On this lecture, we pretend to do a brief study about some ideas on Cultural Routes, and their application to tasks that we must do daily.

In fact, these ideas are contained in the definition on May, 2003 (Madrid-Spain), that had been developing, since 1997, by the doctrine of the International Scientific Committee on Cultural Routes. Moreover, we also consider its further development, following the lecture of our President María Rosa Suárez-Inclán Ducassi on December, 2003 (Querétaro-México). Another important papers are those ones of the meeting that was held in Ferrol.

Firstly, we point up the main concept on communication route. Then, we remember the basic need of a Cultural Route: to demonstrate its own and specific dynamic, as well as its historic functionality. That means to have the following features:

- To have produced exchanges of people and things, including ideas and knowledge among different countries over significant periods of time.

- Its cultural heritage has contributed to our time, both tangible and intangible heritage.

**A multidisciplinary treatment and analytic schemes.**

I think that we must detach the general idea of territory, and its systems of communication route and transport means. What’s more, we have to bear in mind the variety and functions of those cultural properties:

- Architectural, engineering elements and movable cultural properties.
- Relationships among these elements by means of transport and communication routes.
- Geographical and defensive setting.

On one hand, this is a very complex subject if we take into account all the aforementioned above, and that’s why, it requires a multidisciplinary treatment.

Nowadays, it’s a fact that people with different education and career such as: historians, archaeologists, architects, engineers, jurists, sociologists, linguistics, militaries and others are working together. There is a tendency toward specialization. There is a language on any career.

On the other hand, we shouldn’t forget the historic and the present-day functions. These ones offer us the possibility of working for a culture of peace and cooperation among countries, particularly those ones inside a Cultural Route. So, we must initially think about elements, but we must work mainly on the ensembles that make up a Cultural Route. This way, we need to establish the concept of a general system which defines these communications.

The language must be clear. We now make a proposal: So, we can define a system as an ensemble of tangible goods (things) and intangible goods (regulations, knowledge), that are linked one to another for a function.

Here, we emphasize the added difficulty of the different languages with their difficult translations.

I think that we can sum up this introduction on the following headline: Cultural Routes Heritage is a very wide and diverse concept that has the need of interprofessional studies.

As a result of the aforementioned above, I think that it is necessary to get some analytic schemes on territory. These ones must bring forward us security, which will permit us to study all the elements (tangible and intangible properties), and their relationships. Let me to repeat “the idea of system as a whole”. We can’t forget any of the aspects that take part in the management of the territory.

We now make another proposition: I think this affair must be analysed according to the so-called concept “control of the territory”, since control has always been unceasing on history, from the beginning of any more or less spontaneous activity. So, the different governments (states, regions,
Section IV: Cultural routes: the challenges of linear settings for monuments and sites

At least, Cultural Routes have one of the three ways of control: political, socio-economic, and military. Although Cultural Routes very often have the three ones. We must keep into mind that not always a political, socio-economic and military system produce a Cultural Route.

Let me to mention a specific example: The “Camino Real Intercontinental” (“Royal Intercontinental Route”) of Spain on its ancient colonial empire. This great cultural route is a communication system that has to be studied on the three mentioned areas of government:

- Political actions: geographical evaluation (geostrategy) and its ports (sea ports and earthly ports), territorial organization, executives training and others.
- Socio-economic actions: areas and factors of production (industry, agriculture, fishing...) trade and consumption, including supply systems and transport, both materials and people.
- Military actions: defensive system and their logistic support, always dependent on and linked to political and socio-economic actions, mentioned above.

This “Camino Real Intercontinental” (“Royal Intercontinental Route”) linked Spain and the rest of Europe to North, South and Central America and Asia. It was formed by the evolution of people’s movements and ideas, as well as by the material supply system and its transport. That means a port system, how is studied at present. On this system, we include the idea of port like an incoming gate (crossing) to a region, not only by sea but also by earth. It was said in olden days “Key of a Kingdom”.

