



ICOM NATHIST 2016

NATURAL HISTORY MUSEUMS IN CULTURAL LANDSCAPES

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2016 CONFERENCE ABSTRACTS

ICOM NATHIST - 2016 CONFERENCE PROGRAM

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NATURAL HISTORY MUSEUMS IN CULTURAL LANDSCAPES

ABSTRACTS

KEYNOTE SPEECH I

ITALIAN MUSEUMS' SENSE OF NATURE.

SITUATION AND PERSPECTIVES OF ITALIAN NHMS BETWEEN HISTORICAL COLLECTIONS PRESERVATION, LOW BUDGETS AND THE WISH TO PURSUE NEW TRENDS.

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The very rich geography of the Italian NHMs reflects the prestige that our cities, since the Enlightenment, gave to natural and exotic collections. At the time of the first unitarian Regno d'Italia, in 1861, all the cities of the North were proud to support the local NHM or the Academy, while in the South only a few large collections were strictly linked with Universities. Somehow this became the trigger for the critical situation NHMs are currently facing. Cities are struggling against the global financial crisis, the resources for museums must be balanced with the needs for asylums or public pavements. Most of them have just an handful of operating staff, bound to the larger Culture & Education Departments (sometimes even combined with Sports & Tourism), therefore compelled to act as mere officers. University collections became less and less connected with education, “endangered species” are scattered and forgotten inside their dusty cabinets. The research remains a sort of individual hobby for the last curators still on board.

In this horrible scenario, however, emerges the well-known Italian resilience. Struggling across many difficulties, the Italian museums are still able to engage their stakeholder and communities in a dialogue which represents a lively landscape studded by intelligence, competence, generosity. A number of historical collection are precious for their cultural heritage value, others are the ground-stone for educational activities; some museums are highly committed in the new core mission of inclusion and citizen participation. While developing, this black & white landscape, nurtured by citizen participation, might provide a new scenario and role for NHMs, these long lasting cultural institutions.

KEYNOTE SPEECH II

A NATURAL HISTORY MUSEUM OF THE COMMUNITY, BY THE COMMUNITY, FOR THE COMMUNITY.

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Natural history museums occupy a unique space at the confluence of culture, education, preservation, science, and entertainment. They inspire wonder; they preserve, study and interpret the treasures of the past for the future; and they are a bastion of lifelong learning. While these incomparable qualities remain the core of natural history museums, the information revolution of recent decades has brought forth an existential conundrum: Is the age old adage “if we build it, they will come” really true? Most natural history museums have realized that the answer to this question is “no,” and have recognized the need to engage audiences for their feedback in order to improve visitor experience, build bigger attendance, and create a public of dedicated members. Yet, behind the bright, new technology-infused exhibits, past the skilled scientific communicators, and through the now often permeable doors to the collections, we persist in insisting that the institution deems what is relevant and interesting. In light of this seemingly interminable trait, how might the 21st century natural history museum transform to truly meet the needs of the community? We believe that the institutional culture of natural history museums needs to change by placing the community's needs at the heart of their mission. Museums should intentionally engage their community early and often in their planning and development efforts, they must build lasting relationships, and

they should respond with empathy to their community's needs, goals, and interests. If natural history museums are genuinely of the community, by the community and for the community, they will ensure their relevance on the societal landscape into the next century. The Denver Museum of Nature & Science is taking the first steps toward becoming an institution that listens, empathizes, partners, and co-creates with its diverse communities. Following a multifaceted strategic plan, the Museum strives operationally to commit and be accountable to all of its audiences; to create welcoming, inclusive and culturally aware spaces and experiences; and to deepen the community's passion for science and connection with the natural world. We believe that we will ignite a collaborative culture that will blur the lines between museum and community, that will identify, celebrate and propagate the best attributes of all involved, and that will herald a new era for the role of natural history museums.

SPOKEN Sessions

ON EXPEDITION: AN INTERDISCIPLINARY PROJECT ENGAGING MUSEUMS, CLASSROOMS AND COMMUNITY IN LEARNING THROUGH ART AND NATURE

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How can Natural History Museums serve marginalized communities through educational experiences based on their unique blend of art and science? Addressing findings from IUCN's global report on The Urban Imperative: How to reach urban communities: Lessons learned from museum evaluation, The American Museum of Natural History embarked on an outreach program with marginalized and impoverished neighborhoods in the Bronx and its struggling schools. Linking museum resources, collections, and processes with the natural environment in the Bronx school neighborhood enabled students, teachers and parents to appreciate the value of their community. Leveraging the museum's approach for Expedition, Exploration, and Exhibition based on field and interpretive experiences, the program incorporated visits to the museum informing field based trips at the school. The combination of art, science, and nature portrayed in the museum's dioramas formed the basis of a year long afterschool program integrating art and nature in learning.

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'ARCTIC GALLERY 2017 - NEW APPROACHES TO DESCRIBING NATURAL HISTORY IN A CULTURAL LANDSCAPE

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The Canadian Museum of Nature is currently developing an Arctic Gallery, which will open in June 2017. This gallery of 750 square metres will highlight the Canadian Arctic (which makes up 40% of Canada's landmass) - from deep time to the present.

Based on the Museum's extensive collections and research it will focus on the Arctic's natural history and explore the challenges posed by climate change; the need for sustainable economic development; and the importance of understanding the interdependent nature of the Arctic ecosystems in a global context.

In developing this signature gallery the Museum recognised that it needed to adjust its approach and develop new techniques for curating and interpreting an environment that is very much situated in an existing cultural landscape. Through discussions and workshops with a wide range of stakeholders we have developed a number of complimentary techniques to effectively communicate the multi-faceted perspectives of this vast and culturally rich environment. As a result we developed new ways to involve the northern community, give voice to their perspectives and concerns, and enable both scientific and indigenous knowledge of our collections and the environment to be communicated.

This approach has enabled us to develop a deeper and more culturally enriched story of this extraordinary environment, and will give new perspectives to our visitors.

This paper will explore some of the approaches we have undertaken and how we developed a different internal mindset and way of working to successfully accommodate this approach.

THE GEOLOGICAL TIME IN NATURAL HISTORY MUSEUMS' NARRATIVE: A COMPARATIVE ANALYSIS

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This research seeks to examine how the theme "Geologic Time" is addressed in the narratives of Natural History Museums through the analysis of exhibits in museums in four countries. Three exhibits were analysed in the Museum für Naturkunde Berlin: Saurierwelt (World of Dinosaurs), Kosmos und Sonnensystem (Cosmos and the Solar System) and Evolution in Aktion (Evolution in Action). The exhibit From the beginning was studied in the Natural History Museum London. In the Muséum National d'Histoire Naturelle in Paris, the exhibit L'évolution de la vie (Evolution of life), in the Grand Galerie d'Evolution, and both Les vertébrés (The vertebrates) and Les invertébrés (The invertebrates) in the Galerie d'Anatomie comparée et Paléontologie were studied. In the Museu de Ciências Naturais in Porto Alegre (Brazil), the permanent exhibit was explored, in which the evolution of life on Earth is the focus. The last exhibit was the Paleontology section of the Museu de Ciência e Tecnologia (Porto Alegre). We propose a qualitative analysis using data from the literature and available documentation as well as records of the exhibitions. Natural History Museums have an important role as outreach institutions presenting the natural processes on Earth. The Geological Time is a key tool for this understanding. The goal of the present research is to compare the exhibits (its form, organization and narratives) of different museums. We aim to evaluate the approach of geological time and also its potential for integrating usually treated as separate areas in natural history institutions: Earth sciences and life sciences.

