



2018

M CIDOC ICOM
Conference international
committee for
documentation

Generating and tracing the 'Provenance of Knowledge'



Heraklion | Crete | Greece

29 September- 5 October 2018

#CIDOC2018

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Municipality of Heraklion

CIDOC 2018 Conference

ICOM international committee for documentation

BOOK OF ABSTRACTS

Edited by: Ioannis Chrysakis, Lida Harami, Dimitris Angelakis and George Bruseker

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Institute of Computer Science, Foundation for Research and Technology Hellas,

29 September- 5 October 2018

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Conference Days at a Glance

***Venue: St Marcus Basilica**

	Saturday [Sep 29]	Sunday [Sep 30]	Monday [Oct 1]	Tuesday [Oct 2]	Wednesday [Oct 3]	Thursday [Oct 4]	Friday [Oct 5]
9:30-10:00			Conference Opening: St Marcus* Basilica				Day Trip: Palace of Malia and Spinalonga
10:00-11:00	Workshops	Workshops	Conference and Working Group Presentations St Marcus* Basilica	Conference Sessions	Visit to Knossos (8:00-10:30)	Conference Sessions	
11:00-11:30	Break	Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break	
11:30-13:00	Workshops	Workshops	Keynote Dr. Costis Dallas St Marcus* Basilica	Conference Sessions	Conference Sessions	Conference Sessions	
13:00-14:00	Break	Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break	
14:00-15:30	CIDOC BOARD Meeting	Workshops	Conference Sessions	Conference Sessions	Conference Sessions	Poster Session (14:00-15:00) Closing (15:00-15:30)	
15:30-16:00	Break	Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break	
16:00-17:30	Working Groups Chairs Meetings	Workshops	Conference Sessions	Parallel Working Group Sessions	Conference Sessions	CIDOC Annual General Meeting, Closing of the conference	
18:00-19:00			Visit to Archaeological Museum	Visit to FORTH - Cultural Heritage Labs	Keynote Dr. Argyro Nafplioti (17.30-18:30)	Visit to Historical Museum of Crete	
19:00-22:00		Welcome Reception	Reception (19:00-21:30)	Reception at FORTH	Conference Dinner (20:00-23:00)	Reception	

Conference Registration Desk

The registration desk will be available inside the conference venue in the **Cultural Conference Centre of Heraklion (CCCH)**.

Conference Venues

The main venue will be at the **Cultural Conference Centre of Heraklion (Leoforos Plastira 100, 71201, Heraklion)**, located at Nikolaou Plastira street inside the historical center of Heraklion near the Venetian Walls. This brand new center provides state of the art facilities that will fully accommodate the conference participant's needs.

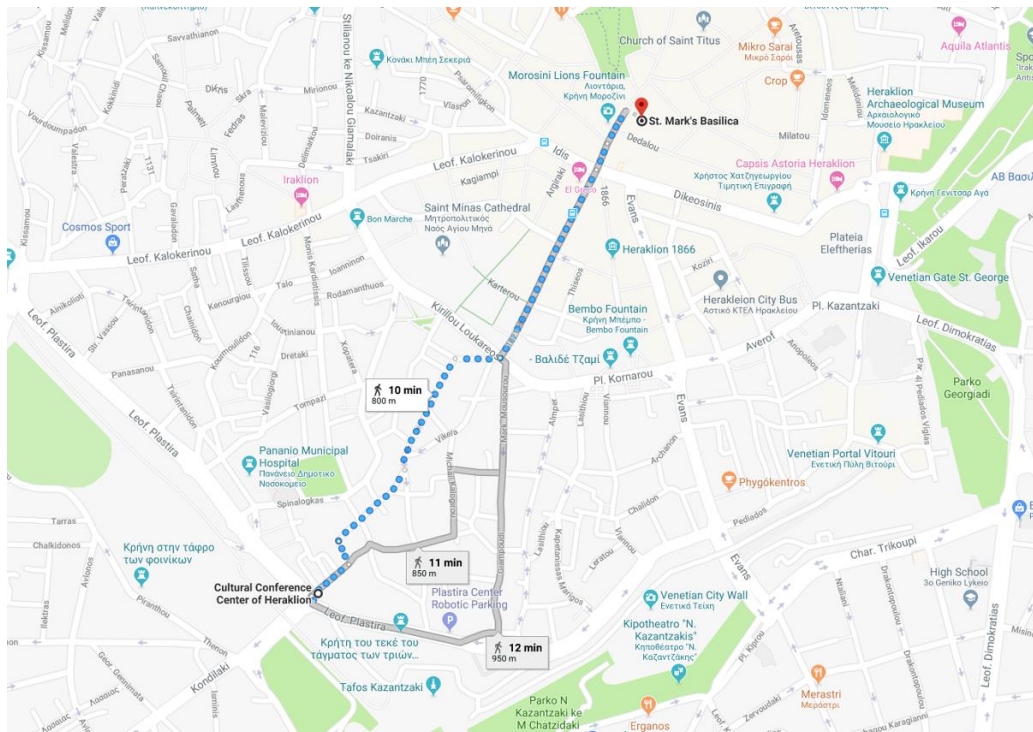


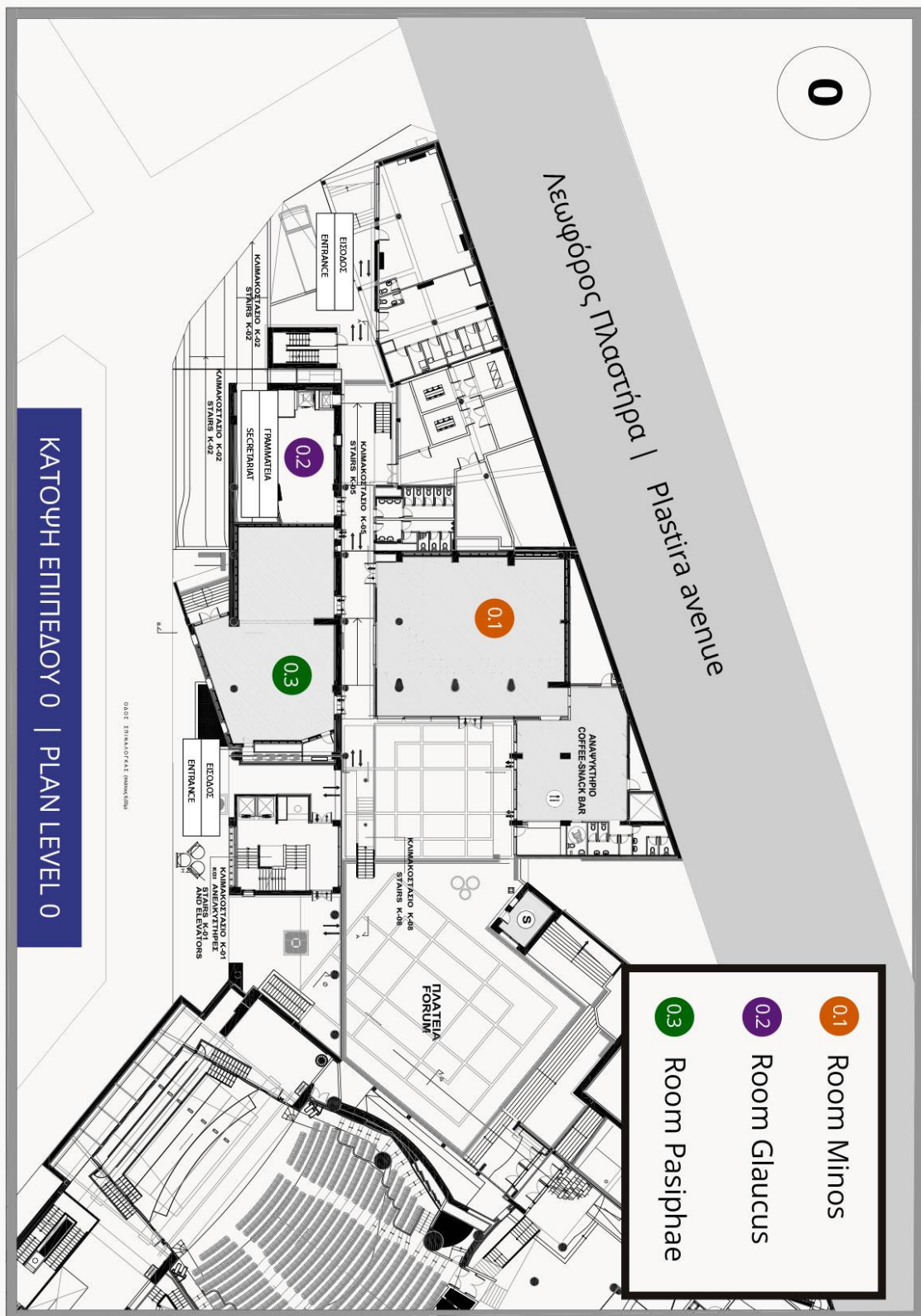
The conference opening in Monday 1st of October will be at the **St Marcos Basilica (Plateia Kallergon 100, 71202, Heraklion)** which was initially build in 1239 a.c. from the Venetians. Later on it was re-built right after a big earthquake that took place in 1303. The Turks modified it into a Muslim temple in 1669 till 1956 when the Company of Cretan and Historical Studies change it into it's initial shape.

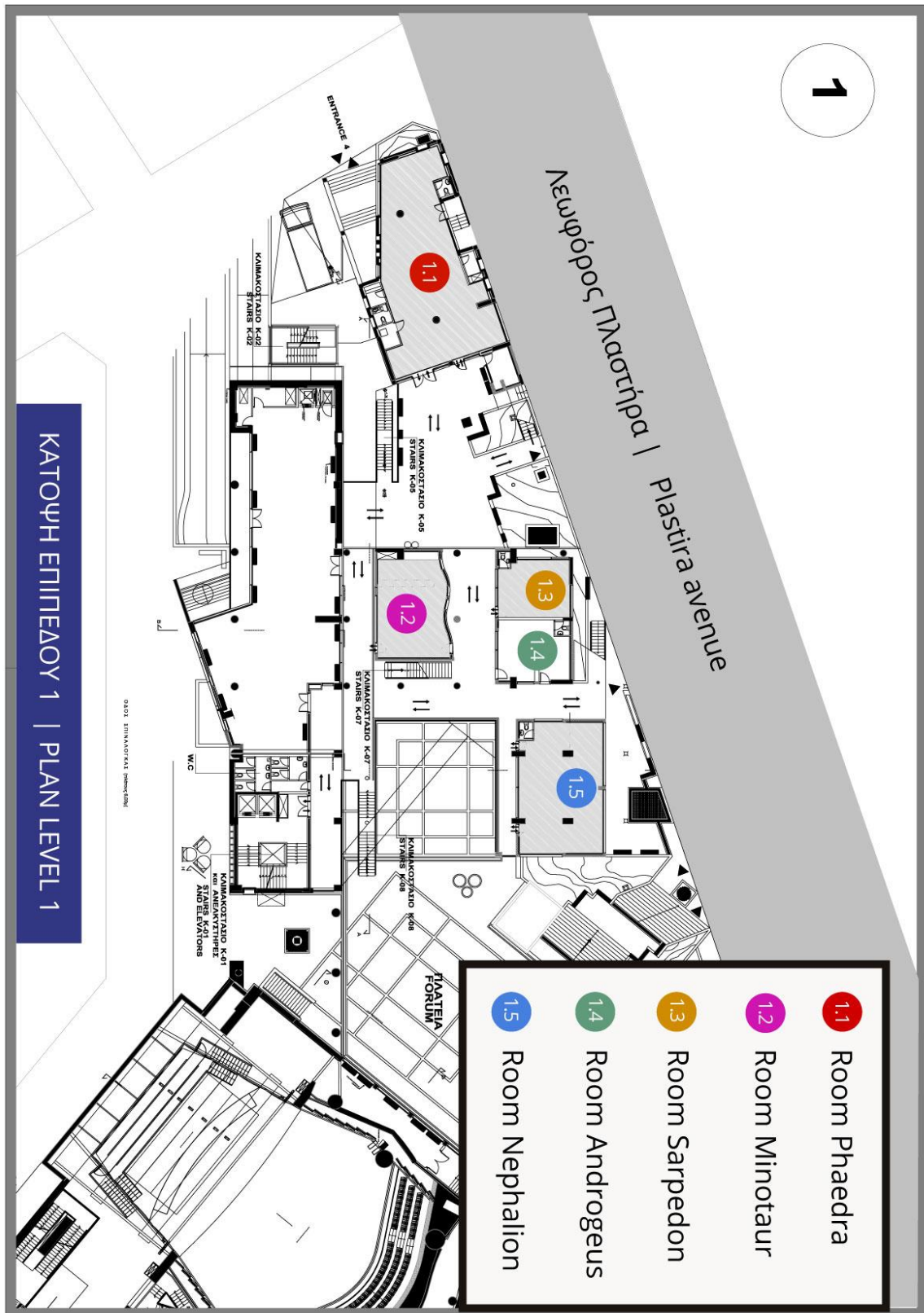


Useful Route

This map shows the route between the two conference venues. For more routes and maps, you can visit the link: <http://www.cidoc2018.com/venues>









Social Events

This year the CIDOC 2018 conference will offer a wide range of social events.

These include a conference dinner, several receptions, visits to the archaeological museum and the historical museum of Heraklion, visits to Knossos, a visit to FORTH's Cultural Heritage Labs.



Archaeological Museum of Heraklion



Knossos Palace







Historical Museum of Heraklion



FORTH

Program per day

#CIDOC2018




























	Documentation: Models, Tools and Technology		Provenance and Documentation
	Innovation in Documentation		Special Theme

Saturday 29 September 2018







Time	Day description: Workshops	
Room	<i>Phaedra</i>	<i>Minos</i>
10:00-11:00	[WS5.1] International Thesaurus Working Group Meeting	[WS5.2] The use of software tools in documentation I
BREAK		
11:30-13:00	[WS5.1] International Thesaurus Working Group Meeting	[WS5.2] The use of software tools in documentation I
BREAK		
14:00-15:30	[WS5.1] International Thesaurus Working Group Meeting	[S0.1] CIDOC Board Meeting
BREAK		
16:00-17:30	[WS5.1] International Thesaurus Working Group Meeting	[S0.2] WG Chairs Meeting

Note: The full book of abstracts is available at the following link: <http://cidoc2018.com/detailed-program>

Sunday 30 September 2018










Time	Day Description: Parallel Workshops, Opening Reception						
Room	<i>Phaedra</i>	<i>Minos</i>	<i>Pasiphae</i>	<i>Asterion</i>	<i>Androgeus</i>	<i>Nephalion</i>	<i>Sarpedon</i>
10:00-11:00	[WS5.1]  International Thesaurus Working Group Meeting	[WS5.2]  The use of software tools in documentation II	[WS5.3]  Collections management from basics to international implementation	[WS5.6]  Ancient DNA Analysis	[WS5.4]  Automating the Application of CRM-dig to the Provenance Metadata for Computational Photography Based Imaging	[WS5.7]  CIDOC CRM in Action	[WS5.9]  Make your museum more visible with Wikimedia projects
BREAK							
11:30-13:00	[WS5.1]  International Thesaurus Working Group Meeting	[WS5.2]  The use of software tools in documentation II	[WS5.3]  Collections management from basics to international implementation	[WS5.6]  Ancient DNA Analysis	[WS5.4]  Automating the Application of CRM-dig to the Provenance Metadata for Computational Photography Based Imaging	[WS5.7]  CIDOC CRM in Action	[WS5.9]  Make your museum more visible with Wikimedia projects
BREAK							
14:00-15:30	[WS5.1]  International Thesaurus Working Group Meeting	[WS5.8]  Exhibition Object Data Exchange Mechanism (EODEM)	[WS5.3]  Collections management from basics to international implementation	[WS5.5]  Multimodal interaction in the Virtual Museum	[WS5.12]  What is a comprehensive Digital Strategy?	[WS5.7]  CIDOC CRM in Action	[WS5.9]  Make your museum more visible with Wikimedia projects
BREAK							
16:00-17:30	[WS5.1]  International Thesaurus Working Group Meeting	[WS5.8]  Exhibition Object Data Exchange Mechanism (EODEM)		[WS5.5]  Multimodal interaction in the Virtual Museum	[WS5.12]  What is a comprehensive Digital Strategy?	[WS5.7]  CIDOC CRM in Action	[WS5.9]  Make your museum more visible with Wikimedia projects
19:00-20:00	WELCOME RECEPTION						

Monday | October 2018

Time	Day Description: Conference Opening, Keynote, Conference Sessions, Visit to Archaeological Museum, Reception		
9:30-11:00	[S0.3] Official Welcoming Addresses [9:30-10:00] Conference and Working Group Presentations [10:15-11:00] *Venue: St Markus Basilica		
*COFFEE			
11:30-13:00	[S0.4] Keynote Dr. Costis Dallas "How a Museum Object 'Remembers its Facts': Evidence, Representation and Curation in the Continuum" *Venue: St Markus Basilica		
LUNCH			
14:00-15:30	[S1.1] Conceptual Modelling  Room: Minos	[S2.1] Documentation beyond the object, oral tradition and performance as context of understanding  Room: Pasiphae	[S3.1] Photography, the Image, Documentation and Provenance  Room: Asterion
COFFEE			
16:00-17:30	[S1.2] Documentation Systems based on CRM or Ontologies  Room: Minos	[S2.1] Documentation beyond the object, oral tradition and performance as context of understanding  Room: Pasiphae	[S3.1] Photography, the Image, Documentation and Provenance  Room: Asterion
18:00-19:00	VISIT TO ARCHEOLOGICAL MUSEUM		
	RECEPTION		

*Note: From 09:30 to 13:00 the venue is at St. Marcus Basilica (Plateia Kallergon 100, 71202, Heraklion). For all the other sessions the venue is at the Cultural Conference Centre of Heraklion (Leoforos Plastira 100, 71201, Heraklion).

Tuesday 2 October 2018

Time	Day Description: Conference Sessions, Parallel Working Group Sessions, Visit to FORTH, Reception			
9:30-11:00	[S1.3] CIDOC CRM and Archaeological Documentation  <i>Room: Minos</i>	[S2.2] Contemporary Art, Provenance, Interviews and Documentation  <i>Room: Pasiphae</i>	[S3.2] Engaging with Audiences, creating, offering and understanding critical communication channels  <i>Room: Asterion</i>	[S4.1] Collection Documentation Modeling Wikidata and CIDOC-CRM  <i>Room: Phaedra</i>
COFFEE				
11:30-13:00	[S1.3] CIDOC CRM and Archaeological Documentation  <i>Room: Minos</i>	[S2.3] Deepening Documentation, beyond the object to knowledge context, potentials and challenges  <i>Room: Pasiphae</i>	[S3.3] Conservation and Analytic Techniques  <i>Room: Asterion</i>	[S4.6] UNESCO Chair on Cultural Heritage-ViMM Manifesto  <i>Room: Phaedra</i>
LUNCH				
14:00-15:30	[S4.7] The National Museum of Brazil and ICOM/CIDOC Response to the Situation  <i>Room: Minos</i>			
COFFEE				
16:00-17:30	[S0.5] Parallel Working Group Sessions CRM WG, <i>Room Androgeus</i> Documentation Standards WG, <i>Room Minos</i> LIDO WG, <i>Room Asterion</i> Museum Process Implementation, <i>Room Pashiphae</i> Exhibition and Performance Documentation, <i>Room Nephelion</i> Information Centres, <i>Room Phaedra</i> Semantic Research Environments, <i>Room Sarpedon</i>			
18:00-19:00	VISIT TO FORTH – CULTURAL HERITAGE LABS - WORKSHOPS (Presentations & Demonstrations): [WS5.10] Lasers in CH analysis, diagnosis and cleaning [WS5.11] Ambient Intelligence Research Facility demo			
19:00-22:00	RECEPTION AT FORTH			

Wednesday 3 October 2018

Time	Day Description: Visit to Knossos, Conference Sessions, Parallel Working Group Sessions, Conference Dinner			
9:30-11:00	VISIT TO KNOSSOS			
COFFEE				
11:30-13:00	<div>[S1.4] Semantic Web, LOD, Graph Dbs and Provenance of Knowledge</div> <div>Room: Minos</div>	<div>[S2.5] Provenance Lost and Regained</div> <div>Room: Phaedra</div>	<div>[S3.6] Documenting Built Heritage and Architecture</div> <div>Room: Asterion</div>	<div>[S4.4] Re-contextualizing the Museum collections and objects to their origin</div> <div>Room: Pasiphae</div>
LUNCH				
14:00-15:30	<div>[S1.4] Semantic Web, LOD, Graph Dbs and Provenance of Knowledge</div> <div>Room: Minos</div>	<div>[S2.4] Provenance and Illicit Trafficking</div> <div>Room: Phaedra</div>	<div>[S3.7] Documentation as Social Memory Practice</div> <div>Room: Asterion</div>	<div>[S4.5] Spectrum - Updating the standard</div> <div>Room: Pasiphae</div>
COFFEE				
16:00-17:30	<div>[S1.4] Semantic Web, LOD, Graph Dbs and Provenance of Knowledge</div> <div>Room: Minos</div>	<div>[S2.6] Crossing Documentation and Archives to Create and Study Provenance</div> <div>Room: Phaedra</div>	<div>[S3.7] Documentation as Social Memory Practice</div> <div>Room: Asterion</div>	<div>[S4.2] Getty Vocabularies</div> <div>Room: Pasiphae</div>
20.30-22:30	CONFERENCE DINNER			

Thursday 4 October 2018

Time	Day Description: Conference Sessions, Poster Sessions, CIDOC Annual General Meeting, Visit to Historical Museum of Crete			
9:30-11:00	[S1.5] Documentation Database Development <i>Room: Minos</i>	[S2.7] Documentation as Source of Provenance <i>Room: Phaedra</i>	[S3.8] Decolonizing Documentation <i>Room: Asterion</i>	[S4.3] Heritage Data Centric Research <i>Room: Pasiphae</i>
COFFEE				
11:30-13:00	[S1.5] Documentation Database Development <i>Room: Minos</i>	[S2.7] Documentation as Source of Provenance <i>Room: Phaedra</i>	[S3.9] User experience and museums <i>Room: Asterion</i>	[S4.3] Heritage Data Centric Research <i>Room: Pasiphae</i>
LUNCH				
14:00-15:30	[S0.7] Posters Session <i>Room: Labyrinth</i>			
COFFEE				
16:00-17:30	[S0.8] CIDOC Annual General Meeting <i>Room: Minos</i>			
18:00-19:00	VISIT TO HISTORICAL MUSEUM OF CRETE			
19:00-22:00	RECEPTION			

Friday 5 October 2018

Day Trip: Palace of Malia and Spinalonga

How a Museum Object ‘Remembers its Facts’: Evidence, Representation and Curation in the Continuum.

by Dr. Costis Dallas

Monday 1st October, 2018, 11.30-13:00, St. Marcus Basilica, Heraklion



Abstract: Can things talk? What is the meaning of an artwork? What can we learn from an archaeological artefact? Are museums about objects, or about stories? Are museum holdings evidence for of past cultures and the outside world, or primarily instruments for contemporary memory work, education, and entertainment? In an era marked by the effects of globalization and dizitalization, by the rise of the experience economy, and by increased pressure on cultural institutions to

demonstrate social relevance, such questions become critical for contemporary museums. The authority of museums was established originally on their ability to act as trustworthy guardians of their collections, deemed in turn to be reliable and important records of human cultures, the natural world, and scientific knowledge. Documentation and study of collections in the light of scholarship and science was, and in many ways, remains central to the contemporary museum enterprise: one might, still, consider the museum information lifecycle as a process of transformation of primary object information into a fixed body of scholarly knowledge and internally consistent authoritative museum documentation, which is then transformed further into exhibitions, educational programming, and public communication. But this “waterfall” model is challenged by acknowledging the cultural bias and historical situatedness of museum catalogues, the multivocality and interdependence between facts stored in museum information systems, the diversity in modes of argumentation summoned to produce object knowledge, and other complexities. The challenge to the “unassailable voice” of the museum by indigenous and decolonial voices, amateur and citizen science, community and participatory heritage practices, is now fuelled by the proliferation of networked communication and social media technologies in the digital continuum. And thus, new actors, processes, and manifestations of curating object knowledge emerge, calling for a reconsideration of how we represent and curate museum holdings in the museum catalogue, and beyond. The museum documentation community has been conscious of this challenge. The adoption of agency-oriented, event-centric approaches to representation (e.g., in CIDOC CRM), the focus on documenting processual, performative and contextual dimensions of object creation and use (e.g., in, documenting Variable Media Art), and the attempt to give voice to indigenous and local knowledge (e.g., by Reciprocal Research Network, or in the Mukurtu system), are testimony to this. Further evidence is lent by recent research on modelling scholarly activity and research methods in the humanities, on the formal representation of documenting scientific observation, on representing different degrees of belief, as well as the broader topic

of the provenance of knowledge in museum documentation. Drawing from considerations of record, evidence, and warrant from information and archival science, from epistemological approaches to archaeological description and argumentation, and from conceptions of objecthood in new museology, the anthropology of art, and science studies, this talk seeks to call attention to the representation and curation of object knowledge as it is manifested not only in professional museum practice, but also in subaltern, indigenous, community, art-based, and other non-custodial memory and identity practices in the digital continuum.

