



Università
Ca' Foscari
Venezia

Corso di Laurea magistrale in Economia e Gestione delle Arti e delle attività culturali

Classe LM-76 (Scienze economiche per l'ambiente e
la cultura)

Tesi di Laurea

—
Ca' Foscari
Dorsoduro 3246
30123 Venezia

M.A.P. Museums Accessibility Platform

Relatori

Ch. Prof. Bruno Bernardi e Ch. Prof. Michele Tamma

Correlatore esterno

Ch. Prof.ssa Victoria Szabo

Laureanda

Stefania Zardini Lacedelli
Matricola 819772

Anno Accademico
2013 / 2014

MQUADRO Platform QR Code



Keywords

Cultural accessibility, Museums, Commons, Digital Heritage, Virtual cultural heritage, Museum Education, Lifelong learning, Museum 2.0, Multimedia learning, Platform

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INTRODUCTION

This Master thesis is the final step in a research project born during the Graduate Course in Economics and Management of Art and Cultural Activities at Ca' Foscari University in Venice, and continued at Venice International University and Duke University. The objective was to **find models and tools to facilitate access to cultural contents for museums in the digital age** through a planning experience applied to a real museum. Within this thesis the multimedia platform implemented for the Museums of the Regole in Cortina represents an example of application of theoretical principles identified during research, then becoming a model and the subject of the thesis itself.

This work has two underlying assumptions.

The first comes from awareness that a cultural player can contribute to imprint a development direction to a territory by introducing innovation capturing environmental boosts and channeling contributions from multiple players.

The second assumes that it is possible to develop a theoretical frame of reference for any museum intentioned to rethink its role as a place for a collective creation of knowledge, acting and reaching into virtual space, and allowing multiplication of contents, meanings and relationships.

The sources were diverse in nature: the theoretical framework encompassing knowledge economy, the systematic vision of organizations, territory management and development, and the recent discipline of Common Property Resources, took shape through an in depth review of the available academic bibliography; while research in the area of *digital heritage* and benchmarking of relevant study cases required investigation within the so called “gray literature”, very popular on the web. During the platform planning phase, of paramount importance were the many technical open source solutions available on the Internet, as well as the numerous resources available to acquire and update the knowledge necessary to realize a complex product.

Therefore, the first part of the research adopted a multidisciplinary approach to analyze the context provided, concentrating on the impact that new technologies, the Internet in particular, have on the ways information and knowledge are created. The principles of the new economy of

collaboration (openness, sharing, peering, and acting globally) facing today's society, were understood by cultural management that highlights the importance of user participation for the creation of content; contemporary museum science also asks itself about the future of cultural institutions in the digital era.

This knowledge revolution influences the way museums interpret their function and leads to the identification of new modalities to make their heritage accessible. The application of multimedia tools to study, communicate and experience the cultural heritage created a new discipline: i.e. *Virtual Cultural Heritage* that the author of this thesis had the chance to analyze in depth thanks to her research period at the department of *Media Arts and Sciences* at Duke University, within the Globalization Program of Venice International University.

Virtual Cultural Heritage represents a rather recent study area unifying the humanistic knowledge and computer science to study, preserve, enhance, and communicate the cultural heritage through digital technology. The choice of conducting research at Duke University has been motivated by the fact that this university has already developed a series of initiatives at the vanguard in this field. *ISIS Lab* (Information Sciences and Information Studies) where planning for the platform took place under guidance by Professor Victoria Szabo, was created for the purpose of investigating how the digital revolution is transforming society, focusing especially on teaching and learning processes. *Wired! Lab for Visualizing the Past* carries forward a series of collaborative research projects to explore the potentials of digital technologies to visually represent the past, developing new approaches to study and tell cultural heritage. Many of these projects involve international partners, like Venice International University, IUAV and the Engineering Department of the University of Padua.

It is not just about applying digital technology to scientific and informative contents, but also about taking advantage of the mutual influence that these different learning fields are able to put on each other, opening up possibilities of applications until now unknown. The potential of a *Virtual Cultural Heritage* project then extends beyond just online reproduction of contents available on paper and physical objects, because it leads to a **deep and stimulating revolution in the fruition of culture** that allows contamination between humanistic disciplines and computer science. Digital technologies are not at all passive instruments: their interactive nature is able to suggest totally new ways to relate to the audience and to popularize cultural heritage. Putting a museum on line means to build access to a space infinitely larger than the physical one.

This works for individual visitors who can prepare and enrich their visit with multimedia contents and virtual reenactments of the objects in the museum, as well as for schools, colleges and other educational institutions able to benefit from educational materials created specifically on the contents of the collections.

The whole cultural heritage processed this way, including both materials in digital format and those specifically created for the digital version (literally “born digital”) is called *Digital Heritage*¹ and is a wealth of knowledge that the museum should protect and preserve for future generations.

To pinpoint a series of reference guidelines to plan a multimedia platform, a comparative analysis of a number of relevant case studies became necessary, through direct comparison with the individuals in charge of the platforms of the Nasher Museum in Durham (*Words and Pictures* and *How do you look*) as well as through a research of more similar projects available on the web.

Fundamentally important was the direct investigation in the field through a series of interviews to the principal players of the territory, particularly the Regole d’Ampezzo, the collective ownership institution managing the museums. The interview with the Presidents of the Regole in office from 1991 until present is focused on the possibility that these ancient management styles might introduce new functions to develop the territory; also, on the opportunity of interpreting the cultural heritage as a collective resource to manage according to access rules which would be different from those that guided the administration of traditional common assets.

The planning work that made possible the making of the multimedia platform of the Museums of the Regole took into account all pertaining factors, noticing an implicit request by the community in Cortina to rebuild a sense of *place identity*, based on the cultural heritage. To (re)discover its meanings towards individual and collective values, the project assumed that **the**

¹ UNESCO, Charter on the Preservation of Digital Heritage, October 15,2003 (http://portal.unesco.org/en/ev.php-URL_ID=17721&URL_DO=DO_TOPIC&URL_SECTION=201.html): “*The digital heritage consists of unique resources of human knowledge and expression. It embraces cultural, educational, scientific and administrative resources, as well as technical, legal, medical and other kind of information created digitally, or converted into digital form from existing analogue resources., When resources are “born digital”, there is no other format but the digital object. Digital materials include text, databases, still and moving images, audio, graphics, software and Web pages, among a wide and growing range of formats. They are frequently ephemeral, and require purposeful production, maintenance and management to be retained. Many of these resources have lasting value and significance, and therefore constitute a heritage that should be protected and preserved for current and future generations. This ever-growing heritage may exist in any language, in any part of the world, and in any area of human knowledge or expression*”

new digital technologies allow widening the field of experiences either at content level – thanks to the remake of the immaterial context surrounding the object and the museum itself - or at relationship level, as it increases the interaction modality and the involvement level of the audience.

The name of the platform developed within the thesis, **MQUADRO**, reminds us explicitly of **a museum elevated to the square**. Its logo, a cube, is a metaphor and visual expression of the volume of the space that new technologies allow us to fill with contents. The cube is both the tool to navigate and to visualize the concept of the change in the paradigm of knowledge that cultural institutions are called to face. The primary function of the museum is providing the audience with the cultural heritage it protects, a non-secondary element in granting wellness and life quality: yet today it must rethink how communication and cultural understanding happen, substituting the mere transmission of knowledge with the model of co-creating brought by the digital revolution. From temple of memories and guardian of knowledge, the museum is on the way to become a creative center to spread knowledge. That is the third dimension represented by the **MUADRO** cube: the cultural object is not fixed content to be conveyed to the public, but a multi-faced prism, which changes depending on the way it is viewed and the free associations it elicits in each individual. A museum collection is not made up just by objects but also by stories, emotions, and the study ideas and in-depth analysis it is able to suggest.

This work has highlighted the fact that planning a multimedia platform has a paradigmatic value the moment it presents itself not as a finished product but as a new concept to model a museum and the heritage it contains. The bi-dimensional level of a face-to-face relationship (curator and audience, teacher and student, author and reader) where the content is broadcast by a transmitter to a recipient turns tri-dimensional when the content is created on a level of mediation. Building meanings can be a valuable and transforming experience only if it takes place through a relationship with an audience and the knowledge, the curiosities and the possibility of in depth analysis it brings. The museum, to become a platform building up meanings, must consider people as part of the heritage and create opportunities for reactions not in front, but around an object. This is the deeper meaning of cultural accessibility that **MQUADRO** tried to express, highlighting how museums should allow the discovery of their multi-layered dimensions that a cultural heritage can bring to the surface through its immense beauty and richness.

With regard to the organization of the chapters, the thesis is divided into four sections called as follows: *The Context: THE FUTURE OF MUSEUMS*; *The Design Model: THE MULTIMEDIA PLATFORM*; *the Case Study: THE TERRITORY OF CORTINA D'AMPEZZO* and *The Project Comes to Life: MQUADRO*

As suggested by its name, the *first part* offers a contextualization of the museums in reference to the digital revolution leading to a rethinking of their role as places for knowledge building.

The *second part* describes the design model, the multimedia platform, focusing on the model of value creation, on the levels of interaction with content and the process of involvement by stakeholders.

The *third part* analyzes the territory of Cortina d'Ampezzo as the case study where the platform planning is developed, a territory where the presence of an institution of collective ownership offers the possibility to reflect on new forms of common assets related to knowledge.

The *fourth and last section* of this thesis concentrates on the description of the project MQUADRO and its phases: concept forming, planning, realization and levels of involvement of the actors of the territory, and analysis.

CHAPTER 1

THE CONTEXT: THE FUTURE OF MUSEUMS

*“Considering the vast amount of data crowding our memory,
we have all gotten used to rely on external instruments to store them.*

This includes museums too: they are like mnemonic extensions, information containers, and dispensers.

*We ask of them to have retentive capacities and ever more extended communication capacities,
so that we can benefit from them in a satisfactory way. [...]*

*The function of such a cultural institution however cannot just be to preserve memories;
it must also recover and undertake a propositional and communicative function of the highest relevance”.*

Giovanna Vitale, *The Visible Museum*

1.1. To change, in order to stay the same

1.1.1. Evolving Roles and Functions

Organizations are complex and finalized bodies, whose existence aims at reaching their own institutional objectives. But the instruments to achieve them may change, depending on the environment and the historic context. Any organization must therefore confront its own actuality in the present, in order to survive and maintain its own validity in the future; and it must rethink its own role, based upon changes occurring in society.

An analysis of the context within which organizations operate is thus necessary in order to be able to understand their institutional functions: *without a context, words and actions are meaningless* (Bateson, 1988, page 15).

This research is focused on a specific typology of cultural organizations, i.e. museums. We are proposing a functional and systemic analysis beyond the diversity of typologies, dimensions and meanings museums can embody. As an organization, in order to reach its ultimate goal which has always been the development and diffusion of knowledge, the museum has always had to change the way its functions are interpreted. This is demonstrated by the evolution in time of the

conception of the museum as institution. The variation of the meaning of the term *museum* in time runs parallel to the extension of the modalities and instruments we use to access knowledge, which from the privilege of few becomes the prerogative of many, until it gets recognized as everyone's right.

Since their birth, museums have been destined to harbor the memories of a people, as indicated by the etymology originating from Mnemosyne, the goddess of memory. In Alexandria, the *mouséion*, the house of the Muses, was the gathering place of scholars who would undertake their research utilizing the famous library, which collected the knowledge of that era.

The conception of a museum as a space for conservation and contemplation is developed during the Renaissance with the Wunderkammer, Cabinets of Curiosities, whereby cultured people gathered rare and precious objects, which aroused wonder. These sites however were private spaces, created to satisfy the needs of a single personality and the desire of showing off one's wealth. Only after the Napoleonic era did museums become public spaces, sites of scientific research where cultural assets are preserved and protected and education is provided. This way an object is taken away from individual ownership and becomes an inalienable resource for all citizens.

The museum's importance as a cradle for arts and a monument to history grows; and at times so much that the container's fame outgrows its contents (Eco, 2007). But when becoming public there is a risk of not belonging in full to anyone: the privileged and personal relationship between scholars, and the object of their research is sacrificed in a formula for transmitting knowledge which is vertical and mono directional. In the traditional conception, which still persists in many people's perception, museums are static spaces where collections and exhibits interact with visitors, their own life experiences and their individuality, only just enough to deliver the information pre-selected by the curators. Museums are, in this approach, a grand archive of beauty, which is preserved, exhibited and made available, yet little contributing to assist in discovering it.

But is this actually the role of a museum?

In order to understand how its functions are perceived today, it is useful to consider the definition by the International Council of Museums, according to which *a museum is a non-profit, permanent institution in the service of society and its development, open to the public,*

*which acquires, conserves, researches, communicates and exhibits the tangible and intangible heritage of humanity and its environment for the purposes of education, study and enjoyment.*²

From this definition we infer that the institutional objective of the museum is to preserve, develop, communicate and make usable to the highest number of users the collective cultural heritage.

But today what does it mean to be *in the service of society and its development*? Next to consolidated and still valid functions are there others that ought to be introduced?

The push to widen these functions derives predominantly from changes under way in society, whose principal engine is the technological innovation which is changing all the sectors of human activities: the Internet.

This revolution of communication processes and knowledge production is a great opportunity for museums, and may become the point of strength of their development strategy.

To ride the changes without being overwhelmed by them, museums must explore the main cultural, political and economic challenges they face in today's environment and examine the current trends influencing the near future which are already affecting the way they relate and communicate. So far, many museums have shown their ability to introduce changes required by their societies by updating their instruments, contents and activities. By taking up a Center for the Future of Museums (CFM), The American Association of Museums (AAM) has set a goal *to sustain creativity and planning, helping museums to go beyond the traditional boundaries to serve society in different ways.*³

To think in such terms means projecting the institution into the future by utilizing a long term approach, ensuring its sustainability in time.

But are survival and validity the only ones to be preserved?

A great responsibility surfaces with the emphasis on the future, which can be detected in most available literature. As human beings, we are co-creators of our existence and our organizations, and we have the possibility to shape up the context within which we live, as individuals and as community (Janes, 2007, page 135). Museums are about people even before they are about objects and collections, which are manifestations of human desire and interest. Their

² Art 3, par 1. of ICOM Statutes approved in Vienna, August 24, 2007. URL: <http://archives.icom.museum/statutes.html> - 2

³ See the definition of CFM: "*A think-tank and research and design lab to foster creativity and help museums transcend traditional boundaries to serve society in new ways*".

sustainability, their own existence, depends upon the relationship they create with individuals and the meaning these individuals find in them. To help them shape their own future and change the world surrounding them: this is the social responsibility that museums must face today.⁴

1.1.2. Organisms with a dynamic balance

A starting point for this analysis is the systemic vision of the organizations. Following this idea, an organization is seen as an open system, a true “organism”, with a life cycle and an ability to “feel” and understand stimulus, experiencing continuous relations and reciprocal exchanges with the surrounding environment. Referring to the social-human system model, we are able to view the museum as an *organized complexity* adapting and morphing while searching for balance and stability.

While operating relative to the outside environment, organizations must in fact maintain their internal balance even while the environmental conditions are changing. An essential characteristic of this *homeostatic* process is the capacity of the system to preserve its own “structural nucleus” in order to preserve its working mechanism⁵. This dialectic exercise between evolution and conservation is the key to turn museums into living and contemporary institutions (Falchetti, 2011).

Adopting this holistic approach means keeping into account the influence of human factors and of elements external to the organization because any organization operates in a context (environmental, social, historical and cultural) influencing its operations *ex ante* and *ex post*. Therefore the balance cannot be found segregated from context: only when fully enclosed in the surrounding environment, an organized reality has the ability to notice those changes and is in a position to manage them.

⁴ Published research provides a vast overview of this effort in the 21st century: *Learning in the 21st Century Museum*; *New Trends in Museums in the 21st Century*; Articles written within the LEM Project: *Trends Watch 2012*; *Museums and the Pulse of the Future* by the American Association of Museums; *Understanding the Future: Museums Museums and 21st Century Life* by the British Department for Culture, Media and Sports; *A Manifesto for Museums. Building Outstanding Museums for the 21st Century*, a document written by British independent associations and government agencies

⁵ Homeostasis is defined as the *process allowing an organism to keep internal chemical-physical conditions constant even upon external environmental changes. It presumes that an organism is capable of feeling the changes of the external environment and of controlling them.* (Microsoft Encarta)

Opening to the environment is an essential condition to the very survival of organizations (Catturi, 2005, page XXI)⁶; and change is a dimension they must face if they want to pursue their objectives in time.

The opening to the environment therefore represents an essential condition for any museum determined to pursue in time the institutional mission of conserving, improving and making usable to the highest number of users the collective cultural heritage (Magliacani, 2008, pages 2-3).

Contemporary society, with the multiple innovations introduced not only in our professional life but also in everyday's life, forces us to a continuous process of adaptation and overhaul of knowledge, skills, and even the ways we look at the world. It is a dynamic balance in which society, i.e. the sum of the institutions, of people and of political and production realities, stimulates the individual organization - which by its own nature is set on searching for a stable form - to keep up with general evolution. Therefore at the foundation of the survival of an organization there is the capacity of recognizing that the working models, calibrated on the context they have been formulated in, must follow the evolution of the environment, and change accordingly.

But what is the engine of such process? What allows an organization to incorporate changes, to morph in order to adapt to them?

The key to change is in the learning processes, which is also for human beings the fundamental mechanism of adaptation to the environment, thanks to its transformative nature:

learning is the process of personal transformation which increases one's ability to participate in the world (and) in society (Wenger, 1996, pages 20-26)

⁶ Catturi even maintains that without homeostasis change causes paralysis and death to the organization. *Were the socio-economic corporate organism not be capable of activating efficient mechanisms of homeostasis, i.e. any modification in a scenario, of market, this would be sufficient to provoke a crisis leading unavoidably to paralysis and death.*

Adapting to the context means seizing the new opportunities that transformation has made available, and learning to utilize the new instruments, the new languages and the new technologies developed by society.

Adaptation is also the mechanism at the base of the updating of standards: to keep receiving and delivering stimulus and information, we must update the instruments allowing their mediation. Examples are numerous: suffices to think of the change from the 56k modem to ISDN and later to ADSL. As this process occurs it is clear that updating to new standards means much more than receiving or sending the same information content utilizing the new platforms. The platforms themselves amplify, in quality and quantity, the possibilities of communicating because they offer, quite simply, more options. From a 56k modem to optic fibers the change is enormous because we have evolved from only text to the exchange of videos, animations, and 3D models. The principle remains the same: if you want to communicate externally, you must use the instruments typically used externally. Within this context technology is a language that museums must learn to master to perfection.

The change implied by this knowledge must start from people: if their way of thinking changes and if cultural operators understand the possibilities enclosed within the technological standard, then the organization grows and renews itself. The availability to learn something new is the premise to innovation.

At the heart of the capacity to innovate is the ability to learn. An organization simply cannot innovate without learning something new (O'Driscoll, Kapp, 2010, p. 21).

Nowadays organizations must rethink of themselves as a *Learning Organization*⁷ in order to ensure their own continuity in time and obtain a competitive advantage: they must learn quickly how to exploit change to reconfigure their resources and capacity, assembling traditional hierarchies and organizational boundaries into a new configuration.

⁷ According to Peter Senge, learning organizations are *organizations where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to see the whole together.*

But this knowledge requires a capacity from the individuals operating within the organizations to “unlearn” as well as to learn, abandoning part of the legacy of ideas, styles, values, beliefs, and consolidated practices and assurances. They must have the ongoing and permanent capacity of rethinking and formulating their own beliefs and their own operating modes, acknowledging changes and their implications.

Within the debate on the future of museums, in order to understand how these organizations must transform themselves to achieve their institutional objective it is essential to analyse the present context, which is influenced by one of the greatest revolutions the industrialized world has ever faced: the *information revolution*.

1.2. Knowledge and Information Revolution in the Internet Era

1.2.1. Three evolutive waves: finding, sharing and co-creating

We live at a time when technological, demographic and economic changes have revolutionized the way products and services as well as knowledge are being invented, elaborated, promoted and distributed.

Of all technological revolutions tied to information (the invention of writing, the transition from parchment to printed paper), the inception of the Internet - or, better, its effects on people's habits - has been the fastest in changing the production and sharing of knowledge.

It's no wonder that a technological revolution generates deep changes in the social and economic landscapes; but what is striking is the speed and extent of the changes: while in the past the impact of innovation manifested itself, in average, at least half a century after invention, in less than 20 years the Internet has imparted an irrefutable change in the order of social, economic and personal relations.

Since its inception, this technology has permeated in such an extensive and all-encompassing way how we communicate, collaborate, and relate on a collective and personal level that even evaluating its actual reach has become difficult.

Today, the web has permeated what we do socially, professionally, and educationally to such an extent that we have become oblivious to the profound changes it has brought to how we connect, communicate, coordinate, collaborate, and take collective action (O'Driscoll, Kapp, 2010 , p. 5).

Museums, as institutions whose purpose is to preserve, develop and spread the cultural heritage, simply cannot prescind from today's main instrument of communication, nor from a reflexion on how this change has transformed not only our world but also the nature itself of the change.

Analysing the course of development of the Web, Karl Kapp and Tony O'Driscoll have identified three main evolutive steps they define *Webvolution Waves*: Web 1.0, Web 2.0 and Web 3.0. Each wave carries a different value creation model and a corresponding business model, which different organizations have been able to interpret and adopt every time around.

With the birth of the first browser in 1993, Web 1.0 has allowed society to access a quantity of information like never before. Since then the web is the research instrument as well as the container of the majority of information. In few years the search engines, and Google in particular, have channeled and consolidated the initial function of this first evolutive wave, which is to find information on the web ("*find value proposition*").

From accessing information we moved on to accessing products, that corporations started to roll out to market through the web (Amazon; ebay; iTunes, Google Play, etc.). But the web's potential was so enormous as to break easily the initial attempts at establishing boundaries. The possibility of sharing for free crushed the chain of values of the productive world, at least until this one reacted by adapting to the change. The music industry has been the first one to be impacted with the advent of Napster, the file sharing musical service. Napster was followed later by YouTube, the platform allowing users to upload, watch and share video, redefining the way the media industry develops and spreads content. Today CD's are destined to disappear, and about 20 percent of music transactions occurs in streaming, downloading is gone. The Internet, in broad sense, has replaced *hardware* - metaphorically, the physical ownership of an asset -with *software* - the right to benefit from it⁸.

⁸ This concept has been so successful that it has outpoured into the real market of objects. Today Apple, with a flagship customer service, is midway between selling individual phones and selling the licence to use them. A customer breaking his phone has a right to get a replacement for a fraction of the original price.

The emergence of this new "*share value proposition*" has prompted users to interface and collaborate with their own peers, transforming the web into an architecture for participation, creativity and sharing. Most of the new content in this phase is generated not by institutions or corporations accessing the web, but by hundreds of millions of users contributing to its expansion.

In the so called Web 2.0 the focus has moved from connecting people to the web, to connecting people through the web and resulting in the creating of the social networks (Facebook, Twitter, Pinterest, Instagram, Flickr), true virtual places where users can enter relationships, create and share content, participate, and collaborate.

These platforms have directed the human inclination to expression, communication and entrepreneurship, becoming the base for new dynamic forms of communal and creative expression (Tapscott, Williams, 2006, page 36).

The possibility for users to create content individually and in collaboration with others without being restricted to receiving information passively only, moves the vertical structure of content creation and passes from a *plan and push* model to a new economy of collaboration by the motto of *engage and co-create* (Tapscott, Williams, page 31).

The most evident example of this new way of producing goods and services founded on mass collaboration is Wikipedia, which has carried Web 2.0 toward the third wave we are presently living through. Born from the belief of founder Jimmy Wales that every single person on the planet must be given access to knowledge of the entire humanity⁹, this vast digital encyclopedia allows all users to create and publish on the same web page, utilizing a wiki software, with the premise that collaboration among users improves and develops content in time. We have entered Web 3.0, the Immersive Internet, an environment in continuous expansion where people interact, form working communities, participate in creating products and services, and contribute to innovation, information and the creation and diffusion of knowledge.

The losers launched Web sites. The winners launched vibrant communities. The losers built walled gardens. The winners built public squares. The losers innovated internally. The winners innovate with their users. The losers jealously guarded their

⁹ Except from a 2004 interview, referring to Wikipedia, American entrepreneur Jimmy Wales said: "*Imagine a world in which every single person on the planet is given free access to the sum of all human knowledge*".

data and software interfaces. The winners shared them with everyone (Tapscott, Williams, 2006, p. 38).

This new proposition of value, or "*co-create value proposition*", carries new competitive principles such as the opening of their own organizational boundaries, the interoperability with other systems, and new peer production models where users participate in creating value in products, starting from the planning phase. Don Tapscott has forged the term *prosumption* (*The Digital Economy*, 1992) to show the weakening of barriers between consumers and producers of goods and services, emphasizing the arrival of a new generation of *prosumers* who look at the world as *a place for creation, not for consumption*.

Obviously, from the point of view of the diffusion of knowledge, all this entails the gravest threat that the technological revolutions have posed to the paradigm of authority.

1.2.2. From Authority to Authoritativeness

The advent of horizontal production, participatory learning and collaborative publishing¹⁰ processes has turned upside down the traditional hierarchies of authority based upon certified domains of knowledge. Today everyone can create and spread content. But this does not mean that they have the knowledge, the culture, the academic formation, the sense of criticism and the control of the sources required to do it properly. To write a post, an online article, all you need is to be connected to the Internet and have a keyboard. Although the percentage of users contributing to creating Wikipedia is rather scant (5%), nonetheless it is higher than for traditional encyclopedias (Davidson, Goldberg, 2009. page 23). This great opportunity conceals also some risks: history can be rewritten like never before, and incorrect information can have the same apparent validity as the correct one. At the same time, specific knowledge can be accessible like never before to all, subject to their ability to receive it; and information can be

¹⁰ Cathie Davidson is a co-founder of HASTAC, a network dedicated to new forms of learning in the digital era. The text these remarks are taken from, *The Future of Learning Institutions in Digital Age*, has been written through a process of collaborative writing: through the digital tool called Commentpress, anyone could contribute, by inserting their comments to the original draft on the website (<http://www.futureofthebook.com>).

sourced through hundreds of eyes and videocams; and history making news, yet to be verified, can be immediately retrievable. Therefore it is more necessary than ever to be able to recognize the quality of content and to see the difference between reliable and unreliable sources of knowledge (Davidson, Goldberg, 2009, page 29-29).

Where sources of knowledge making and authority become less visible, less face-to-face, more anonymous, and less concretely institutionalized, what or whose sources are we to trust as authoritative? And how do we discern the acceptable from the unacceptable, the trustworthy from the misleading or manipulative, the demonstrably compelling from the half-truth or the flatly false? (Davidson, Goldberg, 2010, pp. 54).

These are the questions the institutions who are keepers of knowledge and understanding are facing. The answer cannot be found by dismissing the threat the internet is hiding, but by embracing the opportunities offered by the new technologies to spread its own authoritativeness beyond the boundaries of the institution itself; and by assuming at the same time the role of a filter, a key meeting-point organizing exchanges and the distribution of information and knowledge within which it is responsible.

In this hiatus between threat and opportunities museums can play the best matches in their history. We cannot reverse or cancel the course of events, but we can point them to a better direction. Museums cannot but take into account the social dimension of the new media and the active role of the recipients who, from simple beneficiaries of content, are now becoming *co-creators*. They can, however, even more efficiently than other cultural institutions given their nature, open by definition, insert themselves with enthusiasm in this new environment where information is not diffused but is shared; and they can mediate through a myriad of activities, meetings, laboratories and virtual spaces an open, participative and scientifically sound growth of knowledge.

Conversing with visitors, scholars, enthusiasts, and, obviously, with other cultural and museum institutions from any part of the world, any museum can project its own authoritativeness into the virtual space of discussion, guaranteeing scientific soundness; it can also benefit from contributions exceeding by large in quality and quantity those it might have been able to offer by

going it alone. In a time of horizontal diffusion of culture, communicating means sowing and accepting that the new plant will be bigger than what was inside the original seed.

With the advent of the Internet the cultural institutions are offered the realization of their original mandate: to contribute to the development and the diffusion of human knowledge. No museum or cultural institution will be able to hope to offer cultural cues and in-depth knowledge as high level as those resulting from the interaction of many museums, minds, and cultural institutions having the opportunity to work together and share the best of their research and knowledge. From now on, a virtual exhibit on fossil amber can receive the contribution by the best geologists, microbiologists, paleobotanists and historians whose individual contribution on the subject can be linked together with a click.

Authority in the Internet environment has no end: it grows along with the pillars - involved cultural institutions and minds - it is founded on.

1.2.3. New Exchange Platforms and Production of Knowledge

We have seen how these new models of value creation have deeply affected the architecture and the business models of corporations. But how can we rethink the role of museums, in light of this new economy of collaborations? Most of the well regarded literature in this sector concurs that the rethinking of the role affects the knowledge production processes (Lundgaard, 2013, page 11; Hooper-Greenhill, 1992, pp.198-199).

Under the reforming push of the new technologies, museums find themselves in the midst of a transformative process concerning not only the preservation and management of the artistic, cultural and natural heritage, but also the modality within which it is produced, recognized, diffused, and transmitted. For instance, consider the opportunities introduced by the digital dimension in the fields of preservation, cataloguing and valorization of the intangible heritage¹¹.

The biggest challenge, as seen in par. 1.2.1., is the second and third evolutive waves overturning the axiom according to which information moves from an authoritative source to passive recipients.

¹¹ The new technologies have increased the possibilities of support tools being set on intangible elements of the cultural heritage, giving them materiality.

The interactivity of the new media has replaced the traditional communication linearity between *issuer and recipient*, generating a reticular communication model also affecting the transmission of culture¹².

What Judy Rebick used to say of media applies to museums:

*As long as the media thinks they know what's right, they'll never be in a position to harness people's collective intelligence. It's a completely different culture and a completely different way of thinking about knowledge*¹³.

Museums have been active for centuries in building knowledge, but the new model for creating value through co-creation is causing a rethinking of where and how knowledge is produced. If in the original vision museums had a certain knowledge that they undertook to spread, in the new vision museums aggregate several sources, they integrate them and, in turn, are a resource for knowledge available to the public and to other cultural institutions. This way everybody may complete their own academic, educational or entertainment journey, in a free-choice learning perspective (Falk, Dierking, Adams, 2006).

This new paradigm of knowledge is bound to a concept of education, which in turn surpasses the authority transmission model and places museums side by side to other institutions and cultural places within the context of contributing to forming people and their lifelong learning process¹⁴. It is a manifestation of contemporaneity: not only because it realizes the premises of multi-disciplines, but also because it offers the visitor, scholar or enthusiast the elements required to complete one's course. However it offers at the same time the possibility to a single institution to benefit from the contributions of anyone by actively involving scholars as well as visitors, with all the advantages correlated to the exchange of knowledge and to wider rooting of the individual conscience, even more so if the learning process is active and well attended.

¹² The *information model* elaborated by Shannon and Weaver provides for transfer of information through signals from a source to the recipient, according to a linear and unidirectional conception of communications.

¹³ Don Tapscott cites Judi Rubick in *Wikinomics*, page 146

¹⁴ For an exhaustive overview of *Lifelong Learning*, see *Lifelong Learning in Museums, an European Handbook*, edited by Kirsten Gibbs, Margherita Sani, Jane Thompson, EDISAI srl, Ferrara, 2007

Museums are no longer viewed as classic educational institutions with authoritative narratives disseminated from within the museum to the outside world. Museums are now focusing on users as co-producers of the knowledge and experiences that are generated in museum space (Dysthe, Bernhardt, Esbjorn, 2013, p. 25).

Because of this change of paradigm, museums must rethink their own role as *social learning spaces for knowledge production processes*.

It implies that museums rethink themselves as learning organizations that bring knowledge into play and contribute to facilitating knowledge exchange, thus constituting knowledge centres and learning environments that can form the framework for free-choice learning in a lifelong perspective (Lundgaard, 2013, p. 11).

The passage from authoritarian transmission to a development where knowledge surfaces from negotiation and experience has changed the role of museums: their role is no longer to present truths enclosed in displays, but to ask everyone what is the meaning of those truths; and to start preserving the answer.

The focus therefore must no longer be on what the museums wants to pass on to visitors (*museum content*), but on the meaning they choose for museum experience (*meaning making*): this surfaces when spaces are created and prepared for a multiplicity of perspectives, interpretations and participation. This goes to full benefit of quality, variety and depth of the learning process.

This awareness also affects the conception of museum content which be planned to be open space and flexible in order to welcome diverse contributions to the discussion; and it should not be static, for a unidirectional monologue. It's about making products that can be modular, reconfigurable, editable (*designing for prosumption*), adaptable to various contexts, such as visits, classroom lessons, labs and more, and can also be innovative, dynamic and fertile environments and ecosystems. Museums must find ways of involving and guiding the communities of those who choose culture and pick the cultural course they want to set up for their own benefit.

In addition to providing finished product - such as exhibitions, itineraries and cultural projects - museums should supply tools and become **a platform for user-generated rather than museum-generated content**. User-generated content is a constant of contemporaneity: in online information, in online music, and in online entertainment. And the platform is the instrument allowing participation, encounters, and exchange.

We make an attempt at answering the initial question by affirming that the future of museums is actually to become the architects of these relationship networks contributing to the development of knowledge¹⁵: true and appropriate social exchange, and knowledge-building platforms.

