ABSTRACT

The heritage summarizes the cultural, material and immaterial inheritance which refers to a local and community context expressing its characteristics, uniqueness and potential. The cultural route - container of heritage and structural elements of an area - contributes to the construction of the tourist services and the heritage image. It is oriented towards new musts in the tourism planning and therefore it generates emotional experiences, fosters creativity and participation, it provides different models of fruition and several reading and interpretation tools of the heritage. The attention to these issues led us to analyze the itinerary "The glorious return" (part of the wider European itinerary "The ways of the Huguenots and Waldensians") describing the technological applications that have been made such as the creation of a GIS web-site, a multimedia GeoGuide and an application "Augmented Reality for iPhones".

Keywords: territory, tourism, heritage, ICT

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1. Introduction

The ability to renew and enhance the structural components and resources of a territory is today more and more based on the identification of operational tools that help to reinforce the image of the local context. The creation of a tourist and cultural supply of a territory, for example, sets as its general goal the enhancement of all the resources that refer to the local cultural heritage, and its aim consists in the development of a tourist and cultural tourism which is able to create a link among the different actors or partakers that make up the network on which the operation of the system is based.

In such a point of view, even the cultural heritage can be considered as a potential system of relationships between goods, resources, places, subjects, and communities whose configuration can produce different perspectives of supply and use. Therefore the challenge may be finding the right tools for describing the resources of the cultural heritage, emphasizing also the implied and unexpressed elements rich in potential and foster a more natural process of communication and integration of all the elements involved in the composition of the tourism and cultural services of the territory.

The cultural heritage, which in one word is called heritage, summarizes the cultural, material and immaterial inheritance which refers to a local and community context expressing its characteristics, uniqueness and potential. The heritage must be characterized by value, and this system will inevitably change in time and space, and it crosses the whole society (Timothy and Boyd, 2007). Heritage supports a link with the past, but also and above all, it represents a pattern of continuity with the present and the future. In this new paradigm, the cultural heritage becomes a projection of the characteristics of the territory, the expression of its cultural inheritance and its future potential. It therefore becomes a starting point for the design and planning of interventions which, going beyond the original cultural matrix, become tools of exploitation, development and promotion of a territory, on a broader front.

Faced with these new scenarios, a model of touristic and cultural planning that in recent years has been applied, even with objective characteristics different from territory to territory and with numerous reasons and cultural backgrounds, is that of the cultural route.

A cultural route means a route that passes through one or more countries and is organized around themes of historical, artistic or social interest, both because of the geographically trails and in terms of its context and its meaning. The concept of cultural route, more than any other route, is linked to the territory and the landscape which, in its turn, is an articulated cultural asset that includes a series of other cultural goods. A route is a new type of expanded cultural
heritage that links the diverse and homogeneous assets, creating a new system of knowledge. It could be defined as paths in stages (nodes) connected by segments characterized by a unifying cultural theme that gives a sense to the whole route. The cultural route is by now considered a specific cultural good whose main feature has been the complexity of the planning and management since the location of the route. It is a tool, that at the same time, is a source of cultural heritage valorization, relatedness between communities, area and external bodies, communication and spreading of common values and inspiration, planning and export of expertise, knowledge and savoir faire. In it have to converge a set of elements: a central motif with attractiveness, a diversified offer, an ability to connect and communicate even with the help of innovative media technologies (ICT), which act on a system of accessible sites around whom it is necessary to develop activities and professionalism capable to produce even economic benefits for the territory of reference (Fernández López, 2006).

The cultural route is therefore considered a planning tool which enables to improve the heritage of a territory, to develop new forms of cultural tourism services and to create networks of cooperation, collaboration and exchange between different partners, both public and private. The route is a mental process based on the identification of existing elements or elements which must be created, it can be the result of a historical analysis but also a planning from scratch; it can also be a planning tool that allows to start concrete protection and preservation actions.