NUESTRA SEÑORA DE LA NATIVIDAD DEL ACARAY, A FORGOTTEN MISSION

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The Museo de ITAIPU – Tierra Guaraní, is located in Hernandarias, an historic settlement that in the early 1600 hosted one of the first guarani jesuitic missions. The existence of this mission is mostly unknown by the local population and external visitors. The archaeological surveys conducted before and during the construction of the hydroelectric dam, brought to light important archaeological evidence presumably related to this mission.

The new exhibition brings back part of this historical event, through an historical recreation of the mission, the names of the founding fathers and the troubles they underwent with the abandonment of the settlement caused by the invasion of the bandeirantes.

With the introduction of this topic in the permanent exhibition, the Museum showcases an ignored legacy for present and future generations. Important information about this mission can be found in the Cartas Annuas, and other books written by jesuitic missionaries like Antonio Ruíz de Montoya and Nicolás del Techo.

This historical revival brings new research possibilities: to identify the exact location of the mission, from which there are some evidence but no certainty, and also new information about the way of life and development of the population. This research looks forward to lead to a successful integration of the Mercosur Jesuitic-Guaraní Missions circuit, some of them who are already on the World Heritage List.

OUT OF THE (RHETORIC) BOX: FINE TUNING THE STRATEGIC PLANNING OF NHM'S CULTURAL ACTIONS TO UPGRADE THE INSTITUTION TO THE MULTIPLE NEEDS OF CURRENT SOCIETY.

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To adjust public cultural institution pace to that of the contemporary fast changing world is the need NHMs currently consider, in order to better serve the people. The aim of developing useful activities to address challenges together with the audience, can be more easily achieved if we develop our vision, mission and values, according to the society needs. The periodic revision and update process of the museum's identity core statements will direct consistently the medium-long term strategies and programs. This process requires deep awareness of the "what & why" we do, genuine sharing of conscientiousness among all museum staff, and consequent action. Nowadays, to fulfil the mandate of cultural operators, NHM shall state their position clearly by turning from observer to activist. In this respect, to urge visitors to take part in the latest hot topic debates, MUSE has designed a new temporary exhibition on extinctions. Starting from the current biodiversity crisis - which is the biggest challenge in human history - to exhibit extinction doesn't mean just to elaborate on past events, it rather entails to take into account history of life, geopolitics, economics, in short: society as a whole. In such a framework, to showcase extinction through the anthropocentric museological approach that MUSE has chosen, doesn't refer to the contraposition between our species and nature, but to the awareness that the most of the problem and the only solution for it, is in humans' hands.

CROSSOVER - WHEN NATURE & ART INTERSECT

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Trending around the world, natural history museums are expanding their missions to include temporary exhibitions on a wide-range of cultural topics to enhance their visitor's experience and drive attendance. Once the exclusive home of the dinosaur hall, natural history museums are now hosting and developing what can be termed "crossover" exhibitions in which nature, art, even science intersect, or exhibitions in which ancient worlds and past civilizations are rediscovered by today's audiences. This power-point presentation will take a look at emerging trends in crossover exhibitions, and the alternative and innovation they offer to the traditional natural history museum. Our research is based on our experience over 20 years as exhibition designers and organizers. Contemporanea Progetti is based in Florence, Italy, but our experience is worldwide. Specific case studies will be presented that illustrate the crossover trend. Imagine the beauty of semi-precious stones, wonders of nature, transformed into exquisite works of man by man's artifice. Or the symbolism associated with the botanical world. The ancients gazed at the stars and patterns emerged that became mythology and astrology. Great civilizations of the past have left an anthropological record that we all share. The possibilities for cultural, even mixed exhibitions to connect with the natural world are numerous and open many windows and doors for modern natural history museums to expand their mission and audiences.

THE EDIBLE LANDSCAPE IN THE CENTURY-OLD CAMPHOR FACTORY AS MUSEUM'S DEVOTION IN CONSERVATION OF FARMLAND BIODIVERSITY

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Taiwan's Environmental Education Act was implemented in 2010 after decades of efforts. In 2013, National Taiwan Museum was qualified as an official environmental education venue, and has since started a series of work on biodiversity conservation in its third branch, Nanmen Park, formerly known as Nanmen Factory. Nanmen Factory was built for camphor refinement and opium manufacture in 1899, boosting the world's number one camphor factory. When camphor was replaced by petrochemical products in the 50s, the factory was shut down and later assigned as a historic heritage. The Museum took the responsibility for 8 years of repair and reconstructions of the relic, giving it a new identity as Nanmen Park, a place for the Museum to address Taiwan's industrial development as well as environmental education. In addition to the special exhibition promoting endemic food culture, the Museum has been holding "Footprint Market" every week at Nanmen Park to support biodiversity conservation in farmland ecosystems. Furthermore, the Museum designed a series of food and agriculture courses in collaboration

with NGOs, incorporated the nearby elementary school into the “Little Farmers’ Project” and literally plant agricultural products inside the park. The edible landscape in Nanmen Park presents efforts from different parties in tackling food safety issues and agriculture education. This paper will show how the Museum has transformed the factory landscape behind which laid the truth exploitation of natural and indigenous resources into a green park with edible scenery that signifies sustainable future and the bond between people and the land.

FATAL RELATIONSHIP BETWEEN NATURAL HISTORY COLLECTIONS AND SOCIETY IN SLOVENIA

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Natural history collections played the great role in the development of museology in Slovenia. They influenced the society so much that the first museum in Slovenia was founded in 1821. The founding collections were Zois's collection of minerals and Count Hohenwart's collection of conches. Diversity of the museum collections increased and generated tree museums out of originally one museum. Slovenian Museum of Natural History is however still responsible for the founding collections and also some other historical natural history collections. Furthermore the study collections are a true treasury of biodiversity and geological heritage.

In contrast to the great significance of natural history collections, they became among the most endangered national collections. The only state museum for natural history does not have adequate facilities. The Ministry of Culture agrees that the Slovenian Museum of the Natural History needs a new building, but the solution is postponed for decades.

With the deepening biodiversity crisis the willingness of policy for long-term conservation of natural science collections should increase. Otherwise the biodiversity could be lost without a trace. It is no doubt natural history collections influence the society and fatal relationship between natural history collections and society in Slovenia is obvious. Nevertheless curators and museum management in Slovenian Museum of Natural History are not yet able to convince the politics to make urgent decisions. International expert support is very welcome.