1.3. Culture within reach

1.3.1. Multidimensionality of access

Having access and participating in cultural life are a right universally recognized by international norms¹⁶; but this must be reinterpreted and enhanced in light of the changes related to the knowledge-production processes.

Accessibility to culture is mainly the job of the places appointed to preserve and guard the cultural heritage. But how is it made accessible to people? How can we turn into fact Alexander Langer's statement *everyone must be given the opportunity of making culture, not of being filled up with culture* (Langer, 1967, page 41).

The recent constructivist interpretation of heritage provides a hint that identifies it as the outcome of a dynamic process of attribution of meaning to an object by an individual or a community.

This revolution of the patrimonial paradigm is sanctioned by the *Convention on the Value of Cultural Heritage for Society*, signed in Faro in 2005: for the first time it does not put the object - the heritage - at the center, but the object to which it provides value. This means restarting from mankind to define culture, as stated in the Preamble, where member countries acknowledge “*he*

¹⁵ Cfr LEM report *Virtual Networks and changing position and role of museums and cultural institutes*.

¹⁶ See art. 15, par. I, Letter A of *International Pact on economic, social and cultural rights (CESRC)*: “*The countries of this Pact recognize the right of every individual to participate to cultural life*”.

need to put people and human values at the centre of an enlarged and cross-disciplinary concept of cultural heritage”: because this is functional to the sustainability of life and the quality of individuals.

The standard of this extension to the conception of heritage is the acknowledgment of the value of culture for an individual, affirmed by the *Manifest of culture accessible to everyone* in which *a tight connection between participation to cultural events and the well being and health of an individual is revealed*.

Culture, with its events and the spaces where they are shown, has a primary role in contemporary society for each person, related to the course of their permanent education, pleasure and entertainment and the inclusion into society: because the manifestations of culture actually gather diverse and multiple fields of personal, collective and social growth that touch artistic, expressive, aesthetic, emotional and relational aspects¹⁷.

To make the cultural heritage available to all, it is necessary to address a visiting audience, but also a set of individuals, each with their own contribution of experiences, emotions and cultural background.

How can each individual be granted living culture as a rewarding, pleasant, formative and meaningful experience for their human growth experience?

The cultural transmission happens *when there is an understanding of its nature and its value* (Antinucci, 2007, pages 9-10): in short, when there is a learning process. Therefore, learning and the subsequent transformation of one’s self that goes with it, not the mere presence of the heritage, is the realization of the right to culture.

This concept is in line with the theory of constructivism, according to which access to information must be side by side with learning tools. Making content accessible is essential, but is not enough: learning environments must be planned all over again to stimulate changes in

¹⁷ From the *Manifest of Culture Accessible to All*, diffused at the end of 2010 by initiative of the Council of People Facing Difficulties of Turin and the Education Department at Castello di Rivoli - Museum of Contemporary Art. Consulted January 25, 2015. URL: http://www.comune.torino.it/pass/artecultura/files/MANIFESTO_cultura_access_apr-2012-DEF.pdf

knowledge and ability. This objective can be reached by using new pedagogic and education theories, psychology of development, cognitive sciences and neurosciences.

Learning environments are not created to provide access to information (that is the role for libraries and the Internet) but instead to foster the changes in knowledge and skills that we call learning (Rose, Gravel, 2010).

But learning does not imply just the understanding of the object (*cognitive component*); the affective component bound to motivation has also great importance: nothing is learned if there is no interest to do it.

My experience is what I agree to attend to. Only those items which I notice shape my mind – without selective interest, experience is an utter chaos (James, 1890)¹⁸.

Therefore, in order to realize the right to culture, museums must warrant other kinds of access to the heritage beyond the physical aspect. An object may be physically available but, if there is no understanding of it, it cannot be accessible. If there is no interest in getting to know it, it cannot be understood. If it is not perceived as a carrier of understanding, there is no interest in getting to know it.

Therefore accessibility, far from being just a physical instance, is also cognitive, motivational and relational. And consequently the obstacles to be overcome are not just physical, but also cognitive, motivational and relational.

In light of these considerations it is interesting at this point to reflect on the entry points marking the cultural landscape. How do you set up the access points to the museum in the digital era?

1.3.2. Going beyond boundaries, transforming the threshold

The distinct nature of museums as opposed to every-day experiences is recognized universally. Each museum is in its own way a microcosm, some sort of *upside-down world* (Lugli, 1992,

¹⁸ From James, W., *The Principles of Psychology*, Vol. 1, 1890.

page 11), *another space* - as sensed by Foucault¹⁹ - where rules exist out of time. As such, it requires a passage, an opening marking decisively the physical and psychological transition to the cultural experience. This *boundary* to be overcome has a highly symbolic meaning as *the way you enter a museum reflects the essence of that very museum* (Tarantino, 2013): consequently the anthropological, social, political, economic, cultural, historical changes and the evolution of the concept of cultural fruition lead necessarily to a reconfiguration of the access point. This reconfiguration is physical and symbolic at the same time: the change of the physiognomy of the entry points is most times connected to a change of the deep meaning of the institution itself. This has been the case for the imposing nineteenth century lobbies that would mark the admission point to a coffer full of knowledge foreclosed to many, for the Universal Expo Palaces with a wide central hall providing access to places of collective consumption of free time, and for the areas of autonomous access to modern museums, where the visitor has taken the form of “consumer” of cultural experiences.

For a detailed analysis of the post-digital context we are currently living through, we must consider the influence that digital media - in particular the web - bears on the transformation of the threshold and access concepts. In fact, it is important to remember that the use of digital media changes the imaginary of the audience as to how visitors have expectations to find the same instruments and opportunities they are by now used to use in other aspects of their daily lives, at work as well recreationally.

In particular, we must ask ourselves how technologies - and the expectation generated by their widespread use - are reconfiguring the points of contact with the audience, which are the ones through which the museum experience begins²⁰.

First of all, it is no longer possible to think of just one point of entry, because through the internet a museum can be open permanently and on-demand.

¹⁹ Foucault defines the museum as *heterotopia*, the power to put several spaces incompatible among themselves next to each other in a single location, and *heterocronia*, because it creates an absolute breach with time running on the outside.

²⁰ With regards to a reflection about the influence the web is having on conceptualization and the use and planning of physical thresholds, the project *Transforming Thresholds* represents a collaborative and coordinated attempt to explore some of these questions. In this case the planning of physical thresholds has occurred by inspiration from some disciplines (game design and performing arts) which have developed new meanings and practices bound to the concepts of “threshold”, “orientation”, “initiation” and “border”.

As a result, for many institutions today, the idea of a single point of entry (one threshold to the museum) is no longer orthodox. (...) Instead, through mobile content, open data, and social media, the museum continues to develop platforms and channels on and through which visitors might (re-)encounter and (re-)enter the museum. Today, rather than time-constrained and event-bound, the museum is always on, and on-demand (Parry, Moseley, Kristiansen, 2014).

Rather than being immersive and aggregate, the museum experience becomes floating and fragmentary, as in the web: this way the access threshold becomes *multiple, distributed and peripatetic* (Parry, Moseley, Kristiansen, 2014). And, above all it becomes open, meaning once more that the museum does not designate the course for its virtual visitor, but it is the visitor who picks it.

We must keep in mind that this reconsideration of the concept of threshold today can be defined by intention and action, rather than by physical parameter.

The concept of threshold might better be understood in terms of intention and action, rather than as a physical parameter. It may well be that we are better served seeing museum thresholds more in terms of time, rather than space. (Parry, Moseley, Kristiansen, 2014).

This mainly because the experience at the museum depends upon an intrinsic motivation, i.e. from the will and freedom of choice of the visitor. What determines then the decision of getting into a museum? What makes us decide to experience something first of all is the curiosity toward new motivations and an interest toward specific aspects. The latter, of an individual and personal nature, cannot be set to a universal level for all. However, there are some valid principles for stimulating an involvement: the connection with experiences in one's own life, the sense of discovery, the multiplicity of viewpoints, and the feeling of being participating emotionally. As sustained by artist Julia Cameron, *attention is an act of connection*. The reconfiguration of the access points implements occasions and motivations to access and experience the connection.

1.4. The Museums, Between Real and Virtual

1.4.1. Expanding the Experience

The meaning in Latin of the term *virtual* (from Latin, *virtus: quality, power*) refers to an intrinsic potentiality, a being in potency that is turning into an act. We can therefore interpret a virtual reality as something that formally has not happened yet, but is about to happen, an itinerary where we can perceive its accomplishment. It is very important to digress on this subject, dispelling the wrong impression that a virtual museum is a mere digital replica of a physical museum. Actually with the development of the Internet and in particular of Web 2.0 the concept of “virtual museum” has been directed to a highly complex and independent dimension, based upon a variety of different media and regaining the meaning of scholarly philosophy. Starting from the physical museum, the virtual museum offers new possibilities for bringing the collection included in the former.

Firstly, virtual reality allows the reconstruction and immersion in environments no longer visible, offering spaces and experiences beyond the physical limitations of the spaces hosting the collections. More than to an alienation of physical reality, this extension of the museum beyond the walls of the the digital world ensues in a growth of the experience, for knowledge as well as relations. Consider the possibility of interacting with the objects of the collection by accessing personalized itineraries; or having a direct line to other visitors or the museum staff through blogs or dedicated platforms; or of being able to access educational and informative materials and news no longer restricted to a single physical location from anywhere in the world.

Any teacher wishing to prepare a visit at the Nasher Museum in Durham (North Carolina) can access directly the educational modules specifically prepared by a pool of educators from the museum together with teachers who have had involvements in the past. These materials can be used by any teacher in the USA to prepare frontal lessons dedicated to the artists from the collection. Similarly, when accessing the platform designed for the Museums of the Regole of Cortina d’Ampezzo, any Italian teacher has access to the letters by Mario Sironi and can show his painting in the classroom, without having to physically access the museum or step into its archives. The archives themselves have actually reached him.

Here too it’s not just a matter of making the contents of the museum available online, but of widening the offer - the archives are not available to visitors - as well as giving the possibility of

enjoying it to those living and studying hundreds of miles away from it. Evidently to get such results the museum contents cannot just be taken to the web but they must also be remodeled in the forms and ways the web has to offer so that they can be made immediately and easily found and used.

Consequently, in spite of the fact that museums are by definition the kingdom of real and physical objects, ever more they are expanding their own function as custodians and promoters of the immaterial dimension of the heritage, making it possible to have an experience of dematerialized objects internally and externally, through the web.

De-materialized object, and de-materialized museological interpretation of them is a phenomenon we are living with, but without a clear perspective of the possible influence of this on the future shape and role of museums (Negri, 2012, p. 15).

The reconstruction of the immaterial context surrounding the physical object today has been added to the functions of the museum, specially in consideration of the fact that these objects are the materialization of concepts and ideas. The virtual dimension allows to reconstruct virtually the multiplicity of keeping an object alive that, *with the separation from its own context and the subsequent loss of part of its history, of its primary function and identity, acquires a new language responding to different roles and meanings which must be strengthened so that they do not remain unvoiced (Preite, 2005, page 11).*

In this process of revaluation of implicit values of a cultural asset, the virtual museum *may utilize all physical and conceptual means without any of the physical and conceptual limitations of the real museum, so that the works the museum owns and exhibits are one more given a voice, with the function of a communicative and across the board projection of the real museum (Antinucci, 2007).* This is a communicative structure of a different nature, *operating in-tension rather than ex-tension*, and with a model/prototype function for its fruition.

In light of the accessibility levels analysed in par. 1.6. the possibility of re-establishing a work's communicative system (Antinucci, 2010) has two implications.

The first one is *a cognitive and perceptive increment*: meant as augmented reality, the virtual translation of a cultural asset, by giving access to the virtuality of the context surrounding the object, augments the understanding of the message and of the cultural content. From the

viewpoint of Antinucci, as time goes by, the codes allowing to understand the works change together with the context of shared knowledge required for interpretation. Consequently, the capacity by an average contemporary observer to recognize in medieval bas-reliefs and frescoes the references to the religious culture of that era, is curtailed when compared with a denizen's of that period. A virtual reconstruction allows to fill this void, visualizing an environment surrounding an object, giving shape to associations and connections, inserting notes and additional images. Virtuality gives a voice to encoded messages that time has made unintelligible for most individuals and makes them accessible with a click.

In this sense virtual experience may turn to be not only more diversified and personalized, as seen above, but even more complete and exhaustive compared to the real one. Surely it would be preparatory and propaedeutic to a subsequent physical visit. To illustrate this we can mention the case of a classroom visiting a museum after a virtual visit. Their experience would be much more complete: they could physically see the works of art after being set closer to the works and their contents, rather than seeing them for the first time and, as is usually the case, rather superficially. Once again, the virtual museum would allow a teacher to prepare a personalized visit for his/her students by selecting a number of works and making available to them the tools and information so that they can "see it" more in depth and with knowledge.

The second implication is *motivational*. The immaterial object that surrounds the object is also the one individuals carry with them, based upon inclinations and previous experiences. In the traditional conception of the museum visit, the discovery relation, the inspirations, and the potential points for going more in depth are left to the initiative of the individual visitor. The communication paradigms of the digital media - such as interactivity, participation, and non-linear access to information - allow the user's motivation level to be increased, as they feel more involved in the formulation of their itinerary. These mechanisms offer gratification deriving from the possibility to select and measure the effect of one's actions within the virtual environment, repositing the dynamics of video games (Lercari, 2011, page 90).

By acting on the will to take an active role in the construction of meaning, the virtual dimension implements their capacity to inspire, awe, and excite curiosity. It gives the possibility to test in an immediate way one of the features giving voice to museums and making them truly communicative, as carriers of questions and safekeepers of answers; these answers bring to the

surface an indispensable need for human beings: to construct our personal meaning of experiences.

1.4.2. Room for relations

The extension of museums into the virtual dimension provides access to a space different in nature but strictly related to the physical world. The traditional concept of geographic space is replaced by **a new space paradigm: the social interface**. Individuals who are not physically in the same location are connected and can share with other individuals a cognitive experience based upon the co-presence of the same virtual environment.

When several individuals interact in the same virtual space, cyberspace too becomes the virtual location where ties and inter-personal communications are formed where shared norms have been established, and where behaviors occur which may be legitimate or illegitimate: in short, the typical elements making up the social structure of a community (Lercari, 2011, page 52).

On the other side, the web is becoming an environment and is simply no longer a communication tool: it is something we immerse ourselves in, a space open to exploration - often fragmentary - to research, encounters, and socialization. Because of these features the digital world has become a *new human dimension*: the experience we undertake in the web may enrich our lives, increase our knowledge and stimulate our relationships.

Therefore the positions are getting reversed: The “real” museum has become part of the digital one which on one side is independent from the physical dimension and on the other it fulfills it and adds value to it.

Real and virtual are not opposing dimensions, but integrated: only by starting from this awareness it is possible to turn a museum into a meaningful site for the highest number of individuals.

These two spheres of human experience are strongly interconnected; the statement of the first *Museum and the Web* conference, *Let the museum be the museum and the web the web*, is no longer valid. The evolution of the concept of virtual museum stands right in the relationship of

these two entities: one being tangible - with the physical environment of the museum, and the objects kept in it - and the other one fully intangible - with the Internet, but also with the knowledge kept in the museum, the spawning relationships. and the knowledge preceding the context and culture producing the exhibited objects which can now be accessed with ease.

In the introduction of the workgroup of the LEM Project “*Museums of the 21st Century*” there is also an emphasis on being aware that the new generations of museum professionals must face these challenges, finding ways to connect in a tighter way the physical with the virtual dimension, so that museums may reach more individuals in ways that are more meaningful than in the past²¹.

This bond between physical and virtual world is meant as the challenge to be overcome, in order to go beyond the museum’s walls, where the original works are, toward the digital world, and broadcast the message that a museum *be the custodian of stories of human beings in addition to works of art*. In order to become dynamic centers for learning, creativity and enjoyment, these stories must be brought to life. Virtual space is where this must happen.

The instruments developed by museums in the digital world must therefore be connected intimately to the conception of the very museums held by curators and operators, and of their role and their social function. Planning a virtual dimension is more than just an instrumental passage: it is the opportunity for a museum to become, in a journey of *learning by doing*, an inexhaustible source of knowledge and learning experiences mastering both worlds: real and virtual.

²¹ In the introduction of the workgroup of the LEM Project “*Museums of the 21st Century*” it is stated that *the next generation of practitioners will have to think through these challenges carefully, drawing the links more closely between the physical and the virtual so that the museum reaches more people in meaningful ways.*

CHAPTER 2

THE DESIGN MODEL: THE MULTIMEDIA PLATFORM

Marry the mission to the metaphor and you will transform your museum.

You will be creating your own win-wooing platform,

starting with the largest empirical dataset possible:

the behaviors and experiences of the social Web.

Nina Simon, 2009

2.1. The Museum as Platform

2.1.1. A New Model of Museum Experience

As seen in Chapter 1, published materials recognize the advent of the so called Web 2.0 as a revolution which has transformed the Web into a platform for sharing contents or information. The revolution is not just in the development of new technological applications, but in a proper philosophy, whereby users no longer behave as simple consumers of information, but wish to make a contribution with their experiences and interpretations.

This change in the ways knowledge is shared and created – or, better, co-created – causes the museum community to reflect about which new instruments can be used, and in which direction, depending on the value and impact they have on museum practices and perception of their functions.

In particular: which new models of fruition are offered by the technologies and the virtual nature they create? In which way can these instruments expand and renew the role of museums and their business model, orienting their function toward the collaborative construction of knowledge?

These are the questions some researchers have asked themselves while analyzing the nature of the interactions within the blog associated to the Science Museum of Minnesota, *Science Buzz*.¹ Born in 2004 from the will of the curators to frequently insert news from the science world, it has become a proper virtual *agorà*, or square, a place for dialogue on themes ranging from paleontology to archeology, from natural sciences to environmental sustainability. Research has demonstrated how the Net has allowed building up a proper online community, directing the interest and curiosity of thousands of scientists, researchers and enthusiasts from all over the world.

In this case, the presence of a platform open to contributions made by all, where the content is not static but changing continuously and built also by users, has also changed the perception of a museum as a space defined by architecture where content is encoded in a closed form and produced by a limited pool of professionals.

Therefore we understand how the choice of utilizing a particular technology carries with it the willingness to revolution the way of devising the experience at the museum. By providing codes, interaction instruments, and visual systems, technologies suggest a new way of imagining the relationship between collections and objects.

The technological solution must be thought of as an instrument applying the principles of Web 2.0 beyond a computer monitor: *understanding what museums are doing and can do on the web is important, but the potential applications for Web 2.0 concepts stretch beyond the computer screen* (Simon, 2007, p. 262).

The application of these principles could be void of technology itself, as in the case of an attended exhibition, planned according to principle of collective creation. Nina Simon, author of *The participatory Museum*, maintains that the philosophies of Web 2.0 supporting the participation of users and peer to peer interaction may be applied to museums, to stimulate an active engagement of visitors. The author suggests utilizing these social platforms as **models for museum-specific mediated experienced**, transferring the common language of these interaction to the physical environment of the museums.

¹ The study *Take Two: a study of the Co-creation of Knowledge on Museum 2.0 Sites* has been presented in 2009 during the conference Museum and the Web (<http://www.archimuse.com/mw2009/papers/grabill/grabill.html>). Last consulted January 24, 2015.

Start with your institutional mission and find the core experience goals that you can deliver in new and powerful ways. Then, innovate backwards, using on-line platforms like Facebook and Twitter and Delicious as models for museum-specific mediating experiences that are physically realized in the galleries. (Simon, 2009)

Ultimately, the platform for the museum can be a model of creation of value even before being an instrument. The decision to adopt it requires a preliminary in-depth reflection and the potentiality of the typologies of interactions and relations it carries. Otherwise there is a risk of concentrating on technological matters as mere instruments, losing track of the global strategy that must cross over all the planning choices and operational decisions. Only this way does the museum become a platform for sharing, participating and co-creating contents, in the virtual as well as in the physical dimension.

2.1.2. Participating to Creating Value

For the museum the key to change appears to reside in the possibility of applying the platform metaphor offered by the new Web: i.e. adopting the business model of the open platform. But what is the meaning of platform? And what is its model of value creation?

In Greek *platos* means “amplitude”, “width”, and “extension”: in general a platform is a flat structure allowing the execution of a series of operations.

No surprise, then, that the term is used in computer science to indicate a software and/or hardware base where applications are developed or executed.

The realities based upon a digital platform are numerous and ever more widespread: in education, e-learning platforms providing a portal to didactic materials and online courses; social platforms allow individuals to create relationship within a frame – such as an interest or a common activity -; platforms of crowdfunding collect online financing in support of a project or a specific initiative; and couchsurfing platforms provide hospitality services based upon exchange.

But the term *platform* does not exclusively mean a digital structure; it can also designate the aggregation of a series of operators to pursue specific objectives². Co-working, for instance, is a physical space adopting the logic of a platform for offline relationships wishing to share workspace, competences and planning.

In short, we can define a platform as a Net structure planned to manage relationships with a purpose, characterized by the horizontality and direct participation of the parties concerned. The choice for an organization to adopt this operational instrument comes from the willingness to redesign the organizational and social spaces, the relationship between user and service supplier, and the value chain.

In fact, the platform is a new organizational metaphor, adopted by the entities of peer-to-peer economy who do not view their clients – or their audiences, in the case of museums – as plain consumers, but as part of the production process (*pro-sumers*). And as such it carries a **new model of creation of value**, based on participation.

With open platform a company creates a broader stage upon which various partners can build new business or simply add new value to the platform. (Tapscott, Williams, 2006, p. 184)

The *opening*, meant as accessibility and availability of data and instruments to create, share and comment on content, is one of the features allowing the creation of Net externalities³. In fact in an open platform value increases along with the increase in subjects deciding to participate.

In the case of museums this participation in creating value includes, in addition to visitors, other museum institutions, academic institutions, research institutes, and creative and practice communities, shaping a map across all disciplines connected to the strategy of the museum. A platform works if a critical mass of participants attracting other individuals within the ecosystem can be built around it.

A second fundamental feature of platforms is *interoperability*, i.e. an application's capacity to interact with another application, a platform thus resulting as a set of modules and connected

² ETP, *European Technology Platforms*, is also another technological platform

³ According to the principle of "externality of the Net" the value is an asset growing as its users grow. According to this principle, the value of the Internet or of a software increases proportionally to the number of users of the Net or the software

with other platforms. This compatibility corresponds to product configurators, characterized by bonds of combination of elements of the forming elements, in production management systems. The re-merging by external contributions of elements found on the web is one of the features of this cumulative innovation.

With open platform for innovation inviting unprecedented participation in value creation, cumulative innovation is going into overdrive. Growing number of professional and amateur developers are creating their own content and applications by combining various fragments they find freely scattered across the Web. (Tapscott, 2007, p. 188)

In planning such an instrument, much attention must be paid to activating and organizing interactions, in addition to the organization of contents. In the ensuing paragraphs we propose an analysis of various viable typologies of interaction oriented on museum fruition.

2.2. Instruments of Interaction with Contents

The possibility of integrating contents with instruments and digital space to create new ones and share them (bottom-up approach) has caused these platforms to replace traditional Web content providers, who were proposing a passive utilization of contents (top-down approach). This change has given an active role to Net users wishing to personalize contents, to be involved in their creation, and to undertake relationships through the experience of the content itself.

The passage from Web 1.0 to 2.0 suggests the direction of an evolutionary push for museums to abandon dimension 1.0, i.e. the nature of a place for transmission of knowledge by an authoritative source to visitors, heading for 2.0.

A *Museum 2.0* must be a platform where content is developed, organized and made accessible from bottom to top rather than from top to bottom, and it must include various courses of access⁴; above all, it must provide a context of social participation.

Basing herself on Web 2.0, Nina Simon identifies five different levels of interaction with content, taking up again the evolution of the Internet analyzed in Chapter 1: individual reception of content (*museum to me*), individual interaction with content (*me and museum*), individual networked interaction with content (*me and me and me and museum*), individual networked social interaction with content (*me-to-we in museum*) and collective social interaction with content (*we in museum*). Exhibitions usually stop at reception, or at best at individual interaction with content level (level one and two): the Web shows us that it is not possible to plan a collective social interaction (level five) without first connecting people through their own individual experiences (level three and four). Therefore, to reach its objective, a platform must supply first of all a level of exploration of a content provided by the museum, and then it must allow users to comment or tag the content itself; and subsequently it must connect these interventions, making users aware of the presence of other individuals who have participated on the same themes. The foundation for interaction gravitating around content itself is set at this point: this way the users feel they are part of a community of individuals contributing on various levels and can decide to establish a deeper relationship among themselves.

To reach these levels of depth, the Web provides many instruments.

With regards to access and individual interaction with contents, the instrument available is the digitization of the collections, tied to the possibility of manipulating the metadata or creating objects collections. One of the best known is [MyMet](#), the application of the Metropolitan Museum of Art allowing selecting and forming a personalized collection of favorite works, which can be reviewed and shared via social networks. More museums have developed similar applications; for instance, the Nasher Museum of Art, with the tool *My Collection*, allowing the registered user - or students and teachers in the case of projects with classes - to create their own exhibits online.

⁴ The virtual pioneers of Museums 2.0 have been traced to conferences on cultural assets and digital heritage such as *The Museums and the Web* (<http://www.archimuse.com/conferences.html>). Other conferences about Virtual Heritage are the *International Conference on Virtual Systems & Multimedia (VSMM)*, *EuroMed Heritage*, *Digital Heritage 2013* (Marseille), or can be found in other academic articles in the *Journal of Virtual Words Research* (<http://jvwresearch.org/index.php>) or of the *Journal of Computing and Cultural Heritage*.

With regards to developing the relational dimension, almost all museums by now have developed an active presence on social platforms such as Facebook, Twitter and Pinterest, where users interact with museum content and are able to comment and share data or metadata⁵. To further stimulate socializing and forming a proper user community around certain themes, some museums have created active blogs, such as [Science Buzz](#)⁶. This tool by the Science Museum of Minnesota is a blog of the kind strongly oriented toward the user with very diverse news, also because of the diversity of authors: posts may be authored by staff members as well as registered users, who keep growing.

Starting from the contribution by Nina Simon, it is possible to reformulate all the levels of interactions outlined by her, and list the digital instruments carrying them out:

- the first level regard **the exploration of contents**, via digitizing objects;
- the second level is about **personalizing contents** and utilizing metadata;
- the third one realizes **contents access** through the creation of a profile;
- finally, the fourth level realizes the **creation of online collaborative content**.

2.2.1 Exploring Content: Digitizing the Objects

There are several ways of organizing textual and multimedia contents of a museum to foster accessing and exploring it. Based on communicative intentions, there are different levels for going more in-depth: at the base there is need to fill the gap of understanding the works, originating from the lack of standards required to understand them, rebuilding the immaterial context surrounding the object (Antinucci, 2001).

To achieve this, it is possible to identify a few routing typologies: from video-guides telling the history of collections, to interactive archives and online theme galleries adopting the experience

⁵ Data relative to the presence of more than 3000 museums on the social networks are published in the platform Museum Analytics.

⁶ Born in 2004, this blog is integrating part of the large online community of the museum called Science Buzz. Its origin comes from a particular need: the museum's staff wanted a simple and immediate instrument where to post news from the world of science. The blog can be accessed at <http://www.sciencebuzz.org/blog>

of an exhibition, or suggesting alternate routes for a visit or a connection to other content related to them.

However, at the base of all this there must be the possibility of making the database reachable and available through a search engine.

The museum must have therefore a system for cataloguing, whereby every asset is described through a series of information regarding typology, subject and realization technique, denomination, author, location, and period. This operation may be about the immaterial dimension residing in the knowledge and the memories of individuals. Of notice, about this matter, is the catalog project of the Museum Torino (<http://www.museotorino.it/>)⁷, a virtual and popular museum born in 2011 which collects, conserves and keeps up-to-date the knowledge of the city. The construction and growth of this living collection is entrusted not only to the main institutions (City Administration, Superintendent, colleges, museums, associations, and businesses), but also to the residents.

It is desirable to place side by side this tool an archiving system of all the biographical and informative production of the cultural initiatives promoted by the museum⁸, providing a document support to didactic and research projects (Ballardini, Camnasio, Ferrari, Ferrario, 2006). The function of generating and conveying knowledge ties into the educative dimension of the museum which can be supported by creating multimedia environments for learning, capable of providing instruments leading to the understanding of the works, and didactic cues for teachers.

During the planning phase, the highest attention must be given to the multimedia learning theories (Paivo, Chandler and Sweller, 1991, Mayer, Schnotz, 2001) by using a design centered on those who are learning (*learned-centered design*). A *user-friendly design* is of fundamental importance, presenting data in a clear and simple way, integrating languages (text, audio and video) and exploiting the potential of multimedia communications.

Multimedia technologies provide museum science with new instruments to engage individuals in learning processes leading to a deep and lasting understanding of all communications presented. The Virtual Cultural Heritage projects maximize the interactive component of digital media

⁷ An analysis of the project can be found at this link:

https://www.academia.edu/5071705/MuseoTorino_museo_biblioteca_archivio_portale_piattaforma_database

⁸ A technological platform proposal integrating these services has been developed by CILEA as described in in L. Ballardini, M. Camnasio, R. Ferrari, F. Ferrario, “E-MUSEUM: una piattaforma Web per Musei on-line “medio-piccoli”, Bollettino Cilea nr 102 June 2006

(immersion, navigation, participation, and non-linear access to information) connected to the illustrative capacities of the linear media (narrative, psychological engagement). As demonstrated by recent research regarding developmental psychology and neurological-cognitive sciences, the immersive virtual environments utilizing 3-D presentations, stereoscopy, identification by avatar, and haptic and multimodal interfaces, generate complex cognitive dynamics based upon spatial exploration of data.

2.2.2. Personalizing Contents and Metadata

Up until now we have been describing various methods for presenting museum contents, but also of relevance is all the additional information increasing their understanding, yet without making modifications.

Metadata are defined as the captioned information providing further elements of knowledge on a specific set of data. Information used to catalog a historic source can be included in this definition; like for instance the date a document was created, the author's name, the identifying number used for archiving, the name of the archive where the source has been found, and so on. (Lercari, 2011, page 16).

The concept of metadata is very important because it allows personalizing of contents without modifying them: by using a label called "tag"⁹, a key word is connected to objects, images and documents, following a personal logic thread, thus creating flexible and varied itineraries to access content itself.

In this regard the Pinterest platform is a tool that can stimulate the fruition of the collections, allowing also users to intervene on the works by adding metadata (tags), and customizing the itineraries of a visit.

"A social catalogue", "a community to share collections of things you love" are among the first definitions given to Pinterest by its creators. These definitions are still valid and describe well the key concepts sustaining this social network: *social, catalogue, love*.

The main function is, in fact, to share, archive, and set aside in a secure place all those things - products, images and product images in particular - we are attracted to in one way or another, we

⁹ A tag is a term associated with a content (such as an image, a map, a post and a video) describing the object and making keyword classification and information search possible.

like, and perhaps we would purchase or be inspired by. The museum, utilizing the Pinterest metaphor, can strengthen its function of what, with regards to creativity, is often referred to as *mood board* or *inspiration board*. It is a collection of images and clips: detail to be inspired by; all heading to a theme the artist (a photographer, a designer, or a graphic artist) can turn to when developing a project.

Providing a mood, mood boards are useful when collecting ideas, working with teams, brainstorming, and communicating an idea. Although Pinterest may be seen as generating from these instruments, its collaborative boards allow to push further out, using Pinterest itself (and the spirit driving it) in a new way. The way the museum will succeed in engaging individuals through this platform, enriching its own collections with many contributions and individual points of view will make the difference. In fact, a collaborative board allows several individuals to pin content within a page initially launched by a museum. For instance, you could create a gallery on a theme picked by the museum, and any visitor could contribute to it by selecting those closest to the theme from the vast range of works available worldwide. The potential of this instrument goes far beyond the plain online creation of a collection of objects: the application can be extended to planning collective exhibitions or creating gadgets.

It is not necessary to use the Pinterest platform, which can be integrated to other instruments, such as the creation of a personalized profile where you can create your own collections, picked from the images made available on the museum site.

MyMet, the tool from the Metropolitan Museum of Art in New York, was born from this principle. It allows the visitor to register and "collect" the works he/she was most impressed by during the visit, viewing them again afterward. A similar logical approach can be found in the [Rijksstudio](#) of the Rijksmuseum, taking the form of a personal album, where the user can save favorite works, or even just some details from the works, composing and recomposing them at will, and sharing them.

Depending on the user's typology and determination in going deeper, other levels of application can be thought of: for instance, within a educational or research context.

A group of students can be given the possibility of creating a profile in the site of the museum, coordinated by their professor, where they would be able to create theme galleries for more in-depth research or team work. This instrument can be very useful also when dealing with

academic research, allowing research by a team of scholars and researchers living in various locations worldwide and being able to work remotely on the same collection.

The assumption for this to happen is for the collection to be available online; i.e. there has to be a database collecting data referring to the work and its image. As a matter of fact, to be able to pin something, in most cases contents must be on a site on line. This could be a further stimulus to digitize and, consequently, catalog all works, bringing to the museum a higher awareness of the function of conservation of the digital versions of the works¹⁰.

2.2.3. Access to Contents: Creating a Profile

In order to personalize, comment on and share contents, it is necessary to be able to act in digital (and museum) space with a well-defined identity. Social platforms are based upon construction of users' profiles defining their features and interests, creating a virtual container of the contents being produced and shared.