About the speaker:

Costis Dallas is an Associate Professor in the Museum Studies program, Faculty of Information, University of Toronto, and a founding Research Fellow of the Digital Curation Unit (DCU), IMSI-Athena Research Centre in Athens, Greece. In his research, he investigates the relationship between people, things, and information in contemporary practices of cultural heritage curation, social interpretation and scholarly research, and the digital infrastructures, methods and tools that mediate this relationship. He is the Principal Investigator of E-CURATORS - Pervasive Digital Curation Activities, Objects and Infrastructures in Archaeological Research and Communication (SSHRC Insight Grant, Canada). Also, he is Vice-Chair of the Archaeological Practices and Knowledge Work in the Digital Environment (ARKWORK) COST Action where he conducts scoping and qualitative research on archaeology and social media, and Chair of the DARIAH-EU Digital Methods and Practices Observatory Working Group (DiMPO) where he coordinates a longitudinal European Survey on Scholarly Practices and Digital Needs in the Arts and Humanities across Europe. By synthesizing evidence from these studies, he aims to establish a pragmatic theoretical framework for curation “in the wild”, shaped by increasingly pervasive digital infrastructures such as mobile capture devices, Application Programming Interfaces, and online communication tools in scholarly work, and by participatory online information practices such as cultural memory and affiliative interactions between communities, amateurs and professionals on social media. His recent written work includes “Heritage Encounters on Social Network Sites, and the Affiliative Power of Objects”, “Digital Curation beyond the ‘Wild Frontier’: A Pragmatic Approach”, and “Curating Archaeological Knowledge in the Digital Continuum: From Practice to Infrastructure”. He was co-principal investigator of EU digital heritage research grants such as CARARE, LoCloud, Europeana Cloud, and ARIADNE, participated in the development of the NeDiMAH Methods Ontology (NeMO), and led the requirements analysis and functional specification work for the Metadata and Object Repository (MORE). Previously he worked in various professional positions in the field of museums and cultural policy, including Head of Documentation at the Benaki Museum, Special Secretary for Libraries and Archives of the Greek Ministry of Education, and Special Adviser on Cultural Affairs to the Greek Foreign Minister, and served as a member of the Board of Directors of the Acropolis Museum. He holds a BA in History from the University of Ioannina, Greece, as well as MPhil and DPhil degrees in Classical Archaeology from the University of Oxford.

Bones, provenance and life histories

by Argyro Nafplioti



Wednesday 3rd October, 2018, 17.30-18:30,

Cultural Conference Center of Heraklion

Room: Minos

About the speaker:

Following a first-class degree in Archaeology at the University of Ioannina (Greece), for which I received the top grade awarded in 2000 in the entire School of Philosophy, in 2002 I completed with Distinction an MA in Osteoarchaeology at the University of Southampton. I immediately continued with a PhD at Southampton, during which I was the first to apply strontium isotopic analysis to Aegean Archaeology. My studies have been significantly supported on a competitive basis through: an Arts and Humanities Research Council (AHRC) studentship, a Teaching Assistance Studentship from the University of Southampton, a post-graduate scholarship by the Lilian Voudouri Foundation and four undergraduate state scholarships (Greek Institute of State Scholarships). To date I have held two research posts in the American School of Classical Studies at Athens and one in the Cyprus Institute, and have received seven grants from charities for research that I lead as PI. Parts of my research have involved the targeted, combined application of strontium isotopic analysis with other isotope systems, again for the first time in the Aegean.

Theme: Documentation: Models, Tools and Technology

Session I.1 : Conceptual Modelling



Date: Monday, October 1, 2018 Time: 14:00 - 15:30



Room: Minos (CCCH), Chair: George Bruseker, Panos Contantopoulos

Session Description: This session explores methods and strategies for conceptual modelling in cultural heritage. With reference to key ontologies such as CIDOC CRM, the session explores different issues regarding the representation of knowledge about cultural heritage and how to properly model different topics.

On the Stratified Nature of Cultural Artefacts (and Why We Should Model Them as such)

Author: James Fielding (Université de Paris, France)

Abstract: The primary job of an archival institution is to preserve historical artefacts and to make them available for future research. Connected with this, however, is a corollary: it is equally important that in doing so these institutions remain non-partisan with respect to the scholarly debates that such access seeks to engender. While the tension between these two requirements is not new, it is one that contemporary archivists in particular have to confront. For today, digital tools such as application ontologies promise to make archival knowledge available to a wider audience, with greater ease of access, and with a level of perspicuity never before imagined. However, in developing these ontologies and in making them workable, engineers frequently find themselves in a position where they are forced to resolve deep-seated and long-standing questions about the very nature of the archival material itself, thus embedding partisan views within the structure of the material's digital organisation and potentially prejudicing the outcomes of future research as a result. In this talk, I will highlight one attempt to address this issue. We will first take a look at the theoretical background of this project. Based on the philosophy of Roman Ingarden - a Polish phenomenologist, whose seminal work, *The Ontology of the Literary Work of Art* sought to resolve such issues almost one hundred years ago already -, we will see how his stratified ontology of cultural artefacts is uniquely adapted to the demands of our contemporary, digital world. We

will subsequently illustrate these ideas by looking at several difficult cases currently faced by developers at the Wittgenstein Archives Bergen, and show how Ingarden's conception can be used to design an ontological model that accommodates diverse and even contradictory forms of knowledge without sacrificing its own internal consistency.

Semantic Bridging of Cultural Heritage Disciplines and Tasks

Authors: Efthymia Moraitou (University of the Aegean, Greece), John Aliprantis (University of the Aegean, Greece), George Caridakis (University of the Aegean, Greece)

Abstract: The Cultural Heritage (CH) domain encloses a wide range of different disciplines, serving preservation of objects, collections and sites and dissemination of knowledge. In this context, stakeholders of different sciences generate, retrieve and share a vast amount of diverse information. Therefore, the information interoperability has been considered as a crucial task, especially in terms of the semantics. In this direction CIDOC Conceptual Reference Model (CRM) has been widely used for the matching and merging of related to the CH domain ontologies and metadata standards. Additionally, it has been the base for extensions development in order to meet the needs of specialized fields and tasks. Nevertheless, a table or map which could clarify the correlations between the different ontologies and schemas is not yet defined. Our study includes the review of relevant existed approaches and the proposal of a conceptual layering, considering the CIDOC CRM and its individual models as the center of the organization. Matching and alignment to this high-level ontology is an elaborate task due to the differentiation of abstraction levels and fields of interest. This work could further clarify the semantic level and focus of the different ontologies and schemas, define the scope and method of their combination according to the separate needs of a domain or task, as well as the identification of semantic lack for the documentation of specialized CH activities and fields. Eventually we will outline the efficient combination of different ontologies and schemas, aiming to the best possible capturing of information documentation and provenance.

Visual and iconographical Representation: an ontological approach

Authors: Nicola Carboni (CNRS, France), Livio De Luca (CNRS, France)

Abstract: The perception of our heritage is based on sign - functions which relate visual representations to cognitive types, allowing us to make perceptual judgements over physical objects. The recording of these type of assertions, and their differentiation in relation to the level of interpretation, is paramount for the comprehension and analysis of our heritage. The article investigates a theoretical framework for the organization of information related to the visual works on the base of the identity of their single constituent elements. The partitioning of the process allows for the definition and differentiation between the diverse level of knowledge and sources relative to a statement, significantly improving the semantic clarity of the recorded assertions. The distinction allows us to present the gestalt of an item as a first layer of meaning, following a component - based identity for the subject identification and the expression of a further content as symbolic value. The framework developed is, then, used for the formalization of an ontology which is constructed as an extension of CIDOC - CRM and present the possibility to record statements about the diverse elements present in a visual representation on the base of their act of interpretation. The result is tested with artworks coming from the Byzantine and Renaissance tradition, showing how we can

express denotative and connotative meaning about iconographical objects unveiling the symbolic assignment towards certain type of visual object and clustering them in relation to the referenced entity.

Documenting object experiences in the art museum with CIDOC CRM

Author: Erin Canning (University of Toronto, Canada)

Abstract: This paper explores using CIDOC CRM to document affective aspects of viewer experiences of art objects, such as they can be recorded through scholarly research. This proposal is based on my Master's thesis on affective metadata for art object experiences, in which I developed a schema and controlled vocabulary with which to document affective qualities of viewer - artwork experiences, and validated it through empirical research (University of Toronto; supervisor: Dr. Costis Dallas). On this basis, I explore applying CIDOC CRM to this knowledge representation challenge; the event - centricity of the CRM makes it well - suited for documenting the event of experiencing artworks. I consider the extent to which the CRM can serve to document a effective properties, which leave no lasting material evidence. I propose a solution of how affective experiences may be represented with CIDOC CRM, and consider whether an extension is required to account for aspects of the issue that may not be accurately represented by the CRM. This proposal looks at an area of object research and documentation not yet directly considered by CIDOC CRM or existing extensions. It introduces an interdisciplinary view of documentation that includes affect theory, empirical aesthetics, and visitor research as collaborators in a strategy of holistic object documentation. It seeks to engage CIDOC CRM in continuing to push the boundaries of what is conceptualized as object information worthy of documentation. Additionally, proposing a formal representation of affective visitor - object experiences suggests the potential for new visitor - facing museum practices, such as digital visitor guides making recommendations based on the affective potential of museum objects.

Session I.2 : Documentation Systems based on CRM or Ontologies



Date: Monday, October 1, 2018 Time: 16:00 - 17:30



Room: Minos (CCCH), Chair: George Bruseker, Sophia Sotiropoulou

Session Description: This session gathers together papers exploring documentation projects at institutional and national scale that have adopted CIDOC CRM and other ontologies in order to structure their information management strategy. Papers will report results of such projects and explore strategies and challenges in following such a methodology.

The Mexican Cultural Heritage Data Model: speeding up the pace towards a holistic documentation of the Mexican cultural heritage

Authors: Jose Manuel Morales Del Castillo (Universidad de Granada, Spain), Pedro Angeles (Instituto de Investigaciones Estéticas de la UNAM, Mexico), Claudio Molina Salinas (Instituto de Investigaciones Estéticas de la UNAM México, Mexico)

Abstract: Mexico is a country with a vast and extraordinary cultural heritage that is the result of rich history of cultural exchange, syncretism and transculturation. This circumstance is materialized in the consolidation of a long and prestigious museum tradition, which at the same time is sadly characterized by an endemic lack of technological resources, rather than professional skills. As a result, we find that Mexican museums produce a very heterogeneous documentation (often not even managed using information technologies), and most of them deploy ad hoc solutions that directly limit the usefulness and value of the documentation process itself. Because of that, the recently founded Mexican Ministry of Culture is undertaking the development of the Mexican cultural heritage data model ("Modelo de Datos México"), which is aimed to contribute to the cultural heritage domain of our country through the correct characterization and documentation of its cultural objects. It's the first documented experience in Mexico of a large scale CIDOC - CRM - based data model that is complemented with a set of terminological tools that attempt to capture the singularities and idiosyncrasy of the Mexican cultural sector. Despite there still are a lot of open issues, in the present paper we'll describe the motivations and decisions made so far to adequate the data model to the Mexican reality, and the development of the project that will define a set of local terminologies built on the expertise of linguists, information architects, developers and, especially, museum professionals.

ICON Project: content integration in Portuguese national archives using CIDOC-CRM

Authors: Maria Jose de Almeida (Direção-Geral do Livro, dos Arquivos e da Biblioteca, Portugal), Lucília Runa (Direção-Geral do Livro, dos Arquivos e da Biblioteca, Portugal)

Abstract: DGLAB is responsible for the management of several information systems that support its mission to safeguard, enhance and promote governmental and public records, as well as other historical documents in its custody. One of the most significant information system (<http://digitalq.arquivos.pt>) holds the archival description of information objects dating from the 9th century to present days, of several natures and media. The data infrastructure is supported by a relational database, even though the archival descriptions obey the hierarchic rules defined by the standards of the International Council on Archives (ICA). Both the technology and the data model appear to be unable to respond to the current challenges of our information management needs and those of our audience. The ICON Project aims to renew the existing data infrastructure in order to improve efficiency to internal and external users. One of its key features is content integration, as we intend to create a more flexible data model that can both interoperate with other information systems and accommodate information regarding cultural resources other than archival documents. As the ICA is reviewing its standards towards a conceptual model, but as it has not yet released a final or stable version, the choice of CIDOC-CRM as our root ontology seems the most appropriate for our project. Focusing on the archival resources of the DGLAB, this paper presents the ICON Project current state of development, discussing our doubts and options on applying the CIDOC-CRM to archival resources in integration with other cultural objects information.

Implementation of CIDOC CRM ontology in Ukraine for the development of the documentation systems and data exchange

Authors: Vladyslav Pioro (Ukrainian Center for Museum Development, Ukraine), Anastasiia Cherednychenko, Halyna Holubeva (Ukrainian Centre for Cultural Studies)

Abstract: Recently the museum and cultural heritage accounting system have been radically changed in Ukraine. Traditional approaches that have remained unchanged since the 1980s did not meet current challenges. Firstly, in terms of data and collections security. All complete information about museum collections was stored on the analogue carriers in those museums only. That is why after the occupation of the part of Ukraine in 2014 we also lost access to the museum and information about their collections as well. Secondly, there is a request for another level of accessibility of data for their better analysis and presentation. Therefore, during 2014–2017 in Ukraine has updated the regulatory and methodological basis of museum accounting. CIDOC CRM approved as a basic formal ontology for electronic accounting and description of museum collections. A national metadata scheme was developed to ensure the unification of museum objects data and related inventory data, on the basis of CIDOC CRM. The scheme structure is event based and provides fixation of descriptive and accounting information in the context of events and processes. The development of a national scheme of metadata for the accounting of immovable objects of cultural heritage has also begun in 2017 on the basis of similar principles. In general, we seek to form an integral complex of interrelated resources for documentation, presentation and research of movable, immovable and intangible cultural heritage objects through the implementation of the formalized ontology of CIDOC CRM, compatible metadata schemes and thesauruses.

Semantic Representation and Provenance of Cultural Heritage Information: the National Gallery Collection in London.

Authors: Joseph Padfield (The National Gallery, London, UK), Kalliopi Kontiza (The National Gallery, London, UK)

Abstract: This paper describes a working example of mapping cultural heritage information and data from the National Gallery collection in London. The paper discusses the process of semantically representing and enriching the available cultural heritage data, and reveals the challenges of semantically expressing interrelations and groupings among the physical items, the venue and the available digital resources. The paper also highlights the challenges in the creation of the conceptual model of the National Gallery as a Venue, which aims to i) describe and understand the correlation between the parts of a building and the whole; ii) to record and express the semantic relationships among the building components with the building as a whole; and iii) to be able to record the accurate location of objects within space and capture their provenance in terms of changes of location. The outcome of this investigation is the proposed fully CIDOC - CRM compliant structure, that has been developed during the CrossCult project, the CrossCult Venue Ontology, which attempts to model the spatial arrangements of the different venues that participate as demonstrators in the project: an indoor gallery, a small museum, four open air archaeological sites and two cities.

Session I.3: CIDOC CRM and Archaeological Documentation



Date: Tuesday, October 2, 2018 Time: 9:30 – 13:00



Room: Minos (CCCH), Chair: Stephen Stead, Sophia Sotiropoulou

Session Description: This session will explore the modelling of archaeological documentation using CIDOC CRM. The session is dedicated to Professor Kalpaxis from the University of Crete. Professor Kalpaxis' work opened a generation of scholars to the importance of the application of information management principles to archaeological documentation leading to research supporting many of the innovations discussed today with regards to semantic modelling of archaeological data.

9:30 - 11:00

Thanasis Kalpaxis and 'Advanced Methods and Information Systems in Archaeology'. An early project of the Department of History and Archaeology of the University of Crete

Author: Katerina Kopaka (University of Crete)

Connecting Iranian excavation reports and museum information to cultural heritage information systems

Authors: Massoomeh Niknia (Kharazmi University, Iran), Øyvind Eide (Historisch-Kulturwissenschaftliche Informationsverarbeitung, Universität zu Köln, Germany), Christian-Emil Ore (University of Oslo, Norway)

Abstract: Iran has a rich tradition of archaeological material. Excavation reports comprise one of the most important types of grey archaeological publications. Based on previous works starting in the 1990's we describe two methodologies for extracting information from excavation reports: 1) Manually encoding the reports into XML documents and then extracting information from the encoded reports. 2) Automatically extracting information directly from the reports. The basis for both methods is various types of elements seen as valuable for future use of excavation reports, based on local experience and international standards. These two methods not only lead to different levels of reproducibility, but also lead to different needs for human resources investment. We will discuss how data sets established using these two methods can be imported into CIDOC CRM compatible databases. The first method has already been employed and hopefully we will be able to show results also from the second method in time for the conference. The main objective of this study is to provide a solution to the organisation of excavation reports in a standard way so that it opens up for exchange of data between domestic institutions as well as at the international level. The state of the art international solution in this field, CIDOC CRM, has been under-utilised in Iran until now. This study investigates the application of this ontology. Extensions of CIDOC CRM, including CRMarchaeo, will also be explored to find out to which extent they serve our need and if there are issues to be addressed.

Inrap's experience in the digital acquisition of field archaeological data and associated metadata compliant with CIDOC CRM and Dublin Core standards

Authors: Emeline Le Goff (Inrap, France), Christophe Tuffery (Inrap, France)

Abstract: For the past three years, Inrap has developed the prototype application EDArc for field data recording and minimum associated metadata. EDArc is used for data acquisition about the different

scientific and technical units of archaeological observation and description. EDArc is based on a SQLite database and a set of data acquisition forms developed using .html5 and JavaScript formats. EDArc runs with Google Chrome, Safari and Opera browsers. Data can be exported in .xml format, analysed, displayed in a GIS such as QGIS, processed in a stratigraphic diagram application (B. Desachy's Le Stratifiant) or exchanged with other applications using the interoperable .xml format. The data entered in several tables correspond to the minimum data required for all preventive archaeological operations carried out by the Inrap. Field data were matched with CIDOC CRM in the European ARIADNE programme. EDArc also makes it possible to enter minimum metadata on the field, in accordance with the ISO 15836 (Dublin Core) standard used by Inrap for field data permanent archiving. EDArc is a real step forward on the road to interoperability of field archaeological data, both for harmonisation in data acquisition and for their publication and reuse. Collaborations are envisaged with other public research institutes in preventive and programmed archaeology to extend the fields and use cases of EDArc and, thus, the use of the CIDOC CRM standard in archaeology.

11:30 - 13:00

Describing and revealing the semantics of excavation notebooks

Authors: Eleni Giagkoudi (Department of Archives, Library Science and Museology, Ionian University, Corfu, Greece), Despoina Tsiafakis (Institute for Language and Speech Processing, Athena Research Center, Greece), Christos Papatheodorou (Department of Archives, Library Science and Museology, Ionian University, Corfu, Greece)

Abstract: CRMarchaeo enables the integration of documentations of various aspects of archaeological excavations. It aims at sharing and formalizing knowledge that the archaeologists have achieved during their activities in the field and has been recorded in various ways. It has been created to enhance interoperability among the information systems that support the archaeological excavation processes, by revealing the semantics of the activities related to these processes. This paper exploits CRMarchaeo to describe formally the content of excavation notebooks that document the daily digging process and, therefore, constitute the very essence of archaeological archival material. The paper explores the possibility of the existence of a common ground for the management of archaeological records from raw excavation data recorded in the notebooks and aims at recognizing the correlations between such data. Moreover it suggests potential additions to the CRMarchaeo, as a result of its practical use on real archaeological issues extracted from the experience from the specific archival material (excavation notebooks). As a case study for this research we have used the organization system and samples of the excavation notebooks produced during the excavation of the ancient settlement located in Karabournaki on the northern coast of the Aegean, in the area of Thessaloniki, Greece. The systematic excavation on the site for over 20 years has provided an impressive amount of information that is kept in the excavation notebooks.

The archaeological excavation report of Rigny: an example of an interoperable logicist publication

Authors: Pierre-Yves Buard (Document Numérique de la Maison de la Recherche en Sciences Humaines, Université de Caen BasseNormandie, France), Béatrice Markhoff (Laboratoire d'Informatique Fondamentale et Appliquée de Tours, Université de Tours, France), Olivier Marlet (Laboratoire Archéologie et Territoires, Université de Tours, France), Xavier Rodier (Laboratoire Archéologie et Territoires, Université de Tours, France), Elisabeth Zadora-Rio (Laboratoire Archéologie et Territoires, Université de Tours, France)

Abstract: The logicist programme, which was initiated in the 1970s by J.C. Gardin, aims to clarify the reasoning processes in the field of archeology and to explore new forms of publication, in order to get over the growing imbalance between the flood of publications and our capacities of assimilation. The logicist programme brings out the cognitive structure of archaeological constructs, which establishes a bridge between empirical facts, or descriptive propositions, at one end of the argumentation, and interpretative propositions at the other end. This alternative form of publication is designed to highlight the chain of inference and the evidence on which it stands. In the case of the logicist publication of the archaeological excavation in Rigny, our workflow can provide different levels of access to the content, allowing both speed-reading and in-depth consultation. Both the chains of inference and the ArSol database containing the field records that provide evidence for the initial propositions are visualized in a diagram structure. We rely on CIDOC CRM entities for ensuring the semantic interoperability of such publications within the Linked Open Data. Inference chains are mapped to CRMinf and ArSol records are mapped to CRM, CRMSci and CRMArcheo. Moreover, as part of the work carried out by the French Huma-Num MASA Consortium, a project is underway to allow the building of logicist publications starting from a graphical interface for describing the structure and content of propositions

A Cultural Heritage partonomy for the documentation of 3D digital artefacts of Cypriot coroplastic art

Authors: Chiara Eva Catalano (Institute of Applied Mathematics and Information Technologies, CNR, Genova, Italy), Valentina Vassallo (Institute of Applied Mathematics and Information Technologies, CNR, Italy), Sorin Hermon (Institute of Applied Mathematics and Information Technologies, CNR, Italy), Michela Spagnuolo (The Cyprus Institute - Science and Technology for Archaeology Research Center, Nicosia, Cyprus & Lund University - Archaeology and Ancient History, Sweden)

Abstract: The goal of this paper is defining a Cultural Heritage Artefact Partonomy (CHAP) concerning Cypriot coroplastic art. In particular, two case studies have been considered: the terracotta statues from the port of Salamis, attributed to the Neo-Cypriote style (600-500 BC), and the small clay statuettes from the Ayia Irini sanctuary, mostly attributed to the Cypro-Archaic period (700-500 BC). Although their differences in size, style and decorations, the items of this study represent male standing bearded figures, sometimes holding animals, arms or music instruments, and provide interesting examples for the description of human figures and their attributes in ancient times. Moreover, 3D digital models have been created digitising the physical artefacts for archaeological purposes. The objective of this work is framed within the EU GRAVITATE project, which proposes an innovative approach to the study of heritage artefacts, including 3D virtual reconstruction, classification and morphological analysis, steps that are limited by the impossibility to re-unite them physically, either because they are stored in various museums

or because physical refitting fails. In this perspective, a controlled vocabulary for the documentation and retrieval of 3D digital fragments and their parts has been developed and proposed here. CHAP is a SKOS vocabulary, aligned and mapped to CIDOC-CRM to integrate the description of the relationships between the parts and the overall context of the two archaeological collections. Focussing on both the artefacts and their digital counterparts, CHAP refers also to the CIDOC-CRMdig extension, where possible missing components have been identified and undertaken.

