## The digitization of the tangible cultural heritage and the related policy framework

K. Siountri, E. Vagena, D.D. Vergados, J. Stefanou, C-N Anagnostopoulos

#### Konstantina Siountri

Research Associate, Cultural Technology and Communication Dpt., University of the Aegean, Mytilene, Greece Adjunct Lecturer M.Sc. Programme "Digital Culture, Smart Cities, IoT and Advanced Digital Technologies", Track "Digital Culture", Department of Informatics, University of Piraeus, Piraeus, Greece (ksiountri@aegean.gr; ksiountri@unipi.gr)

#### Introduction

- Nowadays, the digital revolution has changed the conventional way
  - of acquiring images and reproduction of the existing or the imaginary world,
  - leading to new forms and dimensions of the "reality".
- The perception of the user is expanded through
  - 360° technology, Augmented Reality (AR), Mixed Reality (MR), and Virtual Reality (VR) platforms





#### Introduction

- that originally sprang through the gaming industry and
  - have influenced, among other things, the field of culture,
  - both in terms of its production and its management and enhancement.



#### Introduction

#### Our research work aims

- to present the issues of the **related policy framework**
- that arise from the use of the new digital technologies,
- which in our days drastically change the way of management of the Greek tangible cultural heritage.
- In order to present the Greek institutional framework related to
  - Cultural Heritage, the use of digital media and the obligations of involved parties, for the purposes of this study,
  - we also need to define the concept of Contemporary Culture.

### Cultural Heritage and Legal Framework

- Cultural Heritage is the legacy of physical artifacts and intangible attributes of a group or society that are inherited from the past generations, maintained in the present while granted in the future to benefit future generations.
- Contemporary Culture is the combination of physical, intellectual, technical achievements and performance, which is the result of creative forces and human capabilities as expressed in modern times.



### Cultural Heritage and Legal Framework

The above definitions are necessary because we strongly believe that

- any digital display of the past is a contemporary project that
- reflects the artistic contribution and the technological abilities of its creator.



Foundation of Hellenic World "Tholos" Dome Theater, Athens, Greece

### Cultural Heritage and Legal Framework

- The relative legislation is a combination of legal provisions e.g.
  - Law. 2121/1993, as applied on
     "Copyright, related rights and other cultural issues"
  - in conjunction with Law **3028/2002**, as applied, "For the Protection of Antiquities and Cultural Heritage in general".

- In Greece, the protection of cultural heritage is under the auspices of the State as applied under **law 3028/2002** "For the protection of Antiquities and Cultural Heritage in general".
- The Authorization of the use of monument images on the Internet and in digital applications,
  - whether for commercial or artistic, educational or scientific reasons,
  - is given after examination of the issue and approval of the Ministry of Culture as defined in Article 46 of that law.
- The **Directorate of the National Monuments Record** (DEAM) of Hellenic Ministry of Culture, is **competent** for the application of the relevant provisions, regarding both licensing and control of the above content.

- άρθρο 46 του ν. 3028/2002:
- «4. Για την παραγωγή, αναπαραγωγή και διάδοση στο κοινό, για άμεσο ή έμμεσο **οικονομικό ή εμπορικό σκοπό, εκμαγείων, αντιγράφων\*** ή **απεικονίσεων μνημείων**, που ανήκουν στο Δημόσιο, είτε ακινήτων που βρίσκονται σε αρχαιολογικούς χώρους και ιστορικούς τόπους\* ή είναι μεμονωμένα, είτε κινητών που βρίσκονται σε μουσεία ή συλλογές του Δημοσίου, **με οποιονδήποτε τρόπο και μέσο**, συμπεριλαμβανομένων των ηλεκτρονικών και ψηφιακών, του διαδικτύου (Internet), των δικτύων τηλεπικοινωνιακής ή άλλης σύνδεσης και της **δημιουργίας βάσεων δεδομένων με εικόνες** των παραπάνω, από άλλους φορείς ή πρόσωπα, πλην του Δημοσίου, του Τ.Α.Π.Α. και του Οργανισμού Προβολής Ελληνικού Πολιτισμού Α.Ε. **απαιτείται προηγούμενη άδεια**. Η άδεια χορηγείται **έναντι τέλους**, υπέρ του Τ.Α.Π.Α. σε φυσικά ή νομικά πρόσωπα, με απόφαση του Υπουργού Πολιτισμού, στην οποία καθορίζεται και η χρονική διάρκεια της άδειας, οι όροι υπό τους οποίους παρέχεται και το καταβλητέο τέλος.
- 5. Η παραγωγή, αναπαραγωγή και χρήση των παραπάνω προϊόντων για άλλους σκοπούς, όπως καλλιτεχνικούς, εκπαιδευτικούς ή επιστημονικούς, επιτρέπεται, έναντι της καταβολής τέλους, υπέρ του Τ.Α.Π.Α. από την οποία είναι δυνατή η απαλλαγή με απόφαση του Υπουργού Πολιτισμού»

