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**ROMIT PROJECT** 

# TRAVEL, CULTURAL TOURISM AND LOCAL DEVELOPMENT. THE OPPORTUNITY OF THE TABULA PEUTINGERIANA

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#### INTRODUCTION

Travel has always been a component of human history. Its beginnings lie in the travels of Ulysses, spurred on by curiosity, and those of young Roman nobles in search of ancient Greek culture, continuing with the 'grand tour' of modern times. The phenomenon was always restricted to a fortunate minority, who based their future prospects on the experience and knowledge accumulated during their long journeys. They were statesmen, artists, poets, painters and so on; not to mention geographers, for whom travel was a deliberate search for 'knowledge' (von Humboldt A., 1805, de la Blanche V., 1903).

Over the last decade, culture based travel has become ever more important on the new tourist scene, in the wake of renewed interest in the cultural component. By culture we do not only mean the vague concept of art or folklore, but rather a complex set of situations making a particular place, or, more exactly, a series of places a unique tourist phenomenon. This revival of one particular approach to tourism concerns a phenomenon whose object is culture and its promotion, the meaning of 'cultural' having two senses, i.e. those posited by M. Arnold and E.B. Tylor. The former saw culture as the set of units of personal knowledge in various fields, i.e. an élitist concept linked to élite cultural tourism motivated by choice, action and expectations. The latter dealt with a set of spiritual, ideological and artistic values and the works based on these values, which identify a historical period or specific environment, linked to mass cultural tourism. Ability to address both components stands at the hub of tourist policies and planning in the context of a new cultural environmental model (or 'reterritorialisation' as C. Raffestin would call it).

The emergence of cultural tourism has led to a number of consequences, such as a gradual development going beyond the older idea of the 'holiday' typical of the 20th century. Nowadays we address a leisure society in which tourism is a permanent, expanding, year long phenomenon, successfully facing up to and recovering from crisis periods<sup>1</sup>.

Planning an itinerary is a complex operation requiring a systemic approach on the part of those dealing with tourism in civil administration and the tourist industry, and which is also carried out by individual tourists and trippers. It is part of everyone's experience that planning an itinerary brings with it a series of expected features and others that are only probable. These features combine spatial, temporal and economic-managerial aspects with other, highly subjective ones. Thus planning an

<sup>&</sup>lt;sup>1</sup> Berger (1974) writes of a "homeless Mind" in continuous search of new destinations and emotions, with mobility associated with a more exact, or progressively improved notion of society.

itinerary turns out to be a complex decision process, which can be based on a series of overall applicative tools. Naturally, though technological development, over the last few decades, has made a substantial contribution to ever more expert, overall, well structured itinerary planning methodology, one cannot (and must not) do without the creativity and experience of the tourist planner/operator, as well as his/her technical competence and knowledge accumulated over time.

Traditionally, the sector data, statistics, guidelines, thematic maps, and tourist guides have been the basis for preliminary area analysis, while on the spot surveys, such as questionnaires involving a significant sample of respondents, can prove useful for collecting subjective type data, as well as those linked with market movements and economic-managerial aspects. A shared theoretical starting point leading to overall decisions and organisational processes is equally important. Recent years have also seen the development of computer based systems able to collect, organise and process information, thus providing important support for spatial and statistical analysis, and, eventually, for decision making<sup>2</sup>.

Nevertheless, cultural travel always originates in a plan, on a policy making basis, with the aim, on the one hand, of creating a tourist product, in the case of area operators, and, on the other, of contributing to experiences and emotions on the part of the product addressees.

Our observations here on tourist itineraries will follow an economic, geographical and legislational approach, with spatial, area and juridical analysis.

The first part of this report concerns the feasibility of tourist based concern with the Roman roads described in the *Tabula Peutingeriana* (III B Inter-regional Project entitled ROMAN ITINERARIES - ROMIT). Its starting point is discussion of cultural tourism, its definition and measurement going on to concentrate on the economic aspects of linear and circular itineraries, in both élite and mass contexts. The attraction potential, as far as numbers of tourists are concerned, will be highlighted, economic analysis being completed on the basis of a proposal for the ROMIT tourist product, aiming at involvement of the widest possible range of public and private sector participants.

In the second part different access conditions will be examined on the basis of a number of geographical models (linear, circular and radiating itineraries), following an approach deriving from the cognitive component and logistic efficiency techniques, the aim being an initial proposal for a circular itinerary based on the *Tabula Peutingeriana*.

<sup>&</sup>lt;sup>2</sup> Geographical Information Systems (G.I.S.) have turned out to be among the most complete and versatile tools, although simpler systems, such as route itinerary identification computer programs, have also proved useful, thanks to low costs, user friendliness and on-line availability.

The proposal of a shared system of rules and behaviour protocol to complete and legitimise the project among the various European regions is fundamental for the promotion of this tourist product. Starting from the expertise involved with the protection and management of Roman archaeological sites in the 'Italian System', much thought needs to be devoted to heritage and landscape management, where tourism and road networks are the essential material from the juridical viewpoint involved in the ROMIT project.

#### ECONOMIC FEASIBILITY ASPECTS

The building up of a tourist itinerary is an extremely complex phenomenon, owing to a series of aspects, which, albeit in summary form, can be the subject of a long series of observations which require close attention.

Firstly, defining cultural tourism is a particularly complex matter, since empirical data (visitor stays, arrivals and expenditure) do not take into consideration the variable of travel motivation. Motivation is almost always backed up by cultural interests, though intensity varies. Different types of cultural tourism products must address this diversity in demand.

To deal with the above consideration, a second step will be the planning of two possible itineraries, a linear one with a fixed beginning and end and a circular one, covering all the places involved in the ROMIT project.

The linear itinerary is more organic, more artistically oriented and addresses a limited number of visitors. This itinerary, however, has no destination symmetry, since it has a beginning and end. For this reason diminishing numbers of tourists following the itinerary are foreseen.

The circular, entirely symmetrical itinerary offers greater variety of choice and is more flexible, in the expectation of a larger number of users than the previous itinerary. Inevitable reductions in numbers should not affect the various destinations differently.

When a single circular itinerary is available, there should be room for several linear ones, including, following particular lines of thought, all the destinations involved or only some of them. Mixed linear and circular itineraries can also be planned. One example could be a radiating itinerary, with a central destination at the outset from which all the remaining mutually symmetrical destinations radiate.

Substantial geographical distances (on a scale) between the places included in the ROMIT project make sequential, continuous use of more than one at a time difficult. The typical use of Roman roads consists of a single stay in each place, with considerable intervals (a year, for example) between one purchase and another.

The above mentioned aspect leads to two consequences:

within each period of time competition between destinations is high (time and financial resources for a ROMIT holiday are limited and expenditure on one place excludes the others);

with two or more periods, competition between destinations for cultural tourists is lower. Once the tourist has stayed in one place on the itinerary, and, since return to the same place in the ROMIT motivational context is unlikely, the tourist industry is motivated to promote the other destinations in a spirit of cooperation, thus extending the number of potential clients.

Actually, counting on diluting the itinerary over time runs the risk of diminishing the aspect of the journey which is intended to be a strategic characteristic of the ROMIT project.

A significant contribution to strengthening the strategic presentation of the package can be made by linked sales, in the shape of reductions on a further stage in the ROMIT project for those who have already purchased a destination included in it, for example as a complementary voucher.

The voucher-discount system aims at increasing the number of potential clients (both for the linear and circular itineraries), as well as (in the linear case) reducing inevitable asymmetrical aspects of destinations ordered in sequence.

In the conviction that the linear model involves 'élite' tourism, while the circular one regards the 'mass' variety, a ROMIT itinerary could be unanimously accepted by various countries. Besides, the circular model is the one bringing about greater social equality in terms of distribution of tourist movement.

Naturally, equal distribution of tourist movement on a length of stay basis is only an approximate index of profit and level of importance of tourist development at the various destinations. The most appropriate unit of measurement is the income level brought about by ROMIT tourism. Nevertheless, in our view, at this preliminary stage in the project, detailed analyses cannot and should not be carried out on prices and cost structures at the various destinations along the ROMIT itineraries.

Tourists are interested in varied, positive experiences on the personal level. While, from the viewpoint of the development of the tourist product on offer, widely varied skills are required, ranging from transport and catering to cultural expertise, the client sees these services as aspects of a single product.

Most recent empirical analyses of tourist movement foreground the fact that there is a clear preference for 'made to measure' products (i.e. 'customisation') rather than standard packages. Besides, the cultural aspect is one of the most highly appreciated features of these products. It is in this context that interest in the ROMIT package, linking various sites along Roman roads, lies.

