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— **TOURISM**
FROM MALPENSA NORTH TO
TOURIST TRAINS, TO
ESCALATORS FOR ART CITIES

— **FAMILIES AND CHILDREN**
EQUIPPED AREAS ON THE
MOTORWAYS OF EUROPE, LAUDA
AIR'S DEDICATED SERVICES
AND PLAY ROOMS ON TRAINS

— **MEANS OF TRANSPORT**
CHARTER PLANES,
CRUISE SHIPS, COACHES
AND TRAINS FOR TOURISM

LITTLE SURPRISES

The summer issue of Kineo has returned to a monographic presentation, without forgetting however, the number of means and systems which distinguish the world of transport. There is only one theme - transport for tourism - but the argument is so vast and the means so varied that the result is one of the most articulated issues of the magazine, with the added advantage of a few little surprises along the way. The key to the arguments is first of all, quality - of form, of services, of life and the general use of architecture and means more or less conceived for tourism; another key is the technological innovations that have been adapted in each field, often with courage, as it's not easy to give a modern response to tourist needs, without falling into the trap of easy folklore. We have taken a look at the current transport situation and the various solutions adopted: from the search for a better quality of life by the closure of certain alpine centres to traffic, to the spaces that have been created in airports which have heavy flows of charter traffic; from cruise terminals for important tourist nodes to the transformation of old harbours into pleasure boating ports; from some significant examples of service and parking areas along the motorway to the exploitation of the tourist potential of railways; from the access problems in art cities and the responses given to the problem of

car parks for private vehicles, to some of the new initiative for the use of public transport for cultural and free time activities. Then there are the means of transport to take into consideration: from charter flights and the new frontiers their quality has created, to the evolution of cruise ships and sports craft; from "grandtourism" coaches to trains both in their free time possibilities and their improved service to customers. But to all these keys, one more should be added, even if it regards only a few articles but which allows us to assess quality in spaces and services dedicated to a "weak" consumer in the world of transport: children and families in general.

In this issue of Kineo, one can examine how some service areas along the motorway have been implemented and are functioning, with more or less space dedicated to children's play and the care of infants, so much so that they have become points of real support to families on long trips; or how the attention paid to infants can become the distinguishing element of a charter flight company; or there again, the trains with play areas for children where they can have fun during the trip without being closed up in compartments and the offer of that minimum of space necessary to change a baby.

Have a good trip!!

INTERVENTIONS MARIO ZAMBRINI

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Tourism: from quantity to quality?

Within the European Union, the tourist trade makes up 5.5% of gross income and forms 6% of total employment figures. During the 80's, there was an increase of 14% in European figures for overnight stays, most of which were concentrated in the Mediterranean basin states. This growth tendency is going to last over the next ten years, on a European Union level, but the areas most involved are those of the Alps and the Mediterranean basin. These areas already account for 35% of the international tourist trade. According to the United Nations Environmental Program, the number of tourists in the Mediterranean region, by the year 2025, could vary from 380 to 760 million per year, depending on the rate of economic growth. Minimum forecast figures are, however, in the region of 260 million /year, compared to 55 million in 1984 and 100 million in 1990. On the bases of these figures, solid refuse and water effluent figures, due to tourist presence, are expected to double by the year 2 thousand, as is the surface area dedicated to tourist infrastructures.

Tourist stay counts, for Italy, in 1992, topped 1 billion, of which 35 million were Italians and 20 million were foreigners. Of the total presence, 50% stayed in private accommodation, 24% in tourist lodgings (hotels, guest houses, camping etc.), while the remaining 26% consisted of day excursions, without an overnight stay, a tendency which has increased over the last few years.

Tourist distribution throughout the regions is not homogeneous (The graph in the middle illustrates regional indices in relation to tourist presence per inhabitant and tourist concerns per square kilometre of surface area; since the national average index is equal to 1. In each case, the high territorial density of tourist infrastructures in Liguria may be noted, which is even more macroscopic, if one considers that most of the tourist concerns are situated along the coastline. The same applies, to a lesser extent, in Trentino Alto Adige which also has, in common with the Aosta Valley, an extremely high ratio of tourist presence with respect to the number of residence). The substantial differences between the different Italian regions can also be seen in the high number of dwellings which are not occupied, and which one may assume to be second homes. Italian figures indicate that between 12% and 48% of the Aosta Valley dwellings are unoccupied (graph 2 illustrates the indices, based on the national average, equal to 1, related to the density of unoccupied dwellings per inhabitant and per square kilometre of surface area; here again some situations strike one because of the enormous deviation from the national average. Liguria, for example, has the highest number of second homes, with respect to territorial surface area, while the Aosta Valley presents the highest index in relation to its population). Another characteristic of the demand, which is significant in evaluating territorial impact, is the seasonal concentration of the demand itself and even more so, the territorial distribution which, within each region, even those with the highest tourism mission,

concentrates the demand in an extremely limited number of resorts. Take the province of Bolzano for example; over 20% of the annual tourist presence is concentrated in the month of August and, in some resorts in the region, the figure is as high as 50%. The territorial distribution of tourist demand in Alto Adige also presents high concentration levels (see figure 3): about 20% of total tourist presence is concentrated in four municipalities, or on 4.4% of the territory's surface area. Similar quantity\quality data is available for the Aosta Valley, where circa 30% of annual tourist presence, in 1990, was concentrated solely in the Courmayeur municipality; 20% of that presence was covered by August alone and a further 40% was registered in the three months of the winter season i.e. January, February and March.

TOURIST DEMAND: QUANTITY VIS-A-VIS QUALITY.

In general terms, one would suppose that tourist demand is directed to the various localities in relation to the overall level of the offer, which may, in turn be considered from the point of view of its two principal components: quality of the territory and the environment; quantity (and quality) of the services offered for tourism and free time. The demand for quality of the territory and environment is expressed, more or less, by the attention paid to the quality of the countryside and the physical features of the territory, the quality of air and water, space available and surroundings with a high nature, silence and tranquillity content.

Service demand considers the quality and the quantity of facilities, services for free time and sport, accessibility and mobility etc.

Therefore, the tourist supply system must guarantee both environmental quality and quality/quantity of services rendered. Since territorial and environmental resources are limited, one would expect to find a trade-off, within each territory, between the supply of environmental quality and the quantity of the tourist services supplied, in the areas where the request for an increase in services, inevitably increases pressure on the local territory and environment resources. In the case of tourism, the conflicting interests which generally arise, between the different options in the use of land and resources, are perhaps more evident insofar as they are manifested by each single tourist, who would like rapid access roads, comfortable hotels, ski slopes and lifts, restaurants, shopping centres and discotheques, all immersed in an uncontaminated, quiet environment, preferably without traffic and traffic jams. The level of substitution acceptable when dealing with facilities offered and the quality of the environment varies according to the priorities of the demand, which may be willing to accept or even require less environmental quality when compared with the availability of more facilities and vice versa. In the medium and long term, therefore, the offer tends, more or less spontaneously, to comply with the demand,

while balancing out the priorities between the quality of the environment and the density of facilities, according to the preference shown. In any case, the substitution of environmental quality with that of services, requires less time and is more easily done than the reverse operation. In other words, if the demand appears more oriented towards a major number of facilities, it is relatively easy to comply (but the price is always paid by a reduction in the quality of the environment). If the demand re-orientates and begins showing an increasing preference for the quality of the environment, time tabling to meet the new demands is long, costs are high and results are uncertain.

There are signs of this already. The Italian Fourth Report on Tourism, indicates that one of the tendencies showing major growth in the national tourist trade is that of summer mountain tourism, cultural and rural tourism (with annual growth rates, on a national level estimated at 2.5%, 2.6% and 4.3% respectively). These figures implicitly confirm the progressive shift of the demand to that form of tourism which requires a level of environmental quality, well beyond that which is currently found in some of the most famous national resorts. This is also valid with respect to marine tourist resorts, where the primary requirement, during the years of accelerated growth, was access to the coast line, causing an incredible upsurge in the density of tourist settlements crowded along the land/sea interface and setting the foundations for environmental overload and crowding. And if it is true that, in some situations, the crowding itself and the density of tourist infrastructures still form a characteristic part of the offer (a typical example is that of the Romagnola Riviera), it is also true that, in other situations, such external factors are being taken badly by the customer, who is finding it less and less satisfying to spend his/her holiday along an excessively congested coastline, bathing in water which is often polluted and where living with rubber dinghies and water scooters is becoming increasingly annoying.

Basically, the tourist sector's strict dependence on a good level of environmental and territorial quality, requires a particular planning effort, which is oriented both towards conserving those areas which have a higher level of natural beauty and to off setting (even with adequate investments) the deficit in environmental quality which an all too rapid and unconsidered development of the sector has so far generated.

THE IMPACT OF TOURIST MOBILITY.

One of the most evident effects of an intense tourist exploitation of a territory is the level of mobility associated with the presence of tourists. Easy access is certainly one of the key parameters in determining the demand trend, and it is not surprising that the indices above, highlight the peculiar positions of both Liguria and the Aosta Valley, two regions where the elevated number of tourist settlements is in good part due to their closeness to the large north-eastern urban centres.

This relationship has become evident especially since the sixties, with an influx of tourists who increasingly favour brief stays (week-ends, or even daily excursions, which is a growing segment of the tourist trade). Consequently, the availability of quick-link infrastructures, which permit fast access to the tourist locations, end up directing the qualitative and quantitative development towards that segment of demand which is traditionally more attentive to quick access i.e. the daily commuter tourist and the second home tourist. In this case too, the indices related to non occupied homes in Liguria and the Aosta Valley indicate this tendency; it is also significant that Liguria has the highest motorway density index, with 6.8 kilometres to 100 square kilometres, as opposed to the national average of 2.1 kilometres. Easy access is, at the same time both the cause and the effect of the attractiveness of a tourist district; obviously, as in all positive feedback cycles, the moment inevitably arrives when the system is unable to cope: The density of the infrastructures which serve mobility, the high level of mobility itself, which are evident during high demand periods, will surely be the detracting element in evaluating the quality of the tourist offer. In other words, the continuing success of high mobility type tourism, in the presence of an increasing demand and coupled with exceptionally high seasonal/territorial concentrations, which to date have distinguished the demand, are tending to more and more often create that high congestion situation, (in the tourist location) that is so typical of the urban way of life, from which the tourist periodically tries to escape.

Obviously, there are tourist areas which are planning or have already gone into action by implementing a variety of measures which are geared towards major access control, especially that of private

transport. For example, the Aosta Valley Regional Board's proposed legislation caused angry discussions, a few months ago, for having provided that "in order to guarantee transit in conditions of safety, the protection of health, the natural environment and the respect of safe load limits, in the territory", the Regional Board, or municipality could impose "an entrance and circulation tariff on motor vehicles, for the use of roads with high traffic flows". In general, areas which are more sensitive to the problem of the environment are beginning to propose alternatives to the use of private transport, both for access and circulation within tourist settlements. Signs of changing awareness are, however, sporadic while initiatives of quite another kind continue to appear. Rapid link infrastructures between urban centres and tourist localities are still considered to be positive economic boosters for the latter, without the minimum consideration being given to the type of tourist development that should be followed.

Quite a few alpine tourist regions are experimenting limits on private traffic circulation. There is an ample choice of interventions, from the temporary limitation of circulation on certain roads, to the total renunciation of the use of their cars on the part of the tourist, an experience which is already consolidated in, for example, the nine member locations of the Swiss tourist association, Gstaad, which represent 4% of the entire tourist offer in the confederation and which absorb 5.8% of the total tourist presence.

The reasons which determine the measures to be adopted in order to contain private traffic in tourist resorts, though generally aimed at protecting the quality of the environment and countryside, vary according to the history of each location and to the image that one wishes to create, also by means of the traffic policy employed, in the tourist market. The first of these experiments have taken place in those locations which are renowned for their high level of environmental quality, due to their geographic position but, above all, to the quality of the territory found there. In such a situation, limited or even absence of accessibility, are often basic choices and are the result of the desire to maintain the human and environmental qualities which distinguish those locations.

Other alpine experiences have arisen from entirely different conditions and situations: in general, we are talking about tourist centres which were originally accessible by car and whose territorial and settlement characteristics were adapted to high levels of motorised tourism and where increased demand has inevitably created a level of congestion which is no longer acceptable. In these cases, the measures taken are often drastic and costly (it is enough to think about the underground railway in Serfaus, in Austria) and are depicted as the solution to an environmental situation which can no longer be sustained.

The two conditions which have been described, give an idea of the advantages enjoyed by locations which are already prepared for the moderated use of private cars, not only from the point of view of minor necessity of infrastructures and services but also because they have consolidated their image of easier relations with their clients.

In the first case described, the traditional absence of private automobile traffic has greatly influenced the entire tourist development model. Visitors to Saas-Fee, for example, renounce using their own private transport even to reach the locality, because there is an efficient public transport system and because one is stimulated by the type of holiday the locality itself offers.

