

# Historytelling: Designing Validated Heritage Narratives for Non-captive Audiences. Evidence from EU Funded Projects in the Programming Period 2014–2020

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**Abstract:** Much too often a temporospatial gap arises between monuments and non-captive audiences at places of cultural significance. It emerges as the missing link between the tangible and the intangible form of cultural heritage. While material substance or architecture of a monument are perceived by the eye, values and inherent meanings remain inaccessible. This particular condition is further modified for the better or worse by the skills of the audience, which has different origins, mentalities and cultural backgrounds that hinder or enhance the perception and appreciation of cultural heritage. Following the philosophy of hermeneutics, this paper suggests that the temporo-spatial gap between monuments and audiences is principally of cognitive nature: to understand and embrace heritage values and effectively bridge the gap, we need to connect the tangible form of the object to its intangible dimensions, symbols, meanings and values. As much of the supply side offers remain codified in the language of experts, while the public, especially the youth, is looking for compelling stories and multisensory experiences, we need to look for a new narrative discourse. This paper examines evidence from 260 heritage narratives produced through EU funded projects in the Programming Period 2014-2020, in an attempt to evaluate the knowledge acquisition pattern developed and the role of AV technology plays in the development of a validated heritage narrative.

**Keywords:** *cultural heritage; AV narrative (AV); human cognitive architecture; hermeneutics; cultural experience.*

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*"Whoever controls the narrative, controls the history."*

*Joe Berlinger*

## 1. Introduction

The AV production has reached today a number, unimaginable a few years ago: technology allows us to manipulate image, audio and video, to animate and contextualize in a process of synthesis as never before. The entire AV production process is easily accessible to everyone: all the work to create a filmed sequence that in the 70ies occupied an entire building, today is located within a PC weighing less than a kilogram. Anyone who watches cinema or TV may decode and understand the production stages, at least technically speaking. However, a question arises: what kind of impact can the technical shell have per se without appropriate content? Is the ability of each person to generate contents beyond the technique, such, that it has an expressive sense? Or is it that the creation of contents a more complex and demanding project? Moreover, the perception that the digital transformation has impacted cultural content in particular is a widespread fallacy. This process cannot be considered an evolution without cultural impact that the new distribution system should have over the territory and identity of Europe. This last aspect has to be guided by a cultural policy, which can result in a virtuous connection between the public and private sector and contribute to a policy reform related to cultural heritage. This paper suggests that the digital shell by itself does not ensure a value-driven cultural content nor can the latter be achieved by literally everybody. On the contrary the rise of fake news and unverified information have contaminated the user-generated discourse as it appears in social media platforms with distorted views, which often lies outside the scientific discourse, cultural values, human rights and education to democratic citizenship. Much too often violence is justified, historic facts and periods are misinterpreted and misused, hate speech and partiality appear in an endless array of user comments. Disputable social contents, discrimination, race and political incorrectness invade the screens and minds, without the possibility for the audience to critically reflect and resist. It is evident that the heritage sector has a responsibility to restore the historic truth and continue to foster digital representations of history and culture which enable the public to encounter monuments and artworks and interact with, embracing their special values and understand them in the own historic lifetime. The AV languages deriving from the classical theater have created over the years ways and common sense, which can deliver the missing link for the understanding of

monuments and artworks, and this is no other than the scientifically validated and artistically (re)created context and content.

