Promise and Paradox
Accessing Open Data in Archaeology

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Accessing Archaeological Data Online
The Definition

A work is open if its manner of distribution satisfies the following conditions:

1. Access

The work shall be available as a whole and at no more than a reasonable reproduction cost, preferably downloading via the Internet without charge. The work must also be available in a convenient and modifiable form.

Comment: This can be summarized as ‘social’ openness – not only are you allowed to get the work but you can get it. ‘As a whole’ prevents the limitation of access by indirect means, for example by only allowing access to a few items of a database at a time.

2. Redistribution

The license shall not restrict any party from selling or giving away the work either on its own or as part of a package made from works from many different sources. The license shall not require a royalty or other fee for such sale or distribution.

3. Reuse

The license must allow for modifications and derivative works and must allow them to be distributed under the terms of
A sense of unease

Access to data is not enough:
• What are its origins?
• Why was it collected?
• What has happened to it since?

*What is the history of the data?*
ANNAN MOTE OF ANNAN
National Monuments Record of Scotland
Alternative name(s): ANNAN CASTLE
DUMFRIES AND GALLOWAY

AULDEARN DOOKET HILL
National Monuments Record of Scotland
Alternative name(s): CASTLE OF AULDEARN; CASTLE HILL; AULDEARN, DOOCOT HILL; AULDEARN MOTTE; BOATH MOTTE
HIGHLAND

TREMATON CASTLE
English Heritage National Inventory (NMR)
Castle mentioned in Domesday and passed to the Duchy of Cornwall in 1337. It became neglected in the mid 14th century and was in ruins by the 16th century. There are the remains of a 12th century shell keep and the gatehouse, rebuilt in the 13th century, is substantially intact. A deer park is named in 1282 but had lost the deer by 1500. Higher Lodge, a two storey crenellated house, was built within the castle bailey in 1807-8 and part of the curtain wall was demolished to provide views of the estuary. The house is attributed to DA Alexander. ...

CORNWALL
### Accessing Archaeological Data Online

#### Table 1: Sample Data:

<table>
<thead>
<tr>
<th>Location</th>
<th>Description</th>
<th>Grid Ref</th>
<th>Date</th>
<th>Phase</th>
<th>Grid Code</th>
<th>Feature Code</th>
<th>Feature ID</th>
<th>Feature Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site A</td>
<td>Archaeological Site</td>
<td>TQ 7824 0049</td>
<td>2012</td>
<td>High</td>
<td>0000000</td>
<td>00000</td>
<td>00000</td>
<td>Site A</td>
</tr>
<tr>
<td>Site B</td>
<td>Excavation Site</td>
<td>TQ 7824 0049</td>
<td>2012</td>
<td>Medium</td>
<td>0000000</td>
<td>00000</td>
<td>00000</td>
<td>Site B</td>
</tr>
<tr>
<td>Site C</td>
<td>Survey Area</td>
<td>TQ 7824 0049</td>
<td>2012</td>
<td>Low</td>
<td>0000000</td>
<td>00000</td>
<td>00000</td>
<td>Site C</td>
</tr>
</tbody>
</table>

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#### Table 2: Additional Data:

<table>
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<tr>
<th>Feature</th>
<th>Category</th>
<th>Location</th>
<th>Grid Ref</th>
<th>Date</th>
<th>Phase</th>
<th>Grid Code</th>
<th>Feature Code</th>
<th>Feature ID</th>
<th>Feature Type</th>
</tr>
</thead>
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<td>Category 1</td>
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<td>TQ 7824 0049</td>
<td>2012</td>
<td>High</td>
<td>0000000</td>
<td>00000</td>
<td>00000</td>
<td>Feature 1</td>
</tr>
<tr>
<td>Feature 2</td>
<td>Category 2</td>
<td>Site B</td>
<td>TQ 7824 0049</td>
<td>2012</td>
<td>Medium</td>
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<td>00000</td>
<td>00000</td>
<td>Feature 2</td>
</tr>
<tr>
<td>Feature 3</td>
<td>Category 3</td>
<td>Site C</td>
<td>TQ 7824 0049</td>
<td>2012</td>
<td>Low</td>
<td>0000000</td>
<td>00000</td>
<td>00000</td>
<td>Feature 3</td>
</tr>
</tbody>
</table>

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#### Table 3: Detailed Data:

<table>
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<th>Feature ID</th>
<th>Feature Type</th>
<th>Description</th>
<th>Location</th>
<th>Grid Ref</th>
<th>Date</th>
<th>Phase</th>
<th>Grid Code</th>
<th>Feature Code</th>
<th>Feature Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feature 1</td>
<td>Feature 1</td>
<td>Archaeological Site</td>
<td>Site A</td>
<td>TQ 7824 0049</td>
<td>2012</td>
<td>High</td>
<td>0000000</td>
<td>00000</td>
<td>00000</td>
</tr>
<tr>
<td>Feature 2</td>
<td>Feature 2</td>
<td>Excavation Site</td>
<td>Site B</td>
<td>TQ 7824 0049</td>
<td>2012</td>
<td>Medium</td>
<td>0000000</td>
<td>00000</td>
<td>00000</td>
</tr>
<tr>
<td>Feature 3</td>
<td>Feature 3</td>
<td>Survey Area</td>
<td>Site C</td>
<td>TQ 7824 0049</td>
<td>2012</td>
<td>Low</td>
<td>0000000</td>
<td>00000</td>
<td>00000</td>
</tr>
</tbody>
</table>
Archaeological Open Data

- Complete
- Primary
- Timely
- Accessible
- Non-proprietary
- Re-usable
- Searchable
- Permanent

(Anichini & Gattiglia 2012)
The Archaeological ‘Record’

“produced by disciplinary practices and identity processes and discourses”

(Hamilakis 2003)

The Phaestos Disk,
Crete c.1700BC
Context of Archaeological Data

Daybook © Anastasia
(Primary 3, Glasgow Academy 2005)
Skara Brae House 1 meshed data

© Alice Watterson
(Digital Design Studio/Historic Scotland)
Theory-laden  Purpose-laden  Process-laden
Paradata or Provenance

“Documentation of the evaluative, analytical, deductive, interpretative and creative decisions ... in such a way that the relationship between research sources, implicit knowledge, explicit reasoning, and visualisation-based outcomes can be understood”

(London Charter 2.1, 2009)

• Agent-centred provenance
• Object-centred provenance
• Process-centred provenance

(W3C Provenance Working Group 2012)
Data provenance

(W3C Provenance Working Group 2012)
Data provenance

(CIDOC-CRM EH
English Heritage Centre for Archaeology)
Data Anxiety

- How was the data gathered?
- Original data or derived?
- Can I trust the data?
- Circumstances?
- How reliable is it?
- Is it suitable for my needs?
Paradox:
Increasing access vs increasing distance/disconnect
Promise:
Reassurance and realisation of transformative capacity

(The Economist - Feb 25 2010)