

# Arq. en Aguas Profundas III

*Especialización en Patrimonio Cultural Sumergido*  
*Cohorte 2019*



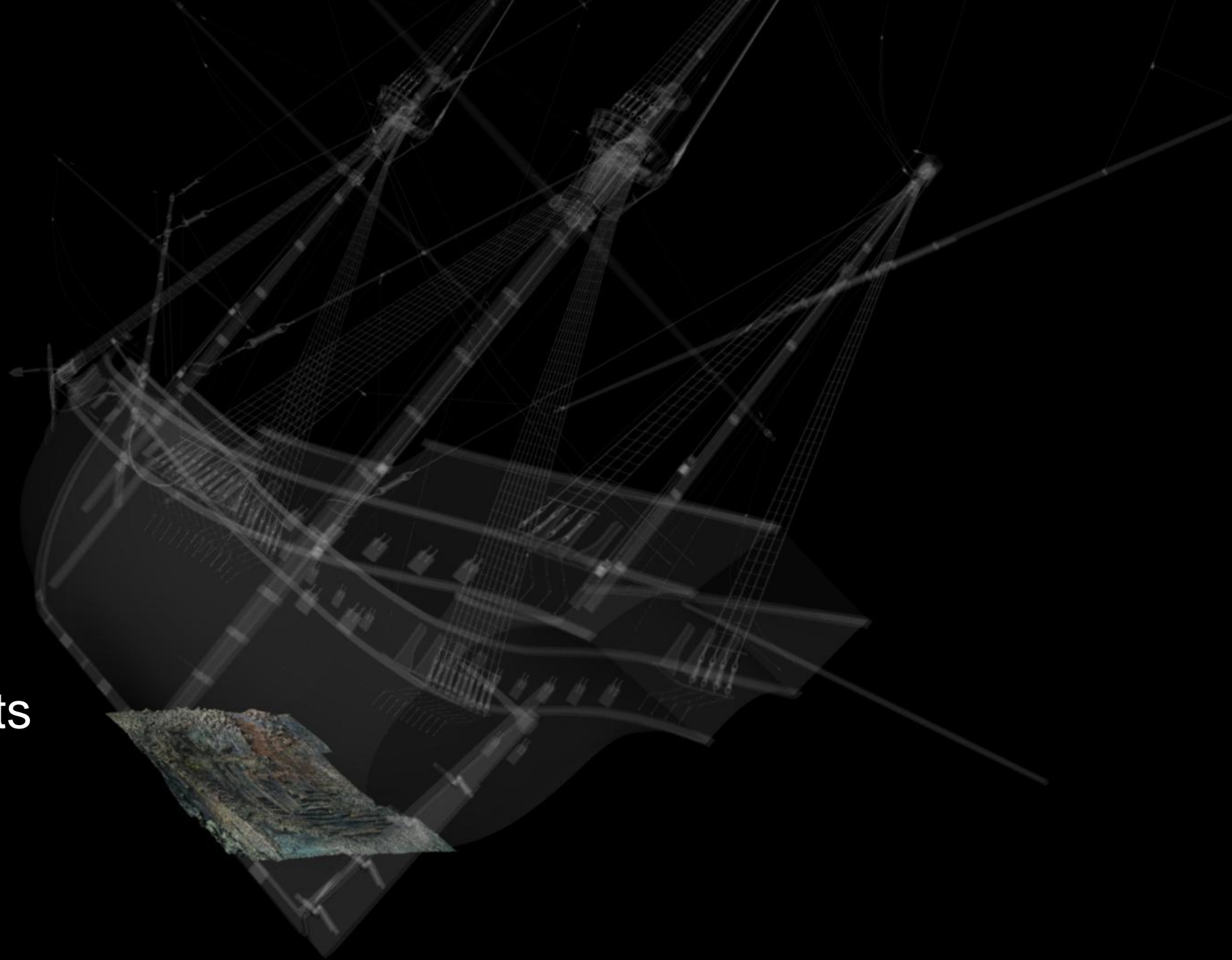
Ethics

# Part 1

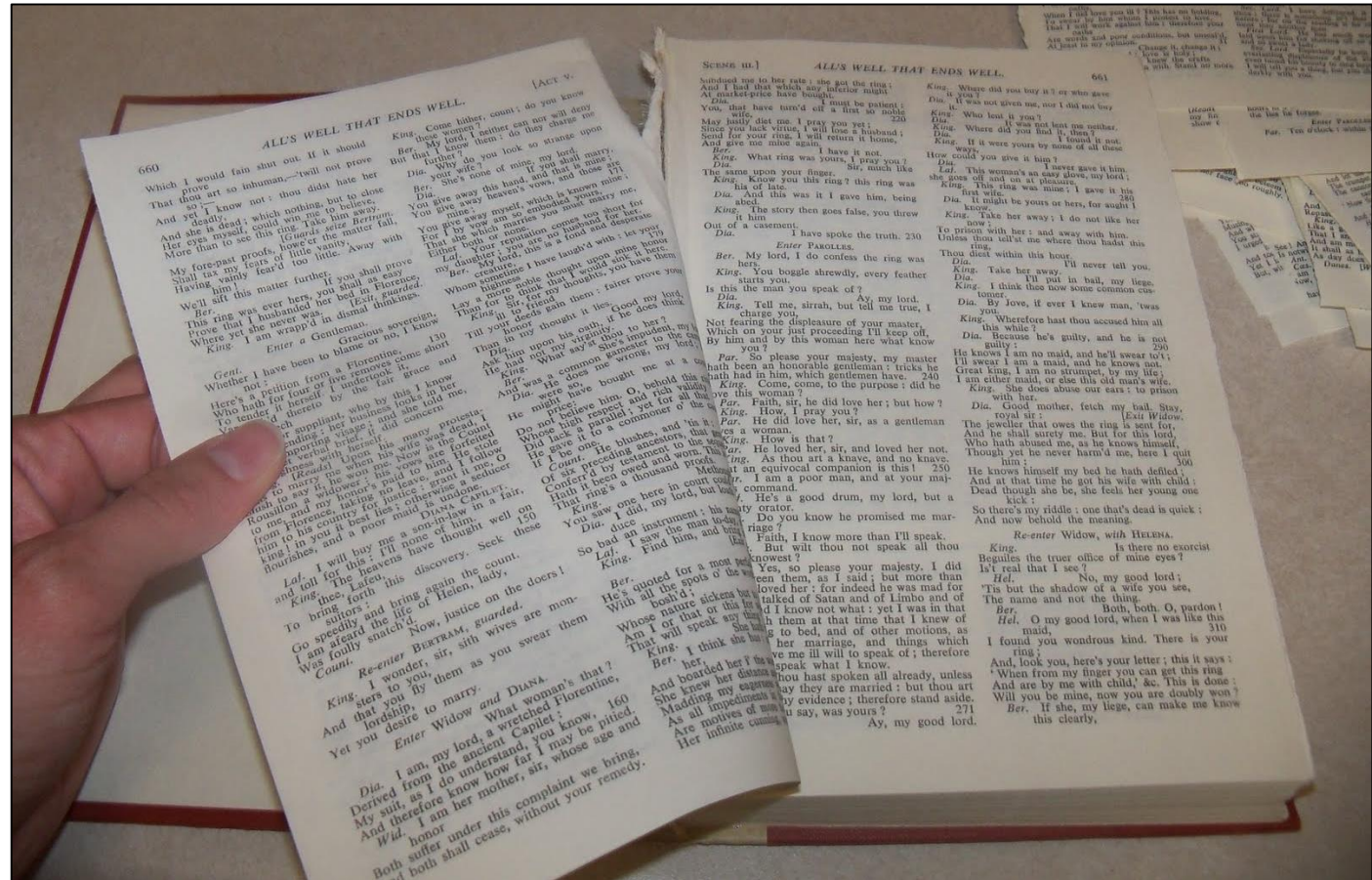
Filipe Castro  
Bogotá, April 2019



Marine archaeologists  
reconstruct historical  
environments from  
archaeological sites.

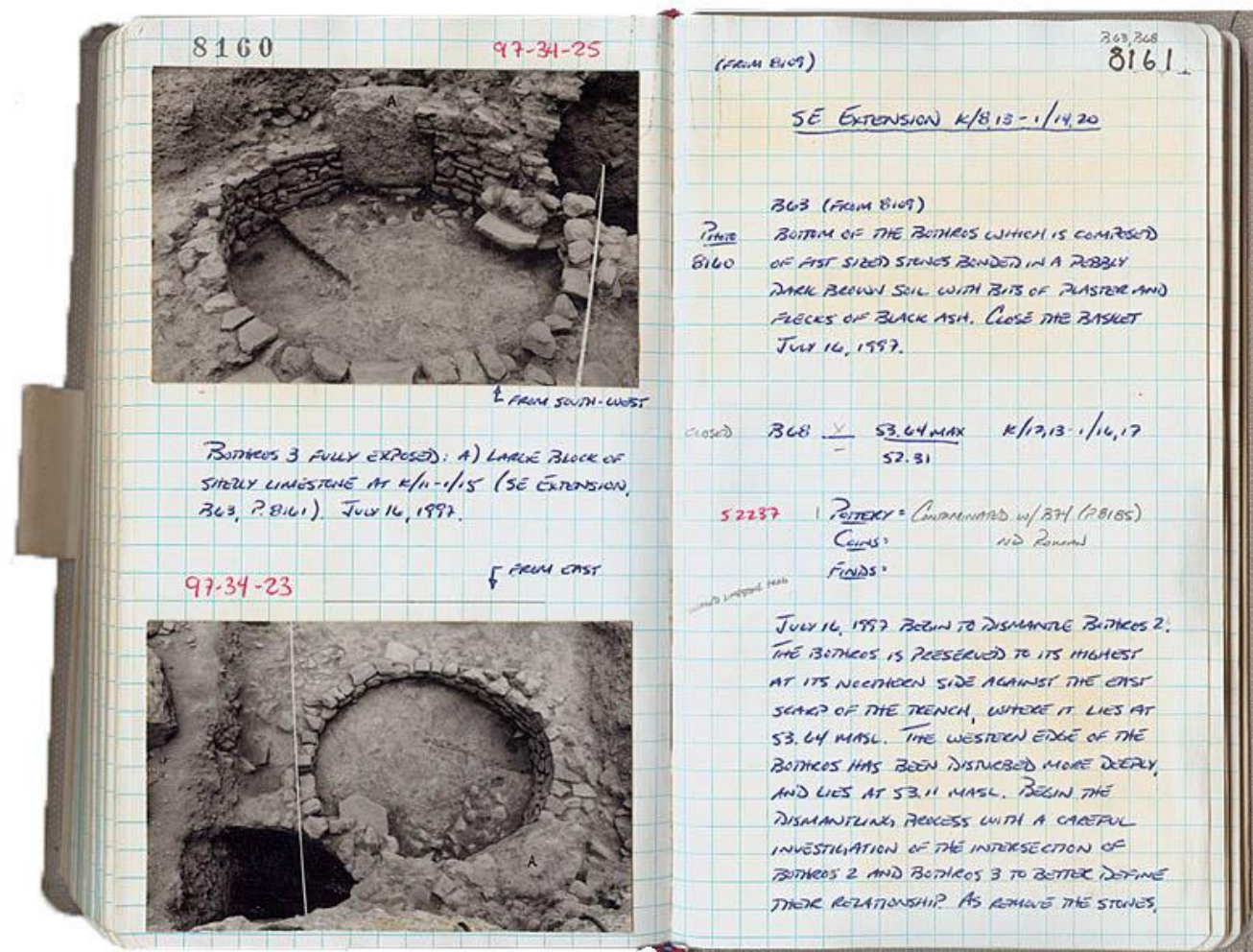


Marine archaeologists destroy the sites they dig. Archaeological sites are buried archives. We describe digging as reading a book by tearing each page read to get to the page below.





# Recording is a responsibility.





Sharing raw, primary data is the only guarantee that we are serious.



Terry E. Hedrick; Robert F. Boruch; Jerry Ross, 1978. "On Ensuring the Availability of Evaluative Data for Secondary Analysis," in: *Policy Sciences*, 9(3): 259-280.

In his introduction to the Oxford Handbook of Maritime Archaeology (2011), George Bass pointed out that, as a class, archaeologists have a track record of negligence: it seems that we publish about 25% of the sites we destroy. Bass' assumption is based on a number of studies suggesting that **over the last 50 years less than 25% of the materials and results of professional archaeological excavations have been properly published** (Boardman 2009), **70% of the Near East excavations have not been published** (Atwood 2007 and Owen 2009), and that perhaps **80% of all Italian archaeological materials remain unpublished** (Stoddart and Malone 2001). It is difficult to argue that the situation in maritime archaeology is better than those mentioned above.

Atwood, R., 2007. "Publish or be Punished: Israel Cracks Down on Delinquent Diggers," *Archaeology* 60.2, 18, 60, 62.

Bass, G., 2011. "Introduction," in Catsambis, A., Ford, B., and Hamilton D., (eds.), *The Oxford Handbook of Maritime Archaeology*. New York.

Boardman, J., 2009. "Archaeologists, Collectors, and Museums," in Cuno, J., (ed.), *Whose Culture? The Promise of Museums and the Debate over Antiquities*. Princeton.

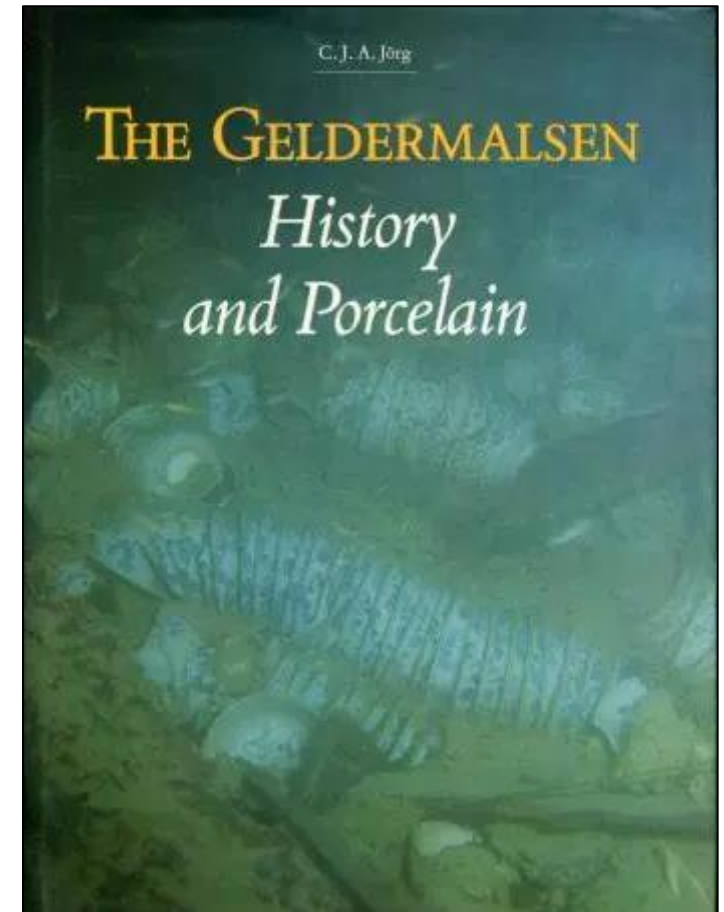
Owen, D., 2009. "Censoring Knowledge: The Case for Publication of Unprovenanced Cuneiform Tablets," *Whose Culture? The Promise of Museums and the Debate over Antiquities*, Cuno, J., ed., Princeton, NJ: Princeton University press.

Stoddart, S., and Malone, C., 2001, *Antiquity*. "Editorial," Vol. 75.288: 233-246.

Treasure hunting secrecy stems from a different cause: treasure hunters cannot afford to let us see what they do the shipwrecks they salvage.



It is said that *Geldermalsen* was dynamited after the salvage operations to prevent the Indonesian authorities to identify the site and sue the treasure hunters.





Treasure hunting secrecy stems from a different cause: treasure hunters cannot afford to let us see what they do the shipwrecks they salvage.

Archaeology should be primarily a public thing.







Archaeology and the Public



# The importance of the maritime cultural heritage







It is difficult to imagine a healthy society that is completely oblivious about its past.

*Monet / Banksy*



Identity, community feelings, a sense of meaning and continuity, are important values for society.



Studies show that most people are happier in an environment that conveys a sense of permanence and stability.

Urban planners claim that the cultural heritage is the “soul” of a landscape. Even bad memories are important for the community.







History is a source of wisdom



The value of History was summarized by Howard Zinn:

If we don't know  
our past, we will  
have to trust our  
politicians!



The cultural heritage is continuously being created and destroyed.



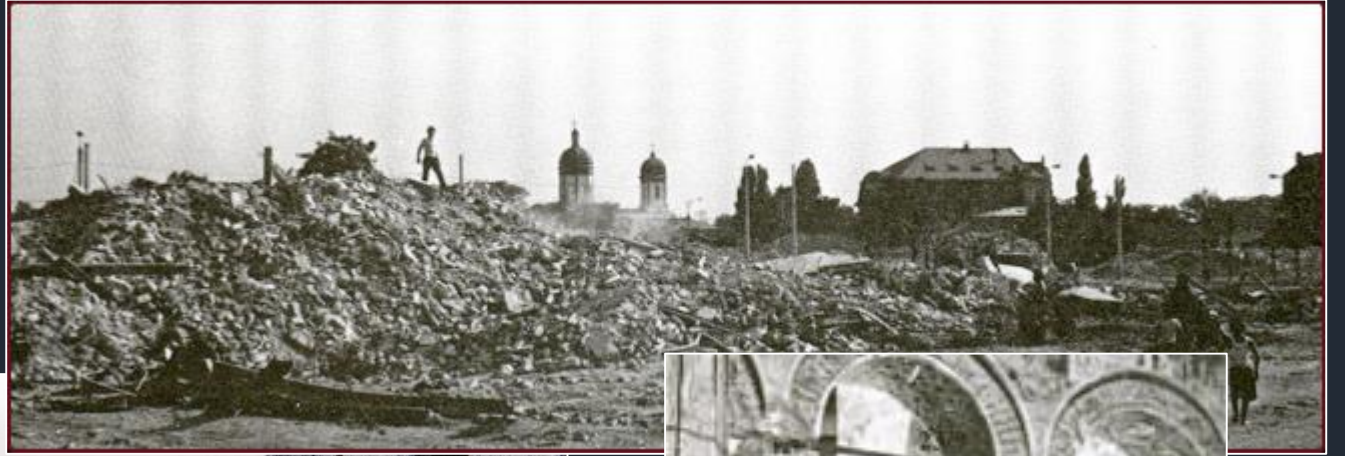


War is a major cause of destruction,



The destruction of Hiroshima and Nagasaki by the USA were war crimes, and also crimes against the world cultural heritage.