#### CULTURAL TOURISM: DEFINITION AND MEASUREMENT ASPECTS

The ROMIT package belongs to the wider ranging context of cultural tourism, considered an expanding sector for the present and future by experts, inasmuch as incomes are increasing, costs and travel time decreasing, and travel comfort is greater. Ever expanding sectors of the population are also better educated. All these factors should contribute to a significant increase in cultural tourism potential.

An initial empirical difficulty concerning statistical measurement of the phenomenon needs to be pointed out, however. We have information on lengths of stay, arrivals and expenditure on the part of tourists, while we should like to know about motivations behind travel, which are still an unobservable variable. Thus our information is partial, since observation of certain types of behaviour (museum visits and overnight stays in a town of artistic interest) should be an indicator of tourist motivation. Information is also distorted or limited, since all the trippers 'travelling' in the surroundings or within their own towns escape statistical analysis. On occasion information is too broad, since staying in a town of artistic interest is not always due to cultural tourism.

The presence of a cultural feature among tourist motivations can be the cause of ambiguity, since most tourists have a taste for discovery and enrichment of their personal experiences. By using an excessively wide ranging definition, there is the risk of including all tourism under the 'cultural' umbrella. On the other hand, in the past the definition of cultural tourism was too narrow. It was restricted to expert travellers, with previously defined preferences along socio-economic lines (high income, university or high school education, comparatively upper age range).

In the traditional sense, cultural tourism was, unsurprisingly, an élitist phenomenon, inevitably of restricted dimensions. The following table illustrates the marked differences between mass and cultural tourism in the USA:

	Tourist	Cultural	Absolute	Percentage
		tourist diffe	rence diffe	erence
Income	\$37,000	\$ 48,000	\$ 11,000	+30%
University education (% out of 100)	32	41	+9	+28%
Managers or professional class 24 (% out of 100)	31	+7	+299	%o

It does seem a good idea to evaluate the importance of cultural tourism in terms of the degree of tourist motivation, without bringing into play strict differentiations. A possible division could be that between extremely motivated cultural tourists (about 15%, corresponding to the traditional definition), those reasonably interested in cultural travel (about 30%), those with low cultural motivation (about 20%), those for whom the cultural aspect is merely an additional (i.e. weak) feature of travel (about 15%) and, finally, tourists indifferent to cultural motivation (the remaining 15%).

On the basis of this interpretation of cultural tourism, it is thus important to acknowledge different motivations for different potential tourists. It is important to create appropriate packages, not only for highly motivated clients from the cultural point of view (usually ready to pay high prices), but also less motivated ones (expecting to pay less). It will thus be also necessary to take these differences into account, together with associated potential demand, in the case of the ROMIT itineraries.

#### ECONOMIC ASPECTS OF ROMIT ITINERARIES

The development of a feasibility project for a ROMIT tourist package requires coordinated analysis of the historical, archaeological, geographical, juridical and, naturally, economic aspects. The need to consider these different aspects together is immediately evident. It is actually unreasonable to provide for the development of a coherent tourist package only from the historical point of view, since the ROMIT project implies extremely complex geographical transfers. At the same time, an economically viable itinerary must also have historical and archaeological characteristics to enable it to be coherently valid. Finally, limitations imposed by involvement of various participating destinations are to be considered, both different national legislation for environmental protection, commercial heritage exploitation and tourist rights protection, as well as economic advantages for individual participating destinations (in the public and private sectors).

A specific difficulty thus arises in the case of ROMIT itineraries. Over a brief time span, the various participating destinations compete to attract tourists. Development of packages considered particularly worthwhile could partially reduce the problem, since this would increase the duration of the itinerary and length of stay at one (or more) of the other destinations in the package. Under these conditions, the total attraction of the various destinations coordinated in the ROMIT itinerary turns out to be greater than that of the destinations seen in isolation<sup>3</sup>.

Nevertheless, the degree of endogeny of the tourist's expenditure on his/her journey is limited on the whole, and, thus, at first sight, we could see this expenditure (and probably the free time available) as given. In such a case, an increase in expenditure at a destination implies reduction of expenditure at other destinations.

This is a well known problem in travel organisation by tour operators and is usually pragmatically solved by them, by creating competition between agents at the various destinations.

In accordance with:

the attraction 'value' of the destination for the package purchaser,

and the price asked for a particular service on offer at the destination,

the role and time allowed for each destination in the context of the journey are modified. The decision maker in this case is the tour organiser, who balances costs and validity of the journey, weighing up the various aspects, following the maximisation criterion of company profits.

The question is posited differently in the case of the ROMIT itinerary, however. There is no private decision maker, i.e. the tour operator ordering the various offers in terms of economic advantage. Each destination must therefore have its importance, since it is guaranteed by a public body in charge of the project. Thus overall evaluation and the importance of the various destinations in an itinerary, as well as the number of itineraries, take place on a *contractual basis*, in an appropriate juridical-institutional context (which will be explicitly dealt with elsewhere in this report).

The costs of this process are well known: contracting usually leads to poor results<sup>4</sup>, causing considerable conflict between package managers, who tend to transfer the costs of this conflictual situation externally (i.e. to possible clients), by increasing prices.

In the specific case of ROMIT a solution to this problem can be suggested: *since* the various stages in a ROMIT itinerary are at a considerable distance from each other, it is reasonable to suppose that most tourists interested in the itinerary are

<sup>&</sup>lt;sup>3</sup> Technically speaking, this situation is known as a superadditive condition:  $X_1 + X_2 + ... + X_n < X_N$ , where X stands for the attraction potential of a single isolated destination, and  $X_N$ , that of the ROMIT package.

<sup>&</sup>lt;sup>4</sup> This result is well known, since it relies on Nash's concept of non cooperative balance; cf. Philps, The Economics of Imperfect Competition.

going to purchase the whole or part of the itinerary, though certainly in different periods.

In other words, a ROMIT tourist should be seen as someone purchasing an itinerary in a flexible manner, providing for a stay at a particular destination in a particular period and another one at a different destination in another period, without strictly fixed times (i.e. a planned itinerary), but flexibly. The second (third or fourth) stage in the itinerary can be several weeks, months or even a year later; the decision is taken by the individual tourist.

This way of presenting the ROMIT itinerary not only satisfies tourists' needs, but allows the extent of the above mentioned problem of competition between destinations to be reduced (thus making the development of a specific itinerary easier). Actually, stopping at a specific destination, the period and type of stay being up to the tourist, allows the various destinations to complement each other, as it were. While, over a short time span, the decision to purchase a specific destination drastically reduces the possibilities of purchasing other ones, over a longer time span, this effect could be lessened or change. A specific package could be thought up, in which each destination in an itinerary 'tows' the others (at a later stage)<sup>5</sup>.

The mechanism that should make this towing aspect of the package especially effective is based on a system of discounts on the cost of staying at the destinations following the first one, by means of vouchers offered at each destination for the next one.

#### CULTURAL TOURISM: ELITE AND MASS ITINERARIES

When talking about cultural tourism the stereotype of minority travel by a sophisticated, well educated élite with above average financial resources still predominates. This greatly reduces the potential market for cultural tourism, and the ROMIT itinerary in particular. However, this view of the phenomenon certainly provides an inadequate picture of the present day situation. Modern tourists have many interests and do not comply with a model where a single interest (culture, or its opposite, leisure) is clearly foregrounded. They have multiple requirements, a minority admittedly fitting the traditional view of the élitist cultural tourist. However, a series of what appear to be potentially divergent requirements combine in other cases, i.e. cultural tourism and entertainment/leisure (for example in the case of expenditure covering a whole family). So the cultural tourist, while he/she may be more or less motivated by cultural concerns, is certainly willing to expand his/her

<sup>&</sup>lt;sup>5</sup> One could obviously think here of a 'wagon effect' linking the various planned itineraries. This conceptually simple extension has not been explicitly taken into consideration, however.

knowledge. Considering this aspect, it seems to be legitimate to plan (at least) two kinds of itinerary, with different knowledge prerequisites<sup>6</sup>.

In the 'high' profile itinerary the suggested knowledge process develops along precise lines; for example, the chronological dimension of events and cultural contexts along the Roman roads, with an itinerary following, destination after destination, chronological development, illustrating (in the case of expert visitors) the evolution of architecture, hydraulic and road engineering etc. In the 'low' (though no less important) profile itinerary more destinations can be substituted, since emphasis on specialist aspects of developing cultural contexts would be out of place. These aspects, which are more closely linked with historical, artistic and architectural considerations are described elsewhere in this report.