In the second case, the ban on private transport is a question of administration and logistics problems: here the customer must be persuaded to modify even consolidated habits or sometimes, to accept the loss of universally recognised rights, e.g. free access to a private house. When dealing with the latter problem, the solutions are manifold (limitations only in certain areas, accessibility limited to arrivals and departures, access granted to residents' homes) and restrictions are offset by increased public transport and often important service infrastructures (automobile public transport, car parks adjacent to urban centres etc.)

Whatever the case, the curbing of private transport or its total elimination, cannot be viewed as a limiting factor to the potential of tourist locations, or even more so, a deterrent to the demand. Zermatt offers over 6 thousand beds in hotels and a further 11 thousand in alternative accommodation; there are 8.5 thousand beds available in Saas-Fee and a total of 850 thousand overnight stays /year; Serfaus offers 4 thousand places and, despite severe private traffic restrictions since 1985, offset by the underground train, the tourist figures for 1981 - 1991 rose from 500 thousand to 650 thousand, which is an increase of 31%.

Mario Zambrini

THE MALPENSA NORTH COMPLEX

The actual Malpensa air terminal, northern Italy's intercontinental and major charter airport has been, for some time now, undergoing renovation and amplification work, the last of which has been the creation of eight new boarding bridges which have given a finish to the entire complex, while awaiting Malpensa 2,000.

The actual air terminal at Malpensa, Milan, which held first place in the 1994 Italian listings of charter traffic, having dealt with 1,666,795 passengers (+ 11.4% with respect to 1993), is already a point of reference in the Italian airport scene, even if awaiting the completion of the Malpensa 2,000 complex, which should confirm the international role of Lombardy's intercontinental airport.

The constant increase in air traffic, especially since the 80's, has required, a number of interventions to amplify and adapt the existing structures, which have gradually lead to stratification of both space and functions.

Over the last few years, the necessity to review certain functional aspects of the passenger terminal has become evident; the gates in particular, and the external embarkation and disembarkation systems needed to comply with the European Community regulations for the free transit of persons within the Community.

Furnishing the passenger terminal with both fixed and mobile boarding bridges, which has brought Malpensa into line with European standards, especially in terms of passenger service quality, was the perfect occasion to tidy up, upgrade and create a new identity for the entire airside of the complex.

In some ways, advantage was taken of the same opportunity as that of Linate, Milan, when the creation of the boarding bridges (project by Aldo Rossi and Uniplan, see Kineo n.1, April 1993) provided a precise solution to the airside, through the creation of a "city gate".

We don't believe in speaking of generic city gates, which nobody remembers, but of a different world: that of the particular and unforgettable Italy. Architectural memories of Italian culture are innumerable, but the one which seems to us to be the most effective is the tower.

Towers, belfries, are elements which every foreigner associates with the Italian countryside; nowhere else in the world are they present in the quantity found in Italy and towers dominate its history too, the tower is the matrix of the skyscraper and is part of the passage to modern times.

The Malpensa North project (so called to distinguish it from the Malpensa 2,000 terminal which is still under construction), has a message to give: an architectural project must adapt to the situation which is opening up at the time. We are facing an economy which is becoming poorer but which cannot give up services which have been promised or expected, nor can it yield to inefficiency in those services.

From the beginning of the history of aviation, the airports which have grown and adapted in time have always desperately pursued urgent functionality, without being able to maintain the identity of a unified complex, due to heavily stratified and differentiated typological and morphological interventions.

Malpensa is no different, its real architectural structure, provided it be furnished with specific and emblematic elements could aspire to a country side qualification.

It is, therefore, indispensable that some formal typological regulations be applied, so that the airport can be immediately identified and recognised as a complete system and not just a simple aggregate of elements.

The solution found for Malpensa North transforms the external supports of the boarding bridges into a curtain of towers (nine), which are linked to one another and the air terminal by connecting walkways; there are groups of stairways and elevators which supply vertical links between the boarding areas and the apron.

In reality, these forms rationalise a linear flow system with a

functional organization: departures can be dealt with by using the boarding bridges or, traditional busses when the plane is at a distance; arrivals use the same mobile bridges .connected to the planes, and reach the arrival terminal without having to go through the entire airport, thanks to the connecting walkways between the towers and the availability of tapis roulant. The decision to isolate the towers outside the building will permit the passage of arrivals without interfering with departure flows and the areas assigned to the latter, apart from facilitating the division of different categories of arrivals (EC and non EC).

The message transmitted by a tower is strong, it is perceived as a zip, as the articulation of passages which depart and arrive within. The architectural message is solid, unitary and concise. The desire is to achieve a global result which is easily decoded and memorised through the use of identical elements. The towers, basically, present a unitary image of the complex, both at short and long distances.

Built in reinforced concrete, they are white and are perforated by a regular mesh of 20 centimetre diameter portholes, which are both functional and visually effective. Natural light filters through the portholes during the day, creating an image of white towers dotted with a series of dark points, whereas, by night, the artificial light viewed from the outside signals the presence of the towers and creates a memorable effect.

The modular structure which is accented by the presence of the portholes, causes the viewer's perception of the towers to move out of scale, impeding him to recognise the exact dimensions, just as occurs with a skyscraper when the number of floors appear greater than they really are. The walkways between the towers are in metal, as if they were real bridges supported by the latter. The arrows which form the mesh in the metal structure, indicate the direction to follow. The colour yellow, which has been chosen by the administrating company as part of its image, favours and highlights the screen effect by separating the inside from the outside, while its horizontal presence unifies the whole system. The total transparency towards the airside, creates a strong night-time visual impact, as artificial light, just as it does for the towers, creates a highly suggestive atmosphere. Behind the screen of towers and walkways, the passenger building has taken on a more finished look, having resolved, in part, from "within" the problem of a chaotic bunch of constructions; the entire southern façade has now been definitively closed. Two new gates are being added to the existing ten, on the ground floor, bringing the building into better contact with the baggage handling area, while in the extreme south-west, a gallery is being created, under which a new air conditioning plant is being installed. A new boarding/landing area on the first floor, completes the southern façade at this level; it is connected directly to the towers by the series of walkways and from these to the boarding bridges. Then the western façade should be completed, to make Malpensa North into a homogeneous complex, capable of coping with what will be the future terminal 2 of the "Grande Malpensa", whose destiny has not yet been decided but which is competent to become the specialised terminal for one or two airlines or to be a real charter airport.

Angelo Cortesi, Umberto Orsoni

CRUISE TERMINAL AT MIAMI

The capital of international cruise traffic is well furnished with a high number of structures for embarkation and disembarkation, which are however, showing signs of the passage of time and the enormous numbers of people who have passed through; rehabilitation and expansion works of a certain importance are required to restore efficiency without destroying the original lay-out of the port

For cruise traffic, the port of Miami, headquarters of the most important shipbuilding companies of this sector (from the

Carnival to the Royal Caribbean, from the Norwegian to Dolphin) is, without doubt the most important in the world with, almost 3 million passengers in 1994 and a forecast for 1999, of 4 million. This is all due to its position at the centre of the principal cruise routes, especially those of the Caribbean, the Bahamas, Florida and the Mexican islands. Obviously, a similar mass of traffic is not easily managed, even for this cruise capital, which has 12 modern terminals. The pressure of a high number of passengers to be managed at the same time, on more than one ship and through more than one terminal, plus the tendency to use ever bigger ships, (over 2 thousand passengers) are pushing capacity to the limits and further interventions have now become necessary. One of the most significant projects is that of Bermello, Ajamil & Partners, regarding the expansion of the first five terminals of the port, which form the original nucleus, with the aim of facilitating passenger movement, through additional structures, including: airline ticketing and baggage check-in, bus and taxi covered drop-off and pick-up, direct pedestrian bridges to future car park facilities.

The existing complex presents two integrated architectural types and comprehends four Arrival and five Departure buildings. The expansion programme will proceed by developing a prototype for terminals 1 and 2, which will then be repeated in modular form, with the other terminals.

The two existing building types differ significantly in terms of function and area: the first is a 1.3 thousand square metre hall, housing a ticketing and seating area; the second is a 2 thousand square metre Baggage and Customs hall. Both these buildings are outdated in terms of capacity, but they have a strong aesthetic image that has been taken as a conceptual framework for the new structures.

Disruptions to the existing terminal had to be minimised. A demarcation line was traced at the south edge of the terminals, actually a steel trellis which runs the length of the site, from the first to the fifth terminal. The new Departure terminal is to the south of the line, while the Arrival expansion bridges the space to the north of the line, up to the edge of the existing Baggage and Customs building. This trellis is the first organisational element of the project, becoming integral to both building types: at the Baggage and Customs expansion, as a canopy for the exits and bus embarkation area; at the Departure terminal, it is enclosed by glass and houses the entrance lobby and the escalators to the Boarding hall. The latter is 5 metres above ground level which is the level of the gangways connecting to the ships; so passengers can walk directly onto the ships. Another advantage is that new construction work can bridge over vehicle traffic to other parts of the site, minimising disruption.

Baggage hall expansion presented a unique challenge, given the striking image created by the curved section of the roof. With the intent to reduce structural modifications, two lines of columns will be aligned to either side of the main curved roof beams, to support a new section of the roof, creating a wave motion which perfectly integrates the old with the new.

PORTS GENOVA

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GENOVA'S TOURIST PORT

The creation of structures at the service of sports craft, in the old port of the principal Ligurian city is indicative of the new tendency abounding in many ancient ports, which are no longer suitable for modern mercantile traffic, of their transformation into spaces for cultural, tourist and past time activities

The old port at Genoa is undergoing an important transformation process which began in 1992, with Expo "Ships and the Sea", as part of the city's celebrations of Christopher Columbus. At the time, the historic port area was handed back to the city, which gained a large cultural, expository and tourist facility, along with a series of impressive buildings.

Work is also being carried out on the old quays, which will make up a large public area: a sea front walk with an archaeological park, on the remains of the old port area, where there will be viewing of the old piers currently underground, due to the various mutations in the old port over the years.

The activities under way in the so called "Morosini Precinct", i.e. Genoa's new tourist port complex, are the key link in the restitution of the Old Port to the city: the sports craft structures, the shops and bars, the hotel and residence all irrevocably combine the activity of the sea with that of the city. The Morosini Precinct consists of two piers, Morosini and Calvi, plus the Salumi quay, which all form part of the old docks, where, over the years, warehouses, silos, houses, offices and work shops have been constructed and eventually abandoned. The area is situated to the south of the new aquarium, to the north, there is the old wet dock, where the new University library, Business Economics faculty, The Nautical Institute and various other structures are planned, as part of Genoa's "Revival pole" which stretches from the Old Pier to the Marine Station.

THE TOURIST PORT.

The area of the tourist port is composed of 56 thousand square metres, of which, 15 thousand square metres are dedicated to piers and quays and the remaining 41 thousand is water. There will be three interconnecting buildings, overlooking the water between the Calvi and Morosini "ponte", facing the docks. The structures will extend beyond the old piers and will be placed upon "islands", from which the fine line of mooring quays for sports craft, will branch out. Moorings for 270 craft are planned, plus services, including three buildings containing all the facilities necessary to meet tourist pleasure boating requirements. The complex will contain an hotel, on Ponte Calvi; a residential-managerial-commercial network on Ponte Morosini, where activity will be compatible with a tourist port e.g. apartments, offices and shops; and a large public square on the Salumi quay, above the underground car park for 400 cars.

PONTE CALVI.

The buildings on Ponte Calvi, which used to house the terminal for the ferries to Corsica, will be demolished and substituted by an hotel, overlooking the sea and resting on the old XVI and XVII century piers, on one side and on a newly constructed "island", on the other, with a total building length of 150 metres. The existing pier will be maintained due to the number of public services it offers on the ground floor: reception, lobby, bar, restaurant and meeting rooms. The bar and restaurant are seaward, beyond the pier head and on an island which is reached through a glass bridge.

In part of the restaurant, which will be lowered within the pier head, as is the case in the whole complex, the historic piers and the new wharves run side by side but they never touch (they will be separated by a narrow trench) and likewise one can glimpse and hear the sea below.

The functional structures of the hotel are contained in a laminated body, a central corridor, with the rooms along the perimeter.

Two emerging bodies ("torracchi" as the Genoa dialect has named these squared towers) one at the centre and the other at the extremity, towards the sea, contain respectively, the reception and lobby service, the suites on the two upper floors while the most reserved section of the restaurant, is under the vaulting, at sea level.

A three storey, underground building will house a car park for 59 cars, warehouses, service units and technology centres. The bedrooms on the various floors will access to balconies and over 300 square metres of quay side are available for the exclusive use of the hotel, which could be used to create an open air restaurant.

PONTE MOROSINI.

The warehouses on the bridge are being demolished and two new buildings, which will be dedicated prevalently to residential and managerial use, with some commercial activity, will take their place.