Byzantine churches were systematically destroyed in the former Soviet block... and now we are destroying Soviet monuments without thinking.



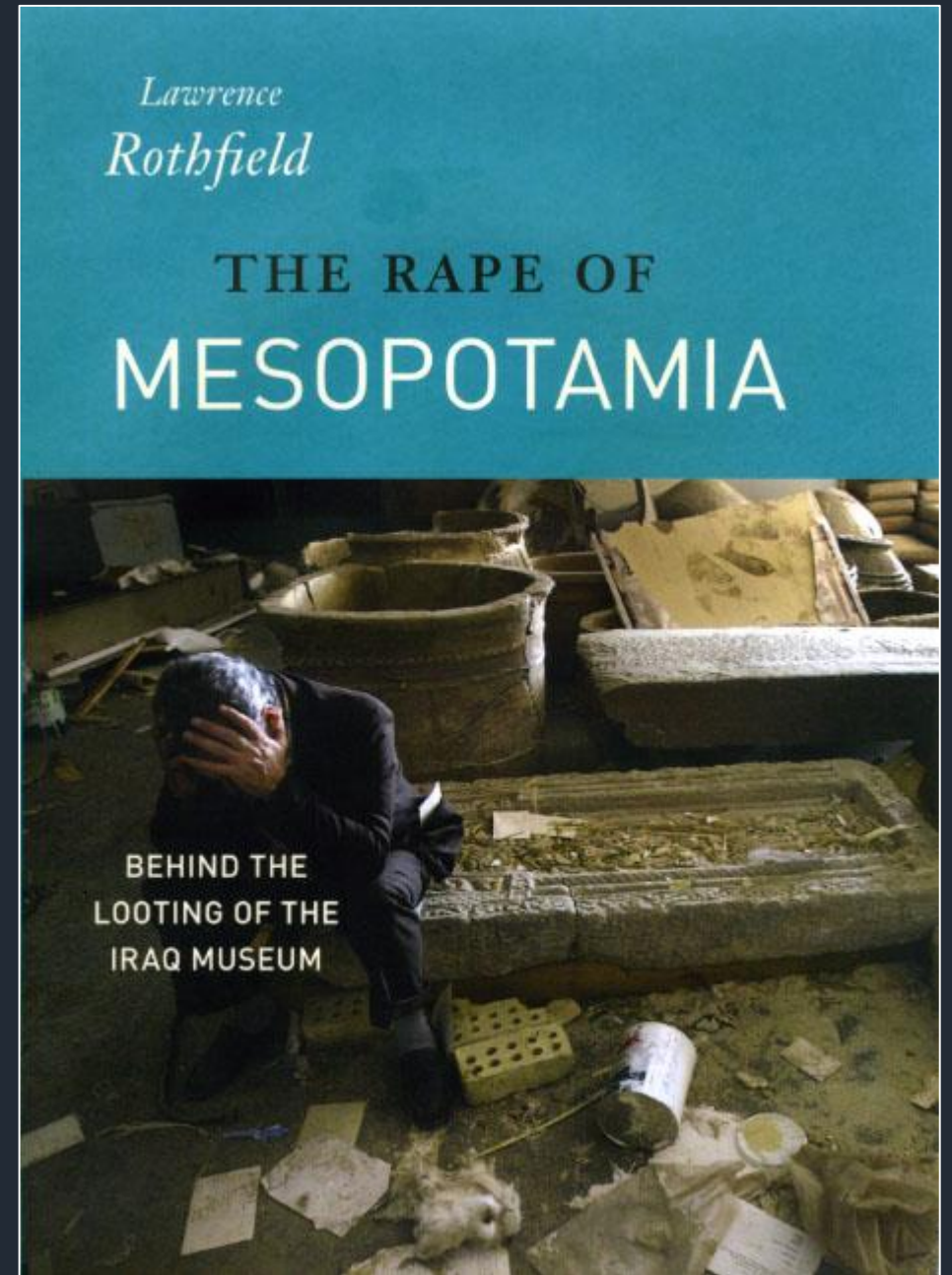


The Chinese Cultural Revolution destroyed and created culture and art.

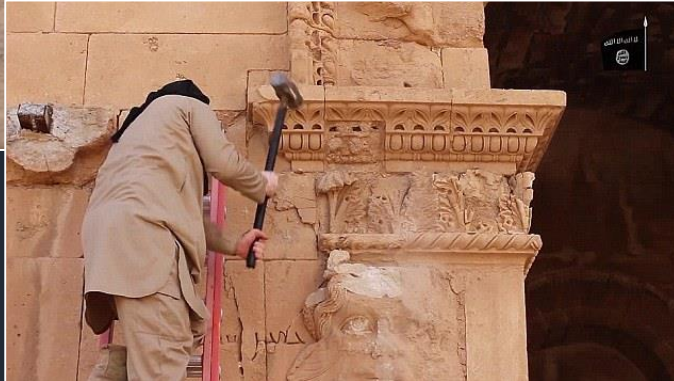




# The American invasion of Iraq...



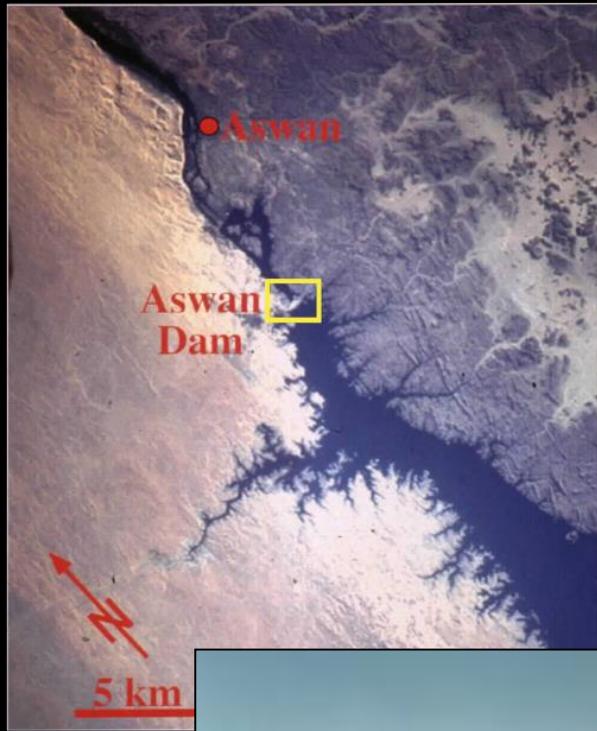




The Islamic State destructions in the Middle East are perhaps the most recent example...



Economic development is another important cause of the destruction of past material culture.





## 8,000 year old site destroyed by bulldozers

Posted by TANN  ArchaeoHeritage, Bulgaria, Europe, Heritage, Southern Europe  
3:30 PM

An archaeological site in Bulgaria, including remnants of a village said to date back 8000 years, has been destroyed by bulldozers, allegedly the work of a construction company building part of a new road from Bulgaria to Greece.



The destruction means that archaeologists have lost thousands of years of Bulgarian National Television reported.

A special commission from the Ministry of Culture is inspecting the destroyed site, near Momchilgrad, and police are investigating.

## The 7000 Year Pardis Site: Bulldozed for a Factory Project

The 7000-year-old mound of Pardis in the Qarchak region has been bulldozed to make way for a brick production factory. This has been reported by the Iranian based news sites of Mehr on September 10, 2008 (in English), the English language Tehran Times on September 11, 2008 and CHN (in Persian) which deals primarily with Iran's cultural and archaeological affairs.



The director of the Archaeology Research Center of Iran (ARCI), condemned cultural officials of the illegal excavations activities at the site. He was interviewed with the CHN in Persian a few days before the report by

XL PIPELINE | March 7, 2012 | ADD A COMMENT

## TransCanada Plans to Destroy 71 Archeological Sites and 22 Historical Structures



**Brenda Golden**

Native American Community Examiner

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[Native American Graves](#)

[Sacred Objects](#)

[Burial Sites](#)

By Guest Writer: Fannie Bates and courtesy of the "Oklahoma Citizen"

While the governors of Oklahoma and Texas may have given in to TransCanada and Exxon, millions of Americans continue to stand in solidarity against the Keystone XL pipeline and the tarsand oil (laced with benzene and arsenic) which it will bring across our state.

According to an article by Paighen Harkins in the OU Daily, the Oklahoma Archeological Survey worked with American Resources Group and Steven W. Carothers and Associates Environmental Consultants to examine the likelihood of the proposed route damaging cultural heritage. Their results showed that there were 88 archeological sites and 34 historical structures along the Keystone XL's Oklahoma route, but the government has decided that it is okay to preserve only 17 of the sites and 12 of the structures. The government is willing for the remaining 71 archeological sites and 22 historical structures to be bulldozed. And for what? Just what are we getting in exchange?

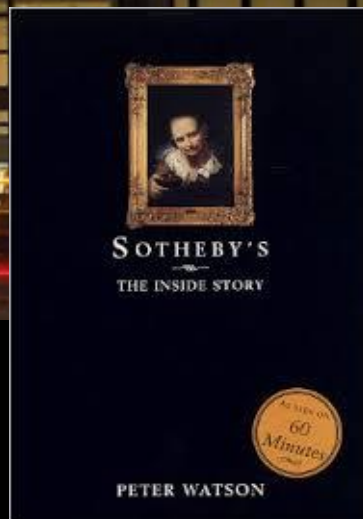
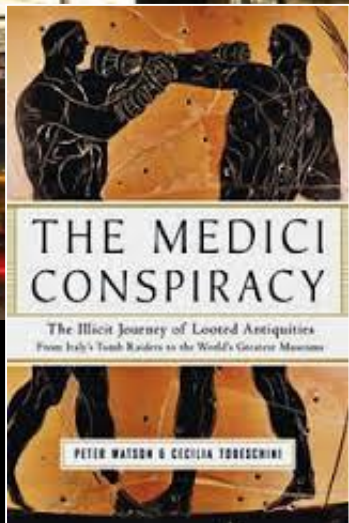
Palliative measures are often expensive and nobody wants to pay the bills.





Sotheby's

Greed is another.





## Lack of interest from the authorities...



Artifacts dredged from the Arade River by the harbor authorities without archaeological supervision.



Roman shipwreck dredged at Foz do Arade, 1982. Its cargo of amphorae was salvaged and sold in the 1970s (pers. inf. Robert Marx).



...trawling,

**APRÈS**  
LE PASSAGE DU CHALUTIER

**AVANT**

POUR 3 POISSONS PÊCHÉS, PLUS DE 100 ESPÈCES SACRIFIÉES, REJETÉES  
MORTES À LA MER. PARMI ELLES, DES ESPÈCES MENACÉES D'EXTINCTION.