DEVELOPING NEW TOURING EXHIBITIONS: PIVOT POINTS OF SCIENCE AND CULTURE

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As part of The Natural History Museum's new strategy launched in January 2015, we will extend our international reach through various partnerships with institutions worldwide. Touring Exhibitions will play a key role in this goal by launching three state-of-the-art touring exhibitions based on our vast collection of more than 80 million specimens. The three concepts, currently in development are “Treasures”, “A History of Life Through Fossils” and “Art of Nature”. Each will feature unique specimens and artworks from the Museum's world-renowned collection. The first of these exhibitions to go on tour will be “Treasures”. Through using the development of “Treasures” as a case study, this session will show the Museum's new approach to touring exhibitions. This approach includes touring original specimens and artworks from the collection, and it also includes choosing objects not only for scientific but also for their cultural and historic importance. This has been a conscious decision to meet visitors' needs and expectations of exhibits that tell culturally enriching stories. With reference to data collected through commissioned research we will share insights and information on how “Treasures” has been developed to tell colourful and personal stories of people and events, while highlighting their scientific importance in the context of the The Natural History Museum's work and collections.

MONKEY BUSINESS

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Alanna Davidson (Touring Exhibitions Manager) and Sarah Teale (Exhibitions Officer) from National Museums Scotland will discuss the processes and challenges of developing the international touring natural history exhibition Monkey Business. This new exhibition will open at the National Museum of Scotland in Edinburgh in December 2016 before touring from 2017. Monkey Business is a family-friendly exhibition featuring more than 50 spectacular new taxidermy specimens of monkeys, apes, lemurs, lorises and bushbabies, alongside engaging interactives, stunning photography and film. Primates are our closest living relatives. This extraordinary exhibition explores the diversity of primates from the tiny mouse lemur to the mighty gorilla, examining their key characteristics and how they have evolved and adapted over time. The exhibition has four key themes of Diversity, Adaptability, Social Skills and Primates Today. Visitors to the exhibition will explore the different habitats primates live in, how they move, the foods they eat, the tools they use as well as differences in social behaviour, and how they raise their young and communicate. Currently many primate species have become critically endangered. The exhibition also examines at the causes of this and what visitors can do to help. Learning outcomes for participants:

- The processes for developing the exhibition content and interpretation
- The different strategies used to create an exciting and memorable exhibition that will fully engage a family audience with this fascinating subject matter
- The challenges of touring this subject matter and in developing National Museums Scotland first turn-key touring exhibition.
- The challenges of acquiring and preparing new taxidermy specimens.

ZOOS AND MUSEUMS AS AGENTS OF CHANGE: EXAMPLES OF COOPERATION

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WAZA and ICOM NATHIST have entered a MoU in order to increase cooperation and to investigate fields of joint action. Conservation of biodiversity links both groups in various ways and despite some differences there are many things in common. Raising public awareness and education is an important part of work for both groups and the potential of getting people to learn and act is huge: 1 billion of visitors in natural history museums and 700 million visitors to zoos and aquariums. Examples will be presented of using material across both groups as well as examples of cooperation in concrete projects, research, education, awareness, and exhibits. Additionally, the visitor survey results which came out of the global campaign “Biodiversity is us”, carried out in more than 30 zoos and aquariums worldwide will be presented. It clearly showed that a visit to a zoo has in fact an influence on biodiversity understanding of visitors. One recent joint field of great interest is the increasing problem of illegal wildlife trade, an issue which is advancing as one of the most important threats to wildlife globally. Visitors to zoos and museums can become partners in fighting illegal wildlife trade through participating in global actions, a concrete example will be presented.

CURRENT CHALLENGES IN THE NATURAL HISTORY MUSEUM SECTOR: RESULTS FROM A TARGETED FOCUS GROUP

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In 2015 annual conference of the International Council of Museums Committee for Museums and Collections of Natural History (ICOM NATHIST), hosted by the National Taiwan Museum, held a workshop exploring the challenges faced by natural history museums. About 150 participants engaged in defining the sector’s challenges, divided along the major themes of the conference: Building Partnerships; Building Collections; Building Audiences and Building Capacity. While a great variety of responses were given, some themes such as finances were common to all categories. As part of the workshop, participants had the opportunity to engage in a dialogue to investigate issues and share problem-solving strategies. This paper explores these challenges, as well as sector-wide solutions being proposed to address them.

URBAN NATURALIST PROJECT: CITIZEN EXPLORATION OF URBAN NATURE IN HISTORIC LANDSCAPE

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With urban populations growing and living environment deteriorating, urban environmental issues have become increasingly important. This article provides an example of how National Taiwan Museum (NTM) devotes in outreach and conservation by launching the Urban Naturalist Project. The project differs from many educational activities in addressing the content of urban ecology and the conflict between citizens and urban wildlife. In addition to indoor lectures on topics from street trees to animals in the concrete jungle, it also includes natural illustration activities and biological surveys regarding the 228 Peace Memorial Park where the Museum centers at. In the Park used to stand the largest temple in Taipei in Qing Dynasty. After the Godama Gentaro and Goto Shinpei Memorial Hall (Museum's current building) became its replacement in Japanese period, the role of the park transferred from the center of religion to political authority. After the relocation of the Museum, the museum-park complex then became a rare green land in the capital for the public to understand nature. In the Urban Naturalist Project, citizens are invited to view the park and their surrounding environment from a naturalist's perspective and engage in conservation topics in the Project. The Project aims at transferring the park into the center of exploration in urban nature, emphasizing the importance of natural studies and enhance public engagement.

THE NUMERICAL REVOLUTION IN THE PARIS "MUSÉUM" NATURALIST COLLECTIONS.

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For new generations, the cultural landscape becomes digital. The Paris "Muséum national d'histoire naturelle" diversified its action to stay tuned.

In Paris, from 2008 to 2012 the "Muséum national d'histoire naturelle" scan the entire Paris herbarium and developed a participative site, the "Herbonaute", to contribute to the creation of a scientific database from the 6 million plants of the herbarium. These plants and their labels are offered to determine when, where, and by which botanists they have been harvested with the help of a broad public of non-specialists.

To survey the natural landscape, the program "Vigie-Nature" transforms each citizen in volunteer observers to follow the common species (flora and fauna) at the national level. Without leaving classical collections, the national program e-ReColNat plans to digitalize all the French naturalist collections, scattered across a multitude of institutions of size and various statutes which represent a historical massive campaign of observations starting with type and figured specimens.

More recently as part of a collaborative research and development of collections, to fulfill educational and scientific goals, we made a partnership with the University of South Florida Center for Virtualization and Applied Spatial technology to create a virtual collection of vertebrates' skeletons in 3D and digitalized the entire galleries of comparative anatomy and paleontology. It will be available via the Internet or any other media to manipulate all the specimens in virtual visits or in another environment.

