# Towards a "Digital CultHeriScape" – The Changing of the Cultural Landscape's Perception

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### Abstract

Today is the time of Cultural Landscapes (European Landscape Convention, 2000): we recognize the role of people in appreciating landscapes (by actions of simple viewing and tourism) and in creating/building landscapes (managing the earth and the nature, designing their shape). But today is also the time of new media and new technologies. These media and technologies could be useful in recognizing, looking at, and loving places, deriving both knowledge and pleasure from "ordinary places" with the value of "ordinary heritage". This paper explores if ICT tools are just more advanced systems to perceive landscapes or if they are able to change the cultural landscape's perception.

**Keywords:** cultural landscape; digital heritage; insiders/outsiders

#### 1 Introduction

"Today it's the time of the cultural landscapes" - such a polysemous term was first introduced in the European Landscape Convention in 2000. A true believer of cultural landscaping considers our environment and its historical integration as an inseparable component of human being's design and creation activities. Albeit its short history, this term has rapidly been accepted. Nowadays, it almost becomes the representation of the simple term of "landscape".

By its definition, "landscape" means an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors. The sense of landscape now has been expanded to cover a much wider aspect, ranging from visual landscape to the biodiversity. Consequently, the focus of landscaping has extended from soil, water, and climate only, to the incorporation of various people's daily activities. The purpose of landscaping has also been broadened to provide a sensible place appropriate for activities, to revise our relationship with land, to remind historical remnants, or simply to tell a story. All of these human activities are part of the "cultural landscape".

Today it's also the time of new media and technology. With the ever-growing desire of new technology and social media, the presence of them comforts our mind and eases our behaviour. Accept it or not, our life style has already been changed forever. When Facebook and Twitter become part of today's culture, the media and technology become part of today's landscape. It poses a new challenge today: how to incorporate media and technology into landscape, so it can be better utilized to improve our recognition and appreciation of more effective landscaping.

# 2 Four "paradigm shifts" and another one

Human has never stopped exploring and transforming the nature. Landscape is especially so. Human can be very creative in changing the landscape. At the same time, they can be spectators to appreciate a landscape product. There are four "paradigm shifts" in the perception of "cultural landscape": text, perspective, photography, and movie.

In fact describing a landscape means recounting it to somebody who is not there. It was the first great revolution in the appreciation of the nature, the rising of a conscious contemplation, probably the birth of aesthetic as well: literal descriptions are the instruments of the "evoking" phase of landscape's perception.

The origin of the word "tourism" is usually attributed to the Grand Tour, which originated in Britain in the seventeenth century. In Europe, the early Grand Tourists spent two or three years travelling through France, Italy, Germany, Switzerland, Netherlands, and other sites connected with classical culture. Then travel notes not only recorded their experiences and mood on tour but also helped to shape the perception of landscape in those ages. By their diffusions, travel notes became materials for those people, who had not arrived in front of a landscape, but could have the opportunity to contemplate it through the texts. When in 1816 and 1817 Johann Wolfgang Goethe published it Italian Journey, it was not only a report on his travels in the Italian peninsula, but later it had a great significance in its aesthetic and philosophical development, also among the successors' references on Italy.

Another case of text, which allows in perceiving landscape, is in the oriental gardening. Chinese traditional garden's conception mostly came from poems and paintings. And then through both the gardening and the naming (the classification of horizontal inscribed boards and hall pillars or name of pavilions, plants and other elements) it's evoked the mood of garden's owner. At the same time the text developed the perception of landscape by visitors, who might leave words to further visitors. So the whole process of gardening "design – express – perceive" could be understood as "text – text – text" and this was a Chinese classical scholar entertainment very welcomed in Chinese traditional literary society.

For example, in the Suzhou classical garden "Master of Nets", there is a famous pavilion named "Yue Dao Fen Lai Ting", which came from one piece of Song dynasty poem "the moon suspends in the centre of sky when the wind comes from water surface". So the gardener named the pavilion "Yue Dao Fen Lai Ting", which means "the moon comes with breeze pavilion". And after visiting it, some scholars also left their literal poems on the hall pillars to express their emotions.