## 2. Problem Statement

The digital revolution has altered the communication pattern impacting the common sense through the interpretation of visual codes and the generation of personalized and multimedia content. This semantic shift is attracting an audience wishing to be intellectually challenged, understand, appreciate and be involved at places of cultural significance [1, p. 2], [2, pp. 378-382]. Along the lines 84% of the Europeans declare cultural heritage as personally important, 90% as nationally important, while 80% perceive it as bonding tissue of Europe [3, p. 7]. However, cultural participation is uneven: it is older Europeans (65-74 years) that visit cultural sites at the most, while 40% of young people attend rather live performances and cinema [4]. There is evidence that cultural attractions are perceived as educative leisure, but the inability of the supply side to attract public interest with holistic experiences quickly leads to loss of intrinsic motivation which in turn disables the public to derive satisfaction [5; 6; 7; 8; 9; 10]. This lack of understanding is not solved by providing information through a standard descriptive apparatus [11, pp. 2-5]; [12, p. 13]; [13, pp. 3-6]; [14, p.13]. The human brain and psyche are inextricably linked and the cognition mechanism is very complex and should be addressed in their entirety, in order to achieve the desired results [15; 16; 17; 18; 19]. I argue that the particular conditions that regulate the human cognitive processing, perception and understanding, the human emotional world, and the socio-cultural valuations of each social background in the informal learning environment, stay unattended when museum, sites and collections, experts and ICT engineers design the supply side offers, leading to the interruption knowledge acquisition and the interactivity with our past. And from there stems the necessity to reform the heritage narrative: Antinucci and Palombini suggest that a series of sites, museums or portals rich in information, remain at a cognitive-emotional level unsuccessful failing to activate the cognitive process of the audience [20, 21; 22, pp. 12-13]. Despite the fact that 50% of the Europeans aged 15-24 years declare cultural affinity and shared values among the nations of Europe, there is an urgent need to formulate an EU-wide remedy for heritage valuations and create the enabling environment for the *Europeanisation* through a new cultural narrative [23, p. 28]. Experts set an alarm for the loss of cognitive skills and for the habituation to violent AV contents in TV, VoD and gaming, which cause lack of empathy: the American Association of Pediatricians warns that the exposure to violence in media, including

television, movies, music, and video games, represents a significant risk to the health of children and adolescents [24, pp. 1496-1500]. In the same vein a series of studies link the social reform with citizenship education, viewing in culture the main regulator of the social order, freedom, and tolerance ; [25; 26; 27, p. 211; 28; 29, p. 203].

### 3. Aims of the research

The conditions that regulate the right balance between historic and social facts and creation of a cultural narrative is the quest of this research. The shared sense and syntax that allow us to understand the syncretism of a cinematographic montage, the voluntarily loss of disbelief that an actor induces on the stage of the theatre are consolidated and advanced in their cognitive and emotional function and successfully governed those who possess the required cultural capital. How to create a create an artistically attractive and historically validated narrative in the domain of digital culture is the main aspiration of these transnational efforts in the Programming period 2014-2020. To understand and embrace heritage values and effectively bridge the gap between cultural assets and the audience, we need to connect the tangible form of the object to its intangible dimension, its symbols, meanings and values at a cognitive and emotional level. The cultural narrative in the digital domain shall consider aspects such as eye scan path movement, the human category learning, the ability to perceive and process information, to retain and evoke mental representations. Literacy of the human memory processor is indispensable to avoid producing content secluded in the terminology of experts instead of compelling narratives. It is common knowledge that human cognitive architecture offers an unlimited long-term memory able to hold mental representations of varied automaticity degrees, but a limited working memory capacity with independent subcomponents to deal with auditory and visual material [28, pp. 60-61]. Consequently 3 research questions arise: **1)** how to embed technical and socio-historical information into a compelling narrative, so as to facilitate knowledge acquisition; **2)** how to exploit the technology intense experience to impact the cognitive paradigm; **3)** how to create a paradigm, where non-captive-audiences engage in a self-directed learning, which in turn lead to the formulation of three hypotheses: **I)** the communication of monuments with compelling stories generates new demand for cultural experiences; **II)** the incorporation of technology in heritage education enhances cultural capital and creates a new cultural mobility pattern; **III)** the involvement of stakeholders in the design of

cultural offers reforms the local supply-demand pattern at places with cultural significance.

## 4. Research Methods

### 4.1 The Research Area

The Research Area extends 260 geolocations, where all 7 Projects include training for the design and delivery of heritage narratives. Desktop and field research have been conducted in a four-year period, from 2016 till 2020 in order to evaluate 260 narratives created. As Table 1 demonstrates below, 5 Projects include applications in the Cultural and Creative Industries, where heritage narratives combine the technology intense experience with onsite authenticity. 7 Projects include training programs for the design and delivery of heritage narratives.