The cultural route is at the same time a geographical route, a mental journey, a new tourism product; in fact, from a geographical feature, a route links geographical points following a logical train of thought or a mental concept, a theme or the genius loci, but in this case it attracts the attention of the tourist market which is always looking for novelties and even for a new sense of travel. Therefore, the cultural route allows the passing from cultural tourism to tourism of Heritage. The places of a territory, subject of tourism supply, can enact some experiences and allow the tourist to become the protagonist of his own travel experience, participating directly in its production.

A form of tourism called "creative" is so created and the creativity lies both in the construction process of the offer and in a new way for tourists to relate themselves to the experience of travel.

The heritage of a region expresses its potentiality as a basis for the creation of innovative tourism products, while the emergence of new themes, prevalent today in the scientific debate in the design on cultural tourism.

For this reason, in recent times have been born forms of consumption and tourism production in which there is a strong demand for the use of new experiences that can afford to live directly affects certain characteristics and certain structural components of a location. And it is the local dimension in which this can best be realized post-fordist tourism. The places of a territory,
the subject of tourism, can enact the experiences and thus allow the tourists to participate in certain aspects of local life through a story, an activity, the traditions of the place. In this dimension, narrative and experiential, the tourist is an actor and protagonist of his own travel experience, participating directly in its production. Creating and selling experience, replaced the traditional tourist offer, it marks the transition from a related product and service economy in which both supply and demand are dominated by the concept of experience. The consumer, search and buy experiences and the same goes for the tourist.

The creative tourism, in the words of Richards and Raymond (2000), who first gave it a definition, is "a tourism that offers visitors the opportunity to develop their creative potential through participation in activities and learning experiences, characteristics of holiday destination where they are involved."

Creativity, however, concerns the construction of tourist and cultural production, and its consumption by tourists. On the one hand, creativity using tools, methods and ideas implemented during the construction process of the offer, which may involve a site visit, an event, the development of a thematic or a route. On the other hand, creativity involves a new way for tourists, to relate the experience of travel. He is directly involved in certain activities through which it can achieve change and development staff, who join the purely recreational and leisure travel experience. The creative experience allows it to evolve, learn and relate with others who share the same experience as him. Share, communicate, relate, be part of a group even if the experiences are personal and individual authentic, are the keywords of a tourism in which the individual value leaves room from time to time, the value of the group, the tribe, the community. The creative tourism finds its theoretical justification in some recurring themes present and often invoked in the sphere of consumption and production that is the emergence of a type of consumer awareness and can develop skills and knowledge, the role attributed to the experience and that of intangible assets as well as the culture of everyday life. UNESCO (2008) gave a definition of creative tourism, taking into account these aspects: “Creative tourism is travel directed toward an engaged and authentic experience, with participative learning in the arts, heritage, or special character of a place, and it provides a connection with those who reside in this place and create this living culture.”

What and how intervenes, creativity, advancing in front of these items? And especially in what is expressed creativity linked to tourism?

On the consumption side, the tourists are becoming more actively involved in culture and creativity of places, from the production side, the cities have to develop fully their resources and their creative potential, highlighting especially the intangible heritage resources more are able to act as factors of differentiation and competitive advantage. The creativity involved in tourism production and consumption in several aspects and with a variety of purposes,
for which we can assume a number of advantages over the traditional cultural tourism:

− Creativity fosters innovation and diversified territories and products;
− Creativity is a renewable resource that creates a sustainable process, because it does not involve resources and goods perishable or subject to the pressures of tourism;
− Creativity is mobile and can allow an easing of pressure on sites and traditional cultural tourism attractors, so can provide a new channel of tourism, it also offers little-known territories and resources;
− Creativity is a resource and an alternative to the serial reproduction of culture and cultural tourism experiences, acting against the phenomena of mcguggheinamization and commodification of cultural processes;
− Creativity promotes the involvement, and the creation of the narrative of the individual but also collective tourist areas, and the creation of the atmosphere and image of a destination.