Here, as on the Ponte Calvi, the buildings will be "bridged", departing from the actual pier and terminating on artificial islands. A transparent gallery will link the two buildings and will be used for meetings, shopping and entertainment. The southern building will be dedicated to residential units and shops: a 120 apartments of different sizes are planned. The club house for the tourist port and the management/control centre of the entire complex, will be at the extremity of this building, seaward. The northern building will house offices and shops. There will be an underground car park, on three levels, with capacity for 290 cars; 90 places will be for public use. The dominating feature of this whole sector is the lagoon effect created by the water and the special re-composition determined by the linearity of the laminated bodies, tending as they do, towards the "torracchi", which incidentally, are simulations of the old towers used by the port workers for the safe keeping of their equipment and goods.

THE TOURIST PORT.

The principal pier which constitutes the port, will be 6.5 metres wide and will host the most prestigious boats (up to 35/40); it will depart from the extremities of Ponte Morosini and stretch out towards the centre of the old port. Four secondary wharves will depart from here. The rest of the port will be made up of wharves running alongside the historical piers or along the bulk of the new buildings on the Calvi and Morosini "ponte". All the wharves are constructed from fixed structures in reinforced concrete on pillars and are accessible to service and rescue services. The pavement of the main wharf is in self-locking blocks of artificial stone of the porphyry type, placed in a concentration of arches in the central strip, while the two lateral bands, which hold the plant drifts, are in sky blue and grey pigmented cement; the secondary wharves' pavements are in cement, integrated with a superficial layer of anti slide surface in quartz grains and coloured stone-like additives. Boats will be serviced from small towers placed along the wharves (one to every two boats), which will supply water, electricity, telephone, fax, television and data transmission etc.

The general equipment will be capable of monitoring the entire port by means of an anti-intrusion television surveillance system, covering both land and sea; special equipment will alert port management in case of fire, flooding or the theft of a single craft.

ACCESSIBILITY, FEASIBILITY AND PARKING.

Vehicle accessibility to the Morosini Precinct, is by means of a traffic lighted side street on Via Gramsci, by the Vacca Gate. A vehicle entrance is planned at the level of Ponte Calvi, to be dedicated to the hotel, and receiving both public cars and customers' private cars.

Circulation of vehicles within the complex will be privileged only to allow access to the public, private and hotel car parks, whereas in the presence of archaeological remains, traffic will be directed to flyovers.

Circulation within the complex will be pedestrian, persons with a handicap will be catered for and vehicle traffic will be limited to supplying tourist services.

Special time tabling will be organised for supply and maintenance vehicles, while the access/exit flows will be conducted along one-way ramps.

Maximum access/exit times have been evaluated as have been the dimensions of the accumulation lanes at the meeting points with urban roads. An underground stop is planned in the vicinity of the Vacca gate (work on the line is under way), which will be near the entrance to the car park at Ponte Morosini and the principal wharf.

But substantially, the area is reached from the sea, there is a study at hand, with the competent authorities, to offer a privileged waterway access to sports and pleasure crafts. The public boats which run a link service with the Riviera will dock along the quay near the aquarium.

THE MATERIALS CHOSEN.

The buildings, the pavements of the open spaces and their furnishings all follow a classic sober line: old materials with modern expressiveness. White wash has been used on the

walls of buildings above ground level, slate slab sheathing on exteriors, bricks to ground level on the elongated bodies of the buildings, dressed stone for the footings of the "torracchi". Open space and secondary building paving is in grey stone and arch bricking, while shutters, manholes and drains are all in "melt".

All the old pier equipment (bollards, rings, frontals etc.) will be utilised when at all possible, but will remain on site, a testimony to life lived. Of the archaeological remains, the "jutting" will be recuperated both functionally and visibly - calling and recalling the gentle lapping of the sea, which makes this place the tourist and cultural attraction it is.

ROADS SERVICES AREAS

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QUALITY AND SERVICE ON THE MOTORWAY

The concept of quality of service for all users of the motorway network, from the heavy duty driver to the disabled and the family, has resulted in some significant applications in Germany and even more in France, where the motorway is conceived as a succession of well equipped areas where one can rest, enjoy oneself, eat, play and access to tourist attractions

Travel is always more than an experience. Once upon a time, a trip was more than just leaving one place and arriving at another, but was a passage through a series of adventures, both big and small; emotions, both deep and superficial; experiences, both conventional and extraordinary, all linked to the places visited, the route taken, the people met, the weather and the countryside. Sometimes there were things unforeseen and sometimes even danger. Only a fraction of all this exists in the civilised western world, where everything has become homologous, controlled, foreseen and even taken for granted. What can one say about a trip on the motorway then - high quality in speed, safety, comfort and economy - it's the typical situation where the departure and arrival (place and time) are the only thing that count, certainly not what one may find in the middle! This partial impoverishment (more efficiency, less interest) gives time to think to those who are, however, able to keep their minds on their driving- and heaven knows how important that is.

On the other hand, a necessity has arisen, to supply the motorway user with a series of services: commodity, technical-psychological support; surrogation of those wonderful moments which are no longer present in a super-planned trip. Motorway management companies have been moving in this direction for a long time, by supplying not only efficient services (indications, vehicle assistance etc.) but also stimulating high quality proposals which go far beyond what a car radio and air conditioning can give to the traveller.

We all know those large panels along the motorway which indicate the tourist attractions (artistic and natural beauty) of the place the driver is passing through, and the services area with their bars, restaurants (with double services: a self-service and a bistro with an intimate atmosphere and regional, international, biological and bio-dynamic food), information offices, cash-points, supermarkets, as well as petrol distribution and break-down services.

To-day, things are moving to higher levels. In Germany, the company for auxiliary services on federal motorways has launched a programme called "Service Areas for the Future" and within this initiative 3 rest areas with: toilet, a car park, a telephone cabin for the disabled; accessibility for the disabled has been provided in the bar, the restaurants, and the bistros, with ample spaces and furnishing which provide for wheel chairs. The attention paid to the "weak" customer has been demonstrated towards families and children, in particular: here too, there are more than 3 rest areas with a play zone, including swings, slides and toys, either in the open or under cover, but all clearly visible to parents, while they are relaxing in the bar. There are changing tables for infants, and even

beds can be hired. The restaurant offers special dishes for children and high-chairs and small chairs are also available. If these novelties indicate the level of civilisation and organisation that has been reached in Germany, that which France offers has a touch more imagination, even extravagance. The whole motorway (Paris-Rhine-Rhone) has been conceived as a travel opportunity. Apart from the normal services, the French have created areas equipped to offer more e.g. welcome centres which supply all information required for a trip - tariffs, services, hotels, restaurants, garages and booking services, not to mention all the tourist information on the area in which they are situated (itineraries, curiosities, monuments, beauty spots). These are relaxation and recreational areas, equipped with huge panels that inform drivers of simple exercises and tips which help to relax and freshen up, play areas for children, and often, wash rooms and telephones. There are service areas where it's possible to test drivers' eyes for signs of tiredness and weakness, free of charge, areas which supply resting facilities for infants, apart from shows - folklore, clowns, musicals, entertainment of all sorts. To conclude, and this is a unique initiative, the Lyons region has devised the "Bourgone Archeodrome", a multi-media area, equipped with dioramas, environmental reconstructions, audio-visual guides, cine-tele programmes which guide the visitor into the past, present and future of the historical/geographical reality of the Bourgone.

When you come out of that one, you probably won't remember where you were going anyway!

Stefano Andi.

RAILWAYS SWITZERLAND

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PANORAMIC TRAINS ON THE SWISS ALPS

The Swiss Confederation's railways are already among the most advanced from the point of view of tourist exploitation of trains and they have now demonstrated how the potential of this means of transport and the regions it passes through, can be even more successfully exploited

The Swiss railway network extends over about 5 thousand kilometres, of which almost 3 thousand belong to the Federal Railways and the rest is divided between 57 private companies. Then there are the rack railways, the funicular railways and the cable ways, all in collective service, in the centre of the Alps, in a countryside of incredible beauty. The story of the Swiss railways is tightly linked to its orography and the distribution of inhabited centres, as well as to the initiatives of many private entrepreneurs. The latter is not insignificant: when, in 1952, the Confederation handed over the responsibility for the railways to the cantons and private enterprise, a rail fever gripped the whole country, and it is to private companies that we owe our thanks for some of the most exhilarating and magnificent views to be seen from a train. This is how lines which forge through apparently inaccessible valleys began, becoming the most important if not the only link, between an isolated reality and the rest of the nation.

And that was also the beginning of some exquisite tourist railways, the most impressive of which is that of the Jungfrau, in the Bernese Alps, constructed at the turn of the century by Adolf Guyer-Zeller and entirely furrowed out of the rock, which carries one to an hotel-belvedere on the peaks of the mountain; the terminal is at almost 3,500 metres (the Jungfrau is 4,158 meters). and to this day the railway is making money. It can be used throughout the year, due to the fact that is cut out of the rock, and therefore not influenced by weather conditions. But, if for the railways and all the other infrastructures of iron or cable, which arose especially for tourism, there is nothing new to add except that they still exist and function and often with a profit, then there is a lot to be said for the efforts being made to exploit some

of the traditional lines and especially the beautiful country side they pass through.

This innovation, which has once again been promoted by private enterprise, has the advantage, not only of offering a service of tourist trains but also of having supplied a modern response to their use without becoming kitsch.

Some private railways and, more recently the Federal railways too, have commissioned and put into service, cars which were especially studied to view and enjoy the countryside and at the same time to live life aboard in a more acceptable manner. So, there have been trains circulating, for the past few years, the names of which are synonymous with tourism and entertainment. The most important, for track length, is the "Glacier Express", the "iced" express which is managed by three private rail companies (Retiche, FO Fulka-Oberalp and BVZ Zermatt). It leaves St. Moritz in the morning, travels through three alpine passes and arrives at Zermatt in the evening; travelling at a speed of 30 kilometres per hour (it has been defined the slowest express in the world) to allow one to admire the Bernese Alps and the mountain range from Bernina to Cervino. Around mid 1990, BVZ and the FO ordered a group of panoramic cars for this service which nets an average of 270 thousand passengers per year. The project was prepared by Breda and Pininfarina, with big lateral panoramic windows, a transparent roof and interiors designed to create the minimum of hindrance to viewing, with a good level of comfort. The "Bernina Express" also travels part of this route. It is managed entirely by the Retiche Railways and joins Italy and Switzerland, through the Bernina mountains.

Another reality which is interesting, is that of the Mob (Montreux Oberland Bernois) railways, where, despite a relatively limited amount of track (two lines of 62.4 and 12.9 kilometres), the company has exploited a route which passes through almost uninhabited valleys, for which the railway is of prime importance. The "Crystal Express", uses the same type of cars as the Glacier Express but has emphasised the tourist characteristics by putting the head and tail cars (Breda and Pininfarina project) totally at the disposition of the passengers, with the driver's cab raised and the part below formed by an enormous window, which gives a 360 degree view of the countryside. The interior design and furnishing are equally geared to creating a sense of enjoyment and entertainment, in fact the traditional seating arrangements have given way to a sitting room arrangement.

The message which has arrived from Switzerland is that, it is possible to find exquisitely modern responses to current needs, without being kitsch, by relaunching the train as a form of holiday and free time entertainment.

RAILWAYS ITALY'S TOURIST TRAINS

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ITALY'S TOURIST TRAINS

The Italian railway FS has begun moves to regenerate its tourist activity, through the use of historical rolling stock - from old steam locomotives to elite post War trains - and the creation of charter trains at the service of customers who are more or less organised

Over the last few years, the Italian railway authority has discovered the tourist train sector, with some pretty good results, too. The initiative responds to a demand for transport which is highly interesting and of no little weight on the scene of customer mobility for cultural, tourist and sight-seeing reasons.

The development of the product has taken place with different timing and along two different lines: that of the charter train and that of the tourist train.

In order to deal with these types of transport, which are true novelties, suitable rolling materials had to be researched; FS itself has a supply of prestigious historical material which has helped to unite the adequate technical elements with folklore and classics airs, capable of attracting the interest of the media, and advertisers, which has given a good return in

terms of image and attention to rail transport and which has been capable of renewing interest in the more traditional rail services. Trains that are considered purely "historical" are inevitably steam trains. One can imagine that the mere fact that a train is no longer in use and is associated, in the collective imagination, with coal, fire, smoke and steam is enough to make it attractive to a large section of the public.

Apart from interest in the locomotive, the historical trains (which are organised by the local divisions of the FS), travel along lines which have been chosen for their interest to the tourist and the physical beauty of the countryside; they are already time-tabled, and are the result of the evolution of those irregular and improvised initiatives which various free-time organisations had tried to carry out, in the past.

Along with this rediscovery of nature in all its splendour, other ecological initiatives have arisen e.g. "train-n-bike" in areas which are not traditional regional routes.

