From Theory to Practice. Objectivity and Sustainability in Archaeological Impact Assessment Processes

Opening the Past 2013. Archaeology of the Future
Pisa, 13-15 June 2013
From Theory to Practice.
Objectivity and Sustainability in Archaeological Impact Assessment Processes

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Why this paper?
• Evaluate the model we proposed in 2011 about the Archaeological Impact Assessments or “Valutazioni di Impatto Archeologico - VIArch”;

• Discuss some of the results achieved during the application of the model;

• Take the opportunity of this congress, to consider the efficiency of the Legislative Decrees which regulates the Archaeological Impact Assessment processes;

• Try to transform a series of vague or general impression in a reliable set of data;

• Finally, we would discuss the opportunities of “open Data” linked with the Archaeological Impact Assessments.
Archaeological evaluation in Italy / state of the art: a lot of regional differences

Many archaeological data still not digitized

Unavailability or Inaccessibility of some archaeological data

Archaeological Risk versus Entrepreneurial Risk

Archaeological deposits are not unlimited
Archaeological Impact Assessment Processes, the present regulation:

DLgs n. 42/2004
DLgs n.60/2009
Ministerial Circular Letter n. 10/2012
Opinion Poll. Does the present Archaeological Impact Assessment regulation works?

Characteristic and aims of the poll:
• It has not been a systematic research, but a cognitive survey;
• We have interviewed Archaeologist and Public Administrations in our area (Veneto/Emilia/Lombardia);
• Our aim was an evaluation on the general “satisfaction” about the Archaeological Impact Assessments process;
• We did not evaluate the scientific content of the single Assessments;
• We have collected impression, suggestion and indications.
Main Outcomes:

• The Archaeological Assessments are generally not able to reduce the project costs.

• The Archaeological Assessments are generally clear and good in terms of contents.

• The usefulness of the Assessments is generally evaluated as low/medium.

• The assessments would be not effective for reducing the quantity of the archaeological soil excavated.

How the Archaeological Impact Assessments commissioned have been evaluated by the engineer of the Public Administration?

Opinion poll, Public Administrations' viewpoint
The Archaeological Impact Assessments commissioned have been considered **useful** for the project?

**Opinion poll, Public Administrations' viewpoint**

- **0%** not useful
- **7%** not very useful
- **21%** useful
- **61%** very useful
- **11%** I wouldn't know

67% of the commissioned works have been perceived as “not so useful”

Only 11% of the commissioned works have been evaluated as “very useful”
The Archaeological Impact Assessments commissioned have been considered clear and effective?

Opinion poll, Public Administrations' viewpoint
The Archaeological Impact Assessments commissioned have achieved a project costs’ reduction?

Opinion poll, Public Administrations' viewpoint
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Average Percentage Report:

**Final Project Cost / Archaeological Assessment Cost** = 0,28 %
range between 1,70% - 0,03 %

Average Percentage Report:

**Final Project Cost / Archaeological Excavation Cost** = 0,98 %
range between 5,07 % - 0,22 %

What is the **Ideal Cost**?

“Good” Archaeological Assessments Percentage Report:

**Final Project Cost / Archaeological Assessment Cost** = 0,51 %

*How much does it costs?*

Opinion poll, Public Administrations' viewpoint
Main Outcomes:

• The Archaeological Assessments are generally perceived as “not so effective” for a better conservation of the archaeological deposits.

• Also from the perspective of the Archaeologists, the Archaeological Assessments are generally perceived as not able to save the project costs.

• The costs for the Impact Assessments are often not commensurate to the quality of the researches.

• The Extra-Urban area, in Italy, are more suitable and fruitful for an effective Archaeological Impact Assessment.

How the Archaeological Impact Assessments commissioned have been evaluated by Archaeologists?

Opinion poll, Archaeologists' viewpoint
The Archaeological Impact Assessments commissioned have been considered “Useful” for a better conservation of the archaeological deposits?

Opinion poll, Archaeologists' viewpoint
The Archaeological Impact Assessments commissioned have achieved a project costs’ reduction?

The Archaeologists are in general more pessimists than administrators: the Archaeological Impact Assessments evaluated (78%) are not suitable for the project’s costs reduction.
Too much archaeology...

"Usefulness"

The Extra-Urban area, in Italy, are more suitable and fruitful for an effective Archaeological Impact Assessment.

"Costs Reduction"

Different areas, different results.

Opinion poll, Archaeologists' viewpoint
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**How much does it cost?**

What is the **Ideal Cost**? “Good” Archaeological Assessment?

It have not to be less than a salary of 5/6 day of work!

Opinion poll, Archaeologists' viewpoint
The Model proposed: “Count up the Risk”

• From Environmental Impact Assessment Process to the Archaeological one

• Not “opinions” but “numerical evaluations“

• GIS based
How to transform opinions in numbers?

• Definitions of a series of simple agreed criteria
  • Value, Potential and Risk
  • Use of a series of guided questions
  • The answers are “compulsory”

<table>
<thead>
<tr>
<th>“Archaeological Value”, parameters</th>
<th>“Archaeological Potential”, parameters</th>
<th>“Archaeological Risk”, parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historical data</td>
<td>Density of the Finds</td>
<td>Vulnerability</td>
</tr>
<tr>
<td>Rarity / Uniqueness</td>
<td>Associative Value</td>
<td>Position</td>
</tr>
<tr>
<td>Preservation</td>
<td>Reliability</td>
<td>Site dimensions / Monumental nature</td>
</tr>
</tbody>
</table>
RTC, Total Cumulative Risk

\[ \text{RTC} = \text{Value} + \text{Potential} \times \text{Risk} \]

The Archaeological Impact Assessments have to be evaluated with the “risk” of a specific project. It is not a general evaluation.
Historical data as evidence of possible archaeological deposits

And between them... post classical data and modern data

The value of Historical (unexcavated) data
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Millecampi, OP 651
Rischio Totale Archeologico
Valutazione espressa sulla base dell’Archeologia Pregressa,
della Cartografia Antica,
Catasto e Foto Aerea

- Historical cartography
- Hidden historical landscape
- Huge areas with no “archaeology”

Millecampi, Laguna Sud- Venice
Treporti – Cavallino Coastline, Venice

- Huge area
- Clear specific small areas at risk, according to the project
- Huge archaeological voids
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- Urban Archaeology,
- Archaeological voids
- Complexity
• Urban Archaeology, without any archaeological excavation
• A lot of historical cartographic data
• Model suitable in different regional context.
The Ideal Archaeological Impact Assessment

- Numerical
- Polyonal /GIS based
- Assertive
- Taking on responsibility the value judgement
- Favourable relationship costs/benefits
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Circ. minist. 10/2012