- 36 objects for co-development of a 3D digital collection.
- 8 areas across the city.
- Area 5 km² in the city centre.
- No more than 10 objects per area.

Brighton Seafront Sculptures and Monuments to photograph

For more information on the sculptures and to upload your images, please visit: <http://shareyourheritage.co.uk/brightonseafont>



1. Tay (Aids memorial)
New Steine Gardens, Brighton
Sculptor: Romany Mark Bruce
The piece is named for Paul Tay, the sculptor's best friend, who died in 1992. The silhouette of the figure, ribbon, comes

Tag: share_tay



3. Palace Pier Clock Tower
Grand Junction Road, Brighton
Builder: W.G. Beaumont & Co.
A new entrance and clock tower replaced the three ironwork arches of the original entrance of the Palace Pier in 1930. At the same occasion, the extension to the promenade from East Street to the site of the old Chain Pier and a new station for the Volks Electric Railway were also opened.

Tag: share_pier



5. Afloat
Grand Junction Road, Brighton
Foundry: Hamish Black
The site for 'Afloat' was selected to enable the viewer, when looking seawards, to see the horizon through the central hole in the sculpture. It appears as a line following through the lines of longitude on the sculpture. The blue/green patination forms a link to the ever changing colour of the sky and the sea.

Tag: share_afloat



7. Statue of Queen Victoria
Marlborough Place / Grand Parade, Brighton
Sculptor: Carlo Nicoli
Sir John George Blaker presented the statue to the town at the opening of Victoria Gardens at the time of the Queen's Diamond Jubilee on 22 June 1897.

Tag: share_queens

Old Steine and Grand Parade Sculptures and Monuments to photograph

For more information on the sculptures and to upload your images, please visit: <http://shareyourheritage.co.uk/oldsteine>



1. Statue of Sir John Cordy Burrows
Steine Gardens, Brighton
Sculptor: Edward Bowring Stephens A.R.A.
Burrows was a surgeon and active member of the Council. He was elected Mayor of Brighton three times and was knighted in 1873.

Tag: share_cordy



3. War Memorial
Grand Junction Road, Brighton
Architect: John W. Simpson
The memorial was unveiled by Earl Beatty and contains the names of 2,597 men and 3 women from Brighton who lost their lives in the First World War. It was designed in the form of a Roman Water Garden.

Tag: share_war



5. Statue of George IV
Church Street, Brighton
Sculptor: Sir Francis Legatt Chantrey
The statue is a replica of that which stands at the head of the grand staircase in Windsor Castle.

Tag: share_george



8. King and Queen
14-16 Marlborough Place, Brighton
Builder: Clayton and Black
The inn's name originally referred to George III and Queen Charlotte.

Tag: share_king



2. Victoria Fountain
Old Steine, Brighton
Architect: Amon Henry Wilds
The dolphins symbolise Brighton in the city coat of arms.

Tag: share_victoria



4. Egyptian Campaign Memorial
Old Steine, Brighton
Erected to commemorate the Royal Sussex Regiment of 1882 and the Nile River Expedition of 1884-1885. The British were ordered to relieve Gordon at Khartoum against invading Sudanese rebels. The battle 'Abu Klea' was fought in the Sudan on 17 January 1885.