Offering the opportunity to create a profile is a complex matter, from the viewpoint of technology as well as respect to privacy; but undertaking this task is worth the effort. The use of the model of personalized registration is very efficient:

When the experience is about you (your health, your opinions, and your abilities) you feel that the exhibits are there for you, which makes you more amenable for engagement. (Simon, 2007, 264-265)

At Sony Wonderlab in New York City visitors can register using their name, photo and an audio clip, and every time they use an interactive technology they do it with their information.

But the personalized experience does not run out during the proper visit. Through registration, the platform, and consequently the museum, is perceived as open and always on-demand. By

¹⁰ With reference to international norms relative to digital heritage preservation, see the *Charter on the Preservation of the Digital Heritage*, UNESCO 2003 (http://portal.unesco.org/en/ev.php-URL_ID=17721&URL_DO=DO_TOPIC&URL_SECTION=201.html). Last consulted January 15, 2015.

adopting a registration system similar to the one used by libraries and colleges, museums can establish a more stable tie for users, and a communication channel - for events, exhibitions, activities, and online discussions - inviting them to visit again their physical as well as their virtual space. The addition of further services, such as an annual membership allowing unlimited access, is an incentive to view a museum as a space you can always come back to, where if you wish you can pause even for fifteen minutes in front of a work, coming back a day later to see the same work once again or the next one. As stated by the Guardian with regard to the Dallas Museum of Art, a museum can become a public space, and a platform of citizenship and social activities.

When you can slip into a gallery for just 15 minutes to see a favorite painting, or when parents can take their children without having to budget for it, the museum takes on a societal function. It's no longer just a fortress or an amusement: it's a civic platform, where education and citizenship go hand in hand. For Dallas, a museum membership should be like a library card: everyone should have one, and it should foster an engagement with the museum that goes beyond the occasional visit to a kind of civic pride.¹¹

The parallel with a library is also functional with regards to the patrimony of resources not to be consulted all at once: an exhibition can suggest a course by theme, but the collection must always be accessible depending on the motivations or requirements for going deeper that each individual can display in a lifetime.

Registrations must in fact be conceived as the starting point of a lasting relationship with the museum, which must be flexible and open to the diversity of individuals approaching it. This is valid for the single individual and for categories of subjects who have an interest in creating a bond with the institution and participate in its creation of value.

The profile will correspond to the typology of relationship with the museum: consequently, different access levels must be planned, depending on the thoroughness required.

¹¹ The article was published on 30 november 2012 (<http://www.theguardian.com/commentisfree/2012/nov/30/dallas-museum-art-free-for-all>). Last consulted January 15, 2015.

Generic users, such as tourists and families, will have an interest in accessing contents supporting their visit, games, multimedia applications connected to exhibitions or works, and the registration area for events and activities.

This is valid above all for schools: through the authentication system they could be granted access to custom contents and didactic instruments, created in collaboration with the staff of museum educators depending on the formative requirements of the group or class involved. Education staff could share with professors some work areas to dialog on pedagogic themes, thanks to blogs specifically dedicated, and jointly plan materials and educational activities better suited to school planning. Professionals and experts in disciplinary fields, such as college professors and critics, could access a different level, thus being able to meet, exchange information, and share research projects.

Conversely, the associations of the territory could be interested in a space developing tourist itineraries, and for digging deeper into subjects; tourist operators could in turn channel the cultural heritage and the museum services into their tourist offer, enriching and diversifying it.

Such could be the profiles and access levels which digital instruments with different participation can correspond to. It is up to each museum to make a detailed analysis of the context and the subjects to be starting from; by taking this road, there is an increase in awareness of the role museums may cover, and the system of territorial players they can join. Managing registrations through a system of authentication in fact allows the development of a higher knowledge of the subjects participating in the creation of value of a museum, giving the possibility, while respecting privacy, to utilize data for possible in-depth research about typologies of audience.

2.2.4. Collaborative Contents: Wikis and Blogs

The model called wiki (a site allowing users to add, remove or load content), derived from Wikipedia, is fundamental for museums wishing to create collaborative spaces keeping contributions by all under advice. Various levels of engagements can be planned: from a contribution collected on special spaces, to real-time comments by visitors (tweets), and to more structured projects with the purpose of recovering memories and personal stories of visitors. The

text of the [video of the Nationaal Historisch Museum of Amsterdam](#) follows below as the incarnation of the role of a museum of history as it is intended by its curators:

I know you. I knew you before you were born. I know your parents. And your parents' parents. And the ancestors of their parents. I am part of you and you are part of me. I have the answer to many of your questions. Everything has already occurred. I have seen so much. I have even seen the country change. And certainly the customs. I've kept all stories. I would like to try to surprise you. You will be surprised by what I have preserved. Enough about me it's you I'm curious about. I have plenty of time and I remember everything. Tell me who your friends are. And what you are thinking about. I would like to hear about what you did today. Were you were yesterday. What plans you have for tomorrow. Because your stories however trivial they may seem are the heart of my existence. I am History¹².

How to go about planning relationship space and stimulate dialogue on a specific subject? It is necessary to start by considering the users as unique individuals with experiences, stories and personal background. The Science Buzz blog analyzed in the first paragraph is demonstration of the capacity by these instruments to build proper communities of interest. There is a risk in all this: creating non-significant content for the museum. But as Ms. Simon emphasizes, at the base of all these operational choices heading toward Museum 2.0 there must be trust in visitors and awareness that any initiative lacking respect for the visitors and not giving them interaction with contents, would limit the range and the breath of the experience, and not stimulate engagement.

Going 2.0 isn't just a design decision. It's a trust decision. All museum endeavors require a certain element of trust in visitors – that they will take their role seriously and respectfully. But the integration of 2.0 requires “radical trust” in visitors' abilities to create and judge, not just receive, museum content. When you design for the we, you must trust visitors to use the exhibits as they see fit – not as you do (Simon, 2007, p. 272).

¹² The video can be accessed at: <https://www.youtube.com/watch?v=CON2dEow6ZM>

However there is another level to consider: the organizational level. The philosophy of peer production and co-creation is changing even the way we work. Work's nature itself is changing:

Work has become more cognitively complex, more team-based and collaborative, more dependent on social skills, more time-pressured, more reliant on technological competence, more mobile, and less dependent on geography. (Tapscott, 2007, pp. 245-46)

Such work modality by the museum staff carries vast implications. Imagine using open source tools such as chat, blog, sharing spaces and work documents: simply going beyond the barriers of traditional organization not only in the museum itself but in the territory where the institution functions. Collaborating and involving people and institutions located in other parts of the world has never been this easy, as well as comparing ideas, projects, objectives and ways to achieve them. The museum community can benefit from the philosophy of Wiki Workplace, turning these spaces into creative, growing platforms for professional training.

Overcoming organizational barriers means also starting a dialogue with different museums to compare, share ideas, results and projects. **#MuseumSchool**, the first example of educational social community in a museum in Italy¹³, stems from this determination. Born at the end of August in 2014 around hashtag #MuseumSchool, the movement prompted a spontaneous gathering of museums willing to get together to tell *everything such institutions think, plan and accomplish for and with children and schools*.

The relationship with the world of schools is one of the most fragile and at the same time most stimulating and full of potential: on one side because the young generations represent the audiences of the future in a museum where they can easily mediate a change in the concept of their role; on the other side because collaborating with schools is a real lab to handle the complexities of the learning process.

As we can read in its manifesto, *educational actions towards different age groups and schooling are among the most complex and delicate: those "stealing" more study and research time, those*

¹³ The blog #MuseumSchool can be accessed at <http://museumschool-ita.blogspot.it/> (last consulted: Jan. 22, 2015)

more pleasing and fun to do but harder and complicated to complete, and those requiring never ending reflections and evaluations.

Giving museums a space to share studies, experimentations and reflections on their own educational offerings increases the force of each single proposal, stimulates peer to peer learning, and represents a chance for continuous updating and professional development.

Thinking of possible extensions for #MuseumSchool and its transferrable module comes very easily. The fields where museums could benefit from a continuous comparison platform could be many: from narrative techniques for the cultural heritage (#MuseumTheatre) or the cultural mediation field (#MuseumMediation) to the development of multimedia applications and games inspired by the collections (#MuseumApp) and the production of gadgets (#MuseumGadget), often an underestimated field, yet with a very large potential.

2.3. Planning a Platform for Engagement

2.3.1. Planning a Complex Product

To fit into such a vast and varied panorama, the authorities and the professionals within the museum are forced to face domains never before explored. Opening up one's borders and extending one's actions on the web, the museum cultural offer takes on a new dimension, which needs to be consciously programmed. The spaces curated by the museum are not only the simple exhibits, the proposed contents are digital as well, and the relationships it handles and promotes are created on the web.

An annual conference comparing digital heritage research and projects, *Museum on the Web*¹⁴ shows that the museum world is already considering these themes and seems ready to formalize and integrate a new practice within its functions, a project for multimedia spaces and tools.

¹⁴ The site museumsandtheweb.com describes this initiative as follows: *The Museums and the Web is an annual conference featuring advanced research and exemplary applications of digital practice for cultural, natural and scientific heritage. Formed by leading professionals from around the world, our community has been meeting since 1997. The products of our meetings and conversations – the MW proceedings, Best of the Web archives and discussion Forum – are an unparalleled resource for museum workers, technologists, students and researchers that grows every year.*

Design is the human power of conceiving, planning, and making products that serve human beings in the accomplishment of their individual and collective purposes.

(Buchanan, 2001, p. 9)

This definition by Richard Buchanan highlights the importance of the planning dimension which integrated conception, and of planning and making of products serving society. Such capability no longer belong to theoretical research, but has always pertained to “decisional” sciences, such as engineering and, more recently, computer sciences (Buchanan, 2001, p.6). Applied to digital heritage, this path can integrate knowledge coming from different subjects to create a complex product that could not be accomplished based on a single educational field. The complexity of this product derives from the multiplicity of its components: communication, as supplier of meanings; physics, because achievable through technological support; interactive, because it becomes part of human experience; relationships, as mediation tool among people; systemic, because it applies to an organized system (the museum) and a socio-cultural field (the territory). Hence developing a theory and a planning method obviously draws from different fields of study independently developed: graphic design, product design, museology and visitors studies, marketing and cultural management (Mason, 2013).

This project research work is born from this challenge: developing a conceptual frame where contributions from other disciplines are listed and techniques are drawn encompassing principles in design, guidelines, best practices and processes that museum staff and designers can refer to if they want to apply the metaphor of the platform to the museum.

As emphasized more than once, a museum is not an independent entity, but it operates within a specific territorial context; as a result, the choice of the technology to be adopted must encapsulate the environmental drive, the strategic objectives of the organization and the technical feasibility of the tool.

Many are the aspects to be considered: the perception of the role of a museum, the production system of the territory, the different needs of the stakeholders, the processes of creating a meaning. The possible technical choices are as numerous, ranging from the modalities of interaction, to the nature of the digital content, to the interface typology, and to the information architecture, just to list a few.

So we suggest adopting a *design thinking* approach allowing to face specific problems that each museum can find within the context where it operates, but proving to be valuable even in diverse situations and contexts. The implemented solutions can only be unique and peculiar because they reflect the peculiarity of the museum-territory system, but the tools to find them can be shared, and they originate from the same conceptual frame. All it takes is answering the same questions while adopting different solutions, according to the context a museum has the opportunity to operate within.

2.3.2 Four Inspiring Principles

Then which are the common characteristics the open technological solution we are looking for should have? Which are the planning principles of a platform finalized to participation?

Technology-powered engagement can represent a new level of citizenship, one that strengthens democracy and leads to transformational community change¹⁵.

This statement is taken from the site *Technologies for Engagement Initiative* by the Knight Foundation¹⁶ born from the conviction that technology offers new creative ways to solve the problems of the community. According to this perspective, engagement should ultimately stimulate creativity and implement solutions with others.

First of all technology must build **infrastructural collaboration**: in other words contribute to shape a critical mass of individuals and organizers able to support social change and development of the territory. Due to their relational nature, platforms facilitate communication and new methods of interacting with others, either near or physically far, overcoming special and temporal boundaries. What characterizes this technology is indeed the ability to establish human connections among people living in the same place, strengthen dialogue among residents and

¹⁵ See the Knight Foundation's website at <http://www.knightfoundation.org/funding-initiatives/tech-engagement/>. Last consulted January 15, 2015.

¹⁶ The mission of the Knight Foundation is: *supports transformational ideas that promote quality journalism, advance media innovation, engage communities and foster the arts. We believe that democracy thrives when people and communities are informed and engaged.*

sense of belonging to a community, and facilitate the search for shared objectives and strategies. The platform can create spaces for confrontation on certain themes, better acquainting individuals with organizers, and stimulating collaboration to develop new projects.

Another success factor in technology for participation is its **impact on the cost of communications and relations**, and the platform model possesses this requirement; first of all it lowers the cost of collective actions: to discuss and compare it is no longer necessary to meet physically in the same place. In addition, the increase of these interactions facilitates the creation of new projects able to find visibility and support on the web. We must not forget that a museum with a strong presence on the internet finds financing more easily, through crowdfunding activities and sponsors. Favoring user's fidelity also increases attendance at the museum, which is perceived as a social place to revisit a work, take part in an event or go to the bookshop. The steady flux of fun and educational game activities on line can stimulate an area that is a strong point in American museums and represents a considerable source of income: merchandising. In this case the platform becomes an experimental laboratory testing edutainment products that specialized companies might be interested to manufacture, adding other players to the creation of its own value.

We must not forget as well that any technology is just a tool, and as such **it must be invisible**. The most powerful technological revolutions, as the Internet shows, are so pervasive that they are not even felt.

It is important to keep this aspect in mind in the planning phase; we must focus on the socio-cultural system of the museum and on its territorial context rather than on technology per se. (Mason, 2013)

One last aspect must be considered. Confronting platforms of this kind¹⁷ a common feature emerges: **the system architecture must be modular**. To manage complex forms of participation, the interface must anticipate the different categories and subjects who will use it. Different integration points with other systems will correspond to multiple points of entry, as analyzed in chapter I. It is important to keep technology easy to implement, and open: it does not mean the launch of finished projects, but the beginning of a development project involving the community.

¹⁷ In particular, the reference model has been the digital platform DMA of the Dallas Museum of Art. See the article on the *Museums and the Web's* website (<http://mw2013.museumsandtheweb.com/paper/nurturing-engagement/>). Last consulted January 15, 2015.

Expanding the studies on audiences, management and museology, we suggest a subject analysis divided according to the principal functions of the museum.

2.4. Nurturing Relations with Stakeholders

In the systemic visions of organizations we saw that the museum as an institution is the center of a network of relationships connecting it to the outside world. But which are the subjects making up the knots of this thick net able to contribute to a creation valuable to the museum? Adopting the managing principle based on the stakeholders theory¹⁸, we suggest certain parameters in light of their classification within the scope of the museum. Such operation is functional to managing the relations with subjects (such as corporations, associations, companies and individuals) able to influence or be influenced by the museum's actions and to increase its value, benefiting in turn from this relationship. Creating a map of the context, meaning the shareholders and the type of possible applicable interactions, is even more important, if we want to project our actions onto the web. As we remarked in paragraph 1.2.2., involving these subjects is crucial to the value increase of the platform itself.

“Relationships management” implies taking care of them more than ruling or constraining them, especially if activated and implemented on the web (Livraghi, 2001, p. 160). The Internet, as a network of bridges among people, offers the widest choices of relations; however it is necessary to nurture them, keeping in mind the different needs, motivations and objectives inspiring them. If every single subject benefits from the relationship with the museum through different modalities and motivations, it is not possible to identify a univocal strategy to manage relations within the platform as well.

So we will have to adopt different approaches for each category according to the kind of interest shown towards the museum and the hidden potential involvement achievable through the platform.

¹⁸ The origin of the term *stakeholder* is found in strategic management studies in a corporate environment. The term appeared for the first time in a memorandum of the Stanford Research Institute in the USA in 1963 to identify those groups without whose support a corporation cannot survive.

Taking into consideration the needs and the interests of the subjects involved in museum life implies a deep knowledge of the specific context where they operate (Finley, Gralen, Fichtner, 2006).

Taking inspiration from economic-managerial literature, (Solima, 1998, Davies, 2010) we suggest dividing the stakeholders within a few macro areas corresponding to the principal functions of the museum (management and conservation, fruition and increase in value, transmission and communication, research and study).

First of all there is **management**, made up by governance (with a strong decision-making power and a strong interest toward the museum) by employees and partners (operational branch and soul of the organization entrusted with the role of mediators with the audiences and the governance itself) by financial backers (they can be public corporations, banks or companies interested in sponsoring projects or activities, or single individuals contributing through friendship memberships). Within this area museums can benefit from ways to share data and management tools; but they can also dialogue and reflect on common themes as. From this point of view we consider also other museum institutions as strategic stakeholders in relation to sharing strategies, within disciplinary fields as well as working methods.

Then there is **fruition**, made up by the different kind of audiences visiting the museum who are the recipients of the cultural proposals and the objectives of the institution mission statement (the heritage at the public's disposal). There are several methods to classify visitors: we can consider personal data (origin, age, level of education, profession), the habit to visit museums (Bollo, 2008)¹⁹, learning styles (Kolb)²⁰, the kind of intelligences (Gardner)²¹ or the personalities (Myers)²². In this field schools, the so-called *coerced audience* because they are pushed by

¹⁹ Alessandro Bollo has created a subdivision in central audiences (those attending the museum), occasional (casual visitors), by proximity (those living nearby but often indifferent and not interested in the museum), potential (those not participating even if they were potentially interested), and not public (those not interested nor motivated to participate)

²⁰ To classify how individuals learn from situations and use their experience, Kolb identifies two main modalities: the first one shows preference for the reflexive observation (to look) or for active experimentation (to do); the second for the concrete experience (to feel) or for abstract conceptualization (to think). According to Kolb, all mentioned activities are involved in the learning process but each individual, depending on experience and actual learning situation will preferably apply some modalities. From their combinations four profiles are identified: the thinker, the pragmatic, the dreamer, the decision maker.

²¹ Gardner's theory is based on the conviction that teaching and learning must concentrate on particular intelligences of each individual, identifying eight different typologies: linguistic-verbal, logic-mathematical, spatial, musical, body-kinesthetic, interpersonal, and naturalistic.

²² The personality test by Meyers-Briggs (MBTI) identifies a series of psychological features associated with 16 different typologies of personality, based upon the combination of four dimensions: introversion versus extroversion, sensation versus intuition, thought versus feeling, and judgment versus perception.

strong learning motivations, are pivotal; so are tourists, because they are pushed by the curiosity to explore the territory. These occasional audiences are interested in the possibility to personalize their visit making it their own, rather than creating contents. On the contrary students and teachers are stimulated by the possibility to go beyond simple personalization, building their own learning tools²³.

A special category of users reminds us of another area we suggest to consider separately, **research**: the relationships with academic institutions (universities, and study and research centers) may pertain to conservation, cataloguing, planning exhibits and production of informational materials. Furthermore in this area we include learned professionals (curators, gallery owners, critics, professors, educators, etc.) who achieve their professional objectives through the museum and are more sensitive to the possibilities to contribute through content creation. For these people the museum is a constant stimulus to research and discuss and a place to weave new professional relationships.

On the subject of **communication**, the relationships with the main media (radio, press, television and web portals, and tourist boards) are a function creating an image of museum operations consistent with its institutional objectives and its audience increase. These relationships also carry the most impact towards fruition of the territory, as noted in literature dealing with interweaving between cultural and touristic productions (Tamma, 2001). It is indeed the cultural content, as an expression of history and value of the message, which supplies a common planning ground able to establish deep and complex ties with the supply system, aiming at a co-production process of tourist-cultural products (Moretti, 2009).

Besides these areas we must add **marketing** of museum products, involving economic relationships with printers (supplying brochures and flyers), publishing houses (for catalogues, popular publications, educational games), different kind of businesses (to manufacture gadgets), book stores (to manage the bookshop), food suppliers (for the cafeteria). Beside the financial nature, essential to achieve the museum economic objective (Ferrarese, 2010), these interactions should not be overlooked by disregarding their potential for innovation and dissemination of the museum's name. Consider the possibilities to widely publicize the museum products through commercial platforms (Amazon, eBay) to expand the familiarity with the museum itself and at

²³ In this respect the theories tied to constructivism take particular relevance. Following the idea that personal meaning making to a central role in learning, George Hein developed the "constructivist museum" theory.

the same time contributing to its economic sustainability²⁴. Investing in the production of items with strong ties to the museum cultural output can intensify the exchange with the production sector (publishing, design, multimedia applications) strengthening the image of a creative and modern institution.

How to go about translating these themes in the open platform module? How do we foresee and design contents, spaces and tools taking into account all the different approaches? We will try to trace few guidelines for each of these categories, before analyzing a case study, aiming to give a concrete application to these principles within a specific context.

2.4.1 Management: Co-working Spaces.

Adopting an open system carries deep implications for the museum management philosophy. Allowing members of the museum staff to access and manage text and multimedia contents requires a constant updating and a continued comparison with the potential offered by a multimedia approach.

Utilizing tools such as Google Drive or Dropbox can spread a mentality for sharing data and organizational processes among the staff, in a co-working approach stimulating *peer to peer learning* processes.

Consider also the complexities of experiences and jurisdictions contained and treasured in the museum. The possibility to relate them even more intensely can only increase the value of the cultural offering, especially in the educational field. Numerous and popular museum blogs were born around educational themes and cultural access. They compare and contrast museum professionals coming from educational fields and institutions geographically remote but operating to reach the same objectives.

2.4.2. Fruition: Didactic and Educational Materials

Educational users, either students or teachers, are always a primary target to use museum materials, very much so for digital contents, allowing to create a durable connection between

²⁴ The success of bookshops of American museums is an example. Cfr Ferrarese, 2010.

learning in the museum and in the classroom. Changing the way to generate and distribute content impacted the educational function, amplifying it and opening new perspectives. As a powerful source of information able to offer opportunities for hands-on learning, museums are getting ready to become principal providers of digital educational materials²⁵. Available literature infers the emergence of a collaborative approach to the supply chain problem in a digital museum (Peacock, 2009): coping with the needs of the educational world, digital resources have to be modular, flexible and adaptable to different contexts. The same learning tool²⁶ can be used in different scenarios according to the interaction of the educator who must take an active part in its elaboration. Accordingly, the tool elaborated by the [North Carolina Museum of Art](#)²⁷ allows the user (mainly professors and educators) to create a personal conceptual map related to a work, following a prefixed path and guided themes. A principle that follows the constructive viewpoint (Hein, 1995, 1998), stating that the effectiveness of the learning process can be reached when the possibility exists to create and interact with the content. This applies to both students and teachers who, being involved together in projects co-creating educational tools and resources, are able to develop an integrated system for content production, benefiting both parties.

[Words and Pictures](#), the educational platform at Nasher Museum, was born from the collaboration between the museum educational team and the elementary school teachers who developed and put on the net a series of educational courses. Conceived as real live lessons, these materials are available to any educator and enable anyone to handle authors and themes tied to the museum collection from the classroom.

Another example subject to empirical analysis in this research area is the platform [How do You Look](#) from the Nasher Museum, mainly addressed to college students participating in organized visits on a theme based upon their study course. The basic idea is to provide support in completing assignments required in their class, supplying them a guide for understanding the artwork. As stressed by museum docents, the digital format allows access not only to wider

²⁵ Peacock Darren, *Building Digital Distribution Systems for School-Based Users of Museum Content: New initiatives in Australia and Canada*. In J. Trant and D. Bearman (eds). *Museums and the Web 2009: Proceedings*. Toronto: Archives & Museum Informatics. Published March 31, 2009. Last consulted on February 8, 2015: <http://www.archimuse.com/mw2009/papers/peacock/peacock.html>

²⁶ Peacock defines a learning object an autonomous entity which can be associated and combined in various ways to reach specific objectives of learning.

²⁷ This tool can be reached at <http://artnc.org/conceptMap/new/edit>. Last consulted on February 8, 2015.

materials, but lets you chose and integrate them with other elements and educational fields, experimenting different interpretations to works and collections. In some cases virtual experience can lead to organizing an actual exhibit, transferring into the physical realm the achieved methods and knowledge.

2.4.3. Research: the Virtual Cultural Heritage Projects

The need to develop applied technologies applicable to cultural heritage created a new field of studies on its way to become the meeting point between the museum world, academia and computer science: the **virtual cultural heritage**. The design research approach finds concrete application in this field (Buchman, 2001), a research applied to project design, involving a large network of actors from different educational fields.

The designing of museum digital media is a collaborative and multidisciplinary practice that often involves a large network of actors including directors, curators, educators, specialists of all sorts. (Mason, 2013)

This collaborative and multidisciplinary practice involves museum professionals (Directors, curators, educators) college professors and researchers, students in humanistic and computer science courses, technicians and designers.

The Media Arts and Sciences Department at Duke University can be considered a model of different disciplines and professionalism integration, collaborating to achieve Virtual Cultural Heritage projects. Among the projects developed by [Wired Lab for Visualizing the Past](http://www.dukewired.org/projects)²⁸ we can find the virtual reconstruction of places in the past (*Visualizing Venice*) actual digital maps and projects of augmented reality (*Augmenting Urban Experience*) and creation of digital archives and interaction interface with digital objects recreating the context (*Operating Archive*). Mainly in the field of cataloguing the processes of digitalization and visualization can lead to a totally new approach and partnership with Universities can greatly benefit museums, considering the

²⁸ For details on projects, see the website of Wired Lab. Last consulted Nov. 23, 2014 <http://www.dukewired.org/projects>

time available for research, the availability of researchers and the development of new educational fields²⁹.

On a different level, we consider collaboration experiences between researchers and professional to achieve research projects inspired by artwork to elaborate and recreate an historical, artistic and cultural context using multimedia language.

[Smarthistory](http://smarthistory.khanacademy.org/)³⁰ belongs to this field, it is an educational platform for art history with multimedia contents, and born in 2005 with the production of podcast self-guided tours for MOMA and the Metropolitan Museum in New York. This “multimedia web book” is open for contribution to other art historians who can create contents pertaining to their field of expertise but, differently from Wikipedia, it is reviewed and filtered by a scientific team: a tool, integrated into the changing course of academic institutions that, like museums, have been heavily influenced by the revolution in the learning process and by the way of producing knowledge. We can think about extending this model to other educational fields benefiting from the synergy between museums and academia.

2.4.4 Communications: the Development of Multimedia Applications

Concerning the modality and the channels used by museums to communicate their activities, offers and contents, the *open platform* approach can widen and alter the relationship with the world of communications which in turn is expanding its tools and operational fields.

The broadband expansion increased on line TV and radio broadcasts, allowing the users to see and listen to programs while in motion; at the same time broadcasters can reach users who could not use the service otherwise for being located out of reach of traditional service. These new access possibilities made room for new collaborations.

Synergy between the broadcasting world and museums can lead to the creation of new contents based on multimedia communication³¹.

²⁹ M. Roberts, “Howdy Partner!” *The Transformative Power of Museum-University Partnerships*. In *Museums and the Web 2013*, N. Proctor & R. Cherry (eds). Silver Spring, MD: Museums and the Web. Published January 30, 2013. Last consulted Nov. 23, 2014.

<http://mw2013.museumsandtheweb.com/paper/howdy-partner-the-transformative-power-of-museum-university-partnerships/>

³⁰ <http://smarthistory.khanacademy.org/>

³¹ L. Hansen, T. Golodnoff, I. Dehn and M. Lerkenfeld, *How to Ride the Digital Wave: a Collaboration Between Museums and The Danish Broadcasting Corporation*. In *Museums and the Web 2013*, N. Proctor & R. Cherry (eds). Silver Spring, MD: Museums and the Web. Published

The potential offerings from new technologies lead invariably to integration among different skills and create a new experimental field in communication through digital cultural resources.

A web radio believing in the opportunity to contribute to enhance the artworks, the natural beauty of the landscape of our national heritage is [Radio Magic](#). Born from an idea by Elena Rocco, researcher at the Management Department at Ca' Foscari University in Venice, Radio Magic is a platform made up by a web radio and a digital library with audio, video and texts for children and young adults aged 0 to 13 even with special needs. This project, which turned into a non-profit organization, received the Andersen Award for best Web project promoting culture and literature. It created a real collective treasure involving a tight network of subjects to be used for content materials. This “Magic Network” is made up by publishing houses, associations and foundations, museums and parks, kindergartens and schools, libraries and bookstores, pediatricians and experts, and national and international media³².

Collaboration with the media can stimulate museum to create audio and video materials reaching an audience otherwise unreachable through the release of other platforms. The widespread level of Digital Storytelling is very high, especially in the field of transmedia narration. The approach of Transmedia Storytelling (Jenkins, 2006) shows the ability of the new digital tools to circulate materials through different media platforms. Using different media formats, the user can create different “points of entry”, feeling totally immersed into the universe of the narration. This approach, applied in movie making, when pertaining to a museum could utilize the unique ability of the world of narrative to involve emotionally and to identify with the story.

Full immersion in a territory and its tales is a common objective that museum directors can share with the players developing new tools of fruition. Receptive structure can benefit from the materials museums handle and develop, enriching their services with quality offerings, highlighting culture. The museum platform contents could be shared with tourist promotion sites and hotels, offering a more complete service for the local culture.

This synergy can intensify to reach levels of co-production of multimedia applications that, starting from the natural and cultural heritage, lead to the discovery of the surrounding territory. The museum’s cultural resources can become the starting point to create cultural itineraries, city

February 1, 2013. Last consulted Nov. 23, 2014: <http://mw2013.museumsandtheweb.com/paper/how-to-ride-the-digital-wave-a-collaboration-between-museums-and-the-danish-broadcasting-corporation/>

³² A listing of the museums and parks members of the network of Magic Radio is available at <http://fondazione.radiomagica.org/rete-magica/musei-e-parchi> Last consulted January 22, 2015.

games, and other applications offering deeply emotional interactive experiences of a travel destination.

2.4.5 Marketing: Digital Publications

The possibility to integrate exploration of the materials with event registration, ticket purchase and museum products (books, gadgets, games and multimedia applications) is standard practice in several museums, mainly at the international level. The more innovative examples in the field are great American museums like MOMA and the MET, whose digital influence *plans to become the widest in the world*³³.

But museums can also draw on the potential of e-commerce to start a co-production process with the realm of business and design.

An interesting example is MOMA, which started a true publishing venture, averaging 25 books per year. Of relevance is the children series, a remarkably growing sector reflecting the educational methods and the philosophy of the education department³⁴. Still partially explored is the field of digital books and digital learning that could channel the contributions by the museum's education staff and from the digital publishing companies.

³³ See the article *The Met Plans To Become The Most Digitally Influential Museum In The World* (<http://www.businessinsider.com.au/digital-strategy-at-the-met-2014-9>). Last consulted January 22, 2015.

³⁴ From the interview by Sole24ore with Charles Kim, Associate Publisher of MoMA (<http://www.ilsole24ore.com/art/cultura/2014-06-13/il-moma-punta-editoria-ragazzi-ampliare-orizzonti-bambini-ma-anche-loro-genitori-092838.shtml?uuid=ABzIsjQB>). Last consulted January 22, 2015

CHAPTER 3

THE CASE STUDY:

THE TERRITORY OF CORTINA D'AMPEZZO

The Museum can help people only if they use it; they will use it only if they know about it and only if attention is given to the interpretation of its possessions in terms they, the people, will understand.

John Cotton Dana, 1909

3.1. A Territory to Be Activated

3.1.1. “Driving” Change

We have seen how adapting to the context is necessary to the proper survival of an organization. But in this process of adaptation, the organization affects the very environment it operates within. It is a self-feeding continuous loop: external pushes affect the demands and opportunities an organization must face, but it is the way these pushes are interpreted that determines the course of its development. Especially since the pushes must be anything but univocal, including stimulus for change as well as opposition.

As to museums, a resistance to change is generated by the traditional vision existing within the institutions themselves; but equally interesting is the one represented by the static and exclusively conservative conception by many people about these places and rooted in the collective imaginary thanks to the experience of the traditional museum.

On the other hand, the context affects and promotes the adaptation of the offer by a museum to the new sensitivity of fruition and to the instruments available to satisfy it: suffices to think of

the technological developments and the new relationships they establish in social habits, and of the aspirations to participate resulting from different audience segments and, last but not least, to the example of other museum institutions on their way to renewal.

The choice by museums to develop and give a shape to these impulses contributes to widen the horizons and the imaginary of the social context well beyond the boundaries within the operational scope of the organization. Therefore, in the presence of a push to change, the response ends up being a catalyst to an additional outpouring of reactions affecting and driving the push itself.

The strategy, intended as a way to interpret the environmental pushes and consequently its own role, must not be applied just to adaptation, but must also contribute to define the breath, direction and borders of a development involving the whole territory of reference.

In fact, no organization operates by itself, but within a *territorial system* made of resources, players and interrelated and interdependent activities. In order to detect the direction of development of a territory as a whole it is therefore necessary to face the collective dimension of the strategic action.

Supply systems are formed thanks to the strategic choices of the actors making them up, who de facto modify the context, therefore the conditions they operate with, by promoting or joining them in a more or less significant way. (Tamma, 2011)

When adopting an approach of this kind, every territorial player must face the capacity of a place to express a coordinated medium to a long term line of development, to warrant its sustainability and competitiveness. As this is a complex and articulated process, quite often there is an emergence of the need to identify an object capable of assuming the role of involvement and participation guidance. The context conditions are numerous; and so are the players, internal and external, who must be mobilized and coordinated. The function of *metamanagement*, which much of the literature identifies, can turn out to be essential to developing an overall strategic line, to managing relationships among players, and to promoting a favorable social and cultural context, specially for tourist destinations.