On the basis of the previous division, two different itineraries should be worked out, which, to simplify things, will be called *linear* and *circular*. In view of previous assumptions it is plausible to see the circular itinerary as élitist (strict adherence to chronology, a more organic cultural offer, which thus addresses a more restricted number of potential clients), as compared with the mass circular itinerary (high chronological and cultural needs flexibility) with a possible 'à la carte' programme allowing for personal preferences, different interpretative and information acquisition levels, so as to widen the number of potential clients, in respect of the linear itinerary.

#### THE LINEAR ROMIT ITINERARY

The linear itinerary is characterised by a pre-defined route, with one destination at the outset, followed by a second one etc., up to the end of the itinerary. There are many possible criteria for the sequential order of the various stages: for example, a chronological one, or (increasing and decreasing) classification of the historical, archaeological and artistic importance of the destinations involved, or a route minimising the overall distances.

In view of the sequential nature of passing from one destination to the next, some fall off in the number of tourists can be expected. This is closely linked to internal factors within the itinerary. If the artistic importance of the destinations decreases along the proposed itinerary, it is plausible that the earlier stages will be followed by larger numbers than the later ones. On the other hand, if the artistic importance of the destinations increases during the itinerary, it is plausible that numbers will initially be more limited, but so will fall off.

<sup>&</sup>lt;sup>6</sup> The models described in this report can be included among those of spatial economic competition initially suggested by Hotelling H. (1929).

This itinerary has a beginning and an end, with initial, middle and final destinations, as clearly emerges from Figure 1a.

#### Figure 1a: The Linear Itinerary

Destination X	Destination Y	Destination Z
(period 1)	(period 2)	(period T)

As pointed out previously, links between the various destinations in the linear ROMIT itinerary, partially based on the sequential contents of each destination, are certainly strengthened, on the commercial level, by a system of discounts, on a voucher basis, acting as an incentive for the tourist visiting one stage to purchase a subsequent one.

In this case, complete illustration of the itinerary is given by Figure 1b.

Figure 1b: The Linear Itinerary and Voucher System

Destination X	Destination Y	. Destination Z
(period 1)	(period 2)	(period 4)
Voucher for	Voucher for	
Destination Y	Destination Z	
(20% discount)	(40% discount)	

**BOX 1:** Analytical development of the linear itinerary

In the linear model the stages are ordered sequentially, so that visitor numbers progressively decrease at the following stages (supposing that the stages are arranged by natural numbers up to N).

At each stage a certain amount of fall off in numbers is envisaged within the itinerary, in accordance with the coefficient 0 < a < 1. In the formal analysis given below this fall off coefficient is to be understood technically: it is an exogenous parameter indicating the number of tourists leaving the ROMIT itinerary, either because they have found more worthwhile interests, or because of low time and financial resources in the case of geographically more distant stages. In a more general model, as has already been mentioned, the number of tourists deciding to purchase the following stage could change, after the introduction of an incentive system, and the problem could be the choice of the best incentive to offer, so as to

maximise overall profits. In the following formal analysis, however, this effect is not considered.

If K is the number of tourists involved in the linear project, stages and destinations give the following stays:

$$PR_1 = K$$
,  $PR_2 = Ka$ ,  $PR_3 = Ka^2$ , ...  $PR_i = Ka^{i-1}$ , ...,  $PR_N = Ka^{N-1}$ 

The total number of tourists involved in the project is:

 $PR_{Lin} = \Sigma PR_i = K(1 + a + a^2 + ... + a^{i-1} + ... + a^N) = K(1 - a^N)/(1 - a)$ 

In conclusion, the linear model is characterised by the following tourist numbers:

-numbers at destination i. but joining the project:  $PR_i = Ka^{i-1}$ 

-total numbers in project: 
$$PR_{Lin} = K(1 - a^N)/(1 - a)$$

#### THE CIRCULAR ROMIT ITINERARY

As can be seen in Figure 2a, in the case of the circular ROMIT itinerary, the route has neither beginning nor end. The tourist can start at any point along the itinerary, which develops with a series of wholly symmetrical alternatives.

The decision to begin an itinerary from destination X, rather than Y or Z can be linked to a tourist's specific interests and the distance between departure and arrival regions. In this case each destination is obviously encouraged to improve its position, to as to attract more tourists, but the result of this competition is left to an impersonal mechanism: choices made on the market, which can be oriented to ROMIT package cost minimisation (in the transport field), since the itinerary is an experience commodity, which, as is well known, allows assessment of its quality (and thus the level of consumer satisfaction) only after, at least partial, consumption.



As previously mentioned, a crucial aspect of the ROMIT project should be vouchers with a discount as an incentive for the purchase of one or more extra destinations along the itinerary.

In the case under examination, i.e. the circular itinerary, the voucher system could be developed as follows. Each tourist at destination X receives a voucher with a discount for each of the other destinations along the itinerary (destinations Y and Z). Clearly, in view of the total symmetry between the various destinations, the same happens at destinations Y (vouchers for X and Z) and Z (vouchers for X and Y).

The tourist who started at destination X will then be encouraged to stop off at Y (or Z, in accordance with his/her financial and time resources), on receipt of a 20%

discount (for example), for any further destination along the itinerary. With a stop off at Y the tourist will receive two other discount vouchers for X and Z (Figure 2b).

After leaving destination Y, the second one along the ROMIT circular itinerary, this hypothetical tourist can complete the circular itinerary, by visiting destination Z at a particularly advantageous price<sup>7</sup>, since he/she has two vouchers for this destination, the discount now amounting to 40%<sup>8</sup>.

### Figure 2b: The Circular Itinerary and Voucher System

Voucher for	Destination	Destination	Voucher for
Destination Y			Destination Z
(20% discount)	Х	Y	(20% discount)
	Dest	ination	
	Dest	mation	
		Z	
	Voucher for	Voucher for	
	Destination Z	Destination Z	

(20% discount)

(20% discount)

<sup>&</sup>lt;sup>7</sup> It could be possible to revisit the first destination with a 20% discount, though this opportunity does not seem to be of particular interest, since the destination is already known and the discount small when compared with the alternative of getting to know something new (a permanent incentive with the cultural tourist) at a rather more attractive price (40% discount). In this case new habits are encouraged.

<sup>&</sup>lt;sup>8</sup> In this case our hypothesis is that the circular itinerary allows vouchers to be accumulated with progressive discounts for subsequent stages. Naturally the same policy can also be applied to the linear itinerary, the only difference being that the discounts do not increase automatically with the tourist collecting vouchers, but by means of a more complex personal accounting mechanism recording the number of stages purchased (a loyalty device which is very similar to airlines' 'frequent flyer' schemes).

It should be noted that, in symmetry conditions among the destinations, the expected tourist numbers induced by the circular itinerary at each one is constant; in other words, there should not be a principal destination. In the case of the linear itinerary the voucher has a double role: to increase the number of potential ROMIT clients, as well as redistributing tourists among "different" destinations, owing to the sequential nature of the route. In the case of the circular itinerary, on the other hand, considering the symmetry of expected numbers among the destinations, the role of the voucher system is entirely that of increasing the number of potential tourists.

The voucher system should ensure a profit margin (even in the case of the accumulated discount, which should thus reach significant levels)<sup>9</sup>. Moreover, there must be a necessary mechanism which, on the basis of final numbers in the overall itinerary a) reduces the effect of discounts on geographically outlying destinations (though not as far as organisation of the itinerary is concerned); b) takes into account the inclusion effect in a tourist market of previously excluded or marginal places (which, for this reason, could not be worthwhile enough on their own).

### BOX 2: Analytical development of the circular itinerary

In the circular model the stages are not in a sequential order, tourists being able to begin and continue differently each year. Therefore, if there are no reasons justifying structured preferences, chance distributions of tourist numbers can be envisaged equally distributed among N stages (in this hypothesis it is supposed that consumer surplus for package purchase will be identical for each destination, so that lower quality must correspond to a lower price, in accordance with a proportion dictated by demand function).

A certain amount of fall off is also envisaged at each stage in the circular itinerary for the subsequent ones. This effect is given by the coefficient 0 < b < 1, which, on the basis of previous argument, we suppose to be different from the linear itinerary fall off coefficient. It is plausible that the attraction of the (mass) circular itinerary be greater than that of the (élite) linear one: H > K, while, for the same reason, the degree of fall off at subsequent stages could be higher in the circular as compared with the linear case, the latter involving a more strongly motivated, select group: a > b.

<sup>&</sup>lt;sup>9</sup> This result can be more easily reached if the typical ROMIT client is a strongly motivated tourist, from the cultural point of view, with sufficiently substantial financial resources.