...harbor works,



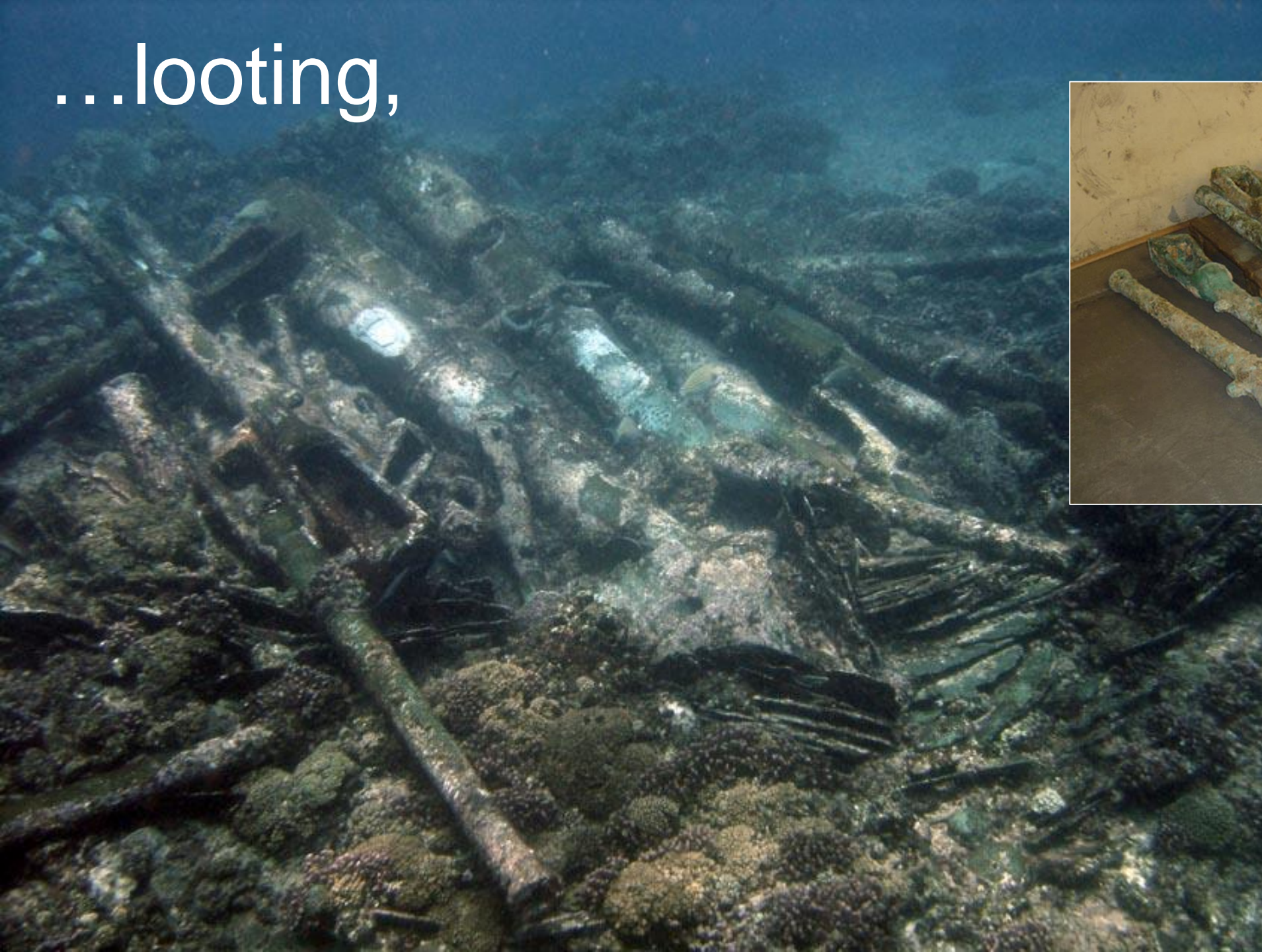


...dredging,





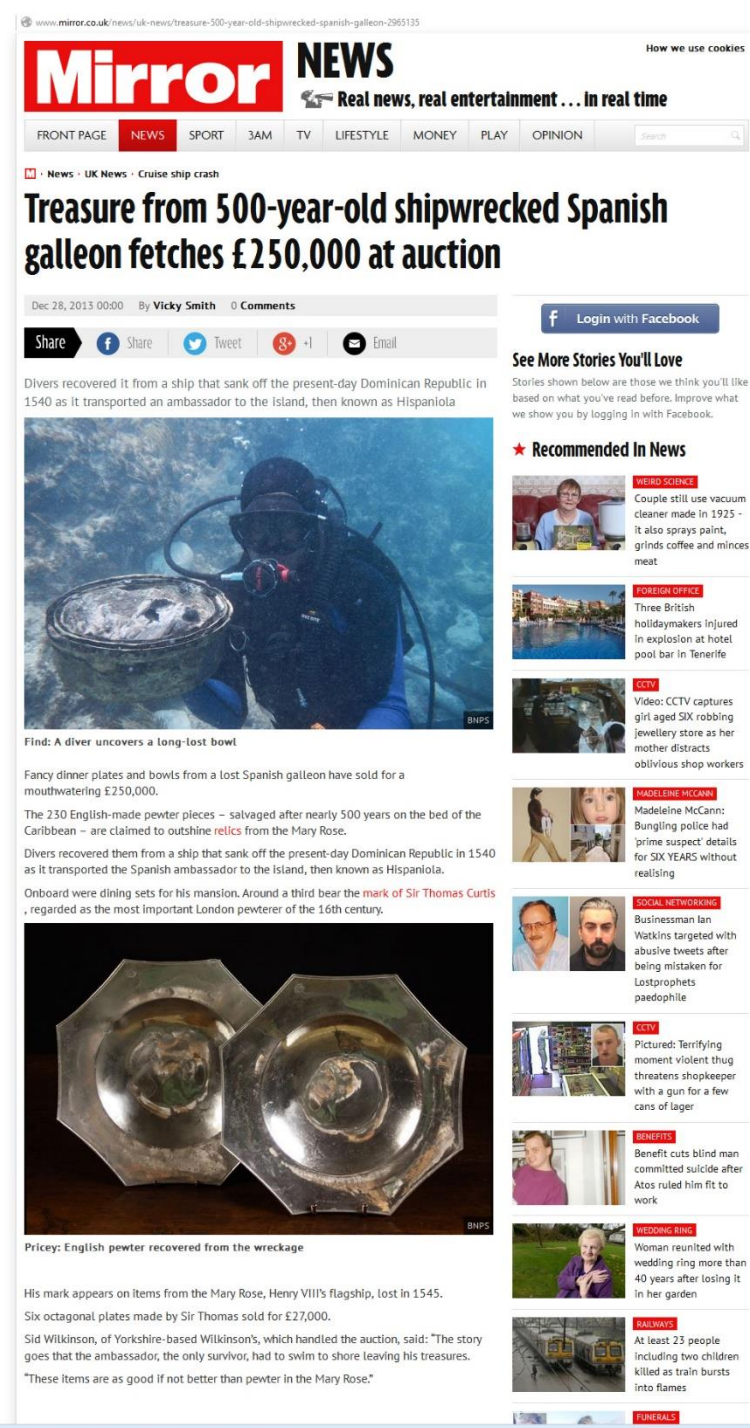
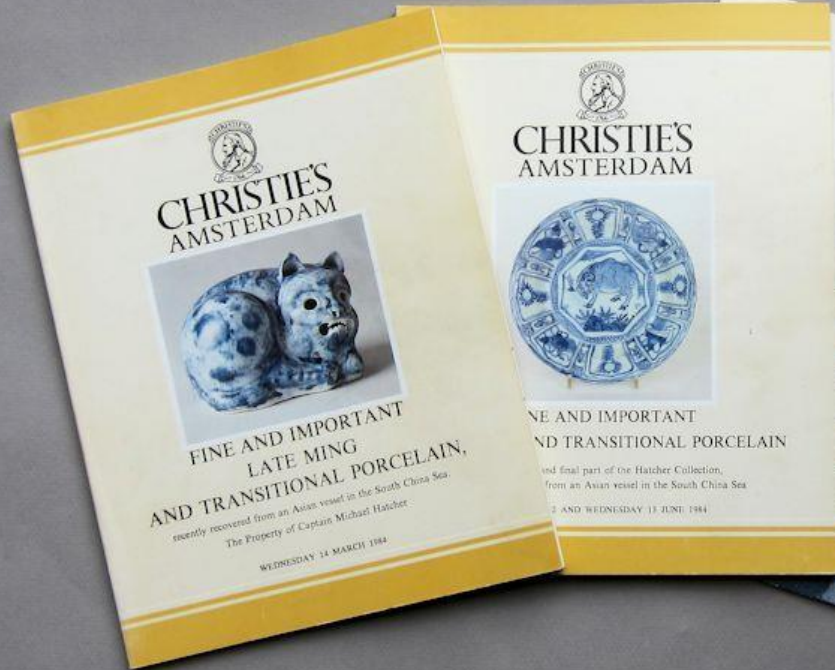
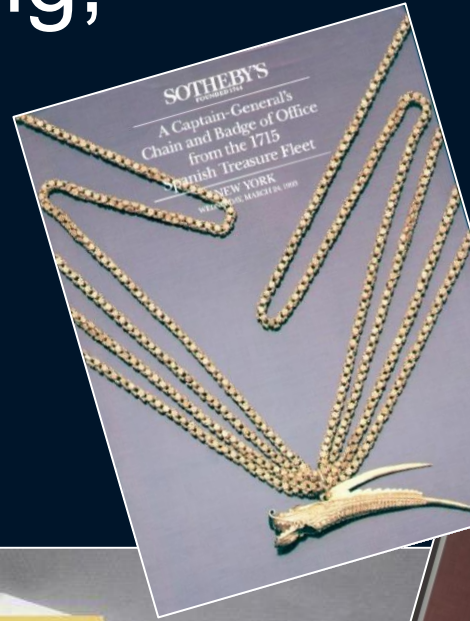
...looting,



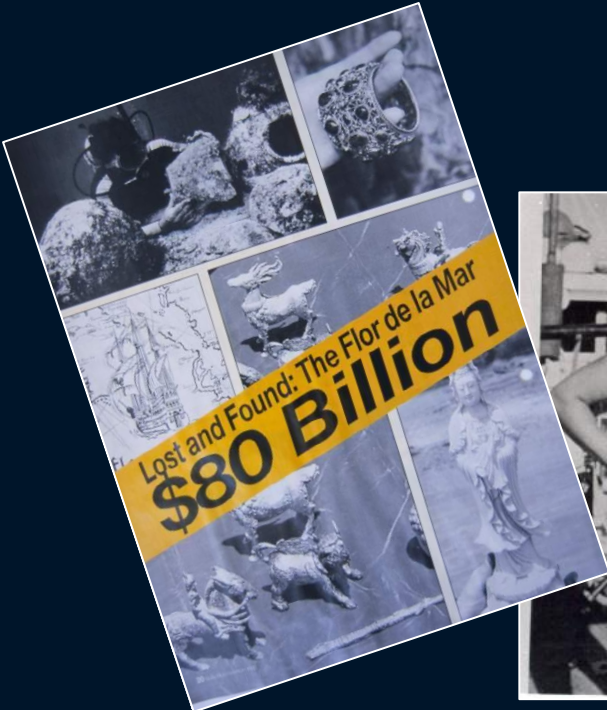
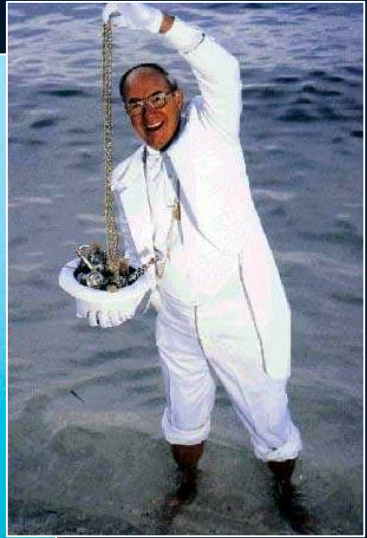
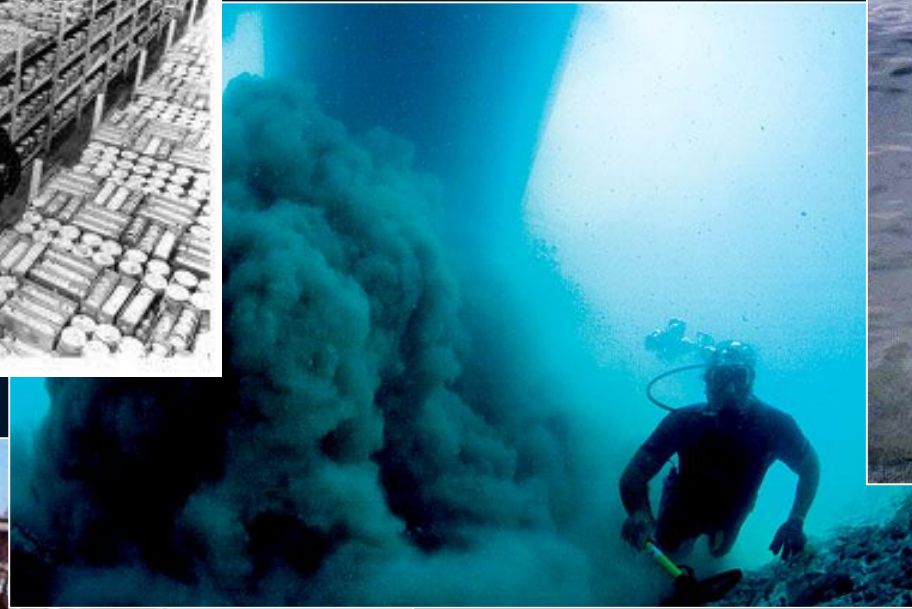
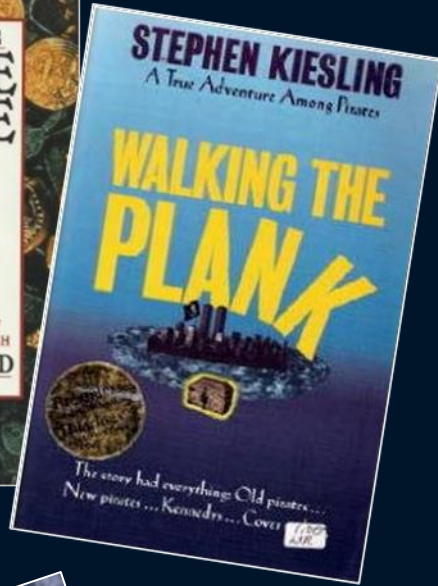
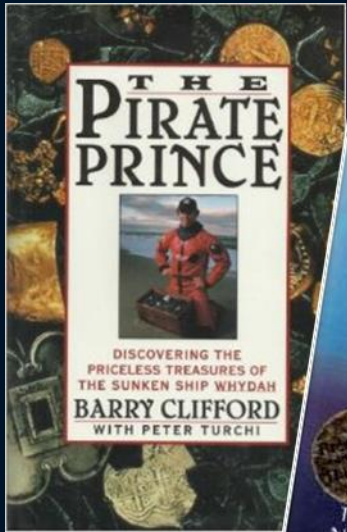
All that survived  
from an early  
16<sup>th</sup> century  
Portuguese  
shipwreck in  
Madagascar.



# ...treasure hunting,









...and archaeology.





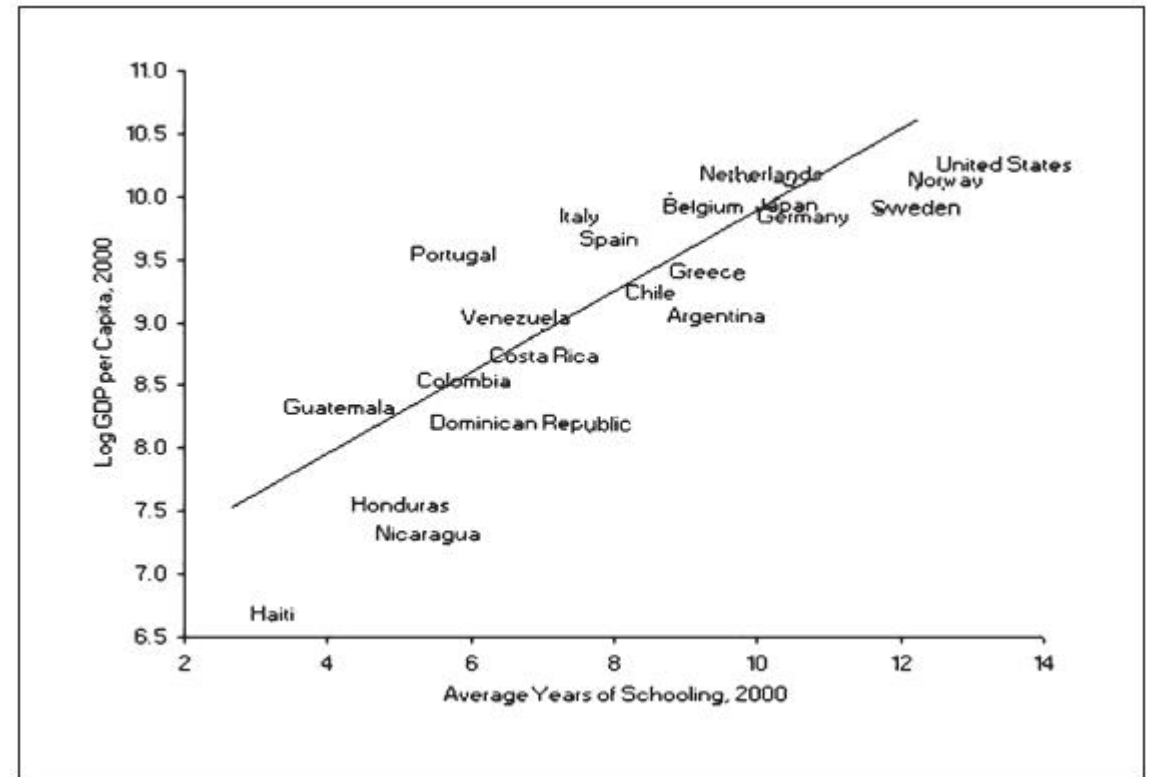


Archaeologists publish less than 25% of the sites they dig (destroy).



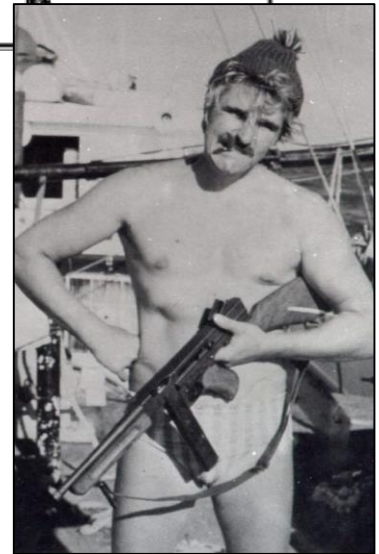
# Why study and preserve the cultural heritage?

**I. Educated societies (with large middle classes) are stronger, healthier, and smarter.**





Treasure hunting is the privatization of the underwater cultural heritage.



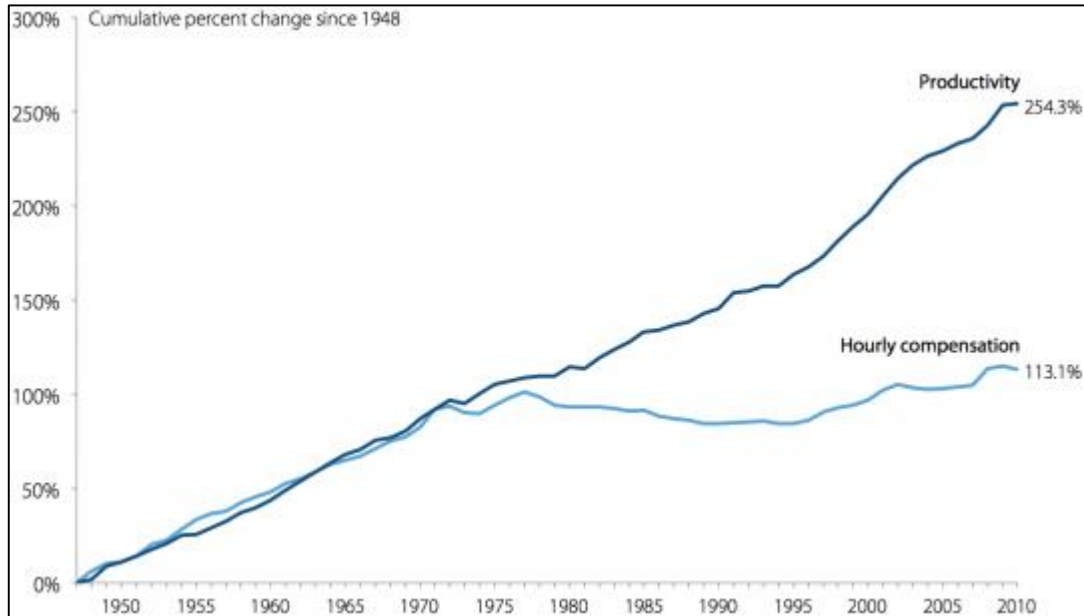


It is a consequence of inequality and lack of democratic values.

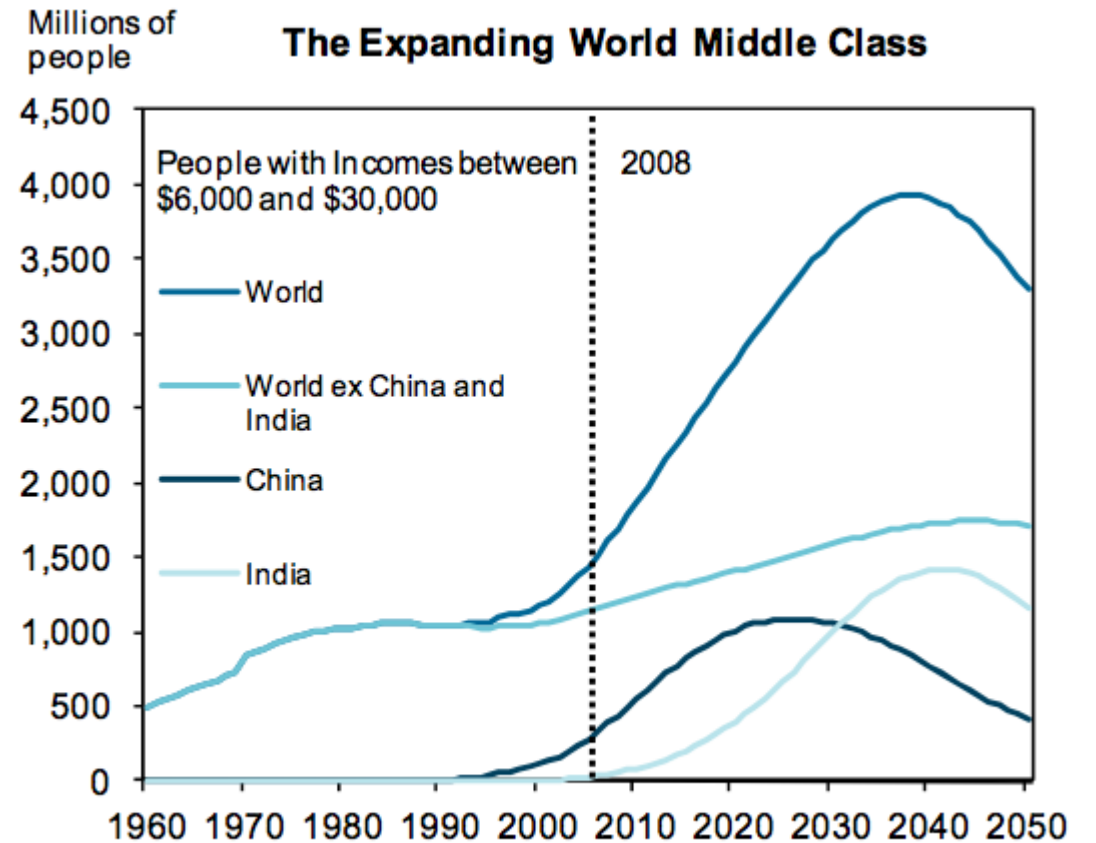




While middle classes are being eroded in the west, they are **growing globally**.