In light of this analysis the possibility emerges that a cultural institution - in this case the museum - can shape up as an instrument capable of gathering the players of a territorial system

around its development, triggering a change spreading beyond the borders of the organization itself. But what are the conditions so that this guidance role may materialize and this change may grow and consolidate, overcoming any inertia and resistance?

For this to happen the first condition is that at territory level there must be **a latent potential for change**, amplified by a state of crisis, or a standstill hiding the requirement for renewal. To respond to such unvoiced requests there has to be a second condition: **the adoption of an innovative behavior** capable of realizing the opportunities given by the new technologies. The revolutions in the processes of communication, production, and diffusion of knowledge identified at world level and analyzed in Chapter 1, constitute per se a fertile ground on which a cultural institution can trigger change. Most times internal creativity and planning are a guarantee for innovation, but to sustain itself and to consolidate, there is need for one more condition.

An organization must have the capacity of **becoming a critical mass**, i.e. mobilizing a sufficient number of players capable of aggressively converging the interests and resource of the other players of the territory in a progressive and cumulative fashion.

This because when taking action individually the possibilities are very limited, while they increase noticeably if we are able to activate a sufficient critical mass of “partners”, involving in our strategic project other businesses, the users, and the institutions. (Tamma, 2011)

The case study analysed in this chapter demonstrates that, if these conditions occur, a museum can be recognized as one of the reference points for collective actions of cultural kind, contributing to influence the direction of local development.

3.1.2. A Project to Act on Context

This chapter is dedicated to the project developed as part of this thesis, allowing a museum institution to trigger a series of change processes within the territorial system it is laid in. The engine of this process has been the introduction of a technological innovation which has attempted to realize the main instance brought by the digital revolution.

The choice to analyze the fall-out a specific project can cause on a territory has generated from the assumption that in order to understand in full the evolution a cultural institution can drive, it

is necessary to drop it into its reference context. In the case of Cortina, all three conditions analyzed in the previous paragraph are popping up. *The first condition* shows up in the latent request to find again a sense of *place identity* (Haven-Tang, 2008, pages 25-26)¹ by a portion of the resident population. This term signifies that set of distinctive features which makes a place unique on earth, creating a tie of belonging to the territory. The process of identification of these elements being subjective, it can evolve with time in the individual and collective perception: in this context the awareness of the natural and cultural resources in their material and immaterial manifestations plays a fundamental role. In the case of Cortina, the territory may count on a vast and multiform heritage - environmental, landscape, artistic and ethnographic - yet which the community is fully aware of². A heritage also protected and valorized by the uniform management of a natural park and three important museum realities by a collective institution with a millennial history³. Under the impulse to extend the fruition of their collections addressed to different audience segments, these three museums in the past several years have shown potential for becoming key locations in the rediscovery process of their own distinctive features by the communities.

An innovative approach has been undertaken to respond to the requirement of rebuilding the sense of *place identity* founded on the heritage, thus satisfying the *second condition* needed so that a cultural institution can perform an efficient action during its journey toward change.

The evolution of the practice and sensibility bound to the cultural fruition in the digital era has found fertile grounds even for local application. The museums in Cortina have understood the opportunities given by these pushes, developing a platform, MQUADRO, with the objective of widening the depth and the range of experiences when visiting, of receiving contributions by

¹ Haven-Tang and Jones define the meaning of “place identity” as follows: *It may refer to a set of personal, family, and community stories which include features of place creating an attachment to a place, or an embedded body of knowledge about a place – history, legends, geography, geology, flora and fauna; or a feeling that communities and people are special and distinct from anywhere else – non-material characteristics which create the “soul” or “spirit” of a place. Ultimately, a Sense of Place embraces everything that is unique and distinctive about a place – special and memorable qualities that resonate with locals and visitors.*

² For a more detailed analysis of these issues surfacing from the interviews with the presidents of the Regole d’Ampezzo, please refer to the enclosed annexes.

³ The Modern Art Museum Mario Rimoldi, the Paleontological Museum Rinaldo Zardini and the Ethnographic Museum of the Regole d’Ampezzo are part of a museum hub managed by the Regole d’Ampezzo.

different cultural players and, as a whole, mediating the diffusion of a new idea for the making of culture.

Because of their capacity to be involved in outstanding themes for an individual or a community the museums in Cortina have demonstrated their capacity to satisfy also the *third condition*, i.e. to start to harvest a critical mass, by inviting other realities to participate in the process of change. Add to this the fact that the professional resources and the competences internal to museums show levels of creativity and planning which warrant the continuation, with time, of renewal itself. But it is evident that these energies, in order to become determining in changing the practice and the mentality of an institution and in mitigating resistance and opening new perspectives to the social context benefiting from this, must be accompanied by a network of sustaining subjects, relationships and activities.

In the case of the museums examined here, the excitement and the curiosity generated by the renewal of the cultural offer⁴ have succeeded in mediating the receptivity of the audience toward new proposals of fruition. These initiatives have been progressively affirmed in the local context, turning the museum into one of the most dynamic players of the territory, open to innovation in the field of educational and cultural activities.

Moreover, the ever more extended participation of museum educators, teachers, students, and of families and children, together to the involvement of agencies and associations of the territory (such as schools, the consortium for tourism promotion, City Hall, the Regional and the Province administrations, the banks, the hotel operators, the merchants and the artisans) represent already per se the starting base toward the formation of that referenced critical mass. The presence of the platform can consolidate and extend this network of relationships, triggering a series of chain reactions that can change the way of conceiving the cultural and tourist offer of the territory.

Proposing a new way of living the museum and the heritage included within suggests implicitly a new way of experiencing the territory, of discovering and getting to know it. This is particularly valid when the destination, as in the case reviewed herewith, has a tourist vocation.

⁴ Since 2011 the Museums of the Regole have been proposing very rich and diverse programs, from events for adults (such as conferences, concerts and roundtables) to labs for children, together with a series of didactic courses for schools of any kind and level, establishing by now a consolidated education offer.

Before proceeding further it is therefore necessary to map this context, identifying which are the structural (subjects interacting directly with the organization, the institutional assets inherited from the past, the practices, the system of resources, meanings and representations forging relationships and themselves in a state of evolution), and dynamic elements (the pushes, resistances and pace of change) becoming significant when explaining the environment and its evolution.

3.2. Structural and Dynamic Elements

3.2.1. The "Queen of the Dolomites" is Moving on

The reference territory is Cortina d'Ampezzo, a mountain resort mainly tourist by vocation, located in Northern Italy and at critical crossroads in its development process tied, not coincidentally, to a strong identity crisis.

And it is precisely from its history that it is necessary to start from, in order to clarify the subtended and manifest dynamics characterizing the context where the Museums of the Regole are inserted.

As in every mountain locality, the difficulties of mobility have contributed to develop a peculiar culture, marked by an outstanding aspiration to autonomy and a strong perception of its uniqueness. Some of the effects result in a political and economic autonomous administration and a subtended distrust in external intrusions and stimulus, tending to open and make available the wealth of the heritage beyond the valley's original basin.

A certain difficulty therefore looms for the cultural and artistic players operating in this context in carrying out innovative courses or changing the modalities of operations. The attachment to the territory proper to the mountain regions is another element of resistance to change, precisely at a time when this change proves to be necessary for a regeneration of the locality, which has a need to rethink how to make tourism and to rebuild its identity.

In the complex and branched out plot between economic pushes and cultural legacy, today Cortina d'Ampezzo does not benefit from a unitary and shared strategy to develop its offer

capacity neither from within nor from its relationship with neighboring towns, which are still viewed with a latent yet efficient perception of otherness.

This reality still uncertain as to the course to be taken is divided between aspirations of change and the safety of a past of glories by now declining. The "Queen of the Dolomites", an oasis for exclusive vacations and destination of that mundane tourism that climaxed during the 1956 Olympics, has not yet faded in the hearts and the imaginary of many residents and tourist operators. And, although there is a widespread awareness that it is necessary to rethink the means as well as the aims of the tourist offer, this awareness has not produced a coherent and, above all, shared plan of development. This situation of turmoil and restlessness represents a further obstacle to change, as every instance must face not a well defined development paradigm, but a diffused feeling of uncertainty which sees in any possible development a further element of confusion and distraction away from the standards of the past.

Cortina's community today has already changed under certain aspects but, without a clear direction of the change, it is struggling in finding a clear and recognized identity, which should be founded on the awareness of its own uniqueness. Such identity can but derive from the interaction of two views: from within, coming from the culture of the mountains, with a centuries-old history of collective management of the territory, and from without, coming from the world, which has given this locale a broad and cultural opening. Such a delicate intellectual liveliness could be experienced next to such persons as Mario Rimoldi and Dino Buzzati, and in more recent times it keeps bringing back to Cortina important players of the artistic, literary and political arena⁵.

These are positive elements of change which should help to counteract the disappearance of agricultural-forestal-pastoral activities, the transformation of the traditional rural architectures into secondary residences, and the decrease in population caused by the price increase in housing.

A development founded on the identity of this locality would respond to two different and strictly interconnected requirements: on one side to respond to an ever more conscious tourist

⁵ Numerous cultural events starting from the forties have succeeded one another until the creation of the Artistic Club (from 1950 until the sixties), a proper cultural center organizing exhibitions, concerts and painting contests. In more recent times the cultural offers in Cortina have found many reference points thanks to numerous popular events such as *Cortina Encounters* (from 2001 to 2012), *A Mountain of Books* (since 2009), *Cortinametraggio* (1997 to 2000, then since 2010), *the Dino Ciani Festival and Academy* (since 2007), *Cortina InCroda* (since 2009), joining the events of the Museums of the Regole.

demand, searching for a deep contact with the culture of a territory, and on the other to center a community around its roots.

To identify the direction of change it is therefore necessary to restart from yourself: rather than wondering what is being required by tourists, one should ask what do the residents of this territory want, what are their behaviors, and which needs do they convey; and above all how they perceive their identity. Instead of a *user-oriented* approach, a *resource-oriented* is suggested, including all natural, physical and socio-cultural aspects allowing the development of one's own distinctive features. Only the active involvement of the local community in this regeneration process can convey a sense of *place identity* also to visitors: because what is known and perceived within a locale is continuously built and mediated through interactions with others (Haven-Tang, 2008, pages 25-26).

This analysis shows how the offer capacity of a territory (not just for tourism, but in a broad sense) is strictly connected to its management, which is influenced by its own history and culture.

The cultural heritage, far from communicating by itself and for itself, must instead be set, organized, diffused and inserted into the Net, being aware of its value. The players of this system must be aware of the importance of their communication and management⁶. This is even more valid when considering the nature of *community based* destination Cortina possesses, in which *ownership and control of resources and tourist activities are divided among a multiplicity of diversely specialized, interdependent yet autonomous players* (Tamma, 2011).

Under the aspect of this heterogeneous set of players, the history of this locale is characterized by a subject who has been able to embody some key functions for the management of the territory, curbing an exploitation out of control and driving its development while respecting its environmental properties: it is the Regole d'Ampezzo, one of the first systems of collective property recognized by the Italian State⁷ and operating de facto as an autonomous structure of government.

⁶ According to scholarly analysis, Cortina d'Ampezzo is included in a *community* destination where the tourist offer and its direction of development emerge from the set of choices of the individualities as well as the dynamics of relationships generating from different stakeholders of the territory.

⁷ In the past fifty years many steps were required to get the Regole d'Ampezzo to obtain full recognition by the Italian State: the reference to autonomy and ancient customs, with Law 3991/52; the recognition of legal private entity with Law #1102/71; the Law of the Mountains #97/94, which kicked off to a rebirth of feelings related to the Regole even in other valleys, where they had disappeared centuries ago; and the various regional laws and the institution of the Natural Park of the Dolomites under the administration of the Regole since 1990.

Numerous features make this institution a potential point of reference that could guide the evolution of the locality, thus giving value to its peculiar characteristics.

Its millennial history, rooted back to the tenth century and formalized with the compilation of the first statutes in the fourteenth century shows its capacity to maintain its independence in spite of economic, historic and social changes, following the development of the locale from the first settlements of a rural nature to the development of tourism, at first thanks to mountain climbing, then with the arrival of winter sports activities⁸. The century-old experience of collective management of the territory allowed to keep a balance between natural resources and human intervention, keeping in check an out-of-control urban development. A balance which has kept intact the environmental peculiarities and the extraordinary features of the landscape, whose beauty has inspired and continues to inspire artists, scholars and writers.

Precisely by virtue of this function performed for centuries, in 1991 the Veneto Region has trusted the Regole with the administration of the Natural Park of the Dolomites of Ampezzo, a unique case in Italy of a regional Park managed by an autonomous agency⁹. And for the same reason the Regole have been given numerous donations and consignments by collectors, families and researchers who have seen a guarantee of stability in this agency. This cultural heritage has grown with time and today includes three museums: the Museum of Modern Art Mario Rimoldi , created in 1974, the Rinaldo Zardini Paleontological Museum, born in 1975, and the Ethnographic Museum of the Regole d'Ampezzo, officially inaugurated in 2011.

In conclusion, the Regole -in the institution per se, in the Park of the Dolomites of Ampezzo, and in the museums - are keepers of the most ancient and tough cultural heritage of community, the material and immaterial basin from which the change toward the future can be built by starting from the past.

⁸ During the thirties Cortina was one the the top mountain resorts in Europe, with the first Italian skiing school (1933), and thanks to the Winter Olympics of 1956 it became the first winter sports resort in Italy.

⁹ The Natural Park of the Dolomites is the only case in Italy of a regional entity managed directly by a Community of the Regole, an agency private in nature being given recognition because of its tradition of a consolidated environmental administration.

3.2.2. Commons in Cortina

Before the advent of *white gold*, i.e. snow industrialized by ski tourism, Cortina was a sober place, spartan, independent and extremely united internally. And it was ruthless, in excluding anyone not belonging from exploiting its collective assets . This past, unlike others, is neither mythological nor idealized, but is still alive, materialized in a centered institution of the territory: the Regole d'Ampezzo. Today this ancient institution represents, perhaps in a more accomplished way than any other reality, the spirit of Cortina and the contradictions shaking it up.

The attention that the recent discipline of the *commons* reserves to the forms of collective property leads to a very meaningful case study about the Regole d'Ampezzo. In fact this institution not only is the first one to have been established as an autonomous juridical entity (Lorenzi, 2002), but the broadening of the functions during the course of its particular historical evolution has brought it to be identified as a model of self-governing of common resources.

The systems for the collective management of some territorial resources can be found in many variants and denominations (*regole, neighborhoods, participations, consortiums*), in several areas of Europe, and, mainly, in the mountains.

Their very ancient birth goes back to the need for survival under hostile conditions having been the base for a social agreement founded on sharing and solidarity. The ancient residents of the valley had understood a fundamental concept: to live in a difficult environment, it is necessary to stay united and collaborate. This requirement has lead to recognizing the resources of the territory as one property of the whole community, identifying them as those from which the family could find sustainment: at first the feeding grounds for cattle, then the forests for the sale of wood.

The way of governing of this extensive common resources has been passed on for centuries until it found a written expression in the ancient “Laudi”, which formed the base of the current statutes. The “Laudo” is a very important source to understand the system of *governance* of the Regole: it sets the norms of Regole life, qualifies the administrative bodies and their functions, provides for the kinds of activities that can be undertaken on the territory, and sanctions the

rights of ownership. The collective property is in fact closed, because only the descendants of the original residents of the valley can be a part of it, and the right to be a member of the Regole (a “Regoliere”) is handed down by inheritance.

In the case of Cortina the rules that the residents have given themselves to manage the territory have become the name itself of the institution which has also a legal identity: the Regole d'Ampezzo are de facto an autonomous body with a legal and administrative venue in the Ciasa de ra Regoles¹⁰, an ancient eighteenth century building, centrally located in Cortina. Of these millennial collective administrations, the Regole d'Ampezzo have been the first ones to be recognized by the Italian State, after a harsh fight in the attempt of keeping their autonomy¹¹.

Another aspect making the Regole a unique case of *commons* is the fact that it was granted the administrative responsibility of a regional Park and a museum hub gathering the artistic, historic, scientific and social vision of a territory that has a lot to tell, even about itself. The three museums of the Regole, which are true centers of aggregation, entertainment, formation and research, can and must have a key role in increasing the awareness of the multiplicity of values that this territory encloses.

As disclosed in the interviews, the guarantee of indissolubility and inalienability of the resources of the forests and meadows has allowed to identify in this self-governing form a solid cultural keeper of the cultural heritage of the territory; a wealth finding its full expression in the three important collections the three museums are safeguarding.

The first one, the arts, has been declared by the Ministry for Cultural Assets one of the most important sets of twentieth century in Italy, because of the presence of masterpieces by authors such as Alberto Savinio, Fortunato Depero and Renato Guttuso, together with other core works essential for studying Filippo de Pisis, Mario Sironi, Giorgio de Chirico, Massimo Campigli. The museum was born in 1974 thanks to the donation to the Regole d'Ampezzo of 364 works of collector Mario Rimoldi by his widow, Ms. Rosa Braun. With time, hundreds of other works have been added to this first core set, thanks to donations and bequests.

¹⁰ The building has been the seat of the institution since 1957, the year of transition with the City of Cortina, which conceded ownership of about 80% of the territory to the Regole. Presently it hosts the Museum of Modern Art Mario Rimoldi (first two floors) while at ground level, reserved for exhibitions and cultural events, there is room for an information office of the Dolomites of Ampezzo and the Alpine Guides of Cortina.

¹¹ Italy, with the law dated 12/3/1972 #1102, art. 10-11, has granted the Regole d'Ampezzo, and many other similar situations spread over the Alps and the Apennines, incorporation status by private law, and the freedom to manage itself autonomously according to its own “Laudi” statutes.

The Paleontological Museum Rinaldo Zardini was inaugurated a year later, in 1975. It holds one of today's most substantial collections of fossils, a precious testimonial to the geological and morphological evolution of the territory. The specimens collected by the researcher from Ampezzo in the area of the Dolomites surrounding Cortina have been meticulously catalogued. Over the years even this collection has been enriched thanks to other enthusiasts, who have uncovered more new and precious fossils, including plants, until the exceptional recent discovery of the most ancient organism included in amber, found in a drop of resin by collector Paolo Fedele. The interest for this collection has grown ever more and scholars from all over the world have been visiting the museum which today is part of a network of prestigious universities.

After a series of exhibitions on objects and traditional activities that during the eighties and nineties would take place at the Ciasa de ra Regoles, in 2011 the Ethnographic Museum was created to tell the story of the Regole through a modern layout.

The purpose of the exhibition is to explain how, standing behind a landscape of woods and pastures which anyone can admire, there are century-old choices made by past generations; how collective property in the past has been the essential source of means of survival for the Ampezzo community; and how this institution, still given recognition at present, is still valid and in continuous operation.

The new competences as to environment and culture have offset the loss of economic relevance of the agricultural-forestal-pastoral heritage which once used to be the only source of sustainment of the community.

In fact, even a solid and millennial reality such as the Regole has been taxed by changes in the world. The advent of tourism has radically changed the productive system, opening new economic perspectives also for the Regole; consequently, the sale of wood and the pastures for cattle could not be sufficient to sustain the operations of the structure. Although still within the parameters of inalienability and indivisibility of the territory¹², the activities have necessarily been oriented toward a tourist use of the territory, through construction of alpine shelter buildings, setting up ski slopes and lifts, and offering also agricultural tourism with dairy farms and stables¹³.

¹² The *ancient patrimony* is comprised of the chartered assets defined by the "Laudo". Destined to the work and entertainment of the member families of the Regole, they are forever deeded, inalienable and indivisible.

¹³ LORENZI S., *The Regole d'Ampezzo Toward a New Economy*, published on nr 48 of the *Ciasa de ra Regoles* newsletter, Nov. 1997

European Union and regional contributions have been added to these new sources of income, thanks in particular to being assigned the administration of the Park, guaranteeing a solid annual funding by the Region for activities protecting the environment.

This economic independence has allowed to grant autonomy to the cultural planning of the Park, which has a budget separate from the Regole. This is not the case for the other formative and social initiatives undertaken by the institution, which are seen mostly as a cost. From the interviews to five presidents of the Regole with terms from 1991 until present, it ensues however that the Park as well as the Museums have met with opposition. But while the former by now is an integrating part of the core of the institution - reflecting its main function of environmental protection - the museums are not perceived as mirroring the spirit of the Regole. In spite of the fact that each one of them is the keeper of material and immaterial wealth which, should it ever be organized systematically and diffused and set on the web, could become a propulsive factor for the development of the locale, nonetheless most members of the Regole do not consider them a potential resource, even economically.

The three museums of the Regole do not exhaust indeed the cultural complexity of the territory's texture; but for being the only museum institutions of the town and for being an emanation of the institution that for centuries has safeguarded and protected the landscape, they can take a leading role in guiding the community in becoming aware of its own *place identity*. This above all by virtue of the human potential allowing them to operate, thanks to the network of cultural operators gravitating around various disciplinary areas and their role as mediators between heritage and community. It is an important sensitivity that could grow and be set as a system, increasing the awareness by the Regole administration of the communicative and identity value of the museums and the individuals working for them, and turning them into living and talking entities.

The introduction of new purposes - educative, cultural and participative - of new techniques and technologies; the opening of the community's cultural heritage to a more extensive community; the diffusion, within the community itself, of a different awareness about how to use that heritage and how many immaterial implications it effectively includes; the vision of how that same patrimony can become a sustainable resource for the development of tourism and the welfare of the residents: these are all the themes and difficulties met by the activity of the

museums when broadening their boundaries and the opportunities for fruition, mirrored within a wider debate on the future of Cortina.

The challenge the museums of the Regole are facing is about strengthening the connection of its members with the cultural heritage of the territory, pushing them to discover it, to get to know it, and to experience it in its new components in addition to the ancient ones. And an even greater challenge is to mediate the belief that cultural resources, because of their particular nature as assets of knowledge, are in need of access and utilization rules differing from those used forever by the community to manage its natural resources, which have guaranteed the protection of the landscape to future generations.

3.3. Extending the Access

3.3.1. An *Open Access* Resource

As observed in the interviews to the Presidents of the Regole, the term “culture” within the Regole environment is a wide concept which includes, in addition to the ethnic and linguistic heritage, the protection of the environment and the tradition of sustainable management of the territory.

This is a management model which is first of all a mentality, a way of participating to social life and to the territory:

Collective ownership is never just a juridical nor just an economic instrument; it is something more, and it needs to draw from a world of values, to root itself in a way of feeling, conceiving and realizing social life and the relationship between man and cosmic nature. (Grossi, 1993, p.7)

With the disappearance of the direct ties between resources and sustenance, this direct relationship between the individual member of the Regole and proprietary territory has weakened, with fewer occasions and reasons to experience it. At the same time, the heritage of the Regole has grown, and has become more diversified and complex. Nethertheless, the

interviews reveal that cultural values driven globally by the Regole are not perceived by the member themselves as a common asset typology different from the one previously internalized. The reasons for this can be found in the particular immaterial nature of this category of assets, defined by recent literature as *new commons*.

Academic research on common assets, which politologist Elinor Ostrom¹⁴ is one of the greatest experts on, have had a noticeable expansion starting from the second half of the eighties in the twentieth century. While at the beginning the traditional *commons* have been the main object of research, starting with the nineties the focus of the analysis has extended to *non traditional commons*, exploring new application fields. With the progress of research it is understood that within the wider category of *commons* are located not only the “collective property” - for which ownership rights are therefore assigned to a specific community - but also the common assets of knowledge, tied to *open access* and to the development of digital technologies.¹⁵ *Common Goods* today is a wide category, including subsets within which are heterogeneous.

In a common asset the resource can be small and of use to a limited group (the family refrigerator); it can lend itself to being used by a community (sidewalks, playgrounds, libraries, etc.), or it can reach internationally or globally (sea bottom, atmosphere, Internet and scientific knowledge). Common assets can be well defined (such as a public park or a library), they may cross boundaries and borders (the Danube river, migrating animals, the Internet) or they can be without defined borders (knowledge, the ozone layer). (Ostrom, Hess, 2009, pp. 5-6)

Therefore, based on the definition of commons as identified by Ms. Ostrom¹⁶, culture, tangible as well as intangible, and inclusive of learning and territory management modalities, is part of this category with specifications conditioning its access and fruition. In this regard a basic difference

¹⁴ Elinor Ostrom (1933-2012), American economist, on October 12, 2009, has been awarded the Nobel Prize for Economy, together with Oliver Williamson, for her analysis of governance, and in particular of common resources.

¹⁵ The international association undertaking the studies on collective properties changes its name to *International Association for the study of the Commons*, with the importance of understanding again, and at the same time differentiating, the various typologies of *commons* in a common universe, no longer solely related to natural resources.

¹⁶ Ms. Ostrom defines “*commons*” *a resource shared by a group of individuals and subject to social quandaries (i.e. queries, controversies, doubts, disputes, etc.)*.

between common assets of knowledge and traditional common assets surfaces: open access, in either case, has fully different meanings and effects .

For traditional *commons*, *open access* - i.e. the lack of rules to access and utilize a common asset - may lead to overexploitation and end up in the physical destruction of the asset¹⁷. The common assets of knowledge, on the other side, as they cannot be taken away, cannot get damaged or destroyed by an access free of restrictions by the community of users. The possibility to access knowledge for free and without restrictions generates individual and collective benefits, which increase as the quantity and quality of interactions grow. Knowledge, unlike natural resources, is a non-excludable and non-rival asset: while utilizing a quantity of wood detracts its use from others, to acquire knowledge about something does not subtract the same possibility from others; on the contrary, it multiplies it because it becomes more valuable with interpretations and perspectives. There never is a danger of overexploitation as in the case of natural resources.

The complex nature of this resource inserts in the Regole a principle clashing with the one which has been driving conservation and environmental protection for centuries: in this case, it is the opening to fruition, to the restricted access, the assumption for the enrichment and the valorization of this common heritage.

3.3.2. A Communal, Personal and Universal Heritage

The push to accessibility coming from the realm of museums in general, and realized in the *AdMuseum* project which has supplied the favorable context to create the MQUADRO platform, clashes with a mentality tied to a different conception of the common good. The members of the Regole are used to regard as common resources only natural and environmental ones. As such, these are limited in quantity and quality, and to be properly managed and conserved requires exclusive access rules. But, as stated, the cultural heritage is a collective resource whose value increases as its sharing increases: consequently, it become necessary to reinforce its access.

¹⁷ By “tragedy of common assets” we mean a situation described by Garrett James Hardin in the article *Tragedy of Commons*, published in the Science magazine in 1968. According to Hardin, the problem of conservation of common assets is in their free access, and there is a dramatic tension between freedom of individuals and destruction of the common resources which survival of the community depends upon.

How can this mentality be changed? How to create an understanding that the cultural heritage is a common resource, like woods and pastures, getting the community to use it, participate in it, and open it to the external world?

The digital revolution can play a decisive role. With the advent of the Internet and the new social media platforms, the chances of sharing common knowledge at a universal level have grown. The platform is an instrument allowing to spread a new conception of common good, passing from the “community” logic about closed borders (product of the relationship of a limited community with those assets allowing its survival, or historically *belonging* to it) to the “universal” one with undefined borders. As noted by Stefano Rodotà, “*it is the logic of “the common”, not of “the community”, which founds the space of common assets, ever more global*”¹⁸. The “logic of the common” refers to the probe about how and why certain assets represent the tie with a specific community, while others must be shared by everyone, with only one possible meaning: of “human community”¹⁹.

Specially in the United States, the paradigm of common assets is presented ever more often as new and disruptive, economically, politically and culturally, as an alternative both to liberalism centered on private property and to neo-statism oriented to the centralized control of resources²⁰. The school of thought of the commons allows to introduce a new series of values and instruments to manage the resources of knowledge in more efficient and equitable ways. It is not a coincidence that the academic and scientific world and the creative communities have been the first ones to recognize its value, identifying it as a governance model. It is not a coincidence that the movement of the commons is particularly present on the web, which by nature is the realm of *open access*²¹: *de facto, peer production*, analyzed in Chapter 1 (collaborative sites, *peer-to-peer*

¹⁸ S. Rodotà, *Common Assets: a Global Strategy Against Human Divide*, in *Beyond Public and Private*, M. R. Marella (care of), Verona, Ombre Corte Ed., 2012.

¹⁹ This connection corresponds to the fusion between *individual interest* (in the specific case of the community of the Regole: community interest) and *general interest*: the conservancy and the improvement of assets, though representing certainly an interest of the members of the Regole, refer without doubt to a wider collective interest.

²⁰ David Bollier, one of the best known American activists of the movement and founder of the website Onthecommons.org has presented in various essays the theme of common assets as the pounding heart of a new economic, political and social paradigm.

²¹ In the Berlin declaration some fundamental concepts about open access are mentioned: *New possibilities of knowledge dissemination not only through the classical form but also and increasingly through the open access paradigm via the Internet have to be supported. We define open access as a comprehensive source of human knowledge and cultural heritage that has been approved by the scientific community. In order to realize the vision of a global and accessible representation of knowledge, the future Web has to be sustainable, interactive, and transparent. Content and software tools must be openly accessible and compatible.*

sharing of knowledge, freeware and *open source*), replaces the logic of profit and exclusion with one of gift and sharing; this without giving up economic efficiency which ends up being improved by the free contribution of the participants. A free software, unlike a “proprietary” software (such as Windows operating system), is released with a license allowing anyone to use it and encouraging research, modifications and redistribution. In *open source* systems, the source code is left open and available to potential developers so that with free and spontaneous collaboration the final product may reach a higher complexity than what could have been accomplished by a smaller programming group, and at a markedly lower cost. As with culture, sharing and collaborating increases our knowledge.

However these examples about the software community demonstrate that the open access at universal level made possible by technologies does not imply the absence of a mechanism of regulation of access and utilization of the resources. One of the features of the traditional commons in fact is the presence of a government structure setting up rules allowing participants on one side to benefit from the resource, and on the other to preserve its quality in the long term. The nature and content of these rules for “authorized users” are subject to change, but it is up to the community in charge of the resource to outline them. From Ms. Ostrom analysis we can identify three different levels in the management and utilization of the digital resource: *users*, who can benefit from it whenever and from wherever; *providers*, who make content available, together with programs and navigation infrastructure; and *policymakers*, regulating the utilization of the resource and defining access and contribution policies (Ostrom, Hess, 2009).

In the case of the Regole d'Ampezzo the digitalization of the cultural heritage may open new forms of access and participation, operating on three distinct levels, yet strictly interdependent and correlated. The platform has the dual target of gradually changing the management mentality by mediating the diffusion of a different philosophy and fruition modality.

But in order to do this it is necessary to contemplate a different set of rules of access no longer founded on the exclusivity of belonging to the territory, rather on the interest and willingness to be part of a cultural, or else patrimonial, community in accordance to the concept developed at the Faro Convention²². A change in paradigm, transforming de facto the heritage from object into society project:

²² The heritage community consists of people who value specific aspects of cultural heritage which they wish, within the framework of public action, to sustain and transmit to future generations.

The cultural heritage is a group of resources inherited from the past which people identify, independently of ownership, as a reflection and expression of their constantly evolving values, beliefs, knowledge and traditions. It includes all aspects of the environment resulting from the interaction between people and places through time²³.

It is important to underline *independently of ownership*: be it a person or a community to be called to manage the heritage, as with the case of the Regole d'Ámpezzo. This is going to be the true difficulty to overcome. The community of the Regole is getting the call to answer this instance, allowing the heritage of the community to become universal, available to all those who recognize it a part to their identity.

For this to happen the assumption is to recognize cultural value as wealth for the individual ahead of the community. During her years as president, Cinzia Ghedina²⁴ has noticed *the difficulty to get the individual member of the Regole to understand the importance of his history, of traditions, of everything represented by the museums, but first of all for himself, as a personal wealth rather than economic and as a value to diffuse.*

It is an important change in mentality, and for this to happen is requires strong technological innovation channeling the new modalities of aggregation and socialization brought by the internet. This is the deep meaning of MQUADRO. This platform wants to be the instrument through which the museums can be made places where you can recognize yourself as being part of a community, not because you simply belong to a physical location, but because you know, you recognize and you build your own heritage.

3.3.3 Cultural and Territorial Accessibility: the AdMuseum Project

²³ European Council - Framework convention of the European Council on the value of cultural heritage for Society (CETS #199) 03/18/08, Faro, 27 X 2005

²⁴ President of the Regole from 2008 to 2011

The [Interreg IV I-A “AdMuseum”](#) program originated precisely from the belief that a cultural accessibility project can contribute to improve the territorial reality in which a museum is inserted and be a resource for economic growth.

The culture, the exchange of experiences, the professionalism and the services aimed at the community with an inclusive approach contribute not only to improve the quality of life of the individuals living within the area of the project, but may also become a resource of economic growth²⁵.

In each of the objectives of this project (*to initiate cross-border and scientific diffusion research projects, to open the dialogue between museums and accessibility, to consolidate cooperation, to adopt instruments to evaluate accessibility*) there is an implicit intention that the museums be a place where you can compare the usability of the territory, viewing them as *key locations* for the local community as well as a in a wider sense. This is only possible by systemizing the experiences of professionals accrued in each museum reality of the territory, generating dialogue among them, thus forming a *transborder network* accruing the value of the museum realities and of the whole territorial system they refer to.