Actually, this Cultural Route is really a communication system among many ports (earthly, lacustrine or maritime) with political, socio-economic and military values.

At the moment, we find out on the new logistic engineering a method of analysis, that permits us to understand all this complicated process.

**A particular logistic scheme**

The Itinerary can be explained like a “logistic chain”, formed by successive cycles (like links). Every cycle has its own scheme: determination of needs, obtaining and distribution. The “Carrera de Indias” (“Indians Route”) - the great system of supply and transport of the “Camino Real Intercontinental” (“Royal Intercontinental Route”) during the seventeenth and eighteenth centuries - can be analysed and explained nice with the following concepts. For instance: the needs of the ports-fairs of America were decided on Cádiz and Sevilla (Spain). The obtaining of materials and people were made on their hinterland, in Spain and the rest of Europe. The distribution was made by sea and overland routes in order to ship on the aforementioned ports of Sevilla or Cádiz. This was a cycle, only a link of the great logistic chain, although this cycle could be divided into another smaller cycles.

Another interesting example is the port of Ferrol within the “Camino Real Intercontinental” (“Royal Intercontinental Route”). This naval base was designed in order to control the coast and the North-Atlantic Sea, including its logistic support. There, its general logistic cycle also comprised: the needs of warships, the obtaining of their materials (equipage, repair parts, consumer goods) and crews, the maintenance of these ships and their distribution to the arsenal (dockyard). This early rationalization of work (organization) and standardization of materials were the basis for the design and construction of the new Ferrol. That means, an exceptional and universal example of the “ideal port city” of the Enlightenment (eighteenth century). At least, the Renaissance utopia.

This logistic chain is applied to different functional and logistic elements, such as personnel, materials and transport, as we have already began to develop. Maybe, the most interesting functional element for this lecture is the transport, because it was the function of development, both for supply and personnel.

The logistic of the transport gives us a scheme of simple analysis. These are the factors that compound it: via, vehicle, load and terminal areas including their settings.

We can also consider these ideas (factors) as the structure of a Cultural Route:

- **Via:** This is the same concept (way of communication).
- **Vehicle:** This is the materialization of the dynamic concept, and at the same time the function of movement.
- **Terminals (cargo):** They are the places of exchanges (ports on their wide sense).
- **Load:** It is the basic aim of the transport, both things and people, including their knowledge and costumes.
On this functional scheme, we can analyse every Cultural Route, from its full space (territory) and general ideas (systems of political, socio-economic and military control) to its smallest phases or elements which set it up.

Let’s us return to the “Camino Real Intercontinental” (“Royal Intercontinental Route”) of Spain, we now give an historical example of its economic system (trade and industry). On a brief and general analysis, we find out the following:

- The via (way) of communication was mixed: both maritime and earthly.
- Vehicles were the conveyors of carts and ships.
- Terminals (cargo) were the ports-cities that had established fairs with a monopoly organization.
- The loads were the merchandises that were determined on the “Casa de Contratación de Sevilla” (“Contract House of Seville”), in order to supply the Spanish colonial territory and their returns of minerals, spices and others, including not only the importations of broad economic hinterlands but also technologies and complementary arts.

Let’s think about another more detailed example. We will analyse a partial route, for instance, in Andalucía (from Almadén to Sevilla) in Spain:

The via of communication was earthly, by means of paths which included bridges, posts and so on. We can say: civil engineering of public work.

Vehicles were generally cavalries and carts with a certain heritage in their design and industrial production.

Terminals (cargo) were the factories of the mercury mines in Almadén (initially) and the stores of the ancient “atarazanas” (port-arsenal) in Sevilla (at the end); this is a mining engineering heritage and logistic trade (supplying and handling).