Standardization and Fuzzy Method as Preservation of Referred Sources: The Case of Small Finds from Phaistos and Ayia Triada (Crete).

Author: Marianna Figuera (University of Catania, Italy)

Abstract: One of the most important aspects in the archaeological documentation is the ability to preserve the origin of the information: all data concerning the sources and, at the same time, the subjectivity inside the archaeological data. The use of IT tools for the management of the archaeological data has highlighting the importance of creating standards and methods able to preserve data integrity and the link to their original sources. All these aspects were taken into account in the creation of a database developed as part of a Doctoral project focused on the management and analysis of small finds from the sites of Phaistos and Ayia Triada (Crete). Particular attention was given to many aspects: (1) the collection of sources, (2) the reading of data in order to identify the inconsistencies, (3) standardization, (4) management through multiassignment of attributions, (5) sharing of data. Standardization (ICCD standard) has involved the terminology (typological categories, functional classes, etc.), and the structure of the database. The sources management was developed applying the Fuzzy Method, with the assignment of degrees of reliability to the attributions. Finally, communication and sharing, fundamental to the creation of a not self-referential tool, is managed through the use of the XML standard. The logical schema developed could be evaluated as a good practice in documentation and is applicable to the analysis of other types of material coming from any archaeological context.

Session I.4 : Semantic Web, LOD, Graph Dbs and Provenance of Knowledge



Date: Wednesday, October 3, 2018 Time: 11:30 - 17:30



Room: Minos (CCCH), Chair: Emmanuelle Delmas-Glass

Session Description: The increasing availability of open source tools and data from the semantic web means it is now possible to do ever more with the semantic web and graph databases within the field of cultural heritage. This session explores projects, technologies and resources exploiting the semantic web in cultural heritage, with a special emphasis on the use of open data for supporting provenance of knowledge.

11:30 - 13:00

“The Twenty-First Century Athenaeum

Author: Virginia Curry (Edith O'Donnell Institute for Art History, University of Texas at Dallas, United States)

Abstract: The collection of materials in a so called “brick and mortar” facility such as an athenaeum, museum or a library suggests that a collection, if seen alone as a hoard of artifacts or books, could be digitally replicated. I argue that the nature of the internet and internet fora are largely still quite anonymous, subject to capricious trending, falsified information potential data mining, data monetization, and its “freedom” in world power countries, such as China, Russia and North Korea, is already controlled, very limited and censored by the State. Therefore, I argue here for the value of preserving original printed material and research libraries as a gateway to “live and personal” interdisciplinary human research and discourse. It not only interrogates and employs data presently available in databases, scanned volumes, library and museum “virtual” access, etc., but allows for the critically reasoned application and interpretation of such data to unique questions. While prestigious online databases can be extremely useful (British Museum, British Library and in France the Louvre and the BNL for example) they often do not include all of the collections (including the British Museum, which does not include their “mistake” purchases(embarrassing fakes) for example, destined to the purgatory of unpublished storage. I argue in the spirit of Raphael’s “Suola d’ Atene” we “Causarum Cognitio” as we gather at the University of Texas at Dallas, libraries and resources acquired by independent scholars, collectors and institutions and make them available in a 21st century Athenaeum.

Using LIDO for evolving object documentation into CIDOC CRM

Authors: Regine Stein (Georg-August-Universität Göttingen, Germany), Oguzhan Balandi (Georg-August-Universität Göttingen, Germany)

Abstract: Over the last years, many projects and institutions have worked on transforming object documentation from existing cataloguing systems into a CIDOC CRM compliant graph representation expressed in RDF. There were also various attempts to provide a generally valid path for the transfer of data from LIDO, CIDOC’s recommended XML Schema for metadata harvesting, into representations suitable for the Semantic Web. They all face the challenge that a detailed mapping, which fully exploits the CRM’s expressiveness, requires semantic assumptions that may not always turn out to be valid. Broad mappings on the other hand fail to leverage the potential of Semantic Web technologies. From the authors’ experiences in developing such transformations for their own object documentation as well as for LIDO based aggregations, balancing dependencies and conditions resulting from the data analysis in a mapping is a major challenge. Another issue is the need for creating RDF resources and associated identifiers for what is typically described as simple text in a record of the source system. In this paper, we present a method for using LIDO combined with an associated terminology as a means to evolve existing object documentation into CRM-based RDF representations. By clearly distinguishing between controlled vocabulary and ontology, it is possible to transform object data relatively easily into a minimized, though efficient structure using the CRM ontology. This structure will open up for the whole world of Semantic Web technologies to be used for further semantic refinement and data quality analysis through exploiting the underlying controlled vocabularies. The LIDO XML Schema together with its recommended LIDO Terminology provide useful features that help bridging the gap between current object documentation and its representation in CIDOC CRM’s encoding in RDFS.

ORION Project – Collections and Art Collectors in Portugal

Authors: Vera Mariz (ARTIS – Instituto de História da Arte, Faculdade de Letras, Universidade de Lisboa, Portugal), Rosário Salema de Carvalho (ARTIS – Instituto de História da Arte, Faculdade de Letras, Universidade de Lisboa, Portugal), Maria João Neto (ARTIS – Instituto de História da Arte, Faculdade de Letras, Universidade de Lisboa, Portugal), Clara Moura (Sistemas do Futuro - Multimédia, Gestão e Arte, Lda., Portugal), Natália Jorge (Sistemas do Futuro - Multimédia, Gestão e Arte, Lda., Portugal), Fernando Cabral² (Sistemas do Futuro - Multimédia, Gestão e Arte, Lda., Portugal)

Abstract: The ORION is a Digital Art History research-oriented project focused on the study of collections and art collectors in Portugal, supported on a relational database management system. Besides the obvious advantage of organize and systematize an enormous amount of information, promoting its analysis, this database management system was specifically designed to highlight the relationships between data, e.g., linking objects and their owners over time along with collectors and mediators, or works and auctions, just to mention a few. This relational capacity is not only one of the most relevant features of the ORION, but a differentiating quality, one step forward in comparison to other international databases and studies that use digital methodologies. This paper will discuss the methodologies and the advantages of using ORION in researches related to the history of collecting, art markets and provenance of art objects, an exponential growing field of studies. In fact, in Portugal, and despite the studies of the last few years, it is the very first time that an approach like this is intended, looking for a systematization of data that paves the way to the emergence of new research question. Furthermore, and because ORION aims to share the data and knowledge with other projects, institutions and researchers, the database uses different international standards, such as data structure (CIDOC – Object Information Categories and Getty - CDWA), controlled vocabulary (ICONCLASS classification system, Getty – Art and Architecture Thesaurus (AAT), Thesaurus of Geographic Names (TGN) and Union List of Artist Names (ULAN)) and communication and exchange of information (CIDOC-CRM).

Linking O’Keeffe: Generating New Knowledge through Linked Open Data from a Single Artist Museum

Author: Elizabeth Neely (Georgia O’Keeffe Museum, United States)

Abstract: Too often in museums, our understanding of the provenance of knowledge regarding an object and its creator becomes hidden within a museum’s institutional information systems and specialized knowledge held by museum staff revealing only a small layer of results through publication in the public research sphere. The Georgia O’Keeffe Museum aims to publish its source data as linked open data to reveal connections amongst its resources—fine arts, archives, catalogue raisonné documentation, and the artist’s personal property—through the organizing lens of a single artist to provide greater access and deepen the understanding of this iconic American artist and her context. The linked open data framework and use of established standards allows the Museum’s varied collections to be interoperable with a growing list of organizations and consortia championing these standards. By opening source data semantically according to field wide standards, we can allow for a new and evolving body of knowledge that is not hidden in our organizational museum systems. New research and information across the field will strengthen this generative dataset. As a relatively small museum, the project itself has led to new relationships, a new organizational structure, and new collaborative ways of working. These changes, along with the transformation of the Museum’s cataloguing practices, have changed the way the institution

approaches and shares knowledge. Though this project is just a first step, the O’Keeffe’s hope is that this project will serve as a model to advance access to the depth of collections and resources in single artist museums.

14:00 - 15:30

Adding Value to Provenance Data through Graph Databases and Historical Context

Authors: Andrew Dejesse (Collective Heritage Lab, United States), Marc Masurovsky (Acting Director, ERR Project)

Abstract: Value is defined as “The regard that something is held to deserve, the importance, worth or usefulness of something.” The true value of provenance does not come in the form of individualized data points. Instead, value is generated when it is linked to the historical context of who, how, when, and why objects are transferred. This paper will demonstrate how graph databases merge object documentation, archival sources, media resources, and geospatial technology into meaningful historical context. Graph databases express highly complex sets of data through information visualization and through their capacity to produce valuable information from complex data queries. To demonstrate graph database attributes, the research uses data sets from the ERR Project’s Database of Art Objects at the Jeu de Paume. This database contains information about the systematic seizure and dispersal of Jewish cultural assets in German-occupied France, Belgium and the Netherlands between June 1940 and August 1944. A graph database visualization of the ERR Project will highlight the organic relationships that tied victims, dealers and perpetrators as well as the patterns of displacement of specific categories and types of objects through space and time. It will also allow users: to highlight the paradoxes in Nazi cultural policy in occupied territories through selections of works and objects intended for Nazi collections or for the private art market, to apprehend esthetic preferences among Jewish collectors, dealers, and artists and to explore aspects of an artist’s works not covered by art historians.

Simulating Serendipity: Information Systems, Chance Encounters, and Cultural Memory

Author: Cristina Linclau (Solomon R. Guggenheim Museum, United States)

Abstract: The evanescent flow of the World Wide Web has ushered in a greater tolerance for transience in cultural phenomena broadly. Its distributed networks facilitate gleaning information from data, favoring temporal, chance discovery across many sources over prolonged, explicit inquiry within one. This paper investigates serendipity as an emergent digital strategy – once a wonder, now a methodology – and situates the efforts of museums and other cultural institutes to optimally coordinate collections metadata with the saccadic movements of the web within a theory of simulated serendipity. Drawing a line from sociologist Robert K. Merton’s attempt to hammer out “The Serendipity Pattern” in empirical research in the 1940s to the use of the term as a tag for Google Cultural Institute’s own “Experiments,” serendipitous information behaviors can either open new pathways of intuition, or leave a world that was “meaning rich, data poor” in the hapless state of being “data rich, meaning poor.”¹ As unmistakable momentum builds

behind Linked Open Data initiatives in museums, this paper speculates how to leverage the precedence of chance encounters – and the confluent predilections of individuals and machines upon which those encounters are built – to find and foster meaning in a data-driven Web.

Norwegian artist names - Authority list of artists in Norwegian art collections

Authors: Magnus Bognerud (The national museum, Norway, Norway), Gro Benedikte Pedersen (The national museum, Norway, Norway), Dag Hensten (The national museum, Norway, Norway), Yvonne Brenden Hansen (The national museum, Norway, Norway)

Abstract: How do you best transform a paper-based publication into a living online resource? This is the theme of an ongoing project at The National Museum of Art, Architecture and Design in Norway, supported by Arts Council Norway. The goal of the project is to create, publish and maintain an authority list of Norwegian artists, architects, designers and craftsmen. The list will in part be based on our Norwegian artists lexicon (published 1982-86) and subsequently digitised in 2013 (<https://nkl.snl.no>). With the help of other public collections in Norway, we aim to make the new resource as complete as possible, and available in both human- and machine-readable formats. By doing this we hope to ease the digitisation process and contribute to better data quality in Norwegian online collections. Although the original paper publication contains biographical texts as well as lists of exhibitions, education, travels, publications and more, the data in the new authority list will be constrained to a set of core biographical data. It will however carry references to online biographical resources such as Norsk kunstnerleksikon, Wikipedia, Wikidata, ULAN, VIAF and more, which will be of great use to online publications that wish to link to or pull in data from such resources. In our paper we will discuss the process of defining the scope and setting constraints for the list, how to enrich and reconcile existing data, as well as strategies to ensure other institutions contribute both as content publishers and end users.

A retrospective on CLIO: legacy, lessons learned and perspectives

Authors: Panos Constantopoulos (Athens University of Economics and Business, Athena Research Centre, Greece), Costis Dallas (Athena Research Centre, Greece & University of Toronto), Martin Doerr (Foundation for Research and Technology – Hellas), Chryssoula Bekiari (Foundation for Research and Technology – Hellas), Ifigenia Dionissiadou (Benaki Museum)

Abstract: During a 1990 CIDOC meeting in Athens the idea was born of using a semantic network – based framework for the purposes of museum documentation. Two years later, CLIO, a pioneering system designed and built at the Institute of Computer Science, FORTH, using the Semantic Index System implementation of the Telos knowledge representation language was installed at the Benaki Museum, heavily involved in requirements definition. At that early time, CLIO allowed extremely dense linking of information, access by unlimited chained references, expression of abstract properties and various ways of joint temporal and spatial assignment, as well as the extension and modification of the data schema by the users, thus supporting the easy adaptation of the system to the field of work and the evolution of knowledge”. The significance of the CLIO system lies in that it explicitly acknowledged and addressed the evolving, incomplete and conflicting nature of knowledge, the variety of required documentation structures, and the need for typed associations, as opposed

to opaque references, in order to support reasoning over documentation data. It was a precursor to current systems employing Semantic Web technologies. Most importantly, though, it explicitly introduced an ontology and served as the seed from which CIDOC CRM grew. In this retrospective we mostly discuss the path taken by conceptual and technical developments, the main issues and hurdles encountered in terms of documentation and data curation practices, cognitive overhead, information visualization and information access, and the current challenges in building ontology-driven, semantic network museum information systems.

16:00 - 17:30

LODsyndesis: Global Scale Knowledge Services

Authors: Michalis Mountantonakis (FORTH-ICS and University of Crete, Greece), Yannis Tzitzikas (FORTH-ICS and University of Crete, Greece)

Abstract: In this paper, we present LODsyndesis, a suite of services over the datasets of the entire Linked Open Data Cloud, that offers fast content-based dataset discovery and object co-reference. Emphasis is given on supporting scalable cross-dataset reasoning for finding all information about any entity and its provenance. Other tasks that can be benefited from these services are those related to the quality and veracity of data since the collection of all information about an entity, and the cross-dataset inference that is feasible, allows spotting the contradictions that exist, and on the same time provides information for data cleaning or for estimating and suggesting which data are probably correct or more accurate. In addition we will show how these services can assist the enrichment of existing datasets with more features for obtaining better predictions in machine learning tasks. Finally, we report measurements that reveal the sparsity of the current datasets, as regards their connectivity, which in turn justifies the need for advancing the current methods for data integration. Measurements focusing on the cultural domain are also included, specifically measurements over datasets using CIDOC CRM, and connectivity measurements of British Museum data. The services of LODsyndesis are based on special indexes and algorithms and allow the indexing of 2 billion triples in around 80 minutes using a cluster of 96 computers.

LOUD: Linked Open Usable Data for Cultural Heritage

Author : David Newbury (J. Paul Getty Trust, United States)

Abstract: A number of recent American cultural heritage projects have been making use of the CIDOC-CRM: The Getty Provenance Index Reboot, a database of art dealer stock books and other documents; Art Tracks, a project to define a standard for provenance of museum objects; and the American Art Collaborative, a Mellon-funded project to use linked data to connect 14 museum and archives'n collections. Each of these projects included data transformation and modeling, and each involve software development that require developers to directly use linked data to power sophisticated web applications. Emerging from these and other projects is linked.art, a profile of the CIDOC-CRM that tries to find a balance between the competing requirements of ontologists, software developers, and catalogers. Beyond

standard catalog data, linked.art uses CIDOC-CRM's event-based model to allow describing the provenance of the objects, and also includes tools to record the provenance of the data produced. It does so in a way that seeks to be understandable by people with wildly differing disciplinary expertise, fostering collaboration across domains and across institutions. By understanding the needs of all three audiences: developers, ontologists, and catalogers, we enable the creation of Linked Open Usable Data: richly semantic, easily computable, well-documented, and described using domain-specific concepts.

Online art museum collections in the United States: textual, visual, and media-based information

Author: Joan Beaudoin (Wayne State University, United States)

Abstract: This in-process study analyzes the publicly available information accompanying cultural objects in online art museum collections in the United States. The project examines the presentation of information (textual, visual, and media-based) about museum objects in the online setting, in order to codify and report on shared practices. The museums' fielded object records are being investigated to determine semantic commonalities, depth of available item descriptions, the adoption of controlled vocabularies, and to identify and explore further shared descriptive practices. Several fields are commonly found in the object records of the art museums examined to date. However, many semantically discrete fields are unique or found in use among only a few museums. While this suggests a lack of coherent descriptive practices among art museums, controlled vocabularies have been found among nearly all of the museums examined. As digital surrogates are important to knowledge construction, images and media accompanying the museums' collections are investigated. Still images are the primary media provided by the museums to explore their collections, with the majority providing basic tools with which to explore these more closely. Several museums also include media content for select items, thereby producing rich cognitive experiences for users.

Documenting and Mining Museum Big Data: challenges addressed by a new research project in Qatar

Author: Georgios Papaioannou (UCL Qatar, Qatar)

Abstract: This paper presents preliminary results of the first year of a research project on Museum Big Data and data mining, attempting to address ethical, contextual and methodological challenges in datasets from museums of Qatar. We aim to contribute to the development of Big Data and Data Mining methods and techniques on museum datasets by exploring and case-studying available museum datasets from Qatar, as well as to contribute towards new Big Data policy documents via relevant policy research. In Qatar, as elsewhere, Big Data and data mining processes comprise relatively new fields in museum research and inquiry, which are expected to become core disciplines as museum data input increases and digital museum data collections from museums' everyday activities and operations become larger and larger. Modern museums all over the globe maintain and expand dynamic databases and Big datasets on museum objects and operations as well as generated data extending from visitors numbers, times and stops to tweets, likes and shares. There is an emerging need to detect new and discover hidden and useful information, patterns, clusters and relationships among large sums of museum data. To address this need, we require ethical considerations and processes, a thorough understanding of contexts in the real and the digital world, and

cross-disciplinary Big Data methods, techniques and testing, all of which fall within this new project's (and this paper's) objectives and discussion points.

Representing place in space and time - methodological aspects in modelling the provenance of cultural heritage knowledge

Author: Guenther Goerz (FAU Erlangen-Nürnberg, Computer Science, AG Digital Humanitie, Germany & Bibliotheca Hertziana, Max Planck Institute for Art History, Italy), Laura Albers (Documentation Center for Art History - Bildarchiv Foto Marburg, Germany)

Abstract: Event-based modelling provides obvious advantages for the modelling of provenance information. In particular, the concept of "place" plays an important role; we compare different definitions and their background. Next, we look at the use of "place" in gazetteers, which are important resources for cultural heritage information, and the relation between place names and their temporal dimension. If we use CIDOC CRM for provenance modelling, the question comes up to what extent the concept of "place" as understood in CRM and its extension CRMgeo provide means to enable interoperability. Originating from a consideration of modelling alternatives in CRM ver. 5 (without CRMgeo), we point out the advantages provided by the integration of CRMgeo into CRM ver. 6. Nevertheless, there are still open questions, and we have to find pragmatic solutions in practical applications. Finally, we present the Bavarian Academy project "Corpus of Baroque ceiling paintings in Germany" as an example.

Session I.5 : Documentation Database Development



Date: Thursday, October 4, 2018 Time: 9:30 - 13:00 / Room: Minos (CCCH)



Room: Minos (CCCH), Chair: Gordon McKenna

Session Description: In this session, papers will present documentation information systems as such as well as information system development and implementation projects. The aims, advantages and innovations of different systems and implementations will be explored.

9:30 - 11:00

Designing a multipurpose infrastructure for cultural heritage collections

Authors: Hans Liss (Uppsala University, Sweden), Anne Ingvarsson (Uppsala University, Sweden)

Abstract: With several ongoing initiatives for preserving information, both for archival purposes, for making the information easily available and usable for researchers, meeting the needs of curators, and making the information available to the public, we have found the need to take a fresh look at the roles of databases in the digitization of our cultural heritage. We are exploring ways to take this beyond individual databases, and design workflows, data flows, custom views and mappings between different

systems, in order to make the same data usable to different roles and for different purposes. We aim to implement tools to enrich the data, and make it searchable and viewable without jeopardizing the integrity of the information. This will, by necessity, include multilevel metadata mark-up, loose and strong mappings to common metadata standards, audit logging and approval workflows, advanced search indexing and multiple views, depending on the user's role. We are basing this work, initially, on Alvin and Pragmata, two databases that are both intended as long-term repositories for collections, but with very different design philosophies regarding data modelling. Alvin was developed by Uppsala University library, for library collections; Pragmata was designed to accommodate and make searchable different types of archaeological data (Swedish institute at Athens and Uppsala University). Beyond those two, we are investigating other use cases from the world of research into our cultural heritage. We envision an integration between different systems to facilitate the association between object/context data and its documentation to enable tracing of object history.

Arches Version 4: A case study in developing a modular semantically-enabled data management platform for ongoing documentation of all types of cultural heritage

Authors: Annabel Lee Enriquez (Getty Conservation Institute, United States), Alison Dalgity (Getty Conservation Institute, United States)

Abstract: Arches began as a project by the Getty Conservation Institute and World Monuments Fund to create immovable heritage inventory system software for cultural heritage organizations worldwide. In order to serve that goal and solve the problems often encountered by these organizations, the project adopted some guiding design principles that eventually led to its expansion and wider applicability and participation. In particular, one of those guiding design principles was that data held in an Arches-powered system would be semantically structured to facilitate better data retrieval and to create self-describing datasets for migration, interoperability and sustainability. Using various implementations as examples, this paper will look at how the Arches project incorporated the CIDOC-CRM ontology into the system and how the current version of Arches is modular and can accommodate different kinds of cultural heritage uses, from built heritage inventories to provenance indices to conservation science data management, both in the field and in the office or lab.

Integration of Information About Objects, Documentation And Intangible Cultural Heritage In Documentation And Communication Contexts

Authors: Matija Dronjić (Ethnographic Museum, Croatia), Aleksandra Vlatković (Ethnographic Museum, Croatia), Goran Zlodi (3 The University of Zagreb, Faculty of Humanities and Social Sciences, Department of Information and Communication Sciences, Museology Sub-department, Croatia)

Abstract: Ethnographic Museum in Zagreb is Croatia's central and largest ethnographic museum and in 2019 it will celebrate its hundredth birthday. Museum's documentation was established immediately after its founding and it was run in accordance with museological thought, legal regulations and internal policies inherent to specific sociohistorical conditions. Intangible cultural heritage, as well as "bottom-up" contextualization of museum holdings became a matter of interest relatively recently and now Ethnographic Museum is facing a specific challenge to reconcile traditional collections structure, outdated legal framework and present day user needs. In order to address the challenge, it is necessary to ask the question how the museum can manage this vast amount of data with maximum efficiency. Therefore,

authors are presenting integrated collection management system and online publishing platform, as well as innovative features of metadata and documentation communication through a series of projects oriented towards users in accordance with strategic goals such as an increase in collections visibility and new audience development. In this work, mechanisms of establishing connections among objects, related textual and audio-visual documentation and other sources of knowledge, would be presented. Special emphasis will be placed on relations of field research results (including oral tradition and witnessing information) and object documentation. Documentation and preservation of provenance information about materials and techniques, and other intangible cultural heritage forms such as knowledge and skills, would be elaborated in both documentation and communication contexts.