Tag: share_egyptian



6. Blaker Drinking Fountain
Church Street, Brighton

Tag: share_blaker

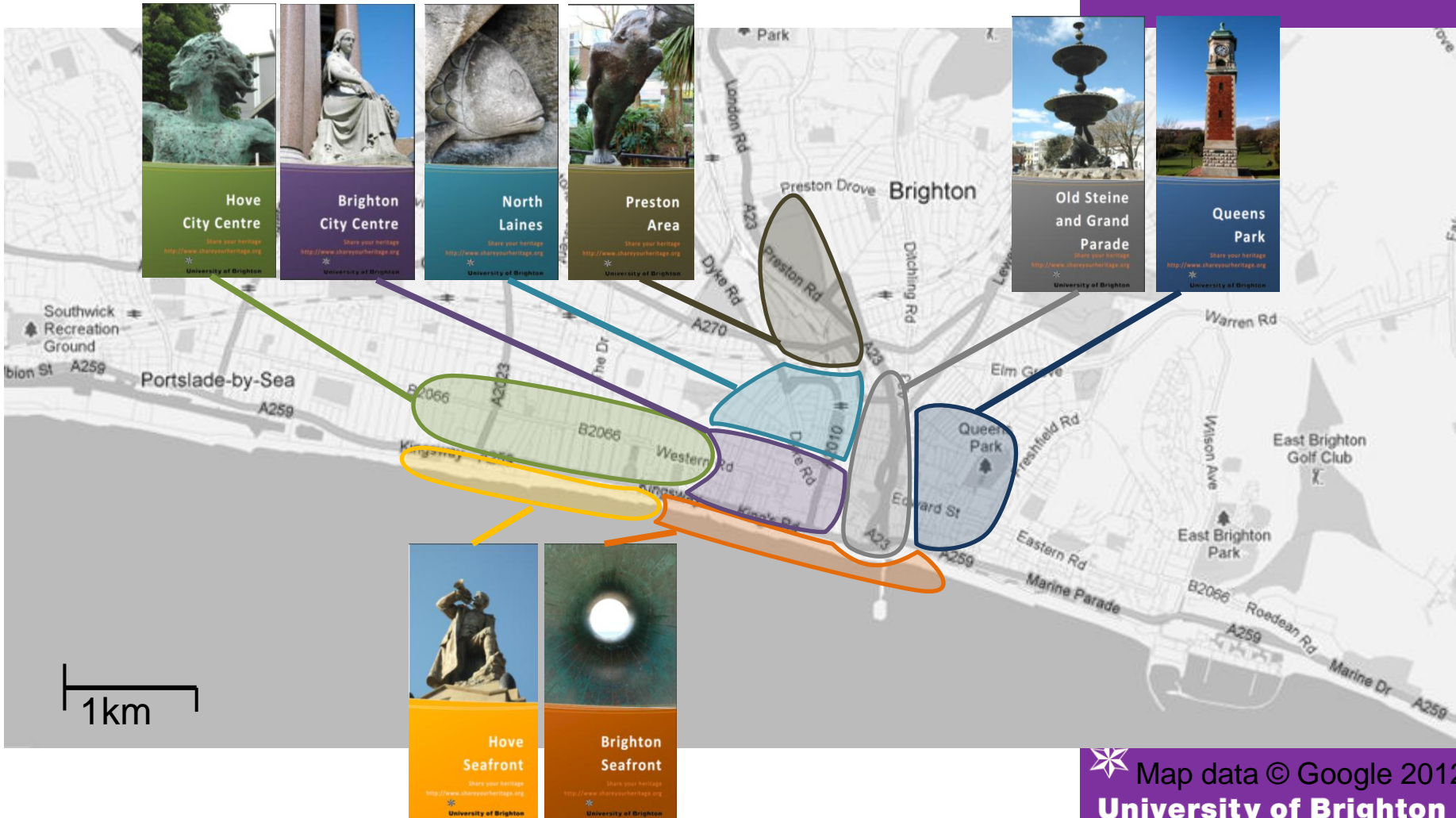


9. Chatfield Drinking Fountain
Richmond Place, Brighton
Architect: Robert Kerrie
Presented to the town by Frederick Chatfield for both human and animal use.

Tag: share_chatfield

PLEASE SEE RECOMMENDATIONS ON THE OTHER SIDE TO TAKE PHOTOGRAPHS

Geographical distribution



Public engagement trials

- Several trials have taken place using lessons learnt.
- Focused on the following areas:
 1. Co-development process.
 2. Mechanisms for the public's involvement.
 3. Using 3D technology.



Mechanisms for the public's involvement: Two level strategy

1. Involvement of the wider public on specific and straightforward tasks.

This required either:

- a. Selecting the simpler tasks of the co-development process (e.g. taking photographs)
- b. Simplifying other tasks.



[Video](#)



University of Brighton

Mechanisms for the public's involvement: Two level strategy

2. Involvement of a smaller number of volunteers or amateurs on tasks which require a higher level of skills and commitment.



Mechanisms for the public's involvement

- Social network sites, such as Facebook.



Mechanisms for the public's involvement

- Presence at local events across the city.