Productivity and Hourly compensation (US)



Source: Goldman Sachs





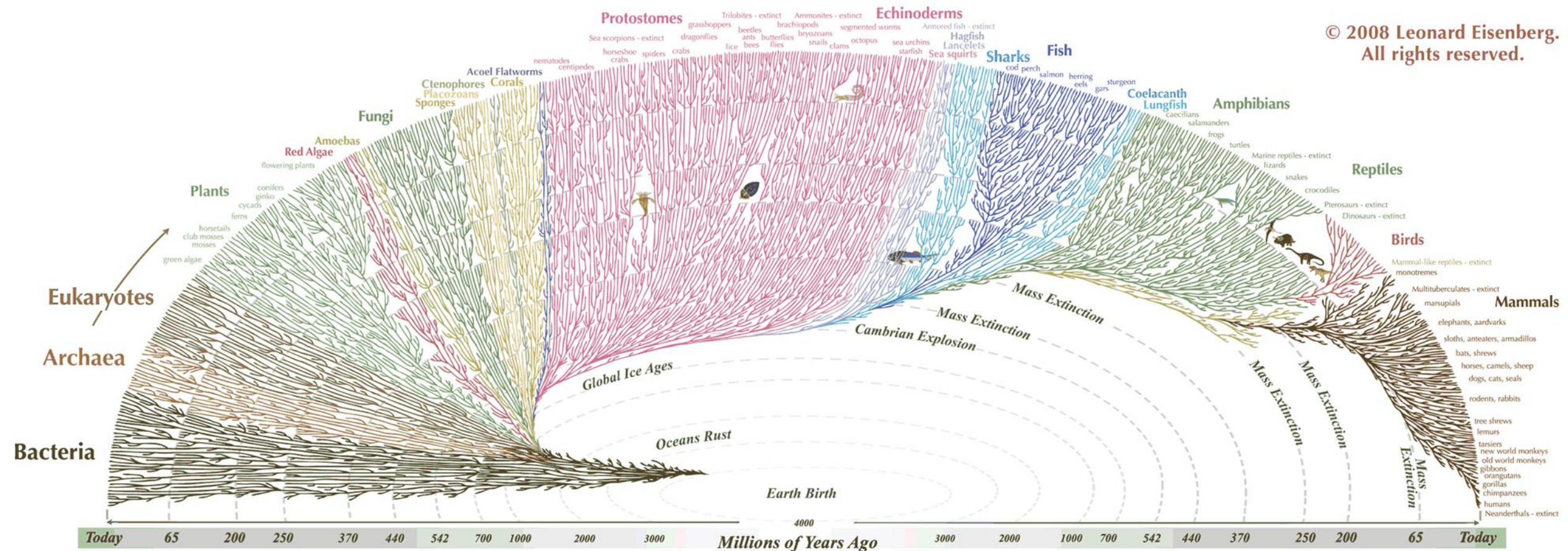
And middle classes are the consumers of cultural productions: libraries, museums, concert halls, orchestras, opera houses, literary magazines, books...



# Why preserve the cultural heritage?

II. “You can’t do much carpentry with your bare hands, and you can’t do much thinking with your bare brain.”

*Daniel Dennett’s student Bo Dahlbom.*



All the major and many of the minor living branches of life are shown on this diagram, but only a few of those that have gone extinct are shown. Example: Dinosaurs - extinct

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evogeneao.com



# Why preserve the cultural heritage?

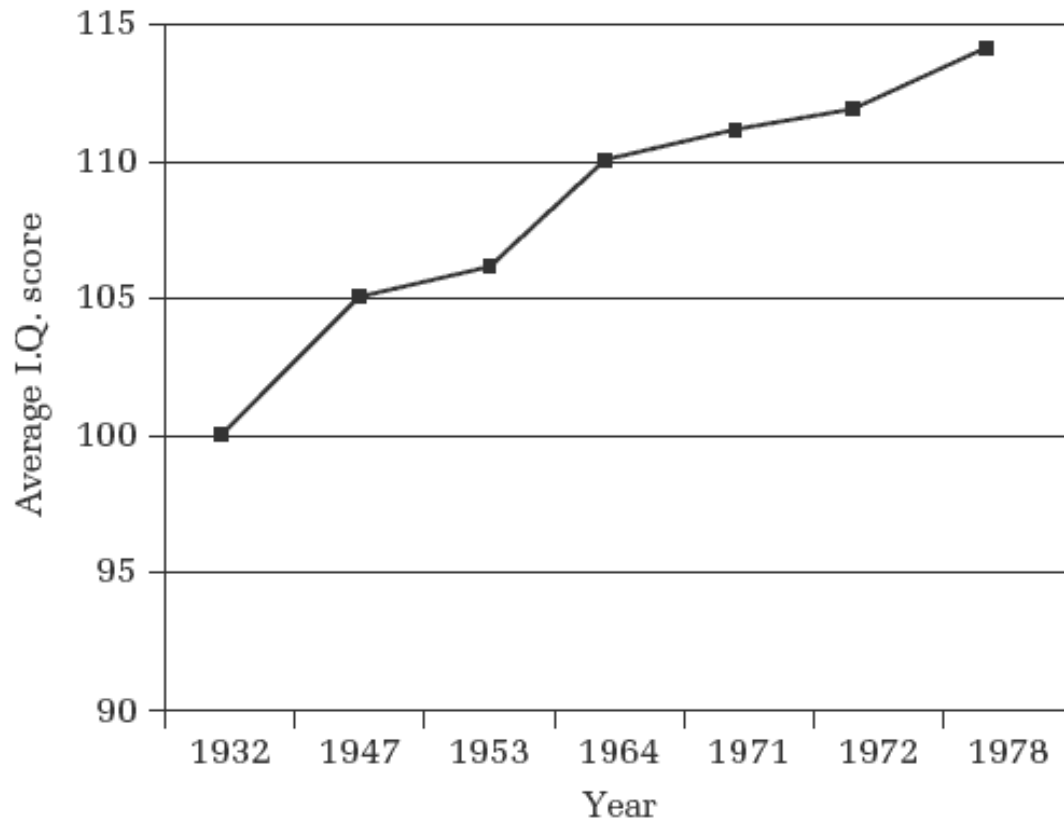
**...you can't do much thinking with your bare brain."**


***Bo Dahlbom.***

The Cultural Heritage is  
a powerful source of  
thinking tools!

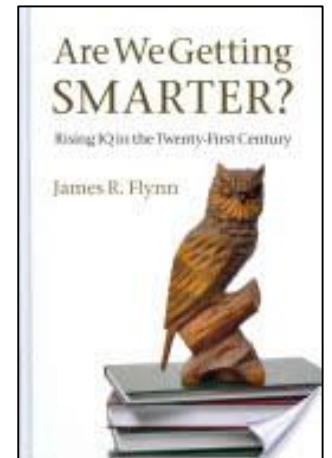


# History is a source of wisdom, or it is nothing!



 **FIGURE 5:** This graph shows IQ score gains between 1932 and 1978 in the United States. The “Flynn effect” is strong evidence that the environment has a powerful impact on intelligence, because geneticists agree that the gene pool could not change rapidly enough to account for this change in IQ.

James Flynn demonstrated that, with *exactly the same bare brains*, statistically we score much higher today in IQ tests that we did 80 years ago.





Daniel Dennett contends that thinking tools (and intuition pumps) are apps that we upload to our necktops.





# Why preserve the cultural heritage?

**III. Cultural identity ensures some diversity in the globalized world.**

**Diverse  
societies are  
smarter.**





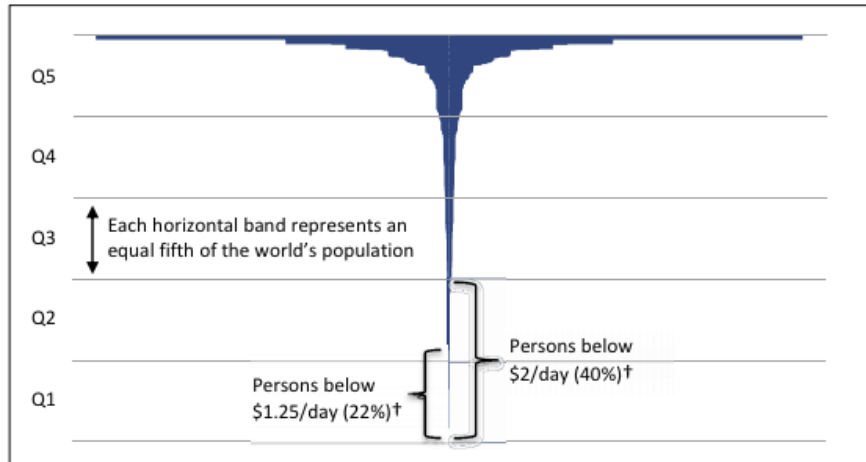




# Ideas and publics

In the West there is pressure to **reduce public funding** for research and **cut taxes** on the wealthier.

Figure 7. Global Income Distributed by Percentiles of the Population in 2007  
(or latest available) in PPP constant 2005 international dollars\*



US House 'Science, Space and Technology Committee' Chairman Lamar Smith (R-TX) is skeptical of the value of **taxpayer-supported research**.





This trend is not equal around the world. For instance, America advocates **small government** and **deregulated capitalism**; Europe defends that a society dominated by the markets **offers less individual and social options**.

William Osborne, composer, 2004, "Marketplace of Ideas: but first, the Bill," *Arts Journal*.



Paris is famous for its large and widely advertised budget public projects (left Louvre and right Quai d'Orsay). This policy was criticized on an ideological basis, not economic: eg. **Fumaroli vs. Jack Lang**.



**Taxes & Subsidies:** *“Germany’s public arts funding, for example, allows the country to have **23 times** more full-time symphony orchestras per capita than the United States, and approximately **28 times** more full-time opera houses.”*

William Osborne, 2004



**Democracy problem:** the production of one hour of opera may cost more than most people can afford.



Europeans tend to see society as an organism that cannot survive without intellectual elites.



Matt Ridley **TED Talk** *When ideas have sex*

Recruiting, training, and stimulating intellectual elites requires public funding (e.g. taxpayer-supported research).



We build things from the top down. We need intellectual elites.  
And they need culture, history, art, philosophy...





Europeans try to regulate capitalism because they believe that it destroys traditional culture and ways of living; that it is a leveling force that makes the world **homogenous**.







Capitalism may  
breed alienation,  
uniformity and  
conformism.







Ray Kroc, one of the founders of McDonald's, (...) angered by some of his franchises: “*We have found out ... that we cannot trust some people who are nonconformists. We will make conformists out of them in a hurry. ... The organization cannot trust the individual; the individual must trust the organization.*” The very nature of a **mass market** is **conformity** in both product and customer.

William Osborne, composer, 2004, “Marketplace of Ideas: but first, the Bill,” *Arts Journal*.



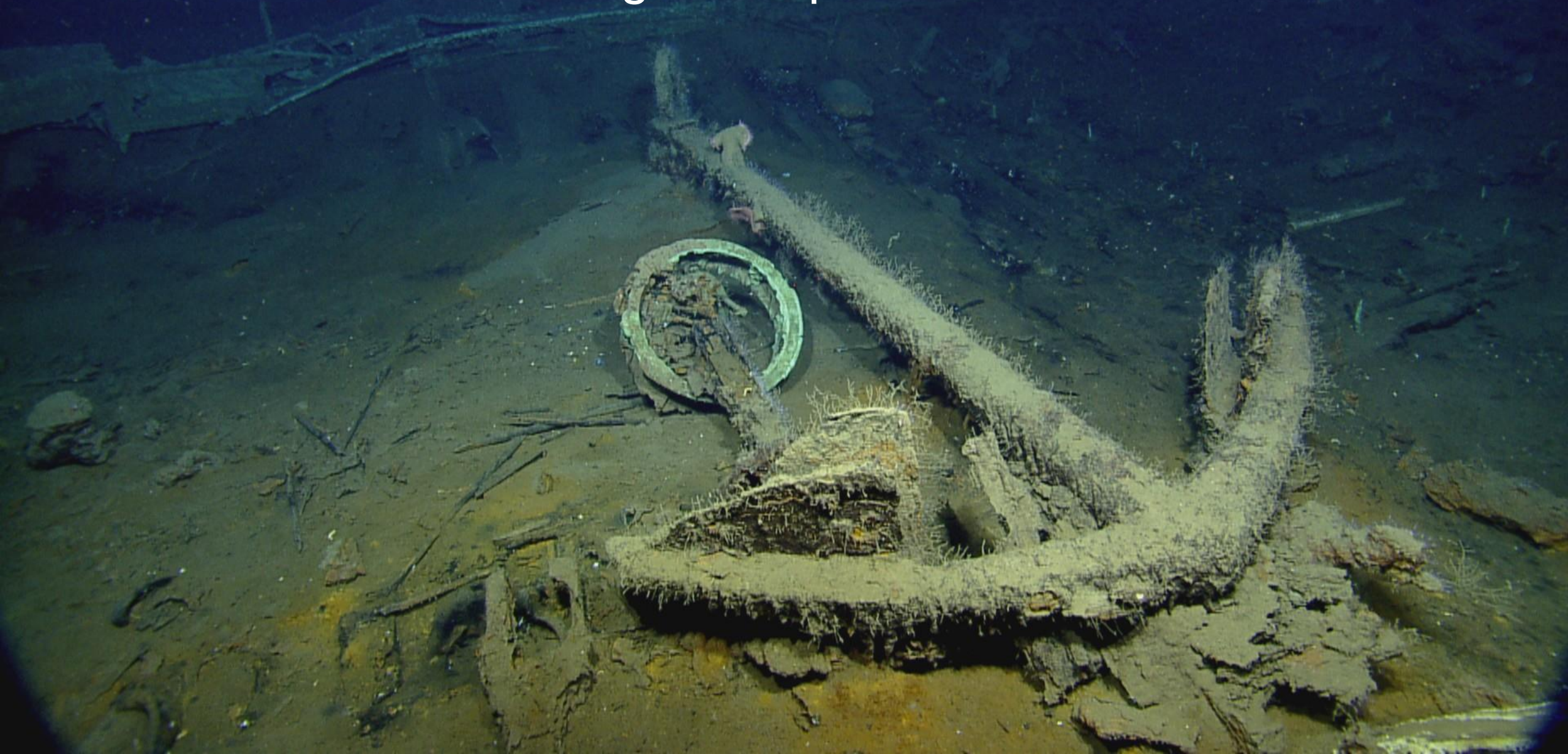
2014: lines for iPhone 6



2014: lines for iPhone 6



# The value of archaeological ship remains

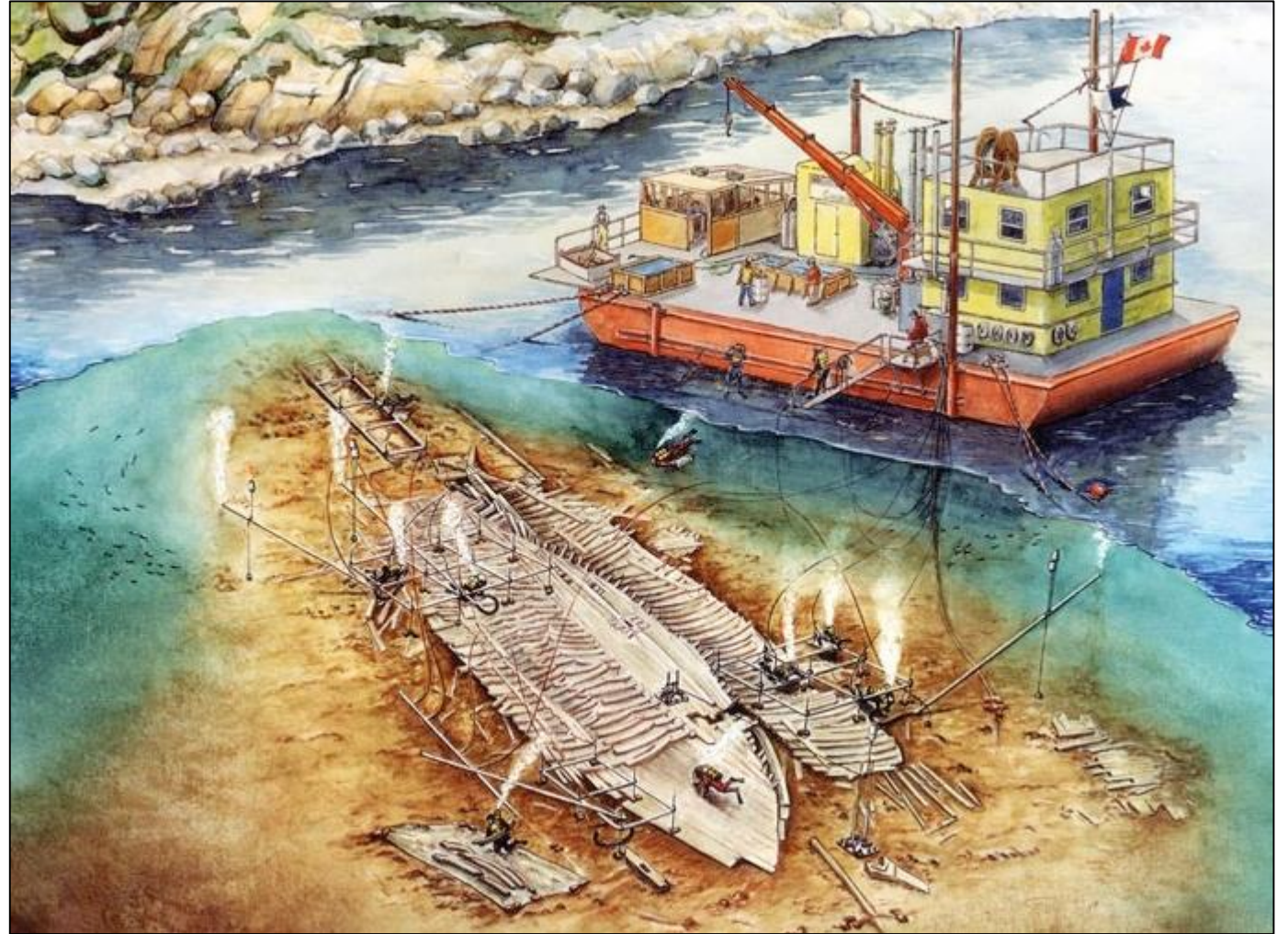




# To be or not to be intrusive

**I. Research excavations:**  
carried out to study, understand  
the past, and answer research  
questions.

*San Juan* (1565) shipwreck,  
excavated by Parks Canada.