11:30 - 13:00

museum4punkt0: new perspectives for collaborative work in museums

Author: Armin Volkmann (Steuerung Wirtschaftsinformatik BKM-Projekt "museum4punkt0 Digitale Strategien für das Museum der Zukunft, Berlin)

Abstract: Museum4punkt0 is a joint project of several cultural heritage institutions in Germany with the aim of developing digital applications for transferring knowledge in museums in a collaborative way. Under the governance of the Prussian Cultural Heritage Foundation museum4punkt0 brings together institutions of different sizes and institutional profiles to share their experiences and outcomes. The main focus lies on the objective to explore, investigate, and evaluate how digital technologies can be used fruitful in fulfilling the museum's mission. Instead of promoting isolated partner initiatives with limited outreach, we bring our partner institutes together to maximise their benefits. Within the project dialog we reflect upon the need of adapting and improving infrastructures, and integrating new forms of expertise, workflows and guidelines, as well as continuous training of employees. Museum4punkt0 strongly engages in actively networking with international organisations and institutions. In order to enhance the partner's communication and documentation processes between, we use a web-based open source project management platform. It functions as a virtual space where the partners can work collaboratively on the creation of concepts and prototypes. The platform engages them to exchange their gained experiences on the development of digital applications. At the same time, a Digital-Asset-Management functions as backbone of our research infrastructure, where we share data purposing internal and external communication needs. For the presentation of the objects being digitised throughout the project, we will develop an open web catalogue, that will be prototyping how a common knowledge base for heterogeneous objects can be established. The project's outcomes will be published under open source and open licences to establish best possible chances for reusability.

ReasonableGraph.org: A Knowledge Repositories Management Framework

Author: Nikos Papazis (ReasonableGraph, Greece)

Abstract: We present Reasonable Graph , an all-in-one framework for the management of digital collections. Reasonable Graph is built on well known industrial strength open source technologies and can be easily customized to use a wealth of different existing or custom ontologies suited to the user's needs.

Reasonable Graph exposes its functions through a back-end interface, dynamically adjusting to the user declared data model, and also provides a full featured OPAC view. Reasonable Graph also contains a sophisticated graph engine module built into the back-end system. Reasonable Graph has been deployed in a number of real use cases and proves to satisfactory meet the requirements of each of these projects.

Knowledge Graphs for Cultural Heritage Powered by metaphacts and ResearchSpace

Author: Artem Kozlov (metaphacts GmbH, Germany)

Abstract: ResearchSpace is a collaborative environment designed to use and help build knowledge about the world and its history. ResearchSpace is funded by the Andrew W. Mellon Foundation and has been developed by the British Museum in partnership with metaphacts. It uses a domain and knowledge led design methodology employed by the ResearchSpace project, realised using the full potential of the metaphacts knowledge graph platform. Together with ResearchSpace, metaphacts provides a collaborative platform for humanities and cultural heritage research and supports historians, curators, conservators and scientists in daily tasks concerning research, relations discovery, and dissemination. A key aspect in this respect is the integration of digital content. To enable the integration of data from various sources and at the same time support contextual richness and allow for the data to retain its individual characteristics, original meaning and perspective, the platform uses the CIDOC Conceptual Reference Model (CIDOC-CRM). This offers great potential for tackling the challenges researchers and curators encounter in the cultural heritage space, in particular the refinement and expansion of existing data, and the creation of semantic narratives, assertions and argumentation models, and meaningful presentations of findings.

Theme: Provenance and Documentation

Session 2.1: Documentation beyond the object, oral tradition and performance as context of understanding



Date: Monday, 1 October / Time: 14:00 - 17:30



Room: Pasiphae (CCCH), Chair: Gabriel Bevilacqua

Session Description: An important element in the gathering of provenance, both for tangible and intangible heritage, lies in gathering oral testimony and information regarding the heritage in question. Documentation of oral testimony and performance often provides crucial contextual information to correctly situate heritage in a culture and connect it to a living provenance. Papers in this session address questions of documenting oral evidence in heritage.

14:00 - 15:30

Speaking Stones: Oral tradition as provenance for the memorial stelae in Gujarat

Author: Durga Kale (University of Calgary, Canada)

Abstract: Anthropological field-work in rural settlements on the west coast of India unravels the close connection between lived experiences, spaces and objects. These “inalienable possessions”, in the words of Annette Weiner, help reconstruct the past through the supplement of oral traditions. Following this vein, the paper attempts at meshing together the material culture and oral histories in establishing the provenance for the plethora of memorials in the state of Gujarat. The memorial stelae commemorating deceased heroes of war and their wives and companions continue to form an indivisible aspect of cultural landscape, often displayed at the museums as artefacts. These memorial stones carry with them several background stories, source literature transmitted orally; elevating their status as cultural motifs. The paper attempts at creating a niche for the oral tradition as authenticating the continued tradition around the memorial stones in Gujarat. Field observations from 2014-2016 and notes from researches in Gujarat from 1985 onwards enabled the study of patterns in oral preservation of literature as sources for the tradition and specifics of the rendering of the stelae, along with the modern appropriation of the tradition. The paper speaks to all these levels of interaction and the making of an identity for the memorial stones unique to the state of Gujarat. With numerous social factors at play, a closer look at the continued tradition involving the memorial stones uncovers the nuances of re-enactment of the age-old traditional and cultural elements indispensable for the study of culture, with Gujarat as the case example.

● **Artwork turned into the narrator of an epic. Case Study: David of Sassoun**

Author: Hasmik Altunyan (University of Kent/ AUEB, Greece)

Abstract: This paper aims to bring forward the issue of the connection of visual arts to oral tradition. Starting from the role of the narrator in the communities of the past and how the written language has changed the perception of these stories, it provides an overall insight of this evolution to what we know today. The narrator and the main channels of communication have changed to something utterly new and exciting. To make these deductions more tangible, the paper analyzes the case study of the Armenian epic, David of Sassoun and its revival in the 20th century, when it was published for the first time, after centuries of oral transmission. The story of David, the main character of the epic, became an inspiration for many eminent Armenian artists, who through their artwork, brought forward key elements of the story itself, as well as features of the main characters. These pieces of art, which vary from sculptures to paintings and engravings, have turned into the main medium of passing on a traditional oral narrative. The sculpture of David of Sassoun has become the symbol of Yerevan, the capital city of Armenia, whereas everyone knows the story, because of the artworks which are put in the city and not because of reading the book. In conclusion, this paper argues the fact that epics and narratives, are nowadays better perceived and transmitted, if connected to a piece of visual art, whether that is a painting, a sculpture or even a 3D cartoon animation, or a model figure of the main character.

● **Documenting Heritage of Nokia - From Discussions to Catalogue**

Author: Emilia Västi (Museum of Technology, Finland)

Abstract: In this paper I will approach provenance of knowledge in traditional sense and field research in applied sense. In 2015 the Museum of Technology received a donation of some ninety data transmission devices from 1960s to 2010s collected and arranged by employees of Nokia and its spin-off companies. Currently, the museum is planning documentation workshops to collect information and connect individual objects with larger concepts such as the company history and innovations and technologies involved. The idea is to gain comprehensive contextual information about the collection by bringing together expertise and experiences of former Nokia employees and documentation and interpretation

skills of museum professionals. The method of the documentation is a conversational group interview inspired by the objects. Subsequently, workshop discussions will be digested and used in cataloguing individual objects and object groups by museum professionals. In this paper I will discuss planning and organizing the outcomes of the documentation workshops: What is the optimal relation between cataloguing information in collections management system and other documents kept in collection archives? How the workshop itself has to be documented to trace the provenance of the information? What information should and can be collected on the workshop participants?

16:00 - 17:30

● **Documentary filmmaking: reflections on ethics and integrity**

Authors : Eirini Sifaki (University of Crete, Hellenic Open University, Greece), Vassiliki Petousi (University of Crete)

Abstract: Documentary film is an expressive art which aims at exposing social and cultural topics or presenting factual stories while at the same time merges with media imperatives such as the need to win the audience and entertain. Though documentary filmmakers engage in many different activities, they share a common goal, that of advancing knowledge. To that extent, it can be argued that documentary filmmakers partake in the endeavors of science and research. Codes of professional and research ethics and guidelines on research integrity are becoming increasingly important in all aspects of research and documentation. Such codes and guidelines provide the ethical and integrity framework within which researchers (and professionals as the case may be) can identify and address the ethical challenges emerging in the course of their research and/or work. Nevertheless, research and practice have consistently shown that the ethics challenges raises and the solutions available are contextually situated. The difference in power between filmmakers and their subjects can often be best measured by the strategies used to expose their personal stories and their relative access to the means of representation. With reference to different case studies and practices in documentary filmmaking, this presentation aims to highlight the difficulties and the challenges that surface when different perspectives and instances have to be met. Can there be an ethical code of practice when personal narratives, documentation imperatives and artistic practices have to be respected? Juxtaposing, standards of ethical research performance in scientific and visual disciplines and in respect to documentary filmmaking we will reflect on a set of guidelines for the formulation of a code of ethics in the arts.

● **School Life Museum: Oral testimonies and documentation at the exhibition 'LEARNING RESOURCES'**

Author : Maria Drakaki (Friends Association of School Life Museum, Greece)

Abstract: Oral history continues today in the Museum School Life Museum to function as a vital part of the museum's policy by contributing to research, documentation of collections, organization of exhibitions and the interpretation of its exhibits with primary concern being its connection with the local community and empowering. One of the Museum's goal is to support its policy in the systematic collection and utilization of oral testimonies, in interactive public communication with exhibits using new technologies, in the Interpreting and creating meaning for public participation, but always under the responsibility of the scientific community of the Museums The oral testimony, the personal look, the narratives of personal experiences offer precious material which in combination with other conventional historical sources and

recordings give a multidisciplinary view of the past. Oral testimonies, the 'common reason' of people often come to counter or challenge historical narratives substantiated by different material. The reconstitution of the experience through the oral narratives, "humanizes" the story, while exploring the notion of subjectivity, the confusion of the real with the imaginary, the individual with the public, the memory with the interpretations of history, the politics with the daily Zoe. The paper will present how to use oral testimonies in the third periodical exhibition of the Museum titled "LEARNING RESOURCES". The report attempts to present representative teaching tools over time and to focus on the learning process that is the key to the pedagogical process.

Session 2.2 : Contemporary Art, Provenance, Interview and Documentation



Date: Tuesday, 2 October / Time: 09:30 - 11:00



Room: Phaedra (CCCH), Chair: Gabriel Bevilacqua

Session Description: Contemporary art often has a dynamic and self-aware relation to the museum and the archive, while archives and museums, in their acts of documentation, seek innovative ways to capture the 'object' of contemporary art. Papers in this session deal with issues of documentation of contemporary art and innovative means to understand and undertake it.

● Object documentation as a contemporary art practice or what we can learn from artists.

Author: Katerina Konstantinou (Panteion University of Social and Political Sciences, Greece)

Abstract: This paper reviews two case studies of objects documentations presented recently as artworks in contemporary art shows in Athens, Greece. Object documentation as a method that draws from the fields of archaeology and museology, has recently gained an increasing interest in the art world. Artists that employ a variety of methods and practices from fixed disciplinary fields represent today a turn in contemporary arts that are related to the so-called "artistic research" an area strongly characterized by interdisciplinarity. Processes of collecting, arranging, contextualizing and manipulating objects are being appropriated by artists not only for the purposes of their research but also for producing artworks that are consequently exhibited in contemporary art exhibitions. Visual artist Natasa Biza recently presented a record of kitchenware stored in the Agricultural Museum of the Agricultural University of Athens. Campus Novel, an art-collective based in Athens, presented their research-based work "Buca #17" whereby they involved with post-excavation processes in order to document the social life of the lignite mines of Kalogreza in Attica. Both examples are related to the Marshall Plan and foster the political and social dimensions of this period. Focusing on the documentation practices of these two cases, this paper addresses issues concerning the creative nature of object documentation as a different mode of engagement with the multifaceted history of sites, museums, and collections. Is there anything to be learned by the often unexpected ways artists deal with collections?

● Performance art documentation – a shared archive with the community

Author: Anni Saisto (Pori Art Museum, Finland)

Abstract: How to archive performance art video documentation with a local artist community? How to produce high-quality metadata and meet the standards of Finnish digital preservation requirements? D-ark is a joint effort of Pori Art Museum and artists association T.E.H.D.A.S. ry. Our mission is to archive and publish performance art documentation produced by T.E.H.D.A.S. ry and to make it available to the audience via Internet. The collaboration is based on shared responsibility. The artist community chooses what to archive, they record the metadata and create the archival copies. Pori Art Museum supports the process by taking care that the material meets the national long-term preservation standards. Most importantly, Pori Art Museum is committed to preserve the archive for the future. A selection of the archive is published on website <http://www.tehdasry.fi/dark/>. At the moment D-ark holds over 300 video recordings, of which 61 is published on the Internet. The database for collecting the metadata is available for trusted users online. The metadata schema of D-ark consists of three parts: metadata describing the performance, administrative metadata and technical metadata of the recordings. It has been created using standards FRBROO, Premis 2.2. and VideoMD & AudioMD. The presentation will shortly describe the collaboration model and explain the metadata schema.

● Documenting Three Complex Installation Artworks: Ways of Securing Knowledge and Information for Museum Practice in the Future

Author: Arthur van Mourik (Centraal Museum, Netherlands)

Abstract: During the installment-process of three complex contemporary installation artworks the collection management department (AvM) documented working methods and performed research on the outcomes. The working-methods were; artist-interviews and artist-collaboration, collecting (technical) data, audio visually filming, photographing, multidisciplinary expert-meetings and knowledge exchange. The outcomes were used for registration purposes and information-management. The following artworks were exhibited and were analyzed during the documentation research; Case-study 1: Hout Auto, by Joost Conijn (2001/2002); decision-making processes and documenting installments. Case-study 2: Expecting, by Pipilotti Rist (2011, 2014 2016); (multimedia artwork) artists participation and dealing with information about exhibitions in shifting site specific locations. Case Study 3: Top down, Bottom up, Driessens & Verstappen, (process/performance art) (2012); acquisition agreements as a starting point for installation instructions. *All Case Studies include audio- and video-film of the artworks. The research showed that by applying the working methods, knowledge could be administrated and that metadata improved the functionality of guidelines and installation-instructions. Changes of intangible aspects such as context and authenticity could now be described more efficiently in a document. Recommendations based on the cases give insight in how to secure information and make documentation more accessible.

Session: 2.3: Deepening Documentation, beyond the object to knowledge context, potentials and challenges



Date: Tuesday, 2 October / Time: 11:30 - 13:00



Room: Phaedra (CCCH), Chair: Alexandre Matos

Session Description: The ambition to gather rich contextual information around heritage objects in a way that would support a true 'provenance of knowledge' bumps into many ethical, epistemic and practical issues. It is one thing to aim for rich contextual documentation beyond the 'tombstone' of knowledge but quite another to effectively and consistently realize it in a professional and consistent manner. The papers in this session are concerned with the questions of how to collect, integrate and manage heterogeneous and vast contextual documentation data over time. In addressing these questions, the session aims to look also at the problems encountered in this process, the ways to approach them and the benefits one can reap from entering into rich contextual documentation.

11:30 - 13:00

● **The preservation of changes of knowledge and its sources: theoretical, practical and ethical considerations**

Author: Tanya Szrajber (The British Museum, United Kingdom)

Abstract: In an age where there is a proliferation of research resources, many available online, knowledge about objects in collections has increased dramatically. The issue is not just to preserve its provenance or referred sources, the changing knowledge itself needs to be reflected in the documentation of the objects concerned. From a documentation point of view, this presents several dilemma, theoretical, practical and also ethical. Thus on one level we need to decide which changes are worth recording, and to what extent we source the knowledge. In many cases, we may only have a list of relevant sources available, not the original knowledge about the object, nor its development. Even if we only record the sources, such as publications or authored opinions, this exercise requires research and expertise, and where do we draw a historical line? There is also the question of whether to preserve certain archaic views or approaches reflecting a less enlightened historical period. Such considerations apply both to data about objects but also to terminologies. And with financial and time constraints, decisions have to be made in the broader context of the pressing need to document collections and make the information available to the public. Will the greater resources of some institutions compared to others create a two-tiered system, effectively undermining the efforts of the less advantaged ones pursuing more pressing goals? Compromises are inevitable, and this paper discusses some approaches taken in relation to the British Museum Collection database.

● **How can we describe a flyswatter and a piece of paper?**

Author: Lina Nagel (Centro de Documentación de Bienes Patrimoniales, Ministerio de las Culturas, Artes y Patrimonio, Chile)

Abstract: The description of collections depends on the knowledge and professional experience of the registrar related to the name of the objects, techniques, materials, physical descriptions and other necessary fields in its file. Sometimes the professional faces objects that escape the usual and their record becomes a real challenge. The description of these objects and the appointment of them depend ultimately on the historical source: that means, the description and creation history given by the creator or his family that knows the creation process, or the review of the historical archives of the creator, interviews, exhibitions, etc. All this means re-constructing a story for object

registration. I wish to present a great poet who, in addition to writing poetry, also created objects by joining and assembling dissimilar objects in their materiality and use, usually accompanied by a text. In addition to its creation, the resulting objects received names that escape the terminology of museums: it is the case of: Practical jobs, Cardboard trays, Tables of Isla Negra, Trays of La Reyna. Therefore the description of these objects together with their terms is a tribute to the creativity of the author, and also it manifests the need to obtain information from historical sources and from his family. Without those sources the objects would become just an "imaginary" curiosity.

● **Text, Context, a wiki and a woo. Layered Information from the Horniman Museum**

Author: Jonathan Whitson Cloud (Horniman Museum and Gardens London, UK)

Abstract: In parallel with the development of new gallery spaces the Horniman Museum set out an ambition to provide greater context in its online provision, enhancing the traditional catalogue of object records into what it came to call 'Layered Information'. This paper describes what the Horniman means by the notion of layered information and describes some of the practical and conceptual issues it has met in its delivery, including the relationship between data, information and narrative, the complexities of aligning what audiences might want and what the museum might want to provide and how a basic wiki has proven useful.

● **Normalizing information from various museum archival resources**

Author: Ifigenia Dionissiadou (Benaki Museum, Greece)

Abstract: Information in museums often goes back many decades and is seldom of a certain quality level. Primary information resources are usually analog registration catalogs which provide objects with an ID code number followed by a short description, thus transforming them from common physical objects into unique museum items. From then on, the amount of information produced about an object is related to its historical, artistic or scientific value, but also to the standard quality of curation provided by the institution. This paper focuses on issues regarding the follow-up of information about museum objects: gathering and regulating previous information, dealing with augmented and often arbitrary resources, confirming, editing and updating information, while also keeping previous knowledge and reasoning about its change, in an effort to provide the wider possible perspective, to avoid repetition of misleading/ambiguous references and to develop an information system worthy to trust. It also discusses the considerations encountered by those who perform digital content curation, as well as their role within the chain of knowledge.

● **The use of documentary practices in interpreting and presenting multiple pasts in Greece. Towards an integrative approach.**

Authors : Archondia Polyzoudi (Ministry of Culture, Greece, Greece), Efstathia Anesti (Ministry of Culture, Greece, Greece)

Abstract: Last years there is an increased focus on the use of diverse and multiple documentary practices in order the increasing number of information derived from antiquities and monuments to be effectively managed. The interpretation and our understanding of the past is lying most of the times on the way that archaeologists and museum experts decide to manage and contextualize pieces of information accumulated in the storehouses. The process of documenting and the selection of practices seem to be challenging, even more, when an integrated approach need to be promoted in order to include multiple

pasts and voices. To what extent the documentation process could create new possibilities for the creation of a new framework where contextualized information from different archaeological and historical pasts could be included? What is the role of the archaeologist in the information selection? What are the theoretical and practical implications? By examining the projects 'cultural paths and historical narratives' as implemented in Greece, in this paper we will attempt to investigate how fragmented information from different pasts and diverse types of information (objects, archives, written sources, oral traditions) could be integrated by exploring methodological tools and practices of documentation. We will then focus on discussing the intent and the efficiency of that process to provide contextual information and initiative for presenting and interpreting multiple pasts.

● **Creation, diffusion, perception and reevaluation of archaeological knowledge: the case of the Gilliéron artists**

Author: Christina Mitsopoulou (École française d'Athènes, Greece)

Abstract: This paper aims to present the case of two artists of major importance for the early phases of Archaeological research in Greece, who contributed fundamentally to the diffusion and propagation of scientific knowledge between the 1870ies and 1939: Émile Gilliéron père (1850-1924) and his homonymous son (1875-1939) collaborated with major projects and Archaeologists of their time. For Crete, precisely, the majority of famous iconic images still represented in books, art or souvenirs, was once processed by their artistic skills. The skilled artists produced work in multiple styles, materials, techniques and artistic periods, from Neolithic to Byzantine, or Folklore heritage. They literally translated artistic forms of Greek culture into famous images, recognized by a wide international public and used in education, science, museum exhibits, and the free market (souvenirs, copies, decorative motifs). The grandson Alfred Gilliéron took on the artistic tradition to the third generation, by propagating the artistic repertoire of his peers via the souvenirs market. Many of their images acquired an autonomous "life", independent from the evolution of scientific knowledge. In many cases this established knowledge has now to be controlled, reviewed, corrected or updated. The recent acquisition of their family archive and workshop by the French School at Athens has provided research with the opportunity to launch an interdisciplinary five-year long project, dealing with a multitude of original data: drawings, copies, molds, raw materials for drawing, copying or restoring; archival documents, as photographs, correspondence, invoices, personal data etc. This project will need state of the art digital tools in order to enhance the diverse data; scientific approach is provided by the collaboration of specialists of conservation techniques. The participation at the CIDOC Conference will provide a valuable experience at an early stage of the project, and may influence the process during the coming years.

Session 2.4: Provenance and Illicit Trafficking



Date: Wednesday, 3 October / Time: 14:00 - 15:30



Room: Phaedra (CCCH), Chair: Emmanuelle Alexandre Matos

Session Description: Illicit trafficking forms a permanent and growing threat to cultural heritage across the world. Documentation and the tracing of provenance play a front line role in the efforts of cultural heritage professionals to protect artefacts both pre-emptively and in the aftermath of looting and theft.

Papers in this session tackle epistemological and ethical questions surrounding documentation, provenance and the illicit trafficking of cultural heritage.

14:00 - 15:30

● **The Case of the Ka-Nefer-Nefer Mummy Mask: An Issue of Provenance**

Author: Ashley Ray (Independent Researcher)

Abstract: In 1998, the Saint Louis Art Museum bought the Ka-Nefer-Nefer mummy mask from Phoenix Ancient Art for half a million dollars. The Pharaonic-era mask had been excavated at Saqqara in 1952, but from there the provenance of the object diverges depending on the party consulted. The Museum maintains that the mask immediately made its way to the various European collections, whereas Egypt asserts the object was stolen from storage at Saqqara. Some years after the purchase, Egyptian officials approached SLAM claiming that the mask had been illegally removed from the country, which prompted the United States government to attempt seizure of the artifact. Instead of heeding the request from Egypt and the US government, the museum chose to try its luck in a legal setting with the hope of retaining the mask. This paper will consider the differing collecting histories, review the court proceedings, and then turn to the current state of the relationship between Egypt and SLAM and review what this case can tell us about repatriation and cultural patrimony.

● **Damnatio memoriae: Antiquities without context**

Author: Despoina Markaki (University of Crete, Department of History & Archaeology, Greece)

Abstract: The documentation of ancient artefacts today in cosmopolitan museums and private collections around the world is quite often incomplete, because of the absence of their finding contexts. What do we really know about cultural objects? Is this knowledge accurate indeed? Most of the items in question are looted and smuggled out of their site, region, or even country of origin, and are sold as artworks, themselves too poorly documented, as “orphans without history”. Their treatment reminds us, metaphorically, of the Latin damnatio memoriae – a kind of condemnation of memory. Cycladic figurines provide a typical example of the material and intellectual damage which is caused by such practices. Besides the loss of their context, it is also the extended circulation of forgeries, due to their high demand in the art market, that intensify the loss. Each figurine with exceptional, unique features becomes, at once, a controversial issue. Are they faked, some or all of them? We cannot prove it, but interestingly enough we cannot deny, neither ignore it anymore. This paper deals with a particular form of knowledge, that of archaeological provenance, known as provenience in literature. It argues that solid scientific information needs apart from the objects, their secure stratigraphic contexts, making the provenience of knowledge also a desideratum

● **Online edition of the file cards from the Central Depot for Confiscated Collections.**

Author: Lisa Frank (Commission for Provenance Research, Austria), Peter Kloser (Kunsthistorisches Museum Wien, Austria)

Abstract: Established in autumn 1938, the Central Depot for Confiscated Collections on the bel étage of the Neue Burg in the centre of Vienna contained several thousand of objects from Viennese art collections, which were confiscated by the Nazis after March 1938 from their Jewish owners and later given to various museums. Until July 1940 the Kunsthistorisches Museum (KHM) in Vienna managed the Central Depot. Thereafter, until the depot's closure, the Institute for Monument Protection, the present-day Federal Monuments Authority Austria (BDA) was in charge. Both institutions used file cards to catalogue the looted art objects. In order to make these sources publicly available for browsing and full text search, we scanned and transliterated the sources and added them to the general KHM database. This digital inventory works as the backend database for the website. For the provenance research community we implemented an access-level where the scientific community can add related information. Relevant additional information will gradually be added to the public website. The December 2017 online edition aims at building historical consciousness and making provenance research in Austria more visible.