All this is fine, but to guarantee a serious and efficient program, on which the customer can effectively rely, a good material inventory must be available and, in consideration of the average age of rolling stock, the necessary care and attention required, must be supplied. So, the last few months have seen the development of a plan for the technical up-grading and enhancement of various types of steam engines and cars, from different periods in the story of the railway. Particular efforts are being made to restore the materials to their nearest possible original state, in order to satisfy a public which is not only interested but is often also historically and technically competent. There is also a move, with the same aims in mind, to recuperate diesel locomotives and rail cars, which are no longer in use.

So far, 21 steam engines have been restructured and restored to former efficiency; among them, a prestigious 685 (the n.19 of the Verona depot), a 640 (the n.143 at Cuneo), and two 625's (the n.142 at Florence and n. 100 at Verona). The latter two can be considered real jewels in the technological crown of their time. About 80 cars have also been restored, among them are about 30 "hundred-doors" and a few rare "terraced" carriages. The diesel sector can boast the restoration of a good example of the D342 (a hydraulic-diesel locomotive derived from the German tank) as well as two examples of Aln 773, which are currently undergoing restoration work to restore their original colouring. Another aspect which shouldn't be underestimated, is the care being taken not to lose a wealth of know-how and technical experience, which still exists, even if in decline, among the personnel necessary to insure that all runs smoothly, from the engine driver to the skilled repair man.

In the long journey sector, tourist traffic is organised by a structure called "Business Charter plus car to follow" which has its own programme for this particular type of transport. From here disco trains, exhibition trains and fair trains etc. have all arisen.

Another extremely important sector for FS, is religious tourism, which generates considerable volumes of traffic. This type of transport, as with other occasional events, linked to sports etc., is conducted with the use of ordinary materials with the eventual insertion of specialised cars.

What has been increasingly successful, is the use of electronic trains, with a limited number of cars and a good level of comfort, sold as charters, in line with customer requests. The use of these "rollers", which originates in evaluations carried out at the beginning of the 90's, at the time when the Etr 300 "Settebello" and three Etr 250's "Arlecchino" (following heavy up-grading and enhancement) were about to begin service. Acceptance by the customer was positive, FS gained in convenience, since the technical specifications of these trains (limited series, aged, costly maintenance, unreliable in heavy usage), were more adept to periodic use, as opposed to high daily usage. There again, this train had an air of fascination about it, due to both the novelty it represented immediately after the War (the presence of air-conditioning, comfortable furnishings) and to the much admired "belvedere" wagon, placed at the front and back of the train and which made it particularly suitable for tourism. The possibility to vary the itinerary, independently of the financial returns, considerably

boosted the image of FS, and on the basis of this, restoration was completed, especially on the Etr 250 and success ensued. Subsequently, a plan was brought forward for the sale of full trains along a precise itinerary and customer approval was so high that not only an increase in the original nucleus was necessary, but so was the creation of a specific "Business charter" segment. To date the trains involved in these initiatives are the "Settebello", the three "Arlecchini" and some Etr "Valentino" which were used, in the past, as Tee diesels. The new arrival will be the prototype of the "Pendolino", the Etr 401, which has been specially restored. To close, one could say that for both the tourist trains and the historical locomotives, and according to market forecasts, the future has only just begun.

Fiorenzo Martini

URBAN NODES ESCALATORS

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ESCALATORS FOR CITIES

The use of escalators and lifts to facilitate mobility of people in art cities or in other places where accessibility is difficult, has accelerated and, following in the foot steps of Perugia, there have been numerous projects and implementations, the last of which have been in Orvieto, Cascia and Potenza

The first Italian locality which decided to establish a mechanised pedestrian route, was Perugia, which recognised its potential within a vast plan for the enhancement and restoration of the historical centre where cars were blocked, downstream and accessibility to the urban complex was facilitated, upstream. Finished in 1982, the system of mechanised routes has demonstrated its validity, so much so that it has been responsible for the increase in traffic to and from the city, which clings to the rock and is distinguished by its narrow streets of mediaeval origins.

To-day, the same approach is being used in localities with difficult orographic positions. In particular, the restoration and consolidation project which has been under way for some years on the rock of Orvieto, has seen the use of mechanised routes as a means of giving life back to the old city, without suffocating or undermining her stability. Cascia, with minor interventions and Potenza, which is using escalators and lifts to restore accessibility to some peripheral quarters, have all chosen this solution.

CASCIA.

Mechanised mobility was designed by studio Rpa, in 1988 for Cascia (plants by Schindler) and was part of the Umbria Regional Board's plan for alternative transport within the historical city, the essential link between an external car park (a hundred busses and sixty cars) at a height of 608 metres and a medieval street, about 40 metres above that again. The centre of Cascia attracts large numbers of people especially in certain periods of the year. Mechanised ascent limits the access of cars and, at the same time, offers a valid service to the people: it is made up of two escalator ramps, one for ascent and the other for descent, with a fixed service stairway running alongside. The system has been completed by the presence of 4 lifts positioned at about 644 metres, between the beginning of the escalators and the heart of the city. The lifts can carry as many people as the escalators so there is a steady flow of anything up to 2 - 2.5 thousand people per hour, over a height of 36 metres.

There is a building planned for the car park area, which will offer arrival and departure services i.e. toilets, bar, technical and monitoring areas and other units to be dedicated to commercial activities. The same principle has been applied to the escalator exit points, in the city, (towers which have been covered with brick to blend in with the medieval milieu), where public toilets have been installed.

ORVIETO.

The mobility system at Orvieto, designed in 1990 by studio Rpa, for the Umbria regional board, and which is nearing

completion, is based on the association of infrastructures for parking and those of mechanised structures. There have been two distinct interventions: the first is a car park, on the east side, from which a series of escalators begin, pass under the railway station and go to the Orvieto funicular and on to the centre of the old city; the second consists of a car park on the west side (the fair ground) and a direct route to the city centre, either by escalator or lift.

The car park to the east offers about a thousand places, on the surface and between the motorway and the Rome-Florence railway line, starts the underground mechanised passageway, made up of an escalator ramp which exits in the railway station. The funicular, which completes the route, has been in service since the turn of the century (the first automatic funicular in Italy), has been revamped and the old route, through the gallery in the Alborno rock, re-established.

The route to the west, begins in the multi-storey car park, which is entirely underground, with a parking capacity for about 600 vehicles, including busses which avoids the rock being damaged by the presence of these big transporters. The last level is entirely dedicated to pedestrians and all the mechanised routes for the historical centre begin here. There are two choices available to reach the top: one is with the lifts which go from the car park right into the city and the other is through a series of escalators which are to be found inside passageways which date back to Etruscan and medieval times. Apart from facilitating transit, one perceives a suggestive and unknown image of the city.

POTENZA.

The principal city in Basilicata is another example of the problems which arise in linking up a city, internally and externally, which is at the top of a hill or on steep slopes. Situated at a height of 819 metres, on a mountainous ridge, which dominates the upper Basento valley, Potenza's ancient nucleus is on the slope of the hill, surrounded by modern suburbia, which had expanded as far as the river, by the end of the 70's, and to-day has reached the adjacent hills. Daily, about 15 thousand commuters arrive in Potenza and about another 33 thousand people live there; practically all of them use private transport. Prompted by this unacceptable situation, a large urban mobility programme was begun. The heart of the project was the multiplication and diversification of the collective transport system- underground, busses, escalators and lifts and the integration between them. The first escalator system, which has recently begun service, was designed by Egidio Iacovino and Antonio Maroscia with the assistance of Schindler's technical office. The aim was to link the centre with the suburbs around the train station and the motorway entrance. There are 10 mechanised ramps which begin at the height of 722 and reach 793 metres, a height of 71 metres, with an overall development of 426 metres and a surface coverage of 2 thousand square metres. The route, due to its passage through densely built up areas, has been partially or completely hidden or camouflaged, especially by the use of underground tunnels.

A parallel route, pedestrian but not mechanised, has been created alongside the escalator, to allow for maintenance and to assist the mobility flow. There are four covered rest stations along the route and arrival is in an old school building, on Vittorio Emanuele II street, which permits interchange both with 4 lifts, within the building itself and which go to the old city centre and with the urban transport system. The results of the system have mainly been seen in the reduction in the use of vehicles and an increase in the use of the car parks which are near the centre, at the bus station and at the vertical link points. The city has re-consolidated, with respect to the historical centre, especially those quarters on the southern side and near the university.

With the help of Maurizio Cirimilli and Egidio Iacovino

FLEXIBLE PARKING FOR PESCHIERA

An overview of the general town planning scheme for Peschiera del Garda, has brought to light the problems, particularly those associated with car parks in tourist centres, which require the creation of large parking facilities and the necessary interventions to prepare for limited traffic at certain points of the year

The theme of tourist parking, in the Italian cities of artistic and historical interest, has become central to urban planning, due to the increase in tourists, especially that of foreigners, which has been registered over the last few years. The entrances to tourist cities have become more and more marked by enormous car parks, which are occupied only in certain periods of the year or, worse still, barely used even at peak tourist periods because they are situated in places unsuitable for those who are directed towards the centre of the city. For most of the year, these immense expansions of asphalt are desolate sights, containing nothing more than the obligatory sign posting, since little thought is given to their form or even their location.

For this reason, the Peschiera case is worth looking at, because the implementation of both the general town planning scheme and that of urban traffic, is about to be contemporary. In fact, when town administrators decided to review the general plan, it was immediately obvious that mobility and particularly parking were key themes to be examined alongside the Urban traffic plan, not separately.

Investigations have revealed two major problems: that of pass-through traffic and that of tourist parking facilities. Traffic is structured as follows: 61% of traffic entering the city is going to Peschiera del Garda, while the remainder is pass-through; 40% of entrance traffic originates in the north east zone and of this zone 52% is directed towards the city centre; of traffic from the motorway and not using the ring road, only 4% is going to the city, while traffic originating in Peschiera and directed to the motorway is 20%; over 80% of traffic passes through the centre of the city, while only 61% is going to Peschiera.

The parking situation is particular: public car parks are used to their maximum; 68% of the traffic which leaves the parks, crosses the city centre (80% if we exclude the parking areas along the shores of the lake, at Garibaldi); 51% of the vehicles park for a period from one to two hours, while 38% stays for less than an hour (the remaining 11% occupy car parks for more than two hours).

The normal public parking facilities are all near the historical nucleus (the fortified citadel) or along the lake shore, with a maximum capacity of about 700 car places. And if we exclude the Garibaldi lakeside, parking areas are to the west of the river Mincio, with an obvious unbalance, especially if we compare with holiday and tourist traffic. In reality, the possibility to facilitate private vehicles is insufficient on holidays, which favours wild parking and in turn hampers regular circulation, the safety of pedestrians and cyclists, and the quality of urban life. Accessibility and directionality are also insufficient.

SEARCHING SOLUTIONS.

The general traffic problems of those travelling to Peschiera are directly connected to the positions of the car parks: 60% of arrivals come from the east and therefore, must cross the city to get to the car parks, which are almost all in the central zone or to the west of the citadel, creating intense traffic on the bridges which connect the citadel to firm ground. One solution could be to reinforce the bridges to take on the increasing traffic load, which is not acceptable, since it would encourage the crossing of the city, through the centre where most of the commercial activity is situated but where parking is already insufficient to cope.

The analysis prepared for the General Town Planning scheme and the assessments made for the draft of the Urban Plan, indicate the best solution in the discovery of new access points to the existing car parks and the choice of future park

locations according to the directions from which the user arrives. This would permit the reduction of traffic along the lake side roads, and allow more attention to be paid to public spaces at pedestrians' disposition or to the other means of transport used by tourists e.g. the bicycle.

In any case, the creation of new car parks, which are absolutely necessary, should not set aside the necessity for an information policy on parking areas and the directions to find them, by following itineraries which avoid congesting the centre and reduce search time. The advantages of preparation of the Town Planning scheme and the Urban Plan simultaneously, will soon be evident with the presentation of some strategic projects. The choice of the area to be dedicated to car parks will now be assessed both from the point of view of the type and form of the area, with the aim of finding a solution to the inactivity of these spaces at certain times of the year and plausible solutions to reduce the attempts of users to go to those car parks which are in the central areas of the city.

Leonardo Cavalli, Giulio De Carli

PUBLIC TRANSPORT TOURIST TRAMS

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A TRAM'S TOURIST POTENTIAL

The relationship between the tourist use of the city and urban public transport is often non-existent or not provided for, even if, as happened in Venice, it's the latter which suffers the consequence. There have been experiments, throughout the world, which demonstrate, even if somewhat sporadically or partially, how the use of public transport in this sector is potentially remunerative

It is certainly a difficult task to imagine how the public transport system could be used as an instrument to favour tourism in a city. The image of the bus or tram, especially in Italy, is linked to the necessity to get work or place of study, often in uncomfortable conditions, due to overcrowding, the irregularity of the service, long waits and the difficulty of procuring a ticket.