In the circular case, if H is the number of tourists participating in the itinerary, and if each year only quota b decide to purchase a subsequent stage, the generic *i.ma* destination on the itinerary will involve the following numbers:

 $PR_{i} = H/N + (Hb + Hb^{2} + ... + Hb^{N})/N = H/N (1 + b + b^{2} + ... + b^{N}) = H(1 - b^{N}) / N(1 - b) = PR$ 

This number does not depend on i (there being perfect symmetry between all the destinations). For this reason, all the destinations participating in the circular itinerary potentially receive the same number of tourists.

The total number of tourists participating is:

$$PR_{Cir} = \Sigma PR_i = NPR = H(1 + b + b^2 + ... + b^N) = H(1 - b^N)/(1 - b)$$

In this hypothesis the linear itinerary has the following tourist numbers:

- numbers at each participating destination:  $PR_i = PR = H/N (1 + b + b^2 + ... + b^N)$ 

- total project tourist numbers:  $PR_{Cir} = H(1 - b^N)/(1 - b)$ .

In conclusion, tourist numbers in the two projects depend on comparison between the relevant market factors, i.e. K and H and a and b values. However, the circular model equally distributes, on average, tourist numbers among the various destinations, which are differentiated in the linear model, progressively diminishing as the stages proceed. These different properties in the models hold true whatever the size of the market.

In the special (but rather unrealistic) case in which K=H and a=b, the two models have the same overall dimensions ( $PR_{Cir} = PR_{Lin}$ ) but are only differentiated in number distribution between the various destinations.

While, in our presentation, we restricted ourselves to exceptional cases in either a linear or circular itinerary, it is clear that intermediate solutions can be developed.

Another possibility is that of a radial route with a leading destination and in which, in order to pass on to any other satellite destination, it is (at least virtually) necessary to revisit the former. This main destination cannot be justified at the outset in terms of a cultural itinerary, but could become so on the basis of policy decisions by participants in the ROMIT route. For example, central (and potentially more efficient) management could be made possible of the reservation system, voucher distribution etc. Owing to the foreseeable difficulties in bringing about policy maker agreement on such a solution, the radial model appears, a priori, to be difficult to achieve and of limited interest<sup>10</sup>.

# LINEAR AND CIRCULAR ROMIT ITINERARY ATTRACTION IN TERMS OF TOURIST NUMBERS

In these different contexts of the same ROMIT itinerary élite and mass cultural dualism again comes to the fore. The problem was faced by comparing the development of two ROMIT products with different features.

It has been stated that it is plausible to see the circular route attracting a larger number of visitors. Nevertheless, tourist number analysis is not sufficient in itself, since the typical visitors following the two routes are differentiated in financial resource terms. More precisely, if élite tourism is, by its very nature, on a smaller scale, it is also true that each visitor in this category has greater financial resources available than those oriented towards a mass product, considering the greater substitution level in preference for one itinerary or the other.

Thus choice is between a model highlighting small numbers with high service levels (and consequently higher costs and prices) and one highlighting service standardisation and large numbers. Choice, therefore, is not obvious, while it is clearer in the case of the objective of the ROMIT itinerary being equal distribution of tourist numbers generated by the project.

It is plausible that the touristically mature destinations will tend to favour the second model, which allows increasing use of already present facilities out of season, while the less mature destinations (from the point of view of tourism) will tend to choose the other solution, which would require less reinforcement of already existing facilities and could be more rapidly set up.

<sup>&</sup>lt;sup>10</sup> It should be pointed out that the idea of a main destination is misleading in the case of the linear itinerary. It would be better to use the term "initial destination". It is aslo clear that, in accordance with the criteria used in preparation of the itinerary, the initial destination could change.

Nevertheless, cultural tourism is, by its very nature, an élite phenomenon, and thus the difference between the two kinds of tourist might not be particularly significant in terms of total numbers.

# LINEAR AND CIRCULAR ROMIT ITINERARY PARTICIPATION INCENTIVES FOR VARIOUS DESTINATIONS

For an itinerary about which some users are dissatisfied or prefer to vary purchase of a cultural tourist product in the future, which are plausible factors, numbers of users will gradually decrease. The number of tourists completing the route is physiologically lower than those who started out.

This phenomenon is of particular importance in the linear option. Everybody will complete the first stage, while the last one is the most unfortunate. There will thus be an obvious conflictual situation over status along the itinerary.

This situation will consist in the local representative of each destination calculating possible tourist numbers for either the linear or circular itinerary. If *in project development (which is, we should like to recall, of a contractual nature) there must be unanimity on the part of all participants*, a necessary condition is superiority for each destination for participation in a specific (linear or circular) itinerary. This result of the superiority of one kind of itinerary in comparison with another, in any circumstance, cannot easily be reached.

The condition by which the circular itinerary be (for all destinations or stages) always superior to the linear one is that this also be the case for those being mostly preferred (i.e. as the first stage) by the linear route. This condition is satisfied if the mass cultural tourism market is sufficiently larger than the élite one. A previous pilot survey will obviously be necessary in this case.

On the other hand, so that the linear route be always unanimously considered superior to the circular one, similar assessment also needs to be carried out for those with most to lose on the linear route, i.e. the last destination. This seems to be a more difficult condition, which requires a limited number of stages, considerable participant loyalty in absolute terms, and in respect of the other route, and that mass tourism numbers should not be very much larger than élite tourism ones.

The two inserts that follow provide analytic formulation of the problem and suggest some simple solutions.

Failure to accept the circular itinerary unanimously could not imply automatic acceptance of the linear one (or vice-versa). The ROMIT project could actually find itself in an unfortunate impasse situation, where every proposal is opposed by someone, overcoming the situation being left to negotiation potential among the parties. A possible solution could come, as has already been mentioned, from a

*redistribution system on the basis of cash income and vouchers* among the various destinations, which, by incentives for an increase in potential user numbers, could, at least partially, reduce the previous objections.

**BOX 3:** Analytical cultural participation conditions in the linear and circular *ROMIT itineraries.* 

It is important to note that a *conflict of interests* will come about in selection of the two projects by the destinations participating. By means of the following equation it is possible to calculate choices, in terms of the volume of numbers in the N destinations deciding on either of the two projects, supposing, to simplify things, that a = b in the formulae in Inserts 1 and 2:

 $PR_i = PR$  quindi  $Ka^{i-1} = H(1 - a^N) / N(1 - a)$ 

which gives us:

$$i^* = \log (H/KN) + \log[(1 - a^N)/(1 - a)] = f(a; H,K,N).$$

On the basis of this result, we note that:

- for the first i destinations (with  $i < i^*$ ), the linear model is the most worthwhile proposition;

- for the  $i = i^*$  destination there is no distinction between the two models;

- for the last destinations (those beyond  $i > i^*$ ), the circular model is the most worthwhile proposition.

If H = K, then the circular model will never be voted for unanimously, while a majority vote could favour one solution or the other, as a function of the value of a. Since df/da > 0, it can be concluded that the greater a is, the more probable it is that the linear model be approved (as long as the destinations where  $i < i^*$  are more than 1/2), while the lesser a is, the more probable it is that the circular model be approved (as long as the destinations where  $i < i^*$  are more than 1/2), while the lesser a is, the more probable it is that the circular model be approved (as long as the destinations where  $i < i^*$  are fewer than 1/2).

If H is different from K, the conditions can be sought for which passing from one model to another is a Pareto improvement and thus capable of attaining unanimous approval:

a) So as to be unanimously accepted, the linear model must also be more worthwhile for the last stage, destination N. It will be unanimously approved if:

$$PR_N > PR$$

This condition implies that (INSERIRE FORMULA). It is clear that, with a high number of participants in the project, such a case will be more and more improbable.

b) The circular model can be unanimously approved, if the linear model is not worthwhile, even for the supposedly most attractive destination:

$$PR_I < PR$$

The condition implies that  $K \le H(1 - b^N)/N(1 - b)$ . Therefore the linear model can be unanimously accepted if

$$H > KN(1-b)/(1-b^{N})$$

Then it is enough for H to be greater than K, i.e. the the market for the circular tourist product be more wide ranging than the linear one, as long as the former is the subject of a unanimous decision.

Obviously, non unanimous acceptance of the linear itinerary implies automatic unanimous acceptance of the circular one (and vice-versa). In other words, the problem remains of avoiding an impasse solution where, there not being one unanimously superior solution, there will always be at least one dissatisfied destination with the right to veto an unacceptable decision.