In the Eye of the Beholder: Felony Hubris

Author: Virginia Curry (Edith O'Donnell Institute for Art History, University of Texas at Dallas, United States)

Abstract: In approximately 1880, Piermatteo Lauro de Manfredi 's painting "Annunciation" was removed from a monastic order's central altar in Amelia, Italy and placed on St. Francis' Portiuncula within the Basilica di Santa Maria degli Angeli, until it was audaciously smuggled out of Italy by Radcliffe art historian Mary Berenson, and her husband, Harvard art historian Bernard Berenson. The Berensons, with the help of an Italian intermediary, laundered the Annunciation through Colnaghi Gallery in London and into the United States to complete the sale to Isabella Stewart Gardner in 1880. This painting then experienced complete obliteration of its provenance including the artist's identity, at Gardner's Boston museum. In a demonstration of sheer hubris, "The Handbook for the Collection of the Isabella Stewart Gardner Museum" relates this conspiracy narrative of looting, smuggling and laundering of the Annunciation painting from Italy in a false bottom trunk under cheap dolls as though it is a humorous anecdote, rather than a series of astonishingly arrogant, criminal acts. This paper will contextualize the relationships between Isabella Stewart Gardner, the Berensons and Colnaghi Gallery and suggest that a close reading of the provenances in the Gardner Museum Collection reveal even further lapses of conscience in the collection as suggested by Mary and Bernard Berenson's independent epistolary confessions with Mrs. Gardner and others.

Session 2.5: Provenance Lost and Regained



Date: Wednesday, 3 October / **Time:** 11:30 - 13:00



Room: Phaedra (CCCH), **Chair:** Emmanuelle Gabriel Bevilacqua

Session Description: Documentation is a key means by which provenance is established and maintained with regards to our knowledge of cultural heritage. Documentation itself, however, is subject to processes of loss and decay in quality both at a physical and logical level. This session includes papers dealing with the subject of re-establishing reliable provenance through the analysis, reconstruction and reorganization of lost or disrupted documentation.

● **Woman--you struck oil': The Zelda Mackay Collection at the George Eastman Museum**
Author: Katherine Cornell (University of Rochester; George Eastman Museum, United States)

Abstract: The Zelda Mackay Collection at the George Eastman Museum consists of approximately five hundred nineteenth-century cased American photographs. While the collection was largely cataloged, it had never been analyzed alongside Zelda Mackay's (1893–1985) collecting notebook and papers—sources that offer insight into her collection-building practices and the provenance of the objects. I have read Mackay's notebook alongside the objects at the George Eastman Museum and made the information found in the primary sources available in the museum's collections database (TMS). My ambition was not only to gain intellectual control over the collection but also to rebuild Mackay's important legacy as a collector. The notebook is evidence of Mackay's careful curation and valuation of a collection that gained the attention of Alden Scott Boyer, Beaumont Newhall, Edward Steichen, Robert Taft, Ansel Adams, and other well-known members of the established collecting circle in the twentieth century. My further analysis of the notebook indicates that Mackay acquired approximately one-fourth of her photograph collection through interactions with other women, thus exposing a pattern of women employing traditional conceptions of domesticity to build their collections. Using Mackay as a case study, this paper explores critical questions regarding the role of women as collectors of photography in the twentieth century. Within this, I consider the network of women who were financially, intellectually, and physically in control of their family photographs, and who seem to have domestic agency as keepers of records, photographs, and memories in non-domestic spaces.

● **The importance of knowledge of provenance for the provenance of knowledge: The case of traditional costumes collections in Greece**

Author: Eleni Papathoma (Museum of Modern Greek Culture, Greece)

Abstract: In Greece there are several collections of traditional costumes, i.e. garments with a strongly local character and a great degree of standardization which were in daily use up to the early 20th century. Many are in museums, others are private and some are still used by dance groups. Traditional costumes are directly linked to Modern Greek folk culture: they were formed in its context and they are its most typical and obvious image. They have been often used as a national icon and are popular with people of all ages, who admire them and, on occasions of national celebrations and dance festivals, take pleasure and pride in dressing with copies of them. Having stopped being worn many decades ago, their study and understanding cannot rely on direct observation of their use or on immediate evidence from their users. Therefore, the existing collections are a major source for their knowledge, and they are respectfully referred to by scholars, the public and makers of copies. The provenance of these collections – the criteria used, the persons involved, the purposes served, etc. – affects deeply the extent and the kind of our knowledge for the objects included in them. Given the inadequate information usually provided on provenance issues, it is necessary to develop a set of tools for 'unlocking' them. In my paper, I will try to pinpoint the main parameters of the subject and draft a roadmap for approaching and interpreting historical costumes collections based on the understanding of their provenance.

● **Documentation and information value of Criminology Museum, University of Athens, Greece**

Authors: Zoi Sakki (Criminology Museum, Medical School, National and Kapodistrian University of Athens, Greece), Artemisia Dona (Criminology Museum, Medical School, National and Kapodistrian University of Athens, Greece), Chara Spiliopoulou (Criminology Museum, Medical School, National and Kapodistrian University of Athens, Greece), Maria Stefanidou (Criminology Museum, Medical School,

National and Kapodistrian University of Athens, Greece)

Abstract: The Criminology Museum is a university museum that holds collections of very important historical, educational and scientific features. Its objects and human remains are evidence of criminal and violent actions, or are important cases of medical and forensic interest. Museum collections have been deliberately collected by an eminent Professor of Forensic Medicine and are connected with sectors such as Criminology, Forensic, Toxicology, Forensic Anthropology and branches of Sociology. For this reason, the proper recording and presentation of the history of crime is very important. However, collector passion for collections' creation did not develop the concern for documenting the objects' associate information. Thus, the Professors-Museum Directors that have followed couldn't know the whole story of many objects and thus, their importance remained silent. Recently, the museum manages to re-connect the collection objects and human remains with their historical, sociopolitical and scientific context by establishing an integrated documentation process. The submitted paper presents documentation main results, by focusing firstly on the process approaching sources and secondly on the value of the information recorded about museum objects, human remains and the main collector. This process and the information gathered document important historical events of 19th and 20th century's Greek history and undocumented aspects of well-known events. Moreover, usually the undocumented aspects of the history are connected with oral history and can be certified only via collection objects and human remains. Finally, this paper discusses the documentation process benefits for the museum objects and human remains that can be used for presentation and interpretation.

Session 2.6: Crossing documentation and Archives to Create and Study

Provenance



Date: Wednesday, 3 October / Time: 16:00 - 17:30



Room: Nephalion (CCCH), Chair: Gabriel Bevilacqua

Session Description: The use of archives and the material that they organize and maintain is a crucial component in building or rebuilding provenance information in cultural heritage. This session looks at the techniques for using and understanding archival material for establishing provenance in documentation.

3D Dimensional Object documentation in archival collections: Tales from the American School of Classical Studies Archives

Author: Eleftheria Daleziou (ASCSA, Greece)

Abstract: Documentation is a vital aspect of collection care. Archival/manuscript collections are often accompanied by 3D items such as leather goods, musical instruments, jewelry, coins, medals, badges, locks of hair, weaponry, to name but a few. All these items are called personal effects, artifacts, memorabilia or realia. It is not always easy to catalog and curate some of these items. But most archivists are thrilled with the little surprises that turn up with archival collections. Most of the times, the 3D objects are by themselves intriguing and spectacular and hide fascinating stories. Some collections would not be complete without the 3D items. Documentation is therefore of utmost importance and archival repositories need to treat 3D objects of archival collections, which are often unique, specialized or rare objects, with the

utmost care. The presentation will present some unique items from selected archival collections of the American School of Classical Studies Archives, their historical significance, their documentation and collection care as well as accessibility for researchers for data collection or historical interpretation.

Archival literacy as desktop archaeology: Tracing the origins of information and the integrating power of historical experience

Authors: Demetra Papaconstantinou (American College of Greece, Greece)

Abstract: As the implications of the digitization of information resources in memory institutions (LAM) increase and there is a demand for good practices in documentation, the aim to produce new insights into the Provenance of Knowledge in the community is more significant than ever. The use of digital applications for user services in libraries, archives and museums, however, seems to concentrate more on the “management” of information than methods of knowledge verification, interdisciplinarity, and provenance. As a result, “fake news” constitutes a common and widespread problem which is difficult to control. One could argue that archives constitute the “natural habitat” of provenance, since they preserve primary sources and help researchers get access to them. The present paper, in its attempt to contribute to the interdisciplinary discussion on the topic of provenance, will outline the insights one can gain from archival concepts and practices, and discuss their relation to other fields in the humanities that share a common interest about the origins of information. Archival practices could be seen as a way of engaging with information physically, through a process of active inquiry, almost identical to the way archaeologists engage with material culture in the field. As such, they are part of the historical thinking heuristics and they have a lot to contribute to the understanding of the whole process for the search and study of origins.

Session 2.7: Documentation as Source of Provenance



Date: Thursday, 4 October / Time: 09:30 - 13:00



Room: Phaedra (CCCH), Chair: Jan Behrendt

Session Description: Documentation, through the application of standard methods and procedures for tracing and organizing information around cultural heritage, is a key source for understanding the provenance of objects and information in cultural heritage. This session consists of papers that focus on documentation itself as a source of provenance knowledge, how to use it, establish provenance through it and, also, to question it.

09:30-11:00

Natural History Museum of Crete-University of Crete in EUROPEANA Digital Library. The Natural Europe project.

Authors: Catherina Voreadou (Natural History Museum of Crete-University of Crete, Greece), Iasmi Stathi (Natural History Museum of Crete-University of Crete, Greece), Manolis Nikolakakis (Agroknow, Greece), Asimina Trikali (Greek Research & Technology Network, Greece)

Abstract: The Natural History Museum of Crete which belongs to the University of Crete has made its first attempt, few years ago, to achieve a European digitization process in the field of engaging the cultural heritage of NHMs of Europe and the EUROPEANA Digital Library infrastructure, in order to enhance natural history and environmental education. This achievement was gained in cooperation with the Museu Nacional de História Natural in Portugal, the Jura Museum in Eichstaett, Germany, the Arctic Centre in Finland, the Tallinn Natural History Museum in Estonia and the Hungarian Natural History Museum in Hungary through their common European project Natural Europe CIP-ICT PSP-2009-3 250579 (2009-2013). Educators from the above museums were given the tools that allowed them to design environmental Education Pathways based on digital content resources from their collections. The following tools were used within Natural Europe: A multilingual software tool that allowed the semantic annotation of multimedia content resources for Museums (creating the digital library of the NHMs), a multilingual software tool authoring the Educational Pathways through the digital collections, a Web interface for navigating Educational Pathways through the Museums' Web sites, a Web interface for visualized faceted search through the NHM content of EUROPEANA and an interactive for virtual 3D navigation. The digitization of 4000 objects of NHMC-UoC and their value of use will be presented in this paper.

Identify and Define What We See

Author: Efrat Haberman (Rishon Le-Zion Museum, Israel)

Abstract: The Rishon Le-Zion Museum presents the uniqueness of Rishon Le-Zion as a creator of fundamental national values and symbols: It is here that the flag, the national anthem, the first Hebrew school, the first Zionist Jewish national fund and more, were created. Alongside these, the Museum displays the daily life in the colony. The Rishon Le-zion Museum Collection is one of the largest and most impressive of the First Aliya period. The collection include objects, photograph, movies, maps, posters and other collections. Research on the items is carried out frequently in order to arrive at provenance of knowledge about them. The research is carried out through internet research, distribution on the social media and in constant contact with the community in Rishon Le-zion and other. As a result, we have been able to enrich the information about the objects and understand their exact context as to their origin, dating and use. Example for this are three pieces from dining set that belonged to Baron Edmond de Rothschild. Monogram: E.R., without a stamp. It is not clear how these three pieces belonging to Baron Edmond de Rothschild reached Rishon Le-zion and unfortunately the person who donate them to the museum didn't know either. We know that the baron visited Rishon Le-zion twice, in 1887 and in 1899. The person who identified them as having belonged to the Rothschild family was none other than Baroness Nadine de Rothschild, who visited Rishon Le-zion with her husband Baron Edmond de Rothschild, the grandson, in 1987. She recognized the pieces as belonging to a porcelain dinner set still owned by the Rothschilds and showed the monogram, E.R. – Edmond de Rothschild. The identification reveal an important historic information.

The critical analysis of sources as the first step in the scientific documentation of collections

Author: Dominik Remondino (Musée d'art et d'histoire - Geneva, Swaziland)

Abstract: Any serious historical study must start with a critical analysis of its sources: who is the author describing the events studied, what is their training, social background or ideological slant? Are they a visual witness, a contemporary of the events described or, if not, on what information do they draw? This analysis is all the more crucial if the sources are few in number, especially if they are contradictory or

when there is only one of them. The sources for the documentation of historical collections are generally handwritten registers that list the provenance of the objects, followed by a more or less detailed description of them, often containing indications of dates, makers, geographical origins or, for archaeological objects, their excavation site. The holdings of the Museum of Art and History of Geneva were created by grouping together a variety of different collections, mainly assembled in the 19th century, and were enriched throughout the 20th century. Despite having been repeatedly moved, reshuffled and reclassified, a number written on the objects in ink or a label generally refers back to one of these registers, which contains the basic information used by the scientific staff responsible for documenting the collections. In Geneva, this mammoth task has been carried out systematically since the early 1990s. The scientific staff assigned to this undertaking have gradually become familiar with the different handwriting of the many contributors recognisable in the registers and on labels, in handwritten files, minutes of meetings, etc. They have gained considerable experience in optimising the interpretation of this data and in enhancing it, when necessary, with "between the lines" information, imperceptible to the uninformed reader. Many of these examples of handwriting have been identified and are now documented in our computer system with a description. A critical analytical study of the various contributors and their skills and reliability is currently in progress. It is clear that systematic work on collections cannot afford to conduct extensive research into each of the objects documented, yet the basic recorded information must be extremely sound. Given the increasingly universal access to documentation, this data frequently forms the basis for assumptions, studies and exhibitions. The critical analysis of documentation sources often makes it possible to qualify or rectify the information they convey, providing a much more reliable basis for scientific research.

Developing the collection's documentation for the Grand Egyptian Museum's permanent exhibition: the role of its central information management system

Authors : Tarek Sayd Tawfik (Grand Egyptian Museum, SCA, Ministry of Antiquities, Egypt), Eleni Zgouleta (Hellenic Ministry of Culture and Sports, Greece), Charalampos Chaitas (3 Culture, Arts and Education, Qiddiya Entertainment, Culture and Sports City, Qiddiya Investment Company, Kingdom of Saudi Arabia)

Abstract: The Grand Egyptian Museum's (GEM's) upcoming exhibition in a new contemporary building in Giza, Egypt aspires to be one of the largest archaeological collections in the world, with an aim to encompass a timeline of the ancient Egyptian history. The paper presents contribution to the documentation of objects within the collections intended to be on display, since this is one of the critical elements of the exhibition project. Through two case studies of the museum's collections, it explores some issues of documentation that were faced. Strategies for exhibition development presuppose creation of collections that convey significant historical narratives. In order to achieve that, documentation of collections is necessary since reliable stories can be produced only if there are clear guidelines and information on aspects like full identification and description of collection objects, their associations, provenance, condition, treatment and present location. Emphasis is given on a clear definition of the selected objects for display through investigation of existing and required data regarding their nature, typology, characterisation, provenance as well as exhibition concept, context and further requirements. Inventorying of objects' records has to be in an adequate and convenient format for information exchange with external exhibition stakeholders, assuring accuracy of the content. Documentation, in the case of GEM, also serves multiple functions of collection management activities (for administrative management of collection) by defining necessary courses of action. Documentation is carried out through a central information management system (Artefacts Database), which stores data for a large number of records of objects, intended both for storage and display. The role of this system is to identify areas that are in need of setting up appropriate documentation guidelines, policies and procedures as well as carry out additions

and corrections on data that will result in provision of adequate and representative records with practical and conceptual features.

● **Results of the 2017 CIDOC Survey of documentation technology**

Author: Nicholas Crofts (Museum of Texas tech University, USA)

Abstract: Documentation technology is in constant evolution: new technologies emerge, and new applications are found for existing technologies. Some developments prove to have long-term value while others quickly fall out of favour. Originally initiated by UNESCO, the survey of documentation technology is an ongoing initiative whose aim is to identify emergent trends and provide the cultural heritage community with insights about successful and potential applications, costs, drawbacks and limitations – allowing informed decisions about future investment. This short presentation gives an overview of the results obtained since the survey opened in 2017.

11:30 - 13:00

● **Storage Collection Recommendation From Interdisciplinary Tools: Documentation, Preventive Conservation, Curatorship, And Architectural Issues**

Author: Yacy Ara Froner (Universidade Federal de Minas Gerais, Brazil)

Abstract: The ICOM International Committees for Conservation (ICOM-CC), for Architecture and Museum Techniques (ICAMT), and for Collecting (COMCOL) have been discussing a Draft Recommendation on Storage Collections. This draft was introduced at the 31st General Assembly of ICOM held in Milan, Italy, in 2016, and was discussed at the 18th Triennial Conference of ICOM-CC, held in Copenhagen, Denmark, in 2017, at a session promoted by the Working Group on Preventive Conservation. The basis on this debate can be seen from the conference on Museology organized in 1934 in Madrid by the International Museums Office, during which the situation of the collections in storage was examined. Later, another meeting focused on the theme: The International Conference on Museum Storage, organized in 1976 (December 13th -17th) by ICOM, at the Smithsonian Institution in Washington D.C.. Likewise, it is important to highlight the relevant role of ICCROM by promoting the course on Security, Climate Control, and Lighting in Museums (SEC-1975-1985), which introduced the concept of Preventive Conservation, and those Unesco publications related this theme. Several issues guide the design of this draft: a) The political perception by the recognition that only a few number of National States have launched campaigns to reorganize their museum storages; b) The ethical issue, considering that the ICOM Code of Ethics states that it is an essential responsibility of its members to create and maintain a protective environment for the collections in their care, whether in store; c) The understanding related the need for specialized training, since the ability to plan, organize, and promote the conservation and risk management evaluation in the store of collections should be done through scientific knowledge approach. What kind of knowledge is need for this project? If we understand the defined fields: curatorship, climate control from the architectural perspective, and preventive conservation from the perspective of the object, we will recognize the relevance of the ICOM International Committees involved in the development of the proposal. What about CIDOC? How is documentation perceived as a preventive conservation tool? How can CIDOC's specific methodologies and past experiences contribute for the Draft Recommendation on Storage Collections?

● **Documentation as a tool for preservation: protocols for documentation and management of the UFMG's Artistic Collection**

Author: Ana Panisset (Universidade Federal de Minas Gerais, Brazil), Yacy Ara Froner (Universidade Federal de Minas Gerais, Brazil)

Abstract: This paper, based on my PhD research, aims to reaffirm and emphasize the relevance of documentation processes and their integrated management as indispensable tools for procedures in collections preservation. To this end, it presents protocols for preservation policies, documentation and management of the UFMG's (Federal University of Minas Gerais) Artistic Collection. The collection, constituted along UFMG's trajectory, currently has approximately 1500 objects such as paintings and religious sculptures from the 16th to the 18th centuries; watercolors of 19th and 20th century landscapes; portrait paintings of UFMG teachers; mural paintings; studies for panels; sculptures; engravings; photographs; and books of artists. All of which are spread throughout the university's campuses, with diverse custody at different departments. In order to problematize the insertion, the provenance and the formation of collections in the university, it was necessary to discuss aspects that involve the history and the unfolding of actions that anticipate the recognition, the management, the safeguard and the necessity of articulation in the local, national and international scopes. Such collections, although accumulated within the university, are often not formed in the trajectory of research and teaching activities. Faced with such challenges, the research aimed to establish subsidies for the discussion of the need for documentation for knowledge and visibility of university collections, in the case, especially the collections of art. The recognition of this important patrimony brings to the fore the need to establish documentation policies in the university context and an effective commitment of the management bodies in the preservation of these collections.

● **Ethical and legal considerations for collection development, exhibition and research at Museums Victoria**

Author: Nancy Anastasia Ladas (Museums Victoria, Australia)

Abstract: With 17 million collection items in our care Museums Victoria is the largest museum in Australia. Nevertheless we recognise the public benefit derived from lending and borrowing between collecting institutions and actively participate in the global loans network in order to complement and enhance the potential for learning and enjoyment for our audiences. Museums Victoria undertook an extensive review of its policies and procedures in order to apply for approval for protection under the Australian Government's Protection of Cultural Objects on Loan Scheme (PCOL Scheme), established to administer the Commonwealth Protection of Cultural Objects on Loan Act 2013 (PCOL Act). The scheme provides (with some limits) legal protection – immunity from seizure – for Australian and foreign cultural items on loan from overseas lenders for temporary public exhibition in Australia. The Ministry for the Arts also released the Australian Best Practice Guide to Collecting Cultural Material in 2015. The guide is not a mandatory code. It outlines principles and standards to consider when acquiring collection items and in part for inward and outward loans. In 2016-17 Museums Victoria used the Act and its regulation along with the Guide to substantially update and formalise previous formal and informal policies and practices, in order to demonstrate its commitment to due diligence endeavours to verify the accuracy of information before acquiring, deaccessioning, borrowing or lending items. This paper outlines the steps we took and what we've learned since receiving approval as a registered borrower under the PCOL Scheme.

● Provenance of knowledge: from documentation to communication in various media: case study of The Zagreb City Museum Poster Collection

Authors : Željka Kolveshi (The Zagreb City Museum, Croatia), Goran Zlodi (The Zagreb City Museum, Croatia)

Abstract: The objective of this project is to leverage various media platforms to present the breadth of the Zagreb City Museum Poster Collection through: printed catalogue, interactive multimedia interpolated in the permanent exhibition and online catalogue enriched with contextual information and multiple interpretative layers. The collection management system provides mechanisms of documentation of provenance of knowledge and preservation of referred sources (e.g. references to bibliographical sources, museum objects and personal communications). All interpretative information is documented to provide foundation for and encourage other authors' future analysis. As a result of detailed primary research, the printed catalogue includes information on 350 posters and is equipped with more than 200 bibliographical units. The interactive multimedia platform interpolated in the museum's permanent exhibition provides not only visual evidence and interpretative information about the posters but also a unique insight into Zagreb's societal, economic and political context from the period from 1910. to 1996. The historical evidence related to each poster includes information about e.g. authors' lives, printing houses, event context, etc. Posters, which relate to various topics and events, are presented in a chronological order, which enables understanding of the city's broader societal evolution. Furthermore, the interactive timeline includes original photographs of posters placed in Zagreb streets and squares, providing additional insight to the changes of the urban landscape throughout the 20th century.

▲ Theme: Innovation in Documentation

Session 3.1: Photography, Painting and the Image: Documentation and Provenance



Monday, 1 October / Time: 14:00 - 17:30



Room: Asterion (CCCH), Chair: Trilce Navarrete

Session Description: The image in the various forms that it shows up in cultural heritage, especially in photography and painting, forms a special category of cultural heritage resource. Images give us a unique, representational source from which to understand the past. The representational aspect of images adds both a richness and a complexity to the object as source of knowledge. This session contains papers that contend with the image as documentation object. The image is questioned both with regards to how to fix its provenance but also how to establish provenance therefrom. It is addressed as a physical, conceptual and digital object.