Plans and projects which deal with mobility in urban areas, currently tend to reinforce the idea of public transport as a means of resolving traffic and pollution problems, while trying to acquire users through quality upgrades but even more so, by car usage dissuasion policies. These policies are particularly effective on commuters who move from the suburbs to city centres and remain in one place for long periods of time. It would be much more difficult for public transport to conquer those automobile drivers who travel on business, for shopping, on visits or for other motives, but, on the other hand, this component of private traffic is much more acceptable once the problem of commuter traffic and parking has been taken care of. There are, however, quite a few functional and environmental problems caused by tourist mobility, due to flows and irresponsible parking of tourist vehicles in the streets and squares of historical city centres.

Admirable, but with little results have been the initiatives taken by some public transport companies with the introduction of discounted daily tickets and illustrated time tables plus guides indicating the monuments, hotels, restaurants and museums to be found along the route. Gvu, Utrecht, in Holland experimented with a string of illustrated tourist leaflets, on the monuments to be found along various bus routes, while Atm, Milan edited a similar pamphlet for the n.15 tram line.

Another important initiative, is the increased diffusion of travel documents: in both France and Germany, the driver sells tickets (with a supplement), while in Switzerland and Holland, daily tickets which may be used in more than one city can be found; tourists move around without having to worry about finding tickets and trying to understand regulations, which are usually incomprehensible to residents themselves.

There are, however, some interesting and effective experiences in the use of public transport for tourism, which

are based on two conditions: the offer of diversified services to be adjusted to meet the needs of the tourist, in terms of route, stops, speed and information (the vehicle should be slow enough to allow the passenger to enjoy the urban panorama and there must be a guide to illustrate the route) and above all, the tourist must be aware that the journey he is on is not only an opportunity to visit the city but is in itself an unforgettable moment dedicated to the enjoyment of the city. In fact, a trip on a Double Decker bus in London, on a cable-car in San Francisco, or on a multi-coloured tiny tram, in Lisbon are all part and parcel of a tourist visit of these cities. The merit goes to those cities which have managed to conserve and evaluate the peculiarities of their public transport systems, which are now universally recognised as integral parts of the urban landscape and are sometimes on a par with national monuments. Apart from these exceptional cases, it would be relatively easy to set up a successful public transport service for tourist, in many cities, with a modest investment of resources.

One of the most interesting experiments is that of Rotterdam, where a tourist tram links the railway station to the port, on a 30 minute circular route, which touches on the most interesting points of the city and where the trip can be combined with a boat excursion in the port.

The success of this initiative depends on three things: first of all, the service is regular (in the summer the service, called "the 15 line", runs every day, departures are every 45 mins. and there are stops by request along the route); secondly, the service can be availed of using a normal ticket which costs 2 florins (approx. 1,700 lire), there is no need to book and thirdly, historical rolling stock is used, which the transport company Ret rigorously conserves and restores, while the company personnel are dressed in period costume. The type of tram changes every day. This service is in marked contrast to the urban panorama of Rotterdam, with its modern buildings constructed on the bombed ruins of the ancient city, victim of the relentless bombings of World War II. The trams are the only historical element to survive.

The success of the Rotterdam tourist tram and other similar experiences e.g. in Stockholm and in New Orleans, have induced other cities around the world to take on initiatives; not all have been successful, as was the case in Milan, in 1984, where the elements of failure were: the high cost of the ticket (25 thousand lire), the need to book and an obligatory departure spot (tourists are not well enough informed or they like to decide on the spot) and the sporadic nature of the service (once or twice a day and not every day).

The originality of historical rolling stock, is a decisive contribution to the success of a tourist line, since it offers the customer the opportunity to visit a living transport museum, take a trip the old fashioned way, all of which bestows special charm on a visit to a city.

Unfortunately, few transport companies, in Italy, have conserved their rolling stock in any acceptable way, having undervalued its historical value to the city, and restorations which have been carried out have often been aesthetic but have compromised the authenticity of the pieces; the rigor which has been poured into the restoration of monuments or works of art, has been sadly missing when it comes to vehicles. Even in the American cities where trams were reintroduced, in modern versions, after 30 or 40 years, the need to introduce a tourist service along the most interesting parts of the route was felt, despite the problems of finding rolling stock for the initiative. Since original trams were not available, some cities purchased them from others e.g. San José, California, used trams from Melbourne and Milan. Portland actually bought modern made period style trams at a cost of 200 thousand dollars each (Gomaco Trolley Company, for example is a specialist in this field).

Some cities have also introduced an accompaniment to the tourist tram initiative; they have begun a tram-restaurant service, which is not only attractive to tourists who want to visit the city in an original manner but also appreciated by anyone who wants to organise a special evening among friends. The Australian city of Melbourne, is the most striking example of this; the city has an extended tram network (225

kilometres of track), on which an old tram, equipped with tables for afternoon tea and dinner, circulates regularly. In Europe, there is Bern and Basil and in Italy, at Turin, the "ristotram", a fifty's tram, redecorated under the direction of Giugiaro, which does a sight seeing trip of the city, a trip to Superga and a combination trip on the river Po.

Enzo Porcu

AIR CRAFT LAUDA AIR CHARTERS

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THE WINGS OF TOURISM

Charter traffic is making itself felt as one of the fast growing factors in the air transport sector, thanks to the expansion of tour operator activities and the use of modern craft in line with the major airlines, while the quality of the service aboard has become the new frontier and is the distinctive element of the emerging companies

One of the principal factors in the growth of the air transport sector, is undoubtedly connected to the growth of non airline or "charter" business. This terminology is used to indicate passenger flights which are hired by tour operators to transport passengers to tourist destinations.

These flights are generally made by air companies which are specialised in charter transport, and who put their planes at the service of tourist agencies, normally in high demand periods, without predetermined time tabling and costs which are normally lower than the airlines.

The Mediterranean basin is full of tourist destinations which are served by charter flights, including the Balearic archipelago, Athens, the principal Greek islands, Tunisia, Sardinia and many others.

Now that planes with greater flight autonomy are available, more remote and exotic destinations have been added to the list: the Caribbean, Indonesia, the islands of the Indian Ocean. The introduction of intercontinental charter services have eliminated the seasonal problem, giving the tour operators the possibility of offering warm, inviting climates at any time of the year. Confirmation of the charter as a valid transport formula is based on figures: in 1994, over 1 million 650 thousand charter passengers transited from Malpensa, Milan (number one in Italy for charter traffic); these figures represent 45% of the numbers handled and +11.5% in respect of previous year figures). In the same year, in Italy, almost 6 million tourists flew on hired aircraft (+16% on 1993 figures).

The numerous companies which offer these services have an organisational structure and other means which are generally different from those of the air lines or the national companies. The variability, which is typical of this type of traffic, requires extreme flexibility e.g. quick adaptation to the tendency of the demand and a high capacity aircraft, to lower the cost per passenger carried. The planes are, in fact, built by the various aviation companies in different versions, distinguished by differing capacity, obtained by dividing the cabin into different classes and by varying the dimensions of seats. This permits the charter companies to use planes with a major number of seats, and optimise the returns per craft. Other accessory services which can be installed on an aircraft (wardrobe, kitchen, screens for film shows, diffusion systems) may be largely unnecessary on craft which are to be used for charter service, in order to contain the cost of purchase or hire. Unfortunately, there have been examples of attempts to reduce costs where the carriers used old and technologically obsolete aircraft, and over-worked staff, which limited passenger comfort and safety. One must also remember that this type of problem has greatly diminished over the last few years, with the development of the sector and greater profits, leading to investment in modern and efficient aircraft. Practically speaking, although there are no aircraft created exclusively for non line flights, it is fairly rare to find a craft that is structured in the same way for line service and charter service.

For example, the American Boeing 767, produced by the house of the same name, is one of the aircraft most diffused in the world and, as such, is currently used for both air line and charter flights. This craft is relatively young (flying since 1988), and is distinguished by: advanced aerodynamics, digital instruments, a wide fuselage with two corridors in the cabin, and, the thing which particularly characterises it, it has a great flight autonomy. It measures about 55 metres, has a wing span of approximately 48 metres and is 16 metres high. The various types of engines available are made up of two turbofan reactors with a thrust of about 27 tons each, and all offer high silence and low consumption. The B767 has a maximum take off weight of about 180 tons, can take on 73 tons of fuel, has a cruising speed of 850 kilometres per hour at an altitude of circa 10 thousand metres. The numerous versions available permit their use on routes and in markets which are very different one from the other, both in line and charter services. Some examples of this are: the 767-200 version offers a seating capacity of between 174 places, in three classes, and 290 seats in a single class; separation between a seat and the one in front may be from 1,52m to 0.76 m. The 767-300 which is a longer version than the former, offers from 210 to 290 places (but a version with 344 places and an abreast of 2+4+2 exists!). In this way, the user can decide which version best suits his/her market needs and so optimise both profitability and functionality of the craft.

The B767 is currently in service on intercontinental line routes, with two or three classes (e.g. Rome-New York and Milan-Peking) and embarking from about 200 to 240 passengers. The same plane also serves short/medium range routes as Paris-London or London-Milan, with a major number of passengers (up to 260). Charter use of this craft, to various destinations, even remote ones, provide only about 270 places, in one class or at most two. Another difference between the service on lines and charters is to be seen in the number of services installed on board i.e. toilets and kitchens, visual and audio entertainment.

The B767 is part of the fleet of the major air line companies, United Airlines, TWA, British Airways, Air France, and of late, it has been used by charter companies, Condor, Martinair, Air Europe, Lauda Air. One must remember, however that the rapid evolution of the air transport market and the growing search for quality, especially in Europe, is bringing about a standardisation of services whereby they are much the same on charter or a line flights, the difference is in the outfitting of the cabin.

Since 1992, for example, Lauda Air SpA, (the Austrian parent company was founded by the ex Formula 1 champion) the Italian charter company has been operating mainly in the northern Italian market, with its base at Malpensa and using one B767/300ER for charter services and airline services with 3, fifty seater Canadair Regional jets.

The company, which has found its niche in small dimensions, has made the high quality of its service, a strong point and has been successful with some of the principal Italian tour operators. The B767 of Lauda Air has a medium/high density configuration with 24 places in the "Amadeus" (in reality, first class) and 234 places in economy (a total of 258). Seating in the Amadeus Class is 116 cm's. apart, while in economy the distance is 81 cm's. The aircraft has two kitchens (one for each class) and six toilets and screens for films, (analogous with the airlines) in economy and individual LCD monitors, in Amadeus Class. Service on board is in the hands of 9 flight assistance and one of the elements which distinguishes the company, is the quality of its flight service, on which it counts to advance in the world of charter flights.

The "Lauda" product is less economical than that of its competitors but presented as it is on a high quality ticket and optimising as it does on seating capacity, it is successfully satisfying both Tour Operators and passengers alike.

Marco Bresciani

NAVAL CRAFT CRUISE SHIPS

page 70

FROM LINERS TO CRUISE SHIPS

The evolution in marine transport dedicated to tourism and free time has, to-day, reached the top with the great cruise liners, huge hotel complexes whose primary objective is not transport but hospitality, in complete contrast with the fast "liners" at the turn of the century, where luxury was at one with speed and the goal to be reached

To speak of ships and their technical evolution, means retracing the story of mankind. Without a shadow of doubt, the floating trunk may be considered the first means of transport ever, a unique fact, without which the essence itself of man would lose some of its nucleus. The necessity to navigate was the most efficient means of "liberation" from the Earth and of reaching astral dimensions, across a sea which represented the cosmos to our ancestors. "Navigare necesse est" said Enrico the Navigator and this necessity has been given body in a thousand different ways, leaving indelible traces, absolute archetypes, without which the ship would lose its very soul. The remote past is too far away to be remembered well. The recent past is nearer in form, space and substances, and can reveal to us its architectural rhythms in the marine tradition which puts soul into every modern ship. Passenger ships, at the turn of the century, used engine propulsion with "lengthened" funnels and were relatively fast. They were the Lusitania, the Mauretania, the Olympic, the Titanic; they transported the very rich and also the sad emigrants over the ocean, a romantic example of hope that would enrich new worlds. In contrast to the first class, the spartan existence of the other "tourists" aboard, who slept in bare dormitory cabins, had nothing, having spent their entire savings on the journey to fortune.

The first class had everything: luxury cabins, Persian rugs, gyms, saunas, swimming pools and halls which were decorated like princes' palaces. There was no sign of saving anywhere, beauty abounded even beyond the levels of good taste, there was no efficient use of space; it's enough to think that the crew had to do without, to supply the clientele with the maximum comfort.

It was the time of the Nastro Azzurro, the fastest Atlantic crossing and being aboard the most luxurious, the fastest and most evolved ship was a reason to be proud and passengers explicitly acknowledged that the vessel was the most complete and efficient means of taking to the sea.