The range of products related to creative tourism is varied and binds to different activities, which, in different parts of the world have already contributed to the creation of real creative networks. Creative Tourism New Zealand, Barcelona Creative Tourism, Tourism Creative Santa Fe. These networks aim to connect and relate all those people who want to share their creativity and their peculiarities or artistic production, in order to centralize and standardize the range of creative experiences and facilitate the contact and the selection by users. In the cases cited, it is essentially tracks, workshops, activities, relating to cooking, crafts and artistic productions, cultural and traditional aspects of certain populations, communities and territories. Far from being a mere representation or reproduction of local cultural aspects and experiences of creative tourism, well designed and offers, allow participants to feel part of the creative processes in place.

Their contribution is essential for the eventual realization that they intend to achieve the different activities, and the experience is not only a source of learning, but also of tax evasion, sharing, establishment of links between participants and the territory in which you live the experience.

From this point of view, the experiences of creative tourism can be considered a useful tool to promote local culture and to promote greater acceptance of tourism by the community.

Among the possible products that lend themselves to represent these new trends in cultural and creative tourism, an important role can be attributed to cultural itineraries and routes. To them it may develop multiple experiences of creative tourism, indirect tools of exploitation of land resources, creativity and local recipients of the activities.

In the next paragraphs we will try to provide some examples of creative tourism products achieved through the use of new technologies, applied to a cultural
route through pilot projects that may well be placed in categories of tourism, creative and experiential.

2. Results

2.1. The “Glorious Return” tourism-cultural itinerary *

Numerous cultural itineraries have been realised in Europe in recent years, also thanks to the Programme (denominated “Cultural Itineraries”) started in 1987 by the Council of Europe. These routes originated from an awareness of the existence of important places of cultural attraction and of the role that these can play in the valorisation of local cultures and of the territory. In fact, the tourism-cultural itinerary arises from a need to create routes through one or more countries or regions. It concerns the history, art or sociology of the places, which are the main reasons of the itinerary itself (Sala, Grandi, Dallari, 2008). Falling within this reasoning is the “Glorious Return”, which is at the same time a geographical route, a mental pathway, a “narration”, a tourism product which, with the aid of the new technologies, can create “alternative” travel opportunities to the usual, consolidated destinations of the Italian and European mountain tourism market.

The “Glorious Return” brings attention back to an important chapter of the history of the Waldenses‡, because it goes back over the dramatic stages of a population which has defended its freedom of religion against French absolutism, and the right to live in its own lands. The episode of the “Glorious Return” is placed in the framework of the struggle of the European powers allied against the despotism of Louis XIV, back by the Duke of Savoy Victor Amedeus II, but in the important phase of the birth of the European States.

*This paragraph has been edited by the author Monica Morazzoni.

‡ The Waldensian movement began with the story of Peter Waldo, a rich merchant from Lyons who, around 1170, decided to lead a life of absolute poverty and to preach the return to a Christianity faithful to the Gospel. His life choice was condemned by the Catholic hierarchy and he was expelled, together with his disciples from Lyons. The “Poor of Lyons”, as they were called, were excommunicated in 1180 and definitively condemned in 1215. Forced to live in hiding and perennially hunted by the Inquisition, the Waldensian scattered in many European countries: Austria, Germany, Languedoc and in many Italian regions. One of the areas where the movement was most present was the alpine region of Dauphiné and of Western Piedmont. The religious life of the Waldensians was looked after by the “Barba”, itinerant preachers who visited them regularly and produced a rich literature in the Waldensian language, a form of alpine Provencal. With the rising of the Protestant reform in Europe, the Waldensians adhered to a new prospective of faith, beginning in 1555, and organised their communities in the alpine valleys on the model of the Swiss Reformist churches and later the Calvinists. Subjected to hard repression by the Dukes of Savoy, the managed to survive thanks above all to the alpine reality of their lands (Molnar A. H.,1989; www.fondazionevaldese.org).
In 1686, the Waldensians in the Piedmont alpine valleys of San Martino (today Val Germanasca) and of Luserna (the current Val Pellice) constituted a population of approximately 13,500 persons. Following the policies of Louis XIV of France, Victor Amedeus II forced his subjects of Reformist faith to cease all public manifestations, to demolish their places of worship, to dismiss their ministers and to baptize their children in the Roman Catholic Church. The Waldensians, however, refusing the hypothesis of exile, were deported to the prisons and fortresses of Vercelli, Benevagienna, Saluzzo, Fossano, Cherasco, Carmagnola, Asti, Ivrea, Verrua, Luserna and Turin, where many died of privation. Slightly more than 3,000 Waldensians withdrew in exile in Switzerland, thanks also to the intervention of the Protestant European states which interceded with the Piedmontese to bring them to safety (Arnaud H., 2001).