▲ **Giving diligence its due: accessing digital images in repatriation efforts**

Authors: Susan Douglas (University of Guelph, Canada), Melanie Hayes (Queen's University of Belfast, Ireland)

Abstract: An increasing volume of images is becoming available online, but barriers such as digital locks, proprietary interests, monopoly of information, software design issues, and narrow scope of information uploaded to image databases maintain structures that have placed constraints on repatriation efforts in the real world. Images of art in the digital environment support cultural heritage. Institutions are developing complex solutions relevant in the network environment to further repatriation initiatives. These solutions facilitate discovery, opening avenues for research into the ethics of ownership that cross the physical/digital divide. There have been calls for strengthening the potential for use of pertinent information in order to protect and recover cultural heritage through increased visibility. However, some museums still limit access to images. We will examine these issues referencing museums of art and anthropology and case studies specific to the First Nations and Métis peoples of Canada with an emphasis on cases dating from 2000 to 2017. In 2002, Dr Ruth Philips, then director of the Museum of Anthropology in Vancouver, British Columbia, Canada, called for a database that would “reach beyond the walls of the building into First Nations communities and link them with each other and with museum and academic research partners.” In 2018, a combination of concerns over permissions and monopolization of information is limiting the potential of shared visual information about art. This maintains the status quo in repatriation of cultural material and limits further research into the Indigenous peoples and cultures of North, South and Central America.

▲ **Archaeological artefact photography: documenting objects, processes or theories?**

Author: Deukalion Manidakis (Heraklion Archaeological Museum, Greece)

Abstract: Formal archaeological artefact photography is often separated from other genres of archaeological photography, considered as simple record aiming at a faithful representation of objects through the adoption of accepted practices, codes and conventions. Through the application of modern theories on the character and function of photographic images, in this article it is argued that these images are not ‘objective’ representations but carriers of meanings that emerge through non-neutral processes of creation, dissemination and consumption. By shifting the theoretical focus beyond their content and including them in the wider corpus of academic and public photographic images of artefacts we can design biographies of the objects and the theories about them and study the production and dissemination of archaeological knowledge

▲ **Preservation of Digital Images: Question of Fixity**

Author: Alexey Tikhonov (ROSPHOTO, Russia)

Abstract: One of the most important aspects in long term digital images preservation strategy is maintaining data fixity, assuring integrity and authenticity of original data. The most commonly used techniques are immutability of data and file checksums. On the other hand, planning for long term preservation necessitates need to migrate data into new future formats to maintain availability and

sustainability, the concept of file itself shouldn't be assumed to remain forever as well, which calls for another tools to ascertain fixity of digital images. The problem goes beyond exclusively technical: bitstream content is not ready for human perception by itself, and digital preservation strategy should include all the necessary technological steps to assure availability of stored image to human eyes. That shifts perspective on what should be considered digital image in digital preservation, it's not the file, but perceptible object, or, more specifically - instructions to create one. And it calls for additional tools to maintain fixity such as perceptual hashing, blockchain transaction/ transformation logging and others.

16:00 - 17:30

▲ **The oldest photo of Darius's inscription in Behistun. A new document**

Authors: Keyvan Mahmoudi (National Library and Museum Institution, Iran), Ali Rangchian (Semnan University, Iran)

Abstract: Darius the Great's engraving on Mount Behistun is the longest and one of the most precious pieces of the world's cuneiform inscriptions. Apart from retelling the initial events of the reign of Darius, decoding its tri-lingual royal text established the starting point for the field of Assyriology. It was thought that the first photographs of this monument were recorded by American scholar "Abraham Valentine Williams Jackson" in 1903. In this article, for the first time, we introduced an Iranian pioneer Iqbal al-Saltanah, known as Agha Reza Akkasbashi. He prevails the royal photographer in the court of Naser-al-Din Shah Qajar. Agha Reza's photo of the Behistun inscription is 33 years older than Jackson's Images and shows the general status of this important inscription in the second half of the nineteenth century. Study of this important document can be seen from two different angles. First: an adequate understanding of the conservation status of the Behistun inscription in the nineteenth century and secondly: the history of Iranian's documentation activities for historical monuments and sites.

▲ **The Contributions of the Computational Imaging Methods in Archaeology: case studies in Phaselis and Termessos**

Authors : Aykan Akçay (Akdeniz University, Turkey), Betül Gürel (Akdeniz University, Turkey)

Abstract: This study focuses on the application of digital imaging methods, Photogrammetry (Structure from Motion) and Reflectance Transformation Imaging (RTI) on archaeological materials and the contribution of these methods to the analysis processes of artifacts. The first example included in the study is the documentation of Hadrian's Gate and its inscriptions dedicated to the Emperor Hadrianus and his family in Phaselis Ancient City and producing its replica/model scaled down at 1/20 via 3D printer through the photogrammetric data, trying restitutions over its printed pieces and display the replica of the gate on its original place in field. Our other study focuses on the results obtained from photogrammetry and RTI methods applied on a columnar sarcophagus located in Termessos Ancient City, E-I Necropolis, and the challenges encountered under the field conditions. The work carried out on the sarcophagus produced results that have contributed to the elucidation of controversial points that were not clarified in previous studies. Thus the depicted figures and missing part of the inscription on the sarcophagus became clear. Both studies have enabled us to realize the importance of preserving and documenting the artefacts and to observe the contributions of computational imaging methods to the archaeological and

epigraphical studies. While documenting the monumental artefacts of Hadrian's Gate has importance in terms of the preservation and restoration project, digital imaging of the sarcophagus in Termessos made it possible to illuminate controversial points.

Session 3.2: Engaging with Audiences, creating, offering and understanding critical communication channels



Tuesday, 2 October / Time: 09:30 - 11:00



Room: Asterion (CCCH), Chair: Alexandre Matos

Session Description: Museums and memory institutions act as key facilitators of our knowledge of the past have an important role to play in mediating understanding of cultural heritage information to the public. Society, however, is rich and diverse in the communities that compose it. This fact faces museums with important challenges in understanding how to connect with different types of audiences. This session provides a forum for presenters looking at innovative means to connect different audiences with the information provided by memory institutions.

▲ **Challenging the provenance of knowledge and the authenticity of museum documentation in virtual space.**

Author: David Cigánek (MUSOFT.CZ, s.r.o., Czechia)

Abstract: Museum documentation fulfils its purpose through the presentation of collection objects, serving as an outstandingly rich source of information for the scientists, scholars and wide public. Enhancement of modern presentation forms with elements of virtual/augmented reality also expands our ability to communicate the museality to its recipient. On the other side, we are also facing the risk of information distortion and the occurrence of various misinterpretations. This paper tries to sum up the experience acquired during the transformation of a real museum exhibition into its virtual imprint. Case of Sered Holocaust Museum (Slovakia) provided the vivid background for critical reflection on the virtual exhibition emergence. There are still many stories to be told and many views on them - allowing for various interpretations using the different (or even the same) objects documented in museum collections and archives. Presentation in digital world no more relies on the techniques used many decenia ago, but the structure of human perception and understanding remains anchored in the ancient biological past. The key point of museum documentation and presentation is their ability to recount on strong narratives without embezzling the raw facts, which are quickly withering away from our shared historical memory. After all, manipulation of facts and the creation of an alternative reality have already led (and can lead again) to the phenomena the Sered Holocaust Museum is devoted to.

▲ **A critical reading toolkit for the use of digital museums and museum websites as providers of knowledge in education**

Author: Kosmas Touloumis (Experimental School, University of Macedonia, Greece)

Abstract: Museum objects, entities and ideas are much more accessible today by diverse communities due to the increasing use of digital technologies. Among these communities students are a very important target group. The issue of the Provenance of Knowledge is also crucial to modern education. Museums can contribute in this direction since they can provide evidence not only to detect the origin of school knowledge but also to substantiate it. New technologies create, in addition, new conditions and challenges. Digital museums and museum websites for children bring museums into the classroom. At the same time, they create a new framework for knowledge and its documentation reinforcing experiential participation. This education though is neither neutral nor innocent. It is determined by specific ideological discourses about the present and the past. Moreover, it follows certain learning theories and pedagogical principles included in school curricula. In this context a tool for an effective “reading” of these digital environments is needed. This reading tool must be flexible to trace the creation, use, interpretation and dissemination of the relevant mediated information and knowledge. The present paper proposes the use of an analogous reading toolkit for digital museums and museum websites. This toolkit comprises ten criteria and takes into account the ways in which meaning can be derived from their content, the ideological and socio-cultural “purpose” they serve, their underlying pedagogical principles, and the added value obtained from the educational use of ICT.

Session 3.3: Conservation and Analytic Techniques



Date: Tuesday, 2 October / Time: 11:30 - 13:00



Room: Asterion (CCCH), Chairs: Sophia Sotiropoulou, Paraskevi Pouli

Session Description: A crucial aspect of the mission of memory institutions is safeguarding of the artifacts in their care through comprehensive, scientific conservation programmes. The practices of conservators both maintain objects in a state whereby they can continue to be used in a chain of provenance, and can also contribute to establishing provenance and understanding of an object through analytic techniques and investigation. This session gathers together papers regarding questions of conservation, documentation and provenance.

▲ Documentation and the Decorative Arts at the Houses of Parliament

Author: Emma Traherne (Houses of Parliament, United Kingdom)

Abstract: The Historic Furniture and Decorative Arts team are now in their third year of professionally caring for 11,000 items of historic furniture, silver, clocks and ceramics. The collection had been treated as a basic asset with only skeleton information being recorded, especially in the last 20 years. In recent decades conservation of this working collection had been carried out on an ad-hoc basis driven by the need to return items to use quickly. This paper will discuss one of the team’s main aims; to build up reliable object documentation and information. Legacy data from two old databases was integrated into a new Spectrum compliant Collection Management System. This pointed the way to other supporting documentation including archival records. The Parliamentary Archives, The National Archives and local archives have provided material showing collection items as they were originally designed. This has

informed accurate, standardised, materials and techniques being used in conservation. Archival records illustrating where items were originally placed around the Palace of Westminster are leading to more harmonious, accurate interiors. This information will dovetail into the Restoration and Renewal of the Palace beginning in 2025. The challenge of integrating this information into the Collection Management System is on-going with a number of different processes being trialled. Work has begun using this newly revealed information to assist in interpretation, access and outreach in Westminster and further afield. The documentation relating to the origins of items; sketches, technical drawings and photographs, is often used in talks to deepen understanding and increase engagement.

Session 3.6: Documentation of Built Heritage, Architecture and Urban Space



Date: Wednesday, 3 October / Time: 11:30 - 13:00



Room: Asterion (CCCH), Chair: Paraskevi Pouli & George Bruseker

Session Description: This session looks beyond the museum walls, looking at questions of documentation around built heritage, architecture and urban spaces. Built heritage is an invaluable element of our cultural heritage, one that provides context to objects, events and ideas that do not fit in a museum but form an integral aspect of cultural heritage. The urban fabric as a constellational whole of built heritage provides an even larger context of reference with additional questions in documentation. Papers in this session provide innovative thoughts and solutions with regards to documentation of these aspects of our cultural heritage.

▲ **Study On The Historical Presence Of Chinese Nation In Northeast China Modern Urbanization: A Case Study About Harbin Fuchiatien Un-treaty Port**

Authors: Haixuan Zhu (School of Architecture, Harbin Institute of Technology, China), Chang Jiang (School of Architecture, Harbin Institute of Technology, China), Fei Lv (School of Architecture, Harbin Institute of Technology, China), Sai Liu (School of Architecture, Harbin Institute of Technology, China)

Abstract: In the late 19th century, due to the special geopolitics, Northeast China became the focus of competition for China, Russia, Japan and Britain. With the joint participation of the multi-ethnic people, modern urbanization developed rapidly. Northeast China has the important historical status in the world human and urban development history. At present, Northeast China modern urbanization history study largely based on the historical documents written by Russia, Japan or Britain for their interests in Northeast China, all of this inevitable led to the historical absence of Chinese nation. The paper takes the modern urbanization historical process of Northeast China as research object, through field investigation and literature research methods, to reconstruct the historical process, restore the authentic history and confirm the historical presence of the Chinese nation, providing the theoretical reference for history study of modern social development and modern urbanization process in Northeast China.

▲ The Dimensions Of History: Villages As Historical Objects

Author: Andrew Murphy (University of Toronto, Canada)

Abstract: When one looks at the Attendance figures from October 2017's Survey on Museums and Archaeological Sites, it is apparent that sites dating from antiquity are receiving the vast majority of attendants per year. According to UNESCO, funding for the Ministry of Culture, which allocates funds for preservation, has been cut by 50% as of 2015. In addition to these monuments, Greece is dotted with rural villages, some of which are centuries old, which are disappearing. There has been work done to preserve and document the architecture, history, genealogy and linguistic peculiarities of these villages, but these efforts have been frustrated by a lack of support and large-scale organization. This paper seeks to propose that there are two steps that can be taken to address this problem. The first is to create a framework oriented both towards communities and state/local government that addresses the villages' preservation and documentation needs. The second has to do with re-contextualizing, on an institutional level, the concept of provenance in terms of the relationship between environment, objects, and ideas.

Session 3.7: Documentation as Social Memory Practice



Date: Wednesday, 3 October / Time: 14:00 - 17:30



Room: Asterion (CCCH), Chair: Monika Hagedron-Saupe

Session Description: The practice of documentation can be seen from the outside as a bureaucratic necessity for the maintenance of collections and cultural heritage without many further ramifications. This session looks at how documentation in fact plays a highly important role beyond the walls of the museum and research institutes in the social life of communities. Documentation is a powerful anchor for self understanding and social meditation, helping establish contexts of meaning in the world. Papers in this session deal with how documentation is deployed in social memory practice and the ethical and epistemological ramifications of this connection.

14:00 - 15:30

▲ Transmission Of Collective Memory And Jewish Identity In Postwar Jewish Generations Through War Souvenirs

Author: Jakub Bronec (University of Luxembourg, C2DH, Luxembourg)

Abstract: My contribution includes a sample of testimonies containing the life stories of Jews born in the aftermath of World War II in two countries (Czechoslovakia and Luxembourg). At that time, Czechoslovakian Jews were living through the era of de-Stalinisation, and their narratives offer new insights into this segment of Jewish postwar history that differ from those of Jews living in liberal democratic European states. Based on personal documents, photos, letters and souvenirs, the conducted interviews highlight an interesting way of maintaining personal memories in Jewish families and how this varies from

one generation to the next. In my contribution, I am planning to illustrate the importance of these small artefacts for the transmission of Jewish collective memory. My presentation showcases people widely referred to as the “second and third Jewish generation”, their attitude to current notions of Jewish memory and self-perception and their role in society. Some had to live under totalitarian oppression, others had to face a wave of Jewish Sephardic immigrants coming from overseas – and witnesses admit that the arrival of these newcomers often caused difficulties in Jewish communities. Small objects from the war, often displayed in their households, serve as a reminder of their roots and destiny, which should not be forgotten. This paper is a part of my broader research project examining distinctions and similarities in identity formation through generations of Czech, Slovak, French and Luxembourgish Jews, who grew up either under communism or in liberal Western Europe. The aim is to create an international virtual library and cloud storage, not only for professional educators but also for the public

▲ **Collecting and Documenting objects of a disputed heritage**

Authors: Elena Mamoulaki (University of Crete, Greece), Nota Pantzou (University of Crete, Greece)

Abstract: This paper examines the process of collection, documentation and exhibition of objects related to political exile in Greece, through the example of two grassroots initiatives. Memory of 20th century political persecutions and discrimination has long been suppressed and silenced in Greece. Official documents were often destroyed not only by individuals (under the fear of being accused or arrested) but also by governments in the name of National Reconciliation based on the collective forgetfulness. Against this trend, some individuals and collectivities resisted oblivion and started collecting items related to that period. This resulted to the making not only of unique and valuable collections but also to important networks of trust which created nodes and nucleus of memory. Based on two case studies, a community museum about political internment and a private collection of photographs related to exile on Ikaria, this paper argues that these grassroots initiatives accomplish two distinct but interrelated goals: the specific way in which these collections are made leads necessarily to the making of a memory community while at the same time the members of this community serve as the main sources of providing and documenting objects. Based on empirical research and long-term ethnographic work, we will present these unique cases of collecting and documenting objects of traumatic heritage.

▲ **Documenting Historical Past is Therapeutic**

Author: Rebecca Naidoo (Local History Museums, South Africa)

Abstract: As custodians of Cultural heritage, museums are not only responsible for the care and protection of its collection in order to ensure the prevention or the delay of damages but they are also required to conduct in-depth documentation to assist in tracking the life of the objects and events of history. To accommodate these needs, museums must adhere to proper museum standards and practices, which serve to create a safe environment for collections with clear and precise accompanying documentation. Documenting original information relating to an experience through collecting and recording maps, microfilm, charts, photographs, posters, recordings and textual formats, museum's can provide a means of grappling with aspects of the past that many may prefer to forget. Those who lived through experiences of mass death, incarceration and forced removal suffer from a collective trauma. Ignoring the past means that there is no way in which their pain could be shared or publicly marked. If a nation cannot face up to its past it will be gravely handicapped in the future. The solution is to allow the people to acknowledge publicly the terrible sufferings of a particular era. Museums thorough documentation of history can help us to face the present and future by enabling us to understand the

forces, however shocking which have made our world and our society what it is. To make accessible the original information for the current and future generation is by sharing what people have previously experienced and learned through proper management and preservation.

16:00 - 17:30

▲ **'Gavdos: The House'. A theatre/archaeology narrative and pieces of knowledge of diachronic home life.**

Authors: Eftimis Theou (University of Crete, Department of History & Archaeology, Greece), Katerina Kopaka (University of Crete, Department of History & Archaeology, Greece)

Abstract: On the Katalymata hillside, on the island of Gavdos, off the south western Cretan shores, the University of Crete has been excavating a spacious building complex dating back to the Bronze Age. In this paper, we discuss a theatrical performance inspired by this discovery, and first presented at the archaeological site in 2012. Created by young members of the research team, who are themselves both archaeologists and actors, the play is based mainly: on the accounts in the excavation notebooks of living through the prehistoric stratigraphic trenches, and on natives' memories of happenings at home. Combining this local experience with wider cognitive pieces of knowledge, philosophical, literary and other, produced a structured narrative of domestic life on the island through time – and some of its aspects and meanings, theoretical, material, cultural. The event aimed to introduce to the Gavdiot community a comprehensive perception of ancient Katalymata as a familiar past animated space in its territory, rather than a secluded domain of its 'cultural heritage'. It was also intended to spur both students and senior excavators to experience the ancient dwelling as a long lasting embodied topos, allowing for alternative interdisciplinary approaches and fresh insights. Since its premiere, the work has been touring in Greece and elsewhere in Europe and adapted for different media, as a performative guided tour played in historic houses, a lecture performance for conferences and art venues, and an audio-visual installation in museums of contemporary art.

▲ **Provenance of Knowledge and Ownership of the Past: My Heritage VS Your Heritage**

Author: Wesam Mohamed (Ministry of Antiquities, Cairo, Egypt)

Abstract: What is the relationship between the provenance of knowledge and the people's appreciation of cultural heritage? Who owns the past from the point view of the local community? Egyptian antiquities cannot be owned by individuals; rather it is the patrimony of the whole country – even the world - as a product of global cultural appreciation of the past. But how heritage and its provenance are connected in the eyes of the people and how it linked to ideas of identity, ownership and value? Legally, antiquities in Egypt are under public ownership but there is significant chasm between what the public view as 'their' heritage in contrast to global perceptions of Egypt's heritage. People sometimes consider only the heritage of their own country as "their" heritage while everything out of their land belongs to the "others" heritage and therefore is not as necessary to value. It is even more challenging to foster appreciation for heritage that is not considered one's own; especially in a country which is very rich in heritage and archaeology such as Egypt. Even for some heritage professionals, there are many who appreciate Egyptian heritage more than the heritage of any other nation, as evidenced by the lack of non-Egyptian heritage in the museums of Egypt. There also remain divergent and even conflicting ideas

regarding the ownership of the past. This audience-based study discusses ideas of identity and ownership engaging to ideas around the provenance of knowledge and how it sometimes shapes the people's understanding of their "own" heritage.

Session 3.8: Decolonizing Documentation



Date: Thursday, 4 October / Time: 09:30 - 13:00



Room: Asterion (CCCH), Chair: Alexandre Matos

Session Description: Museums and memory institutions play an important social and cultural role in connecting us to the past and delivering authoritative narratives and visions of that past. In playing such an important role, museums and other cultural institutions alike have not been innocent of knowledge distorting and socially disruptive practices, including the imposition of colonial narratives over the past. This session looks at how to decolonize documentation and how museums can enable reconstructing lost knowledge of the past by self-reflectively deconstructing their role in imposing colonial narratives.

9:30 - 11:00

▲ Privileging Knowledge, who's right is it?

Author: Faye Belsey (Pitt Rivers Museum University of Oxford, United Kingdom)

Abstract: The importance of recording historical data is universally recognized by museum staff, but what about other forms of knowledge which might be equally important to understanding objects? Ethnographic objects which exist far from their place of origin inevitably lose some if not all contextual meaning. The need to identify and work with other forms of data over and above the historical data is a key concern at the Pitt Rivers Museum. [PRM] The PRM has always privileged the identification, retention and accessibility of historical data for scholars. This data often concentrated on the history of the object after it left its source community. However details of manufacture, the circumstances in which the object was used, and cultural sensitivities were often not recorded. The museum is evolving its database to incorporate indigenous knowledge and current research in addition to maintaining the full historical record. Using the Haida collections at the PRM as a case study, I will look at how different knowledge forms are presented and retained. I will show how the structures as well as the content of museum documentation might need to change. Our systems of classification and organisation of information naturally privileges institutional and historical documentation. Do our approaches to documenting ethnographic collections need a more radical rethink? I also hope that an exploration of our documentation experiences can be helpful to other museums as we all develop museum care of collections in the twenty-first century.

▲ Collections in the expanded field: relationality and the provenance of artefacts and archives

Author: Mike Jones (The University of Melbourne, Australia)

Abstract: In 2017 archaeological evidence was published which indicates modern humans first arrived in Australia around 65,000 years ago. Through the countless generations since Aboriginal and Torres Strait Islander peoples built deep connections to the landscape, developed rich material culture infused with story and myth, and used oral and ceremonial traditions to transmit knowledge over thousands of years. Yet, since European invasion at the end of the eighteenth century the provenance of ethnographic and institutional collections has largely been documented with reference to white collectors and colonial institutions. Attitudes are starting to change. Recent decades have seen significant work on the repatriation of ancestral remains and moves away from the idea of the authoritative institution toward participatory museums, keeping places, and the co-creation of knowledge. But, though these activities rely on effective access to collections, their origins, and their stories, the structure and content of much museum documentation continues to lag behind contemporary practice. This paper looks at the documentation of Australian ethnographic and anthropological collections through the lens of changing attitudes toward provenance, including archival notions of parallel and societal provenance. When viewed this way, and placed in the context of recent developments in material culture theory, these collections help to highlight the limitations of existing documentation. The paper concludes with a call for a more relational approach to documentation which better encompasses the complexities of provenance and the entangled perspectives of institutional, archival, oral, and community voices which provide evidence for the meaning of artefacts in contemporary museums.