# To be or not to be intrusive.

**II. Emergency excavations:**  
carried out to save and rescue  
what can be saved and rescued  
from destruction by contractors  
and developers.

Newport Ship, saved by the  
City of Newport.

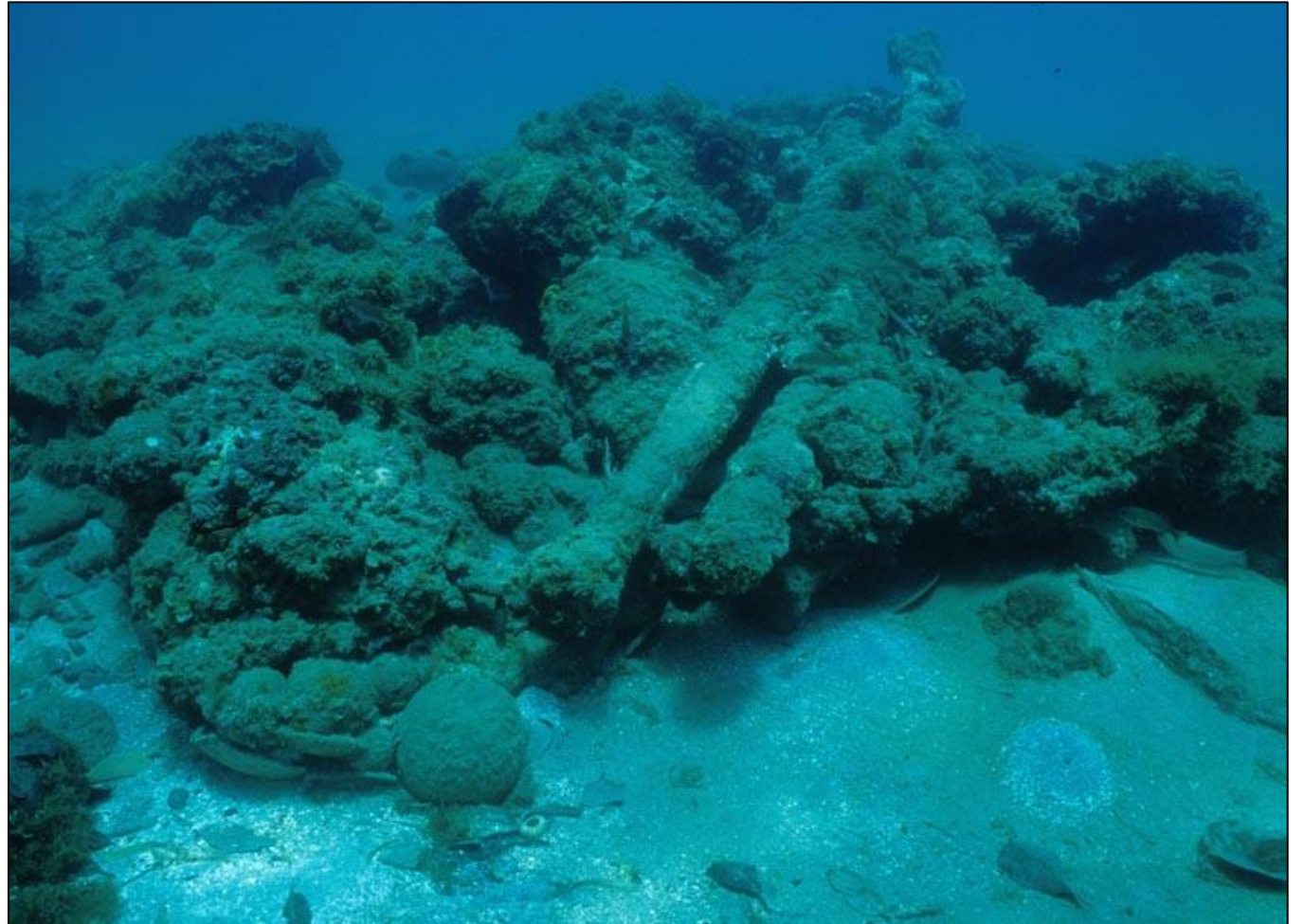




# To be or not to be intrusive

**III. Assessments:** carried out on sites that have been destroyed, for instance, by treasure hunters.

Playa Damas shipwreck, repeatedly salvaged by treasure hunters.

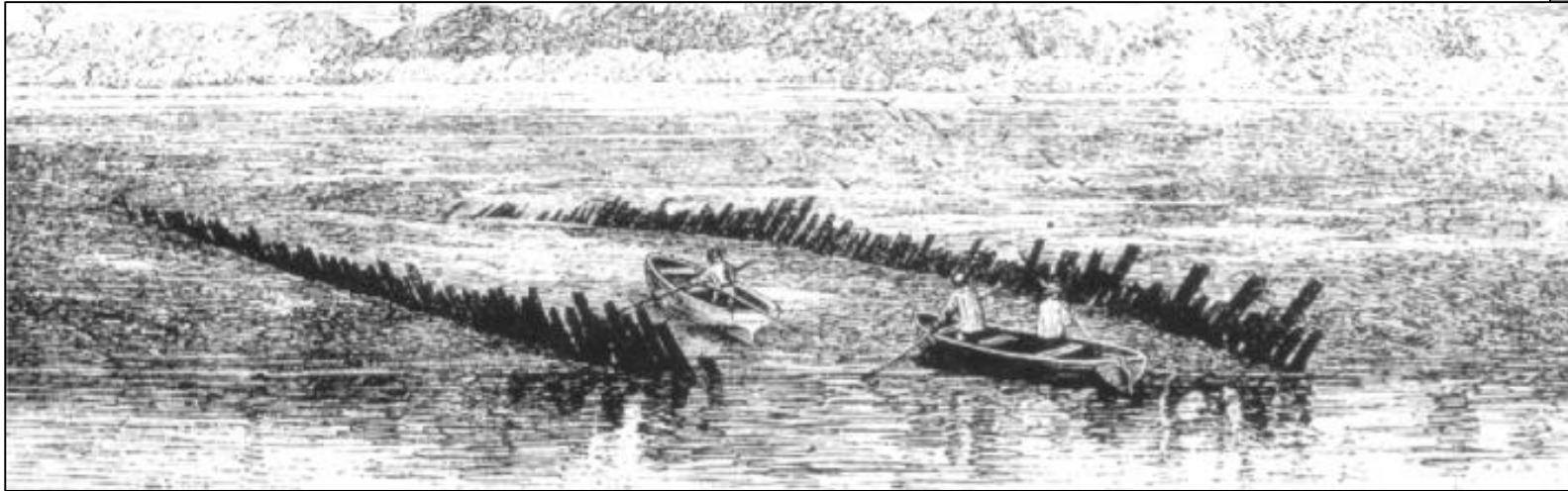




# To be or not to be intrusive

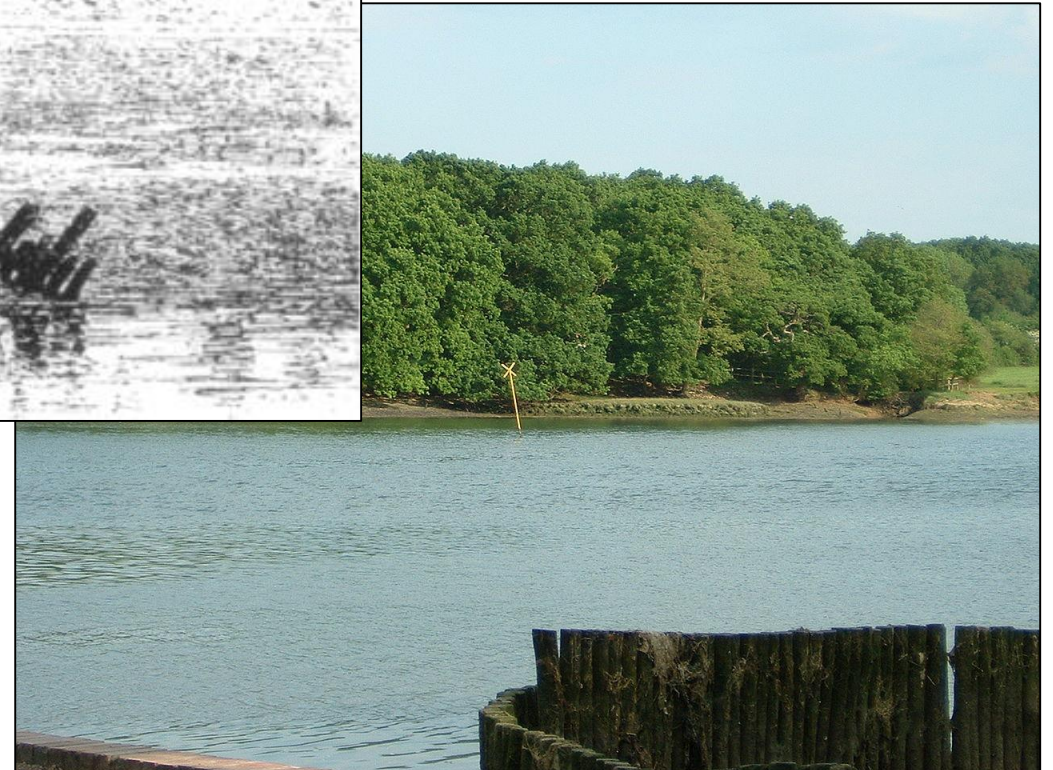
**IV. Conservation in situ:** when sites are preserved for posterity.

*Grace Dieu*: reconstruction of what it may have looked like in the 1420s.



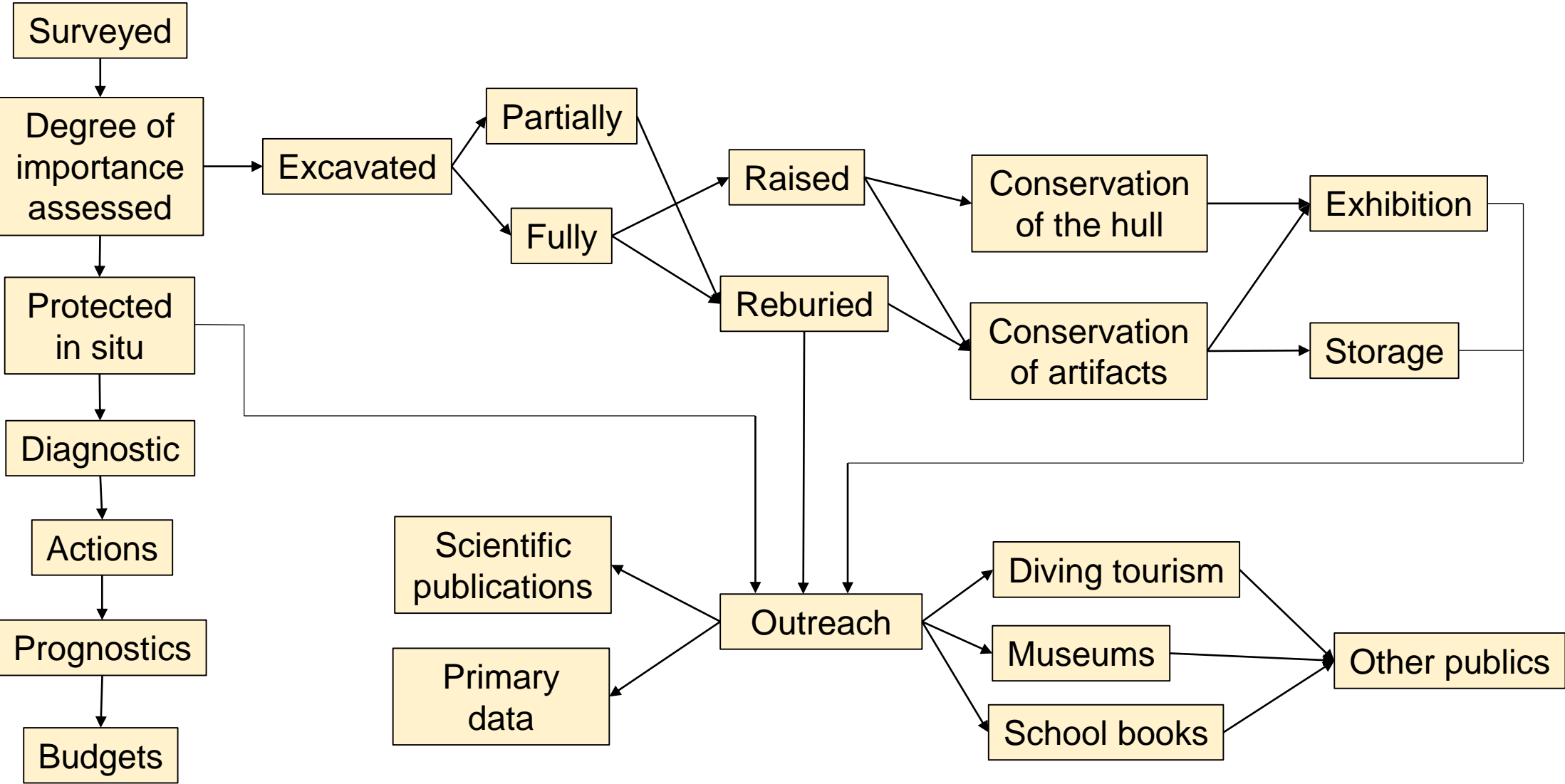
In the early 20<sup>th</sup> century.

Today.





# Outreach

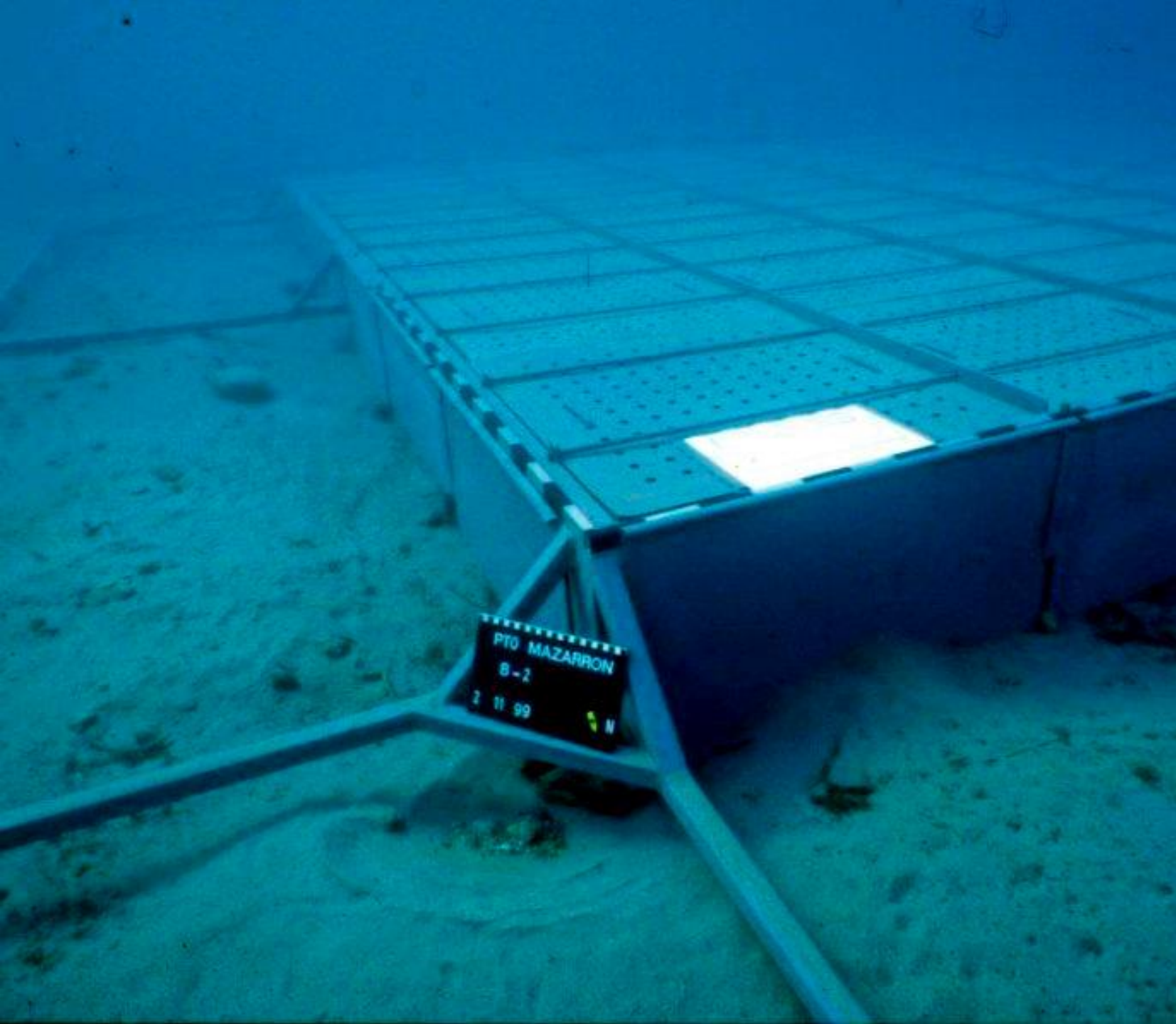




Preservation in situ (is not forever)













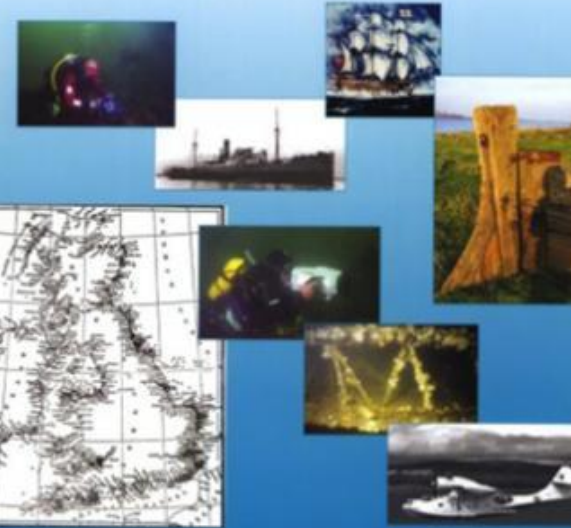
# Archaeological diving parks





## Ships' Timbers interest in the Flying Foam The Nautical Archaeology Society - *Adopt a Wreck Scheme* -

Looking for a new project?  
**Adopt a Wreck**



Investigations can be through drawing, photography, wreck survey, biological survey, or historical research. In 2013, Ships' Timbers *Adopted* the Flying Foam wreck under the NAS Adopt a Wreck Scheme.