**Table 1:** The Research Area

EU PROGRAMMING PERIOD 2014-2020					
EU PROGRAME	PROJECT ID	NUTS II REGION	No of Stake holders	No of Heritage Narratives	No of Media
ERASMUS + Strategic Partnerships for Higher Education	TOURIBOOST/2018-1-TR01-KA203-058344 “Reorienting tourism education with digital, social and intercultural competences to support local stakeholders tackle strategic innovation in heritage tourism” Budget: 238.980,00 €	TR52/TR100/HU101/NL321/ITD55/EL41	180	30	1 Training 6 iBooks with external links 1 EQF Certification
	AD HOC/2019-1-MK01-KA203-060269 “Accessible and Digitalized Cultural Heritage for persons with disabilities” Budget: 259,874,00 €	NMK/SI038/ITE4/EL41	40	40	1 Platform for individuals with impairments
ERASMUS + VET	EACEA-27-2017 “CULTVET. Joint Qualification in the field of Cultural Tourism” Budget: 620 000,00 €	-	-	-	1 VET Training in Cultural Tourism 1 EQF Certification
INTERREG BALKAN_MEDITERRANEAN	BMP/1.2/2619/2017/INNOViMENTOR “Generating SME product and process innovation with a new tourism mobility model, stakeholder alliances and skills alliances to facilitate the market uptake of local enterprises in remote and sparsely populated areas” Budget: 948.572,80 €	EL41/EL622/BG33/BG41/CY/AL022/AL033/NMK East Region	240	80	1 Training in Cultural Tourism 8 iBooks with embedded multimedia; 8 Heritage Trails

	BMP/1.2/2627/2017/INNOVA "Balkan-Mediterranean Centre for Entrepreneurship and Innovation" Budget: 919.544.95 €	-		-	1 Training 1 VET Certification in ICT, Tourism and Entrepreneurship
INTERREG IPA CBC GREECE-ALBANIA	INTERREG IPA CBC SMARTIMONY MIS 5041666 "Support stakeholders tackle strategic innovation in tourism in peripheral, remote and sparsely populated areas with resilient heritage offers and place-based investments in the Cultural and Creative Industries" Budget: 695.846,42 €	GR54/AL033	120	40	1 AV Production; 4 Heritage Games 4 iBooks with embedded multimedia; 1 Heritage Repository
COSME PROGRAMME	DIVERTIMENTO/699493/COS-TOUR-2015-3-04Diversifying tourism offers in peripheral destinations with heritage-based products and services, stakeholder-skills alliances to internationalize locally operating micro-enterprises Budget: 312 329,00 €	EL42/ITF5, ES11/SI012/RO121/BG33/TR90	70	70	1 Training; 7 Heritage Games; 7 iBooks with embedded multimedia
TOTAL	5		650	260	59

The heritage narratives have not been developed in isolation. 650 stakeholders have been interviewed in the research area with a standard joint questionnaire with semi-open and open questions prior to the design of the heritage narratives. Their views, aspirations and priorities have fed back the design of narrative aiming to create a cognitive, emotional and multisensory experience at each place of interest.

**Table 2:** Research Steps

RESEARCH STEPS	
<b>1</b> ASSESSMENT	<b>SIGNIFICANCE ASSESSMENT</b> 260 monuments in the Research Area
<b>2</b> FRONT END EVALUATION	<b>STAKEHOLDER INVOLVEMENT (650)</b> Interviews
	1.PUBLIC SECTOR: 3LevelAuthorities; Public Museums/Sites/Collections; 3Level Education Institutions involved in Research
	2.PRIVATE SECTOR: Chambers of Commerce/Industry, SMEs, Development Agencies; Public-Private-3SectorPartnerships
	3.ACADEMIC COMMUNITY: Universities; R&I Bodies; Tertiary Education Institutes
	4.PROFESSIONAL UNIONS: Travel Agents/Tourist Guides/Artisans/Creative Workers
<b>3</b> VERIFICATION	<b>VERIFICATION (2600)</b> Development of an Asset Record with Verification Sources for the design of each narrative
	PILOT PROJECT PLANS (260) Feedback, Co-Design of Prototypes