At the end of the World War, new means of naval transport came into being, more adapt to facing the dangers of the sea. Tonnage increased as did power and speed. It was the golden age of the liners or transatlantics, with their huge bows, to better cross the Atlantic and their long closed "promenades", which offered protection against the extreme cold of orthodromic routes. The ships on Asiatic routes and to Australia, were smaller and more open, arising as they did from different necessities. The Normandie, the Conte di Savoia, the Queen Mary and our Rex were as successful as they were unfairly competitive, sailing away and totally ignoring that one day this almost fantasia world would be swallowed by competition from the air.

By the end of 1945, there were few transatlantics to have survived the War and by the 50's, ship yards had begun constructing smaller, quicker and more practical ships, more adapt to modern times. The United States, a monster of 240 thousand horsepower, could cross the Atlantic in little more than three days and ten hours. The ships were not as sumptuous as they had been but were divided into three classes with a good hotel service and with a first class where only the best was available.

The Italian ships were really beautiful, there was the unfortunate Andrea Doria, the Leonardo da Vinci, the Michelangelo, the Raffaello and many others, but all were expressions of an Italy which distinguished itself with its impeccable service and a style which had no equal.

Then, in a type of irreversible nemesis, the aeroplane arrived on the scene and in the minds of man, the love-child of an ever quicker and more practical world. The great fleets were dismantled, apart from a few survivors: the France, the Queen

Elizabeth, the Camberra. All seemed lost and nostalgic for the old sailors of times past, there was no doubt about it, the aeroplane was more practical.

After a long stand still, the Liner gave way to cruise ships, symbol of a diversified tourist offer, at the beginning of the 90's. This new tendency, confirming a renewed love of the sea, can be best illustrated by giving a few essential facts on the general organization. The Caribbean is the most popular and requested spot and the biggest navigation companies all operate there. The Carnival Cruise Lines is the most representative of the colossals, with 18 ships in service and 24 planned for 1997. The Royal Caribbean Cruise Line has 9 ships (13 in 1997) and the Italian Costa Crociere, which is in the 5th place in the world classification list, with 10 ships in active service.

The number of cruise ships operating in the world, to-day, is 160 (180 in 1997), with a total of 114 thousand beds, which will become 145 thousand, in 1997. The big ship builders, with their percentage of the world market as follows: the Finnish Kvaerner Masa -32.3%; the French Les Chantier de Atlantique - 10.3%; the German Meyer W- 22%, and the Italian Fincantieri - 35.4%, can't help but take note of the new tendency to maximise tonnage. In fact, Fincantieri will launch a 103 thousand ton cruise ship for P&O, in 1997, which compared to the old Queen Elizabeth (86 thousand tons), is a real leviathan of the seas.

The cruise boom is a fact that may be taken for granted, the market shows an average of 10% increase per year, giving a lot of work to ship yards, builders, navigation companies and tourist agencies. But this renewed tendency means and will mean more sophisticated, complex choices and keeping up with the tastes of a clientele which is becoming more and more demanding.

To conclude: the cruise ship has changed with respect to the old Liners, it is more squat but with more capacity, with comfortable and practical standardised cabins. Nothing is left to chance, designers carry out market studies in order to meet the needs of increasing numbers of customers. The ship, as a concept of long range passenger carriage, has gone but despite those who announced the end for good, a new Disneyland astral ship cruiser has been born, where all is possible and where a frenetic earth gives way to the magical world of the sea.

The new generation ships are "ichthyomorphics" and internally, all available space, which was previously dedicated to goods passage e.g. the holds, is now exploited by designers. The wide body structure increases dimensions and the use of light materials for the superstructures provides the most efficient, aesthetic and technical solution for vessels and for those to come. Evolution has changed both practical and aesthetic aspects of a place where the passenger feels pampered and relaxed by details which make one feel at ease and not overcome by an almost untouchable luxury. Everybody can afford a cruise and the ships of the future will increasingly meet the needs of each single passenger.

The old Liner has traded in its speed for a quieter life at sea!

Stefano Impallomeni

NAVAL CRAFT COSTA VICTORIA

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CRUISE SHIP DESIGN

The Costa Victoria, designed with Pierluigi Cerri and Robert Tillberg, is the most important and most recent initiative of the Genoa ship builder and is also a significant example of the evolution of the modern cruise ship

To talk about the design of a modern cruiser, one should firstly underline that they have nothing in common with the great transatlantics of the past. From the construction point of view, cruise ships are no more than hulls to which the form and content of a transatlantic is given but they look like gigantic monocoque bodies which are similar to, and are probably derived from the structural concepts of cargo ships.

Floatation is very different though, because tonnage is huge and control of stability and movement or particular situations, such as sail effect (due to the considerable height which can be up to 35 - 40 metres above sea level) are all managed by computerised systems, which control the entire ship. And this is another important novelty.

The transatlantics were craft whose mission was to link two locations in the quickest possible time, while the cruise ship has a completely different destiny, which is sail tranquilly, preferably by night, between one island and another or through large areas of water, without any definite goal.

The design of a ship of this type has little to do with navel traditions and more to do with hotel planning. The ship has an external aspect which must be described as a type of corporate image, so that it can be identified as pertaining to one company rather than another. The interior is a shell, which in general creates a more or less "hotel" image of the ship and identifies the ship builder.

There are companies with a precise marketing plan who create a type of camouflage, by eliminating all reference to naval craft. In the case of Costa and of "Costa Victoria" in particular, the tendency is the exact opposite, the desire to conceive the interiors of ships where the grand tradition of navel design comes to the fore, as does the language of things navel i.e. the materials and forms used, the coherence between one space and another. We aimed at creating a coherent language within the ship, so that there would be a formal beginning and end. From the cabins to the exterior decks, we have tried to further develop a language which has had a notable influence even on the history of architecture: Rationalism arose from modals which were often navel; Le Corbusier used to invite architects and engineers to study navel designs as examples of essentials and the rationalisation of space.

It's not easy, however to uphold this type of theme, especially in the face of the more diffused hotel marketing models. The idea of luxury is, for example, far from our concept of things, especially when that which is often described as "luxury" is none other than an immersion in kitsch. We find spacial complexity much more interesting, as a form of emotion, than camouflage.

EXTERIOR FORM.

In concrete terms, work on the Costa Victoria began, as with all previous ships, with a draft project prepared by the ship yard and containing the initial ideas on the external form and dimensions of the ship. Then followed the moves and interventions to give the ship a coherent form, not just with the subject "ship" but also with the image of the Costa company, for example the yellow cylindrical funnels, which first appeared with the Costa Classica, as a distinctive sign and somewhat provocative in respect of the fake aerodynamics of other companies. We also tried and with a lot of difficulty but a lot of satisfaction too, to create a ship profile much stronger and more precise in respect of the concept of a ship as a condominium. In reality, all external volume was redefined establishing the positions and dimensions of the "full's" and "empty's", as well as the great transparencies, while trying to take the signs which are produced in the interiors, towards the outside. And so, the attempt to signal the natural sunlight which filters into the large entrance hall of the Costa Victoria, (an enormous empty space which crosses all decks), led to the creation of, probably for the first time in a ship of this type, very large, continuous glass partitions, which permit passengers to look out at the sea all the time and to feel that they are in ship and not in Disneyland or in an hotel.

The attempt to link the interiors and exteriors, is part and parcel of taking the image of the ship back to its traditions, which, for example, caused us to reintroduce round portholes, which have been practically abolished in favour of square windows and hotel like balconies.

THE INTERIORS.

One of the major problems one faces when designing the interior of a ship is the problem of lightness and safety. So there is constant research on materials, which must be

absolutely fire proof and often come from other applications. For example, the most used panel on the Costa Victoria - the Hst from B&B Italia - was studied for the missile industry: it's an aluminium alveolate which, thanks to the use of a ceramic foam, combines remarkable qualities, i.e. lightness, fire proofing and non conductivity of heat (if there is 700 degrees on one side, there will be no more than 60 degrees on the other). Then there were acrobatics trying to find and adapt materials which were aesthetically valid, like the lightened marble, 3 millimetres thick, or the melamine wood and the laminates which have reached levels of photographic precision in their wood markings and colourings, so much so that it's difficult to tell where the wood ends and the laminate begins. Then there's the thin drawings of aluminium finished with pear wood, the stucco experimented for civil constructions or parts which came from the automobile industry.

Research was carried out under extreme pressure on these points, because when you have to "furnish" a series of spaces which are ever more complicated and varied, you have to have an immense amount of materials on hand. Its not by chance either, that we say "rig out" a ship; it's a type of exercise that would never be attempted in civil constructions, because few things are allowed on a ship but it is possible to experience sensations and the quality of space in many different ways. In a building, one is not usually allowed to drill a high number of floors, on a ship one is almost forced to do so. to section her, to demonstrate the stratification of the levels of which a ship is composed; on the Costa Victoria, we managed to do it right to the top, whereas in other ships the maximum reached has been five to six decks, without ever coming out on top.

BIG SPACES.

The entrance hall is the strongest and most certain point of reference of the whole ship, precisely because it cuts vertically through the entire volume and all the decks is very relevant if you consider that on ships of this stance - 75 thousand tons, almost the double of the other Costa's - there is a sort of loss of our sense of direction, which we have fought against, firstly by signs and above all through precise reference points. One of these reference points where everybody returns is in fact the hall, a type of cathedral, the position of which is perfectly well known to all and from which one can trace all the other spaces.

Another important space is at the prow, where the body work in other Costa ships was closed and housed the theatre, here opens into a glass partitioning which lights a large volume on various levels, where the square, a meeting and entertainment area, is found and represents the second important point of reference. This space is another design novelty, unique of its type on a cruise ship, due to its position at the prow of the ship, with the possibility of seeing the sea, and due also to its height and width.

On the other hand, in ships of this size, obsession can set in about what to do and what to put in the spaces available: a theatre was put in on two levels, two restaurants, a night club, a panoramic space, a gigantic casino, a grand bar, a reading space, a thermal centre with a covered swimming pool (another novelty for a ship of this type), a shopping area, discotheque, a play room for children, a conference room, a party room and other bars.

All to offer the ship to the passengers, so that they disperse through it rather gathering in only a few places.

THE IDEA OF TRANSPARENCY.

To the communication between interiors and exteriors and to the creation of precise points of reference, we must also add the search for major transparency in all the other spaces of the ship, which are inevitably quite limited. Creating communication between spaces or decks themselves is always aimed at creating the highest transparency possible. Likewise, we tried to create less walls, less dividers, less visual barriers, to the point of not using closed stairways but light structures with transparent steps. With the same aim in mind, we used transparent or reflective materials in those areas which are

narrow and limited in height and width (quite usual on ships), and which now give the sensation of opening out or of leaning out over the sea.

NAVAL DESIGN AS SCHOOLING.

A ship is an almost living organism: it vibrates, it moves, its architecture in continual movement and so the means of fitting her is necessarily more advanced than any building site. At the same time, as already pointed out, one of the most interesting elements in designing a ship is the search for materials, the way to join them, the type fittings to use. It is highly probable, and once again, as Corbusier used to say, that one should look to navel constructions for civil building. First of all, for the time scheduling: a ship of the size of the Costa Victoria, which is a 100 thousand square metre complex can be built in only two years.

Pierluigi Cerri

NAVAL CRAFT PLEASURE BOATS

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NEW TENDENCIES IN PLEASURE BOAT DESIGN

The evolution in pleasure boat design, especially that of 24 metre motor yachts, regards two different types of craft which are distinct in their use and performance, from the difference in design of both the hull and the engine

Everybody is talking about motor yachts, 24 metre motor yachts, especially in Italy. A 24 metre length is the limit set by the new regulations so that a water craft used for sport or pleasure may be considered a "sports craft", because a craft which exceeds this length has now been classified "sports ship", a tag which greatly increases costs within bureaucratic structures

As a result, "the 24 metre", has become a measurement of reference, which is significant both from the maintaining cost and the design point of view; designers are rethinking and evolution is under way.

There has been a continuous evolution in both the interior and exterior design of the motor yacht, since the 50's and the principal interpreters of the new tendencies have been the Italians, who have been joined more recently by foreign contributors.

If we examine the evolution of the motor yacht, not from an aesthetic or style point of view but from its functional concept, we can see that in the last 40 years, there has been a consolidation in the market of basically two types: displacement yachts and plane yachts. The two differ in both hull and engine characteristics, which in turn determine two different ways of usage.

The hull of a displacement yacht, at cruising speed, is basically sustained by "Archimedes' thrust": maximum cruising speed is about 12/14 knots, it offers contained engine and fuel consumption, excellent autonomy and a relatively high displacement.

The hull of displacement motor yachts ensures that the craft can take on rough seas, travel by night (their speed doesn't cause concern for safety), and face even ocean crossings, thanks to the amount of weight they can carry, which is fairly high, given the amount of fuel they take on board. This type of yacht has been adopted mostly by American and northern European ship yards.