#### **BOX 4:** *The superiority of the linear itinerary as compared with the circular one.*

The table below shows the maximum number of stages on either a linear or circular ROMIT itinerary ensuring the superiority of the former as compared with the latter, as far as numbers are concerned. Results depend on the relative number of clients in both cases, three possible scenarios being considered.

In the first case (H = K) there is no numerical difference between élite and mass tourism. In the second case (H = 1.5 K) the mass tourism market is 50% higher in terms of numbers to élite tourism. In the third case (H = 2 K), there would be one

élite tourist for every two mass ones. The result of the scenario also depends on the probability of the two types of tourist purchasing a subsequent stage. Four different hypotheses have also been worked out, merely as examples, in this case. In the first scenario the élite tourist has a high degree of loyalty to the ROMIT itinerary, since there is a 60% possibility that he/she purchase a subsequent stage, while, in the case of a potential client for the circular itinerary, the possibility is reduced to 30%. In the second and third scenarios, the degree of loyalty of the élite tourist is reduced to 50% and 40%, while there are no modifications in the case of the other type of tourist. In the fourth and last scenario, the degree of loyalty to both programmes is comparatively low (40% for the linear and 20% for the circular itineraries).

The example of Table 1 shows that, if the circular ROMIT itinerary market is 50% higher than the linear one and the probabilities of following on later are 30% and 50%, even with three participants in the project (i.e. three different stages) the circular itinerary is more attractive, since the maximum number of stages compatible with the unanimous superiority of the linear itinerary is two (but, as with N = 3 the circular itinerary may not be unanimously accepted).

Obviously, in the "banal" case in which the maximum number of stages is equal to one unit, there will no longer be any difference between the linear and circular itineraries. Actually the very concept of an itinerary no longer exists.

It can easily be realised that the attraction of the linear case for any possible destination can only be achieved for a rather small number of stages, and only then when there is a high degree of loyalty and only small reductions in market size as compared with the circular case.

	a=0,6	a=0,5	a=0,4	A=0,4
	b=0,3	b=0,3	b=0,3	B=0,2
H/K = 1	4	3	2	2
H/K = 1,5	3	2	1	1
H/K = 2	1	1	1	1

**Table 1:** Fall off rate (a: linear itinerary, b: circular itinerary

 Relative size of elite and mass cultural tourism markets

Clearly, economic action applied to an area and which addresses processes of territorial recomposition and local development requires interdisciplinary consideration able to offer an approach that is complex and the closest possible to a phenomenon to be interpreted and planned on the basis of a shared, cooperative project in several contexts ranging from geography to legislation.

### GEOGRAPHY IN THE FACE OF A CULTURAL JOURNEY: MODELS

A journey consists of transfer from one place to another, also implying the setting up of a route. The word *tourism*, deriving from the French and English word *tour*, where a route must be followed, shows how central the idea of a journey is to this phenomenon. Tourism started out when people began to move around for recreational purposes, following itineraries including visits to various destinations. It is still the case that the route chosen for a journey or tourist visit is a crucial strategic feature of the development of tourist products, both by individual tour operators and in the context of planning and territorial enhancement for tourist purposes. This is also, more generally, a strategic tool for local development processes and a means of territorial recomposition<sup>11</sup>. The fact that ROMIT has taken up an archaeological itinerary with the strategic aim of reaching an objective for regional development in the European context is well founded.

U Toschi saw tourism, from the 1950s onwards, as a specifically geographical phenomenon, since it is linked to mobility and circulation. Nevertheless, most geographical publications have long been mainly descriptive studies, typological investigations and detailed studies of specific regions, entirely ignoring territorial and socio-cultural impacts. No attempt at methodological deduction had been made<sup>12</sup>

<sup>&</sup>lt;sup>11</sup> Reference to the theory of territorialisation-deterritorialisation-reterritorialisation (Raffestin C., 1984; or following the ideas of E. Morin 1967) allows us to see the tourist journey or itinerary as a way of organising or recomposing (and understanding) the territorial signs of the past, the points on a mental network defined by economic, social, political and cultural orders of past societies (Dallari F., 1991).

<sup>&</sup>lt;sup>12</sup> One of the first attempts at a geographical configuration of the tourist phenomenon was made by U. Toschi, who, in 1948, made a distinction between active regions: "...with a high population density, a high level of civic development, very active urban, industrial and business life, a uniform natural landscape, extreme climates, long cold, rainy and foggy spells, and poor in historical background" and receptive regions: "...with a varied, hilly landscape, mild, dry climate, a population with different ethnic make up, customs and traditions and rich in history,..." (Toschi U., 1948).

In 1955, W. Christaller, with greater subtlety, identified a number of factors conditioning tourist localisation: climate and landscape, sport availability, health centres, art and antiquities, cultural or historical sites, economic specialities were considered decisive for the tourist chances of a destination. He also listed five temporal phases in tourist development: 1790 - 1840, movement aided by railways, 1840-1870, the period of early industrialisation, 1870-1900, the first signs of a tourist industry, 1930-1960s (when he was carrying out his research), the beginning of group tourism organised by agencies. A few year later, the same author discussed

and no models had been worked out<sup>13</sup>. Starting from the late 1960s, interpretative models of the spatial structure of tourism began to appear in the geographical field, though developing autonomously, without acknowledging previous work. Certain common aspects and spatial interactions inherent in all forms of tourism do, however, emerge. Most models, as summed up by D. Pearce (1995) in a work considered a cornerstone of recent tourism geography, centre on the concepts of: *origin, connection* and *destination*, each scholar further investigating one or another of these three features, in line with his/her approach.

Spatial models for the interpretation of tourism can thus be grouped under four main headings: mobility, origin-destination, structure and evolution (Pearce D., 1995). The more recent network and product life cycle ones should be added, the latter concerning the place or range of tourist supply.

Concerning the theme of the journey and cultural tourist itinerary, the tourist mobility models are of particular interest, centring on the "mobility" or "connection" components, as is the network model, all of them aimed at maximum improvement.

A. Mariot's model describes both a linear and circular itinerary, with a preference for the latter. C.K. Campbell formulated the circular itinerary with a radial type addition. The model emerging from the "problem of the travelling salesman" and from that of transport centres on the complex or semi-radial linear form. The zoning model has a radial figure. The literature on the subject tends to prefer a circular or complex radial itinerary, in which the network model achieves an ever stronger capacity for planning, owing to highly marked implications in favour of forms of governance.

### BOX 5: A Mariot's Model, linear and circular itinerary

A. Mariot's is the best known model in the first category, with its three possible routes connecting usual place of residence (*origin*) with a tourist centre (*destination*), thus identifying three tourist movement routes: *access* route, *return* route and *recreational* route.

#### outward journey

the peripheral nature of tourist areas, supplying a valid departure point for research on the centre-outskirts dynamics sector. Nevertheless, as can be easily understood, detailed studies of tourist geography were still to come.

<sup>&</sup>lt;sup>13</sup> It should be pointed out that a model should not claim to ensure the interpretation of a phenomenon in all its components, but merely supply a theoretical, conceptual basis for examination of a configuration brought about by tourist activity.

origin

recreational itinerary

return journey

Figure 3: A. Mariot's Model (Matley I.M., 1976, Pearce D., 1995)

The access and return routes, which can also coincide, have the main purpose of connecting the two places concerned, without additional significance.

From the research point of view, the analysis of the recreational itinerary is much more attractive. On this itinerary the tourist is already fully involved in his/her holiday mission and is more interested in making use of the hospitality and recreational resources available along the route. An alternative in the model allows for the tourist deciding to use the recreational route only for part of the journey, entering or leaving it at a particular point between origin and destination.

So A. Mariot's model also covers the idea of the journey, on which visits to different places replace a single final destination.

After introducing formulation of the itinerary as the function to be enhanced both in the cases of the linear and/or circular routes, the network system becomes basic for the analysis and study of itineraries. For example, following this argument, a road route can be simplified as a network made up of arch (road) shapes and nodes (meeting of two or more roads). Here the outward and return routes can be redirected to problems of identification of the shortest itinerary (returning to A. Mariot's model), or the shortest one in a network covering origin and destination<sup>14</sup>. It should be pointed out that A. Mariot's model already included the idea of a tour, i.e. visits to several places on a single journey, without concentrating everything on one destination. Clearly the problem becomes more complex when there are several destinations.

<sup>&</sup>lt;sup>14</sup> Associated attributes could be length and speed of the journey, restrictions on the direction to be taken along the roads (for example, one way roads and roadworks) or amount of traffic.