A second revolution in perceiving landscapes was represented by the invention of perspective: drawings or paintings are built in a geometrical or logical way, but at the same time they allow the artists to express personal moods. With the birth of the perspective, the object landscape can be evoked using a sharp image that is at the same time deeply subjective and with an emotional cover.

Canaletto (1697-1768), for example, was an Italian painter of landscapes, famous also as painter of urban cityscapes. His paintings are always notable for their accuracy: he

recorded the seasonal submerging of Venice in water and ice. People, in that age, studied and got most of memories on Venice by such kind of accurate painting description. So the artists' representation has a great part in creating the image of a place. Also today we can study the unique geography and history of Venice by the artworks and our perception is deduced from the artists' eyes, that it the artists' awareness of environment.

Photographing landscape is the third revolution: showing landscape in its reality is the most direct task for visitors' perception. So the photography replies the landscape and its signs, symbols, images, patterns, on books, newspapers, T-shirts, advertising boards and so on. Photographing, printing and image transferring have an increasingly important role in the development of the idea of landscape. This non-language transfer method has the similar strength of development of language transmission.

The "Kiss by the Hotel de Ville" by Robert Doisneau (1912-1994) is for example one of the most famous pictures of the Paris urban cityscape. The common people in common situations of the famous photographer become not only a portrait of Paris and its street, but also an icon, ready to be reproduced everywhere.

Another revolution, the fourth one until now, was represented by movies. In the cinema landscape can be appreciated in the reality of movement, adding to its telling the kinaesthetic experience, that is typical of the direct perception of every landscape. But in the movies (for example, we could think to the western style) the director can add to the kinaesthetic experience his emotion, pushing the spectators towards different and new feelings.

Nowadays there is probably a fifth revolution, driven by the digital (the so called ICT) tools: the perception of places changes again, by augmented reality (after the end of virtual reality's season and with the invention of the Google Glass), by the using of personal devices (we should study smart citizens more than smart cities), and by the new sharing systems (e.g., social networks).

Today technology, philosophy, psychology, and physical sciences are working in an interdisciplinary way for the integration of space, time and territory, even with the responding of literature, painting, architecture, photography, and surroundings design. The perception of different spatial locations is simulated by interdisciplinary application, in something like a "time/space transparency". Space not only moves by the time lapsing but also can recede in a fluctuate state of continuous activities. The position of the transparent figures has equivocal meaning as one sees each figure now as the past, the present, and the future ones.

Bolter (2000) once claims that remediation has two logics: immediation and hypermediacy, which should be dated back to the Renaissance and the invention of linear perspective. From Renaissance to today (from Renaissance painting, nineteenth-century photography, twentieth-century movies, etc.), each age the manifestation of immediacy has different meaning, it may mean one thing to theorists, another to practicing artists or designers, and third one to viewers.

Hypermediacy has been defined by Mitchell (1994) as: "[a] style of visual representation whose goal is to remind the viewer of the medium." Hypermediacy is the "crazy design" that comes with exciting and blending medium into one another. It

invites others to enjoy the interplay. "[P]rivileges fragmentation, indeterminacy, and heterogeneity (...) emphasizes process or performance rather than the finished art object." So here "invitation" and "performance" are outlined in hypermediacy rather than "visual representation" emphasized by immediation. The double logic of immediation and hypermediacy are two strategies of remediation. Bolter (2000) argues that new visual media achieve cultural significance by refashioning earlier media. Remediation operates in two directions: older media tries to appropriate or refashion digital media and digital media tries to refashion older media. Such older media elaborated above is "text, perspective, photography and movie". And the remediation refers to our new media today.

Augmented reality (AR) is a live, direct or indirect, view of a physical, real-world environment whose elements are augmented by sensory input such as sound, video, graphic or GPS data. It is a combination of real and virtual objects in the real world; interactivity and interaction in real-time; and registration and alignment of virtual and physical objects with each other in 3D. Mobile Augmented Reality (AR) has recently become very popular thanks to the convergence of Smart Phones, faster networks and cloud computing. Nowadays, in Europe, cities give more opportunities to tourists to discover city areas as they were in the past and as they will be in the future. Several cities are planning to use AR application for promoting tourism. Thus such Google glass, and other headset, body set is increasingly applied for augmented reality.