5 FINAL EVALUATION	CO-DESIGN OF MEDIA PROTOTYPES (56)
	Feedback, Co-Design of Prototypes
	1.LOCAL COMMUNITIES: Young Audiences, Local Experts, Key Informants, Policy Makers (150)
	2. END USERS: Cultural Tourists, Excursionists, Locals, National and Foreign Visitors and Tourists (50)
	<b>EVALUATION (3 Stages)</b>
	Evaluation of Heritage Games and i/eBooks
	1.ACADEMIC COMMUNITY: Universities; R&I Bodies; Tertiary Education Institutes (25)
	3.LOCAL COMMUNITIES: Young Audiences, Local Experts, Key Informants, Policy Makers (100)
	3. END USERS: Cultural Tourists, Excursionists, Locals, National and Foreign Visitors and Tourists (260)
	4. LOCAL and NATIONAL PRESS AND MEDIA (50)

## 4.2 Heritage Assessment

260 assets have been selected in Greece, Cyprus, Italy, Romania, Bulgaria, Hungary, Slovenia, Spain, Holland, Albania, the Republic of North Macedonia and Turkey. A heritage significance methodology has been adopted and a statement of significance has been produced for each asset, which reveals the asset values and leads to the interpretive messages tailored to the selected audiences. The assessment ensure that historic sources are scrutinized to support asset identity and deliver a comprehensive file with a multivariate analysis for each asset at spatial (global, national, regional, local), scientific (research, technical), historic, aesthetic, social (national, community, group, family personal), and spiritual (tradition, religion, rites and beliefs, lifestyles) level [30, pp. 67-68]. The assessment not only testifies the significance, but as Palombini suggests can clear the “narrative arena and the never-ending fantasy-history dilemma” [31, p. 136].

## 4.3 Stakeholder Involvement

650 stakeholders have participated a qualitative research, which consisted of three stages: **1)** responses obtained during the *Front-End Evaluation* with a specifically designed questionnaire conducted as semi-structure interview and which participated target groups 1-4 as indicated in Table 2 under step 2; **2)** responses obtained during the *Formative Evaluation* during the dress rehearsal of prototypes with a specifically designed questionnaire, which participated the target groups 1-2 as indicated in Table 2 under step 4; and **3)** responses obtained during the *Summative Evaluation* e.g. the final performance of the 15 games, 260 narratives and 25 i/ebooks which participated the target groups 1-4 as indicated in Table 2 under step 5.

## 4.4 Verification Sources

All 260 monuments are included in the State Registries of Greece, Cyprus, Italy, Romania, Bulgaria, Hungary, Slovenia, Spain, Holland,

Albania, the Republic of North Macedonia and Turkey. 8 out of 260 monuments are UNESCO-listed: Medieval Town of Corfu (GR); Nea Moni in Chios (GR); Santiago di Compostella (ES); Gjirokastra Historic Center (AL); Castel del Monte (IT); Monte Sant'Angelo (IT); Budapest and the Danube banks (HU); Neolithic Site of Çatalhöyük (TR). In order to harmonize the narration with scientific reliability and ensure a high quality historical reconstruction, scholarly research has been conducted in archives and libraries for each heritage area resulting to a minimum of 50 reference works and a maximum of 310 reference works for each heritage area and 100 AV materials (videos, photos, recordings) for each asset. This step was indispensable for the completion of the Statements of Significance. Multiple verification sources have been analyzed, compared, contrasted and evaluated to ensure that each narrative reflects the socio-cultural values of the own historic period. This was an indispensable step to ensure the quality of the final outcome and avoid misinterpretations and fallacies.