Image Above: Flying Foam Wreck February, 2015





# Museums

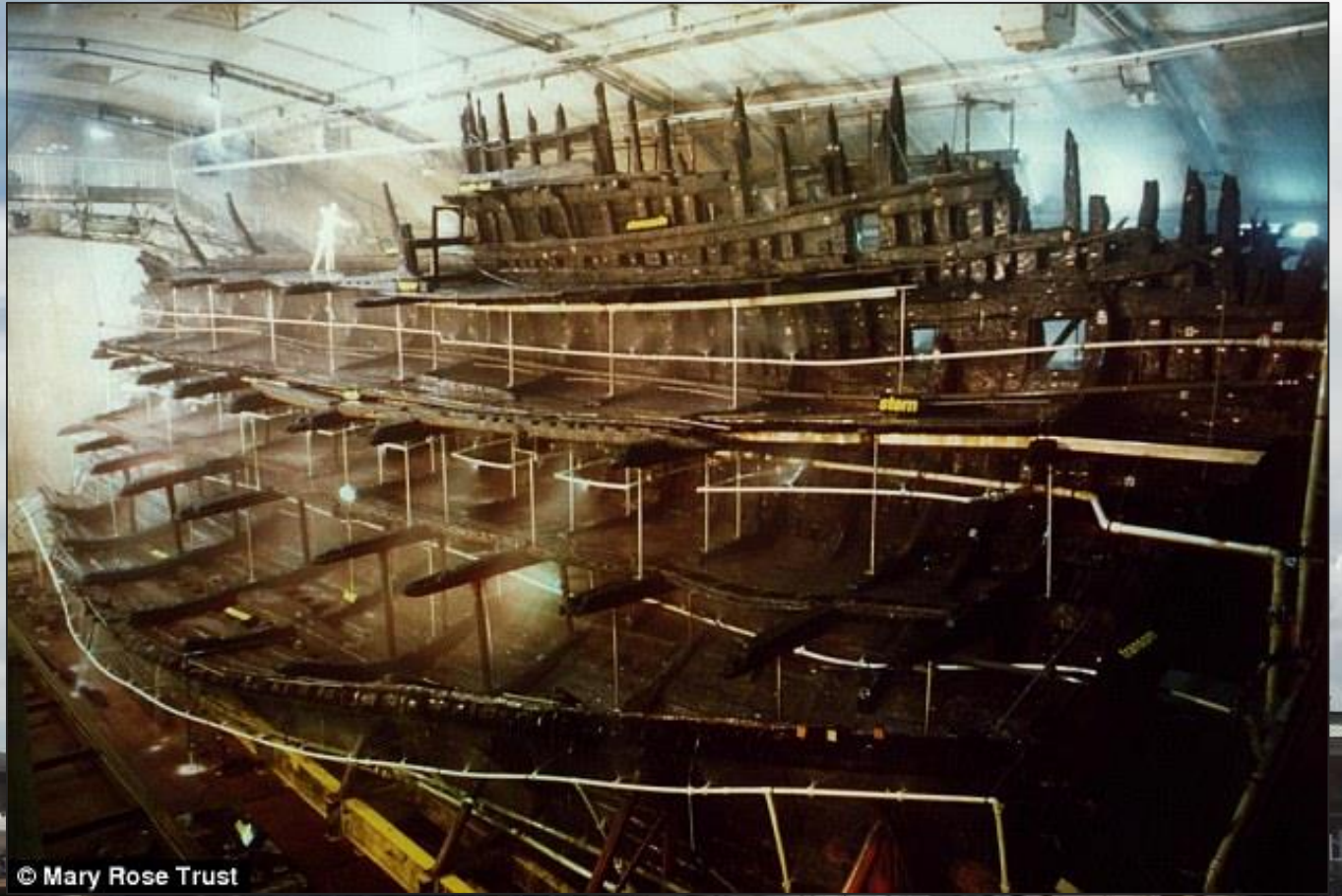
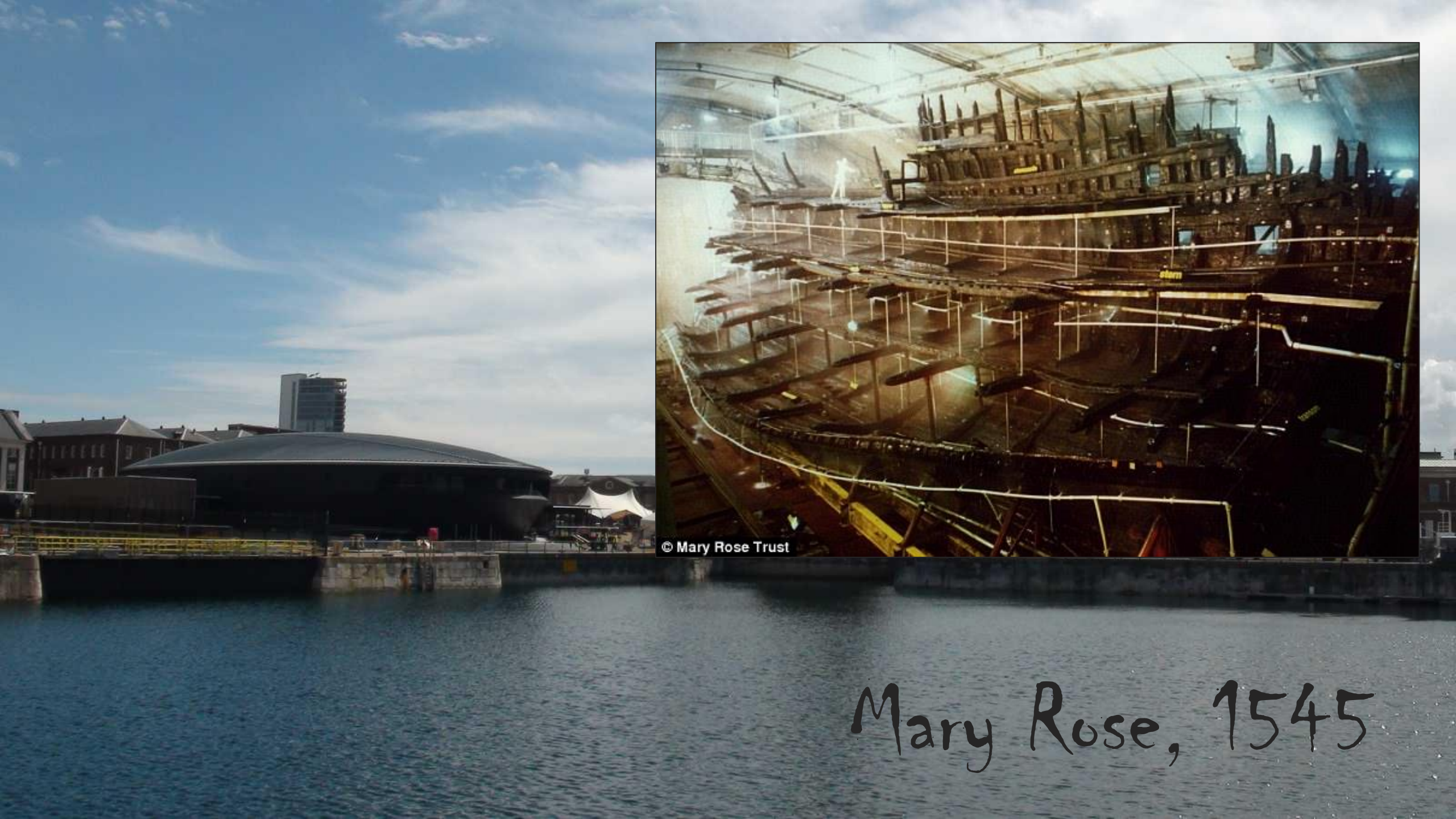






Vasa, 1628





© Mary Rose Trust

Mary Rose, 1545





Viking Ship Museum, Roskilde





Bodrum Museum  
Turkey





Belle, 1686



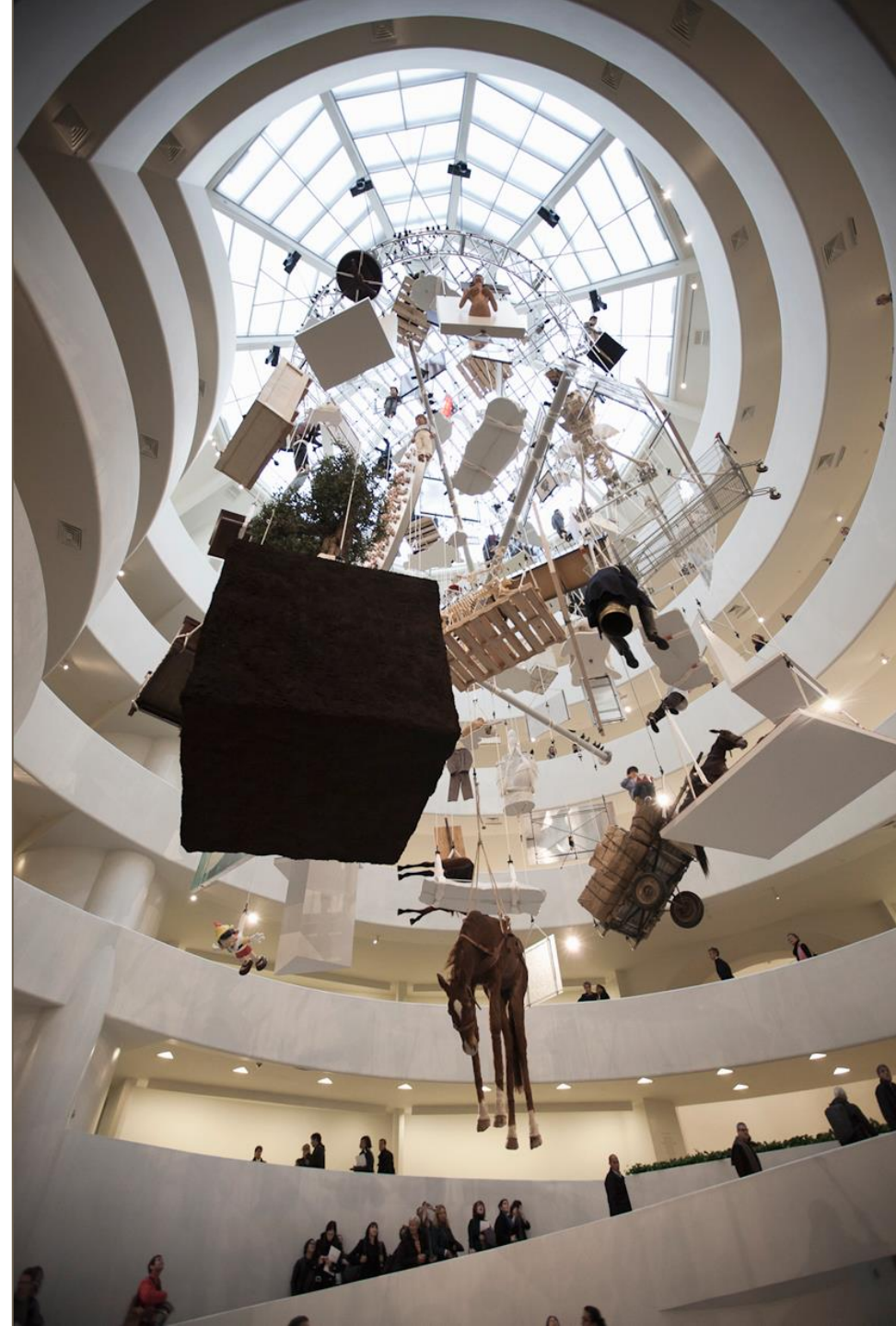
# Problems:

1. Often shipwreck timbers are ugly and not interesting to the public;
2. It is difficult to design a museum that attracts the same public regularly;
3. The treatment and retreatment of waterlogged wood is expensive.

The answer is **creativity**.







# Trends:

The evolution of ideas is wasteful and feeds on the chaos and randomness of brainstorming. **Creativity** has always been a part of archaeological thought, and images are less secret than 20 years ago. A lot must still be done regarding copyright restrictions (fair use) to the use of archaeological images. **Art** is a solution for the promotion and interpretation of archaeological data.



**Trends:** We can safely say that technology is changing everything, including museums





# School books & interactive sites





# Publications

Primary data

Reports

Peer Reviewed Papers

Books

Documentaries

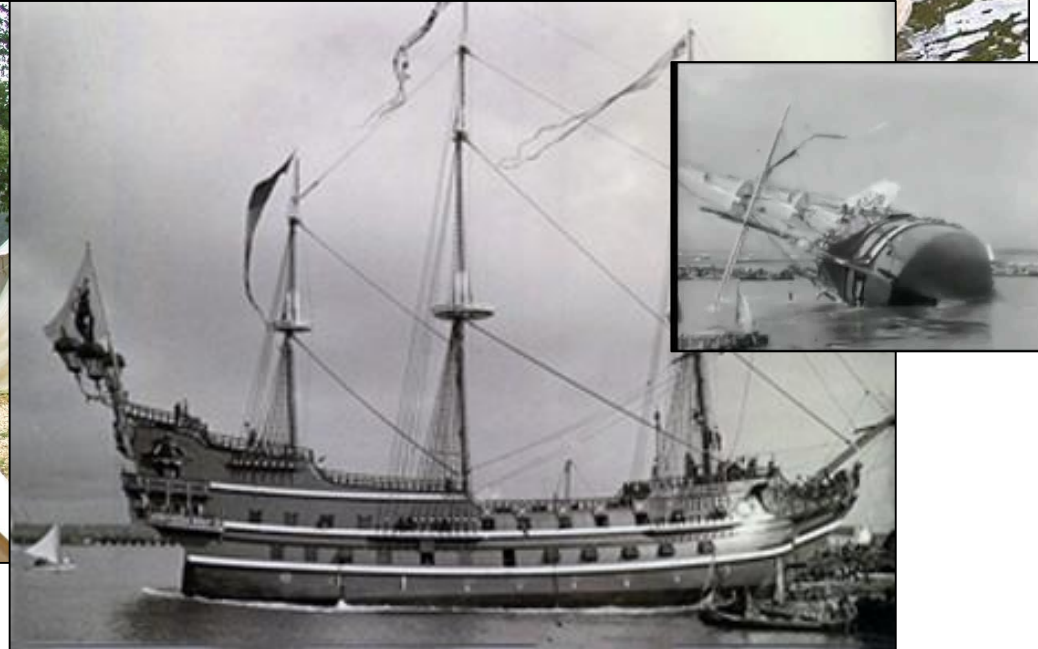
Magazines

The screenshot shows the Academia.edu website interface. At the top, there's a navigation bar with the 'ACADEMIA' logo, a search bar, and links for HOME, ANALYTICS, SESSIONS, and UPLOAD PAPERS. Below the navigation bar, the main content area displays a feed of publications. The first publication is bookmarked by Jessi Halligan and titled 'Abrupt warming events drove Late Pleistocene Holarctic megafaunal turnover'. The second publication is bookmarked by Sergius Rutheniensis and titled 'Александр Пиперски. Остаточные региолектные явления в языке трёх поколений одной семьи'. The third publication is recommended by Hendrik Van Gijseghem and titled 'Becoming Binford: Fun ways of teaching archaeological theory and method'. On the right side, there's a 'RECOMMEND TO FIELD' section with several recommendations, including 'Men and Horses', 'Volumetric models from 3D point clouds', 'Projet de thèse : l'anthropomorphisme de l'animal', and 'Pour une écocritique interdisciplinaire et engagée'. At the bottom, there's a footer with links for Job Board, About, Press, Blog, People, Terms, Privacy, Copyright, We're Hiring!, Help Center, and Academia ©2015.



# Other publics

Archaeology including increasingly multiple publics and multiple narratives about archaeological remains.







## I. Contract Archaeology

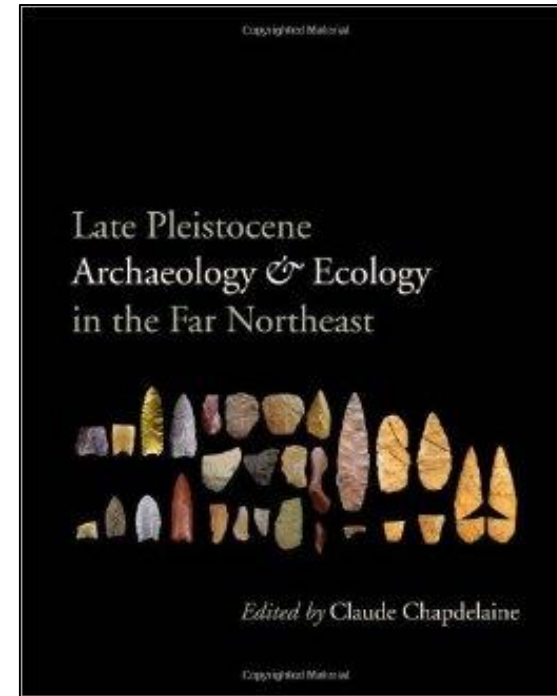
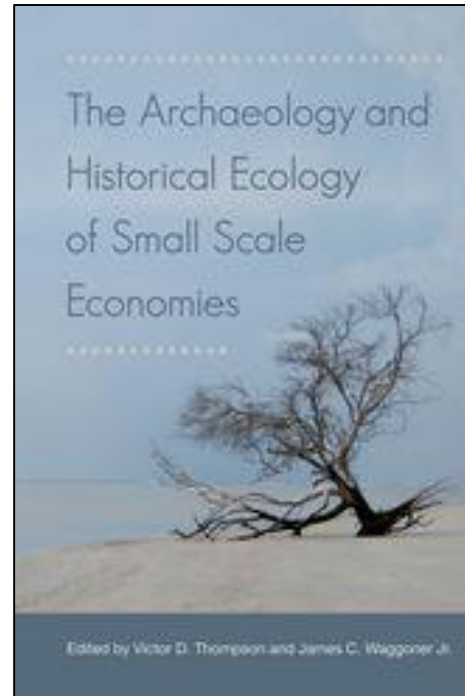
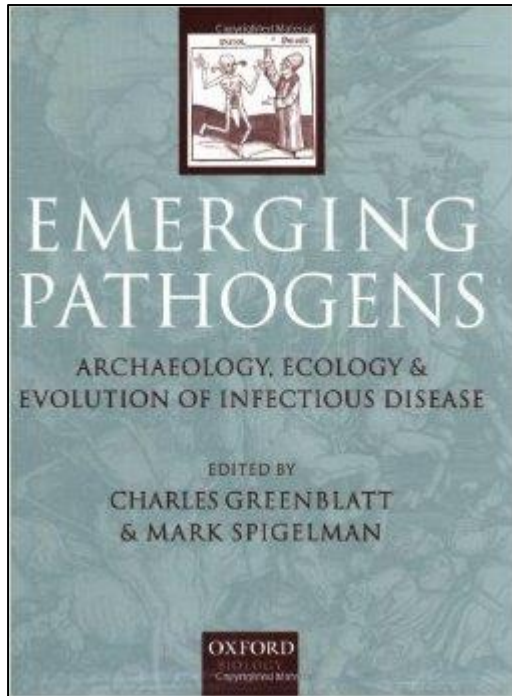
Contract archaeology firms have amazing archives, with large amounts of information that can be analyzed and data mined.