The way of intending the theme of accessibility by its creators corresponds to the one analyzed during this research, because it puts an emphasis not only on the physical but on the cognitive aspects as well:

The aim is to elevate the fruition standards of the museums in terms of access to the location as well as accessibility of the cultural contents of the assets they refer to, within and outside the structures.

For this reason the museums subscribing to the project are invited to adopt a variety of approaches, languages, and communication methods beyond any barrier - be it physical or cultural - to fruition. The multimedia and interactive instruments implementing the capacity of involvement and improving accessibility to a set of “user’s typology” are included under this

²⁵ From the AdMuseum website <http://www.admuseum.eu/>, last consultation 11/30/2014 - Presentation.

aspect: such as residents, tourists, seniors, school classes, emigrants, and underprivileged individuals with disabilities.

But accessibility is not limited just to the sphere of the audience, as diverse as it could be. As has been noted in Chapter 2, visitors are not the only stakeholders of the museums and they are not the only ones who should be granted admission. There are many other actors in society who, in spite of not being part of the audience in the traditional meaning, must be involved in the museum activities and spaces so that accessibility can be achieved in full. The museum must also, if not even mainly, be accessible to public administrators, to museum professionals, to experts of telematic and didactic courses, to developers of computer science, promotional, management and marketing solutions able to create the assumptions for improving visitors' accessibility.

The criteria of accessibility must be extended at this point to those individuals whose activities are introductory to accessibility itself. If we talk about sustainability, how can we ignore public administrators and officials? If we talk about diffuse knowledge of museum activities, how can we disregard professional experts in communications? In conclusion, accessibility is a bidirectional instance: not only of the societies drawing from the knowledge of museums, but also from the museums drawing from the knowledge of society. From this encounter originates a new and precious aspect of collaboration by those who rely on museums, recognizing their role as crossroads, to create new perspectives of fruition the territory founded on the cultural heritage. In a nutshell, the *AdMuseum* project includes all these potentialities. One is enclosed in the willingness to create a cross-border network of professionals collaborating in the activation of services and in evaluating them; one is enclosed in the declared intention of improving the quality of life and contributing to the economic growth of the territory, which cannot not involve also local offer and promotion players; and, lastly, one is enclosed in viewing the museums as key locations for the community, bright points in a constellation of players recognizing in them a resource for personal and collective growth.

But this all encompassing vision of the theme of accessibility must become a principle guiding to action, an orientation to the development of the projects. The Museums of the Regole have had the opportunity to pick up this challenge and interpret that “*Ad*” as a bidirectional approach, by the museum toward the community, and by the community toward the museum.

CHAPTER 4

THE PROJECT COMES TO LIFE: MQUADRO

*Nothing in the world is as powerful
As an idea that has reached its time*
Victor Hugo

4.1. The Planning Phase

4.1.1. The Birth of the Project

The project MQUADRO, created within the program *Interreg IV I-A “AdMuseum”* on behalf of the Museums of the Regole, was developed at first thanks to the research developed at Venice International University and later at Duke University, through a scholarship won through the Globalization Program¹. These training experiences within the multimedia project allowed to achieve in concrete form the principles identified in the theoretical framework, making MQUADRO the practical application of the principles applicable to this Master thesis.

The basic idea was the completion of a multimedia platform for the Modern Art Museum to increase its accessibility. The experimental phase of the project addressed only one of the three Museums belonging to the Regole², but during its development the modular structure of the platform prompted the extension to the other two museums.

¹ The research period at the ISIS Lab of Duke University ran from March 31st until June 6th, 2014, under the Globalization Program of Venice International University.

² Even though all three museums of the Regole participate in the AdMuseum network, The Museum of Modern Art Mario Rimoldi has been selected to receive funding within the project Iv I-A “AdMuseum, *Trans border network for physical and cultural accessibility to museum, natural and urban space heritage*” in favor of MQUADRO, in February of 2013.

The primary objectives were:

- Fill the physical, cognitive and sentimental gap between the public and the artwork, exploring new ways to pass on the cultural heritage through digital tools and social networks
- Reach a larger audience segment and intensify the relationship with preexisting audience³
- Mediate the perception of the museum as a live and dynamic “talking” entity, overcoming one of the most significant obstacles in the appropriation process of the community heritage: the idea of a place with no action, exclusive, and simply conservative.

Thanks to the nature of the network that relies on the process of association, dialogue and hypertext, the museums indeed *can reach out to a different and significantly larger segment of the population and, thus, become a virtual democratic resource.* (Dysthe, Bernhardt and Esbjörn, 2011, p. 31).

Taking a cue from a series of families of indicators formulated to measure the social impact of cultural activities (indicators by Matarasso, GLO Generic Learning Outcomes⁴ and GSO Generic Social Outcomes⁵), the level of the expected benefits is twofold. From *an individual standpoint*, the platform lays the foundation for increased knowledge and comprehension of the museum content, a change in attitudes and values towards its functions, an increased level of imagination, and inspiration and creativity resulting in personal growth.

From *a collective standpoint*, the platform instead can potentially strengthen social cohesion due to the interactions that it can generate and the shared experiences contributing to rebuild a sense of *place identity* based on the awareness of a dynamic and living heritage.

³ According to the audience analysis performed by Alessandro Bollo, the museums of the Regole were clearly in need of building new audiences (within the context of proximity and potential audience, and of non-audience) and increasing the quality of the relationship with main and occasional audiences.

⁴ <http://www.inspiringlearningforall.gov.uk/toolstemplates/genericlearning/>

⁵ <http://www.inspiringlearningforall.gov.uk/toolstemplates/genericsocial/>

4.1.2. Concept: a Museum to the Square

[MQUADRO](#) is configured like a real virtual space aiming to expand and amplify the physical experience in the museum, experimenting different ways of living the collections and finding



Fig.1

new interpretations to understand its richness.

The platform name by itself indicates space expansion through different levels of observation and elaboration, resulting in the ability to enter a "Museum to the Square". At the same time it refers to the square meter, the unity of measure for the dimensions of the canvas, a surface the digital tools and data banks can enrich, supplying new interactive experiences and learning processes during the visits. The increase of the physical, cognitive and emotional experience and the multiple readings and access points becomes a visual metaphor: the square, basis to all navigational architecture.

In the planning stage we identified few guidelines that inspired the platform project. Due to its virtual nature we will use the term *user* to indicate the utilizer of this tool at different levels.

According to what we identified during this research project, we planned the platform to be open, interactive, customizable, social, educational, bottom-up, emotional-narrative, integrated and implementable.

- **Open**

MQUADRO shall create an online database to give access to the artwork that the users will be able to tag using key words or gather into personal collections. In the digitization process different and flexible ways to access this content will be prearranged.

- **Interactive**

The content will have to be accessible from the users' point of view. They will be able to experiment different approaches to the virtual research experience becoming in turn explorers, commentators, curators, creators and content providers.

- **Customizable**

MQUADRO will be a space to encourage users to register and create their own profile reflecting their identity and interests. It will be possible to interact with the content commenting it by getting into a relationship with other users as part of a community.

- **Social**

MQUADRO will offer a framework for social participation, where the users will be able to meet and share opinions on certain themes relating to the collections and, at a deeper level of interaction, collaborate in the creation of contents and research projects.

- **Educational**

MQUADRO will mirror the museum educational purpose, supplying different tools to make cultural content accessible, by making materials and learning resources available to diverse type of users (museum professionals, teachers, students, researchers, children, general public)

- **Bottom-up**

The content will be developed, organized and made accessible not only top-down but also, and above all, bottom-up. Instead of supplying contents, MQUADRO will provide a platform for their creation.

- **Emotional-Narrative**

MQUADRO is going to offer new interpretations and multidisciplinary access to museum content, recreating the intangible context surrounding the object through sound, animation, and images in motion. Narrative, musical and chromatic suggestions can change the perception of the object and increase the wealth of meanings it carries or is able to arouse stimulating the creative ability of the users' imagination.

- **Integrated**

MQUADRO will have a modular architecture functional to the interoperability between modules; each one will individually relate and integrate with other pre-existing tools and platforms, social networks in particular.

- **Implementable**

MQUADRO is planned to grow in time due to the collaboration with the users who will be involved at different levels. Not a finished product with closed content, it is an open

tool conceived to keep evolving and receiving contributions from individual stakeholders as we saw in Chapter 2. This way the platform becomes an intersection catalyzing interests and activities from the various actors from the territory, supplying a tool and a digital space for interactions and participation.

4.1.3. Target and Access Levels

In the initial planning phase it was necessary to pinpoint a modality for user classification, according to two different levels of involvement: the in-depth analysis levels, based on the user's will to explore contents and to access learning resources, and the participation level, based on the user's will to contribute to content creations.

With regard to the first level, mainly tied to the fruition area, we thought of making a distinction between two different user profiles: the **generic visitor**, tourist or resident, considering the museum a source for personal growth within the aspect of permanent formation⁶; and the **school audience**, viewing the museum as an educational resource within learning experiences.

Both categories are strongly interested in finding learning opportunities in the museum and in the collections. They are moved either by an *intrinsic motivation* (personal interest for informal learning, in the case of museum visitors), or by an *extrinsic motivation* (educational interest for formal learning steered by their own course of formal study)⁷. Therefore we should allow for different levels of exploration but also of learning, corresponding to different sections.

On the other hand the second area requires in-depth reflection on the diversity of subjects and motivations that will encourage participation. The division we are suggesting here is dictated by the specific needs of the territory where the museums are included: on one side **the actors of tourist offering** who consider the museum as a provider of cultural contents, for the services it offers and the activities it develops; **the academic world and the museum experts** on the other side, who view the museum as a resource for research, to develop study projects and experiment innovative approaches.

⁶ Starting from the Lisbon Council in 2000, permanent learning has become a central element of European strategies; consequently, the fundamental role of informal learning places such as museums and libraries has surfaced.

⁷ An analysis of intrinsic and extrinsic motivations can be found in Csikszentmihaly, Mihaly and Kim Hermanson, *Intrinsic Motivation in Museums: What Makes Visitors Want to Learn?*, *Museum News* 74(3) (1995): 34-7, 59-62.

These two categories can be interest in accessing different areas of the platform, where they can interact with the museum staff to build different types of contents (educational materials, in-depth resources, educational games, multimedia guides of the territory, etc.)

4.1.4 Information Architecture

Information Architecture, or the content's organizational structure and logic in an information system, is a fundamental starting point for any product destined to interact with technology. In the case of website site planning, it includes the setting of a basic structure, the organization of the navigation schemes, the choice of content type for each section, and studying the interface.

In the case of the MQUADRO platform, on the basis of in depth analysis levels and participation, we pinpointed four sections:

- EXPLORE

It matches the exploration level of contents. This section is built by the museum staff with contributions from historians and experts in various educational fields. Contents are classified by category: **emotional-narrative videos** on the collections or on the history of the museum; **interactive archives** where it is possible to access ancient documents mapped on original photographs and displayed through a text editor, simplifying reading and transcribing them; **theme galleries** offering original ways to view the collections using chromatic, musical and narrative cues.

- LEARN

It matches a higher level of exploration, where learning materials and tools are available. The section is planned to be built in collaboration with teachers and museum educators, who can develop the lab educational materials for easy access and available for school. Besides the **educational resources** for schools, tied to the educational offers from the museum educational department, this section anticipates also the creation of **interactive guides to the artwork**, planned in close collaboration with university professors and experts, **learning places and educational games** that can be developed in conjunction with universities within courses of virtual heritage or multimedia design.

- INTERACT

It matches the participation level tied to the personalization of personal experience, online and in situ. This section includes both **museum organized activities**, available upon registration (events, workshops, laboratories and educational courses) and online activities allowing to personalize one's course, from **creating a personal collection** to actual **online exhibitions** built within educational projects.

- PARTICIPATE

It means a deeper level of participation, allowing involvement in creating contents; this is the most complex section because it includes setting up a series of different profiles according to the main categories identified, through which users will be able to access differentiated levels in the platform. **Generic users** will be able to explore and personalize part of the contents even through integration with social networks, besides being able to register for the activities; **professors** will access also educational resources tied to their educational courses, while a third category will be reserved for content co-production. **Museum professionals, researchers and scholars** will be interested in creating and share specialized contents and will be able to offer research courses, **the actors of the tourist offer** will be able to gather contents and take advantage of the advice and the mediation of the museum, which is already in progress in the form of initiative planning and cultural events to be used to enrich the local tourist attractions.

Actors and associations dedicated to one or more cultural aspects in the territory can take part in the platform by uploading materials and contributions in their area of expertise.

As for the navigation structure, we adopted a reticular option. Considering the peripatetically fragmented nature of the online experience, it is mandatory to prearrange multiple entry points to the platform: that is why only one road to access contents is inadequate and various sections have to be tied together by a nonlinear road.

research must delve into the structural forms of new media. In the digital age, epistemic and communication changes are based on such forms, conditioning cultural fruition (Lercari, 2011, p.172).

The importance to fully know the mechanisms entailed by multimedia narration, interactivity, virtual places and social media in order to imagine a new model for a museum experience, emerged abruptly during the planning of the platform at Duke University. Developing multimedia contents conceived during the planning phase⁸ unfolded through a learning-by-doing approach under the guidance of Professor Victoria Szabo, Program Director at *ISIS Lab* (Information Science + Information Studies). This lab, in conjunction with *WiredLab for Visualizing the Past*, stands as an example for cross discipline approach to education utilizing technologies as integral part in the learning process. In the academic course programming at the Department of *Media Arts and Sciences* the acquisition of competences in the fields of 3D modeling, 2D graphics, audio and video editing, and web page design is not a means to an end; but it lets you expand your humanistic knowledge beyond traditional education boundaries, disseminating them through new means provided by digital technology.

Consequently, the research period at ISIS at Duke University had the following objectives:

- Investigate the field of virtual heritage comparing similar experiences,
- Acquire technical knowledge tied to the production of interactive multimedia contents allowing to extrapolate a few planning principles
- Analyze other museum platforms through research of case studies present on the net or through direct field interviews

Therefore the work developed as follows:

- **Bibliographic research** online and within the resources at Duke Library, in the section devoted to multimedia learning and *cultural heritage visualization* processes. Fundamental in this context has been the ability to meet other researchers and graduate

⁸ The research period at Duke University has been an ideal continuation of the formation period of the fall semester courses at the Venice International University, *Foundations of Web Based Multimedia Communication* (Prof. Szabo) and *Globalization and Cultural Heritage* (Prof. Bernardi).

students working on similar projects in the department⁹: the exchange of experiences and daily dialog fostered the process of *peer to peer learning* and set the basis for future collaborations.

- **Planning sessions** under the supervision of Professor Szabo, allowing the pursuit of the formative experience started during the course *Foundations of Web Based Multimedia Communication* during the Fall Semester 2013 at Venice International University. During this phase the content planning was going hand in hand with the practical realization of its digital drafting, in a climate of mutual influence. The blog [MQUADRO Development](#) was an important tool to guide the development of multimedia contents, as it collected the references and a calendar of the work phases. The blog indeed hosts a sort of “technical bibliography” divided by [type of content](#) (thematic galleries, video guides and animation, interactive artwork analysis, and educational games) and [technology used](#) (JavaScript and JQuery to set up the interactive tools, stylesheets to create the web page interface, and examples of augmented reality). Among these, the wide availability in the source code¹⁰ network turned to be fundamental in creating interactive, free and aptly adaptable web pages.
- **Conducting a series of interviews** with the project managers of two educational multimedia platforms at Nasher Museum of Art, to compare similar experiences and verify the value of MQUADRO inspiring principles. The first interview dealt with *Words and Pictures*, a multimedia platform including educational tools for elementary school teachers, built in collaboration with a few teachers. From this interview we note that user involvement, teachers in this case, in content creation is fundamental to the proper functioning of any educational tool offered outside formative reality. The second interview instead aimed at the elaboration of *visual strategy* and more generally at the process of finding meaning in imagery, supporting principles of the *How Do You Look* project, addressed to college students. The comparison with the educators was essential to a more concrete reflection on the techniques to stimulate the process of *visual*

⁹ Specifically, it has been interesting to connect with the project *Visualizing Venice*, and with researchers who would be working on creating an immersive virtual reality for the Museum of Reggio using *Oculus* technology.

¹⁰ Many sections of MQUADRO are generated from tools planned for contexts differing from the ones museums: for instance, the origin of the page *Listening to Art* is a source code created for a compilation of musical CDs, available on the open source portal <http://tympanus.net/codrops>. For an analysis of individual pages and a detailed listing of looked-up sites, please refer to the appendix section.

understanding and highlighted the importance of collaboration with the college education world, where the audience can be users and creators of multimedia contents at the same time.

4.2.2. Internal and External Competences

Upon returning to Italy, the platform found its space on the web within the server of the Regole d'Ampezzo (regole.it).

To transfer the project model we involved the computer programmer of the Regole d'Ampezzo. Starting from the stylesheets created at ISIS Lab at Duke University he created a dynamic site¹¹, accessible at <http://mquadro.regole.it>. The capability to use information within the database of the Museums' site (<http://musei.regole.it>), already including part of the images relating to artwork, allowed us to increased efficiency and management optimization levels¹².

Due to the platform's dynamic nature, in order to offer updating capabilities for each section we created a back-office area¹³, or a working environment where you can upload, modify and cancel various content of any page of the site in a simple and intuitive way.

Through this administrative area we were able to involve the inside staff by remotely uploading text¹⁴, images and audio files, while videos are incorporated into YouTube. This way, creating complex tools requiring the acquisition of technical knowledge, has made them accessible to those not possessing an advanced level of computer skills. The contents of the EXPLORE section, the interactive archives and the thematic and multimedia galleries in particular, were built thanks to the museum staff, who was able to share its knowledge of the collection and participate in the platform development.

¹¹ In a dynamic site, content is archived in a database and managed by the code from the web pages. With regard to mquadro.regole.it, the database is also used for dynamic management of the style sheets of the website. CSS, Cascading Style Sheets, are an extension of HTML language used to indicate to the browser the presentation features of a web page (fonts, color and layout).

¹² The solutions adopted by technician Mauro De Biasi are SQL for database and PHP for language programming on the server side.

¹³ Access to the administration area is made possible by user authentication procedure with insertion of user id and password.

¹⁴ The text contents are saved in relational database tables optimizing the organization of the information.

mqadro.regole.it
AMMINISTRAZIONE WEB

MQADRO RIMOLDI - EXPLORA - stanze virtuali

EXPLORA - GESTIONE STANZE VIRTUALI

- Crea nuova stanza virtuale
- Elenco stanze virtuali
- Torna alla sezione principale di Explora
- Home page back office
- Log out

INSERIMENTO DI UN NUOVA STANZA VIRTUALE

Titolo italiano (max 50 car)

Titolo inglese (max 50 car)

Fig.3

We suggest a detailed analysis of the tools, divided by type.

- **The Thematic Galleries**

To develop [thematic galleries](#) we followed the more experimental approach of this section: on one hand, because they were fully planned to be completed by the users, and on the other because of the typology of an experience destined to stimulate multisensory perception and synesthetic associations.

These galleries are based on a few preset virtual rooms where the physical experience of the exhibit space is offered, either through a tridimensional image or through captions under the artwork that the user can chose to view with a simple click, increasing the level of interaction.

Thanks to the area of Backoffice, the first galleries were created by the internal staff, but this tool's potential for involvement is much larger, as it allows hosting on line exhibits proposed by the users.

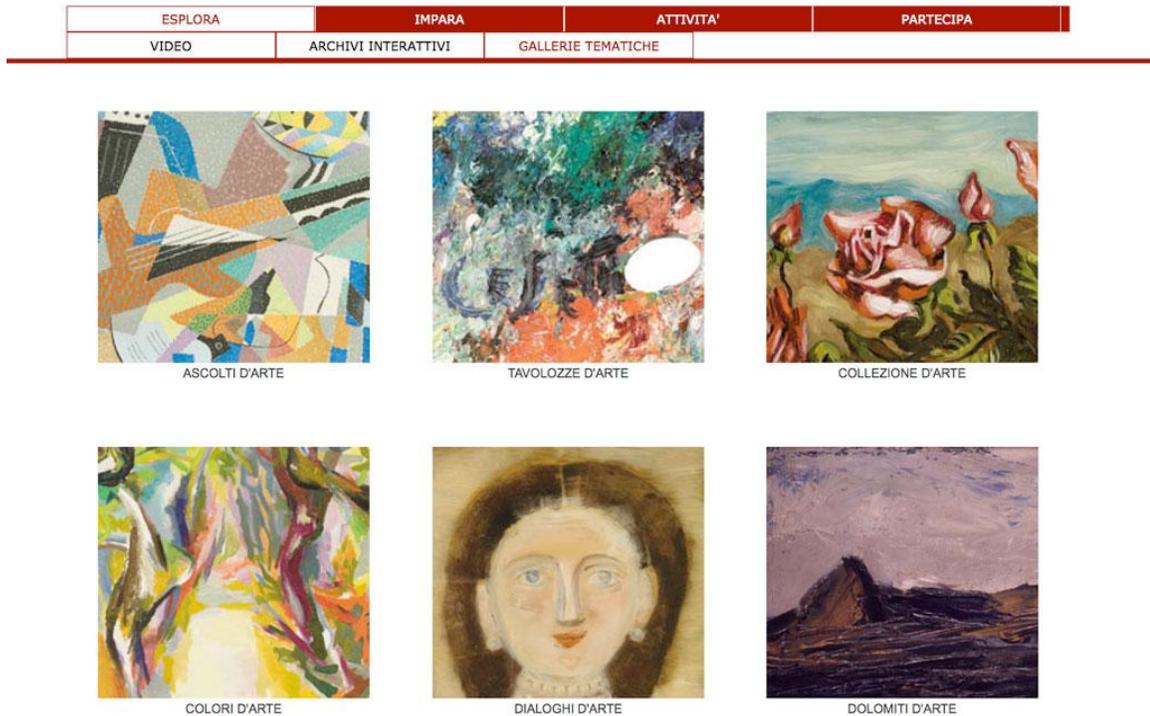


Fig.4

The galleries are implemented on historical criteria ([Art Collection](#) gather the works that Mario Rimoldi loved the best or that he had personally commissioned), thematic criteria ([Art Dolomites](#) offers a landscape selection showing different styles artists used when painting the Dolomites), chromatic criteria ([Art Colours](#) shows how artists can interpret and use the same chromatic range in different ways according to their expressive purposes and formal output) and stylistic criteria ([Art palettes](#) compares the palettes, an important tool to understand the artist chromatic vision and his approach to color, through his works¹⁵). The galleries [Art Listening](#) and [Art Dialogues](#) are of a different nature; they are not virtual rooms, but places for enriching the artwork by multimedia suggestions offered by the visitors: the first is a compilation of music that social network users

¹⁵ The original "draggable palette tool" created during the research period at Duke University is not yet available on MQUADRO Platform, because it is still under development and it will be inserted in the INTERACT section. This tool is currently hosted at ISIS Lab address: <http://isismapping.org/stefania/palette/campigli.html>

associated with a specific piece of artwork, while the second gathers stories created and recorded by the students starting from creative writing inspired by the images.

- **Interactive Archives**

The objective of this tool is making the museum archives accessible by promoting interactive exploration: through the platform in the original format or through a text editor we can view not only the works, but letters, photographs and numerous articles of the time. When choosing a time bracket and document typology, the user is sent to an [interactive map](#) where the transcription can be read by clicking on each image.



Fig.5

The importance of digitalization for this kind of archival material is twofold: on one hand a part of content not accessible during the museum visit becomes usable, on the other it promotes its conservation through digital copies saved in data bank of the server of the Regole. In this case as well, the contribution from internal experts was fundamental: the staff undertook a major part of the transcriptions, expanding the museum history and contributing to its propagation.

This tool created within MQUADRO can represent the starting point to build a live archive, because the ease of access and use stimulates anybody to populate the database with unpublished articles and documents which this way become part of the museum's digital space.

- **The Video Guides**

Achieving in-depth multimedia contents on the museum history offered a cue to extend collaboration with educational operators and the [group of players and musicians](#) permanently collaborating with the Museums of the Regole. Actually, adopting a narrative approach to pass down and tell the heritage created a series of educational activities in the museums, which use music, theatre, dance and movies to create a deeper emotional involvement. Museum storytelling goes a long way back¹⁶, especially in Anglo-Saxon countries where the term *Museum Theatre* was created to indicate a discipline using theatre as a tool to tell stories kept by the museum. But the input of digital technology in this interaction between the museum content and the performing art stepped even further, turning the educational experience into practicing *digital storytelling*¹⁷.

The educational piece *What Rimoldi loved the Most*¹⁸, a show walking through the museum halls to discover the protagonists who created it, was the cue to make the first [video guides](#) for the MQUADRO platform. The actors playing the collector Mario Rimoldi and his wife

¹⁶ The first museum to avail itself of Storytelling has been the Metropolitan Museum of Art in New York City, thanks to Anna Curtis Chandler, who expanded the educational program of the museum by rewriting and readapting stories and tales on slides. For more in-depth knowledge, see the publication by Lucia Cataldo, *From the Museum Theatre to Digital Storytelling* (cfr bibliography).

¹⁷ Digital Storytelling takes its name from experiences of therapeutic narration recently used in a psychoanalytical context.

¹⁸ *What Rimoldi Loved Most* is a theatre production set in the rooms of the Modern Art Museum Mario Rimoldi and proposed at first to the schools in Cortina by the Education Services of the museums.

Rosa Braun lent their voices to transpose the story into a multimedia format, accessible from the platform, sectioned in a series of chapters ([My husband was a collector](#), [The artists' best friend](#), [This hotel is an art gallery](#), [Beauty calls beauty](#)) uploaded on YouTube.

In the video transposition¹⁹, this backward voyage to Cortina in the early 1900s was enriched by musical and visual suggestions, through period photographs and archival images, with zoom effects and multimedia graphic superposition increasing the emotional impact. The tale of Mario Rimoldi and Rosa Braun becomes a Digital Story²⁰ that *widens the sense of the words, contributing to the associative process of the listener's ideas, stimulating synapses and opening explanatory windows underlining the key concepts* (Infante, 2004, pp.111,112). Another novelty is the interactive nature of the video: in each chapter the articles and letters from that period refer to the interactive archive section. It is up to the user choose to stop viewing or to put off the in-depth analysis to another time.

4.3 Involvement by Local Players

4.3.1 Schools

One of the objectives of the MQUADRO project presented within *AdMuseum* was to allow students and teachers to access educational materials and archive documents and interactive tools addressed to better knowledge and interpretation of the cultural heritage.

Considering the technological potential strengthening the learning experiences and their familiarity with the multimedia language, high school students were destined to be actively involved in this project. The meaning of MQUADRO finds here its full expression: through creatively reinterpreting the past, like digital architects, the students can build their square meter, developing technical and communication abilities tied to the modality of multimedia narration.

¹⁹ Chapter 1, *My husband was a collector*: <http://mquadro.regole.it/Ita/Rimoldi/Explora/visVideo.php?idVideo=1>; Chapter 2., *The artists' best friend*: <http://mquadro.regole.it/Ita/Rimoldi/Explora/visVideo.php?idVideo=2>; Chapter 3, *This hotel is an art gallery*: <http://mquadro.regole.it/Ita/Rimoldi/Explora/visVideo.php?idVideo=3>; Chapter 4, *Beauty calls beauty*: <http://mquadro.regole.it/Ita/Rimoldi/Explora/visVideo.php?idVideo=6>

²⁰ The Center for Digital Storytelling (CDS) of San Francisco (<http://storycenter.org/>) defines a *Digital Story* as a *short video narration in the first person ,created by combining recorded voice, fixed images, and music or other sounds.*

This is why, in the planning phase of the MQUADRO platform during the 2013-14 school year, we offered the schools the educational project *From the Painting to the Screen*, offering to two high school classes in Cortina the possibility of undertaking in-depth work on the artists in the Rimoldi collection. Two multimedia narrations, titled *Filippo de Pisis: an interview in time*²¹ and *Sironi is Present*²², entered the Policultura competition²³ at Milan School of Engineering, earning the Jury Special Award.



Fig.6

The partnership between the museum and the school was pivotal to the prize awarding, so much so that a special category for collaboration with a cultural entity was created. As the competition judges remarked²⁴, the chance to literally and in the first person step into the shoes of historical

²¹ *Filippo de Pisis: an interview in time*:

http://www.1001storia.polimi.it/meusGEN/meuslive.php?projectId=1766&pageid=44884&navigation=short&language=it-it&template=policultura&device=dynamic_html&public=1

²² *Sironi is Present*: http://www.1001storia.polimi.it/meusGEN/meuslive.php?projectId=1806&pageid=45908&navigation=short&language=it-it&template=policultura&device=dynamic_html&public=1

²³ The Milan School of Engineering in 2007 organized the competition *Policultura* (<http://www.policultura.it/>), promoting the adoption of digital storytelling by schools.

²⁴ Jury assessment for the narration *Il Sironi Presente* produced by 5th Arts High School of Cortina: *The narration proposes the discovery of painter Mario Sironi through a museum journey undertaken by the class, and elaborated well. The construction of the editorial context is novel and well structured. The iconographic framework, thanks to a collaboration with the Rimoldi Museum, is rich with period documents (mostly*

figures, usually removed from the students' personal lives, catalyzes identification and comparison. To complete the narrative the students entered a small temporal paradox where they supplied words and voices to figures of the past and took from them as many words and thoughts, making them their own while they were performing. Writing, imagining and creatively performing what they learned, they were pleasantly surprised to be able to partially overcome the distance separating them.

Following the positive outcome of the experimental phase, we decided to reach further and involve other school grades and teachers, setting up the basis for creating a real school-museum platform. For the 2014-15 school year we proposed a more structured course of collaboration, with the twofold objective of making the educational tools and the in-depth resources of the platform more efficient, and making the students active protagonists of the path to knowledge. Thanks to the comparison to the platforms of Nasher Museum in Durham, analyzed during the research period²⁵, we followed two paths.

The first one actively involves the **students**, through a series of educational courses aiming to create multimedia products, formulated according to grade level and educational field. At the elementary school level we offer the possibility to produce audio narrations inspired by the artwork in the museum, made up and taped by the children under teacher and the museum docent guidance; while for the higher levels we continue the experience of thematic multimedia narration, created using the engine 1001History from the Milan School of Engineering.

The second one focuses instead on the **teachers**, whose experience in learning dynamics and pedagogical techniques is essential to produce educational materials that they and their colleagues will be able to download and use in class. Considering the difference between learning in a museum and in a classroom, it is necessary that the educational contents present in the platform are prepared in collaboration with those who will be using them. The purpose is making the teachers comfortable with this tool, encouraging them also to explore the site and discover more offers outside their focus.

This way the teachers in Cortina will be able to contribute to the production of materials a larger number of colleagues from around the world will in turn use later. Taking advantage of the

photographs), and is very evocative thanks to the images of many works. Lastly, even the audio is produced with care, and the alternating of voices and music is pleasant. Furthermore, several times the students during narration take the role of historic characters making the narration more involving”.

²⁵ For a more detailed description of the platforms *Words and Picture* and *How Do You Look* please refer to the appendix.

multimedia language potential and technology, the platform will make material ready available specifically for teaching subjects related to art, paleontology and history of the territory. The final objective is to allow the teaching staff in any school a vast and ready choice when organizing specific lessons on single artists, painting techniques, traditions and folktales from the valleys in the Dolomites, and geological and geomorphological features that defined these mountains as being part of Heritage of Mankind. The availability of learning tools and educational materials characterized by the more recent strategies of *visual thinking*²⁶, holds no less importance than viewing the artwork and the artifacts in the exhibition. It is de facto a further instrument to access and use collections and cultural heritages within a new scope: classroom lessons.

4.3.2. Web Users: the Digital Network Strategy

The recent analysis on digital strategy²⁷ puts the accent on the importance of integration allowed by these tools: i.e. integrated platform. The presence of the Museums of the Regole in the social networks pre-existed the birth of MQUADRO, but its creation provided a stimulus to rethink digital imaging in the museums, also in view of the new tools and contents accessible and widespread only through an integrated system. The elaboration of a digital common and integrated strategy spurred contrast among the staff on reachable objectives, adoptable tools and timing. This level of collective reflection increased the awareness in the importance of personal contribution to increase the level of public involvement, putting to good use one's professional experience matured through the years. The presence of a young staff familiar with the language of social networks and competent in the use of technology made this field rich and open to untold possibilities.

²⁶ For an exhaustive overview of *visual thinking* and *visual literacy*, see the Visual Thinking Strategy website (<http://www.vtshome.org/>) and *How do you look* platform (<http://hdl.nasher.duke.edu/visual-literacy/>). Cfr bibliographies

²⁷ *Digital Engagement Framework* by Sumo Company is a guide on how to proceed in discovering the digital potential of a cultural organization; it starts from an analysis of the audience, organizational vision and key assets.

- **Facebook**

The Facebook page of the Museums was opened in 2012, but its use was always limited to the publication online of articles regarding the museums and the initiatives they organized, with no active involvement by the internet audience.

The possibility to involve users through online activities proved to be essential to implement the MQUADRO platform contents.

The first initiative we tackled in January 2015 was creating musical paintings, based on the associations between a work of art and musical pieces suggested by users through social networks. As a matter of fact, every month on the Facebook page of the [Museum of Modern Art Mario Rimoldi](#) we publish the image of a painting with news and trivia stimulating the visitor to suggest a musical piece associated to it. The initiative was born on the assumption that what a painting suggests is born upon the encounter with it: paintings talk to observers, to their experiences and imagination; often time music expresses this relationship more than words.