#### **BOX 6:** The travelling salesman problem (the complex linear model)

To give an idea of the dimensions of the possible solutions, it is worth mentioning the simplest of the problems of route identification, i.e. the so-called problem of the "travelling salesman". In this case there are a given *n* number of places to be visited on a tour, given the origin and with the two by two distances between the stages being known. The problem lies in choosing the best itinerary between the possible ones, so as to minimise the total distance covered, seeing that the travelling salesman is not interested in the direction of the tour. The number of possible itineraries is given by the possible combinations of *n* places excluding the depot, i.e. it is given by (n-1!/2. The number of itineraries increases at an incredible speed, considering the presence of the factorial operation (!), i.e. if there are 3 places to visit, the possible itinerary is a single one, if there are 4, there are 3 itineraries, if 5 stages are to be covered there are 12 possibilities, and so on, with n=6 there are 60 possible routes, n=7 implies 360 itineraries, with n=8 the number increases to 2,520 etc. (Longley et al., 2001).

It is also easy to imagine that, when planning tourist itineraries the direction of a tour could be important, so that the number of possible itineraries to be considered initially, given the origin and various distances between the stages being (n-1)!. CHECK-LIST

In conclusion it seems appropriate to summarise the various  $x_i$  elements conditioning the solution to the problem of deciding on and/or optimising the  $I = f(x_1, x_2,...,x_n)$  itinerary, with reference to a pseudo-mathematical definition of it. The scheme is posited as a working tool, linked with the "check-list", a simple, intuitive method which can, above all, become an instrument for planning per se, since it brings into play all the elements to be potentially taken into consideration and be supported in analysis and choices.

The model in Table 4 below is a possible one. Nevertheless, owing to the very nature of the check-list, it can be added to and personalised, adapting it to specific needs, and enriched by experience accumulated by individual planner/operators during his/her professional activities. In this model the  $x_i$  elements are classified, on the basis of their characteristics, in four main categories, i.e. those mostly involved in organisation-management, economic-financial, socio-cultural and more geographical, political and environmental dynamics.

#### Table 4: Elements for route identification

- management and organisation elements

- number of persons involved
- means of transport used

	<ul> <li>number of days available</li> <li>transport timetables</li> <li>tour operator partnerships</li> <li>etc.</li> </ul>
- economic and financial elements	<ul> <li>transport costs</li> <li>tourist activity operation margin</li> <li>participant income</li> <li>exchange rates</li> <li>museum, site admission, guide charges etc.</li> <li>hotel and food costs</li> <li>insurance costs</li> <li>possible benefits and offers by transport and restaurant operators</li> <li>etc.</li> </ul>
- participant socio-economic elements	<ul> <li>personal aims and expectations on holiday/trip</li> <li>age</li> <li>health condition</li> <li>food habits</li> <li>family status (single, married, with children etc.)</li> <li>personality</li> <li>life-style</li> <li>cultural tastes</li> <li>landscape perception</li> <li>health services in area visited</li> <li>attitude to payment</li> <li>etc.</li> </ul>
- geopolitical and environmental elements	- season - climate - political stability

environmental resource
distribution
historical-cultural
resource distribution
recreational resource
distribution
etc.

# ROMAN ARCHAEOLOGICAL SITE PROTECTION AND MANAGEMENT COMPETENCE IN THE 'ITALIAN SYSTEM'

On the basis of the above considerations, ROMIT itinerary development requires the identification of a public administration context taking into account the various needs of the places involved and specific national legislation. In the absence of a shared set of rules and behaviour, the setting up of a package of this type can be problematic. This problem, in the present context, which has a more general character, in respect of ROMIT, is addressed by starting out from current legislation for archaeological site protection in Italy and the connected enhancement problems under the heading of laws concerning tourism and transport.

Recent reforms of the legal system have appropriately reformed the legal situation concerning the cultural heritage.

The first, most marked change concerns public function distribution, as emerges from Chapter V of the Constitution approved by n. 3 Constitutional Law of 2001.

In this connection, it should be pointed out that the Constitution already provided for intervention at all levels on behalf of 'cultural promotion and development' and protection of the landscape and 'the nation's historical and artistic heritage'. These objectives, sanctioned by art. 9 of the Constitution, among its fundamental principles, address the 'Republic', a term used by the Constituent Assembly to include all parties made jointly responsible for the common interest, each in its own sphere of action.

From this point of view, the major modifications to the Constitution, in this specific case, concerned differentiation between (exclusively State) protection activities and those (shared between the State and regional administrations) for 'heritage' enhancement and promotion and organisation of 'cultural activities'.

This differentiation, which cannot always be easily put into practice, comes to the fore in setting out the project under discussion here. The juridical responsibility setup can vary significantly, according to whether attention is to concentrate on sites, i.e. single portions of the heritage to be protected and enhanced, or on a route connected with Roman roads, to be seen as cultural activities to be promoted and organised.

The most interesting point to be found in the modified Constitution concerns the plurality of actions in the sector under discussion here, at least partially reflecting its complexity. On the occasion of the new decentralisation, beginning with the reforms of the late 1990s, indications were provided by legislation (leg. decree n. 112 1998, arts. 148ff.) for further action concerning heritage management. Further distinctions are to be found in the text of the main legislative source in the sector, i.e. the heritage code approved by leg. decree n. 40 2004, to which reference will be made later.

The need for participation by all governmental levels in heritage protection is already highlighted in the Constitution, concerning the exercise of the administrative function. The new text of art. 118, sect. 2 of the Constitution places limitations on State legislation, in exercise of its exclusive legislative power, providing for the State to engage in "forms of agreement and coordination in the question of heritage protection".

The Constitutional model for heritage administration is thus that of cooperation between all governmental levels involved, each one for the part corresponding to its organisational structure and territorial sphere.

Another very important aspect in the new text of the Constitution concerns the statement of the principle of so-called "horizontal support", fully involving private parties (more exactly "citizens as individuals or in groups") engaged in activities of general interest among the parties concerned in achieving public objectives.

Together with activities concerned with heritage protection, which, as has been pointed out, are provided for by the Constitution, the most recent norms in the field address the need to ensure its use at the highest level, thus highlighting satisfaction of public interest.

The part of the heritage and landscape code devoted to their use delimits the object of the project under discussion here in the juridical sense.

Art. 101 describes among "cultural institutions and areas" "d) an "archaeological area" as a site characterised by the presence of fossilised remains and those of human made objects or structures dating to prehistory or antiquity; e) an "archaeological park" as an environment characterised by important archaeological evidence and the presence of historical, landscape or environmental features, organised as an open-air museum". The first effect deriving from the inclusion of these categories is given by the article itself, on the basis of which "(3) the publicly owned institutions and sites mentioned in section 1 are intended for public use and provide a public service. (4) Exhibition and reference structures, as well as the

places mentioned in section 1 belonging to private parties and open to the public provide a socially useful private service".

In the same context legislation is based on the principle of agreement and coordination approved by the already mentioned art. 118 of the Constitution. Art. 102 establishes that, with reference to the public sphere, "(4) so as to coordinate, harmonise and complete use of publicly owned cultural institutions and sites, the State, in the guise of the Ministry, Regions and other public bodies should set up agreements in the sphere and following the procedures provided for by art 112. If there is no agreement, each public body is obliged to guarantee use of the heritage under its jurisdiction. (5). By means of the agreements mentioned in section 4, the Ministry can transfer to the Regions and other territorial public bodies, on the basis of the principles of subsidiariness, differentiation and adequacy, availability of cultural institutions and sites, so as to ensure adequate use and enhancement of the heritage concerned".

Use of the portion of the heritage, in relation to the parallel sector of environmental protection, will be sustainable owing to the nature of the above heritage, in accordance with assessments to be carried out in concrete cases. This task must be assigned to the Public Administration, which, when directly carrying out actions relating to the portion of the heritage for which it is responsible, must therefore always assess the impact as well as monitoring its ongoing protection.

Actual realisation of the project under analysis here, with initial reference to its cultural dimension, may require future structural interventions, such as substantial modifications so as to protect the portions of the heritage to be enhanced and improve availability - with special reference to the road network connected with the suggested routes, following the opinions of the specific local and sector authorities. With this in mind and with reference to the specific cautionary measures regulated by art. 28 of the code, an environmental impact assessment procedure will be necessary, with specific consideration of the portions of the heritage involved and their cultural dimensions. It could thus be strategically useful to forecast possible applicative developments of the project, including its structural aspects, restricted to impact on the portions of the heritage of which full knowledge is acquired, so as to facilitate a possible impact survey and take on an active part, albeit externally, in the possible urban adjustments provided for by local government.