Session 3.9: User experience and museums



Date: Thursday, 4 October / Time: 11:30 - 13:00



Room: Asterion (CCCH), Chair: George Bruseker

▲ Autism, Hyperconnectivity, and Documentary (20')

Author: Salar Rafieian (Malek national museum, Iran)

Abstract: With regard to ICOM's theme for 2018 International Museum Day – Hyperconnected museums: New approaches, new publics – one can expect that documentation potentially pave the way for this interactive context. From the viewpoint of availability to publics, rather than how the work itself is able to connect, a work's documentations (from pictures and data to metadata) make playfulness and enjoyable, destructive, and, sometimes constructive mischiefs accessible. Especially, if the audience can find a way through the works in a museum, and extract something new from inside an exhibit, documentation is mandated to record it, analyze it, and publish it as metadata and added value. Now, if, beyond the typical structure of museums, due to especial mental or physical conditions, this new audience seeks especial circumstances to access museum works, then documentation, based on its resources, is able to make multimedia access available to facilitate access for this type of audience, and at the same time, it can receive, analyze, and archive the audience's encounter and reactions. Among those audiences, people with Autism Spectrum Symptoms would probably have a unique understanding and appreciation of each work, due to their potential mental capabilities and extraordinary brain functions. People with one of autism

symptoms, as a group of people with especial needs, are potentially one of the most attractive new publics and audiences who have a twofold importance in interaction with museums; firstly, and generally, as an audience with especial needs when encountering the intrinsic aspects of a museum (entertainment, education, etc.), and, secondly, as a viewer with a unique perspective when interacting and analyzing museum works – a person who would probably see things within museum works that would be otherwise neglected in the everyday natural (even though expert) observation or may be totally unobservable. Autism is a neurological development disorder diagnosed by damaged verbal and nonverbal communication and social interaction, stereotypical behavior, and limited hobbies. Problems with social skills and interactions is one of the major symptoms in people with Autism Spectrum Disorder. This problem varies from child to child depending on the level of performance and age. Meanwhile, metaphorically speaking, museum works can also suffer a spectrum of autism symptoms in their encounter with their audience! From this point of view, we can say that these works have poor social skills, including eye contact, initiating acts of communication, using nonverbal communication, gestures, and facial expressions. People with autism disorder display the lack of social skills in different areas such as limited eye contact, joint attention, making conversation, and making friends. With regard to ICOM's theme for 2018 International Museum Day – Hyperconnected museums: New approaches, new publics – using new sciences, such as cognitive sciences and different rehabilitation branches, including that for Autism Spectrum Disorders, and utilizing multimedia methods, from the viewpoint of museology, documentation may be able to bridge between museum works and audiences, particularly those with especial needs, in order to expand social interaction between them. Hyperconnectivity, although initially implies a means of communication between museums and their audiences, on the other hand, could be generalized to include concepts of sciences, technologies, and any other means of communication in society. From this point of view, just as drama therapy has been long accepted among its audiences, museum therapy could be considered another means for hyperconnection among museums. There is this promise, however, that these new areas in the arena of museum, not only helps the audience, but also paves the way for documentation of a vast spectrum of feedbacks, reactions, or actions that could be potentially considered part of the data. From this perspective, a hyperconnected museum is a context that, further to museum concepts, includes other sciences as well.

● **Where is Hanuman? Provenance of knowledge, Hindu mythologies, transmigration process and the user experience of digital objects in museums (20')**

Author: Patrizia Schettino (AgID, Italy)

Abstract: The paper presents the interpretation strategies used by designers of a digital object (an immersive environment about Hindu mythology) and the provenance of their own knowledge about Hindu deities and their attributes, with the goal to transmigrate the images of Hindu god and goodness inside an Australian museum and for a cultural hybrid audience. The paper will show how powerful is the oral tradition as interpretation strategy (Fish, 1980) to link the user experience of the digital object and the information inside the museum with visitor's previous knowledge about shared narratives, in this case the Ramayana. The paper will also summarize in a model the link between the transmigration of images (Cieri Via, 2018), the information available for the designers, the information available inside the exhibition, the oral tradition about the object and the knowledge construction process by visitors.

★[S4.1] Collection Documentation Modeling Wikidata and CIDOC-CRM

Presenters: Sandra Fauconnier (Wikimedia Foundation) Emmanuelle Delmas-Glass (Collections Data Manager, Yale Center for British Art, USA,) George Bruseker (ICS-FORTH), Trilce Navarrete (Erasmus University Rotterdam)

Chair: Trilce Navarrete Erasmus University Rotterdam, Netherlands

Date/Time: Tuesday, 2 October / 09:30 - 11:00

Duration : One session

Place: Cultural Conference Centre of Heraklion (CCCH)

Audience Type : Open

Type: Panel Discussion

This panel will focus on two models to organize museum documentation to increase visibility and use of collections online. The panel will include a representative of Wikidata (the free collaborative knowledge base, a sister project of Wikipedia) to give a general explanation of the project and its mapping to international metadata standards. She will present Wikidata as multilingual knowledge base, and general database behind Wikipedia (and many projects relying on machine readable data). This will be followed by an academic speaker to present an overview of the use of museum content in Wikimedia projects, as main visible outcome of participating in Wikidata. Two museum representatives will present their experience in collaborating with Wikimedia and Wikidata. Aims of collaboration included to enrich the museum's data, to tap into a key global hub of datasets available online, and to reach to as many people as possible. The panel will close with a proposal on how Wikidata can be mapped using CIDOC CRM to further facilitate harmonization of work and support the sustainable documentation of knowledge. Panelists have been working on a pilot to explore the possibility to map Wikidata using CRM. Results will be presented at the conference. This panel will rise a fundamental question: as digital online services, such as Uber and AirBnB, have totally disrupted their markets, can Wikimedia projects provide a new way to access information, including museum collections? The speakers will propose that a collaborative relation can be established in order to benefit from the strength of the online encyclopedia platform, the only non-profit website in the top 10 used websites worldwide, and its sister projects. By collaborating with Wikidata, CIDOC standards will be disseminated, and hopefully adopted, worldwide. In response to the topic of the conference, this panel will underline the importance of documenting the sources of information, following international standards, readable for humans and machines alike, to increase understanding of the transmission of heritage knowledge. By connecting authoritative data by museums in Wikidata, using CRM, the knowledge of the crowd may assist in the reconstruction, confirmation, illustration, enrichment, and valuation of museum collections. Particularly for lesser known museums, the high-profile platform can provide a stepping stone to become more visible and connected in the digital information economy.

★[S4.2] The Getty Vocabularies: Interactive Contribution Session

Presenter: Jonathan Ward (Getty Research Institute), Gregg Garcia (Getty Research Institute)

Date/Time: Wednesday, 3 October / 16:00 - 17:30

Duration : One session

Place: Cultural Conference Centre of Heraklion (CCCH)

Audience Type : Open

Following the Getty Vocabulary Program's presentation at the 2017 CIDOC conference in Tbilisi, this 90-minute session will focus primarily on contributing to the Vocabularies. One of the barriers to access to art information is the lack of standardized metadata and the use of controlled vocabularies. The aim of the Getty Vocabulary Program, at the Getty Research Institute working with a technical team at Getty Digital, is to provide expansive, multilingual, multicultural terminology resources. The Getty vocabularies promote consistency in cataloging and success in retrieval and discovery of information about art, architecture, and other cultural works. These free and open vocabularies grow through contributions from collaborating institutions and user groups. This workshop will first cover a general introduction to contributing data to our five vocabularies, as well as the step-by-step process to become a contributor. We will cover contribution of both new records as well as variant terms, the required fields, the scope of the vocabularies, sourcing terms, multilinguality, current partners and translation projects, how contributors are sourced and credited, with detailed examples in each step of the process. The distinct rules for each vocabulary, with the Art & Architecture Thesaurus (AAT) the most detailed, will be considered in relation to contributing. Secondly, we will cover technical issues with contributing data. Topics will include the data transformation process as well the process of loading and vetting data submissions from both individuals and institutions. The issue of data reconciliation will be addressed, as well as mapping data sets to the vocabularies, with examples from past submissions. We will discuss logistical challenges, future plans to assist contributors, and upcoming contributions.

★[S4.3] Heritage data-centric research: are FAIR data fair enough?

Presenters: Nicola Barbuti (University of Bari), Panos Constantopoulos (Athens University of Economics and Business, Athena Research Centre), Martin Doerr (ICS-FORTH), Achille Felicetti (PIN, Prato), Marianna Figuera (University of Catania), Sorin Hermon (STARC, The Cyprus Institute, Nicosia), Olivier Marlet (University of Tours), Joseph Padfield (The National Gallery, London), Christian-Emile Smith Ore (University of Oslo)

Chair: Franco Niccolucci (PIN, Prato, Italy)

Date/Time: Thursday, 4 October / 09:30-13:00

Duration : Half day

Place: Cultural Conference Centre of Heraklion (CCCH)

Audience Type : Open

Type: Invited session

In the current trend for e-Science, i.e. collaborative, computationally- or data-intensive research, archaeology is not a laggard. A number of initiatives are addressing how to manage and use data produced by heritage research, most notably the ARIADNE one in the archaeological domain (<https://www.ariadne-infrastructure.eu>), presently involving the most important research centres from all European countries in creating a comprehensive and integrated archaeological data infrastructure that so far has already registered little less than 2.000.000 archaeological datasets. Such infrastructure, implemented by ARIADNE, is bringing archaeology out of the “long tail of science”, i.e. those disciplines that make little use of data-centric research. It is revolutionising the concept of Big Data: not relatively few datasets, each with terabytes of numbers, as in nuclear physics; but millions of small datasets, all potentially relevant to a specific research question but including a large (and unknown) majority probably irrelevant at all. E-Science relies on the well-known FAIR principles (<https://www.force11.org/fairprinciples>), stating that data should be Findable, Accessible, Interoperable and Re-usable. Now, if “F”, “A” and “I” mainly depend on the technical way in which data and metadata are generated, stored, managed and curated, the “R” has less technical (but not less important) implications. It involves theoretical, methodological and epistemological aspects that have not received enough attention in the current debate. It has been argued that e-science discovery could be modelled as a deterministic discovery process; nevertheless, even in this perspective, simply modelling the provenance of data is not sufficient, but the provenance of the hypotheses and results generated from analyzing the data need to be modelled as well. Thus, to reuse data in cultural heritage it is necessary to expand the “R” facet of the FAIR principles at least into R3: Re-usable, Relevant and Reliable. Judging relevance and reliability may appear obvious to a human eye, but it is not to machine processing. Data reliability depends on a chain of trust that needs to be adequately supported by documentation, and on this regard the CIDOC CRM may play a key role. If in the past reference to previous discoveries published in journals and books was based on the academic practice of peer-review and on the authoritativeness of the author and of the publication, re-using data created by others is still lacking a similar good practice. The session will discuss such aspects and propose ways to address the issue. Contributions will come from purely cultural heritage practice (“What would you need to rely on somebody else’s data?”) to semantics (“What would you suggest to document, in order to support reliability?”). Both aspects will be analysed in light of the CRM: does it already provide a sufficiently rich toolbox, or additions are required? If so, which ones?

★ [S4.4] Re-contextualizing the Museum collections and objects to their origin

Presenters: Martin Doerr (ICS-FORTH), Wesam Mohamed (Ministry of Antiquities, Egypt), Lina Nagel (Ministry of Culture, Arts and Heritage, Chile)

Chair: Franco Niccolucci (University of Florence)

Date/Time: Wednesday, 3 October / 11:30 - 13:00

Duration : One session

Place: Cultural Conference Centre of Heraklion (CCCH)

Audience Type : Open

Type: Panel Discussion

★ [S4.5] Spectrum - Updating the standard

Presenter: Gordon McKenna

Date/Time: Wednesday, 3 October / 14:00 - 15:30

Duration : One session

Place: Cultural Conference Centre of Heraklion (CCCH)

Audience Type : Open

Type: Panel Discussion

This session will look at:

- At how Spectrum 5.0 was created, what has changed and what is new
- Experiences of localising and supporting Spectrum
- The development of support for Spectrum terminology

The session will also include a discussion session where attendees, particularly those who are not familiar with the standard, are encouraged seek answers to their questions.

★ [S4.6] UNESCO Chair on Digital Cultural Heritage-ViMM Manifesto

Presenter: Marinos Ioannidis (Director of UNESCO Chair on DCH)

Date/Time: Tuesday, 2 October / 11:30 - 13:00

Duration : One session

Place: Cultural Conference Centre of Heraklion (CCCH)

Audience Type : Open

Type: Invited session

The agenda of this special session is the following:

- [11:30]: Welcome (Monika Hagedorn-Saupe, President of ICOM/CIDOC and Marinos Ioannides, Director of UNESCO Chair on DCH)
- [11:40]: Introduction to UNESCO Chair (Marinos Ioannides) 12:00 H2020 - CSA Virtual Multimodal Project (ViMM Project), Main objectives and goals (Marinos Ioannides / Andreas Richter) Manifesto, Road-Map and Action-Plan for Europe's Digital Heritage in the EU Horizon-Europe Framework Program (Robert Davies)
- [12:30]: ICOM-CIDOC Synergies and common paths with the UNESCO-Chair and ViMM,
- [12:45]: Question and Answer, Discussion

★ [S4.7] the National Museum of Brazil and ICOM- CIDOC Response to the Situation

Presenters: Gabriel Moore Forell Bevilacqua (Federal Fluminense University, Brazil), Monika Hagedorn-Saupe (Institute for Museum Research Staatliche Museen zu Berlin - Preussischer Kulturbesitz, Germany)

Date/Time: Tuesday, 2 October/ 14:00 - 15:30

Duration : One session

Place: Phaedra (CCCH)

Audience Type : Open

Type: Panel Discussion

This session will provide an update from board member Gabriel Moore Bevilacqua on the state of affairs in Brazil after the catastrophic fire at the National Museum, followed by an update by CIDOC board president Monika Hagedorn-Saupe on the ICOM response. Following these presentations a free discussion will take place around the role of documentation in general in relation to these fires and in regard to proposals for pragmatic action that could be taken under the aegis of CIDOC to be of service in this situation

Plenary Sessions

Session: 0.3: **Official Welcoming Addresses /Conference and Working Group Presentations**



Monday, 1 October / Time: 09:30 - 11:00



Room: St. Markus Basilica

Session: 0.4: **Keynote Speaker: Dr. Costis Dallas**



Wednesday, 3 October / Time: 11:30 - 12:30



Room: St. Markus Basilica

Session: 0.6: **Keynote Speaker: Dr. Argyro Nafplioti**



Wednesday, 3 October / Time: 17:30 - 18:30



Room: Minos (CCCH)

Session: 0.8: **CIDOC Annual General Meeting**



Thursday, 4 October / Time: 16:00 - 17:30



Room: Minos (CCCH)

Session: 0.7: **Poster Session**



Thursday, 4 October / Time: 14:00 - 15:30



Room: Labyrinth (CCCH)

Session: 0.7: Poster Session



Thursday, 4 October / Time: 14:00 - 15:30



Room: Labyrinth (CCCH)

Theme: Documentation: Models, Tools and Technology

Different views for different needs: A model for data preservation and representation

Authors: Hans Liss (Security and Safety Division, Information Security department, Uppsala University, Sweden), Anne Ingvarsson (Uppsala University Museum, Sweden)

Session: I.2: Documentation Systems based on CRM or Ontologies

Abstract: In an increasingly complex technical environment for archaeologists, the need is emerging both for more complex research data, as well as for cooperating with traditional "cultural heritage" institutions for publishing our archaeological collections to the public, in the form of museum collections. We will outline the problems we have experienced in meeting both the need for preservation of existing excavation data and for a more popular presentation of the same data. Our approach involves a pragmatic repository for mixed research data, as well as a mapping model for representing a simplified view of this data when integrating with CH-oriented systems.

APOLLONIS Greek Infrastructure for Digital Arts, Humanities and Language Research and Innovation

Authors: Panos Constantopoulos (Athens University of Economics and Business, Athena Research Centre, Greece)

Session I.5: Documentation Database Development

Abstract: APOLLONIS is the Greek Infrastructure for Digital Arts, Humanities and Language Research and Innovation, recently formed by the union of two existing ESFRI-related national research infrastructures: clarin:el, the CLARIN-related Greek network for language resources, technologies and

services; and DARIAH-GR/DYAS, the DARIAH-related Greek network for digital research in the Humanities. The development of the APOLLONIS infrastructure advances the existing clarin:el and DARIAH-GR/DYAS services within a common framework that will ensure interoperability and reach to broader user communities, as well as promoting open science principles. Clarin:el will provide a permanent, stable infrastructure for accessing language resources and language processing web services, will support all kinds of languagerelated activities (regardless of subject), and collaborative workspace for application development environment. DARIAH-GR/DYAS will provide access to curated digital resources and services for the development, analysis and visualization of data, best practice guidelines, and dissemination and training activities on the use of digital methods and tools in the Humanities. A Digital Humanities Observatory will monitor the penetration of digital practices in the Humanities. Establishing a unified, open virtual workspace that will enable access to interoperable digital resources, curation and editing tools, good practice guidelines and support, APOLLONIS will allow Greek humanities research and education communities, as well as professionals in the media, culture and tourist industry, to carry out their creative activities more efficiently and less costly. Furthermore, through the clarin:el and DARIAH-GR/DYAS national networks, APOLLONIS will continue Greece's participation to the european infrastructures CLARIN and DARIAH, respectively. The development of APOLLONIS is being carried out by a consortium comprising: Athena Research Centre (coordinator), Academy of Athens, National Center for Scientific Research Demokritos, GRNET, University of Athens, Institute of Communication and Computer Systems, Athens School of Fine Arts, Foundation for Research and Technology – Hellas, University of the Aegean, and Ionian University.

● Theme: Provenance and Documentation

● A Schematic Representation Of Ethnographic Documentation: Two Case Studies

Author: Katri Hirvonen-Nurm (Helinä Rautavaara Ethnographic Museum Espoo, Finland)

Session 2.3: Deepening Documentation, beyond the object to knowledge context, potentials and challenges.

● The story of a Tie: Interpreting museum object and the construction of local identities

Authors: Margareta Biskupic Curla (Muzej Tropolja, Croatia), Vesna Zupetic (Grad Velika Gorica, Croatia)

Session 2.5: Provenance Lost and Regained

Abstract: Postmodernist theories change the paradigm of a museum and museum activity, together with the paradigm of heritage and identity. Museums are no longer perceived as storerooms/depos that store objects valorized as permanent value that shape the identification card of the community, they are the institutions that tell stories for the present, based on the objects from the past. Museums are places where basic facts about the object from the past, through imaginative and stratified interpretations, enrich with new meanings in a way that they become more representative and thus more valuable to the community they present. Museum's task is to produce and shape the contextual contents and information about the

objects from the past, with the goal to preserve, promote and present the identity of the community they are active in. Considering the fact that the museum's status in the community depends on its ability to communicate and interpret cultural heritage, the interpretation and contextual information become the important part of the museum documentation, which requires well designed plan for keeping and managing. The aim of this work is to show process of creating contextual and interpretative contents on the object from the museum collection – garment detail of Croatian peasant (soldier). The story of a tie is the history of diffusion, of transformation and desamentization of a garment detail in peasant's clothing, in social and cultural context but also the reconstruction of the process of creating, using, interpreting and spreading the information and the knowledge about the museum object.

● Object information as historical source

Author: Chiedza Zharare (National Museums and Monuments of Zimbabwe, Zimbabwe)

Session 2.7: Documentation as Source of Provenance

Abstract: History is the narrative of time changes and objects can reflect change overtime thereby becoming sources for better understanding of our history. They are very crucial to us as a way to approach the past hence they provide us a way into history. Analysing the objects, placing them into historical context and using them to understand the past, is the type of work that transpires in the museum world. By simply looking at an object, one can get many stories. For instance by asking the following messages; what is it? when was it produced? what material is it made from as well as its uses? The above questions assist in identifying the object and placing it in its historical phase and time. Each object has a story to tell, a story shaped by human use. Historians during the analysis of objects begin by recording basic facts like description of an object and its photograph. Description includes size, material and features on the object like ornament and engraving. Objects may have many functions some more obvious than others. The principal function of an object is that for which it was originally made and used. Thorough analysis of an object and its background can help establish function. Analysing wear patterns may show if a knobkerrie was used or if it was for decoration. It is feasible that an object is not in its 'natural' environment thus looking for patterns or multiple examples of the same object can assist to determine normal use

● „Expb. ODA 1976 el.“ – Sustainable use of abbreviations, symbols and numerical codes in documentation

Author: Dietrich Maurer (Deutsches Museum von Meisterwerken der Naturwissenschaft und Technik, Germany)

Speaker: Dietrich Maurer

Session 2.7: Documentation as Source of Provenance

Abstract: The advantages of abbreviations, numbering systems and symbols are basically evident. But what should be kept in mind while using them in the field of documentation? In my presentation I would like to discuss primarily the problems associated with their use in the object documentation, also on the basis of examples from the Deutsches Museum. As a kind of conclusion I'd like to derive some recommendations or golden rules from my experiences. Seen from the historical distance it is obvious, that the terms used to simplify work and improve clarity make the documentation more difficult than easier for future generations. Obsolete, no longer common abbreviations represent thereby the smallest

problem. More difficult to decode are institution-specific abbreviations, which has been used only in a single Museum. Even more problematic are individual shortcuts of individual employees in the accession register, on index cards, in databases and other documents. Also not effective is the use of numbers without explanatory additions. For example, we have three-digit numbers behind the deaccession notes in the accession register. Unfortunately, the meaning of these numbers is no longer apparent to any employee in the house. Most likely it is the number of a revision list. The accession register contains undated and therefore mostly worthless revision symbols (hooks and crosses in different colors).

● Contributions towards the establishment of documentation principles for art museums in Brazil

Authors: Camila Silva (ECA USP, Sao Paulo, Brazil), Marilda Lara (University of Sao Paulo, School of Communication and Arts, Brazil)

Session 2.7: Documentation as Source of Provenance

Abstract: Recently, Brazilian museums have shown an increased interest in museum documentation. So far, however, there has been little discussion about information organization of art collections. In general, studies in this field suffer from several drawbacks: most of them have only focused on computing and its applications instead of principles and theory; the relationship between Museology and Information Science has not been widely investigated; and, particularly in Brazil, the first serious discussions on museum documentation emerged during the 2000s with local events, while internationally, discussions have been going on since the late 19th century. The main issue addressed in this study is the need of information organization principles for Brazilian art collections. Therefore, the aim of this study is to examine documentation guidelines on museum objects, as well as their development, to contribute with discussion in Brazil, and to propose a methodology for artworks information organization, which may be used as a parameter to Brazilian museums. It was hypothesized that the absence of national associations, and the lack of knowledge on international standards, resulted in an ineffective documentation of collections, including damage to the artworks information retrieval and access. The findings, while preliminary, suggest that international associations were accountable for gathering professionals, creating a collaborative environment, and establishing documentation tools, mainly in the 1960s, and so these associations were believed to be the core of museum documentation development. Nevertheless, the formulation of specific tools for museum objects overlaps the formulation of theory, which is fundamental to guide documentary practices.

● Inventory Data as Object Documentation and Interpretation

Authors: Bethany Romanowski (National September 11 Memorial & Museum, United States), Sandra Vanderwarf (Conservator in private practice, Brooklyn, NY, United States)

Session 2.7: Documentation as Source of Provenance

Abstract: Our experience paired with collections stewardship data indicate that museum collection inventories are significantly de-prioritized, which creates opportunities for loss of objects, information, and knowledge provenance. We maintain that inventory de-prioritization stems in part from low awareness of how inventory information underpins public-facing functions. To make this connection clear, we place museums in a systems thinking model. Two case studies from the National September 11

Memorial & Museum and Brooklyn Children's Museum illustrate how this connection plays out in practice. Evidence suggests inventory deprioritization may also correlate with low awareness of inventory methodologies. Our forthcoming Collection Inventory Handbook for Museums and Historical Societies is offered as a step towards improving this information deficiency, prioritizing inventories, and optimizing inventory performance.

In pursuit of Ariadne: following the thread of artefact curation at the Stratigraphical Museum at Knossos

Author: Eleni Makrygiorgou (British School at Athens, Greece)

Session 2.7: Documentation as Source of Provenance

Abstract: In the hilly vicinity of Knossos, facing the Palace of Minos, stands the Stratigraphical Museum at Knossos. The "Strat" is considered one of the most important museums in the Eastern Mediterranean, with artefacts dating from the Neolithic period until late Antiquity. The importance of the museum lies in the fact that it is a "hybrid", operating simultaneously on museum curatorial principles as well as acting as an archaeological - academic repository. The work is undertaken predominantly by archaeologists with a knowledge on curation, documentation and digitisation of the artefacts of the museum. This unusual combination sets up a fertile environment for the adoption of interdisciplinary approaches to the study of the artefacts. Especially at a time when the abundant information of dubious knowledge becomes more and more accessible, it is an obligation for museums to provide adequate and proper information concerning artefacts and collections. One of the main advantages of working on the aforementioned project is the way that the documentation is being generated, with the ability to use all the information found within the BSA archives and libraries. The latter provide a very good insight into the knowledge surrounding an object. As it will be argued, object curation should ideally encompass paper and photographic documentation as well as information about objects' life, from the moment it was retrieved or found until the moment it is displayed in a collection. Such an idea, can also be beneficial to the provenance of knowledge of the practices under which, an object arrives in a museum.

Theme: Innovation in Documentation

The Digital Repository of Carlos Lloyd Braga Foundation at Minho University-Portugal in the preservation and valorisation of historical and cultural heritage of the institution.