The "plane" yacht, on the other hand, has a V shaped hull which, at cruising speed is dramatically sustained by a hydrodynamic thrust, resulting in a cruising speed of minimum 20 knots, high engine and fuel consumption, and a necessary containment of weight. This craft is, therefore, not suitable in high seas as its safety depends on the speed with which it can reach safe waters; autonomy is limited, in the region of 4 - 5 hundred miles, due to the impossibility of embarking any great amount of fuel and its high consumption rate. It is important to point out that it is not sufficient to reduce "the gas" in a plane yacht in order to

transform it into a displacement craft and so obtain similar performances, because there are problems related both to the type of hull and the type of propulsion, problems which would take too long to explain here.

The plane type of craft has been adopted more than the displacement yacht, especially by the Italian ship yards, which are definitely the world's major producers.

The marker, though, has begun to feel the need to for a type of yacht which unites the better qualities of both the plane and displacement yachts; all due, either to a refinement of "nautical culture" or to the natural desire to evolve functionally.

What seems to be required is a yacht which has the safety and autonomy characteristics of the "displacer" but which can reach the speed of the "planer" for quick transfer over very short distances.

A solution of this type has been found by studio Giorgetti & Magrini, by using a hull and a propulsion system which has been well tested in the military craft field i.e. navy patrol ships and some types of military supply vessels.

The 24 metre craft, illustrated here, can reach the speed of 24 knots, with 2,400 installed horse power, for a 5-6 hour transfer and at the same time, can take on a crossing of 3 thousand marine miles, maximum displacement, at a speed of about 10-11 knots, with the maximum safety. The technical solutions which permit this performance, have moved away from an engine regulation system to the adoption of a propeller system, which can vary its efficiency according to requirements, to the use of hulls without the pronounced "V" and with active stabilisation.

The exterior design is in line with the new functionality of the yacht, gone is that typical "motorboat" line and a more sober theme has produced an exceptionally developed freeboard, a fine lined bilge at the prow, conditions necessary to be watertight and safe.

Giorgio Magrini

ROAD VEHICLES ITALDESIGN COACHES

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GRANDTOURISM ACCORDING TO GIUGIARO

The design of coaches is similar to a balancing act between cost, market reality and technical potential, where the field of manoeuvrability is very limited, where dimensions are bound to the centimetre, but where innovative proposals can be found

Designing a coach is different from conceiving a car. The vehicle is a big mass, and especially at short distance is perceived almost as the façade of a building.

Viewed from the lower frontal or when seen in a three quarter prospective, the junction between the upper struts and the roof, tends to widen and deform the summits and so the designer has to take this into account and introduce corrective optical measures.

After some experience as a designer of coaches for Menarini (with the obligation to create a dynamic shell that wasn't too dynamic, so that the second life cycle of the coach could be foreseen for public transport in the country), I had the good fortune, in 1981, to be offered the chance to create an experimental prototype which associated new architectural concepts with valid technical content. "Italia 99" -light bodywork materials, a modular system of assembly using transversal strips, the use of rototranslator doors for the baggage compartment, vertical translation for the engine bonnet etc. - was soon transformed in "Volvo Italia 99" and has continued to give satisfaction to its producers; we have recently followed its re-styling. At the beginning of the project, I had decided to leave the bodywork clean, as with a car, using only two colours, metalised grey for aluminium parts and darker anthracite grey for the lower parts which divide the volume, without the disturbance of graphics or confusing colours. I don't feel that I'm being arrogant if I say

that "Volvo Italia 99" has become a school over the years. I can't help liking the fact that the cabins of Renault's new generation of industrial vehicles, have that groove between the bumper group and the frontal surface which breaks down the mass of the compartment, which is now in autonomous suspension from the chassis.

A project for a coach is again different from that of a car because of the lower numbers produced and the actual manufacturing process is always more artisan; i.e. the interior and exterior finishing cannot be attempted with sophisticated equipment moulds etc.

The solutions are found with "cosmetic" panel beating, which gives an aesthetic touch to single components without incurring excessive costs.

Interior decoration is chosen from what the market offers: seats have undergone enormous transformations from the ergonomic and finishing point of view, but that the producers supply more than one customer and the variants that exist may be seen on competitors "Grandtourism" coaches.

It is, however, the exterior aspect of the coach which gives the designer the greatest possibility of intervention and which allows project improvements to be more up-dated and accelerated than those of a car. Even if space must be respected to the nearest millimetre, there is still room for imagination in inventing new and courageous junctions between windows and belt lines, original connectors, matching of roll bars and the tail mirror, which distinguish your coach.

The hardest hurdle to overcome, is that of economics imposed by the end user; the purchaser, mindful that the number of places influences his gain, he constantly requires more seats. The result is cut backs on space between the backrest of one and the vital space of another, which makes long stays on board uncomfortable. There are also very few requests from tour operators for a compartment which would be similar to business class on an aeroplane. Small "sitting room" areas do not really address this problem.

There are problems too, on the technical side, because some aesthetic innovations which are coherent with the current design tendencies and the ways of intervening on the masses are actively resisted by the manufacturers. Just as occurred in the world of the motorcar, the proposal of certain curvatures or junctions which are too daring implies making a series of changes in the production process, more testing and laboratory experiments and the investment in equipment which cannot be depreciated in the medium term.

Another very important and binding role in the design of coaches, is national and international legislation and standards: a good example is the form and positioning of the rear mirrors which often look like big ears or spades stuck into the general image of the coach and are often very unattractive. Only by changing the regulations will we be able to make any substantial changes or even eliminate the ears; modern technology has already created video cameras which can permit a perfect vision of what is going on outside and sensors which can signal the presence of an obstacle to the nearest centimetre, while manoeuvring a vehicle.

Having established that, for a coach designer, the margins of invention have always been critical, there are however areas where one can have fun; the windows, the master sections, the relationships between glass and metal, the front and posterior optical groups. Colour and graphics play important roles too, more for a bus than for a car, even if Fiat's Bravo and Brava have invested heavily in this message, which is becoming more and more fashionable.

Giorgio Giugiaro

ROAD VEHICLES IVECO'S GRANDTOURISM

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IVECO'S NEW GRANDTOURISM

Bus of the year in 1995, Iveco's new Euro Class HD is another step forward in the process of renewal of the range of buses and coaches, begun in 1992, at the Turin company.

It is also a significant example of the formal and technological evolution of this type of vehicle

The average yearly demand in long range interurban buses in Europe, regards about 12 thousand units, of which 7 thousand are at the service of tourist transport. Since the end of 80's, the demand has been moving away from the Normal Decker, which are less than 3.5 metres high, to the High Decker, which is higher, with a greater capacity baggage boot (in the order of 10 metres cubed) as well as greater visual and living comfort.

In this context, all the major automobile houses are producing at least one HD, whereas up to a few years ago they were the heritage of very few companies.

Last to venture into this segment of the market, Iveco (it did have one model which was completely produced by Orlandi) began, in 1992, with a renewal plan for the range and the presentation of the new "Euro Class" interurban bus. The class specifications were: 10.6 and 12 metres in length, the commercial effort pivoted around the star of the fleet - Euro Class HD, 12 metres long and 2.5 in width, available in a 46 or 50 seat version and receiver of the 1995 "Bus of the Year" award. Iveco hopes to conquer the European segment of the HD market, which accounts for 70% of the demand (about 5 thousand are registered every year). Iveco's "grandtourism" is a valid example of the evolution in design and technology, which has taken place in this sector, over the last few years and which signals some important steps forward.

The exterior, for example, redesigned by the "Centro Stile Iveco", is a parallelepipedon, fragmented and rendered more articulate by the creation of a semi-spheric body at the anterior which visually underlines the difference between the driver's seat and the coach itself, where the passengers are and where the horizontal string of ample windows has been maintained.

Substantially, in the presence of a tendency to square up, here there is the search for a distinctive sign in a more rounded and articulated line, where the front section of the vehicle becomes the producer's factory and new range trade mark. There are of course concrete advantages to this evolution in design, especially in terms of aerodynamics resulting in reductions in consumption and both internal and external noise.

As with all the other vehicles in its range, the Iveco HD respects the European Union's regulations on both emission pollution and overturn resistance, which not only underlines the positive role played by the regulations in determining the evolution of technology, within the Community, but also the ability of the better constructors to join the spirit of the law and keep below the fixed limits, often earlier than required.

The interior of the HD is in line with all the solutions and services which are by now typical of the major "grandtourism". (finishing by Orlandi) The driver's area is ergonomic, conceived to facilitate function monitoring and use of instruments; should it be required, there is also a rest cabin at the disposal of the driver (1.95 metres in length, and inserted under the stairs, it is equipped with an electric fan) and a wardrobe for clothing.

The tour assistant's area has been designed as a bridge, with a microphone, a good sized object holder, controls for the video-recorder, TV, and stereo. From this area, the assistant can supply music, speak to the passengers and show films or TV (there is a monitor at the front and at the centre of the coach). There are two fridges, with a total capacity of 100 litres (about 150 tins), a toilet, a minibar with a coffee machine, a boiler and hand basin and two sinks (a food warmer may also be installed), a cellular GSM phone, European range, are at the disposal of the passengers.

To supply the most in comfort, essential in a vehicle which travels 100's of kilometres per day during long hours, special attention has been paid to the furnishing and the air conditioning system, with the result that one would seem to be in a small plane on wheels. The interior baggage holds are similar to those of a plane, while the seats are ergonomic, with adjustable foot rests, magazine holder, table and glass rest, rubbish bin and an expansion button. The seat coverings

are sound absorbent and are easily cleaned; their anti-shock capacity, coupled with the absence of sharp corners in both the furnishings and the structures, contribute to the increase of passive safety.

The frame of the Euro Class HD coach, is composed of a tight chassis in aluminium, to which two separate bogies are attached, the anterior one is directional while the posterior holds the engine and a body which is almost all made of synthetic resin. Tight chassis technology is not new on this type of vehicle, whereas the steel used (self-passivation "Corten") and the extensive use of polyester resins is unusual; this resin helps prolong the life of the vehicle itself, so much so that the bus manufacturers have supplied a 10 year corrosion guarantee with each coach. If, as we know, resins have a long life, the use of "Corten" steel for the chassis (made from open section tubing), guarantees the same resistance; if the case of damaging, the paint oxidises on the surface, creating a protective coating against external aggressive agents, as happens with another long life aluminium. In fact, the baggage boot doors are made of aluminium. The rest of the bodywork is made from a sandwich of epoxide resin and fibre reinforced polyester modular panels, with interposed insulating material.

The solution of using modular panels, permitted by the tight chassis, creates a number of advantages from the maintenance point of view: damaged panels can be substituted in a short time. The idea of placing the mechanics, electrics and pneumatics on two separate bogies, which were prepared apart and were assembled at the end of the production cycle, makes maintenance easier, the bogie needing repair work can be substituted by a spare.

Another aspect of the Euro Class which is worth mentioning is the production procedure developed in the modern factory of Valle Ufita, near Avellino.

Quality and precision is guaranteed by a computer assisted system; laser and plasma plate cutting machines can cut to the thickness of only 10 millimetres; there is an automatic plate positioning system; profile line; wafer drilling and sectioning machines (difficult to carry out with old technology) and robot soldering assisted assembly.

TRAINS SWITZERLAND

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THE SWISS WAY TO QUALITY

A series of trains which the Swiss have begun circulating, demonstrate how a modern response is possible, without being too folkloristic, to the use of trains for tourism and there is a rare and very high level of attention paid to the needs of all users, including the "weaker" categories, such as families and children

Of all the means of transport available, the train is the most classical, it has the possibility to concentrate both the quality of travelling long distances at a good speed and in comfort with that of short distance trips, while experiencing and exploiting the natural beauty of the places visited. Faced with the fierce competition between the two main transport protagonists, the car (due to its personal and "local" qualities.) and the aeroplane (due to its technology and service), the train has recently been developing both from a quantitative and quality point of view. There has been an increase in tracking and destinations, in transport capacity, economics, etc.) while quality enhancement has taken place through diversification and upgrading of the service, comfort, ecology and energy saving principles.

Within this general re-launch of the train, some particular proposals designed to satisfy or even to create customer needs, are worth examining.

THE PANORAMIC CARS.

A particular solution is the panoramic car, adopted by some private Swiss rail companies. This is a modern, not folklorist, response to a tourist demand which has been developed especially in the Confederation by Fulka-Oberalp, Brig-Visp-

Zermatt, Ferrovie Retiche and others. The "Glacier Express" which travels the length of southern Switzerland, is composed of cars produced by Breda according to Pininfarina designs, in which the contemplation of the countryside the passenger is passing through, is privileged: seats are placed traditionally in the only open space on the train, while all other obstacles to viewing (including baggage racks) have been removed, giving importance, in all directions, even upwards to ample windows and transparent skylights. Baggage is gathered at the end of the car, in transparent spaces, allowing one to keep an eye on the luggage from one's seat. All internal fittings are transparent too, so as not to interfere with the view; only the technical equipment (lighting, audio plant, air conditioning) is contained in an opaque shell. These trains, which carry 48 passengers each with no space to spare, are accompanied by a bar version, for passenger refreshment. All in all, this is a sporty and functional train, if not exceptionally significant, easily recognised from the outside by its compact and airy profile.