THE "INTERNATIONAL NATURE EXHIBITION" – A NEW CONCEPT FOR A WORLDWIDE EXHIBITION FORMAT

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The International Nature exhibition (INE) is a new event format. It is based on the format of similar major events such as EXPO, Garden Festivals (e.g. IHE) or the International Architecture Exhibition. The basic idea of an INE is to explore different strategies for the preservation and development of biodiversity, and transform these strategies

into powerful experiences and learning opportunities for visitors. An INE consists of numerous projects which include conservation measures, innovative attractions for nature experiences as well as museological approaches. The talk will fit into the conference theme as it will elaborate on cross-sector relationships of regional development organizations, conservation NGOs, tourism providers and artists. It will also touch on the educational mandate of an INE and its strong link to schools and universities. However, the focus of the talk will be the interface between museological approaches and the visitor experience outside the confined museum space. After discussing the concept of the INE the talk will give an overview of the work in progress of the first INE in the making. Interested stakeholders from the NatHist community are encouraged to join the process.

BASILISK AND DRAGON - INVENTING NATURE

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Among the most popular fabrications of the “inventing nature” of the sixteenth and seventeenth centuries there were hydras, basilisks and dragons. They have their place in the cabinets of curiosities and pharmacies among the many different kind of exotic animals as we can see it for instance in the famous apothecary Francesco Calzolari’s museum in Verona (17th century). Flying dragons, basilisks and other hybrids emerged from the medieval bestiaries and were fabricated by fishermen, sailors and mountebanks. These creatures fascinated scholarly collectors who figured them in their famous books e.g. Pierre Belon (1151), Conrad Gesner (1558) or Ulisse Aldrovandi (1640). Some Natural History Museums or cabinets keep and exhibit these strange creatures that are difficult to range in the zoological system. They were in origin skates or rays which have been distorted by hand, dried and varnished. This makes them look like dragons or basilisks with wings and tails and demoniacal faces. They are precious artefacts of the Renaissance period when the boundary between reality and myth was not clear. Three basilisks are kept in the Czech Republic. Two of them are displayed in the famous Natural History cabinet of the Strahov Monastery in Prague (18th century) and one in the collection of Čáslav municipal museum; it was donated by Josef Kaunický (1884), a piano technician living in London, where he bought exotic specimens from the sailors and travellers.

Other historical specimens are displayed e.g. in Museo di storia naturale Verona (Moscardo collection), Vienna Naturhistorisches Museum, or at the Forchtenstein castle in Austria in the collection of the Paul I, Prince Esterházy.

BEWARE OF THE STUFFED ANIMALS! EXPLORING THE ROLE AND USE OF TAXIDERMY SPECIMENS IN SOME PERMANENT EXHIBITIONS IN NATURAL HISTORY MUSEUMS IN THE NETHERLANDS, FRANCE AND THE UK.

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The use of taxidermy specimens in natural history museum exhibitions has not been without controversy. After what was considered the heyday of taxidermy at the end of the nineteenth century, the taxidermy mounts in natural history museums fell from grace during the twentieth century. It was not until the new millennium that taxidermy has been critically reappraised in a (natural history) museum context.

In my presentation I want to reflect upon the opinions and views of three stakeholder groups regarding the use of taxidermy in exhibitions of natural history museums, namely: the museum professional, the taxidermist and the museum visitor. Their opinions and views rarely feature in the current discussions about the topic, which seems an omission. More insight in how these stakeholders perceive taxidermy could add another important layer to the current discussions and research regarding this topic, and give guidance in the possible use of these objects in the future. To investigate the opinion representatives of these stakeholder groups were interviewed or asked to fill in questionnaires.

The outcomes of the research show that taxidermy specimens remain a source of wonder for many visitors, a favourite museum exhibit among children and a renewed source of scientific research. Moreover, the multidimensionality of these objects is ideal for telling a broad array of stories and creating multiple meanings

("resonance"). They therefore might play a crucial role in future exhibitions of natural history museums, with the aim to create an overall awareness for the environment and nature in general.

ART/NATURE. A PILOT PROJECT AT THE MUSEUM FÜR NATURKUNDE BERLIN.

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Natural history museums have always been places where the study of nature has involved artists. By accompanying naturalists on expeditions, artists have contributed towards telling the story of life on earth, recording, sketching and depicting what they have seen. They have also documented collections and been engaged in the presentation of nature in exhibitions.

In line with this tradition, the Museum für Naturkunde Berlin and the German Federal Cultural Foundation have launched an international pilot project exploring the interactions between contemporary art, museum practice and natural history research. The project "Art/Nature invites artists and writers to interpret the natural history museum by creating new artworks. The results are displayed in four rounds of interventions in the exhibition halls of the museum between 2015 and 2018. With this collaboration between art and science we aim to open up new perspectives on the natural history museum, its history and collections as well as its research and exhibiting practices and to reflect the role of a the natural history museum in general.

What happens when contemporary art encounters natural history collections and research? The works in the first round (27.8.-30.11. 2015) showed how different the responses can be: The acoustic intervention *echo echo* by Norwegian artist A K Dolven introduced questions of transition, migration and uprooting into the collections and donated to the museum the first recording of fish for the animal sound archive.

Together with the composer Augustin Maurs the French artist Saådane Afif staged *The End of the World* as a modern Vanitas motif in the dinosaur hall. *The Origin of Senses* comprised poems and drawings of Sabine Scho and Andreas Töpfer (Berlin) and invited a sensory exploration of the museum through dealing with different modes of perception by animals.

The second round (opening 18 July 2016) will present two art works by the Peruvian artist Fernando Bryce (NYC/Berlin) and the artistic duo Serotonin (Berlin) dealing with the history of the museum around 1900.

The presentation will introduce the concept of the project, the artworks and experiences of the first intervention and also include a preview on the second round opening in July 2016 in conjunction with some results of the visitor evaluation.

MUSEUMS IN THE ANTHROPOCENE; TOWARD THE HISTORY OF HUMANKIND WITHIN BIOSPHERE & TECHNOSPHERE

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The purpose of my presentation is to introduce the Symposium, Museums in the Anthropocene - Toward the History of Humankind within Biosphere & Technosphere, at the NMNS on 29-31 January, 2016. The Anthropocene is a term gaining currency to refer to the geological epoch of human activity that will leave a mark on the Earth observable after millions of years, and to a time when awareness of the human-environment relationship should be at the fore. The symposium intended to integrate the fragmented body of knowledge on the Anthropocene, and to build a museum framework for presenting an overarching view of natural history in relation to the history of human activity, particularly in industry, science and technology. Discussions covered topics such as the potential extent of the concept of the Anthropocene, objects that represent the Anthropocene, and the significance of collecting and displaying evidence of the Anthropocene. Human activity both influences and is influenced by the natural environment. We adapt to the changing environment and in turn become a trigger for further environmental change. To sustain human activity into the future, we must not only accept the natural environment but also, on occasion and in appropriate ways, involve ourselves in it. We must also strive not only to gain insight

into individual elements of the natural environment but also understand these elements in the context of the bigger picture. At this point in time, we humans are searching for a means to coexist with nature. The symposium explored in depth this ongoing challenge.