Although AR technologies have been developed during the last three decades, and smart cities closely link to this question is becoming hotspot, the users are often ignored. We put too much effort on that how to become a smart city, but no more taking care on how to become a smart citizen. The new media times is involving daily life, accordingly, trying to guide our users to learn about that is also our urgent priority. People is not only limited walking in physical space, they should strategize their new media appliance, body set and also master surfing in social network. Sharing system provide them a good platform for such experience sharing.

We can suppose to build landscape territory online for local community (insiders) and at the same time also for tourists (outsiders), to share territory properties where they live and territory memories where they visit. Based on the opinion of one group of family, school, or old generations, people share their stories of past or just happened now, to tell the others (maybe outsiders) everything regarding this territory. They can seek the assets of their territories, even hidden or forgotten, and will recover the emotional connections with there lives and other activities. The material could be collected by smart citizens as photographs, videos, drawings, and interviews (i.e., all that are old media) through the collaborative construction of an interactive Google map, to spread and update daily.

## 3 Ordinary heritage and "cultural landscapes"

Is it true that we are facing a new paradigm shift in the perception of landscape? If true, what kind of landscape are we talking about? To understand if the new technologies and the new media are getting the same role of text, perspective, photography and movie in changing the perception of landscape, we can look at the cultural landscape as "ordinary heritage", recognizing if ICT tools could be for that

kind of landscape (and that kind of heritage), something more than an improvement of its touristic use.

To catch this goal, we can describe the methods and the results of a research, entitled Architecture and Places: Local landscape enhancement between identity development and promotion. From "Parish Maps" to "Territorial Brands" (Directed by Marco Trisciuoglio at Politecnico di Torino, 1909-1913).

The core of the reasoning about cultural landscape is the so called "ordinary heritage". Overall during the second half of the 20th century, we have realized that any places are very far from the traditional or classical idea of heritage (Choay, 1992), but they have their own value overall for the inhabitants that recognize in the places themselves a part of their feeling to be part of a local community.

To understand the idea of "ordinary heritage", it is very useful to read the note written by John Brinckerhoff Jackson in his journal "Landscape" (1952) under the title The Almost Perfect Town. John Brinckerhoff Jackson describes the history of a poor village in the Midwest of States, telling the different and several moments of its history, its development and its crisis. What's interesting is that in that moment (the mid of 20th century) instead of looking at Sparta or Athens, Rome or Jerusalem, a geographer could study a not-so-extraordinary place (called, with irony, Optimo City).

The attention to the "ordinary heritage" (rural landscapes, industrial heritage, built heritage, etc.) has often driven to the discovery and the enhancement of local identity, very useful in keeping together the "grandparents generation" and the generation of their nephews. In Italy, for example, "parish maps" and ecomuseums began (starting from the Eighties and during the Nineties) to be the perfect instrument to restore the sense of local communities. But nowadays these instruments are in crisis, without funds to be able to support them.

Moreover, it's time to realize a stronger relationship between the two classes of people that have interest about a place: the insiders and the outsiders (Denis Cosgrove in 1984 was the first to describe the contrasting experiences of a singular spatial context by them). Bringing the restored local communities' identities to the "outsiders" (generic users, tourists and visitors, investors, new stakeholders) means leaving the exclusive philosophy of "parish maps" in favour of the inclusive philosophy of "territorial brands", as well as creating new markets to treat "ordinary heritage". The economic development of cultural districts (Santagata 2006) can find in this process an important engine.

But the machine is complex and it needs a multidisciplinary approach. That's why it's better to forget the availment of "best practices" and to create on the contrary operative protocol of actions based upon cartography, thematic maps, iconography, cataloguing and censuses of buildings and objects, participation, visitor management, networking, protection and enhancement tools, study of architectural typologies and settlement morphologies, study of infrastructures, theme parks design, visual communication design, hyper and social media. Barosio Trisciuoglio (2013) is a handbook useful to organize this kind of work.