This application is to be added to the specific provisions of art. 152 of the cultural heritage and landscape code, which states that "1, in the case of road construction...in the sphere of areas of particular interest (referred to by letter c) of art 136, as will be mentioned below), "the Region may prescribe, distances, measurements and variations to projects being carried out, which, bearing in mind the economic utility of work already completed, should avoid any damage to

portions of the heritage protected by this Regulation. The Ministry has the same powers, which are to be exercised after consultation with the Region concerned. 2. For the archaeological areas listed in art. 136, letter c), or art. 142, section 1, letter m), the Region is to previously consult the Superintendencies concerned". The law also makes a number of specific provisions, such as art. 153, containing prohibition to place "advertising material without previous authorisation by the authorities concerned, indicated by the Region".

# HERITAGE AND LANDSCAPE MANAGEMENT AND CONNECTED MATTERS IN THE ROMIT PROJECT. TOURISM AND THE ROAD NETWORK

The aim of the ROMIT project is to identify new protection and management methods for a specific group of archaeological sites, based on historical links, and, as an innovative factor, a return to original use (in the sense of roads to be followed) of these portions of the heritage.

So as to achieve this objective of heritage use, whose cultural implications for heritage enhancement and conservation of historical memory are only too evident, a system needs to be envisaged.

It should not appear contradictory, and is in fact necessary for the organisation of the project work plan, that each country participating in the project initially take a new look at its laws in the sector, in which it would be helpful to identify the interlocutors addressing the common objective. Once responsibilities have been assigned and the roles of public and private bodies established, though respecting each country's organisational autonomy (either as a participant or being otherwise involved in the project), coordinate actions required by the project can be identified by one or more conventional means, with reference to a specific activity, or part of it, case by case, taking into account the necessary financing and division of duties among the parties involved.

As far as the Italian legal set-up is concerned, it should be recalled that current legislation already envisages a recent model concerning places and activities linked with tourism.

Reference is made to the 'local tourism systems' covered by law n. 135 (2001) on tourism, whose jurisdiction has been debated by the Regional Administrations in the light of the already mentioned revision of the Constitution, which restored tourism to the exclusive jurisdiction of the Regional Councils.

Despite the fact that the presence of inter-connected archaeological sites is not in itself sufficient to place the hypothesis under examination here within the context of application of this model, or any other similar regional context, the configuration of such an institution generally active in the tourism sector is significant, nevertheless. State legislation places concrete description of local tourist systems in the hands of the Regions, including establishment of borders, establishing conventional means for the setting up of single institutions able to involve public and private parties interested in the development of tourism activities.

This institutional system, as noted, is linked to the operation of new responsibilities in the sector outlined by the Constitution in force. As far as the Emilia Romagna region is concerned, the setting up of a local tourism system does not appear to be on the immediate agenda, since there do not appear to be plans to supersede current legislation on product unification in Regional legislation.

For the moment attention should be devoted to further development of current legislation applicable to the project, i.e. that concerning the heritage at present in the 'code on the heritage and landscape' passed in 2004, mentioned above.

This text does not entirely cover the question dealt with here, even though there are some useful remarks that could find application in the case under review.

Special attention is drawn to art. 136, which, at letter c), lists 'properties of characteristic aspect with aesthetic and traditional values', significantly referring to 'groups' of properties rather than single ones, i.e. cases in which properties are considered as units. The reference to traditional abstract values is also of special interest here.

It should also be noted that the regulations concern 'landscape', following on from previous legislation, and, especially, that contained in the law of 1939 concerning natural beauty, parallel to contemporary legislation on the heritage, thus devoting attention to integration of 'things' with their environmental context.

This back reference of the object to be protected to the above mentioned legislation extends public interest dimensions beyond the more limited ones concerning the areas identified by law, i.e. without the need for assessment by the responsible administration, in accordance with art. 142, letter m), that is 'areas of archaeological interest identified by the date (this) code came into force'.

#### THE OBJECT TO BE PROMOTED

The cultural dimension of the ROMIT project provides a well defined set-up for the activities it covers, which will also affect connected tourist development. Certain specific juridical aspects should also be put forward to be developed with actions related to single cases.

For the phase concerning the compilation of catalogues, or communication of the project to a wider audience, it is of great interest to foresee reference not restricted to historical origins and the use of the Roman roads completing the heritage picture with specific reference to written or customary juridical norms, which have regulated the use of these roads over the centuries. This reconstruction, apart from its intrinsic historical interest as an indication of the origin of current legislation, and its evolution over time, is a further unifying feature to foreground the part of a common tradition it is intended to recall.

It should also be remembered that the heritage and landscape code, though having the thorough objectives characteristic of this type of act, does not exclude from its outset the existence of special laws. Art. 129 of the 2004 law refers to maintenance of "laws concerning single cities or parts of them, architectural complexes, national monuments, sites or areas of historical, artistic or archaeological interest".

It may seem inappropriate to hypothesise the adoption of a new law in addition to a legislative context that is already well provided with norms and limitations, nevertheless this situation could be useful for the extension of other regulations which could be adapted to the situation under examination here, from which the ROMIT project could obtain useful incentives. It is enough to think, for example, of the norms concerning local tourist systems, or other analogous profiles with the context under examination, of the interesting legislative scenario regulating 'wine routes', also suitable for a unitary context considering sites, related properties and activities, similar to the management objectives for the uses considered here.

Law n. 268 (1999) introduced the fundamental principles for the exercise of regional legislation, at the time of a competitive nature, concerning wine routes, already anticipated by the Tuscan Region with a regional law (n. 69 - 1996), followed by other regional laws, such as that of the Emilia Romagna region (regional law n. 23 - 2000), and Piedmont (regional law n. 37 - 1999). The Italian National, art. 1, section 2, defines wine routes as "routes advertised by signs along which natural, cultural and environmental values are to be found... they are a means by which wine growing areas and their products can be known, commercialised and put to tourist use". A significant point is that these laws are closely interconnected, as is appropriate, with the cultural dimension in continuation with local traditions, including provisions for setting up museums along the routes.

Tourist use of Roman archaeological sites as organised by the ROMIT project requires immediate attention, i.e. right from the initial processing of the interconnected themes, particularly linked to the economic development sector, such as the one involving business activities. It should be kept in mind that, in accordance with art. 52 of the code, "with measures taken in the field of reform of the commercial sector, town administrations, after consulting the superintendent for ancient monuments, are to identify public areas of archaeological, historical, artistic and environmental interest in which business activities are to be prohibited or subjected to special conditions". An interdisciplinary approach, in this special case, is required, as envisaged by legislation.

Therefore, apart from forms of support for the promoters of the initiative, it is of particular interest to hypothesise a kind of common regulation involving the interested parties, for establishment of uniform quality standards for products and services for tourists, starting with information made available, and the setting up of a sign system along the suggested routes, which, as has been already noted, encounters specific limitations to be removed by means of the necessary authorisations (art. 153 of the above mentioned code).

As pointed out at the outset, the ROMIT project can considerably vary its juridical character according to whether it is intended to promote the route following the Roman itinerary or single finds testifying to its existence.

The first hypothesis presupposes obligatory actions on the part of all the local authorities involved - for example provincial responsibilities for the road network - which should foresee a special coordinating body with responsibility for setting out the route, and acting as a point of reference for the non territorial institutions and private parties involved in setting up the services required.

In the second case - which can anticipate the previous solution experimentally, with a possible view to stability - points of reference are the individual managements of the sites involved, in the guise, as recalled above, of 'open-air museums', it being possible to envisage the creation of separate managements in respect of the remaining archaeological heritage with a different scope, with the purpose of making setting up and enhancement of the project easier.

The possibility of including activities and services connected with travel and stays for tourist use of the sites, as additional services provided by the museums, including 'outsourcing', is of interest.

# THE OPPORTUNITY OF THE TABULA PEUTINGERIANA: WHAT IS THE SUGGESTED ITINERARY?

The idea of an itinerary, or rather network of itineraries, on the basis of the Tabula Peutingeriana is enormously fascinating, for a number of reasons.

Firstly, the project aims to contribute to EU policy, after extension towards Eastern Europe in 2004, in an unprecedented move towards economic and political reconstruction: i.e. the elimination of national frontiers and reconstruction of Western European territory. In this scenario relations and communications are of fundamental importance, as the Tabula Peutingeriana itself reminds us. This map was put together in the historical period (3rd - 4th centuries A.D.) in which the Roman Empire dominated the continent of Europe and the Mediterranean shores of

Africa, by means of an unprecedented road network, to the extent of these historical roads still being the backbone of the system.