Fig.7

Users share in the creation of a kind of very special artwork that without their contribution would never have been “painted” and find a place in the [Art Listening](#) gallery in the MQUADRO platform. In this section the musical pieces form an original compilation that can be listened to by visualizing the painting in the background: this way it is possible to

experiment how a perception of art changes when we listening to one melody rather than another.

- **Pinterest**

The [MQUADRO Regole](#) Pinterest account was opened in December 2014, after the creation of the platform, aiming to offer a further portal accessing multimedia contents and to set up an integrated use of the new activated channels.

Given the tendency of this social network to channel and spread themed contents, the first showcase of the Pinterest page were tied into the theme galleries of the platform and into the initiatives undertaken in parallel using other social networks.

To integrate the experience of the first musical painting inspired by the work *L'île des Charmes* by Alberto Savinio, for example, we created a [gallery collection](#) other toy islands by the artist, providing an overview to one of the main themes in his work.

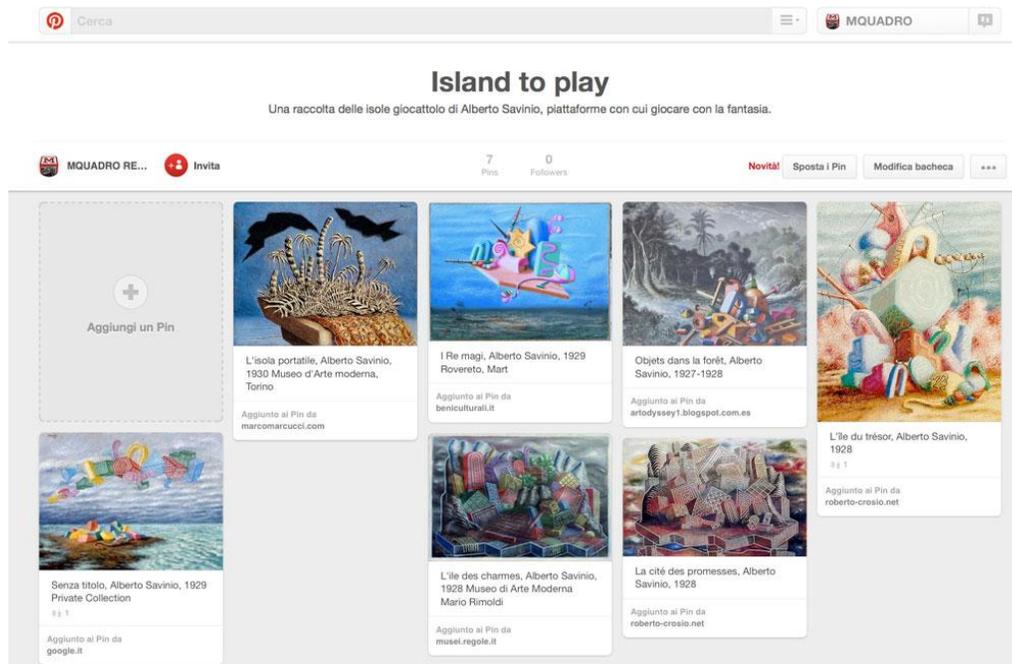


Fig.8

In the creation phase of the mood boards related to the other two museums, we were faced with the lack of online images related to the objects in the Ethnographic Museum of the Regole d'Ampezzo and the finds in the Paleontological Museum Rinaldo Zardini. For these

museums a database to consult online is unavailable, unlike the Rimoldi collection. The need to extend the tools projected for MQUADRO to all the museums belonging to the Regole caused the need and the urge to fill this void, setting up their completion in a short time.

- **Cowbird**

The narrative vocation of many contents in the platform brought us to use [Cowbird](#)²⁸, a social network for writing multimedia stories complete with images, video, and audio. In this case the idea to fit MQUADRO in this community of “digital storytellers” was deemed necessary to provide a writing tool to the initiative *Flashes of Verses*²⁹, offering the creation of Haiku inspired by the paintings. In a way similar to the musical paintings, here too the objective is to stimulate people to express their own sensations towards the artwork through the means of poetry that acts with a power and immediacy barely touching the borders between reason and intuition. In this case we chose Japanese Haiku, the most immediate and concise form of poetry in the world dating back to the XVII century, due to its strong ties to sensory language. To create a haiku no poetic ability is necessary, you just must be open to give voice to your emotions, fantasies and sensations prompted by the artwork, and compose three quick verses according to the 5/7/5 scheme. The initiative intends to stimulate the participation in workshop experiences that can lead to the creation of a renga at the end of the exposure phase. It is a poem that includes all the haikus from the variety of successive participants and visitors who, day after day, visited the collections, able to register the state of mind that the exhibit and the paintings were able to arouse. This way the museum becomes a collector of stories in poem form, gathered through Cowbird, the visual storytelling platform par excellence.

²⁸ Jonathan Harris, founder of Cowbird, explains his choice of name for the site as follows: *Cows are slow and stable, solidly anchored to the ground; birds are fast, free and full of joy. If we apply this animal kingdom metaphor to the main communication tools, we have mostly birds with regards to the internet and cows as more traditional forms of narrations, such as novels or lyric opera. Cowbird combines these two extremes and generates a new way of telling a story where sluggishness and contemplative aspects of the cow are combined with the speed, efficiency and passion for playing of the birds.*”

²⁹ The initiative *Flashes of Verses* was generated by a spontaneous proposal by the museum, which understood the spirit of MQUADRO and its aggregative and open nature.

- **Twitter**

As for [Twitter](#), the drive to create a profile was dictated by the possibility of dialoguing with other museums and cultural institutions on the complex relationship with the world of schools, by participating in the campaign #MuseumSchool.

This social network can increase the echo of multiple educational projects organized by the museums of the Regole and spread their knowledge beyond the territory, staying updated on the initiatives and the more active subjects in the educational field. The speed of diffusion of tweets can foster interactions not only with other operators of the museum sector, but with direct users of educational initiatives (students and teachers) as well as with experts in the learning field. Therefore in the long run Twitter can be the channel to spike the interest towards the platform and implement involvement in creating educational materials, while taking part in the formation of a “community of practice” on new methods to pass on cultural heritage.

- **Social Media Campaigns**

One of the more important aspects to evaluate the digital impact of a museum is its presence in the visitors’ accounts, either in the form of testimonials or by participating to the online initiatives offered by the museum itself.

To stimulate sharing images, comments on one’s experience - offline or online - are essential in social media marketing campaigns that use key words (hashtags) to synthesize a theme or an initiative, in addition to recalling the brand (the museum, in this case) and spreading its awareness.

Through hashtags, a word or a phrase preceded by the # symbol, it is possible to trace comments and photos related to a museum campaign that have been shared on a social media. Among photographs, those taken by visitors in museums – the so-called selfies - are most common, so much so that they were prominently featured in an international event, the Museum Selfie Day³⁰. Through this tool visitors increase and share the value of their own experience, becoming promoters of artworks.

³⁰ In Italy a further sensitizing element is Law Decree of May 31st, 2014 #83, on urgent directives for the protection of cultural heritage, the development of culture, and the re-proposing of tourism, which allows “taking pictures freely in museums for personal use and not for profit”.

Fig.9



The first campaign connected with MQADRO was launched in connection with the opening of the winter season 2014-15, with the specific objective to spread knowledge about some of the protagonists of history of the museums.

To tie them into our own personal lives and activate the identification process leading to the decision to acquire knowledge and interact, social media can play a fundamental role. That is why at the start of the winter season the shapes of those responsible for the birth and representing the soul of the museum were placed in the lobby: the collector Mario Rimoldi and the artist Filippo de Pisis in the Museum of Modern Art, Deodat de Dolomieu and Rinaldo Zardini in the Paleontological Museum, and a family from Ampezzo at the Ethnographic Museum. These

shapes are an invitation to get into a picture with these characters, knocking down the time barrier. A souvenir photo with a story to share on social networks with the hashtag #museiregole#mqadro.

4.3.3 The Scientific Community

- **Virtual paths: *Colors of Art***

The enrichment and increase in quality materials produced by the interaction between museums and teachers represent a feature of a larger scenery: the museum platform representing a meeting point for special knowledge through the involvement of a single individual or of professionals, carriers of such knowledge. College researchers, art historians, experts and art lovers: they can all give their contribution to producing contents, building

their user path, or making the fruits of their specific knowledge available in relation to the contents, the exhibits and the in-depth analysis offered by the museums.

During the planning phase in the States, realizing the thematic galleries showed the largest potential in catalyzing contributions from critics and art historians. The possibility to create courses on a theme stimulates those searching the web for materials and tools for their own research: offering a selection for curators within such a vast core of works in digital format, sets the basis to produce proper virtual exhibits.

Upon reflecting on the artworks in the collection, following different interpretations to direct the user, the chromatic criteria showed a variety of cues, leading to an in-depth analysis on the pivotal role of colors in the perception of a work of art.

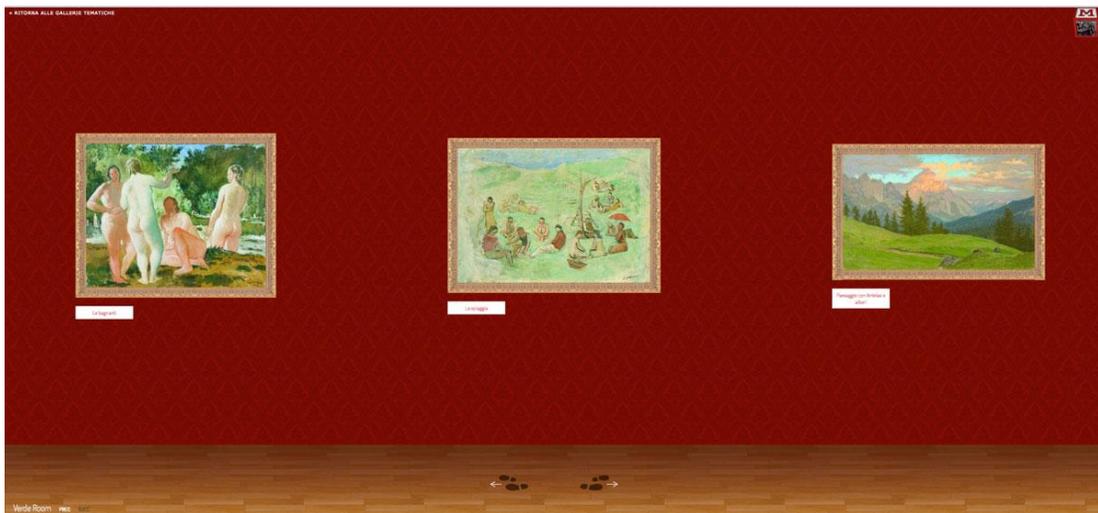


Fig.10

An expert researcher's contribution in the theory on colors was fundamental in creating the thematic gallery [*Colors of Art*](#): for each color (white, black, blue, green, yellow, red, gray, and brown) we made a selection of paintings highlighting the different chromatic visions of the artists. Directly exploring the structure itself of the pictorial language and the perceptual mechanisms, this tool opens up the great semantic richness in a work, surfacing the elements making up the nonverbal communication flow reaching the visitor. By changing gallery, the user can discover how deeply color perception changes with the different chromatic choices of the artist. It is an experience increasing awareness of the deep bond

between colors and emotions: a color recalling a certain mood can inspire a different one depending on how the artist uses and portrays it in his work.

The experience with the chromatic galleries in the Museum of Modern Art can be repeated in the other museums of the Regole, locating a criterion of selection allowing exploration of the collections through new eyes. Just think for example of the possibility to be able to visualize the objects in the Ethnographic Museum, divided according to thematic categories (history of the territory, daily life, farming, forest management, cattle, and arts and crafts), to listen to testimonials about objects functions and use through the platform; or learn to differentiate fossils in the Paleontological Museum according to type (corals, ammonites, gastropods, and ambers) or discover the principal evolutionary stages of earth through virtual paths allowing the experience of geological time.

- **Multimedia Exhibits: D-ROCK**

At research level, a multimedia project allows to intensify the levels of perception with the actors in the scientific community even when organizing exhibits that use new technologies as main channel of communication. A multimedia project gathers contributions from experts and researchers and can strengthen the bond with other museums or research institutes, as shown by the exhibit presented during the winter season at the Paleontological Museum Rinaldo Zardini.

The title, [D-ROCK](#), blatantly reminds us of MQUADRO, aiming to expand the visitor's experience through technology, giving impulse to the study object and offering new interpretations. The exhibit path, in fact, aims to stimulate the visitor's curiosity and interest in regard to a rock that represents a fundamental part of the landscape in the Ampezzo valley, "the dolomite rock", and its geological and scientific value through the reenactment of the esthetic-emotional context that gave life to the research. The multimedia nature of the course allows putting the figure of Deodat de Dolomieu, who gave his name to the Dolomites, side by side with Rinaldo Zardini and researchers like him, who contributed to a deeper knowledge of the geological phenomena in these mountains. Through the centuries these characters show that they share the same research approach, a lively, cultivated and non-stop curiosity for the phenomena in earth science, and love for the mountains. The story evolves by comparing these two important characters: in fact the multimedia narration steers the

course through the museum's permanent collection and the objects coming from two important institutions in the territory, the Angelini Foundation and the Mineralogical Museum in Agordo. The exhibit offers the first concrete opportunity to create a platform, comparing and contrasting the actors of the scientific museums in the Venetian Dolomites, carried forward by the Domus network³¹. In this case as well, technology multiplied relationships and widened their nature.

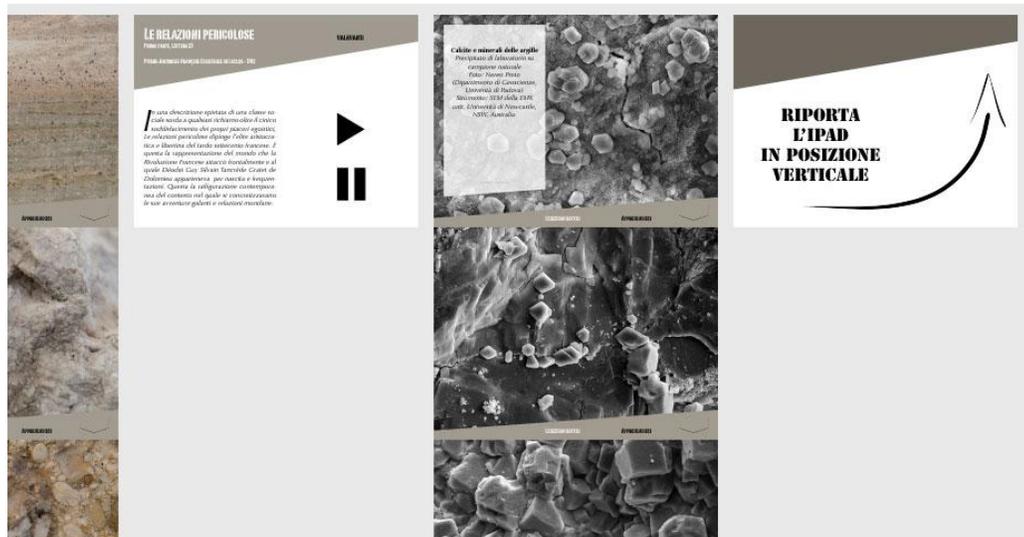


Fig.10

The Follador Mineral Institute in fact not only loaned the researcher's tools dating back to the eighteenth century that were at the exhibition, but also supplied input and tools to produce a video of the experiments that lead to the discovery of a new mineral. These extra contents – photographic materials, films, and audios – are fundamental to understanding. Thanks to the tablet-guide the visitor can actually listen to the readings and delve in the cultural context of the times, watch the experiments showing the chemical and physical characteristics of the rocks, and observe the microscope generated photographs of the thin sections of dolomite rock and limestone coming from the University of Padua.

³¹ The Paleontological Museum Rinaldo Zardini is part of the DOMUS Network of Dolomites' Museums of Science. URL: <http://musei.angelini-fondazione.it/museo-paleontologico-rinaldo-zardini/>



Everything is quite handy because the D-ROCK course is a [downloadable app](#) from the App Store and once the exhibit is over it will converge into the MQUADRO platform, where it will be possible to view the material in the interactive archives, and watch again the videos and listen to the readings.

Fig.11

4.3.4 The Media

Digital tools and narrative techniques born from their own application – first of all by storytelling - fit into the already wide interaction existing between the museum heritage and the different approaches for use and promotion, creating other communication formulas and projects on the edge between physical and virtual.

It's the final result achieved by the video guides from the Rimoldi Museum that attracted the attention of the tourist board in Cortina, interested as well to channel the contents of its promotional magazine into a narrative. The issue of [Cortina Topic](#) for winter season 2014-15 offers in fact a new approach, *“immersive” and “interactive” to involve the reader, to expose him to the emotional accounts of those who lived in Cortina and still live it in person, even in its more unusual aspects.*

This new style shaped by storytelling offered a further development level to the narration by Mario Rimoldi, creating an immediate imaginary dialogue of the actor with his character, together with the narration of their impossible meeting through images³².

³² In reference to the article *Rimoldi vs Rimoldi* in the magazine Cortina Topic (http://issuu.com/cortinaturismo/docs/topic_14dic), which includes for the first time references to the platform by QR code of the video guide.

Rimoldi vs Rimoldi

di Lucia Portesi
 nell'ambito dei fatti della spettacolo. Chi che l'ho da ancora di più

Le sale vuote di un museo. Un attore e un grande personaggio s'incontrano. Sottile confine tra realtà e fantasia. Abbiamo provato a raccontare l'arte con l'arte. Per celebrare a modo nostro i 40 anni del Museo d'Arte Moderna Mario Rimoldi delle Regole d'Ampezzo

Giuseppe Rimoldi ha in mente Mario Rimoldi (il più grande collezionista di opere d'arte del Nord-Est italiano) e il Museo d'Arte Moderna di Ampezzo. Un modo di vedere e di fare arte, un modo di vivere e di pensare.

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■ riquadro regole ■



SCENA 1
 Filippo de Pisis, *Checos di Corina*, 1957

GI: La verità è che mi sono trovato molto bene nei suoi panni.
RI: Soddiafatto di essere stato nelle sue vesti.
GI: Interpretare è essere finché dura l'interpretazione.
RI: Un po' di più, in realtà. Penso che ciò che si interpreta rimanga come un'ombra. Si rivela in un grattare un'infiammazione. Stare un po' più, per sempre.
GI: Lei interpreta i suoi artisti?
RI: Sì, ma non li ha interpretati tutti.
GI: La sua collezione?
RI: È il mio lavoro. La mia professione.
GI: La collezione è in se stessa un'opera d'arte?
RI: Oggi direi che di sì senza esitazioni. Allora non credo che l'intendessero in questo modo. Era, però, senz'altro un'antiquaria.
GI: Cosa intende di prezioso?
RI: La cosa è il pezzo appoggiato i collezionisti e riceveva il loro modo per l'arte contemporanea. Ma i miei committenti non capivano perché mi ostinassi a comprare gli artisti, ad acquistare i loro quadri. Pensavano speravano il denaro della famiglia.

GI: The truth is that I like being in your shoes.
RI: What is your love for you?
GI: It is interpreted to be an being in blue hat?
RI: A bit, more, actually. I notice that what our interpreted remains like a shadow. It reveals itself through a sign or an inflammation. It will be part of me, forever.
GI: You interpret your artists?
RI: At the end I embodied them all.
GI: Your own collection?
RI: It is my life, my profession.
GI: Is the collection itself a work of art?
RI: Today they would say yes, without hesitation. In the past I do not think it was intended in this way. It was, of course, an antiquarian.
GI: What do you mean precious?
RI: At that time, the state would support art collector and engage their role in contemporary art. But my fellow citizens did not understand why I insisted on buying the artists, on buying their works. They thought that I was dropping my family's money.

Fig. 12

From this literary setting as well as in the multimedia part, what actually emerges is the human side of Mario Rimold. The man made possible the creation of the museum bearing his name, dedicating his life to the love of paintings, to his friendship with the artists, to the collector's 'mission' in foreseeing well ahead of his time to show the way and encourage art in the future. Thus the magazine becomes another point of entry for the user to completely delve into the Museum's history, multiplied on different media formats (theatrical performance, video narration, literary account), and taking advantage of the potential of transmedia communication analyzed in chapter II.

The initiative of the musical paintings as well, fostering the bond between paintings and musical pieces according to the web user's individual sensibility, reached beyond the intangible boundaries of the internet becoming a real life experience. Radio Cortina, broadcasting in Cortina d'Ampezzo, embraced the project, devoting an afternoon slot to the broadcast of the pieces suggested by the users, commenting their pairings, and offering in-depth analysis of the chosen work³³.

³³ The first musical paintings have been aired during the broadcast *Navigating between the Mouse and the Elephant* by Mosi Roots, from January 28 to February 3rd, 2015.

Thanks to this synergy, the pool of users for this initiative has grown further: a radio station has become the access portal to the museum that enters the homes through the eyes, actually the ears, of the users who saw the work in digital format. Broadcasting its musical counterpart to the radio audience spikes its curiosity to get to know the work live on site, and stimulates it in turn to offer its contribution. Awareness that one's musical choices will be shared through radio, in fact increases the motivation to participate in the creation of a thematic playlist that originates personal and unusual musical pairings. The positive response to this initiative (40 pieces suggested in a week and 5,278 visualizations) mandated the selection of ten pieces to add to the gallery *Art Listening*: that is why the second week was devoted to the completion of a "top ten" list of the most voted musical pairings, increasing the users' interactions.

4.3.5 The Actors of the Offer

The first place for collaboration and dialogue between the Museums of the Regole and few hotels in Cortina revolved around children activities. Thanks to the experiences matured over the years with hundreds of workshops and educational initiatives, the Museums of the Regole have finally been perceived like a true provider of recreational and educational activities for the family, as shown in the partnership with the [KidsArtTourism portal](#)³⁴ and the sponsoring of [Family National Day at the Museum](#)³⁵. For a single hotel it is difficult to plan, organize and have readily available exciting activities leading children to the discovery of a territory and its peculiarities. The Museums of the Regole can be platforms for family-friendly services, putting the collected know-how to serve the tourist demand in the area, enabling each accommodation to provide its customers with cultural events of the highest quality.

³⁴ www.kidsarttourism.com is a portal dedicated to the proposals museums all over Italy are offering to families with children; since 2013 it has also been hosting the events of the Education Services of the Museums of the Regole.

³⁵ On the occasion of the second National Day of the Families at the Museum, on October 12th, 2014, which has been adhered to by the Museums of the Regole, Kids Art Tourism and Artkids have been promoting the *Museum Manifesto for Children*, hatched from a cooperative effort between families and institutions united in an effort to educate children about knowledge and beauty.

This outreaching capability can have another target: sharing multimedia materials available through the museums and introducing a calendar of varied and rich events, the hotels in Cortina will offer to their guests unique occasions to get to know the history and culture of the territory.

The first venue who was receptive to this vision is the Cristallo Hotel, willing to integrate the local cultural offerings within a wider entertainment package, in harmony with the development office of the Regole Museums. According to the hotel owner³⁶, promoting a wider synergy through the use of new multimedia tools should positively affect both players: the hotels, in direct contact with the tourist flow, can help the museums communicating their heritage and widening the pool of users for their activities; and the museums and the Regole can supply the hotels with the tools to pass on to their guests the peculiarities of the territory and the importance of protecting and preserving it.

4.3.6. Other Content Carriers

Side by side to creating the multimedia platform, within the Regole the requirement came up to renew the communication tools of the Natural Park of the Dolomiti d'Ampezzo and the Museums, setting up a series of multimedia supports aimed at integrating the visits. By the first floor of Ciasa de ra Regoles, the main building hosting the offices, the Mario Rimoldi Modern Art Museum and the office of the Guides, two displays have been set up since the start of winter season; these are joining the touch screen and widescreen purchased thanks to European funding received within the *AdMuseum* project. The displays have a purpose unlike the platform's: they have been born from the requirement to set up an information point in center town to convey all the main news regarding the trail system, and Park and climbing itineraries; they are not meant to stimulate a direct engagement of the visitor; however they can still be an important point for accessing MQUADRO. The structure of the displays, whose contents have been created through static pages not accessible by web, is made up of four main sections. The first one is dedicated to the Park and to the main naturalistic itineraries with a few environmental trivia; the second one is dedicated to the Guides, who are given the possibility to insert information regarding climbs; the third one is dedicated to the Regole d'Ampezzo and the fourth to the three Museums. To develop the displays' contents dedicated to the museums, in cooperation with the computer programmer

³⁶ The interview with Michele Gualandi, owner of the Cristallo Hotel, is available in the appendix.

of the Regole who took care of the implementation, the approach adopted was the integration of the information to the sections of the platform. Also, efforts have been made to exploit the possibility of posting images in high resolution, thanks to the off-line nature of the pages, which cannot otherwise be offered in online catalogs because of copyright issues³⁷. On the first page of the museum presentation, access is available to three kinds of content: works, events and cultural itineraries. Each section includes a high resolution image connected to a description of the work, suggested typology of events and cultural itineraries, with the possibility to dig further into the platform at a later time.

This way a hint is given about the typology of the heritage entrusted to the museums (content level), of organized activities (exhibitions, conferences, labs, didactic courses for schools, concerts and drama productions) and of the connection to the territory proposed by each museum, suggesting a new key to reading the itineraries of the visit. The inquisitiveness stimulated thanks to these instruments and their positioning in center town inside the building, which is viewed as the symbol of the institution of the Regole, can turn these instruments into a portal, organizing the services offered by the territory according to nature, sports and culture. Once again there is a returning to the open platform model which can be implemented by the contribution of players who will later join after seeing themselves as being part of this offer system.

4.4. The Analysis Phase

4.4.1. Results after First Months of Use

How to evaluate the impact of a museum changing into a content-sharing platform? In consideration of the nature of this complex and integrated product, the analysis must take many factors into consideration.

³⁷ With regard to the online availability of high resolution images, the Paul Getty Museum and the MET have taken a new course: they have decided to give up in part the copyrights for image duplication and to share their immense iconographic wealth on the web making it available to all, with a well-defined objective: to increase the number of visitors and awareness of the museum.

The web offers many analytical tools from the viewpoint of utilization of online contents by the audience.

With regards to the degree of usage of the MQUADRO platform, after the registration system is activated it will be possible to monitor the pace of users' registrations. Being a site actually hosted on the server of the Regole d'Ampezzo, for now valid tools such as Google Analytics can supply a detailed analysis of the contents of the platform and a possible increase in the utilization of the website of the museums connected to it. But these partial data do not exhaust the evaluation of the global impact of initiatives taken within the project, which are mainly deployed on social networks.

To understand the range and potential of the new digital communication tools it is worth examining their level of evaluation and diffusion: social media are becoming more and more part of people's lives, and the degree of access to the platforms and time spent within them is ever growing.

According to the study by the Pew Research Center³⁸ on social platform usage by online users, compared to 2013, in 2014 there has been an increase in the number of people accessing more than one social platform (from 42% in 2013 to 52% in 2014)³⁹, Facebook being still most used.

As noted by the report by the Fitzcarraldo Foundation, this implies that the *strategy of social channel be ever more frequently thought of in a "liquid" way, based not so much on co-presence on different channels for the purpose of reaching different targets, but on the creation of a community developing a conversation on several platforms, strongly connected with each other and characterized by content ties capable of unfolding into storytelling that can generate a sense of belonging, participation and sharing.*

Another important piece of data revealed that for the first time more than half of the online adult population using Facebook is over age 65 (56%) and, in spite of slower growth, an increase of the level of involvement was on record. At the same time, an increase in mobile devices use was being noted: these were no longer just an instrument to access the internet while in motion, but *a way to integrate and utilize other contents.* In spite of the lower diffusion of the Internet, in

³⁸ <http://www.pewinternet.org/2015/01/09/social-media-update-2014/>

³⁹ *The Museum and the Net: New Communication Methods*, Fitzcarraldo Foundation, April 2014

Italy a few peculiar behaviors are observed: a bigger inclination to use social media, and more time spent on the internet than the European average⁴⁰.

At the same time, the museums' evaluation tools of digital positioning and the identification of guidelines for Net communications strategies have increased.

The [Museum Analytics](#) platform is a good starting point for best practice analysis: it reports data on online and offline audiences of over 3000 museums from around the world. Encouraging museums to register and submit their data, the objective of this platform is to increase awareness and relevance of the monitoring tools of their own audiences: their analysis range has expanded, adding virtual to on-site visitors. The listings reported are not just about most visited museums but also most visited websites, Facebook pages with most likes, Twitter pages with most followers, and a listing of posts creating more involvement in these platforms. From this overview we can deduce that with the development of online presence of the museums, audience development studies have expanded to include Internet users, who by now can be fully considered users of museum contents. Adopting this logic, we can analyze one of the initiatives taken under the MQUADRO platform: the first post relative to musical paintings, *Art Listening*.

The [post](#) from January 24th, 2015 on the Museum's Facebook page has received in one week 5.278 views, 76 comments by users who inserted a YouTube link with their music clip selection, 44 likes and 17 sharings.

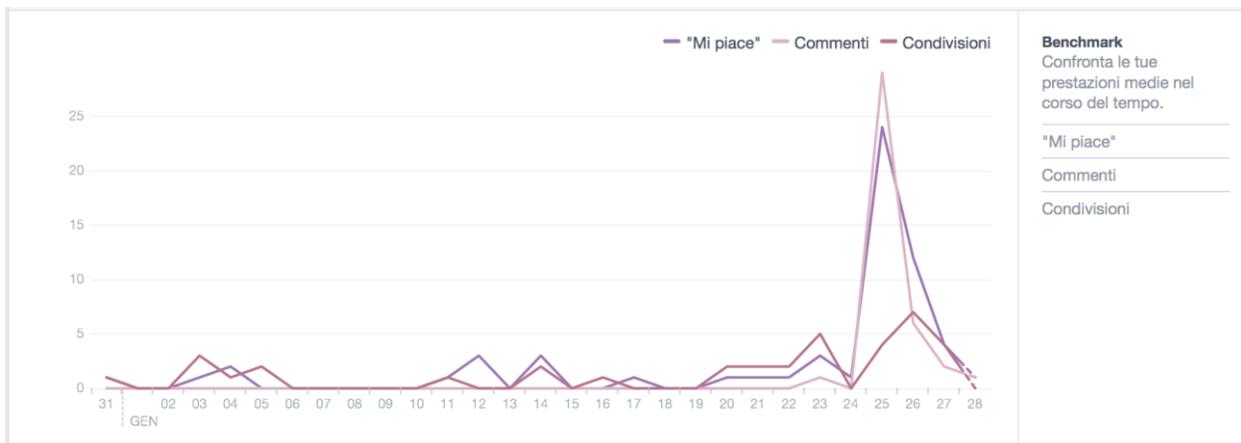


Fig. 13

⁴⁰ Data processed and collected by Simon Kemp on the *European Digital Landscape*, in care of WeAreSocial: <http://www.slideshare.net/wearesocialit/social-digital-mobile-in-europa-2014> (last accessed on January 27, 2015).

Analyzing the insights of the page between January 24 and 27⁴¹, an increase both in involvement and visualization can be noted, promoted also by sharing the post on the Facebook page of Radio Cortina⁴², which had been broadcasting the music clips all week long, hosted the Museum Director who would described some peculiarities about the selected work, *Iles des Charmes*, by Alberto Savinio.

On a quantitative level, if we compare data relative to Rimoldi Museum's visits in the past several years (9136 in 2012, 8995 in 2013, and 9093 in 2014)⁴³, the hits show how in less than a week many more individuals could be reached and made aware of the cultural offer of the museum and were able to experience its contents.

The interaction with users on a quantitative level has been marked by a high degree of involvement, as noted by the comments ranging from one's key in reading the work (*because they look like many closed boxes; because I see in it the Great Flood and little hope; the crushing of Nature solely for economic gain*); to formal correspondence with musical elements (*standstill and movement, color and shapes; I think that the pressing rhythm of the music can well represent this work which appears to be in the making*); to the declaration of one's personal interest in a process of identity reconstruction within the online community (*being a passionate movie lover I associate a movie and relative soundtrack with the painting by Savinio*); to a declaration of wishes and mental processes (*I would so much enjoy a stroll Richard Ashcroft style on the notes of Bitter Sweet Symphony*); to the expression of the impact of the activity on the self (*initially the painting reminded me of a graveyard of civilizations. However, reading posts and musical suggestions of others, I have discovered a vitality of colors, like neon lights in Las Vegas, that I had previously failed to notice. Seeing connections and associations by others is a way to look at the same painting many times over, each with different substrata*).

Of notice the participation percentage of a class of students, motivated by a professor of Italian who proposed this initiative in the classroom as a didactic experiment: six of the suggested clips in fact carry an indication of school origin, and have a different, more pragmatic writing style, (*Personally, I would connect the painting to this song, not so much for the meaning of the lyrics, but for the melancholic emotion it tries to communicate. Initially the song appears to be*

⁴¹ The tables are taken from the insights of the Facebook page of the Museum of Modern Art Mario Rimoldi, consulted on January 28, 2014.

⁴² The Facebook page of Radio Cortina has a larger number of fans (3013) than the Modern Art Museum Mario Rimoldi (496). Last consulted on January 27, 2015.