Author: Márcia Carolina de Oliveira (Universidade do Minho /FCLB, Portugal)

Session 3.1: Photography, Painting and the Image: Documentation and Provenance

Abstract: As is well known, the massive diffusion of electronic communications and information poses a challenge to educational and cultural institutions. Faced with these challenges, the Carlos Lloyd Braga Foundation (FCLB) is currently working on a project aimed at enhancing the historical and cultural heritage of the University of Minho in Portugal. To this end, FCLB has created a digital repository ("FCLB Repository") that aims to disseminate and heighten the resources of the university's historical archive, as well as some collections of its Cultural Units. It is a work in progress that examines documents of high historical and cultural interest related to the history of the New Universities in the context of the

Educational Reforms in the 1970s in Portugal. The project is also developing multimedia and interactive products that strive to enhance collections belonging to Cultural Units of the University of Minho, such as the BPB – Braga Public Library, ADB – Braga District Archive or MNS – Nogueira da Silva Museum.

▲ **Historical Persian painting works as documentary objects and provenance of knowledge**

Authors: Hassan Ghaseminejad Raeini (Art University of Isfahan, Iran), Amin Bineshpajouh (University of Soore, Iran), Zeidifard Rasoul (Scientific-Applied Education Center for Handicrafts of Tehran, Iran)

Session 3.1: Photography, Painting and the Image: Documentation and Provenance

Abstract: One of the most important objects in museums of Iran and around the world is, Persian paintings works. These artistic works are a mixture of painting, poetry inscription and historical documents and mostly part of a book that was very important in history of Iran. These museum objects make for about thousand years in history of Iran and could named as the most important pictorial documents of Iran. Now, here in this survey, three of these historical painting survey and explain various aspect of them as source of information. In Persian painting, we see various personages, various colors, various spaces and places at same works, various professions and various other things. Persian paintings has very important and key role in surveying the history of art in Iran and achieving to documentary information for various studies. Also because of variety in subjects and stories of these painting works, another role and function of these works in museums is their usage in enriching temporary exhibition. Here and in this case three kind of Persian painting works including one work from Demote Shahnama book (13th century) another one from Shah-Tahmasbi Shahnama book (16th century) and the other one Hezaro-Yek Shab(18th century), After brief introduction of these three books, explain the most important pictorial aspects of these books and also some of documentary aspects that could be useful in field of museum exhibition for enriching various concepts. Finally, explain some experiences in relation with using Persian painting documentary role in museum exhibitions of some museums.

▲ **An interdisciplinary analytical approach to the iconographic examination of minoan frescoes. The so-called " fresco of Goddess" of Aghia Triada as a case study.**

Authors: Pinelopi Stefanaki (Archaeological Museum of Heraklion, Greece), Eleni Papadaki (Archaeological Museum of Heraklion, Greece)

Session 3.3: Conservation and Analytic Techniques

Abstract: As the past reconstructions were incomplete and many of the depicted elements, until recently, were still difficult to be identified, it was decided to proceed in the re-examination of the burnt painting surface, integrating modern and traditional techniques in a new, interdisciplinary analytical approach. The painted surface of the fresco was examined using a mobile Spectral Imaging System, while a high resolution microscope was used by the conservators throughout the cleaning process. Moreover, draft overlay drawings made in a tracing transparent film that turned later to digital drawings in scale, provided valuable information in the identification of some new pictorial elements. The correlation of well preserved fragments and the pre-existing knowledge of the Minoan iconographic program contributed to a new reconstruction of the fresco. Overall, the combination of different analytical methods and the related detailed documentation in the process of the re-examination of the minoan burnt fresco provided

important insights in the study of minoan iconography and furthermore in our knowledge about minoan civilization.

▲ **Transmission of knowledge through the painters brush and colors. Tracing the pigments from relief wall-paintings of Knossos.**

Authors : Efi Tsitsa (Archaeological Museum Heraklion, Greece), Theodore Ganetsos (UNI.W.A., Greece)

Session 3.3: Conservation and Analytic Techniques

Abstract: The colorful wall-paintings of Minoan art have been a favorite topic of discussion. The main subject of the paper is the study and the identification of pigments. Raman spectroscopy was used in order to identify the pigments that were used in the past. Minoan artists created masterpieces from lime plaster and a limited range of pigments. These unique artworks can be classified in three main categories: Flat wall-paintings, Relief wall-paintings and moveable three dimensional works of art. Relief fragments of wall-paintings from Knossos were chosen to be examined. The use of microscope was crucial in order to understand the technical details of their creation. During the examination photographs were taken with a portable microscope that helped to decide the exact point in which the analysis would take place. Raman spectroscopy is a non destructive technique that can identify the chemical type of the pigment. The procedure took place at the Archaeological Museum of Heraklion. After the measurements were taken the second phase was the study and the interpretation of the spectrums. New evidence came to light, revealing the complex way that Minoans used the pigments that had at their disposal, in order to achieve a certain color. The study contributed to our understanding of the pigments and the techniques of wall-painting, although some details still remain elusive.

▲ **Conservation work of the ceramic finds from the island of Gavdos**

Authors : Amalia Troullinou (University of Crete, Department of History & Archaeology, Greece), Eftimis Theou (University of Crete, Department of History & Archaeology, Greece)

Session 3.3: Conservation and Analytic Techniques

Abstract: In this paper, we present the main aspects of conservation of the ceramic finds from the excavation of the University of Crete at the Bronze Age building complex at Katalymata on the island of Gavdos. The first author's contribution to this work started in 2014 and is in progress at the Laboratory of Conservation of the University. It represents an immense but also exciting effort, because of the large number of pottery and other clay artefacts unearthed, their rich variety of shapes, and, above all, their particular local character. In fact, most of them continued to be hand-made until the end of the 2nd millennium BC, consist of native clays, and result from long-lasting Gavdiot techniques of manufacture and decoration. Clays are abundant on the island but, as a rule, quite friable, and clay objects are usually covered with a tough crust of salts, soil particles, dust, and, rarely, with products of biodeterioration (algae, lichens). Colors are very faint, preserved mostly due to the salt crusts that also act as a protection layer, and must be treated (and almost 'revealed') with extreme caution. Thus, both gentle solvents and dental and surgical tools are used for their cleaning, while the whole conservation process is under constant examination and control with a diophthalmic stereomicroscope. The indigenous, unique character of these ceramic finds calls for a mutual, close collaboration between the conservator and the archaeologists; this collaboration is strengthened every year during the days of the summer training school

of the Gavdos project, where young students of the University are acquainted with the various stages of conservation work on this material, as well as its interdisciplinary approach.

▲ **The Creswell online network: documenting Islamic architecture through early photography**

Author: Spyros Koulouris (Villa I Tatti, Harvard University, Italy)

Session 3.6: Documenting Built Heritage and Architecture

Abstract: The poster will present the Creswell online network, a project organized by five institutions. Keppel Archibald Creswell (1879-1974) was a pioneer in Islamic architectural history who considered photography an essential part of his fieldwork and published five volumes of *Early Muslim Architecture* and the *Muslim Architecture of Egypt*. These works remain essential in the history of Islamic architecture. During his life he travelled extensively in the Middle East to measure and photograph monuments. He created a unique photo archive documenting monuments and archaeological sites that are now in ruins or have disappeared because of wars or natural disasters. Others have been significantly altered through restoration or adaptation, or have been subject to thefts. These materials are today an invaluable source of knowledge to trace thefts and alterations. The photo archive (40,000 photos) is now divided in five repositories; librarians, IT specialists, and architecture historians from the American University in Cairo, the Ashmolean Museum, the Victoria & Albert Museum, and two Harvard University institutions the Fine Arts Library and Villa I Tatti will collaborate in order to reunite in a single online platform all documentation. The aim is to provide scholars and conservators linked metadata of exceptional value.

[WS-5.1] International Thesaurus Working Group Meeting

Presenters: Jonathan Ward (Getty Research Institute , USA), Gregg Garcia (Getty Research Institute , USA)

Date / Time: Saturday,29 September & Sunday,30 September / 10:00 : 17:30

Duration: Full day

Place: Cultural Conference Centre of Heraklion (CCCH)

[WS-5.2] The use of software tools in documentation

Presenters: Jonathan Whitson Cloud (Horniman Museum and Gardens London , UK), Maija Ekosaari (Tampere University of Technology , Finland), Rupert Shepherd (The National Gallery, London , UK)

Date / Time: Saturday,29 September & Sunday,30 September / 10:00 : 13:00

Duration: Half day

Place: Cultural Conference Centre of Heraklion (CCCH)

The Documentation Standards Working Group invites as many collections management system vendors as possible to a round-table discussion of the past, present and – most important – the future of software tools for museum documentation. Digital collections management systems are proliferating – the DSWG is aware of over 40 systems – and are widely used in museums and other heritage organisations. They have made it much easier for these institutions to manage and disseminate their collections; but they can be expensive and complex, and our experience is that many users, whether basic or advanced, are regularly frustrated by at least some aspect of the systems they engage with day-to-day. At the same time, a series of standards has been developed by a variety of organisations (such as CIDOC, Collections Trust, and the Getty) for the documentation and management of collections; yet the uptake of these standards by collections management systems has not always been as quick or comprehensive as their creators might wish. We plan to discuss how collections management systems have evolved to reach their present forms; the kinds of tasks they are being asked to facilitate; and what pressures shape their future development. We intend to combine short papers and provocations from a variety of speakers, with discussions between the speakers and vendors. By the end of the day, we hope all participants will have acquired a shared understanding of the current challenges facing the users and developers of digital collections management systems – and, ideally, some idea of how future systems can best evolve to address these challenges.

[WS-5.3] Collections management from basics to international implementation

Presenters: Gordon McKenna (Collections Trust , UK)

Date / Time: Sunday, 30 September / 10:00 : 16:00
Duration: Full day
Place: Cultural Conference Centre of Heraklion (CCCH)

Collection management standards are best created from the practice of the people working in the sector. This has been the experience of Collections Trust, formerly the Museum Documentation Association (MDA) in the United Kingdom. Since its publication in 1994 Spectrum has undergone changes which reflect the changes in the sector. It has also been implemented in all kinds of institution national to local to volunteer. It has been translated into other languages, including German, Dutch, with an upcoming version in French (Canada). The workshop will cover: deriving the basics of collections management, procedures and information needs, from common experience of the participants; Spectrum – the UK Collections Management Standard; and how to localise Spectrum in your country, and organisation. The workshop is aimed at all those who are interested at implementing collections management in their organisation. Attendees of all levels of experience are welcome. It will be interactive, involving working in small groups to consider relevant questions with reporting back. It will give advice and hopefully provide inspiration.

[WS-5.4] Automating the Application of CRM-dig to the Provenance Metadata for Computational Photography Based Imaging

Presenters: Carla Schroer (Cultural Heritage Imaging (CHI)), Mark Mudge (President and co-founder of Cultural Heritage Imaging)

Date / Time: Sunday, 30 September / 10:00 : 13:00
Duration: Half day
Place: Cultural Conference Centre of Heraklion (CCCH)

This tutorial provides lectures, demonstrations, discussion, and hands-on practice with software tools for creating and validating context and process metadata for photographic image sequences. The initial software is designed for RTI and Photogrammetry, though the approach has broader applicability. The tools produce Linked Open Data mapped to CRM-dig saved as RDF. The user need not know anything about the CRM or linked open data to use the tools. These tools form the basis of the Digital Lab Notebook (DLN). The DLN serves the same function as a written scientist's lab notebook, enabling data inspection and reuse by others. We begin with an overview of both RTI and photogrammetry, including basics of image capture and examples of each from cultural heritage subjects. This will allow participants to understand the structure and approach of the tools. There will then be an exploration into CHI's approach to metadata collection and image validation, including the hands-on use of new, open source software tools. **Participants are encouraged to bring their laptops for hands on practice with provided sample data.** This tutorial enables an attendee to:

- Learn about the Digital Lab Notebook (DLN), how archiving and reuse requirements are driving modifications to its development, and how to use it in an RTI or photogrammetry practice.
- Gain a basic understanding of two computational photographic imaging techniques: Reflectance Transformation Imaging (RTI) and photogrammetry for 3D.
- Learn about two specific software tools for collecting metadata about image sequences and validating image sequences, including recently funded plans for additional features and tools.

- Provide an opportunity for hands-on practice with the tools: DLN:Capture Context and DLN:Inspector using provided example data. (Participants will be able to download the software from the [CHI](#) website prior to the tutorial – the free software runs on both Mac and Windows PCs)
- Provide feedback on the tools for subsequent versions
- Provide input for additional tools for archiving image sets which are being planned

[WS-5.5] Multimodal interaction in the Virtual Museum

Presenters: Margherita Antona (ICS-FORTH , Greece), Nikolaos Partarakis (ICS-FORTH , Greece), George Margetis (ICS-FORTH , Greece), Constantine Stephanidis (Department of Computer Science, University of Crete, ICS-FORTH , Greece)

Date / Time: Sunday, 30 September / 14:00 : 17:30

Duration: Half day

Place: Cultural Conference Centre of Heraklion (CCCH)

Today, the term Virtual Museum is mainly used to describe initiatives such as 2D and 3D digital collections available on the web, virtual tours to existing physical museums or (in its advanced form) a systematic use of web technology and tools, as well as multimedia content, to communicate aspects of cultural heritage. Recent and current research activities on VMs have identified and systematically advanced new technologies, methods and tools to develop digital cultural heritage supporting rich interaction. This tutorial will analyze and discuss enabling technologies, examples and case studies of a wide variety of novel interactive systems in the context of digital and physical cultural heritage. The tutorial will cover:

- A brief introduction to multimodal interaction in the context of cultural heritage
- portable, mobile and custom hardware devices
- reusable interaction modalities
- visualizations
- gamification techniques
- interaction and content personalization
- virtual, augmented and mixed reality technologies
- augmentation of physical artifacts
- interactive surfaces
- moving surfaces
- interactive animations
- immersive representations
- multiuser support
- integration of the above into holistic solutions for virtual exhibitions and interactive art installations.

[WS-5.6] Ancient DNA Analysis

Presenters: Despoina Vassou (IMBB-FORTH , Greece), Nikolaos Psonis (IMBB-FORTH , Greece), Dimitris Kafetzopoulos (IMBB-FORTH , Greece)

Date / Time: Sunday,30 September / 10:00 : 13:00
Duration: Half day
Place: Cultural Conference Centre of Heraklion (CCCH)

Analysis of ancient DNA (aDNA) is new powerful means to study biological excavation specimens and answer paleontological and archaeological science questions.

Comprehensive genome sequencing of genetic material, salvaged into ancient biological specimens (bones and teeth of human and animals, seeds, wood, food residues etc.), can shed light into various anthropological and historical events related to the human origin, the migrations of populations, the domestication of species, the identity and appearance of individuals, diet information, genetic diseases and pathogens. The workshop will cover:

- Demonstration and discussion about the conditions and sampling procedure of ancient biological residues in the field, introduction to wet-lab procedures (lab precautions, sample handling, DNA extraction, genomic libraries preparation, sequencing etc).
- Process of ancient DNA data (Next Generation Sequencing data handling and filtering, DNA damage estimation, contamination check, comparison to reference data).
- Utilization of ancient DNA data to species identification analysis.
- Determination of morphological characteristics of individuals (e.g. color, shape) and genetic sex estimation.
- Introduction to population genetics studies focusing on origin, migration patterns and genetic admixture among populations.

[WS-5.7] CIDOC CRM in Action

Presenters: George Bruseker (ICS-FORTH , Greece), Mark Ficthner (Germanisches Nationalmuseum , Germany), Theodoridou Maria (ICS-FORTH , Greece)

Date / Time: Sunday,30 September / 10:00 : 17:00
Duration: Full day
Place: Cultural Conference Centre of Heraklion (CCCH)

This workshop will offer a hands-on introduction to the process of data integration from heterogeneous cultural heritage (CH) data sources. Increasingly CH professionals working in the museum sector are faced with the challenge of bringing together a holistic view of the information available from different specialists and institutions with a field from multiple data sources, for the purposes of research or greater institutional knowledge sharing. Whether the goal is data integration for research or for intra- or inter-institutional data integration and harmonization, the skills necessary to plan and execute a data integration project are in demand. Adopting the CIDOC CRM standard ontology, this workshop will present some of the essential elements for carrying out a data integration project:

- Understanding conceptual models [specifically the basic modelling patterns, classes and relations of CIDOC CRM]
- Basic data mapping techniques and an introduction to the X3ML Toolkit for Data Mapping and Transformation
- An introduction to the WissKi platform and how to create born-semantic CH data

Participants should leave the workshop having a better understanding of the basics of semantic data, CIDOC CRM and how to create semantic data through data mapping/transformation and how to manage it in a semantic research environment.

[WS-5.8] Exhibition Object Data Exchange Mechanism (EODEM)

Presenters: Jonathan Whitson Cloud (Horniman Museum and Gardens London , UK), Maija Ekosaari (Tampere University of Technology , Finland), Rupert Shepherd (The National Gallery, London , UK)

Date / Time: Sunday, 30 September / 14:00 : 17:30

Duration: Half day

Place: Cultural Conference Centre of Heraklion (CCCH)

The Documentation Standards Working Group proposes to work with museums and museum collection management system software creators (vendors) to devise and implement a mechanism, grounded in existing data standards, that facilitates 'at the touch of a button' the exchange of object and object requirement data, needed when objects are lent from one institution to another. Our current experience is that when objects are lent, data about them and their protection is currently shared in text documents, by email, by phone, by any method other than the one that requires least effort and seems most obvious: direct from one collections management system to another. Our intention is to tie the dataset to be exchanged as small as possible: sufficient to adequately (as opposed to perfectly) describe objects and the requirements usually stipulated in the process of their being lent from one institution to another. This data set will be mapped to the CIDOC-CRM. Object description data will be limited to that required to meet the Object ID standard.

[WS-5.9] Make your museum more visible with Wikimedia projects

Presenters:

Sandra Fauconnier (Wikimedia Foundation), Trilce Navarrete (Erasmus University Rotterdam , Netherlands)

Date / Time: Sunday, 30 September / 10:00 : 17:30

Duration: Full day

Place: Cultural Conference Centre of Heraklion (CCCH)

This workshop will provide a basic introduction on how museums can be present, visible and connected via the free and non-profit Wikimedia projects, including Wikipedia., Wikidata, and Wikimedia Commons.

Goal of the workshop:

- To present an overview of the Wikimedia projects, with special attention to Wikipedia, Wikimedia Commons, and Wikidata.
- To provide participants the necessary information to enter information about collections in Wikidata
- To demonstrate to participants how data from Wikidata is re-used across the web
- To provide participants with information how Wikidata serves as a hub of worldwide, international metadata standards,
- To introduce the way in which museum collections are shared and re-used via the media repository Wikimedia Commons
- To make participants acquainted with metrics that demonstrate the impact of sharing collections via Wikimedia projects

Since almost a decade, museums and other cultural institutions around the world (GLAMs – Galleries, Libraries, Archives and Museums) have been working together with volunteers from the Wikimedia movement (Wikipedia and its sister projects). Such GLAM-Wiki collaboration projects offer a way to reach broad audiences and to make collections available for enrichment and re-use. Wikipedia, the non-profit, free encyclopedia, is the most well-known platform of the Wikimedia ecosystem. But there is also a lot of potential in sharing museum collections via Wikipedia's sister projects: the free media repository Wikimedia Commons, and via the free, multilingual knowledge base Wikidata (which is increasingly re-used across the world by many applications and websites, including VIAF, the Google Knowledge Graph, and iOS's Siri Knowledge). In the upcoming years, Wikimedia Commons will become an even more impactful platform, as it is converted to structured and machine-readable data as well, mapped to international metadata standards. Thus, both Wikidata and Wikimedia Commons have great potential in helping less well-resourced museums to publish collections as Linked Open Data. This workshop offers a first hands-on insight in how GLAM-Wiki collaborations can take form, and how museums can increase and measure their presence and impact via Wikimedia projects. Participants will be asked to bring the basic registration information of their top collection pieces to create Wikidata items, and a freely licensed or public domain image that can be uploaded to Wikimedia Commons. Depending on the number of participants, a selection of museums will be selected (based on quality of data) to work on in groups.

[VWS-5.10] Lasers in CH analysis, diagnosis and cleaning

Presenters: Paraskevi Pouli (IESL-FORTH , Greece), Sophia Sotiropoulou (IESL-FORTH , Greece)

Panagiotis Siozos (IESL-FORTH , Greece), Aggelos Philippidis (IESL-FORTH , Greece), Kristalia Melessanaki (IESL-FORTH , Greece), Demetrios Anglos (Department of Chemistry, University of Crete, IESL-FORTH , Greece)

Date / Time: Tuesday, 2 October / 18:15 : 19:15

Duration: Half day

Place: FORTH- amphitheater

In recent years complex diagnostic and restoration problems have been efficiently approached by means of laser techniques. In fact a number of laser material processing and spectroscopic methods has been specifically adapted with exceptional success to the requirements of a wide range of demanding conservation applications. Surface cleaning, based on laser ablation, has been particularly effective for the controlled and selective removal of altered over-layers and unwanted accumulations in a variety of cases (i.e. stonework, easel paintings, icons, glass and metal objects). Among the outstanding examples is the laser-assisted removal of pollution accumulations from the sculptures of the Athens Acropolis.

Furthermore, spectroscopic techniques, such as micro-Raman, Laser Induced Fluorescence (LIF) and Laser Induced Breakdown Spectroscopy (LIBS), have been used to determine the chemical composition of materials in works of art and archaeological findings, while imaging techniques (i.e. multispectral and holographic interferometry) have been able to differentiate similar materials and reveal hidden stratigraphic information. Illustrative examples related to laser-cleaning will be given and the prospects and limitations of lasers in Cultural Heritage restoration will be discussed. Also the prospects of employing laser analytical techniques in art conservation and archaeometry will be presented in view of recent advances on compact, portable instrumentation.

The workshop will cover:

- An introduction to the use and applications of advanced laser-based technologies in Cultural Heritage (CH) science, diagnostics and conservation.
- A demonstration on the combined use of LIBS and Diffuse reflectance to determine the chemical composition of CH materials
- A demonstration on the real-time documentation of these analytical procedures using the DIAGNOSIS/POLYGNOSIS documentation platforms

[WS-5.1 I] Ambient Intelligence Research Facility demo

Presenter: Nikolaos Partarakis (ICS-FORTH, Greece), Irini Kontaki (ICS-FORTH, Greece)

Date / Time: Tuesday, 2 October / 18:15 : 19:15

Duration: One session

Place: FORTH - AMI amphitheater

The ICS-FORTH Ambient Intelligence (Aml) Programme is a long-term horizontal interdisciplinary RTD Programme aiming to develop and apply pioneering human-centric Aml technologies and Smart Environments. In the context of the Aml Programme, more than 130 integrated systems have been developed targeted to a number of interconnected technological environments such as home and daily living, workplace, learning and education, healthcare, arts and culture, leisure and entertainment, and commerce and marketing.

During the demo, which lasts approximately one hour, the visitors will have the opportunity to see many of the developed systems, with particular focus on systems providing innovative forms of interaction with digital and physical cultural heritage artefacts.

[WS-5.12] What is a comprehensive Digital Strategy?

Presenter: Jan Behrendt (Militärhistorisches Museum Flugplatz Berlin-Gatow, Germany), Gabriel Moore Forell Bevilacqua (Federal Fluminense University, Brazil)

Date / Time: Sunday, 30 September / 14:00 : 17:30

Duration: Half day

Place: Cultural Conference Centre of Heraklion (CCCH)

Arguably all museums use digital tools to fulfill their tasks. Museums take digital photos of exhibits and use data bases as the central knowledge systems of their object documentation. They make online collections available to their visitors and social media teams use object information for their PR work. However, comprehensive digital strategies are rare in museums. It's time to assess costs, risks and opportunities and to link the various approaches to developing a digital strategy that fits its institution.

The workshop aims at assessing the use of digital tools in museums in an interdepartmental approach. Curators, collections managers and documentation specialists will be brought together to discuss the digital tools they use and to find ways to develop a comprehensive digital strategy for their institutions.

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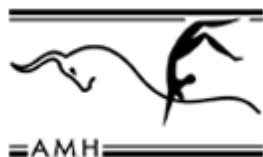
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