In August 1689, the international situation turned in their favour: William III of Orange, crowned king of England, re-established the anti-French front of the League of Augsburg and in the framework of the war against France financed a military expedition in Piedmont (The Glorious Return), composed of a thousand men, mostly Waldensians along with a group of Huguenots. Leaving from the south shore of Lake Geneva§, on 17 August 1689, the expedition (20 companies of 50 men, for a total of 1,000 persons, of which 650 Waldensian and 350 Huguenot) guided by the Waldensian pastor Henri Arnaud crossed Savoy in 14 days of marching. Regaining possession of the valleys, the Waldensian found themselves engaged in months of guerrilla warfare against the French army of France and Savoy and were forced to entrench themselves in Balsiglia (today the City of Massello, in Val Germanasca) and in other places that have become famous (for example, “the valley of the invincible” above Angrognia, Guglia and Guglietta). In May 1690, the attack of the French-Sabaudian troops (who had followed them in vain up to then) seemed to signal the end of the Waldensians, but they were saved by the sudden change in political alliances, which led the Duke of Savoy to go to war against his French ex-allies.

The “Glorious Return” (Figure 1) commemorates, therefore, the escape march of the Waldensian and today the route assumes meaning which is not just historical-military (the escape strategy used seems to have been studied and admired by Napoleon) and naturalistic, but also and especially cultural. The entire route covers about 330 Km and is composed of 20 legs (14 in French territory and 6 in Italy), of medium and high alpine mountain, with departure from Nernier (on the south shore of Lake Geneva) to reach Sibaud (Bobbio Pellice), in the Hautes Alps. On the Italian side, the route unwinds for 100 km from Col Petit Mont Cenis – near the refuge of the same name in French territory – to Col Clapier (ancient pass, 2,477 meters above sea level, in the

§ Also known as “Lem an”, the Celtic name for Lake Geneva. Still today, in French, it is indicated as Lac Léman.
territory of the City of Giaglione, in Val di Susa, where it appears that Hannibal passed during his descent into Italy) to Bobbio Pellice. Eleven Cities are involved in the route: Giaglione, Salbertrand, Chiomonte, Exilles, Pragelato, Sauze d’Oulx, Oulx, Massello, Salza di Pinerolo, Prali (the Rodoretto and Ghigo hamlets) and Bobbio Pellice (www.lestradedeivaldesi.it).

The Piedmontese territories involved in this route are, therefore, as far as the exile is concerned, the Saluzzo area, the Pinerolo area and the Val di Susa and, as far as the repatriation is concerned, a group of places among the most significant and beautiful of the Western alpine territory in the Chisone, Germanasca and Pellice Valleys.

The six Italian legs** (Fig.1) include an extremely picturesque mountain-alpine geographical context notable for the landscape and naturalistic value of the territories covered, as well as for their cultural particularities. With regard to the components and landscape units, according to the classification used in the Regional Landscape Plan (2010), the route winds through areas of important geomorphological interest (Col Petit Mont Cenis, Denti D’Ambin Mount, Chaberton Mount, Seu Mount, Generis Mount, Col Blegier, Col of Pis, the Morefreddo and Ruetas mountain group, Col Arcano, Waterfall of Pis); areas of agronomic interest in Val Chisone and Val Pellice; historical territorial systems (historical centres, settlements with characterising religious structures, gates, archaeological remains of Roman foundations, towers), systems with historical witnesses of the rural territory and of manufacturing (rural complexes, alpine complexes connected with agro-forestry-pastoral exploitation, infrastructures for the production of hydroelectric energy of historical-documentary importance, mining areas of ancient, medieval and modern periods, alpine complexes connected with religious wars), systems with historical testimony of devoutness, fortifications and mountain tourism infrastructures (sanctuaries and “commissioned” works of territorial importance, trenches, fortifications, refuges); belvedere (panoramic routes) areas with the widespread presence of historical infrastructures (hydraulic, mining and industrial plants); identity places and