DNA BARCODING – A NEW ROLE OF MUSEUM COLLECTIONS

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Until very recently scientists have relied principally on macro- and micromorphological characters to identify biological specimens. This has been often difficult or impossible because eggs, larval forms, damaged or incomplete specimens, or derived products may lack diagnostic features. In the last decades, researchers came with the idea that all biological species could be identified using a short gene sequence from a standardized position in the genome – a ‘DNA barcode’ - analogous to the Universal Product Code used to distinguish commercial products.

Over the past 300 years taxonomists have collected and described more than 1.7 million (out of estimated 10 to 100 million) species of plants, animals and microbes. Biological collections throughout the world comprise about 700 million specimens and they can form the backbone of a global DNA Barcode of Life initiative (IBOL). Voucher specimens in collections provide tissue samples that will produce a reference barcode for that species, using the standard tools of molecular biology.

DNA barcoding is now used in many areas as e.g. basic research in taxonomy, protection of endangered species, control of agricultural pests and disease vectors, sustaining natural resources and monitoring environmental quality.

THE MUSEUM TERRITORY AS AN EDUCATIONAL PLATFORM

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Russians often say that a theater begins with a clothes hanger. And a museum begins with a territory around its premises. It would be ideal, if a natural history museum had a large area where one could create a live exposition. Land is very expensive in Moscow, and museums have little or no land at all. The city museum also needs a good parking place as visitors feel very unhappy, if there is no place to park their car. The State Darwin Museum is located at the intersection of two streets with intense car traffic, so a parking place is absolutely necessary. The museum’s land is small (1700 square meters), and a half of it is a steep slope of the former ravine. However a few years ago we created an environmental trail along which we planted and labeled about 100 species of plants. These labels are in Russian, Latin, and Braille. We offer excursions along this trail and tell about the plants that can survive in the city. Last year the museum was permitted to expand its territory. The environmental trail was reorganized and complemented with sculptures of extinct animals which gave a start to a small Paleopark. We chose animals that lived in Russia. So, the first sculpture is an extinct fish and the last one is a mammoth. Today the museum territory is not only the place for excursions, but also a comfortable educational area where local citizens enjoy walking, even when the museum is closed.

BREAKING THE BORDERS BETWEEN NATURE AND CULTURE: ANTHROPOCENE AS AN OPPORTUNITY TO ENRICH THE COLLECTIONS AND THE EXHIBITIONS

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From a philosophical and anthropological point of view, the boundaries between nature and culture are renewed with the concept of Anthropocene. Most arguments that are behind this transdisciplinary concept are in itself not

new but the Anthropocene concept gives a global frame in order to think the link between man and nature. Such a paradigm shift can be interpreted differently and must be considered by the museums of natural history because, basically, natural sciences and sciences in general have been born and have been developed by distinguishing strongly nature and culture. And the way museums of natural history have dealt with the collection is strongly based on this distinction. By weakening this latter, the Anthropocene offers an opportunity to enrich their collection and to propose more culturally enriching exhibitions. The presentation propose to give an overview of stakes of the Anthropocene concept that served to make some choices at the Nature Museum of Valais (Switzerland) both for the collection and for the exhibitions (permanent and temporary).

EVOLUTION IN OUR MUSEUMS: CONTRIBUTING TO THE CULTURAL AND SCIENTIFIC LANDSCAPE OF THE XXI CENTURY

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Since their origins Natural History Museums (NHMs) were connected to the production and diffusion of knowledge. As institutions that bring together these two functions they tried to offer to visitors new paradigms in science and since the end of the XIX century NHMs tried to incorporate evolutionary narratives in their exhibitions. Evolution was presented in different ways in the museums narratives and changed along the history as well in different cultural contexts. It is known that without evolution we cannot make sense of the overwhelming amount of information we have about Biodiversity. Although evolution became the main paradigm for natural sciences the acceptance and understand of it is still a challenge. The XXI century faces anachronic threats to the education on evolution in various countries. In reaction some NHMs are adopting a more explicit evolutionary approach to deal with this menace. I will present a revision of some studies related to the display of evolutionary narratives in NHMs and show that it should be a key concept on our institutional programs for visitors as an fundamental tool to understand and face the challenges for the Antrhopocene. Support: grant 2011/51754-0 São Paulo Research Foundation (FAPESP) and Research Nucleus EDEVO-Darwin.

ENABLING THE URBAN LANDSCAPE MUSEUM OF ARCHITECTURE PROJECTS: ARCHITETURAL PROJECT CASE STUDIES OF NATURAL HISTORY MUSEUMS DONE BY GRADUATE STUDENTSTHE FIAM FAAM - UNIVERSITY CENTER - SP / SP – BRAZIL

LO TURCO, Ivanise¹; BERLOTTI, Dimas; NETO, Fernando M.; CRUZ, Andrea B.s

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The projects listed here, developed by undergraduate students, under Professor Dimas Bertolotti and Ivanise Lo Turkish, show the importance of the image of an architecture that meets the needs and aspirations of society and Collection. Provides for the creation of architectural projects geared to a dynamic planning process in which the greatest challenge is to reach a consensus on the space required by museologist and the architect, creating an interdisciplinary approach that goes beyond the boundaries of architecture, conducting research on how as game technology applied to architecture. The first project proposes the relocation of the current Zoology Museum of São Paulo, located in the park of independence, to the next field. The proposal includes the development of a building specifically aimed for this purpose, different from the actual building which it is adapted as a museum and unsuitable for the collection's exhibition. It's directly related to the environment which it operates. The project also relates to the urban landscape neighborhood and its surroundings respecting older existing buildings to integrate and incorporate into other program. Another project, also still in progress, refers to the development of a building for the Natural History Museum, located in a region of high density commercial and residential buildings, which was proposed from intensive research on the subject, their need and location. The projects are intended to represent the relationship of man to the space and object, stimulating the user's sensitivity, creating a dynamic reading of the project, and its relation to the collections.

WHY AND HOW MUSEUMS AND COLLEGES BENEFIT SCHOOLS BY SHARING THE PREPARATION OF SCIENCE TEACHERS

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Over the past 10 years, multiple museums and science centers across the world have developed museum-university and museum-school collaborations. WHY these collaborations? The main reason for developing the five collaborations we feature in this presentation has always been *“to increase opportunities to learn and teach science using authentic resources that often exist in natural history museums.”*

The focus of this session is HOW educators and scientists at the American Museum of Natural History in NYC developed these relationships. We feature collaborations that are over 10 years old with Columbia University Teachers College, Barnard College, Bank Street College of Education, and three CUNY campuses at Lehman, Brooklyn, and Hunter Colleges. Key topics of discussion will be the co-development and co-teaching of courses, required assignments, sharing of resources and funding, creation of adjunct positions, invention of payment structures, and research.