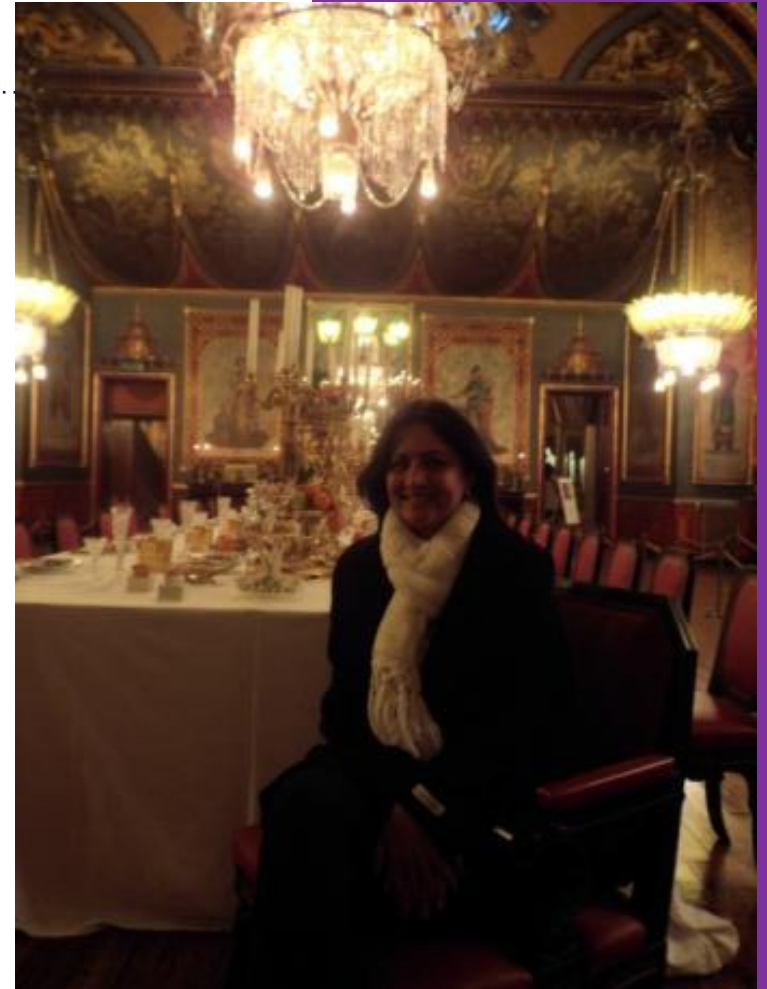
International Student Fair

Open Heritage Days 2011



Mechanisms for the public's involvement

- Incentives or prizes with a value of €250 from local organisations.
- Organisations are very enthusiastic to contribute.



Mechanisms for the public's involvement

- Website (www.shareyourheritage.org) enables people to participate.
- Lists the objects, their information and presents resulting 3D models.

The image is a collage of four screenshots from the website www.shareyourheritage.org. The top-left screenshot shows the homepage with a navigation menu (HOME, ABOUT, ADVICE, CONTRIBUTE, EVENTS, WIN PRIZES, FEEDBACK) and a section titled "Jubilee C" featuring three photographs of heritage sites. The top-right screenshot shows a list of monuments and sculptures, including "1. Leaves and Fishes", "2. Ceres", "4. Royal Pavilion entrance", and "5. Indian Memorial Gate", each with a small image and a "3D model available" label. The bottom-left screenshot shows a map titled "Monuments and sculptures on a map" with red pins indicating the locations of the listed monuments. The bottom-right screenshot shows a "3d Model" of a stone relief sculpture, with a "Contribute Photos" sidebar on the right listing various heritage sites like "Brighton City Centre", "North Laine", and "Queen's Park".

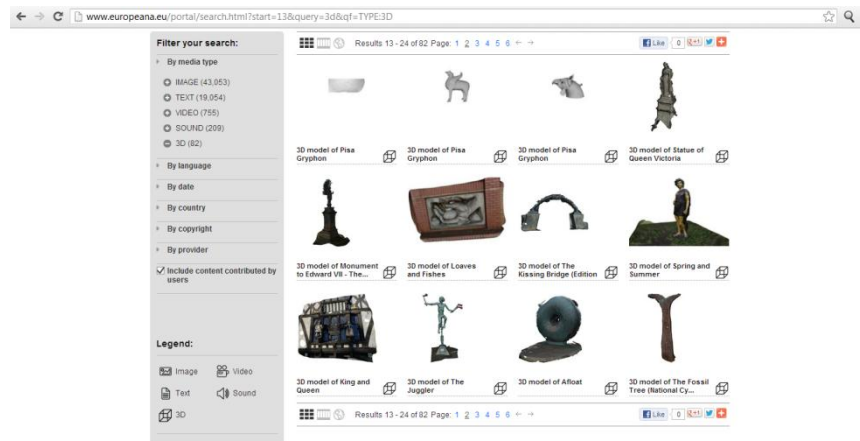
Content outcome

- Outcome of using these mechanisms from July to October 2011:
 - Photographs with 70% coverage.
 - Produce 3D models of 18 objects (50% coverage).
 - Few committed more time to learn to build the 3D models.



Public access

- It was considered very important to make the content available to the public:
 - Enriched the PMSA website with information in 3D
 - Make available the information through the Europeana portal.



Lessons learnt

- To enable non-profit organisations to co-develop 3D collections with the involvement of the wider public, it is necessary to consider:
 - Project management
 - Motivational issues
 - Economic issues
 - Technology support



Project management considerations

This type of project is usually long term, with a time span of years.