** 1st leg from Col Petit Mont Cenis to the hamlet of San Giacomo; 2nd leg from San Giacomo di Giaglione to the Seu Mountains; 3rd leg from the Seu Mountains to Pragelato Granges, through the Park of Gran Bosco di Salbertrand (this last place rises on the crossroads between the Glorious Waldesian Repatriation and the Via Francigena or Pilgrims Road); 4th leg from Pragelato Granges to Balziglia (first fortress and refuge of the Waldesians on their arrival and the place where they tragically sacrificed the hostages that were with them; it should be remembered that the Waldesians were received coldly by the inhabitants of the Val di Pragelato, where, after the Edict of Nantes, the reformed cult was forbidden); 5th leg from Balziglia to Ghigo di Prali (the Waldesian Museum was instituted here, in one of the oldest Waldesian temples, dating from 1556, the only one not destroyed during the persecutions of the 1600’s, along with the new Temple built in 1662); 6th leg from Ghigo di Prali to Bobbio Pellice (the Waldesian Temple here was rebuilt at the beginning of the 18th century annexed to an older bell tower which, before 1603, was part of a Catholic church; before reaching Bobbio Pellice one encounters the famous Stone of Sibaud, monument inaugurated in 1889 to commemorate the second centenary of the Glorious Return) (www.gloriosorimpatrio.it).
elements (historical centres with churches, colonnaded streets, fountains, the parks, fortresses, Olympic architecture, Waldesian temples and cemeteries, trenches, mills, alpine pastures, lakes and waterfalls, century-old forests of pine, larch and beech trees).

The route, developed by the Waldensian Cultural Center Foundation†† in collaboration with Gal Escartons and the Waldesian Valleys and promoted during the Winter Olympics 2006 of Turin, unites, in the tourism area, alpine locations that can be reached with soft mobility (in fact the itinerary calls for walking along footpaths, paved paths, mule tracks, cart roads, military roads, stream crossings, mountain pastures, grassy dells, woods and the use of lodges), ensuring the safeguarding of the environmental context (Morazzoni, De Ponti, Colombo, 2010). The presentation of the natural and cultural particularities of the places the route passes through, thanks to the involvement of Gal Escartons and the Waldesian valleys and the support of the Region of Piedmont, makes use of accurate signage along the route, of descriptive panels, of geo-referenced maps and of a special website (cfr. paragraph 2.2).

In uniting geographically and ideally such a rich and vast territory (330 Km from the South shore of Lake Geneva to Bobbio Pellice), the “Glorious Return Road” is certainly an element of strong tourism incentive, stimulating the local stakeholders (guides, escorts, hospitality managers, agencies) to enhance and promote their territory and its cultural specificity.

2.2. The “Glorious Return” and Information Communication Technologies

The need for information more and more carefully linked to different dimensions of the territory induces the actors of the tourism industry to use