The load was mercury that was sent to the Indians (America) in order to get silver. Due to this factor, we find out many surprised and novel hereditary ideas, some of them tangible and others intangible; for instance: the technology of packing the mercury that shows us a very interesting knowledge. So, we can study how the packing were used: They employed animal skins as bags in order to contain liquid, and they used boxes that had suitable forms for the type of storage in the terminals (cargo) and vehicles (carts and ships); that means, we here see a great lesson on technology in relation to the most current designs of containers (the so-called “bag-in-box”) and intermodal transport; and furthermore, with these loads were also transported mining and logistic technician, enclosed their knowledge and their way of life, what is actually known as transculturization.

We have a limited space and time for this paper, that’s why we can’t give many other examples, which justify the opportunity of these analytic schemes in any cultural route and function. In other words, useful schemes for all type of historical heritage.

Let me to repeat, the scheme is useful for cultural properties very often studied such as: architecture, fortifications, and it can also be applied to the great majority of elements and ensembles that begin to be included as heritage properties: public works engineering, industrial engineering, mining engineering, trade, intangible arts and others.

We now go on with the application and development of these theoretical ideas to practical tasks which demand us the evaluation and management of cultural heritage.

**Description patterns and procedures**

All of us are convinced that the essential tool of work is the cataloguing of all cultural properties; but this cataloguing may have many patterns and contents. In this way, I think we must make an effort to get an optimum pattern of cataloguing, and then we can determine its procedures with most detail. On this subject, the logistic engineering can also help us due to its modern doctrine, included the theme of organization.

As a result of the aforementioned above, I think that we must check and improve the systems of work that we now use.

I make the following questions:

- Who are the professionals that work on cultural heritage?
- How is this work carried out?

Our organization of ICOMOS is very important, and we put into practice a good and complete doctrine. On one hand, we must recognize that we come from different professions which are very dissimilar in many cases. That’s why, we also have unlike interpretations and tendencies. On the other hand, we have to take into account that many people and institutions are working on the evaluation, protection, management of cultural heritage in different areas.
It is necessary to share data, experiences, investigations in order to complete our task; to establish more agreements of cooperation. For this task which is about a general matter, the “Scientific Committee on Cultural Routes” must design a more complete databases, in which are included organizations and people, who are related to cultural heritage, pointing up their area of work: performance areas, themes they treat (general or specific) and means of available communication.

Our organization of ICOMOS has developed good patterns of inventories for different types of cultural properties, but these documents must be improved in order to get an optimum cataloguing. I think, it is necessary and urgent to examine the content of the inventories and to get some complete procedures for their application through every Scientific Committee. Maybe, the most complex case is incumbent on the “International Scientific Committee on Cultural Routes” (CIIC), due to the variety of themes that treats.

I now refer to systematize the different tasks: to identify, localize, describe, evaluate, manage and their references; of course, not only for the tangible immovable properties but also for the tangible movable properties as well as intangible goods.

The problems of identification are difficult, since they are really the synthesis of every process, beginning by their denomination with certain idea of functionality.

Perhaps, the localization is the less complicated task. The description has big problems too in the determination of the parts, that usually forms the cultural property, with its more essential elements and interconnections.

Evaluation is the most complex concept. Besides, we think that it must be done from two different points:

1. Historical evaluation, and at the same time it must be examined according the following perspectives:
   - Evolutionary historical evaluation: detaching the importance of its time creation and its evolution towards the actual type of hereditary property (political, socio-economic and technical factors).
   - Commemorative historical evaluation: detached due to its linking to important facts and its antiquity.
   - Instrumental historical evaluation: detached due to the function that fulfilled and fulfils at present.
   - Artistic historical evaluation: detached due to its aesthetic style that is very complicated to evaluate with objectivity (newness and style related to art sociology).

2. Relative values to the inscription by categories. I think it is important to establish a rank according to the “Indicative List” for the “World Heritage”. So, we can appreciate:
   - Universal and exceptional values: Carried out according to UNESCO doctrine, the followings ones: the values of a masterpiece, considerable exchanges of influences, unique testimony, eminent example and others.
   - National, regional and local values: with regard to its own worth in the scope of nation, region and locality. Within these values, it would be suitable that estates implemented some lists with the heritage of every nation, establishing these three categories according their territorial organization. These lists would be of great aid for heritage management.