Based on Law 3028/2002 and the relevant Joint Ministerial Decision (JMD) YPPOT/126463/28.12.2011 (GG 3046/B/30.12.2011) **fees to the Greek State are provided** in relation to the following:

- photo shoot
- filming
- use as illustration in printed and electronic publications (e-book)
- use for internet illustration
- use in audiovisual or electronic guides
- use for the production of audiovisual works
- holding of events

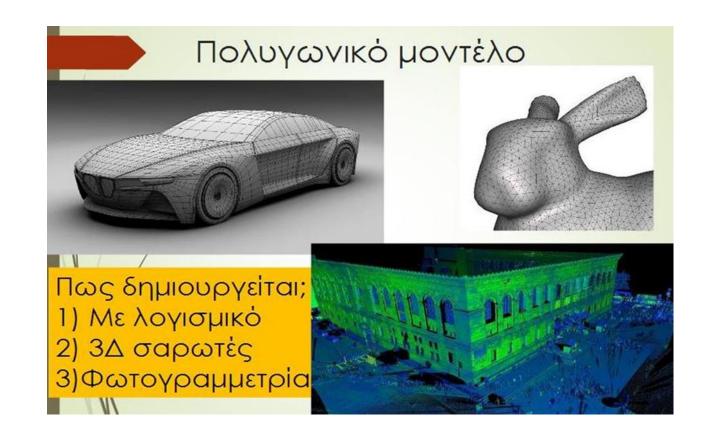
Chap. 2 art. 1

The term "images" is defined as the

"displays of monuments belonging to the State or property situated in archaeological sites and historical places or individually, or moveable monuments found in museums or collections of the State".

- Chap. 2 art. 5
- the term "photographs" is also inserted and
  - it is linked directly to the amount of fees (depending on their number),

creating a confusion
 whether the displays
 generated by design
 software or three dimensional scanning
 (laser scanning) are
 finally subject to fees.



- Chap. 2 art. 5
- the reference to "online" does not specify the number of sites,
  - making the web to be treated as a single entity and
  - it is not clear whether the fee should be paid in respect of each site separately
  - or whether once paid it covers any form of online display by the user.

- Chap. 2 art. 6
- on charges for production of audiovisual works,
  - the question arises whether the <u>charge per second</u> of display can be applied to **VR tours** digital applications.

#### Moreover, it is not clear whether

- the display is referring only to monuments, as they exist today or
- it also concerns iconic reproductions and restorations produced by software.

- Chap. 2 art. 7
- on fees concerning the digital electronic applications guides
- a fee is provided amounting to 20% of the retail selling price of each digital application.

In the current digital landscape and the widespread use of personal electronic devices (e.g. Smart phones)

• the application of this provision tends to be <u>very difficult</u>, if <u>not possible at all</u>.

•

Cultural displays involve often content illustrated

- on social media (like facebook, instagram etc),
- on digital platforms such as Open Heritage by Google Arts & Culture and
- on crowd sourcing popular platforms like Wikimedia commons, YouTube etc.
  - in which users from all over the world can add content.











In these cases, there may be copyright issues since

- the terms of use of these sites include clauses
  - under which users who add upload content
  - give both to other users of the media as well as to the companies who own these platforms the permission to use the material.