†† Instituted in 1989 for the occasion of the 3rd centenary of the return of the Waldesians to Piedmont from their exile of 1686, it is situated in Torre Pellice, in the heart of the Waldesian Valleys, in a frontier area which intends to be a place of meeting, comparison and a gathering point of the rich cultural heritage of the Waldesian community. The Foundation has the purpose of preserving and enhancing the Waldesian Library, the Waldesian Historical Museum and the Museum of the Waldesian Valleys, as well as contributing to the development and spread of studies of a theological, cultural and historical nature of the Evangelical Churches, in particular Waldesian, also in collaboration with other Italian and foreign bodies, through conferences, conventions, debates, exhibits, publications, and every other useful form. It also has the scope of safeguarding the specific characteristics of the Waldesian community under both a religious and a cultural profile, in the framework of the valorization of minorities, in a European prospective. At the Foundation headquarters it is possible to visit the Waldesian Museum, leader of the Sistema Museale Eco-Storico delle Valli Valdesi (Eco-Historical Museum System of the Waldesian Valleys), which is divided into a historical section (the reconstruction of the Waldesian vicissitudes from the Middle Ages to the present) and an ethnographical section (daily life in the Waldesian valleys between the 19th and 20th centuries) (www.fondazionevaldese.org).
broadly diversified technologies for a proper valorization of the resources. The plurality of involved actors, each with his/her own skills, time and responsibility, contributes to create a flow of information, whose modes of spreading represent important components for a complete management of the territorial supply and demand. With this viewpoint, in the building of a distributed application support for the users, the criteria time becomes a highly discriminating factor. Considering the tourist as an active part of the system means to acknowledge him/her, with his/her own desires, availability, needs, personal choice, a primary role inside the tourist offer. The web technologies represent the natural environment in which the information are integrated to be then returned in an aggregated form for the processes of decision making, where we pass from a local dimension, represented by the single tourist destination, to a set of alternative solutions viewed as on-line itineraries.

The term “Sistema Informatico Geografico” comes from the English expression “Geographic Information System”, whose acronym GIS is currently used to indicate this system. In Italy is often also used the acronym SIT (Territorial Information Systems).

The definitions of GIS, existing in literature, reflect the particular disciplinary contexts and applications in which the GIS is used, however they represent some overlaps which allow to identify the key features. A geographic information system is a ... set of tools for collecting, storing, retrieving, transforming and displaying spatial data ... (Burrough, 1986) ... and non-spatial data (Parker, 1988); a system of support to decisions that involves the integration of spatially related data in an environment oriented to solving problems (Cowen, 1988) ... with advanced modeling capabilities of geographic data (Koshkariov et al., 1986).

From these definitions it follows that a Geographic Information System has the capacity to process spatial and non-spatial data, to transform data into information, to integrate different data types, to analyze and model the phenomena that occur on Earth's surface, to provide support to decisions. Among the many fields of application, perhaps that of the cultural and landscape heritage is the least developed and not properly exploited yet. Very few people use this important tool and not all professionals know the benefits they might have by using a GIS.

Geographic information is by now an essential component of the problems related to the management of cultural heritage, particularly architectural and landscape heritage, historical, artistic and archaeological heritage; the protection and enhancement activities, study and research related to these sectors, seem to be much more effective if they are set in a dynamic process involving the global dimension of the context.

The GIS allow to direct efficiently and in an innovative way the strategies for the Cultural Heritage management within the town and country planning.
This work, for example, cured by the Company itinerAria sas‡‡ has pertained the creation of a Web-GIS site (Fig.2), accessible at the internet address www.gloriosorimpatrio.it, for the display and management of the itinerary on Google maps of the cities, the attractions, the pictures, which belong to an itinerary offering the possibility to create personalized maps and guides and download Google Earth, Garmin, GPX tracks as well as the road books of the itineraries.

After the analysis and planning phase, accurate surveys of the Glorious Return route were carried out during which the following information were obtained:

1. GPS track of the path;
2. GPS location of each junction and of any change of the road surface;
3. Accurate description of each junction in both directions of travel;
4. Conditions of the trail, road signs, security
5. Location of the emergencies which are possible to be found along the way;
6. Photographs for descriptive purposes.

The survey was made with instruments with a precision better than 10 m and the tracks were worked out using orthophotos (corrected aerial photos) in scale 1:10.000, to correct major errors (interruptions, knots, distortions due to foliage and buildings, etc.), in order to be suitable for the navigation on 1:25.000 and 1:50.000 scale maps.

It was used a GeoRouter that is a powerful geographic information system, which is accessible from the Web (Web-GIS), capable of managing large networks of paths and cycle lanes, with functions similar to those of popular commercial sites which are used to plan car journeys.

The commercial web services, however, are able to calculate routes only on ordinary road networks, even when other means of transport are chosen like "on foot" or "by bicycle".