⁴³ Data taken from the annual reports of the Museums of the Regole

*sung solo by a girl, then in the end it develops into a chorus; this makes me think of a “company in solitude”, like the buildings in the painting: the sad and desolate environment with the cluster of buildings. 5th gr., Hospitality School)*⁴⁴.

Identifying the global impact of this project is a much more complex matter, because many different factors must be considered. *From a qualitative viewpoint* the elements to be evaluated are the level of participation by the players of the territory, the change of perception of the museum by the audience, the media coverage, and the internal organizational level. Conversely, *from the quantitative aspect*: an increase in stakeholders, an increase in museum visitors and users participating to online initiatives, and a higher number of organized activities.

It is still too soon to examine these data, but a series of considerations can be drawn, compared with the situation prior to the start of the project.

- Increase of the online visibility of the museums, through the opening of other channels (activation of a Pinterest page, a Twitter account, or a YouTube channel).
- Increase in the level of interaction of social networks pages, through a series of initiatives engaging the users (hashtag campaigns, online activities).
- Increase in initiatives involving new technologies (creation of an app for the exhibition D-ROCK, realization of two informative multimedia displays).
- Increase in awareness of the importance of a coherent strategy, shared by the museums staff at administrative as well as operational level (opening new channels and adopting new technologies has induced reflecting on the need for integrated communications).
- Increase in individuals involved in museum activities, online and offline (relationship with Duke University to create the MQUADRO platform, collaboration with the radio station for the activity *Musical Paintings*, strengthening of synergies with other science museums for the exhibition D-ROCK).
- Increase in quality of relationship with those individuals already involved in museum activities (schools first, having been involved in realizing some multimedia contents of the platform, thus being able to extend the lab experience of previous years into more structured didactic projects; then hotels, purchasing tickets to be offered free of charge to

⁴⁴ The post with comments by users is shown in the appendix.

their guests: they now have started channeling the cultural offer of the Museums into their communication vehicles).

- Increase in media coverage thanks to the interest in initiatives involving new technologies (as evidenced by the annual press review about materials published on paper as well as on the web).

As also shown in *Guidelines for Evaluating Work in Digital Humanities and Digital Media*⁴⁵, the speed and pervasiveness of changes introduced by technology makes it impossible to analyse in an exhaustive and global manner the impact any digital project has on internal organization dynamics, on approaching audience utilization, and on the relations with the territory. This above all because of the nature itself of the project, which is an open system that can be implemented; it should not be considered as a finished product whose purpose is utilization, but as a generator of complex processes in continuous evolution which need monitoring, constant reviews, care, and dedication by all staff, because of their nature and unpredictability.

For sure a detailed documentation on the development of the project is a very important instrument to drive awareness about the potential of the tool; such documentation should contemplate a context analysis, planning objectives, realization stages, triggered engagement processes, and active feedback mechanisms.

4.4.2. New Perspectives for the Museums of the Regole

In its initial phase the cultural proposal tended by MQUADRO has been already reawakening the interest of the players of the territory, responding to their need to expand the cultural offer in an innovative way.

The platform signals an opening which has been a catalyst for a series of proposals for collaboration, providing several players with an opportunity to embrace innovation and create synergies, thus solidly showing the possibility of widening contents and relationships at digital level. MQUADRO acts as a cultural multiplicator: it funnels competences, energies and

⁴⁵ *The Guidelines for Evaluating Work in Digital Humanities and Digital Media* have been written by the Modern Language Association's Committee on Information Technology, and contributed by Prof. Szabo (http://www.mla.org/guidelines_evaluation_digital)

resources of the other territorial players into broad breath actions; also, by supplying a welcoming environment and a place where cultural proposals can be reciprocally fertilized, this platform allows to show the museum and the heritage within it as a “resource” for cultural, social and tourist development of the territory⁴⁶.

If on one side the economic and productive dynamics of a territorial system affect the way a museum is set up, transformed, utilized and identified as a resource, on the other the museum itself can influence these dynamics, above all by virtue of the multiplicity in which it is inserted: the museum community, the world of formation and permanent learning, the academic and research institutions, and the practice communities.

With MQUADRO the museums of the Regole acquire an additional tool to be perceived as a resource, supplying concrete answers to an essential question: *what added value do they offer to the territory?* The virtual dimension encases synthetically the possibility that museums become propulsive elements for tourism development, promoting participative processes, and providing a place for aggregating and building communities. They are a pool for testing new modalities of cultural fruition: an example of innovation in virtual heritage and in creating multimedia products. And, above all, they can weave networks, connecting experiences, institutions, people and projects.

It is not possible to foresee the outcome of what presents itself as a long and obstacle-ridden journey; but today the platform has opened a new course: **interrelation, propelling these museums in the co-creation era.**

4.5. Museums Accessibility Platforms

The case study of Cortina, although unique in its nature, proposes a valid example for other contexts too. It demonstrates that technologies today allow each and every reality to grow bigger and assume a universal value, increasing its own capacity of being an influence. By adopting the platform model the museums of the Regole have the possibility of transcending the limitations

⁴⁶ According to the constructivist approach by Kebir and Crevoisier, a resource is a relational course connecting a cultural object – in this case a museum – to a productive system (cfr bibliographies, *Cultural resources and regional development*).

connected to their own organizational dimension and strictly local territorial placement; they become part of a working community which grows thanks to the contribution of each and every player and become available at the same time to all. This is the deepest embodiment of the concept of universality, guaranteed by the Internet: it does not matter how small the reality, which offers content, because today it is possible to make it accessible to a wider community. It is the principle of *acting globally*, identified in the publication *Wikinomics* (Don Tapscott, 2007). The territory of operations becomes larger, the bearers of interest can physically be more remote, yet contextually near.

If it has a valid project and a willingness to expand its own range, any reality can interface with another, even if physically remote. From the previous unbridgeable division, now everybody can benefit from the contents and tools of the other.

M.A.P., Museum Accessibility Platform, appropriately indicates this concept: “platform” is the instrument and at the same time the model thanks to which museums can become an actual platform of accessible cultural contents. The importance of this technology is in the new value-creation model and in the direction of development it proposes: for the individual institution, either global or local, within which it operates, and for the heritage community surrounding it.

But to effectively perform its new functions the museum meant as platform must push two areas: planning and evolution. To build complex processes contemplating collective participation, it is necessary to let them evolve. Planning and managing initiatives for the sake of openness and collaboration is an art, rather than an exact science. It implies setting up clear objectives, building trustworthy ties, being capable of sharing responsibilities, managing conflicts, listening to the responses by the environment, and adjusting course accordingly; allowing planned activities to take a life of their own; and, finally, being a fluid process welcoming and harmonizing individual contributions.

Joel Cawley’s words could also have a value for the museum as platform⁴⁷:

“Keep in mind that there was no strategy to do what we did with open source. It was happenstance all the way through the journey. We started doing what made sense, and kept on doing it each step of the way.”

⁴⁷ Joel Cawley is a strategist at IBM. The quote is from an interview with the authors of *Wikinomics*, February 2006. Tapscott, Don; Williams, Anthony D. (2011-03-01). *Wikinomics* (p. 340). Atlantic Books Ltd. Kindle Edition.

APPENDIX

Appendix A: Interviews at the Nasher Museum, Durham, NC

DURING THE RESEARCH PERIOD WITHIN THE GLOBALIZATION PROGRAM OF VENICE INTERNATIONAL UNIVERSITY

Interview with Juline Chevalier and Christopher Gollmar, in charge of *Words and Pictures* platform

Nasher Museum, Durham, NC, May 2nd, 2014

When has the Words and Pictures didactic platform been created?

The Museum's educational program was created right at the birth of the Museum in 2005. But the Words and Pictures project started with a grant application in 2009. We coordinated with professors, had preliminary meetings, and asked their advice as to which images would best attract the attention of their students and would more easily integrate in their curriculums and their teaching standards.

How did you develop the didactic material of the platform?

The project has allowed us to develop various tools, co-planned with the faculty professor to facilitate their task. We invited them to spend one week with us to develop content, which they realized mostly on their own. Our goal was to produce didactic materials as functional as possible which would be deployed at first in their courses and to be made available later to different areas of the country.

The role of the educators has been substantial too: most of the work has consisted of realizing materials and concurring on the information that the professors would subsequently release during their lessons; we needed to ensure that the students, upon being taken to the Museum, would receive on-site information that must be homogeneous and concurrent with what they got in school.

Under this scenario, the digital platform the professors were given access to for the materials has been one of the main tools available to us.

Have you found inspiration from other educational platforms?

The accessibility and the connection with other museums working on similar projects have been a primary objective. One of the main problems has been the copyrights of the featured works.

What is the idea behind this platform?

Merging images and information has the purpose of offering to professors an immediate selection of materials to organize the next day's course, choosing among different options. From this perspective, reading written materials has an importance not inferior to observing the paintings.

The base idea behind our site is precisely to allow the professors, even those who are not familiar with teaching the arts, to be able to benefit from materials specifically suited to this purpose.

How did you integrate the different didactic methodologies of museums with those of schools?

We are aware that the difference in teaching at Museums and in the classroom represent an important element to be kept into account. This is why lessons inserted in the platform have been prepared mainly by professors who were well aware of the tools and would know the best way to teach in the classroom.

This is the role of those professors who, being motivated by a profound interest in the subject, make themselves available to produce materials which can be utilized by an even larger number of their colleagues. This process has lasted two years after the first meeting in 2012 because the issued materials have been tested and corrected before being published online.

There has been a long preparation to make sure that materials were really effective. The materials have been created targeting principally elementary school classes. A choice that in the USA has depended much upon the affinity between school programs and the offer at the museum.

Who has taken care of the planning of the site and what have been the principles for designing it?

To come up with the design we have hired a specialized company. This has been another very important element of the project, because it was focused on the expectations of the professors and the most efficient way for them to navigate and find the materials. The objective, therefore, is for the professors using this tool to be at ease when using it. Which, parenthetically, is an incentive for the professors to explore the site and discover other offerings beyond those they were focused on. The design is centered on the professors.

Do you think this model can be exported?

Certainly: the model can be also used for other categories, such as museum educators. Moreover, other museums can deploy the same platform model.

Interview with Marianne Wardle and Molly Boarati, in charge of the *How Do You Look* platform

Nasher Museum, Durham, NC, May 15th, 2014

What is the role of your Department?

Our work is to be in touch with college professors and students, promoting museum visits of many of their classes. It is important to emphasize that every visit is conceived upon the requirements of each class. Based upon subjects and themes they face, and the didactic course they are undertaking, we select various works of art, taking them from the gallery or from our archives. There is a special space in our vault with the purpose of hosting classes, creating personalized collections on the spot.

With each of these classes we deploy didactic materials and with historical accuracy and *Visual Thinking* strategy to ensure that we connect what they see at the Museum with what they are studying in the classroom.

Do you work mainly with professors or students?

With students. They are guided by teachers and college professors, but it is a rather rare occurrence that the latter take a deep interest in the works and might like to talk about it. We should add that many classes follow courses going from sociology to history, and from languages to various kinds of studies, meaning that few professors are effectively prepared on the arts. To ask them to face the subject is, however, the opportunity to involve both students and faculty.

How did *How Do You Look* get started?

In our platform we begin by giving some basic information on how to approach a work of art and where to start when doing it. This is the central point. People learn already in school how to approach a written text, or a document, or an academic article; but to try and think of a work of art in the same optics may be a difficult task for them. It is like a mental barrier. From here was born the idea of creating *How Do You Look*. It is an instrument for consultation by classes about to visit the museum.

Even in post-visit situations, when a professor assigns a further assignment related to a specific work or a more in-depth study, it can still be useful. You can revisit the exhibited pieces from home before writing about them.

It provides help because people are not used to describe paintings, and sculptures even more; and our tool helps them to look at them and describe them.

For us the ability to go more in-depth is important: the aim is to help them to learn how to perform their work by themselves and to drive students to view the visit not merely as an occasional outing, but as one of the important elements for their classroom experience. If they have homework, I am convinced that they pay closer attention. Also, the average visiting time is one hour: not enough to cover the whole collection: homework may be a way to extend ideally the time spent at the museum.

How many meetings are planned?

Some classes come just once, while others participate to long term projects such as those requiring preparation of an exhibit and lasting one full semester. In such case students visit frequently our archive and look at many works. They prepare the listings of the selection, working on the preparation of presentations and legends, and setting up the exhibit itself. It all depends on the professor in charge.

Often we must try and seize the opportunities offered by the University. At times professors decide to undertake a project for the museum but do not have much time to commit to it. They may not be passionate about art and may possibly be uncertain about the final result of the experience. If we work efficiently, chances are that they will come back with more classes.

Are there professors who are helping you to develop themes, or is museum education viewed as a separate field?

It is a mix. By now we have a certain familiarity with the themes of the courses and we are ready to offer proposals best suited to their own course. Thus we are able to propose to bring their class to see certain works of art connected to what they are doing in the classroom. We can do this in advance, which is rather appreciated.

Is there a way to integrate various college programs with yours?

This could be a challenge for a museum, but the online format helps to make more materials available and to integrate them globally. It is also a tool to explore a new possibility: providing to students with a chance to become online exhibit curators, presenting works in a language less complex than the academic one; and at the same time allowing them to experiment the complexity behind the construction of an explanatory text regarding art, and to test different control levels and the improvements such a work implies. In some cases this work flows right into a fully fledged exhibition, such as *Masculinities: Mainstream to Margins* on the subject of masculinities, created by students in 2012.

Can adding diverse viewpoints stimulate curiosity and learning?

There are people who are only looking for information. But that is not the end of the story, nor is information the only benefit for an individual. The purpose, online as well as live, is to help them develop an awareness and trust in the work of art. The most efficient tool is to convince them that they can and must spend a long time with the painting. Because the longer you watch a painting, the more that painting can offer. One of the possible ways is to offer various topics, visual and reading keys to observe the painting. And this can be done online with high efficiency.

When developing the *Words and Pictures* platform, it has been essential to involve elementary class teachers. Does this apply to higher education and colleges?

Collaboration between museums and teaching body gives always best results. Surely older students can establish a personal relationship with the activities at the museum and the museum itself. More than ever, as teachers we offer ourselves to this age bracket like tutors, to be able to give students the support of our activities. That is why it is important that professors convey their objectives to us: they are thus able to offer materials and activities helping them to reach them by finding within the museum elements compatible with the course of their studies.

The approach to the works of art you utilize is highly multi-discipline. Why is it important to know how to narrate a work of art?

In several disciplines it is important to be able to explain with words what is born of observation. In the medical field this is object of close scrutiny. And the same thing applies to art: we can put in front of the students a work of art and teach them how to acquire such an awareness of knowledge of the experience as to be able to narrate it. This may include the possibility of working in an inter-disciplinary way, learning from other fields as well as bringing other elements from other disciplines - for example, a fossil - inside an art museum, and ask individuals what they see. We are dealing with these elements as if they were works of art. The method utilized when looking at a work of art may strengthen our observation capacity; we can then apply it to other fields, and, viceversa, acquired capacities may help us to better observe a work of art.

***Visual thinking strategy*: what is the objective? Does the meaning of a painting change whether it is exhibited on its own or presented as a collection?**

I think that the process at the base of what causes us to find meanings within a painting is the same whether it is applied to a single work or within a collection. This does not mean that there is a remote meaning in the relationship between works. This is a process that applies well to students. The first step of the *visual thinking strategy* consists of putting them in front of a work of art and simply ask “What do

you see?”. Often individuals do not respond to this question but tend to jump immediately to the interpretation. At this point we simply invite them to describe the painting; then we ask which element has driven them to the interpretation. The objective of this strategy is to simply push individuals to look, eliminating the immediate interpretation and avoiding jumping to conclusions. Often it is useful to ask questions, like for instance: *What is going on in this picture? Why?*

Appendix B: Interviews with the Presidents of the Regole d'Ampezzo

Interview with Ugo Pompanin, President of the Regole from 1989 to 1995

Cortina d'Ampezzo, December 1st, 2014

How do the Regole and their members interface with the collective patrimony they are safekeeping? Is there a tension between the old and the new, between material and immaterial patrimony?

A parallel between the two forms of patrimony is not immediately perceived. That includes the fact that it is a matter of two different aspects sharing a base in common: the protection of the environment -which the Regole d'Ampezzo made their own with the law of the Mountains in 1994 - and the promotion of local traditions and the arts are the cultural values driven by the Regole institution. Both, paradoxically, considering how ancient the Regole are, share the same difficulty: they are not fully understood by the members of the Regole.

Why is it difficult to mediate the cultural function of the Regole and convey its value for the community?

Cultural activities encounter more difficulties along with more misunderstanding. Or their positive impact on the whole economic system is not comprehensible. This is not a phenomenon belonging just to museum activities. Before the museums were founded, the Regole used to host exhibitions and cultural events. We have even had a Norman Rockwell exhibition that attracted 61 thousand visitors and, later, events dedicated to costumes and exhibits dedicated to wood carving and traditional activities. The visitors, however, were more tourists than members of the Regole. Cultural activities do encounter obstacles when they are perceived as a useless cost.

The collections gifted to the Regole have allowed the creation of three important museums. How have the members of the Regole lived through this gift giving?

In opposing ways. Suffices to say that there has been a lot of debating, at Regole Council level, whether or not to accept the donation by the widow of Mr. Rimoldi. Many thought that this massive capital would be a burden - this was related also to recent debt incurred by the Regole when restructuring their new headquarters. In the end it is always the activity of three or four “illuminati” that causes a breakthrough.

But to think of the members of the Regole as distancing themselves from cultural activities is disparaging and misleading. Most are far removed from the activities of the Regole and unaware of their contribution to the life of the territory. Just take, for example, the difficulty in assigning the revolving appointments, such as the one of the “Merighi”, which are difficult to fill in spite of carrying virtually no obligations .

By virtue of the economic and social changes and of the vocation for tourism of our area, has there been a change in the way the Regole perceive their collective resources and the modalities for participating to the management of the territory?

Much has changed in the past fifty years. For centuries the only way to live in Ampezzo has been by belonging to the Regole: they would provide pasture grounds for the animals, wood, and rocks, for housing. With the de facto disappearance of the pastoral and forest/agricultural/pastoral economies the status of the Regole necessarily goes through change. Nowadays participation is not a privilege. It is almost a civic service dedicated to safeguarding the territory and its culture.

Are the rules of access contemplated in the Laudo and establishing the duties and privileges of benefiting from the territory still valid?

I believe that they should be thought over again. There are two areas of intervention. First we have to eliminate the unjust and unsustainable discrimination against women. The women members of the Regole must remain member, whether they have a brother or not. By now it is absurd that members by right show no interest in the territory, while other individuals who would be actively protecting it are excluded from membership. For the same reason the Regole should include also those persons who, while not belonging to a family from the Regole, still live in the territory and are committed to it.

Is there room, in your opinion, for the members of the Regole to look at the museums, and, in a broader sense, to culture as a resource, even for economic growth?

Yes, but a mediation by the administration is necessary . The Regole must explain with courage and determination to their members the relevance of the two cultures they own: the protection of the environment, and the protection of the cultural heritage, of traditions and customs. Considering that we cannot continue living by selling wood like in past centuries, it is necessary to explain that the future goes through culture and tourism. And they must understand this.

Interview with Cesare Lacedelli, President of the Regole from 1995 until 2004

Cortina d'Ampezzo, January 15th, 2015

Have the functions of the Regole changed from past times?

Not a whole lot. The economy has changed, but the function of preserving the landscape, the forests and the pastures has stayed. In 1990 the Park took over, with a function of diffusion of culture through exhibits and cultural activities, in addition to the protection of the environment. The Park however is financed by the Region, and the reduction in contributions necessarily implies a limitation to the program.

Is the connection to the territory, a permanent feature of the spirit of the Regole, still present within their community?

I think that the community is still rather connected with the Regole, which is perceived as a very important institution for our territory. But the members of the Regole pay close attention to the monetary aspect. As an institution that provides work, it makes it hard to find individuals available to be volunteers without getting paid. This year the income statements of the Regole will show a loss, and this is disturbing to our community. Anyway, the economy has deeply changed. Once upon a time the agricultural activity was a fundamental resource, but now it cannot sustain itself on its own. Building and managing a stable today is a big economic risk, and the one who are operating properly are those dedicated to agro-tourism. Today there are also many state or European Union incentives to keep these agricultural initiatives running. You must always start with the assumption that things make sense if they can sustain themselves economically. This applies to all activities: even the forest does not provide much of an income any more. It barely sustains itself with wood cutting and selling activities.

What has been the experience of the members of the Regole when confronted over the years with the gifts of art, paleontology, traditional objects and artisan crafts collections?

This is an institution with a history of one thousand years, it is just right that they have given to the Regole. When I was President the proposal to move the Rinaldo Zardini collection to Alexander Hall faced many opposers because the museums did not provide any income.

By virtue of the tourist vocation of our territory, should the cultural activities also represent a source of income for the Regole?

In order to attract more visitors we should organize more relevant exhibitions and with higher appeal because the competition with large cities is quite strong. The lack of economic independence is no help. This activity has to be self sustaining.

In the Laudo there is no precise reference to the cultural heritage of the Regole, but in the mentality of the members is it perceived as a collective asset?

Culture is part of the collective patrimony but is not felt a whole lot in Cortina. The members of the Regole do not visit the museum frequently and once they have done it they do not come back. In our by-laws there is no mention of culture, even though in the revision of the Laudo an insertion is planned. We should increase this bond, for instance through the Ethnographic Museum, which is the one closer to the mentality of the Regole. Its function of valorization of the traditions of the Ampezzo region makes it very close to the Union of the Ladini of Ampezzo. So much so that there has been talk of pass it on to them for managing, a commitment deemed too heavy.

While natural resources can be taken away and access has to be regulated to protect them, with knowledge it is the opposite: the more it is shared, the more its value increases. Culture is not a resource getting protected when it gets closed. Can these two mentalities co-exist?

This management of the collective property is unique in the world, and it is excellent. To be able to benefit from this collective good which is inalienable and indivisible is an exceptional feat, and it has lasted for a thousand years. Today we have the possibility of enriching this patrimony also with the museums and cultural activities, and people must be made aware of them. But in order to be able to involve and attract individuals they must be motivated. For instance, many museums offer free admission on Sundays. This could be a way of involving members of the Regole as well as non members.

How can a more personal bond be created between the members of the Regole and the cultural heritage at the museums?

This is not easy. We should talk more about the museums, tell more what is inside. The Regole's newsletter, which gets delivered bi-weekly to all the families, could be an instrument to spread awareness of this heritage, make people curious, specially young people who may have an interest because of their studies. We could create, for instance, a dedicated insert with in-depth materials.

Can the Internet be also an opportunity for spreading knowledge of the heritage and make its way into households?

In the last few years the world has changed. There is a big difference, when looking at the past, and young people have a much faster way of communicating, fully based on the new technologies. Even excessively at times, as we are losing manual dexterity. But certainly it could be an instrument for museums and culture to tell their story and become more popular. But behind these instruments there must be people, because passion and knowledge of the territory are the base to involve others and communicate what we have. These competences, which may belong to members as well as to non members of the Regole, must be valorized, or else they will get lost.

Interview with Alberto Lacedelli, President of the Regole from 2004 to 2006

Cortina d'Ampezzo, January 19th, 2015

Is the museums' heritage perceived as a collective patrimony by the members of the Regole?

Members know about this patrimony. Everybody knows that the museums exist, that they are there; but nobody goes and visits them. There is a certain lack of interest in this patrimony which no one wants to affect while wishing it did not have a cost. During the previous president's mandate there had been an opportunity to make a single museum hub at Alexander Hall, together with an information office for the Park, in agreement with the Council and the Cultural Committee. When I became President, we had to make the physical transfer and we started backing up, so much so that in the end we only would move the Paleontological Museum. There were many reasons for this: the place was decentralized, and we did not want to degrade the image of Ciasa de ra Regoles, which would have been leased to generate more funds for investments in the territory. The Council, debated between the general potential income and the requirements of the Cultural Commission, had a lukewarm attitude toward the matter because the members of the Regole do not warm up to culture.

The museums organize many opportunities to visit and get better acquainted with the heritage. In your opinion is there participation by the members of the Regole to these events?

Not much, but this is also because in Cortina too much is offered. Here you can do a lot of things, and from a sports viewpoint there is a very ample offer. Also, there are plenty of active associations; just consider how many cultural, sports and religious associations are around. An individual who wants to be engaged is going to find whatever is closer to his/her interest.

Compared to the past, is the Regole community still united and cohesive? Has the participation in administrative activities of the institution and territory management changed?

Since agricultural-forestal-pastoral activities have dwindled after World War Two, the Regole are not seen any more as a primary source of sustainment for families; in the past, they used to be indispensable to afford a living and to allow children to make a living. As this primary necessity is no longer there, part of the members do not identify with the Regole. However, belonging to the territory is still well rooted and there is pride in being a member, even though there is recognition that the economic framework has changed; that the sale of wood, the pastures and the stables are not strong sources of primary sustainment, and the institution has necessarily had to seek new income sources. At times the reason why many refuse to take on administrative positions - such as the “marigo” - is simply the fear of making mistakes, of not being up to it.

Is this reverential fear there also regarding the Museums? Is the barrier also of cognitive kind, of understanding the works of art?

Knowledge actually attracts people. Once you know, you are fascinated and your participation grows. It gets hard to diffuse it and to communicate it. This applies also mainly and above all to those who are charged with the management of this heritage.

Are the members of the Regole aware of the potential, even in terms of revenue, of this cultural heritage? Consider the possibility of accessing specifically dedicated contributions, of creating jobs from the territory for young people .

All the income analysis made during my term as President always showed a loss. Beyond the value added of culture, which cannot be quantified, our statements were in the red. Revenue from tickets, from loaning out works of art or other initiatives, would not cover the expenses. The only consistent revenue was from the leasing of space. At the time both the Cultural Commission and the Director of the Museums maintained that the museums were under utilized and that a different type of management could have offset the losses and generated a profit. They actually have never been able to demonstrate this, therefore in the Council many were opposing spending for culture without a return. The question was not just economic, but also of participation. The members themselves were not attending the events.

The Park was founded with relevant regional financing, giving the Regole an opportunity to increase its staff. If the museums too were to have an economic independence, would the predisposition of the members of the Regole toward this patrimony change?

Yes, probably. If the economic question were to be overcome thanks to external contributions, they would find it less hard to judge the issues related to culture. The example of the creation of the Park is significant. Initially the proposal was not received positively. The President in charge then, Ugo Pompanin, was able to defeat the opposition by leveraging two points. First of all the fact that funding to manage the Park would be received from the Region. This would bring benefits by creating jobs. Then the fact that the administration would be led by the Regole and not by a public agency as is the case for other regional parks. This is a fundamental aspect which has contributed to the Park being perceived as a resource, because the administration, ordinary as well as extraordinary, is not a burden to the community.

Even though the responsibility to manage this patrimony leads to a limited community, is there any interest in diffusing, extending and publicizing this heritage to a wider audience?

I can't tell, because it is difficult to read the mentality of the members of the Regole. At times they are surprisingly very open. Back then we had tried to activate some synergies with other museums, to give more visibility to ours, but the proposal was met with much opposition. There was a widespread fear that "they would come and be in charge" right here, at home. After all, it is the same idea: even though the members of the Regole may not look interested, they still would not accept to hand out the administration to an external entity.

While the Park and its embodied function of protection of the environment is something quite near to the collective mentality, is the static and conservative conception of the museum an obstacle to its fruition?

Certainly, but to make the museum perceived as a dynamic entity it is not enough to just do it. It is necessary to experience a solid alternative. 25 years after its birth, the members of the Regole have seen how it works, and if they could set the clock back all of them would repeat the experience, even though back then it had been difficult to make a choice. It is true that in the case of the museums there is a further difficulty because they are perceived as a sphere with well defined boundaries, limited to the space for exhibits. The Park, on the other side, is spread out on a large portion of the territory of Cortina. Moreover, the members of the Regole have strong ties with Nature, and though feeling ownership for the works of art, they are not intimately affected by them.

So, do you think that instruments such as the new technologies may help in involving people more, and strengthen a more personal bond with the collections?

There have been no activities related to this. Therefore it may take hold, or perhaps not. Certainly the digital dimension may make the museums and their heritage known. On the other side these instruments belong to the present, even in Cortina. And social networks are not used just by young people: initially the not so young perhaps struggle when learning how to use them, but after overcoming the initial obstacles they become part of these online communities.

Interview with Cinzia Ghedina, President of Regole from 2006 to 2011

Cortina d'Ampezzo, December 5th, 2014

Is there a difference between collective ownership and collective resources within the context of the Regole?

I consider them resources, not ownership. Collective ownership is an entity per se, but for the individual member of the Regole this territory, this patrimony, is simply a resource, for a member family and for the community. It is not something merely economic and quantifiable. It has a great value as a resource for the Regole community and the community in general, because it benefits member and non member families.

Today the term *commons* refers to a wide category which also includes knowledge and learning. Do you think that this definition also applies to the Regole?

I believe that culture is a very important component because history, being also made of documents and object, defines us a lot. But I think that for most members this is not the case. The biggest difficulty I have had has been to get members individually to recognize the importance of their history, traditions and all that is represented by the museums, but first of all for their own benefit as personal enrichment ahead of economic factors and as a value to diffuse.

A museum is an institution keeping material objects that narrate this intangible heritage of history, knowledge, traditions and learning. Do the three museums of the Regole get recognition about this?

They don't. There are problems with that at all of them. While for the Museum of Modern Art and for the Rimoldi Museum the difficulty is in understanding the subject matter and the knowledge of the objects on exhibit, the Ethnographic Museum does not get any appreciation because it is about daily routines, which is taken for granted. It is as if you wanted to forget about the past because it has no value for the future: the past however has forged this community which has a thousand years with a background of Regole

history. But if you cannot understand the importance of this history for yourself, you cannot convey it to visiting guests.

The cultural heritage of the museums is a universal heritage and like all assets deriving from knowledge it is a typology of undefined boundaries resource. Are the members of the Regole aware of the universality of the heritage they are keepers of?

I don't think they are. At statutory level we have a function of protection of the environment and of valorization of culture and traditions, but I think that this is approached more materially than on a cultural identification level. We are not feeling like belonging to a wider collective family. Four hundred years ago the members of the Regole would live feeling like a slightly larger family than their own because you needed to support each other to survive; today in my opinion this community is not there any more.

What direction should be taken to rediscover the value of the community?

The Feast of Desmonteà or Senior Citizen Day are occasions to recover a social texture that has gone lost among members; there should be more work done in this direction. If we were to rediscover the value of the community, we would rediscover the value of culture.

Society has changed, and so has the way we think of resources. Is there room in the future to look at culture as a resource, or even as revenue?

I hope so. I think that his town should have more pride in its history, aiming also at a hospitality characterized by the presence of a community with a unique history.

While natural resources can be taken away, and to protect them their access has to be regulated, with knowledge it is the opposite: the more it is shared, the more its value increases. Culture is not a resource getting protected when it gets shut down. Can these two mentalities co-exist?

I think there is a problem upstream. Many members view like an imposition the experience of being more directly involved. Only by experiencing it proactively you can understand the importance of the contribution made by everybody in order to bring it to life.

Has the birth of the Museums also been considered an imposition?

When the museums were born, I was a little girl. I remember the inception of the Park, and I think it may have been similar. Even that one has been imposed. It has not been born of the will of the members of the Regole. This has been the case also for the museums or even for the ethnographic museum. The positive

outcome is that in the end they have accepted it and this huge heritage has not been lost. The work here consists of creating understanding that the museums are a value added for the town.

Do you think that the new available technologies may assist in involving and assigning this active role both to the Regole community and to a broader audience?

In my opinion yes, I think this may be useful. For instance it would be wonderful to make the historic documents of the Regole permanently accessible: when your curiosity is aroused, and you have time and willingness to know better your past, now you have the possibility of accessing it. If we think of the Rimoldi Museum, more than half of its works of art are in the vault. True, there is the catalogue, but to view the works there could be more easily accessible instruments. In the case of the Paleontological Museum, there are many scholars who do not live in Cortina, and the possibility for an American or a Chinese student to see the fossils of our museum, of diving into research without moving physically, could be very useful. Go figure how many objects from our museum could open a window on the world.

If others were to give value to these objects, could the perception of their value be increased also within the community?

Absolutely, yes. I think that there should be a lot of talk about it. With a lot of talk, something will stick in the heads of the members. If we never talk about it, it will die out. For many years our museums have been a collection of lifeless objects. You need people such as Paolo Fedele or Giorgio Zardini, who have passion and motivation to try and involve other people. As people get involved, then something can be achieved, but if you lock things up, they are confined there.

Being open represents a stimulus to involvement, then.

Yes. I also think that the museum can be closed physically, but through a platform it can stay open 24/7.

Before the birth of the ethnographic museum, there have been exhibitions on traditional activities. Was there already a perception of ownership of an ethnographic heritage, before it was decided to dedicate a building to the museum?

The exhibitions were generated through two doctoral theses, authored by me and by Astrid Menardi. Back then there was an exhibit of the museo Rimoldi on the first floor, while the second floor was dedicated partly to the Rinaldo Zardini collection and partly to a series of objects by Ampezzo artisans, but without a well thought thread. The exhibitions have been a stimulus to give these objects a meaning, with a thought of providing permanent space to this material. During the planning phase, while setting up the Ethnographic museum in Pontechiesa, we decided to dedicate this museum to the Regole institution and

to how, thanks to the Regole, people have been able to live in this valley. To this leading thread we have also added various aspects of daily life.