With regard to the conservation management, another important criteria that we defend from UNESCO doctrine, we comment the following ones:

- Authenticity and integrity, which aim is the conservation of the whole or one part of the properties, according to UNESCO criteria. Authenticity must be clear according its time and conserved values up to now, relating it to integrity must establish the disappeared parts; including their physical description.
- Setting: In this paragraph, it has special significance the questions made on the Section Fourth of the Scientific Symposium.

The patterns of the inventory should be extremely exact in the analysis of every element of the setting, since it is essential for the connection of cultural routes. These settings have often suffered great mutations on their vías, vehicles, terminals and loads. So, the defence of systems and ensembles is fundamental. We think that, if it is not possible the description of continuity, as it occurs many times at present, we should try to isolate the conserved properties from their degraded settings, creating “interpretative centres” and another informative elements in order to substitute through virtual means the aforementioned connections: models,
maps, didactic sculptures, multimedia presentations (audio, video and interactive programmes and others.)
- Legal protection of properties and their settings. It must contain all these ideas within complete catalogues, where these references appear, being necessary informs for any intervention: previous, mandatory and entail informs. These regulations and catalogues must exactly contain the elements that have full or partial protection.
- Degree of social implication: This is a paragraph that it must include the analysis of people’s hope and official institutions (authorities) support particularly, including education, cultural centres, foundations and others.

The models of inventories must be improved with special paragraphs for references, that means:
- Connection with another records-inventory (related themes).
- Documents (written, plans and others) and their records.
- Bibliographies, even their cataloguing (records).
- Computer science and others.

At last, the information must be completed with graphic data as an essential complement of the record
- Schematic plans that show us the time and style.
- Plans and detailed drawings.
- Photographic images (with different supports).
- Guessworks reconstructions (DVD and another techniques).

It will be important to finish the record of the inventory with the initial date of redaction and its last modifications, as well as the authorship or the institution in charge.

The tasks of the CIEFAL: Databases, ideological dictionary and description patterns

I think that it is necessary to do a standardization of all documents and procedures of work.

Let’s remember, there are great problems on the usage of the language that professionals do, as well as the translations to different languages. In this way, we must keep into mind the limited official usage of languages, such as English and French, only allowing the use of the language where the meeting takes place (at present Chinese).

We must admit that there are many problems with simultaneous translations on these meetings, on the whole text, on summaries and colloquies.

Some of these problems have appeared on the Scientific Meeting of the CIIC in Ferrol (Spain, October 2004, just at the beginning of a critic juice in which we use the logistic doctrine (the logistic cycle): “Determination of needs” that are the aforementioned problems; “obtaining” that includes how to solve them and “distribution” that is the procedure of delivery and diffusion.

As many of you know, during the aforementioned meeting of the CIIC, it was created the “Centro Internacional de Estudios sobre las Fortificaciones y Apoyo Logístico” (International Centre on Fortifications and Logistic Support) CIEFAL, in Ferrol. This Centre has organic dependence of the Spanish National Committee (CNE) of ICOMOS and the International Committee on Cultural Routes (CIIC).

Initially, we pretend to embrace a fundamental aspect of the cultural routes: military heritage and its relationships with another activities; including a forgotten aspect: the whole logistic heritage that makes possible fortifications, in other words the factories of industrial type, minings, forests, paths, ports, arsenals, academies, hospitals and others.

We now think that this Centre has more interest due to the recent creation of the International Committee on Fortifications and Military Heritage (I.C.F.M.H.) as well as the programmes on investigation, development and innovation that began in the big historical naval base of Ferrol (Spain).

From the first day, our initial goal was the organization of work, after we decided the tasks we must consider more important and urgent.

