Digitising Intangible Cultural Heritage: The use case of Antigone

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1   Introduction

Digital technologies provide new ways of engaging with cultural heritage (CH). Importantly, they also allow the embodiment of intangible CH (ICH), as well as the embodiment of intangible properties related to CH and ICH, such as citizens' perceptions and engagement while interacting with an artifact.

Besides their artistic and cultural properties and context, artifacts also embody the values of their times, their creators, or of the stories/people they talk about. Although the interaction of aesthetic and moral values [7], as well as the role of art in moral education [4] are topics of debate, perceived values, in the eyes of citizens, can trigger reactions as strong as toppling statues. Given the important role of values in our lives, -they define who we are, the way we think about ourselves and others, and the way we live-, capturing people's perception of the values associated with an artifact can be significant and can be exploited in various contexts including research, exhibit curation and education. For example, interactive exhibits and educational activities integrating CH/ICH artifacts can actually support the exchange of views, encourage thought-provoking dialogues and heighten citizens' sensitivity towards diversity and inclusion.

In this context, VAST, a European H2020 Research project, aims at bringing values to the forefront of advanced digitisation. This is achieved through the VAST digital platform, which offers (among others):
− a methodology and tools for annotating artifacts with values [6];
− a toolkit for value-centred educational activities;
− a methodology for capturing citizens experience with and value perception of artifacts, interactive exhibits and during educational activities;
− tools, such as online user surveys and applications, that support VAST methodologies, and equip related professionals in their daily practice.

The data collected through the aforementioned tools populate VAST's ontology and can be used at a later stage for various purposes: research, curation and education, among others.

Research. VAST methodologies draw upon scientific research for capturing audience characteristics: from demographics to personality traits [8], emotions[1]

and personal values [10, 3]. Additionally, the perception of values is collected by means of annotation, mind maps and custom-made questionnaires. Based on these, the design of the interactive exhibits, the educational activities, etc. can support the collection of datasets that can be further exploited for research in various fields of Social Sciences and Humanities.

Curation. Capturing citizens' viewpoints during the interaction with CH can allow curators to better understand the diversity of behaviors and perspectives, thus avoiding 'my-personal' biases. This can contribute to a more inclusive perspective in the interpretation and presentation of artifacts that takes into account visitors' background [2].

Education. Both the tools for capturing people's perception, during the activity, and the design of the educational activities, follow Kolb's experiential learning cycle [5], which is driven by the resolution of the dual dialectics of action/reflection and experience/abstractions. VAST's experiential learning approach begins with a stimulus/experience. Following this, the data collected are exploited to provide all sort of post-activity experiences. These can support reflective observation and active experimentation, through the comparison of one's view to others that experienced the same stimuli.

Importantly, VAST supports experiences both inside and outside a museum. In this way, a wider range of audiences is considered, which are not the common 'museum goers', including teenagers, young adults and minority groups. This not only benefits the citizens, but also allows them to be heard by capturing their perspectives. At the same time, it provides museums and exhibitions with the tools necessary to achieve their new and extended role "in the service of society and its development", as "meaningful meeting places and open and diverse platforms for learning and exchange" [9].

2   The use case of Antigone

Following, a museum interactive exhibit and an educational activity are presented. Both are based on the tragedy of Sophocles Antigone and demonstrate how the ideas above are put into practice. These experiences have been designed by the House of Classical Greek Ideas (HoCGI), an innovative exhibition on ancient Greek Philosophy. Philosophical questions, problems, values and ideas are part of the ICH and, under a philosophical perspective, retain a timeless and everlasting mind-intriguing aspect. However, they are particularly hard to demonstrate and exhibit as they are both abstract and complex. The HoCGI aims, through technology, to create interactive exhibits that engage visitors in philosophical thinking, answering dilemmas and challenging questions. Providing visitors with an experience, where they actively participate in philosophical thinking, makes their visit relevant and attractive. For example, the concept of *justice* is crucial in our everyday decision-making, and influences how we perceive and evaluate the political context and our social relationships. Justice as well as other relative concepts, like democracy and freedom, are essentially understood by citizens through personal experience, reflection and decision-making. Finally,

the monitoring of the visitors' interaction and decision-making helps museum curators and educators (1) get a better insight on the visitors' point of view, (2) reflect on the experience the museum offers, and (3) rethink their role as curators and also as value communicators.

2.1   The exhibit: 'The trial of Antigone'.

This exhibit inspires to serve as an ongoing experiment in the appropriation of the story of Antigone. Visitors are positioned in a similar place as the spectators of the ancient tragedy, watching the exchange of arguments between Creon and Antigone on her trial. However, they have the opportunity to participate in the trial as a jury, choosing the questions they can ask Antigone in order to form their judgment. The treelike form of the script provides the users with the opportunity to direct the experience according to different focal axes depending on their ideas and interests (see Fig. 1), allowing multiple storytelling experiences and a deeper examination of the questions emerging from the tragedy. In the end, visitors evaluate the arguments of Antigone and Creon, by voting if Antigone is innocent or guilty.
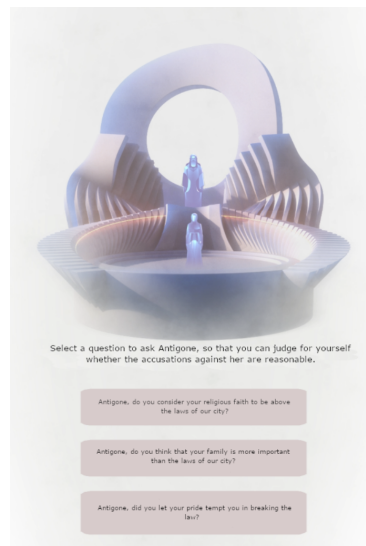

Fig. 1: Users can direct the experience according to their interest by choosing to ask different questions. Their final choice depends on the the arguments of Antigone and Creon.

No alternate ending is offered, but visitors are rewarded by the notion that -through their judgment- they become part of the discussion this emblematic story ignites through the centuries. The visitors' choice of questions, as well as

their final judgment, are collected and will accumulate over time. Visitors will be able to go online, on the VAST platform, and follow how the trial result progresses and participate in relevant discussions.

2.2   Educational activity: 'Creon vs Antigone: a collision of values'

The activity aims to encourage participants to reflect on *values* using the tragedy of *Antigone* as an educational tool, discuss the values that are important to them and how they prioritize them. It also promotes and facilitates group discussion about the values perceived by different people given common stimuli. The activity's four main parts are: 1) ice-breaker activities that allow participants to feel comfortable and encourage active participation, 2) the individual work' part - participants annotate the values perceived in an excerpt of the Antigone tragedy and then prioritize them, 3) the 'working group' part - participants share and discuss their personal views, and create a group mind-map of values, 4) 'discussion in assembly' - all groups discuss their mind maps and create a common one. In addition to data such as the annotations and the mind-maps, information about demographics and other characteristics such as personal values can also be collected. These become useful for relevant research and could also be exploited post-workshop.

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