In some cases, the users who upload the content

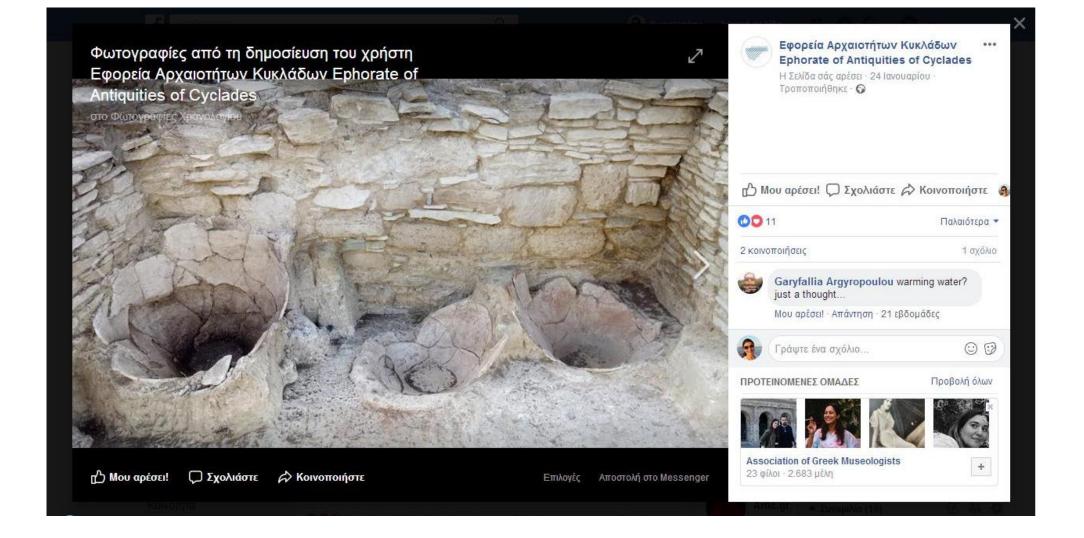
- may not have even the right to provide such a license and
- finally the content uploaded may be <u>illegally reproduced</u> and made available to the public
  - but without the users realizing it.

It is also noteworthy that





- the scope of application of those provisions <u>applies also</u> to the activity of Services of the Ministry of Culture,
  - which maintain <u>pages on social networks and often post pictures</u> of monuments, parts of their collections or actions e.g. excavations and findings.



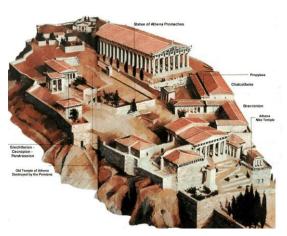


#### Numismatic Museum

Αθήνα, Greece



- Since the digital cultural projects as mentioned above can combine heritage and contemporary creation,
  - copyright law issues emerge.
- The main copyright law governing the law of copyright is
  - Law 2121/1993 on "Copyright, related rights and other cultural issues" (Government Gazette A/25/1993),
  - as combined with the recent law 4481/2017 (Government Gazette A/100/07.20.2017) for the collective management of copyright and related rights,
    - granting of multi-territory licenses for online use of musical works and other Ministry of Culture and Sport competence .













- Copyright is a right of "double nature" as it includes both property as well as moral rights.
- The moral rights are independent from the economic rights and remain with the author even after the transfer of the economic rights.
- Copyright arising from the photographing or filming of protected works, such as monuments,
  - are first recognized for the originator creator while the rights of the content depicted belong to the Ministry of Culture

- Copyright is a right of "double nature" as it includes both property as well as moral rights.
- The moral rights are independent from the economic rights and remain with the author even after the transfer of the economic rights.
- Copyright arising from the photographing or filming of protected works, such as monuments,
  - are first recognized for the originator creator while the rights of the content depicted belong to the Ministry of Culture

- On this basis copyright arising from the photographing or filming of protected works, such as monuments, are first recognized for the originator creator while the rights of the content depicted belong to the Ministry of Culture (which is mandatory, and according to par. 3 of the Joint Ministerial Decision (JMD) 2199/12.09.2005 each photo should be stated that: "the Copyright of the depicted ancient objects belongs to the Greek Ministry of Culture (Law 3028/2002)".
- It should also be reminded that according to article 26 of Law 2121/1993, the Greek law allows only the occasional reproduction and dissemination by the mass media works that are legally in a public place.
- Therefore, any other use case and reproduction photographic or electronic forms should have the necessary licenses to ensure both the archaeological and the law of copyright in relation to immovable monuments.

- There is also the alternative of the contractual schemes such as **Creative Commons**, aim to change the way right holders exercise their rights without modifying copyright's exclusive character which can be used.
- Creative commons is a nonprofit corporation dedicated to making it easier for people to share and build upon the work of others, consistent with the rules of copyright.
- The organization provides free licenses and other legal tools to mark creative work with the freedom the creator wants it to carry, so others can share, remix, use commercially, or any combination thereof. Creative commons movement defines the spectrum of possibilities between full copyright and the public domain since it gives author the possibility to opt from all rights reserved to no rights reserved. It is also possible to keep your copyright while allowing certain uses of your work
   — a "some rights reserved" copyright.