- A preparation period is required. This leads to a high initial overhead.
- Then time is required to advertise the project.
- Involvement of the public in tasks takes further time.



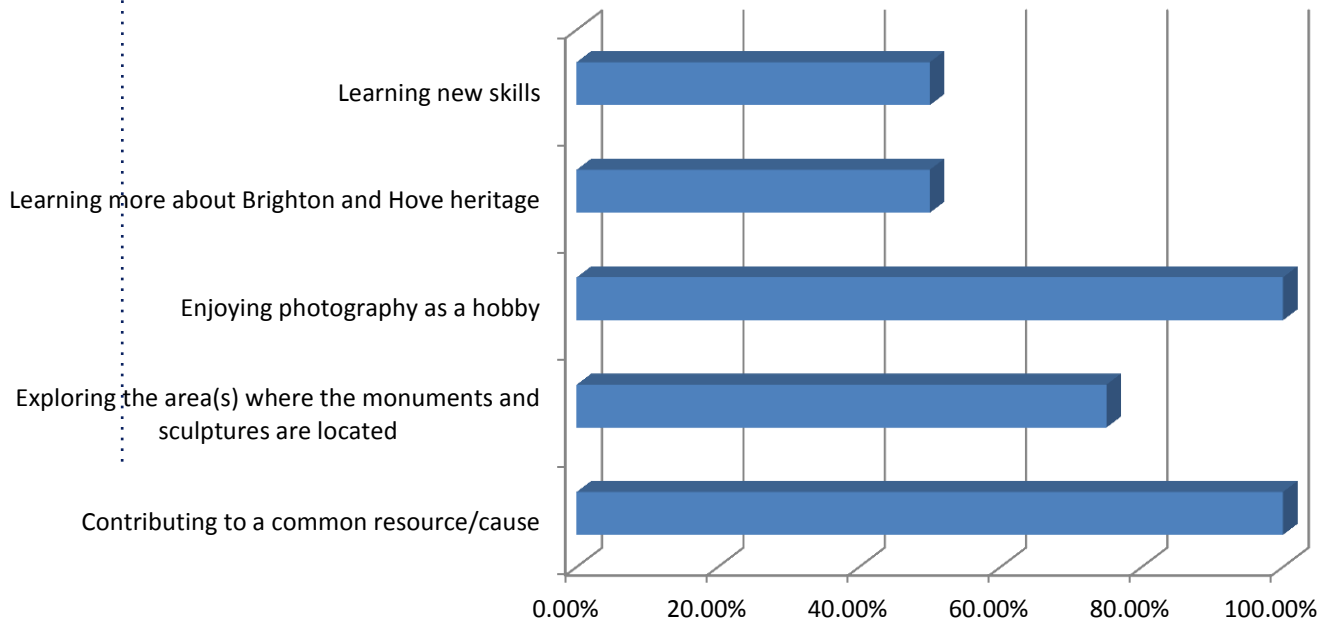
Motivational considerations

- Select the crowd most suitable to the project objectives.
- More people might participate if objectives are not so rigid.
- People require constant motivation. This could be achieved by different mechanisms.



Motivational considerations

- Contributors mentioned both personal motivations as well as contributing to a common cause as strong drivers.



Motivational considerations

- Committed contributors spent an average of 3 hours taking photographs and up to 3 hours in processing them.
- Selected the objects to photograph either because they were particularly interested or for practical reasons.



Motivational considerations

- Loosely associated groups might be harder to motivate.
- Associated groups might be easier to:
 - Contact
 - Motivate, and
 - Have interests that are closely aligned
- But there are potentially fewer of them.



Economic considerations

- This type of project might only be viable for a large number of objects over a long period of time.
- This will minimize and distribute the commitment both from volunteers and the organisations.
- Nevertheless, an initial budget will be required to set up the project.



Technological considerations

- Organisations will require support with setting up an infrastructure for the 3D collection.
- Different models:
 - Existing partnerships with universities.
 - Yearly fees to access a common infrastructure and expertise.



Evaluation conclusions

- Involving the public for 3D object acquisition can work, but is appropriate for ...
 - larger numbers of objects
 - Objects that are accessible (not always museum collections)
 - Widely dispersed objects
- It could take some time to complete
- This takes advantage of the strength of the crowd ...
 - Its geographical spread
 - Potentially large numbers



Thank you

Questions?



This project was conducted by the 3D-COFORM project funded by the European Community's Seventh Framework Programme (FP7/2007-2013) under grant agreement n° 231809; 2008-2012



University of Brighton