## II. Public Archaeology

Promoting the debate “surrounding archaeological and heritage issues as they relate to the wider world of politics, ethics, government, social questions, education, management, economics and philosophy.”

Wikipedia





### III. Didactic Archaeology



Promoting archaeological sites as learning environments that encourage the public – which includes k-12 students – to ask questions, wide and narrow and research them through archaeology.



## IV. Critical Archaeology

Trying to provoke critical thinking and engage the public on debates on social issues such as power structures, class struggle, or inequality and ecology.





## V. Community Archaeology

Engaging local, descendant, or ideologically related communities in the development of projects around archaeological sites.

Hodder's work at Çatalhöyük





# The internet

Primary data

Reports

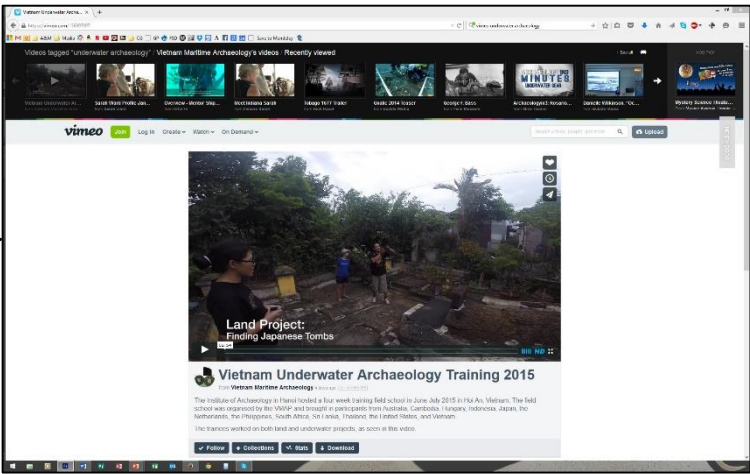
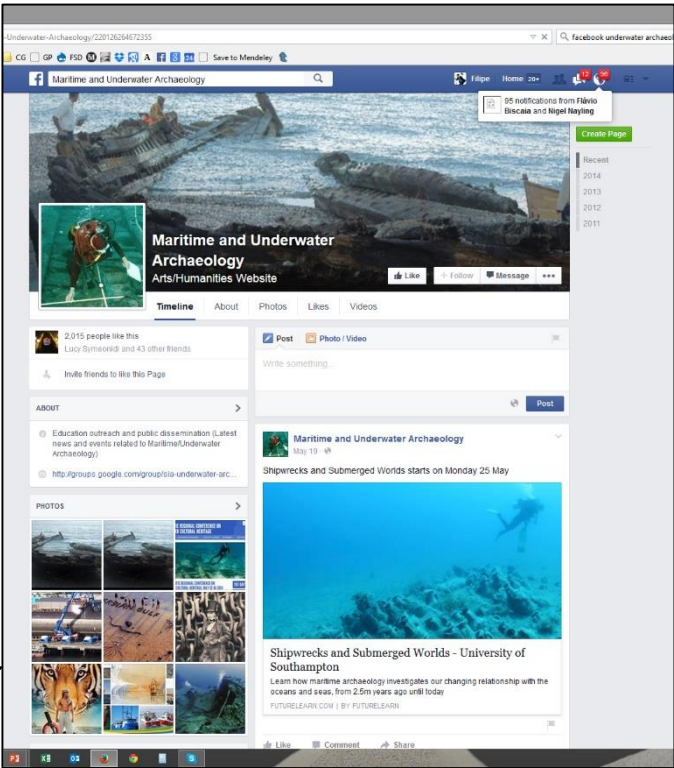
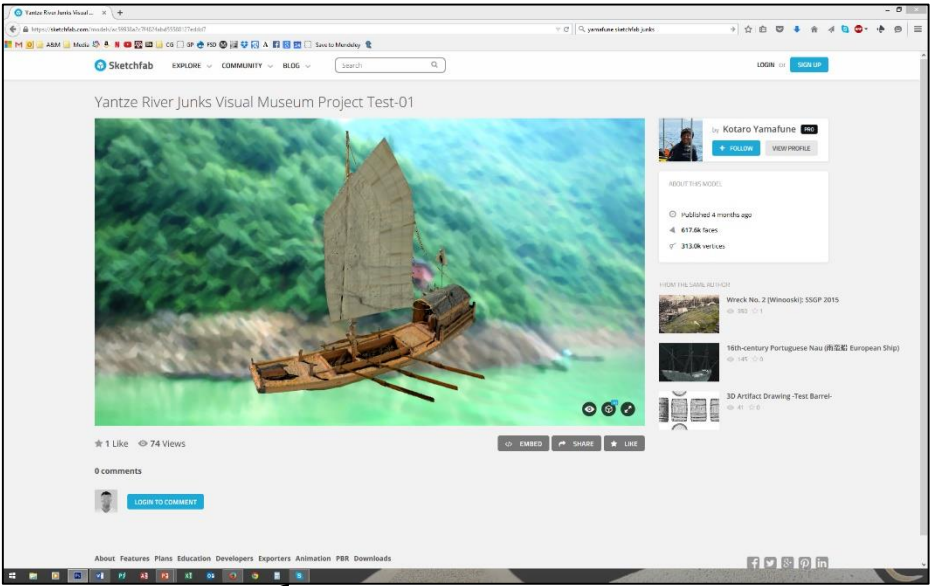
Peer Reviewed Papers

Books

Documentaries

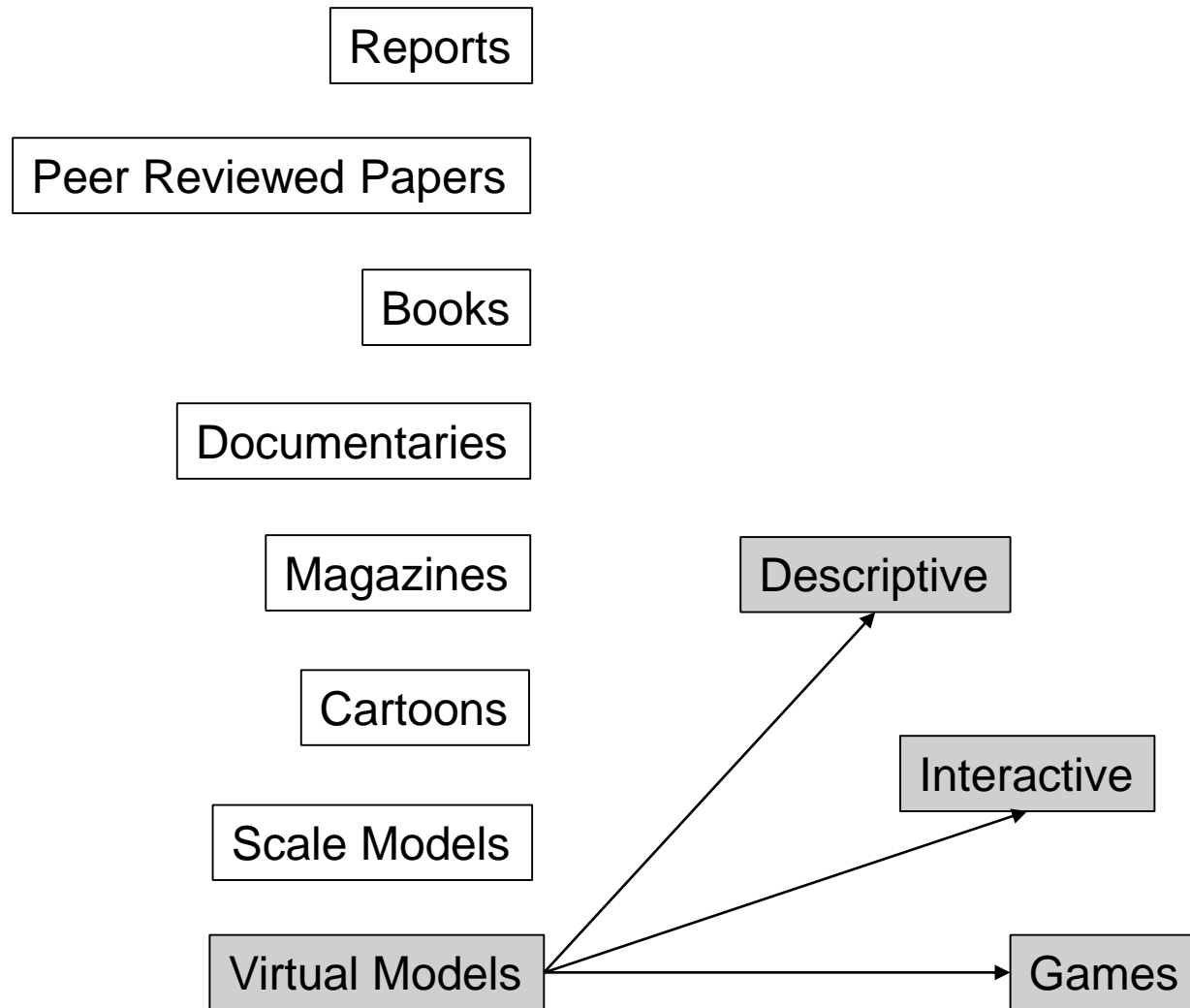
Magazines

The internet





# Reconstruction of past environments



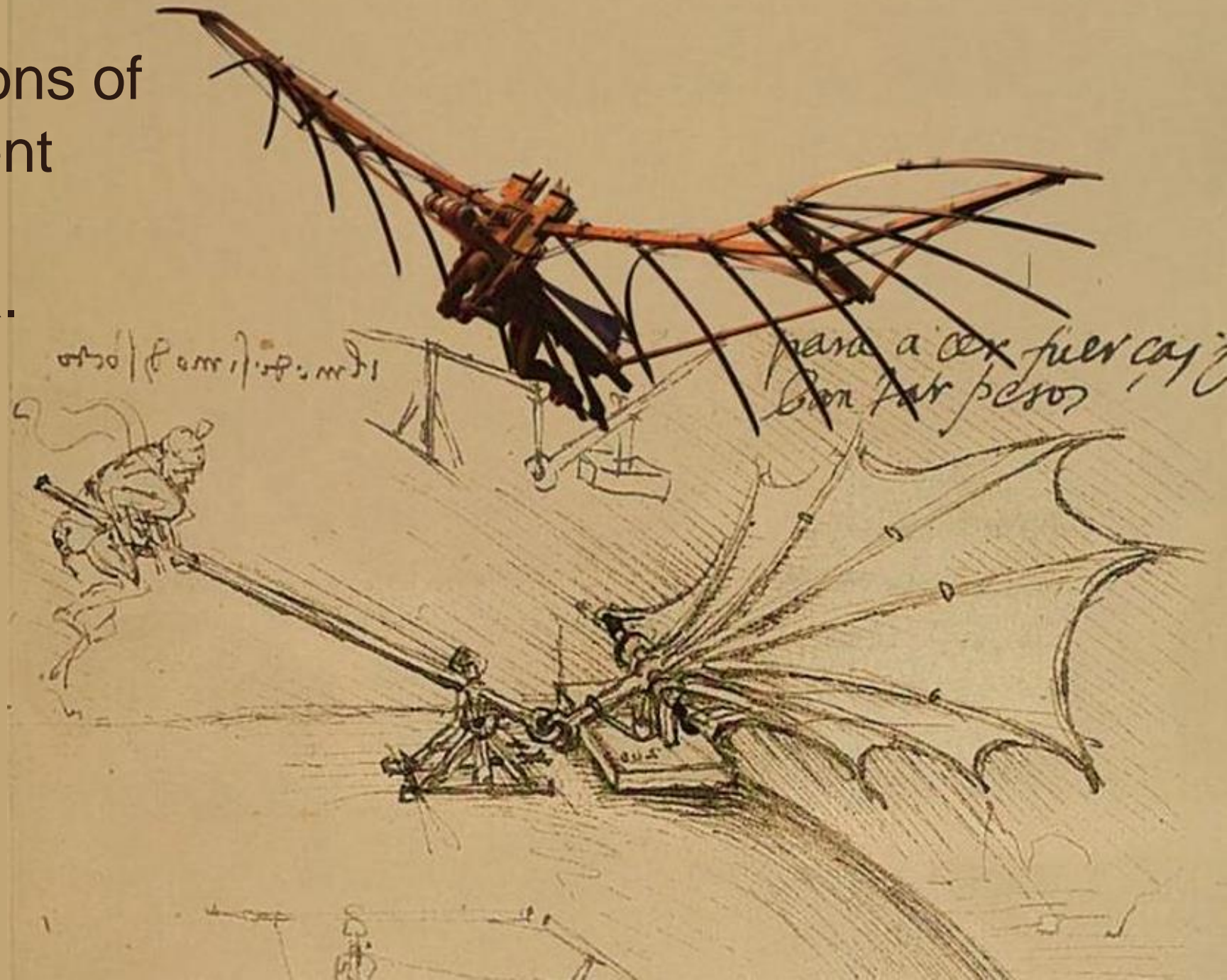


# Reconstructing Historical Environments





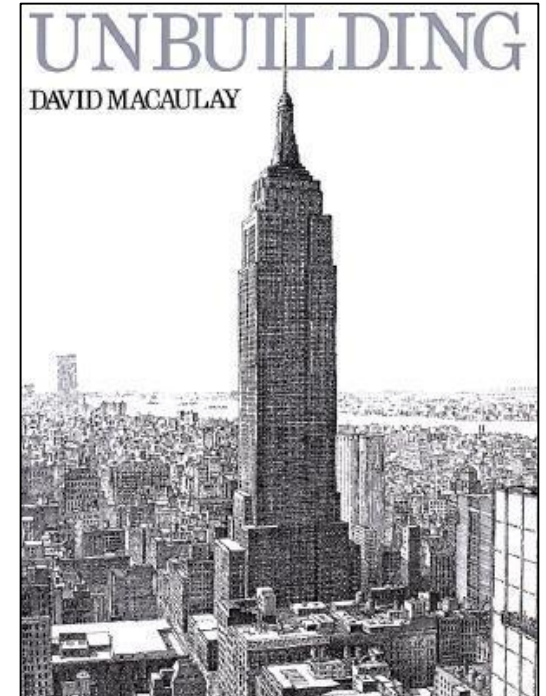
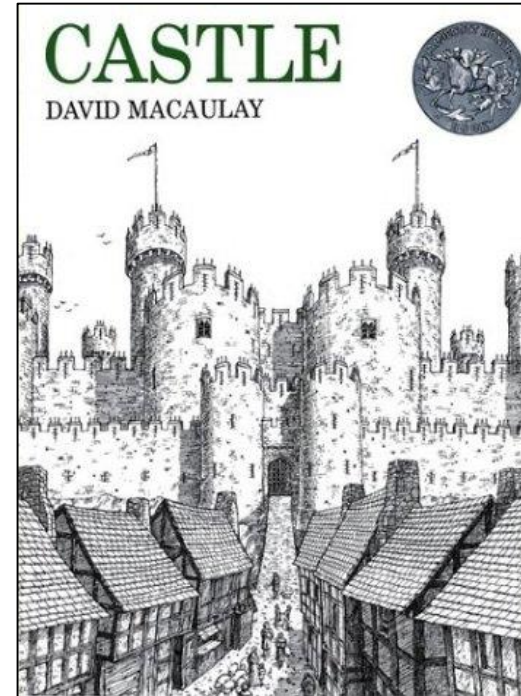
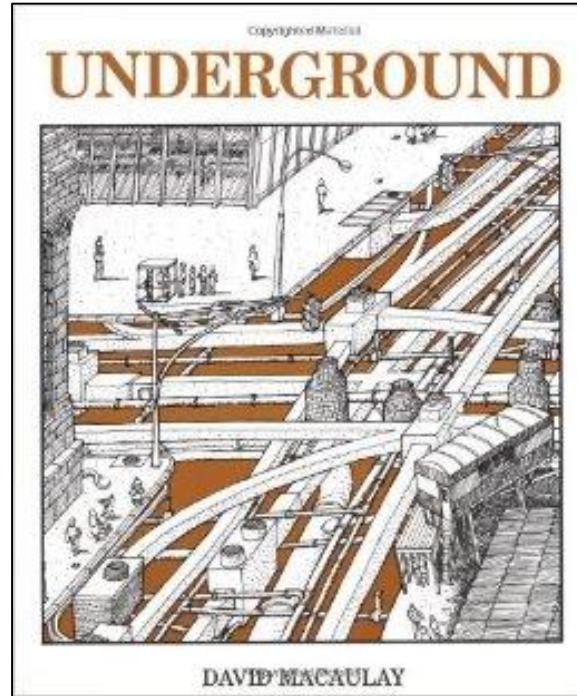
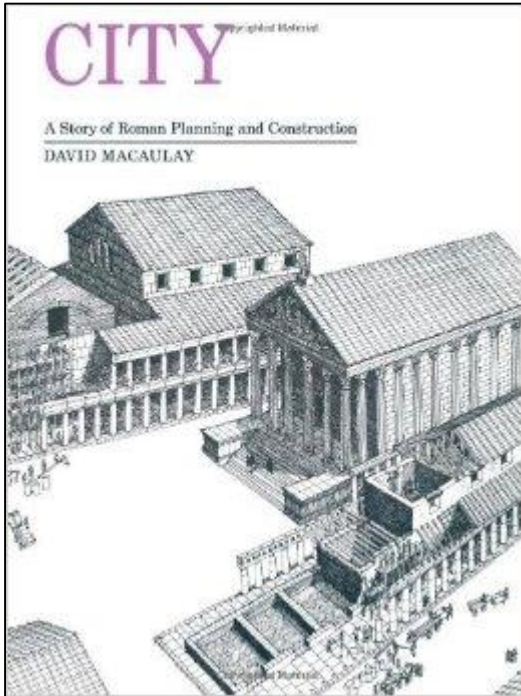
Virtual reconstructions of the past are excellent strategies to share archaeological data.