- The six main licenses offered when you choose to publish your work with a Creative Commons license all include the basic element of attribution by which you let others copy, distribute, display, and perform your copyrighted work and derivative works based upon it but only if they give credit the way you request.
- Creative Commons also has two public domain tools: CCO and Public Domain
  Certification. CCO enables authors and copyright holders to dedicate their works to the
  public domain. Public Domain Certification facilitates the discovery of works already in
  the public domain.
- A person using CCO (called the "affirmer" in the legal code) waives all of his or her copyright and neighboring and related rights in a work, to the fullest extent permitted by law. If the waiver isn't effective for any reason, then CCO acts as a license from the affirmer granting the public an unconditional, irrevocable, non exclusive, royalty free license to use the work for any purpose.

- Η περίπτωση της εφαρμογής **Acropolis Rock** της εταιρείας **Lightbuzz Software** αποτελεί ένα παράδειγμα απόπειρας παραγωγής και διάθεσης στο κοινό εφαρμογής ηλεκτρονικού ξεναγού χωρίς την εξασφάλιση των απαραίτητων αδειοδοτήσεων.
- Η εφαρμογή, η οποία παρουσιάστηκε και πήρε το πρώτο βραβείο σε διαγωνισμό καινοτομίας της Microsoft το 2011, κυκλοφόρησε εμπορικά το 2013, μπαίνοντας στη λίστα των top-30paid εφαρμογών.





- Τον **Απρίλιο του 2015** η εταιρεία πρότεινε στο ΥΠΠΟ τη δωρεά της εφαρμογής, χωρίς κανένα κόστος και αναλαμβάνοντας η ίδια τα λειτουργικά έξοδα και τα έξοδα συντήρησης.
- Τον **Οκτώβριο** το Ταμείο Αρχαιολογικών Πόρων αρνήθηκε τη δωρεά, αναφέροντας μεταξύ άλλων ότι για τη συγκεκριμένη παραγωγή δεν είχε τηρηθεί η προβλεπόμενη νόμιμη διαδικασία που περιελάμβανε την έγκριση της αρμόδιας Εφορείας Αρχαιοτήτων για τη χρήση εικόνων και την επιστημονική ακρίβεια του περιεχομένου εν γένει καθώς και την καταβολή τελών.



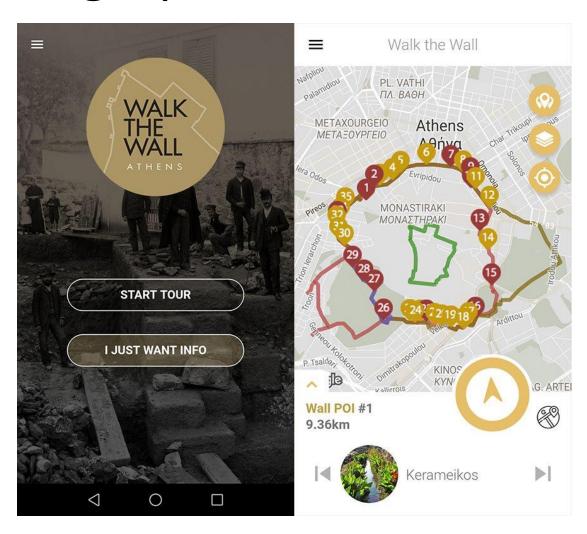


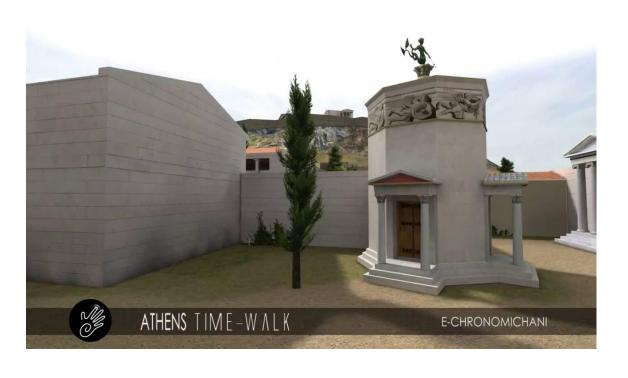
- In Ancient Corinth, during the last two years, two digitization projects were produced for training purposes, which despite their high quality or their global impact, they did not apply for the necessary license given by the competent Services of the Hellenic Ministry of Culture.
- Both of the above productions are on the Internet.