MUSEOLOGICAL STRATEGIES OF THE LANDSCAPE REPRESENTATION. THE CASE MUSEUM OF HUMAN EVOLUTION (BURGOS, SPAIN)

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The Museum of Human Evolution has become one of the most important institutions in the city of Burgos (Spain). This museum, along with other devices (National Research Center on Human Evolution (CENIEH), the Auditorium and Congress 'Forum Evolution Burgos' and the Archaeological Park of Atapuerca), is part of what we might consider the semiosphere of Atapuerca. This museum will hold a number of strategies in order to create their own identity through the interdefinition with other museums.

The Museum of Human Evolution is a science museum of natural history, dedicated to release the knowledge obtained from the study of deposits. But it is also self-referential. It dedicates much of its content to describe itself, its history as a continent.

To achieve its communication the Museum makes a number of strategies among which we highlight the direct relationship of the museum with the space of the Sierra de Atapuerca through the recreation of these deposits inside the museum and the strategic placement of the bones found.

In short, the Museum of Human Evolution is constituted as a monument of another space outside the city, which is the site of Atapuerca.

The aim of this paper is the description of the strategies that allows the interdefinition of Museum of Human Evolution and its establishment as a monument.

OUTSIDE THE MUSEUM: FORMATIVE AND INTERDISCIPLINARY EXPERIENCES

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Meeting other people and breaking barriers between disciplines are necessary frameworks for a formative and interdisciplinary experience in a museum? This is a report on an experience that took place in a public park in São Paulo – Brazil, in 2008. This experience was the result of a partnership between different institutions in the Park, and was the starting point of my Master's degree project, finished in 2014, and of my current PhD project. The objective of the experience was to explore the interdisciplinary possibilities of the park, considering nature and the scenery as sensory stimuli for living together and building knowledge. The institutions were involved in astronomy,

botany, contemporary art, and oriental culture, and all had their own concepts and ideas, but decided to let vanity aside and hosted the activity together, creating an external and exploratory path for people of all ages. The activity was carried out at night in the whole park, and was an investigative path of sounds, smells, and architectural and artistic views related to the fauna, flora, and astronomic investigation. The experience integrated the environment, astronomy, and art and enabled a dialog with ontological records of human experience and knowledge building, without having the focus on transmitting concepts. Participants recognized themselves as part of a world that is full of mystery and poetry, besides having lived a creative and collective learning opportunity. The museum may create actions that go beyond its walls, helping us to simultaneously find questions and answers for our doubts.

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TYPE SPECIMENS IN THE INSECT COLLECTIONS OF THE VIETNAM NATIONAL MUSEUM OF NATURE, HANOI

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Type specimens from the insect collection deposited in the Vietnam National Museum of Nature (VNMN), are currently being catalogued. In this part of the catalogue dealing with the seven orders: Odonata, Hemiptera, Coleoptera, Hymenoptera, Mecoptera, Trichoptera, and Lepidoptera we present precise information about the types of 51 taxa belonging to the families Aeshnidae (1 taxon), Gomphidae (1 taxon), Cicadidae (7 taxa), Issidae (2 taxon), Hybosoridae (1 taxon), Staphylinidae (3 taxa), Lucanidae (5 taxa), Cerambycidae (1 taxon), Formicidae (24 taxa), Panorpidae (2 taxa), Bittacidae (1 taxon), Helycopsychidae (2 taxa), Saturniidae (1 taxon) including holotypes (or dissected parts of holotypes) of 47 taxa, and paratype of 36 taxa.

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SCIENCE AS CULTURE – CONNECTING TRADITIONAL MUSEUMS WITH CONTEMPORARY SCIENCE

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The Museum of Natural History at the University of Oxford has collections that date back to the early 1600s, and the collecting of the Tradescants, father and son. The collections came to the University in 1683 as part of the founding collection of the Ashmolean Museum, and natural history then received its own museum in 1860. Thus, in terms of its collections history, building and displays, the Oxford institution is very much a 'traditional' natural history museum. However, some of the challenges facing modern society are anything but traditional. Over the coming decade or two communities in all parts of the globe will have to make important policy decisions in relation to the natural environment, directly or indirectly. In the UK, at least, the populace is rarely presented with the underlying science that enable an evidence-based decision to be made. Museums have a key role to play in presenting these data to enable informed decision making. University museums, in particular, are in a particularly powerful position to connect primary academic research undertaken within the academy to their, often large, public audiences via teams of specialist science communicators. This talk will examine some of the interventions that are being made in Oxford, and by other UK university museums, to connect wider audiences with the science of the natural environment, using a cross-disciplinary approach to maximise audience diversity.

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"NATURAL HISTORY MUSEUMS IN CULTURAL LANDSCAPES" – THE EXAMPLE RUHR MUSEUM.

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Natural history museums very often ignore cultural aspects of man-made landscapes and regional, cultural or history museums neglect aspects of nature. The Ruhr Museum in Germany (located at the largest building of the UNESCO World Heritage "Zollverein", a coal mine) is a unique type of regional museum. Its permanent exhibition shows the entire natural and cultural history of the former industrial heart of Germany, the Ruhr Area. Fairly

uncommon for a museum, the tour starts with the present. Photographies, objects, audio-visual and olfactory installations and the use of sound and films demonstrate what people nowadays associate with the term "Ruhr Area". The next level, a former battery of small coal bunkers, stores objects from the cultural memory of the preindustrial man-made landscape. Here, visitors are welcomed by witnesses of the last Ice Age, in which natural landscapes were formed, and sent off with a presentation of faunal and floral elements from preindustrial time, inspired by traditional ways of presenting natural history.

Finally, the last part of the exhibition is dedicated to the history of the Ruhr Area during the period of industrialisation including its major environmental problems. The processes of origination and restructuring are shown as a drama in five acts, framed by a prologue – the formation of coal during the Carboniferous period – and an epilogue attempting to take stock and to give an outlook..

The spoken presentation will focus on the aspects of nature presented in the exhibition and will hopefully provide a good basis for discussions.

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FISH, FISHING AND FISHING-DEPEDENT COMMUNITIES: A TRAVELLING EXHIBITION TO COMMONWEALTH SMALL ISLAND DEVELOPING STATES (SIDS)

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The aim of the exhibition is to raise awareness among communities dependent on fishing of the wider, global context that threatens the sustainability of their livelihoods. The focus will be on artisanal and subsistence fishing, known as small-scale fishing (SSF). The vehicle will be a converted shipping container. The cultural aspects of fishing and the 'marine imaginary' on one side of the container will feature along one side of the container, with science and policy on the other. These will intersect in the middle in transitions from the imaginary to the scientific, the giant squid as one example: the kraken myth manifest.