The Tabula Peutingeriana had a practical purpose and described the whole world known to the ancients, the *Orbis Terrarum*, i.e. the three continents of Europe, Asia and Africa, surrounded by the Ocean framing the map. The description of the Ancient World passes from Britain, Spain and Western Africa (as far as the Nile) in the first section (of the twelve making up the map), which has not survived, continuing towards the East as far as India and, possibly, Burma.

It had come to life with the purpose of supplying a large amount of useful information for travellers, with c. 100,000 km of roads mapped out, 3,000 references to place names, illustrative descriptions of land contours and local populations, as well as numerous allegorical drawings. The accuracy of the illustrations of physical<sup>15</sup>and inhabited<sup>16</sup>features is significantly superseded by representations of the road network. This fact is clear evidence of the importance of the latter infrastructures in the Roman world, inasmuch as they constitute one of the most important, often unconsciously perceived, aspects of the ancient heritage over the centuries which the ROMIT project intends to salvage and bring back to life, thanks to a process of reconstruction taking as its starting point five cities: Rimini, Vienna, Nuremberg, Sofia and Patras.

The road routes are drawn in red with a series of basically straight segments of varying lengths, each of which represents a fraction of the entire route. These segments are linked by angles indicating centres, stages or stop off sites (*mansiones* or *mutationes*) along the road (Bosio L., 1983). The names of the places along the roads are those of cities or known centres, of considerable historical importance, but also place names of various origins, which could lead to surprising territorial identification: names of mountains, rivers and vegetation or others referring to particular buildings or characteristic artefacts (*ad Horrea, Ad pretorium, Castra, Tabernis*), as well as proximity to industrial activities, some of them highly original with reference to words written on signs of taverns and lodgings for travellers. Distances are in miles given in Roman numerals. The various routes have their main nodes at the leading cities: apart from Rome, Constantinople and Antioch, Ravenna and the four Eastern cities of Thessalonica, Nicea, Nicomedia and Ancyra.

What is the route then that will come to life in the context of the ROMIT project?

A number of priorities can be initially identified and subsequently investigated logistically:

<sup>&</sup>lt;sup>15</sup> Seas, coastlines, islands, mountains, rivers, lakes and woods.

<sup>16</sup> Drawings of 555 centres. They are personifications of cities, drawings of walled cities, religious and cultural centres, spas, warehouses, harbours, lighthouses and altars.

- A political objective oriented towards the east, in this first phase;

- Recognition of Rimini as a main node<sup>17</sup> being the arrival point of the Via Flaminia and the departure point of the Via Popilia and Via Emilia;

- Choice of a circular itinerary model based on 5 main nodes (Rimini, Vienna, Nuremberg, Sofia and Patras.

- Re-scaling, with the use of zoom in with regional, inter-regional and local arch shapes;

- Identification of regional or local nodes for an itinerary network;

- Identification of localising intensifications for the identification of arches;

- Identification of different regional and inter-regional arches, for example that between Rimini and Nuremberg, starting out from the Via Emilia towards the Brenner Pass and/or the arch between Rimini and Vienna along the Via Popilia and the Tarvisio Pass (Appendix 2).

A number of summary feasibility elements have emerged (Appendix 1) from economic, geographical and juridical considerations necessary for the ROMIT project, starting with archaeology and leading up to interested public and private parties involved.

The contribution of the Tabula Peutingeriana to our knowledge of the territory concerned is enormous. It can rightly be seen as a compendium of ancient knowledge of the world, also showing how the Romans were keen to explore land beyond the frontiers of the Empire and encounter places and people with different ways of life. It is now time for this shared heritage of European regions to be recognised in its cultural values, so as to set up a common future on the basis of a common past.

<sup>17</sup> Italy is divided into five segments (= 2.10 m), with much greater geographical information than that for any other area, so ,that other territories are dealt with in much less detail.

# Appendix 1. ROMIT: tourism Roman road enhancement

# Summary of feasibility report

1) The definition of cultural tourism is complex, inasmuch as empirical data (stays, arrivals and expenditure) do not take account of the journey motivation variant. Cultural motivation is almost always present, albeit in various degrees of intensity. These differences in demand must be addressed by different types of cultural tourism product. This is why this report provides two possible itineraries, a linear one, with predetermined outset and conclusion and a circular one including all the destinations in the ROMIT project.

2) The linear route is more organic, is of a more artistic character and addresses a smaller number of possible clients. There is no symmetry between destinations in this itinerary, since the itineraries have an outset and conclusion. This is why a certain fall off in tourist numbers is likely.

3) The circular itinerary, placing all the destinations in perfect symmetry, is more fragmentary from the cultural point of view and more flexible in use, since numbers are expected to be higher than for the linear itinerary. Though fall off is inevitable, this should not affect the different destinations differently.

4) Mixed routes can also be planned with both linear and circular components. For example, there could be a radial route with a destination at the outset (at the centre) from which all the other destinations, in symmetry, branch off.

5) Considerable geographical distances between the places involved in the ROMIT project make sequential use difficult for more than one place at a time. Typical use of the Roman roads consists in purchasing a single stay at each place, with considerable intervals (for example, one year) between one purchase and another.

6) This above mentioned aspect has two consequences: while competition is high between destinations in each time span (time and financial resources for ROMIT holidays are limited and expense on one place actually excludes the others), competition for cultural tourists in two or more periods is less intense. Once a stay in a particular place has been completed, and since a return with the same motivation is unlikely, tourist businesses are motivated to promote the other destinations in a cooperative spirit widening potential demand. Counting on time lengthening involves possible reduction of the itinerary feature characterising the ROMIT project.

7) Promotional strategies of the package can be supported by inter-connected sales, in the form of reductions in the price of a subsequent stage in the ROMIT project for clients who have already purchased one, for example, with vouchers valid for other destinations. This system of discounts by means of vouchers aims at increasing potential client numbers (in both the linear and circular cases) as well as (only in the linear case) diminishing asymmetries which are inevitable in the case of destinations organised sequentially.

8) The linear model involves "élite" and the circular one "mass" tourism. It is thus argued that a circular ROMIT itinerary can be unanimously accepted by various countries. Furthermore, the circular model is the one creating greater social equality in terms of tourist number distribution.

9) Tourist numbers are an imperfect indication of profits and the actual degree of importance of tourism development induced by the various destinations. The most appropriate yardstick is arguably income resulting from ROMIT tourism. Nevertheless, at this preliminary phase, detailed analyses cannot and should not be carried out on prices and cost structures in the destinations making up the ROMIT itineraries.

10) Geographical analysis shows how the route chosen for a journey or tourist visit is a key strategic feature in tourist product development both by individual tour operators and tourism oriented planning and area enhancement. This is also more generally true as a strategic tool in local development processes and as a means of territorial recomposition.

11) Concerning the theme of the journey and cultural tourism itinerary, the tourist mobility and network models make up both linear and circular itineraries, with radial type additions, on the complex or semi-radial linear form. The zoning model contains the radial figure. The literature tends to prefer a circular or complex radial itinerary, in which the network model takes on an ever stronger planning capacity, owing to marked implications in support of governance.

12) Concerning cultural tourism, reference should not only be made to the general concept of art or folklore, but also to the series of situations making a place or set of places a unique tourist phenomenon. This new conception of tourism returns to the

real meaning of 'cultural', i.e. a phenomenon whose purpose is cultural promotion where the meaning of the term has two senses: élite and mass. Reference to these two components is crucial to tourism policy, in planning a new culturally oriented territorial set up model.

13) In territorial planning, and especially decisions concerning sustainable use of environmental resources, multicriteria analysis techniques are particularly useful for identifying priorities and optimal localisation of objects in space, on the basis of a set of specific criteria; distance calculation techniques (i.e. cost distance); mapping techniques of perceived landscape characteristics and use potential; as well as intervisibility analyses.

14) Concerning localisation logistic efficiency, it is of strategic importance to refer to passive tourism locality accessibility in respect of tourist markets outside the area under study; the efficiency with which the passive tourism localities are linked with other places of the same type within the area under study, or with populated centres; the number of different places accessible in the same amount of time from each site, i.e. the potentiality for spatial linking with other areas; the degree of agglomeration of passive tourism areas, i.e. agglomeration economy potential.

15) The use of accessibility indicators concerning external markets is advisable; as of connection efficiency indicators with other tourist sites; of spatial synergy potentiality indicators and agglomeration indicators.

16) As an operational tool, use of check-lists is advisable. This is a straightforward method which can become a planning tool, since it can recall all the potential elements to be considered and supported in analysis and choices.

17) Interactive computerised mapping is advisable, on the basis of Geographical Information Systems and a series of data bases of all the potential and active territorial accomodation elements.