Google Arts & Culture with non-profit CyArk

- In the web there are many digital applications that offer under payment or for free guided tours to a various archaeological sites, through virtual and augmented reality.
- They are also enriched with information, historical pictures, videos, stories etc.
- The majority of them have not applied for the necessary permission and their historical accuracy is under question.
- In Athens for example we can distinguish the cases of Athens Time
   Walk and the Walk the Wall Athens
- These applications are available through Google Play platform.





• Finally, the case of video games is worth mentioning, especially the case of the adventure game Assassin's Creed Odyssey produced by Ubisoft company that takes place in ancient Athens of 5 cent. B.C.



• The appeal of the game to millions of players around the world and the enthusiastic reviews for the quality of graphics and the historic information has already raised the debate about the boundaries between imagination and reality and whether it involves issues that concern the implementation of Law 3028/2002.



#### **European Union Initiatives**

 Greece is a state member of European Union and therefore we should also take into deep consideration of the initiative of EU for the diffusion of the cultural "stock" of Europe through the digitization, primarily for conservation purposes as well as the disposal of digital content



#### **European Union Initiatives**

- In this context it is worth mentioning the main provisions of the European Commission **Recommendation of 27 October 2011** on the digitization and online accessibility of cultural material and digital preservation.
- The Recommendation highlights that the Digital Agenda for Europe seeks to optimize the benefits of information technologies for economic growth, job creation and quality of life of European citizens, as part of Europe 2020.
- The Recommendation makes particular reference to **Europeana**, "The European digital library, archive and museum".

#### **European Union Initiatives**

- Taking into consideration the above, the project
- "National Archive of Monuments" of the Hellenic Ministry of Culture is necessary to be completed.

This archive will provide a unified documentation system

- for Monuments and Collections Management
- that can be linked directly to other platforms and
- include all the checked by the Greek State data and metadata.

#### Conclusions

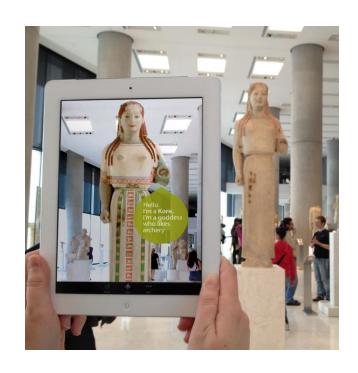
#### We may conclude that

- the application of the relevant Greek legal framework for digital imaging and online distribution of protected cultural resources will become increasingly difficult in the future,
- requiring taking a lot of extra technological measures on the part of the Competent Services,
  - since technology seems to be constantly ahead of the law.
- For that reason, the establishment of a special department dedicated to the continuous web and electronic monitoring to avoid trafficking of illegal or not proper content seems to be necessary,
  - since the market does not seem to follow the existing laws of licensing.

#### Conclusions

#### Moreover,

- the contracts within designers, photographers, computer applications producers, etc.
  - as regards to the production, reproduction and further online promotion of their work and the concession or not of their property rights,
  - should be established.
- However, the critical issues relating to the enrichment of the relevant legal framework,
  - the introduction (or the clarification) of regulations for the online crowd sourcing platforms and social media and
  - the copyright protection and management point out that
  - we need a serious national digital cultural strategy.



#### Conclusions



It is also under consideration that

- in this new digital era the involved institutional stakeholders would benefit more by the adoption of the Open Data and introduction of a new system of "certification".
- That means that instead of trying to find out in this global market who is illegal,
  - the Greek State could introduce an Organization for Standardization
  - that would be concerned with "rewarding" and promoting the best practices.

#### THANK YOU

K. Siountri, E. Vagena, D.D. Vergados, J. Stefanou, C-N Anagnostopoulos

#### Konstantina Siountri

Research Associate, Cultural Technology and Communication Dpt., University of the Aegean, Mytilene, Greece Adjunct Lecturer M.Sc. Programme "Digital Culture, Smart Cities, IoT and Advanced Digital Technologies", Track "Digital Culture", Department of Informatics, University of Piraeus, Piraeus, Greece

(ksiountri@aegean.gr; ksiountri@unipi.gr)