#### ***4.5 Co-design of Media Prototypes***

The design of heritage narratives targets heritage education at places of cultural significance, aiming to enhance intercultural dialogue, critical thinking and media literacy, and create immersive experiences [32, p. 453]; [33, p. 32; 34]. As narrative is defined an enriched text audio-visually supported with multimedia (data, images, animations, videos, multivisions, external links) that provide educative content within a storyline with the aim to foster comprehension, emotional responses and empathy. This type of narrative is linked with each other and do not impose cognitive loads on readers or demand prior knowledge. At the same time, it invests efforts to eliminate the biases deriving from prior beliefs and prejudices. Both heritage games and narratives desire to approach the audience in a way that fosters active mental processes, combined observations and shared practices enabling them to attach personal meanings to heritage and culture. In his seminal work *Wahrheit und Methode. Grundzüge einer philosophischen Hermeneutik*, Hans-Georg Gadamer suggests that during the process of understanding the artworks from the past, the greatest difficulty to interpret them, is the distance between the knowledge necessary to arrive at an understanding, even at the elementary level and that understanding depends greatly on language, linguistic skills and prior beliefs, views that are supported by recent research in instructional design [35, p. 387 ff.; 36; 37; 38]. Along this vein we can assume, that if the public is not 'skilled' enough to confront the artwork, then the cognitive gap of the public is growing and with it the losses in cultural capital. This assumption is not very far away from the views



formulated by Bourdieu in his work *Les trois états du capital culturel*, in regards to individual learning- whereas Bourdieu involves also the aspect of social struggle and the stratification of social classes [39]. In the past it was assumed that the interpretive tools needed were already property of the public, part of their intrinsic wealth of knowledge provided by the cultural institutions: schools, first of all. However, the field research has demonstrated that when non-captive audiences are when being confronted with coded artworks, this is creating a real frustration, which is enough to bounce back motivational. To re-establish motivation the prototypes developed, use an audio-visually supported narration and selected multimedia that relate to historical events, other artworks, historic or fictious personage with specific missions. The aim is to meet the expectations of visitors for cultural accessibility and socialization through an improved learning with physical, cognitive and multi-sensory experiences and changing the present-day without distorting the historic truth as Palombini, Luo and Yeb, Vaz et all, and Cekaite and Björk-Willén suggest [31, p. 2; 32 pp. 45-46; 33, p. 60; 40, p. 121; 41]. In this sense the heroes chosen or created operate in their world, but their mission is to build a bridge to understand it. Whenever possible, heroes narrate the story in the first person and in present tense, whilst the context supports the revelation of the values and elements of the historic era. The language is historicized in order to recreate the atmosphere of the historic period, depicting historic turning points like for instance the European Discovery Age starting 1492, the peak of the Christian-Muslim antagonism in 1571; the French Revolution in 1789; social aspects like the assassination of Joe Petrosino by the mafia in 1909, the unification of Romania in 1918, knowledge about artworks, like the mosaics of Nea Moni in Chios and Aghia Sophia in Constantinople, the Massacre of Chios by the Ottomans in 1822 as depicted by Delacroix, knowledge about burial customs in the Neolithic site of Çatalhöyük in the plain of ancient Iconium. The different and contrasting viewpoints are presented in a fashion that supports impartiality, allowing visitors to reach their personal conclusions, and in several cases the narrative includes conflicting views and concepts like Christians vs Muslims, Mafia vs Justice, Inquisition vs Galileo etc. Each Narrative is based on verified sources in order to help shed light to the historic period and understand the reasons and the impacts on the evolution of humankind. However, the effort for impartiality is not undermining widely embraced social values and historic truth: narratives related to the WWII Holocaust, are intentionally not juxtaposed with any narratives presenting the views of Nazism. The Projects CULTVET and INNOVA, which offer training basis for the development of narratives have explicitly dealt with the underlying values of narratives, e.g. the human rights

and the rule of law. Finally, all information collected is analyzed from a human cognitive architecture perspective, considering working memory limitation and cognitive loads categories. Contextual information is re-structured to free working memory from irrelevant cognitive loads to a) facilitate comprehension, b) reinforce the association chain, c) and enable new knowledge to relate to prior knowledge.

## 5. Findings

The development of research- and praxis validated heritage narratives aims to capture the essence of each of the 260 monuments and effectively communicate those in a cognitive-emotional way to non-captive audiences in a multimedia environment. The main medium selected is the Apple iBook for its many and manifold technical possibilities. Findings have been obtained across three evaluation stages jointly performed in the research area:

*Front-End Evaluation:* has taken place at the stage of initial concept development for each of the 29 heritage areas in order to provide information about the intended audience, and determine the stakeholder involvement. Front-end evaluation is a predominantly a qualitative process: the involved project partners have asked exploratory questions in an effort to ensure that the intended i/eBooks and heritage games will deliver visitor satisfaction. During this stage the assumptions about monument values and visitor expectations have been clarified.