Different approaches...

# Paper







Reconstructions can be cartoonish, like the Belgium 1960s' Blake and Mortimer adventures...



Spielberg used a lot of these cartoons as sources of inspiration







Tintin



FROM STEVEN SPIELBERG AND PETER JACKSON

★ THE ADVENTURES OF ★  
**TINTIN**  
IN 3D

COLUMBIA PICTURES PRESENTS A STEVEN SPIELBERG PRODUCTION  
BASED ON THE ADVENTURES OF TINTIN BY HERGÉ SCREENPLAY BY STEVEN MOFFAT AND EDGAR WRIGHT & JOE CORNISH DIRECTED BY STEVEN SPIELBERG TINTIN.COM

IN DIGITAL 3D AND IMAX 3D COMING SOON ALSO IN 2D IN SELECTED THEATRES





1/1 Models





# Scale Models





# Digital Models



Pitfalls: reconstructions must be as accurate as possible, and indicate what we know and what we are deducing.

**Anastylosis** (from the Ancient Greek: αναστήλωσις, -εως; ανα, ana = "again", and στηλόω = "to erect (a stela or building)") is [an archaeological term for a reconstruction technique](#) whereby a ruined building or monument is restored using the original architectural elements to the greatest degree possible.







Nobody  
knows if  
this is  
even  
close to  
the  
original.

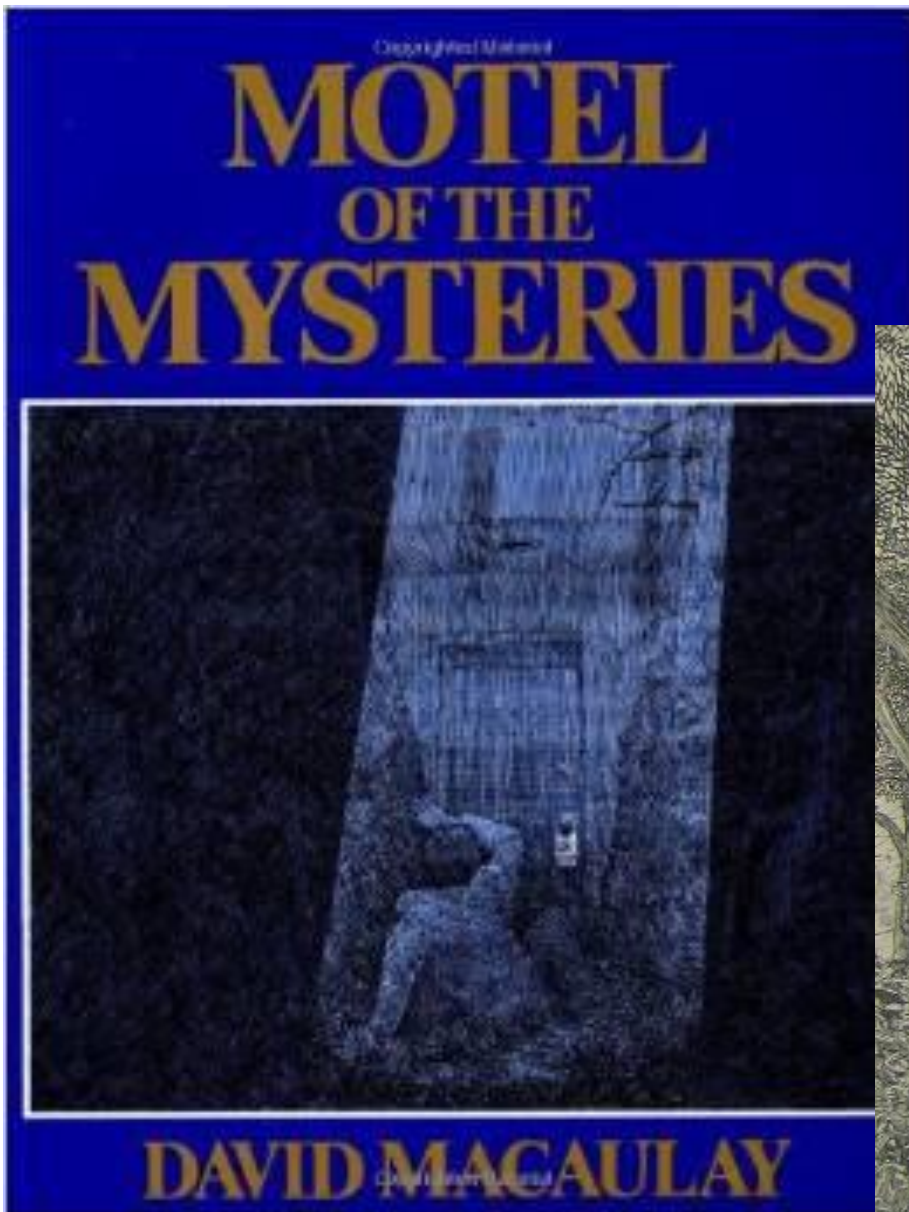


# Pitfalls: cultural bias

Often reconstructions picture men as strong and powerful and women as less important, taking care of children...

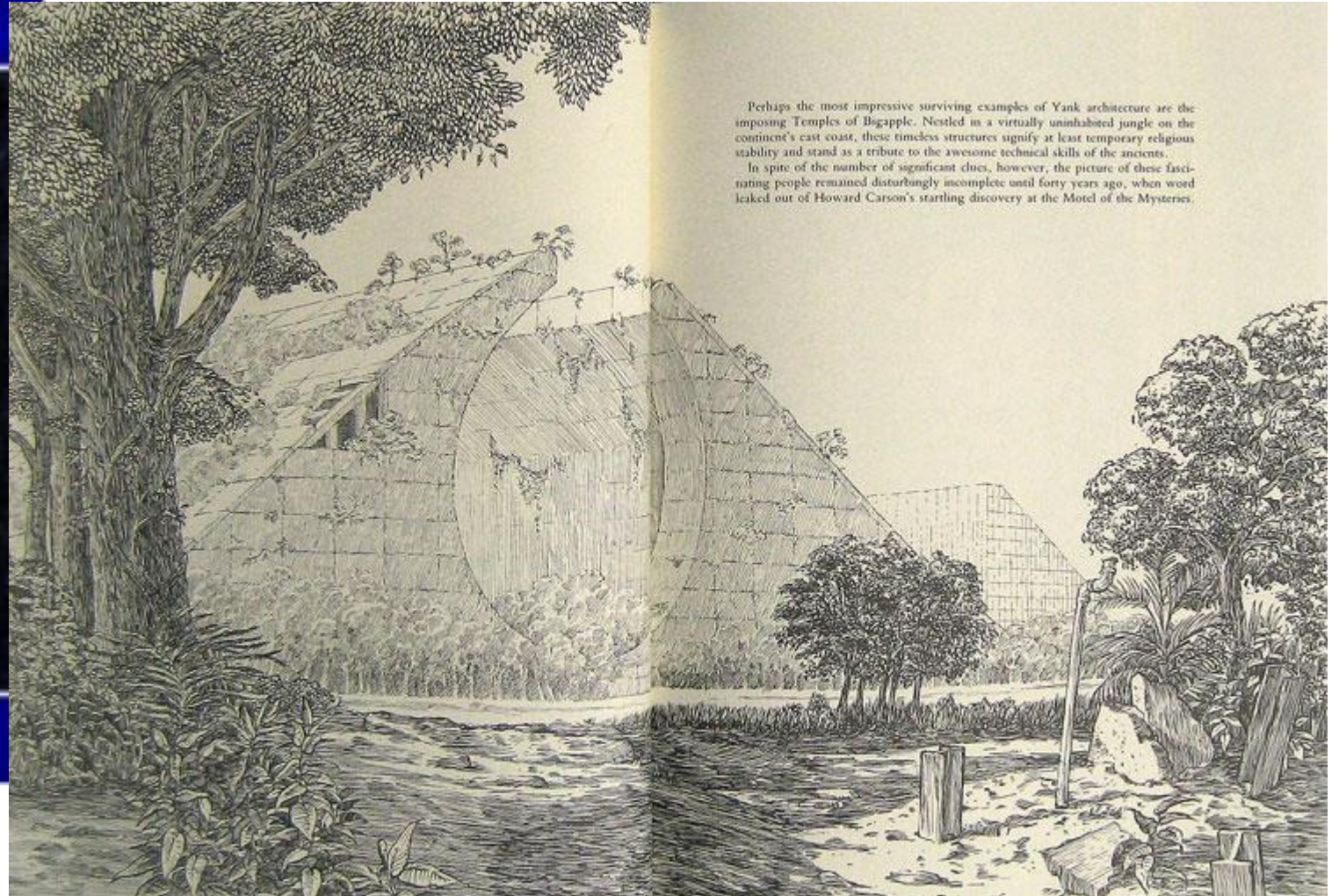






## Pitfalls

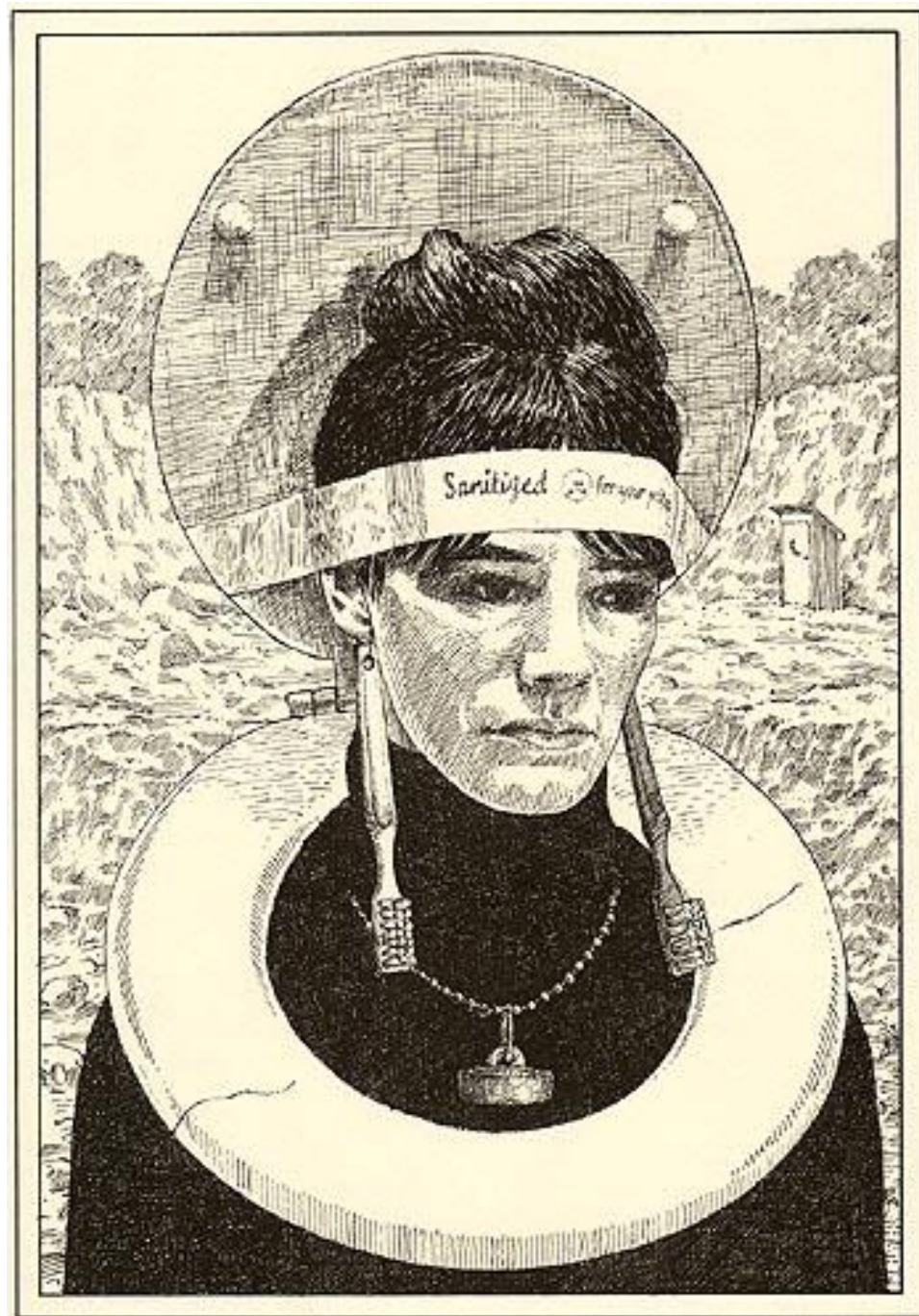
Biased reconstructions







American author David Macaulay made a famous parody about the dangers of overinterpretation...

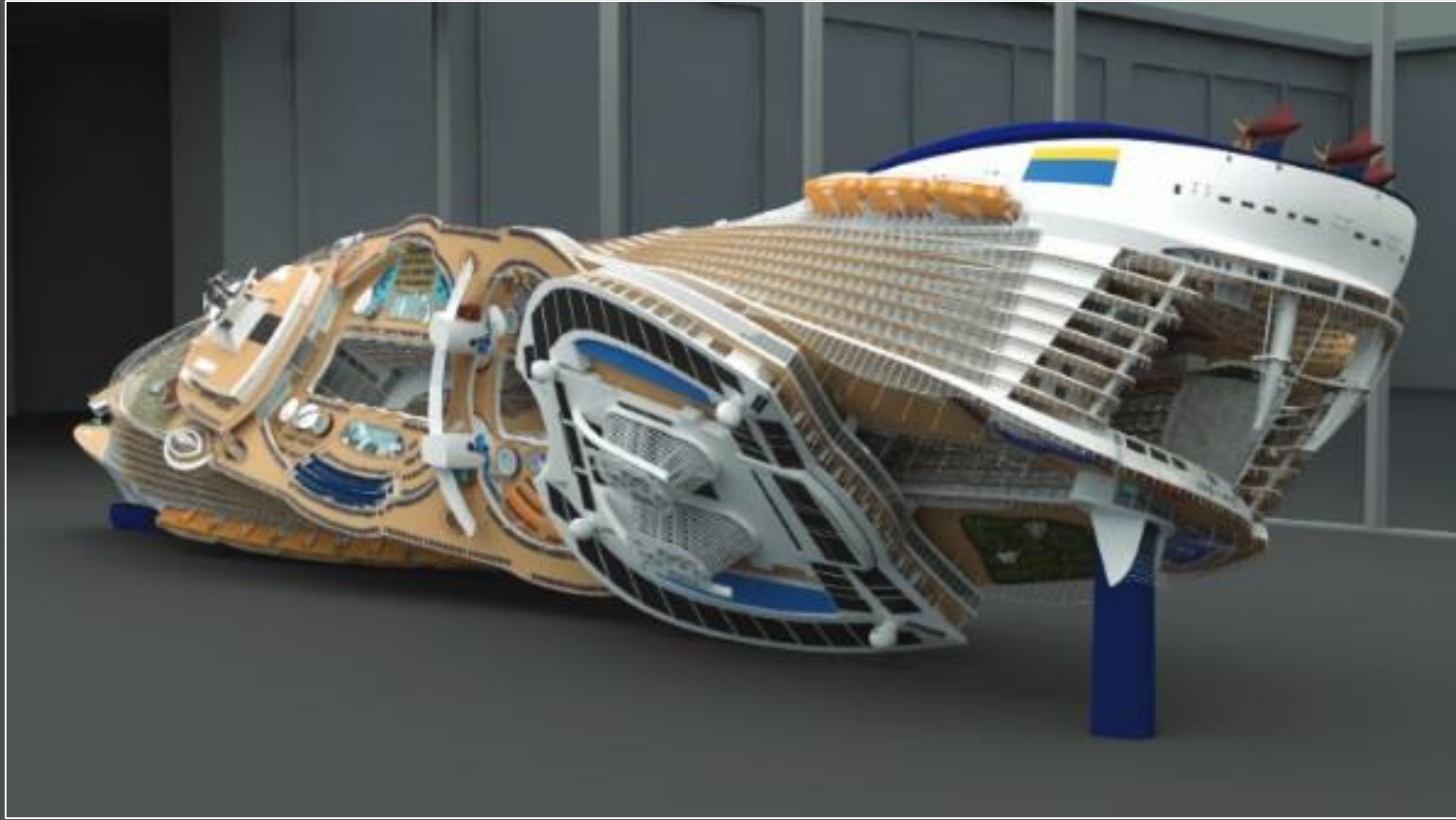






Archaeology is about our history. It celebrates life and diversity: culture, taste, history, and civilization. It must be shared, cherished, and present in everyday life. It is the story of us, our families, friends, regions, countries, neighbors, and Humanity.





Questions?