We know (and this is a great part in IFITT mission) that nowadays the new technologies, conceived and realized in the fields of information and communication,

could be very useful in actions dedicated in improving the link between insider and outsider users of a land. ICT can help in telling the "cultural landscape" and the "ordinary heritage" (two subjects that are almost perfectly superimposable, so that we can say "CultHeriScape") to the outsiders (that are more and more "smart citizens"). This shift can be pushed without losing the participatory idea of "parish maps" (by the improvement of the use of social networks), adding further kinds of spatial perception (by the augmented reality technologies that today have passed the obsolete concept of "virtual reality"), experimenting - by Data Mining, GPS and GIS technologies - innovative ideas of touristic/cultural itineraries.

# 4 The "ArchiPla" Project

We are experimenting the use of ICT tools in linking different feelings (an tastes) of insiders and outsiders towards a "CultHeriScape", making it a digital "CultHeriScape". The Archi.Pla (Architecture and Places) application for tablet (developed for iPad and by any months to be presented on the App Store) concerns the territory of North West Italy between Torino and Milano, particularly the area between the village of Settimo Torinese and the little historical town of Casale Monferrato. It's a real "ordinary heritage" area.

The area is full of traces and monuments of a productive (industrial and rural) past: in Settimo Torinese there is an active ecomuseum (Ecomuseo del Freidano), whose seat is inside an ancient mill and whose topics are about the industrial use of the Po river waters, in Casale Monferrato the Italian leader company in producing cement (Buzzi-Unicem) maintains and promotes old industrial plants that are part of the imaginary of citizens. In between there are the rice fields of the Vercelli Province (with their picturesque image of a "sea" in the countryside and with their long history, since Middle Age until the construction of the Cavour Channel in the middle of XIXth century). Also the value of the area in term of natural environment is interesting, linked to the Po river basin biodiversity.

The Archi.Pla App aim is better organizing the knowledge (that already exists) about that area and offering to visitors something that is more than a "Digital Baedeker". The visitor will find in it multilayer information, maps and pictures concerning places he/she is experimenting. He/she will find help in organizing the itinerary according to his/her taste, time, interests. He/she will test the past reality of a place (now by technique of overlapping historical pictures upon the nowadays "face" of the place, in next months using more advanced technique of AR).

Overall he/she will meet on the social sector of Archi.Pla App (linked to a supporting website) the opinions of other people: their memories (by the insiders, who lived and live in that place) and their expectations (by the outsiders, who are going to visit or have already visited that place).

The aim of the Archi.Pla App Project is to create an instrument (now going to be tested in its first elementary release on App market) ready to be dedicated to any further cultural landscape area, also to promote new forms of sustainable tourism (and knowledge) in the economical de-growth era. In this project, as architects we often talk about "regeneration without bricks".

## 5 The "Digital CultHeriScape"

We described until here the aims and the goals of such a kind of initiative (not so far from other similar ones). But what are the consequences of the use of ICT tools in "looking at" the landscape? Perceiving the landscape as a "Digital CultHeriScape" means perceiving all aspects of "cultural richness" of that landscape. An inexhaustive list includes its history, structure, the reason of its existence, but also its past uses and the dreams, the expectations, the fears of the inhabitants, the evaluations of the travellers, and so on.

When the "smart citizens" are concerned, many acquired their perceptions about the reality (and landscape) through ICT device. Often they compare the landscape changes with the pre-digital era. To be exactly accurate, what has changed is nothing but the perception of the landscape by the people. The concept of landscape has extended beyond the concept of merely telling, describing, taking still or motion images. Today, it also includes the intertwining of new media and technology.

We could say that, in the landscape's perception, after the evoking phase, the image phase, the reproducibility phase and the cinematographic phase, we are facing today the "depth" phase: our perception of landscape is changing towards a deeper knowledge of the places we are looking at (knowledge of tangible and intangible meanings and values).

Today, landscape is no longer a standalone concept any more. Culture, Heritage and Landscape most likely mingle together and form a complex combination of CultHeriScape. Although an emerging concept, many books and papers have already been dedicated to this topic. It is no doubt such a great interest will soon steer into the disciplines of tourism management and culture economy (and media sociology). We can only expect the development will stimulate the recognition and the enhancement of "ordinary heritage", by both insiders and outsiders.

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