*Formative Evaluation:* has been conducted to test the prototypes developed: 260 narratives, 29 iBook drafts and 19 heritage game prototypes has been tested in situ addressing 180 respondents: local community members and visitors (foreign and nationals). This stage has proved very valuable as it has provided for feedback and has traced irregularities in content and design. It was used for gaining a reaction to the prototypes, it has pinpointed the technical problems and changed the contents of narratives and the game plots to the extent it was required. Formative evaluation has also helped the project consortia, experts and stakeholders to work together and make informed decisions during the final development of the applications. Partners have traced those learning experiences which could trigger situational and emotional interest, personal relevance, appropriate levels of challenge, hands-on activities, intensity, understandability, and social interaction.

*Summative Evaluation:* The applications (multimedia i/eBooks; heritage games) have been tested by both Managing Authorities and Agencies which manage and monitor the EU projects in question and the

general audience including the press and media. This stage has documented the impact of the final outcomes on the intended audience and has determined the extent to which the goals were met. Acquired information shall be used to make future adjustments to iBooks and the games assessed and also help others learn from experiences made. Despite the fact that each of the 29 heritage projects has undergone the own evaluation and the differences are many and multiple, there exists a common denominator: the audience, independently of nationality thinks at 77.4%, that the iBooks and the games are an indispensable components for an integrative experience in situ, with two notable exceptions in Italy: the EUROPEANA awarded *Joe Petrosino House Museum* in Padula and the Narrative Museum *The world of Frederick II* in Lagopesole, which offer a complete experience at technological and content level and have been the inspiration for this adventure.

## 6. Discussion

The **Front-End Evaluation** revealed that **a)** not only a culturally oriented audience is looking for authentic experiences, while the youth is looking for possibilities to disseminate its experience; and **b)** the supply side relies heavily on publicized monuments to attract the audience, while lesser known monuments are neglected. The **Formative Evaluation** has documented that in the Research Area exist few possibilities to generate customized experiences and discover points of enthusiasm. Thus, it offered a first-class opportunity to broaden and deepen the envisaged experiences with new stories meeting the demand of the targeted audiences. This quest has also demanded from stakeholders to play an active role in the co-design of cultural offers in order to reform the local supply-demand pattern (Hypothesis II). The **Summative Evaluation** has revealed of 3 main outcomes: **a) Enhanced cognition:** i/eBook readers and game players have engaged mentally with the selected assets, reflecting with their peers inspired by the AV context. 67% of the visitors deployed the i/eBook(s) offsite as preparation for their visit either at the permanent place of residence, or at destination level in hotels and coffee shops mainly, stating that sitting opportunities prolonged the reading time substantially. The possibilities smart devices offer have enabled visitors to access the stories any time and anywhere was positively evaluated at a 93% by the age group 25-45, while 72% of the age group 45-65 preferred devices with larger screens (tablets, iPads, PC), because they “ensure a more relaxed reading”. Both older and younger audiences made use of the social media embedded into the i/eBooks and used further external links in search of asset related and