When did you start collecting traditional objects? Has there been a willingness by the administration of the Regole to collect this heritage?

When I arrived the warehouse was already full. The Regole administration was not asking for anything, people were trying to empty their barns and would take them to the Regole. Some of these included many items of artistic handcraft, and there was a perception of value, but no willingness to give them a meaning. When I got the Presidency, the need aroused to recreate a context for these objects, to make them available to the community. This has also been the case for the Paleontological Museum and the Rimoldi Museum, for which we sorted out a “permanent” core.

What kind of relationship is there between the Museums and the Park?

The museum closer to the Park is the Paleontological Museum, because it valorizes the environment both from a geological standpoint with the fossil collection, and Nature, with the herbarium by Rinaldo Zardini. The herbarium is not so accessible, and the multimedia instruments could further enhance it, together with the insect and butterfly collections. These aspects are strictly bound to the Park, which is under the control of the Regole. The region has transferred the administration of the Park to the Regole because they have always been managing their territory like a Park. I view the whole heritage belonging to the Regole as a Park.

If we consider “Park” a way of approaching the territory, would the museum be part of this mentality?

Yes, to me that’s an idea.

Then the idea of museum does not remind of family, home?

Perhaps the word must be thought over again. When you think of a museum, you think of a building, something static, enclosed. Perhaps through these new instruments we can change this conception, because the museums get into your home.

Interview with Gianfrancesco Demenego, President of the Regole from 2011 until present

Cortina d'Ampezzo, January 13, 2015

Why are the Regole d'Ampezzo important for the territory of Cortina?

While there may be incongruities, the importance of the Regole stems from their autonomy, from being far removed from any political judgement. An institution such as the Regole gives the citizens strength and allows a correct use of the territory, always safeguarded and respected. It is a way to manage and enjoy a common patrimony forever regulated by the Laudo, where rights and obligations are in perfect balance by putting everyone on the same level and where the well-being of society, not the individual profit, steer the choices.

A recent discipline includes in the collective assets the resources from knowledge. Is culture viewed as part of the patrimony of the Regole?

Generally, culture and education are considered not values per se, but instruments. School is for a craft; University for undertaking a profession and earn from it. For many, in fact, knowledge has no value per se and, consequently, is not an experience like a patrimony. To sensitize the members of the Regole this way has been one of the tasks at hand in the past few years.

What does culture mean within the context of the Regole? Just the exhibitions and the objects of the Museums, or does this include also the Regole's spirit, the tradition of territorial management?

It would be worth incentivizing the knowledge of the history of territorial management because often we stop at the surface, and are limited to the awareness of ownership of the territory; we are not thinking how it can be used and preserved so that the whole community may benefit. And this without restricting ourselves within an identity pride that often tends to block any development and diminishes the very function of the Regole.

In addition to the mentality, is there also an economic reason? The widespread belief is that culture is just a cost.

When you are not aware that knowledge, under certain aspects, causes an opening of the mind, therefore widens the horizon or the curiosity of learning more, culture is automatically viewed as a useless cost. We can see it in several fields. Recently we have been criticized for having reserved the first floor of the Ciasa da Regoles to cultural activities. This choice has meant a loss right out: The missed rental income will not be compensated by the income from cultural activities, but we are certain that the Regole as an

institution have acquired more authoritativeness and consideration in their role as custodians of the values and knowledge of the community.

Is any cultural activity perceived as a cost?

It would be opportune to ask what is the enrichment that new ideas, institutions and knowledge confer to anyone visiting, for instance, an exhibition. It is this capacity to inspire creativity that drives museums all over the world to organize exhibitions and cultural events of relevance. If our world is restricted to what we have always known, the result is not going to be preservation but, rather, decline. And our ancestors knew it very well, as they used to travel a lot in order to learn innovative artisanal techniques.

In time, the Regole have demonstrated an ability to change according to context, looking for other sustaining sources. For instance, by selling wood. Could this still apply, by turning to environmental and cultural tourism, like with cattle in the past?

At present it is difficult to sell the idea that any activity must reflect the requirements of the period we are living through, which is what was happening in the past. For instance today agricultural activities cannot sustain themselves on their own, but they must go along with a collateral activity in accordance with the vocation of the town, which is tourism and culture.

The principle inspiring the Regole is that right generates from need, but what happens if the need changes? Is it also necessary to adapt the Laudo?

Not every source of sustainment is covered by the Laudo. The example of the houses with a right of surface is emblematic of the conflict that is often encountered between the spirit of the Regole and the literal application of the statutes. If we read the Laudo, we cannot find a line of the right to a house: the member has a right to wood and rocks. This until one hundred years ago was enough. Without the right to access these collective assets, he could not have built it. Today the problem of a “house” is of another nature. The additional assistance that the Regole can offer is the possible concession of use of land in an urban area, if the Regole own some, obviously.

Cultural activities are also new to the Regole as is the addition to the Regole’s patrimony brought by the art donations: are they covered in the Laudo?

In the Laudo the cultural functions are there, but in a very marginal way; this aspect should be strengthened. There is no mention of donations or temporary loans, which however are under the *new patrimony*, the one acquired after 1952. In the proposal for reviewing the Laudo, cultural activities are recognized, but they are not given economic independence, which is a must. We should divide the

productive activity of the Regole into fixed chapters of cost: the agricultural-forestal sector, the maintenance of the trail network, the new agricultural-forestal-pastoral structures, and culture. In the three-year plan these percentages should be adhered to, with a margin for emergencies. By guaranteeing a fixed quota to the cultural activities, these might not be seen as an inappropriate cost.

In your opinion would this warrant economic support and survival to the cultural function?

Certainly. Consider the cultural function offered by the Park of the Ampezzo Dolomites, which has also been recognized because the Park itself benefits from an economic autonomy which allows a separation from the administration of the Regole. This does not mean that the Regole do not invest hundreds of thousands of Euros every year, which are added to the contributions by the Region. This is done because they perceive in the activity of environmental preservation one of their fundamental objectives.

Could the multimedia tools the Regole are adopting, such as the information panels or the MQUADRO platform, improve the perception of the cultural heritage?

We must sensitize from within, because this is a problem of mentality. For sure the multimedia tools do offer the possibility of knowing and discovering the heritage from many viewpoints and sharing this knowledge, but it is necessary to undertake the effort of accessing them while asking again what does it mean to inherit a patrimony such as the Regole's and how we can "live it" in an intelligent manner.

Appendix C: Interviews with the tourist stakeholders

Interview with Michele Galandi, owner of Cristallo Hotel

Cortina d'Ampezzo, February 3rd, 2015

How important is the cultural offering of the territory within the broader tourist offer?

It is very important. We are aware that the demand for cultural tourism is ever growing, in particular with foreign visitors, who often favor a destination because of the cultural offer. From this viewpoint I think that the offer from the territory is very important, above all and more and more because of the requirements of customer segmentation. Our approach is to offer direct services to different kinds of customers: those interested in active lifestyles, those in culinary experiences and local products, and others who may be interested in culturally oriented vacations.

Do you think that the tourist offer by Cortina is trending toward more segmentation?

I hope so, because it is getting ever more relevant. Perhaps we could do even more, through synergies between those handling the offer and hotel operators.

What has been determining in the offer by the Museums of Cortina and your decision to collaborate with them? What new elements would you expect from this relationship?

By all means the fact that these museums which have been operating for years are starting to make a wider offer available, not just on a local level. I think we must take a more national and international range of offers, without worrying about the offer itself, organizing the exhibitions, and activities. From this viewpoint hotels can be an important connection.

Where can museums and hotels become active partners in the tourist offer?

A hotel can be a space dedicated to exhibitions, and approach more individuals. First of all because by definition it has a higher traffic and is perceived as less boring and open even to non-connoisseurs. Then, because guests can live a different arts experience, more thorough, because they can utilize a series of services that a museum does not have. Another level of collaboration could be reciprocal promotion: being able to propose cultural packages together with the hospitality offer may allow a museum to promote the locality and a hotel to promote its own offer jointly with the museum. This becomes a tenacious loop where no one is separated and independent but each one is working for the other party.

From this synergy can a reciprocal promotion be created whereby museums and hotels share contents, activities, communication tools and audience?

Tourist flows go through hotels by definition: if you wish to create higher traffic, or to reach a certain kind of customers, you must offer another kind of stay. Everybody wins: a museum may find it difficult to make itself known and incentivate a visit, yet it all becomes easier if there is a closer collaboration between museum and hotel.

Multimedia tools and new technologies are also changing how the territory is enjoyed. Can this also be an opportunity for collaboration between hotels and museums?

Certainly. I think that we cannot stay away from the new technologies. Recently Google's founder has made a provocative statement declaring that the Internet will cease to exist. This not to say that it will die out, but that it will be embodied with us, because we are going to be more and more connected. Multimedia tools are indispensable to start the experience before traveling, and to make it longer lasting once it is over; this is also true to increase interactivity while traveling. This is even more valid for the cultural experience, which gets imprinted into memory before, during and after. It is a way to stretch the time of our experiences.

The museums of Cortina belong to the Regole d'Ampezzo, a form of collective ownership peculiar to mountain regions. Do you think that the history of this institution and its values are important aspects of the cultural offer of the territory?

Definitely. Only few know what the Regole, are and precisely because of that many tend to emphasize their exclusiveness and diversity as opposed to other territories. Few know the benefits which I think should be valorized and explained. Protecting the territory and learning how it has been preserved over the centuries: here are two current theories. I think that if we were able to convey a quality of territory through past history allowing it, the territory itself would benefit from it: this would apply to vacationers as well as residents. Maybe we could even reverse the flow taking many young people away from Cortina: in fact even the quality of the territory nowadays has pushed many families owning a second home to adopt it as main residence.

How can the Regole be a resource for developing tourism?

To vacation in Cortina is different when it comes to quality of life, air and food as opposed to any other territory where there are no Regole. It is about best conveying and drilling with all possible means a peculiarity which is already a value per se. By definition, to be different in terms of communications is a first step: everybody tries to be different, precisely because the offer in this field, be it for tourism,

culture, or food and wine, is endless. In a world so small precisely because everything is on the Net, the fact of being able to communicate about something unique I believe has a huge value which is still underestimated. I believe that the turning point for the Regole d'Ampezzo is truly about adopting a more contemporary mentality based upon its origins, but looking at the future. We must not lament about the past, but we must take away from it what's good to go forward and open up to the outside world.

Appendix D: The First Musical Painting Post on Facebook Page

Museo d'Arte Moderna "Mario Rimoldi"
Pubblicato da Stefania Zardini Lacedelli · 21 gennaio alle ore 12:29 · IA

La prima opera che abbiamo scelto per #quadrimadiali è L'Ye des chames di Alberto Savinio. Proprio come riquadro, una piattaforma in cui giocare con la fantasia, un'isola da sperimentare, assaggiare, esplorare. E soprattutto ascoltare.

Che brano musicale vi viene in mente, e perché? Inserite il link di Youtube e un breve commento sulla vostra scelta.



MUSEO REGOLE.IT

3.276 persone raggiunte

Mi piace · Commenti · Condividi

Place a Victoria Szabo, Marco Barbetta, Martino Apollonio · Commenti più in vista e altri 25.

4 condivisioni

Scritta un commento...

Museo d'Arte Moderna "Mario Rimoldi" Ciao Cortina, basta inserire un link di Youtube con il brano che ispira il quadro e commentare la scelta!
Mi piace · Rispondi · 2 · Commento di Stefania Zardini Lacedelli · 25 gennaio alle ore 13:30

Museo d'Arte Moderna "Mario Rimoldi" Al minuto 50 potete riascoltare l'intervento della Dottressa Alessandra de Bignartina, che parla della prima opera dei Quattro musicali Grazie a RadioCortina e intervistando tra il topo e l'asfalto di Luca Zardini <http://www.radiocortina.com/interveiwgde/50>

Radio Cortina

Mi piace · Rispondi · Rimuovi anteprima · 4 · Commento di Stefania Zardini Lacedelli · 27 gennaio alle ore 17:27

Museo d'Arte Moderna "Mario Rimoldi" Grazie a tutti delle bellissime suggestioni...Ora si vota! Cliccate "mi piace" su tre brani che pensate esprimano meglio l'atmosfera dell'opera di Alberto Savinio. I dieci più votati verranno inseriti nella galleria riascoltando della piattaforma #quadrimadiali. Creiamo la top ten dei #quadrimadiali!
Mi piace · Rispondi · Commenti di Stefania Zardini Lacedelli · 31 gennaio alle ore 18:00

Museo d'Arte Moderna "Mario Rimoldi" <http://inquadro.regole.it/> Esplora i quadri più... di Ecco i brani che avete votato per. Un che di Savinio di Alberto Savinio e che potete ascoltare sulla piattaforma #quadrimadiali. Grazie a voi abbiamo costruito il primo dei #quadrimadiali della galleria riascoltando. Siete pronti per la seconda opera? Domani la scopriremo...

La piattaforma multimediale dei musei delle regole a cortina d'amperezo

MUSEO REGOLE.IT · DI MAURO DE BIASI - EMEREA ASSOCIATI

Mi piace · Rispondi · Rimuovi anteprima · Commento di Stefania Zardini Lacedelli · 1 febbraio alle ore 20:02

Museo d'Arte Moderna "Mario Rimoldi" Silvia Gioia Giacomo Luca Mosè Tommaso Tommaso Aaron Simona Marco Giuseppe Giala Giulio Alessandro Sara Luca Annabella Nicoletta Beate Maurizio Cosetta Emanuele An Na Carolina Costanza Matteo Elias Lorenzo Giulio Matteo Erica avete votato i vostri tre brani preferiti?
Mi piace · Rispondi · Commento di Stefania Zardini Lacedelli · 1 febbraio alle ore 18:00

Victoria Szabo Congratulations! So happy he is going well!
Non mi piace più · Rispondi · 1 · Lei alle 7:09

Luca Zardini Lacedelli <https://www.youtube.com/watch?v=9vZ221v9iWk>...

Lapalux - Gauri
Lapalux "Gauri" from Nostalgic on Braindeeder Learn more at <http://www.braindeeder.com/uploaded...>
Non mi piace più · Rispondi · Rimuovi anteprima · 3 · 2 febbraio alle ore 15:30

Aaron Hepp <https://www.youtube.com/watch?v=qKZ221v9iWk>

Giovanni Allevi - Come Sei Venente
Mmmmm bellissima...
Non mi piace più · Rispondi · Rimuovi anteprima · 1 · 2 febbraio alle ore 5:30

Martino Apollonio <http://youtu.be/Ahnd-w7Xw8I>

Mi sembra tutto fatto di caramelle... Altro...
Non mi piace più · Rispondi · Rimuovi anteprima · 3 · 31 gennaio alle ore 18:09

Lollipop - The Chordestes
The Chordestes Born to be with you. 1984 P Lollipop LYRICS: Lollipop lollipop on call and tall tall lollipop...
Non mi piace più · Rispondi · Rimuovi anteprima · 3 · 31 gennaio alle ore 18:09

Simone Dallari <https://www.youtube.com/watch?v=HDT7M5d9I>
un grande senso di confusione mi sale guardando questo dipinto, tutte queste forme messe lì in modo totalmente casuale. Personalmente mi attira molto ma è molto confuso... Altro...
Non mi piace più · Rispondi · Rimuovi anteprima · 1 · 31 gennaio alle ore 11:45

Moreno - Che confusione. Video Ufficiale. Tratto dall'album "Stecor"...

Mario Miglioni <https://www.youtube.com/watch?v=9vZ221v9iWk> ho scelto questo pezzo perché da il senso di spazio e colore e ricorda il tramonto. Luca Zammitelli 28 IPEDA

Von Paul Kalkbrenner - Aaron
Her den Soundtrack & Film laufen:
<http://fastore.amazon.de/youtu00211+ Bewertung...>
Non mi piace più · Rispondi · Rimuovi anteprima · 1 · 31 gennaio alle ore 11:45

Marco Miglioni <https://www.youtube.com/watch?v=9vZ221v9iWk> ho scelto questa canzone perché mi trasmette serenità guardando questo quadro, e ritorno al quadro di sono delle onde che mi hanno subito fatto venire in mente questo quadro. Francesco Tolosso 28 IPEDA

LE ONDE - Ludovico Einaudi -
Einaudi - ondes - Acque lene da Febbraio2009 a Novembre2009 Che cosa sono le nuvole? Le nuvole...
Non mi piace più · Rispondi · Rimuovi anteprima · 2 · 31 gennaio alle ore 11:20

Marco Miglioni <https://www.youtube.com/watch?v=9vZ221v9iWk> ho scelto questa canzone perché mi trasmette serenità guardando questo quadro, e ritorno al quadro di sono delle onde che mi hanno subito fatto venire in mente questo quadro. Francesco Tolosso 28 IPEDA

KATKALYSM - The American Way (OFFICIAL VIDEO)
Kataklysm cover Sacred Reich's "The American Way"...
Non mi piace più · Rispondi · Rimuovi anteprima · 2 · 31 gennaio alle ore 11:20

Marco Miglioni <https://www.youtube.com/watch?v=9vZ221v9iWk> ho scelto questa canzone perché mi trasmette serenità guardando questo quadro, e ritorno al quadro di sono delle onde che mi hanno subito fatto venire in mente questo quadro. Francesco Tolosso 28 IPEDA

A Tribe Called Red - Electric Pow Wow Drum
For more info and free downloads visit <http://www.electrictribe.com>
Non mi piace più · Rispondi · Rimuovi anteprima · 1 · 31 gennaio alle ore 11:20

Giuseppe Coppola Più che una canzone, la prima cosa che mi viene in mente è un video di Björk.

Björk - Hyperballad
Post - 1995 - 3:59 - Hyperballad - 1.331 + 4.3 Aspettato. Summumed 51 Ancestral AAC-MAA Lossless...
Non mi piace più · Rispondi · Rimuovi anteprima · 2 · 31 gennaio alle ore 11:20

Giala Pinotelli <https://www.youtube.com/watch?v=9vZ221v9iWk> ho scelto questa melodia perché la ritengo la più appropriata per questo quadro, da un senso di malinconia e tristezza. Sembra che entri in un mondo nuovo e piuttosto triste e grigio.

Equipe 84 Tutta Mia La Città 1959
Equipe 84 - Tutta Mia La Città (Backstory way) (Rings - Wood P/N) No, non vestrai l'orgoglio nella strada...
Non mi piace più · Rispondi · Rimuovi anteprima · 4 · 30 gennaio alle ore 18:18

Tommaso Deutch Tolosso https://www.youtube.com/watch?v=79j90u_zg ho scelto questo brano perché mi ricorda il contrasto tra la natura, appena visibile nel quadro; nella canzone rappresentata dalla voce e la melodia, con il contrasto della struttura lirica che nella traccia appare come il suono del violino che prende il sopravvento.

Gabriel Riser - Gold (Thomas Jack Remix)
First Dealer de Musique here +
<http://delestermusicque.fr/> <https://www.facebook.com/delestermusicque/>
Non mi piace più · Rispondi · Rimuovi anteprima · 3 · 30 gennaio alle ore 18:18

Giulia Pinotelli <https://www.youtube.com/watch?v=9vZ221v9iWk> ho scelto questa melodia perché la ritengo la più appropriata per questo quadro, da un senso di malinconia e tristezza. Sembra che entri in un mondo nuovo e piuttosto triste e grigio.

NOSTALGICA- MISTERY MELODY (melodia misteriosa)
ME GUSTARIA QUE ALIQUER HAGA UNA VERSION...
Non mi piace più · Rispondi · Rimuovi anteprima · 2 · 30 gennaio alle ore 18:18

Alessandra Papanella <https://www.youtube.com/watch?v=9vZ221v9iWk> Premetto che il quadro non è di mio gusto, e fatica a essere una mia scelta di accostare e questa. Poiché mi sembra un poco così. 5 Abberghero

Philadelphia International All Stars Let's Stay Clean Up The Ghetto
Non mi piace più · Rispondi · Rimuovi anteprima · 1 · 30 gennaio alle ore 9:55 · Modificato

Sara Ghedin Ghedin a me a vedere il quadro sono venute in mente i Jamiroquai, di vedo un misto di ipù, elettronica e soul jazz. E questa la trovo perfetta, a esprimere i casi ibridi del mondo in cui viviamo: <https://www.youtube.com/watch?v=890vWfWk0>... Altro...
Non mi piace più · Rispondi · Rimuovi anteprima · 1 · 30 gennaio alle ore 20:27

Luca Zardini <https://www.youtube.com/watch?v=9vZ221v9iWk> ho scelto questa canzone innanzitutto per la melodia abbastanza cupa, stessa sensazione che può trasmettere il quadro, così un che di misterioso. Ma poi, se guardiamo il titolo, ci può essere... Altro...
Non mi piace più · Rispondi · Rimuovi anteprima · 2 · 30 gennaio alle ore 11:13

Luca Zardini <https://www.youtube.com/watch?v=9vZ221v9iWk> ho scelto questa canzone innanzitutto per la melodia abbastanza cupa, stessa sensazione che può trasmettere il quadro, così un che di misterioso. Ma poi, se guardiamo il titolo, ci può essere... Altro...
Non mi piace più · Rispondi · Rimuovi anteprima · 1 · 29 gennaio alle ore 20:29

Aaron Hepp Come sei veramente Giovanni Allevi i colori mostrano l'espressione del vero essere, il grigio quello che era. Non mi piace più · Rispondi · 1 · 29 gennaio alle ore 20:29

Luca Zardini <https://www.youtube.com/watch?v=9vZ221v9iWk> ho scelto questa canzone perché penso che come il quadro sia un po' astratta, con tratti molto vicini alla arte stessa tempo moderno. I tratti moderni nel quadro sono rappresentati dalle figure, nella canzone dalla voce, i tratti moderni nel quadro sono i modi in cui sono posizionate le figure, nella canzone dal suono in sé. (5 Abberghero)

Noskoid - Listen to George
New remix channel (R2) <http://bit.ly/MoonballastOfficial> Like us and follow us! <http://facebook.com/MoonBallast>...
Non mi piace più · Rispondi · Rimuovi anteprima · 4 · 29 gennaio alle ore 18:33 · Modificato

Annalisa Sorani <https://www.youtube.com/watch?v=9vZ221v9iWk> Personalmente collegare il dipinto a questa canzone, non tanto per il significato del testo, quanto per l'emozione malinconica che vuole trasmettere. Inizialmente la canzone è presentata cantata da una sola... Altro...
Non mi piace più · Rispondi · Rimuovi anteprima · 2 · 29 gennaio alle ore 19:20

The Hanging Tree - James Newton Howard ft. Jennifer Lawrence (Audio)
Download this song: <http://itamarutit.com/track/jenniferlawrence...>
Non mi piace più · Rispondi · Rimuovi anteprima · 2 · 29 gennaio alle ore 19:20

Nicoletta Cargnel <https://www.youtube.com/watch?v=9vZ221v9iWk>

Renata Tebaldi - Pace mio Dio - La forza del Destino - 1953
The best "Pace mio Dio" I've never heard it migliori.
Non mi piace più · Rispondi · Rimuovi anteprima · 1 · 29 gennaio alle ore 20:59

Nicoletta Cargnel <https://www.youtube.com/watch?v=9vZ221v9iWk>

Björk - Jóga (Official Music Video)
Directed by Michel Gondry. Written by Björk/Ólafur Arnalds/Brigr Sigurdsson (aka Snips). Published by Universal...
Non mi piace più · Rispondi · Rimuovi anteprima · 2 · 28 gennaio alle ore 23:51

Sergio Zangiacomi <http://youtu.be/VLQjv4QvRM0> trovo che le frequenti ripetizioni della melodia della canzone rispecchiano l'aspetto casuale dei colori nel dipinto. Inoltre la melodia tende a ripetere ansia proprio come lo sfondo del quadro di Savinio. (5 Abberghero)

Dream Theater- Erotomania [Instrumental]
From Dream Theater's 1994 album "Awake". This song...
Non mi piace più · Rispondi · Rimuovi anteprima · 3 · 28 gennaio alle ore 18:33

Maurizio River Senesi http://youtu.be/32DkGZ2_0

Plastic Bertrand - Ça Plane Pour Moi (1978 promo-video on rage)
Plastic Bertrand - Ça Plane Pour Moi
Non mi piace più · Rispondi · Rimuovi anteprima · 1 · 27 gennaio alle ore 21:39

Cesare Cardanelli Come ho guardato il quadro, immediatamente mi è venuta in mente Claudio Lollo <http://youtu.be/CGV1n1Qd8>

Angosia Metropolitana - Claudio Lolli
Che dire... è un bellissimo brano di Claudio Lolli
Non mi piace più · Rispondi · Rimuovi anteprima · 5 · 26 gennaio alle ore 13:44

An Na Bianco <https://www.youtube.com/watch?v=NuZgR1w48> perché il video del divo universale è una poca speranza

Le luci della centrale elettrica - L'amore ai tempi dei licenziamati del...
Non mi piace più · Rispondi · Rimuovi anteprima · 3 · 26 gennaio alle ore 19:20

Emmanuel Mengotti <http://youtu.be/Wk2eG8B3> Don't you remember. Perché sembravo tanto scabato chissà

Adele - Don't You Remember
Non mi piace più · Rispondi · Rimuovi anteprima · 1 · 26 gennaio alle ore 9:25

Caterina Pinotelli <http://youtu.be/8h2C82z2> sto facendo il natus per il suo interesse economico

Eddie Vedder - Society
Music from the Motion Picture: Into the Wild l'album di debutto come solista di Eddie Vedder ed è la colonna...
Non mi piace più · Rispondi · Rimuovi anteprima · 2 · 25 gennaio alle ore 20:45

Mosli Rodas <https://www.youtube.com/watch?v=UHDW42D0> a place for creation souls... un posto per le anime creative... dice tutto la canzone.

Bonobo - Days to Come
From the album Days to Come. Lyrics (thanks to the many viewers of this video): Journey set sail was to...
Non mi piace più · Rispondi · Rimuovi anteprima · 4 · 25 gennaio alle ore 21:21

Isella Marocchi <https://www.youtube.com/watch?v=9vZ221v9iWk>

Chopin Ballade No. 1 in G minor, Op 23
 Frédéric Chopin's four Ballades are one-movement pieces for solo piano, composed between 1830 and...
Non mi piace più · Rispondi · Rimuovi anteprima · 1 · 25 gennaio alle ore 21:14

Caterina Praxitelli stiticità e movimento, colore e forma. <http://youtu.be/V0V6d5jW>

Mussorgsky Pictures at an exhibition - Byllo - Karajan
Berliner Philharmoniker, 1986
Non mi piace più · Rispondi · Rimuovi anteprima · 4 · 25 gennaio alle ore 20:19

Giulia Cataneo <http://youtu.be/V0V6d5jW> Dan Deacon per l'assurda

Dan Deacon - Feel The Lightning (Official Video)
"Feel the Lightning" is from Dan Deacon's new album...
Non mi piace più · Rispondi · Rimuovi anteprima · 4 · 25 gennaio alle ore 20:19

Giulia Greco <http://youtu.be/Mf0b0mYhZ0>

Leon Janáček - In the Mist - II. Molto adagio
Thomas Hawstack, Piano
Non mi piace più · Rispondi · Rimuovi anteprima · 1 · 25 gennaio alle ore 20:14 · Modificato

Lorenzo De Martin Tognolini Perché l'attesa è fatta e l'attimo è lì tempo, quest'opera è un tempo perfetto <https://www.youtube.com/watch?v=81H0CMF4F0>

Einstürzende Neubauten - Ich warte in Berlin - End Credits
Non mi piace più · Rispondi · Rimuovi anteprima · 1 · 25 gennaio alle ore 20:23 · Modificato

Tommaso Vesentini scoglio Boom Boom di John Lee Hooker. Inizialmente il quadro mi ricordava un cimitero delle civiltà. Leggendo, però, i post e i suggerimenti musicali degli altri, ho scoperto una vita di colori: quasi uno scintillio di neon da Las Vegas... che prima... Altro...
Non mi piace più · Rispondi · 5 · 25 gennaio alle ore 19:44

Matteo Iacono <https://www.youtube.com/watch?v=9vZ221v9iWk> credo che questa musica è questo testo dei musei siano perfetti!

Muse - The 2nd Law: Unstable
Muse The 2nd Law: Unstable from the album "The 2nd Law" out now. The album is available in its format...
Non mi piace più · Rispondi · Rimuovi anteprima · 6 · 25 gennaio alle ore 19:43

Erica Dalmatino Leopoldo Mozart (tributaria al "Sinfonia dei giocattoli"...) perché il dipinto di Savinio ricorda un mucchio di giocattoli ammassati in disordine http://youtu.be/32DkGZ2_0

Leopold Mozart (7) Sinfonia dei Giocattoli - Karajan Philharmonia Orchestra
"Mozart 7" Haydn... 7 Sinfonia dei Giocattoli...
Non mi piace più · Rispondi · Rimuovi anteprima · 3 · 25 gennaio alle ore 19:42 · Modificato

Tommaso Vesentini <https://www.youtube.com/watch?v=9vZ221v9iWk> boom-boom!

Boomb! - John Lee Hooker
Welcome to the Boom Boom Room! THE GRAND GRAND DADDY OF DA BLUES! Being out his famous number Boom Boom here on the BBC in the early swinging sixties!...
Non mi piace più · Rispondi · Rimuovi anteprima · 1 · 25 gennaio alle ore 19:37

Giulia De Bignartina da brava cretina! Ho fatto un film e relativo colonna sonora il quadro di Savinio. Joe Hisaishi creta il castello erante di Howl e Miyazaki. In un'atmosfera di romanticismo, malinconia e speranza emergono i colori e figure dello stesso Savinio sulla tela per dare vita a un universo magico. <https://www.youtube.com/watch?v=9vZ221v9iWk>

Joe Hisaishi - Howl's Moving Castle
From his 2005 album "Freedom - Piano Stories 4" Main theme of the same-named movie from 2004.
Non mi piace più · Rispondi · Rimuovi anteprima · 5 · 25 gennaio alle ore 19:27 · Modificato

Irene Visal Muriala Ah ho dimenticato la motivazione: una passeggerata alla Richard Anthoni sulla nota di Bitter Sweet Symphony in un quadro di Savinio ma la potete proprio fare

Irene Visal Muriala <http://youtu.be/2Cm46407b>

Non mi piace più · Rispondi · 1 · 25 gennaio alle ore 18:28

Elisa Cicchi <https://www.youtube.com/watch?v=9vZ221v9iWk> ho scelto questo brano perché il Big Bad Voodoo Daddy, perché credo che il ritmo incalzante della musica possa rappresentare molto bene quest'opera d'arte che sembra in divenire...

Big Bad Voodoo Daddy - Jumpin' Jack
Yeah, Swing!
Non mi piace più · Rispondi · Rimuovi anteprima · 5 · 25 gennaio alle ore 18:21 · Modificato

Giuseppe Pompanin http://youtu.be/32DkGZ2_0

Tom Waits - Clap Hands
Tom Waits - Clap Hands
Non mi piace più · Rispondi · Rimuovi anteprima · 4 · 25 gennaio alle ore 18:20 · Modificato

Irene Visal Muriala Il gioco è semplice: guardare il quadro del link, pensare a una canzone, postarla e il link della canzone e un commento alla scelta. Maria Beatrice Konijn Di Tullio Elena An Emanuela Giacomini Fausti Merand Pier Eugenio Genova Piana Franca Elena Rosa Toso Fulvia Leonardi Samuele Majoni Benedetta Tia Bonaso An Na Bianco

Irene Visal Muriala http://youtu.be/32DkGZ2_0 Gladia Cattaneo Anna Chiara Giorgini Arianna Mazzanti Raffaella Teatru Clara da Sofia Francesca Rosa Giulia Tullio Elisavinda Gae Di Gallo Gabriele Cori e loro sentite le vostre canzoni?

Non mi piace più · Rispondi · 1 · 25 gennaio alle ore 18:13

Stefania Zardini Lacedelli <https://www.youtube.com/watch?v=9vZ221v9iWk> inquadro in azione, Vittorio Szabo Many people have enjoyed our first collaborative music painting! Later to the top ten here <http://iglo.gp/GnW4z>

La piattaforma multimediale dei musei delle regole a cortina d'amperezo

MUSEO REGOLE.IT · DI MAURO DE BIASI - EMEREA ASSOCIATI

Mi piace · Rispondi · Rimuovi anteprima · 1 · 7 febbraio alle ore 21:18

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ACKNOWLEDGEMENTS

Prof. Bruno Bernardi and Prof. Michele Tamma, who oversaw the development of this thesis project

Venice International University, for the support during my research period at Duke University thanks to the Globalization Program

Prof. Victoria Szabo, for having guided me throughout the development of multimedia contents and for having taught me to figure out every difficulty

Regole d'Ampezzo, the computer programmer Mauro De Biasi and the Museums Director Alessandra de Bigontina, that allowed the implementation of the MQUADRO platform; all museum staff for the enthusiasm they put in new projects

Teachers, museum educators and collaborators that enhance educational and multimedia projects and allow them to grow up

Giacomo and Giorgia, voices and soul of *What Rimoldi loved most* and other museum theatre performances (and endeavours)

Prof. Victoria George, for the expert advice in the creation of chromatic galleries

Marco and Marina for the overseas support during translation

Chiara and Enrico, for the ability to seed and foster new ideas, digital or not

My parents, constant and lovely presence

Tommaso, who walks with me in this journey