The exhibit will engage with the crises of the oceans (sea level rise, ocean warming, fish stock migration towards the poles, ocean acidification and coral bleaching) and fisheries (overfishing, illegal, unreported and unregulated - IUU - fishing) and efforts to redress these (using marine reserves, for example) to mitigate the impact on the sustainability of fisherfolk livelihoods in SIDS communities where fishing is the main, if not the only, source of income.

The shipping container will itself be problematised in the context of maritime transport and maritime security. An empty container will be provided at each exhibition site so that the local community can develop its own exhibition in response to the stimulus of the container exhibit. Consideration will be given to new means of exhibition and communication, including creating a virtual link to all maritime and natural history museums across the Commonwealth.

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YES – IN MY BACKYARD – BEING RELEVANT TO THE COMMUNITY

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The museum as leader and partner in the community involvement in environmental issues.

In recent years, there is a growing recognition that the role of museums is not only to present and mediate information, but to be the initiator and leader of the social and cultural processes in the community. The museum activity takes place not just in the confines of the museum, in many cases the museum go out into its surroundings.

Since the Earth Summit in Johannesburg in 2002- the use of the term "sustainability" has expanded, in the context of lifestyle, and policy management that will not harm the capabilities of future generations for fair existence. Education for sustainability focuses not only on our own environmental problems and their solutions, but allows observation of a broad social context, and thinking how to avoid the problems.

As a museum that sees its role as a community leader and pioneer both culturally and socially, we decided to adopt a new approach and to step outside the walls of the museum. The city of Ramat-Gan where the museum is situated, is a part of the Metropolitan Dan, the most populated area in the country. Because of that we chose to deal with the problem of open spaces and urban nature sites in an urban environment. We have prepared a variety of activities that its objective is to develop ecological observation aimed at different ages. In our presentation we will show the various activities.

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POSTER session

MUSEUM CONTRIBUTION TO THE QUALITY INTERPRETATION OF CROATIAN NATURAL HISTORY SITES

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Modern museums play an increasingly important role in programs of cultural/natural tourism. As their holdings, collections and exhibition programs attract more and more visitors, especially tourists, this is a good way how museum can contribute to a better, high-quality interpretation of natural heritage. Croatia has exceptional biodiversity (wildlife, habitats, ecosystems) as well as geological diversity (rocks, minerals, fossils, reliefs). Although only a small part is visible in the museum, it is still enough to give a museum great potential in natural tourism activities. The partnership of museums and tourism today is necessary in order to develop and present natural heritage. Therefore it is important to establish network of natural history museums and institutions related to the sites of natural attractions (e.g. National Parks, Geoparks etc.). In times of increasing globalization, interpretation and presentation of national natural heritage is required in a way that natural heritage becomes a magnet for tourists. In a globalized market it is quite challenging for all, especially museums. Paper will present how the museum with its program contributes at popularizing Croatian natural attractions: with an interactive map on the museum website, museum guided tours and workshops, organized outdoor guided tours to some sites etc. Schools are very interested in participating in this program as Croatian school curriculum increasingly encourages learning about the natural heritage in schools, but also in nature and at the sites, as a part of the compulsory school outdoor education.

COMING SOON, THE NATURAL HISTORY MUSEUM: THE COLLECTION BUILDING EFFORTS OF A 115 YEAR-OLD MUSEUM

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National Museum of the Philippines.

The presentation will focus on the recent efforts of the Geology Division (of the National Museum of the Philippines) in collecting outstanding specimens for its soon-to-open Natural History Museum. While the institution already has excellent pieces in its collection storage, the demand to put up more exceptional specimens for an entire gallery in a new museum requires a bit more effort in sourcing them. To do this, the Geology Division has partnered with different government offices and private companies for acquiring specimens that are not always accessible for sampling. Here, we discuss how we tap on the different industries (i.e. mining sector, construction companies, and academe) in requesting samples that are museum-quality. We also present here what issues and concerns we faced in dealing with samples that we did not collect ourselves. Apart from donations, we once again relied on our time-tested method of collection building through literature review and local residents' interview. Here we look-back on published reports of the country's geologic agencies and scientific journals for localities that are not yet represented in the reference collection specimens. This method usually works best on our fossil collection. Reports and stories from the locals also contribute to additional specimens whenever they are confirmed through fieldworks and site visits.

AN INTRODUCTION TO CARNEGIE MUSEUM OF NATURAL HISTORY FOR ICOM NATHIST 2017

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Carnegie Museum of Natural History is proud to host the 2017 conference if ICOM NATHIST. Established 120 years ago by Andrew Carnegie, Carnegie Museum of Natural History is one of the four Carnegie Museums of Pittsburgh. It is among the top natural history museums in the country, maintaining, preserving, and interpreting a collection of 22 million objects and scientific specimens used to broaden understanding of evolution, conservation, and

biodiversity. The museum generates new scientific knowledge, advances science literacy, and inspires visitors of all ages to become passionate about science, nature, and world cultures.

The theme of the conference will be “The Anthropocene: Natural History Museums in the Age of Humanity.” The Anthropocene is the concept that human activity has had such a profound and pervasive impact on the planet that its effects will be present in the fossil record millions of years from now, thus warranting a dedicated geological era. The concept of humanity’s impact on, and interaction with, the global environment touches on science, conservation, artistic expression, philosophy and even recreation. Natural history museums are at the next of these considerations, researching arcane ecological and evolutionary concepts, interpreting them for the public.

The 2017 conference will explore the various manifestations of the Anthropocene within the fields of nature, art and the humanities as well as synergies between them. During the conference we will hear from scientists, authors, fine artists and social historians all coming together to explore this topic together.

ART AS A DISCOURSE APPROACH IN THE NEW LONG DURATION EXHIBITION AT UNIVERSITY OF SÃO PAULO MUSEUM OF ZOOLOGY, BRAZIL

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Historically art has been occupying an important role recording and communicating feelings, impressions and ideas. It also can be a valuable resource to convey highly complex scientific concepts to broader audiences. When applied to rhetoric of natural sciences museums exhibitions, art use to be very eye-catching and spectacular: its communicational role leads to capture our attention and help us not only to get familiar with the main ideas, but also keep them in our minds. In its new long duration exhibition, opened to the public in August 2015, the University of São Paulo Museum of Zoology (MZUSP) have chosen to explore the subject “Biodiversity”, articulating in its discourse key topics as "evolution", "scientific research" and "conservation", always emphasizing the role of humankind in this context. Because scientific illustration has been contributing remarkably for both research and science popularization in MZUSP, its was chosen to occupy a prominent place of the exhibition’s discourse. From the historical naturalistic plates used to compose its visual identity - not only beautiful to look at but also valuable sources of zoological information - to the contemporary illustrations dedicated to restore the appearance of extinct species as more accurately as possible, MZUSP’s exhibition pays a deserved tribute to the capacity of artistic intervention to take the viewers through overlapping information layers, often unattainable by visual capture approaches like photography - helping scientists researchers to compose and refine scientific hypotheses, as well as broader audiences to have access to this knowledge in a fast and text-independent way. Support: grant 2011/51754-0 São Paulo Research Foundation (FAPESP) and Research Nucleus EDEVO-Darwin.