tourism information. The iOS books with an embedded Google map have been preferred by the exclusive segment of iOS users to any other media like trails provided with QRC signs or websites, however the clientele of other operating systems was not adequately serviced. **b) Socialization:** i/eBook readers and game players have interacted with others in their social groups and media. An “ultimate experience” is considered one that links to a specific monument through a personal relation and which is “worthy of sharing” with the own peers and social media contacts. Game clues embedded in the narratives of the i/eBooks in each of the 26 heritage places developed, thus helped “to win the game”, and were evaluated positively, however only 37% of the 650 respondents played the games in situ. 46% declared that their collective identity as been reinforced having “understood how the national history is connected to the world history”. This response seems to support the view that the incorporation of heritage education in the leisure time could enhance cultural capital and create a story-driven cultural mobility pattern (Hypothesis II). **C) Emotional engagement:** 37% of the i/eBook readers and game players appreciated the fact of having acquired “expertise” and that the new knowledge has led to excitement and inspiration. This response seems to support that the communication of cultural values via compelling stories and open source technology generates new demand accessing globally new and higher value audiences (Hypothesis I). **D) Audience Skills:** narratives in English language linked to monuments in situ and especially those providing compelling stories supported by advanced interactive technologies has been consumed offsite and have been reused onsite for providing explanations to family and friends, or as a direct onsite facilitator towards an integrative experience. A segment of 47% of the sample -independently of age and nationality- has devoted attention to the AV narratives, which they found ‘compelling’, and ‘revelatory’ compared to the isolated onsite experience, which was evaluated as ‘boring’ or ‘not understood’, and ‘too complex for the short time of the visit’. This segment has three main characteristics: a) are frequent visitors of sites, museums and collections, b) are avid users of technology, c) have good command of the English language. The young adult segment has overlooked all narratives over one page when using the e/iBooks in situ and only an 18% declared the iBook a “good preparatory tool” for an upcoming visit.

The three major limitations of this research are linked to **a)** the public procurement rules in the 12 EU and non-EU countries for applications and services (external expertise; ICT and CCI applications; i/eBooks, tourists trails; training;). Those have been obtained by public procurements with different budgetary restrictions, which are reflected on the final outcome reflecting also the ICT and CCI skills available across the

different countries. **b)** Different partner budgets and implementation timeframes, and **c)** different commitment grades per partner and country. However, higher value final products like the DIVERTiMENTO Project failed in disseminating the results, despite being published at the Appstore and despite having received an EUROPEANA Award in 2017 and a distinction from the COSME Programme in 2018. On the contrary the just published the TOURiBOOST Project has successfully mobilized its stakeholders despite budgetary restrictions.

## 7. Conclusions

Art is the greatest intellectual realization in the history of mankind. The artifacts and artworks in sites and museums, witnesses of our past, have a great social value because they represent the social tissue of civilization and reflect the collective identity based on history, territory and tradition. The meanings and the emotions, that stories about them, generate, enable the audience to look at those objects with the eyes of the past, to imagine them in their splendor and significance. Precisely for this reason, we should try to focus on the essential elements that lead to the formation of cognition and emotion and an enhanced cultural capital. In fact, the task of those who want to welcome visitors to the heritage places is to know how to build what is needed to tune into the needs of the audience: reconstructing an AV context that allows interpretation, in a coherent way, that allows a new object to (re)appear from the past. The articulation of the written and AV language of the images and sounds could become a solution to the problem of reception and knowledge and can actively support the social function and identity of cultural heritage. However, this articulation should not be confused with the indoctrination of the audience as it is an active and personal process. Definitely the starting point of the story should be the truth shared by scholars, but from this point onward the efforts should focus on building a path of experiences and the intellectual tools to ensure that this sense can be born from the imagination of the audience, as generated by the digital work of art. Bridging the spatiotemporal gap between contemporaneity and past civilizations is one of the most important themes and challenges that a narrator has in front of him, Homer and Shakespeare are illustrious examples. In the works of these great minds, a fracture creates an inner disarray, with the references and beliefs that relate to the own life and values on which each one has built the own balance. The power of art lies exactly in this intended disharmony. In his work *Art as an Experience* conceived in 1934 John Dewey suggests that the emotion is the conscious sign of a fracture, present and looming and that the disharmony is

the opportunity for reflection [42]. The desire for the restoration of union transforms the mere emotion to interest for certain objects and condition for the realization of harmony. This new harmony is made of sensory perception and rational processing together, is therefore an interactive process. When harmony is achieved, the material of reflection is incorporated into meaning. It's the beginning of the chain reaction: the past is brought into the present in such a way as to make it possible to the broader and deeper the content of the latter. This complex and articulated process, made up of crises, reflections and answers, is able to restructure the criteria of analysis towards a new and more advanced balance useful to embrace larger fields. Because our brain cannot tell which experiences will meet in the future, the balance in which it settles after the new experience incorporates functions such as memory and judgment, which are fundamental to the confrontation, waiting for the fruits of a subsequent experience.

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