A GeoRouter, instead, is capable of calculating the shortest path between two or more points even on "off road" or rather on networks of paths or cycle lanes, and it is able to create personalized itineraries by the user, who can:

• view online the location on interactive maps;
• export it in 3D on Google Earth;
• print the map by choosing between various types of maps (eg. Google, Bing, Open Cycle);
• print the specifications (length, gradients, ground type, etc.) and the road book with detailed descriptions for each junction;
• download the GPS track.

‡‡ ItinerAria sas is a company specialized in the exploitation of the "slow tourism", walking and cycling, using advanced technologies (www.itineraria.eu).
The system also locates the resources (points of interest, accommodation, etc..) which are situated within a certain distance from the itinerary. A very appreciated feature by those people who travel on foot and by bicycle, because so they do not stray too far from the shortest path.

Possible future developments are the multimedia GeoGuides: mobile devices provided with GPS able to guide the user along a route and to locate points of interest (POI - Points of Interest), providing their description. It will be created a GeoGuide whose main feature is a complete independence from other particular model devices. Geo-referenced contents of quality can be developed, which will be distributed in standard formats or in formats compatible with most devices that are on the market.

If the devices manage the sound, we can speak about true automated tape guides that are activated near the POI "telling" about them in the desired language. Otherwise, the GPS will transmit a buzzer indicating the closeness of a POI and displays the descriptive card provided with text and photos.

The GeoGuides are particularly useful for travelers with cultural or environmental interests. For example, going through a wood, the guide can help to recognize the type of vegetation or can tell what animals live in that area. Or going through an abandoned village it can tell its history and show the photographs of the period when it was still inhabited.

Among the later applications it is foreseen the creation of a guide for iPhones which uses augmented reality for the cultural areas in the zones of interest of the Itinerary the Glorious Return of the Waldensians.

The iPhone is one of the most interesting devices for such applications. In fact Apple Store distributes dozens of software that allow to use it as a navigator, as an audio guide or as a tour guide. For example, the Lonely Planet guides of various cities, and the audio guides for some destinations are available in the form of texts and images and they can be downloaded by the tourists even after their arrival at their destination.

For this project we plan to use an audio guide created within the GeoLives application. The software, released in December 2009, was downloaded by 15,000 iPhone users, and the community increases at a rate of 3,000 new users every month. The software allows to create personalized itineraries and to document them with text guides which can later be read using an automate reading software.

One of the most innovative and interesting aspect of the project is the development of an application “Augmented Reality for iPhones”, to be published for free on Apple Store. This is an application that can be downloaded and installed on the mobile device.

Augmented reality, in fact, is the superposition of information levels (multimedia and virtual elements, geo data, etc.) on a video stream that shoots reality of everyday life. The elements that "increase" the reality can be viewed...
through iPhone 3GS or 4GS. The overlapping of real and virtual elements creates a "Mixed Reality". The mobile phone or smartphone of latest generation must necessarily be provided with GPS and magnetometer (compass) for the positioning and must allow the display of a video stream in real time. The phone frames reality in real time, which is then superimposed by data of the geo-localized Points of Interest (e.g. tops of mountains, place names, etc.).

3. Conclusions

The GIS belong to a category of tools that allow a direct participation of the trip preparation and the sharing of experiences in virtual spaces. The original theme of a route does not preclude the possibility of developing wider and more diversified experiences of use. Creativity does not really create anything new but it makes use of the culture and resources of the place, reinventing and reinterpreting them in a creative and innovative way. The cultural itinerary can be a stimulus for all the territories that make it up in the direction of a planning based on the existing resources and creativity, but which, at the same time, is also able to create innovative processes through which support and enhance the potential and competitiveness of a territory. The synergistic use of new technologies with the territory enriches the HERITAGE, creates “alternative” tourism opportunities and implements the knowledge of the involved geographical areas!
References


www.lestradedeivaldesi.it
www.surlespasdeshuguenots.eu
www.gloriosorimpatrio.it
www.fondazionevaldese.org
www.comune.torino.it
The Glorious Return of the Waldensians: Italian stages from the Little Moncenisio to Bobbio Pellice