The CIEFAL has the following organic structure:
- Direction (and secretariat) with scientific and administrative Councils as staff.
- Executive bodies: Work Groups for investigation (they are constituted for every task) and Chair “Marqués de la Ensenada” for the diffusion (lectures, publications and others.)

This paper really ends with our analysis of the existing problems and with the planning work that we have fixed for three groups, according to the idea aforementioned above:
1. Creation of a database which will contain the organisms and people who work on matters about cultural heritage. First, we began with military heritage.
The format is designed by sections according to nations and another territorial spaces. The content embrace the following information:
- General and specific areas of work.
- Organic structure.
- Responsible members.
- Available products (concerning to inventories and catalogues, issue editions of books, magazines, CD, DVD and others).
- Guide lines for communication.
- Easiness that brings forward.

2. Creation of an “Ideological Dictionary” on Cultural Heritage, being priority military heritage. It’s a complex document which will be published as a book and through multimedia presentation. The content is organized in three sections:
- Ideological scheme on words, that form the particular languages of the different specialities and general languages, which contain heritage management. On this section, the ideas (words) are related to their functionality.
- Definition of words (ideas) according their function and form. This section is ordered alphabetically with all the possible meanings and translations to different languages.
- Graphic annexe, complementary to the sections above.

3. Design of standardized and descriptive patterns for cultural properties, being priority military heritage.
- For immovable tangible heritage is designed the following ones: systems, ensembles, constructions (compositions) and elements.

   In the format of systems and ensembles it is given importance to functional relationships (strategic, tactic and logistic schemes, as well as another more special and concrete ones for any particular case,) that are embraced on the general description and evaluation.

   It is completed with the identification of the parts, including their short description, evaluation, management, references and a graphic area. Everything follows the aforementioned scheme.

   In the formats for constructions (compositions) and elements, it is done references to systems and ensembles of which they form part (general description), although it is detached with major intensity everything related to their inner relationships and parts. As a matter of course, it will be detached the section of formal and long description, evaluation, management, reference and graphic area.

- For movable tangible heritage are designed the following descriptive and specific patterns: documents, books, magazines, equipments and equipage (including different elements: vehicles, weapons, munition, sculpture, painting and others).

   For the design of these models we have to take into account the whole doctrine of archives and libraries, as well as the experiences of logistic support of many military organizations (identification, standardization, cataloguing and others.)

- For intangible properties we are also working at description patterns, although with less priority.
Abstract

On this writing we must pretend to analyse the content of the Cultural Routes on their basic concept as communication routes, with their own dynamic and historical function, that have provided a heritage to our epoch for a considerable period of time of interchanges not only things but also persons, including ideas. This cultural “superstructure” has an important territorial base due to the localization and connection of its elements and heritage clusters that constitute it, as well as it is also stood out and prolonged to its environment. Anyway, the theme is presented with a feature of great variety and a certain interdisciplinary character. Following with these ideas, we provide a brief general analytic scheme about the aforementioned territory (“control of the territory on its socioeconomics and military actions that we will particularize to the Intercontinental Royal Road (The “Camino Real Intercontinental” from Spain); and we make specially to investigate on its formation: people’s movements evolution, supplying and transport system. We think to find out on the current logistic engineering a particular scheme for a better understanding and treatment of the “port system” on its wide sense (routes, vehicles, charge and maritime and earthly terminals).

On the practical order, these schemes, that are in contact with ideas, must applied to a concrete methodology of work for the “identification, valuation, inventory and treatment” of the historical heritage, that is to say for a complete cataloguing of the cultural properties.

So, we want to share the investigations and experiences we are carrying out in Ferrol (Spain), on the International Centre of Studies on Fortification and Logistic Support (CIEFAL) of ICOMOS, linked to the CIIC: linguistic normalization that needs to be carried out due to the existing reality by different professional who work on these matters. Normalization of “descriptive patterns” for the cataloguing of the “systems”, “clusters” and “elements” that can form a Cultural Route.