SOME CHARACTERISTIC FOSSILS OF VIETNAM TERRITORY

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The Vietnam National Museum of Nature (VNMN) is part of the Vietnam Academy of Science and Technology. Since its founding in 2006, the Museum’s Paleontological collections are estimated 6000 specimens, belonging to phylums: Retaria, Porifera, Cnidaria, Athropoda, Brachiopoda, Mollusca, Echinodermata, Hemichordata, Vertebrata, and regnum Plantae. In this poster, we introduce some characteristic fossils that collected from 250 stratigraphic units of Paleozoic, Mesozoic and Cenozoic sediments on the all Vietnam territory:

1. Cambrian trilobite fossils;
2. Ordovician graptolite fossils;
3. Silurian, brachiopod, trilobite, eurypterid, coral fossils;
4. Devonian brachiopod, fish, coral, plant fossils;

5. Carboniferous brachiopod, coral fossils;
6. Permian brachiopod, foraminifera fossils;
7. Triassic bivalve, ammonite and plant fossils;
8. Jurassic bivalve and ammonite fossils;
9. Cretaceous nonmarine bivalves and ichnofossils;
10. Paleogene gastropod, crocodile and turtle fossils;
11. Neogene coleoptera fossils;
12. Quaternary elephant teeth fossils.

THE DENVER MUSEUM OF NATURE & SCIENCE: THE INTERSECTION OF ART, NATURE & SCIENCE

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The Denver Museum of Nature & Science has historically celebrated the connection between art and science. Nestled at the foot of the Rocky Mountains, DMNS is ideally suited as a venue where the immense natural beauty in our own back yard is celebrated and revered.

Beginning with the Museum's striking dioramas, the Museum routinely retains artists that work closely with Museum staff and scientists to document the astonishing diversity of beauty in the natural world. The Museum has retained artists for numerous special projects, from public art works to works celebrating the geologic and paleontological discoveries so prevalent in the Rocky Mountain region.

DMNS also engages in partnerships with the art community so that its collections are available as teaching tools for adult art students in the metro area. Art is a component of all programming activities for children.

The artwork of Native Americans is interpreted by Native Americans deeply familiar with our collections so that these artifacts can be displayed respectfully and with a full understanding of their meaning and import. Our space department utilizes sophisticated technology to create educational programming and interactive experiences that celebrate not only science and visual art, but music too.

Wherever we are within our Museum, the inextricable connection between art, nature and science is evident, with the message to our visitors to get outside and see the real thing!

INTRODUCTION OF VIETNAM NATIONAL MUSEUM OF NATURE

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The Vietnam National Museum of Nature (VNMN) belonging to Vietnam Academy of Science and Technology, which is at the head of the Vietnam Natural System established on March 10, 2006, a state-owned cultural science museum with functions of: Conducts research, Collects and preserves specimens, and creates exhibits about Vietnam's natural environment to educate the community and disseminate scientific knowledge. VNMN has 65 officials and staff. Besides, the VNMN has more than 150 collaboration scientists. Vietnam National Museum of Nature has 9 Departments.

The VNMN's collection has over 50,000 specimens: mammals, reptiles, amphibians, fish and snails, geological specimens, insects and plants, including holotypes and paratypes.

At present, Vietnam National museum of Nature is implementing 03 projects: Project of Building Vietnam National Museum of Nature, with the areas of 300.000 m², located in Hanoi, the project will be implemented from 2014-2025, total capital: USD 200-300 million. Project of building Center for rescue wild animals and plant at Phong Dien, Thua Thien Hue, with the areas of 175.000 m², the project will be implemented from 2016 -2020, total investment: 130.000 million VND.

The project of building National Specimens Collection on Vietnam Nature, the project consisting of 34 components projects, implemented from 2011-2025, total investment: 340 billion VND.

In terms of international cooperation, Vietnam National Museum of Nature has signed 45 Memorandum of Understanding with museums and organization of 18 countries in the world on science research and specimens collections of Geology, mineral, paleontology, Reptiles and amphibians, others...like Institute of Animal St. Peterbua, The Botanical Garden the Russian Academy HLKH (Russia),The Royal Botanic Garden Edinburgh, London's Natural History Museum (UK), the Museum of Natural History New York, The New York Botanical Garden, The Museum of Florida, USA., The Natural History Museum of Paris...

VNMN has the Organism Evolution Exhibition Room opened in May 2014, although the exhibition room's areas is of 300 square meters, in 2015, the room received over 40.000 visitors: including pupils (primary school, secondary school, high school) and students account for 41,73 %; kids account for 33,56 %, the other account for 24,71 %., especially, from the beginning of the year 2016, the exhibition room received over 8.000 visitors per month, it is expected that the number of the visitors in this year will be reached at 96.000, more than twice time in comparision with last year.

After ten years of operation, VNMN has gained remarkable achievements, in March 2016, VNMN has been given the labor medal by President of the Socialist Republic of Vietnam.

NATURAL HISTORY MUSEUMS & ENVIRONMENTAL ISSUES

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Natural History Museums, as a strong tool in education and raising public awareness could and should play their role specially in regard to the current world environmental Challenges.

Three main issues are : A- Climate Change B- Biodiversity Protection C. Desertification

Education on these issues can be done by proper designing of dioramas; for example in case of climate change designing dioramas could be :

1 – The submerging of an important city by the seawater rising level.

2 – A polar Bear alone on a piece of ice, the diorama explains the undesired raising of temperature and as result the melting of ice and as result there is no space for the bear to walk and haunt .

INTERACTIVE ONLINE DATABASE SYSTEM ENERGIZED BY THE MUSEUMS IN SCIENCE THEMES AND HUMANITIES THEMES

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Researchers at the National Museum of Nature and Science, Tokyo (NMNS) and other partner institutions run an interactive online database system called “Science Literacy Passport β” , also known as PCALi (Passport of Communication and Action for Literacy) . It is operated thanks to synergistic partnerships with like-minded museums that are not necessarily science themed. The museums involved are science museums, science centres, zoos, aquariums, history museums, integrated museums and art museums. Educational programmes’ data is input into the database by those museums’ curators using a common framework which was proposed in the conference of PCST 2010 (Ogawa et al., 2010).

The system was established for two purposes. The first is to establish a museum utilization model in which science literacy is fostered in knowledge circulating society. The second is to establish an interactive lifelong learning system as a new function of museums.

The project has achieved several results. For example, continuous learning is maintained within this system. By sharing the educational programmes’ data, museum curators working at different themed museums learned from each other, established good relationships and started to cooperate with each other to run the programmes. Those cooperating programmes entertain the participants and tend to have them interested in social issues continuously.

On the poster, the overview of the research project and the partnership will be introduced. Also, the best practices planned and operated in cooperation with science themed museums and humanities themed museums will be explained.

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