Similar cars, produced by Schindler, are being used by the Federal Railway, which have taken advantage of this opportunity, developed by private enterprise.

Breda has made another panoramic train, this time for Mob (Montreaux-Bernese Alps): the same structure as the one above but decorated and finished in a completely different way; it's more original internally, with seating in open spaces, with divans to favour the formation of groups, such as families, committees etc. and there are small tables for meals. The interesting points are: the ergonomic study, the spaciousness of the central corridors, the choice of colours (neutrals that are restful and which don't distract from the view outside), the wide windows along the sides and in the roof, as already described. The most original element of all, however, is the driver's cab (the engine at the centre of the train) placed as it is in a dominant position above the passenger zone, extending outwards. A splendid rounded "bridge" permits a frontal view and at 360 degrees, through the window of the trains tapered "muzzle". The entire group, with that original car at the head and the panoramic cars all in a row, looks both sober and elegant, functional and dynamic.

CARS FOR FAMILIES AND CHILDREN.

There's another proposal from the Swiss which deserves a mention; cars in which, as well as the normal seating arrangements in compartments, opening onto the central corridor, a large space has been created in the middle and dedicated to children at play. There's a swing, a slide, a corner for reading and story telling, one for construction and assembly work and group games. In another version, the area is at the head of the car, with a rocking horse, a table for painting and drawing and other past times. The partitions which surround these shiny spaces are in part transparent, to allow surveillance from the external corridor. This praiseworthy and original proposal also supplies an infant changing table.

Again, with the family in mind, the Swiss railways have given the restaurant into the hands of the fast food chain, McDonalds; the car is organised, apart from the normal space dedicated to service and staff, into a large well equipped imaginatively decorated area, with tables to seat 36 people, 8 counters for stand up meals, and a kitchen which occupies a good half of the length of the entire car.

A very particular proposal, McDonalds gains from the publicity given to its ecological treatment of restaurant waste, the service is so far limited to the Basil-Geneva and Geneva-Zurich-Romanshorn (lake Constance) lines and has been running since 1992.

All contributes to the image of proverbial Swiss railway efficiency, but with a note of youth and dynamism and let's face it, a desecrating commercial and consumer modernism.

THE HOTEL TRAINS.

Another good solution comes from a consortium - the Dach Hotelzug AG- formed by the Austrian, German and Swiss rail companies, with a fleet of "hotel" trains, with cars for overnight travel but with a high standard of comfort during

the day, just as one would expect in a travelling hotel. The City Night Line, as the service is called is divided into two categories: Wlab - superior level "Deluxe" and "Hotel"; Wlb - the inferior tourist or "Comfort" class. The compartments are equipped just as an hotel room, with two beds, toilet, wardrobe with mirror, cupboard space, a small table and two easy chairs and baggage space. The level of furnishing and design is exceptional, especially the lighting, sound-proofing and the construction details.

The real novelty lies in the conception of the cars, which have two levels, with two lines of cabins, one above the other (the Wlab has 8 + 26 beds and the Wlb has an incredible 44), all connected by a series of internal stairways and accessible to the car through the longitudinal corridor, which is in the middle between the two levels of rooms. This lay-out (with two entrances in one end only of the car, a central space for instrumentation, a compartment for train personnel with all that's necessary to prepare breakfast and refreshment, two public toilets, and other spaces dedicated to material and equipment) confers a very original aspect on both the internal and external view of the car, with a curious bilateral asymmetry of the windows and the service hatches. Other technical details include a video security system along the corridors, an inter phone system and a radiophone service between each cabin and the assistants, who in turn are connected to the driver's cab. The trains, which are painted midnight blue with yellow writing, on the outside, travel in couples to exploit some centralised services and a new restaurant and bistrò, with a modern profile and a lot of space inside. The City Night Line has been in service, since May, on the Vienna-Zurich and Vienna-Cologne lines. In September, the service will be available on the Zurich-Basil-Hamburg line.

Stefano Andì

TRAINS RISTO-BAR FS

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RESTAURANT/BAR CARS ON ITALIAN RAILWAYS

A positive sign of the renovations and up-grading of the structures of the Italian railway FS, may be seen in the restructuring of the old self-service cars and their transformation into a mix between a snack bar and a restaurant (risto-bar) in line with and often improving on the experiences developed abroad

The recent restructuring of the self-service cars of the Italian national railway - carried out by the Rolling Maintenance division, Heavy Maintenance and Firema - was aimed at creating a mixed service car where, together with the traditional hot and cold meals served at set times, there would be a snack/café service, at the disposition of the traveller throughout the entire trip. In this way, and basically for the first time, the national railway, offers its customer (especially that of the Intercity), a polyvalent service, in line with other countries and in the conditions necessary to meet the needs of many more people with an improved offer, over the entire journey. A restaurant service, even though valid, has its limits: limited seating, opening hours (breakfast, lunch, dinner times) and the number of choices available (generally not more than two per meal). It should be said, that for some years and on some trains, the old self-service was open for the entire trip and offered a bar service, therefore the new service is none other than an increase in capacity, of what was already under way i.e. the amplification of a service, which addresses the customer who would never use the restaurant or the self-service but prefers quicker and more economical snacks. This has been confirmed by the personnel in service and reconfirmed by the fact that organization is evident and there has been an increase in customers.

The car is divided into three distinct areas: the preparation and distribution area, at the centre, and two eating areas, one dedicated to the snack bar and the other to the restaurant, at

either end. The distribution area is a self-service, with the kitchen, spaces for the exhibition of hot and cold dishes, at one end, the cash desk in the middle and the bar counter at the other end. Right beside the bar, is the area dedicated to quick snacks: there is a counter running along both sides of the car and eight high stools fixed to the floor. Beyond the kitchen, is the self-service area, which is no longer organised with counters and high stools, as it was before, but is now in a restaurant style, with 34 places to sit, 7 tables for four, 2 for three and seats which are fixed and flip up.

REGULATIONS EUROPEAN COMMUNITY

page 106

TOURISM MOVES EUROPE

The European Community treaty, has recognised, for the first time, that measures are necessary in the tourist sector (art. 3t) and has provided for the examination of the theme, on the basis of a report which will be presented by the Commission and prepared by the Conference of State Members Representatives, which will be held in 1996

This important innovation contained in the treaty signed at Maastricht on February 7, 1992, is indicative of a triple awareness: on one hand, the economic importance of the tourist trade for growth and employment within the Union, on the other, the compatibility between the subsidiary principle and the utility of action on a Union level in this field (which is not within the Communities exclusive jurisdiction) and finally, the indispensable co-ordination of the actions required in the three sectors involved i.e. tourism, protection of the consumer, the natural and cultural heritage.

The discussions preceding the treaty revision, which began with the informal meeting of the then Ministers for Tourism of the member countries on January 29, 1990, in Milan and continued with the examination of the contributions made by the various states in preparation for the intergovernmental conference (Italy and Greece in 1991, Luxembourg in June 1991 and Holland in November 1991), not to mention the European Parliament's resolution of July 15, 1991, on a community policy on tourism, have all now been brought to a close. However, the treaty clarifies neither the specific aims nor the means by which the measures in the tourist sector depending on Community initiatives should be activated, as it did for other sectors which were revised at the same time e.g. culture (art. 128) and consumer protection (art. 129A). This is certainly due to the complexity of the field of activity covered by the notion "tourism", the different means of managing the issues and the interaction of tourism with numerous other community policies.

The most recent news is the Green Book on the role of the Union in tourism - published by the Commission, April last and now being examined by the single states. This ties in with the informal discussions in Athens in 1994, and the aim of the document is to stimulate a general reflection on the role of the Union in favour to tourism, with respect to the report which the commission will present to the Council by the end of 1996.

Without intending to forecast the conclusions of the work in progress for the preparation of the intergovernmental conference, in 1996, nor foresee the Commissions intentions in this context, the Green Book, aims at opening consultations on the role of the Union in tourism, among all interested, by identifying the actions already taken by the Community and the structures at its disposal, by studying in-depth, the added value of a policy at Community level and finally, by presenting the prospects of evolving in this field.

The necessity to involve a large number of subjects, both private and public, operating at different levels (regional, national, European and international), all goes to show the multi-disciplinary and transversal nature of tourism and its complementary position with various sectors of activity, which explains why numerous policies have impact on the sector.

In reality, according to the European Parliament and the economic and social Committee, a tourist policy could contribute to demonstrating the complementary nature of the means at the disposal of tourists and enterprises and favour the articulation of the various levels of economic support to the sector.

The resolution on tourism in the years 2,000, January 18, 1994, following the report of Commissioner Cornelissen, states that "tourism should be considered a priority, strategic sector in the economic development (within the Community) and as such should be considered an industry in its own right" and that "tourism represents an essential sector in the economic growth of the Community, but it also constitutes an undeniable social factor i.e. the recognition of the diversity (in culture, way of life), as well as the reduction of regional differences".

The European Parliament, in the resolution adopted following Mrs. Diez de Rivera's report, declared its surprise that: "tourist activity, which concerns all European citizens has been to date, analysed, with few exceptions, only from an economic point of view," and declared its conviction that "tourism could play an increasingly important role in the creation of the fundamental concept of European citizenship". This resolution "maintains that tourism is not only one of the most important industries of the Union but also and above all, an activity which is important to all European citizens, for whom it represents an irreversible social conquest, from which one expects improved quality each time" and that "it is logical to place tourism at the centre of a community policy on tourism".

COMMUNITY RESPONSE.

In the carrying out of its duties, the Community has various legislative instruments at its disposal, some of a mandatory nature (regulations, directives and decisions) and others of an advisory nature (recommendations, statements and advice). These acts may be operative (plans of action, work schedules with priority zones) or they may be rigorously obligatory (when both duties and rights of both parties are defined). They may be incentive (proposals which the Community would like to see being applied in absolute freedom) or there may be a combination of some or all of the above elements. Within the framework of amplified national co-operation, the Community could also adhere, negotiate or propose conventions and agreements in specific matters, with international organisations or third party countries. Finally, and in respect of those duties for which neither the co-operation nor the collaboration with the private sector or economic and social operators, nor even administrative decentralisation have been enough to find a solution, the Community has decided to institute decentralised community organisms, where there is a well defined field of activity which doesn't interfere with the powers of the institutions over the Community policy in question.

DIRECT MEASURES.

One of the direct measures taken was the setting up of a first Community plan of action in favour of tourism (EEC decision 92/421 of July 13, 1992, based on art. 235 of the treaty) which lasted 3 years, from January 1, 1993. The priorities identified within, gave rise to a number of pilot projects, especially on the theme of rural, cultural and social tourism and professional/environmental training. Each of these projects offered the opportunity to tourist operators, from various regions and countries to collaborate. Since 1990, and in accordance with art. 213 of the treaty, action has taken place within the biannual programme for the development of Community statistics on tourism.

INDIRECT MEASURES.

Above all, these include, the 5th. Community action programme on the environment and various directives, in particular those dealing with the assessment of project effect on the environment, the quality of natural environments, and the protection of nature. The Community is also a signatory to international conventions directed to regions which are heavily involved in tourism, e.g. the conventions for the

protection of the Mediterranean and the Alps.

Actions in favour of culture, as those provided for in article 128 of the treaty, regard the protection of cultural heritage in the context of the Community action programme "Raphael". Tourist enterprises have benefited from a group of measures provided for in the EEC decision 93/379 of June 14, 1993, which provided for a pluriennial programme of actions to reinforce priorities and to assure the continuity and consolidation of enterprise policies, especially those at the service of the small and medium sized companies.

On the subject of research and development, with reference to the principles set out in articles 130F and 130G, a "tourism information marketing" project has got under way, as have various pilot projects and demonstrations of tourist information through electronic services (Impact); a specific research programme has been opened, in this field, on "Technology for the protection and restoration of the European cultural heritage". The Environmental and climate (4th programme frame of R&ST) can allow for projects regarding tourism and the human dimensions in environmental changes, aimed at improving the political bases of actions directed at upholding the development that Europe can sustain.

Measures for the creation of an internal market, once they have been activated, facilitate an increase in exchange, stimulate inter community tourism, facilitate the birth of a sole tourist destination (the European Union) for extra-community guests. An example of this is the elimination of custom check-point measures along internal borders, which have been applied by almost all signatories of the Schengen agreement. Progress on the completion of the internal market (free circulation of the work force, rights to settle and offer services, elimination of fiscal frontiers) all facilitate movement and the circulation of tourist professionals from one side of borders to the other, the creation of a trans-national tourist industry, all of which is destined to consolidate the dynamism of European tourism.

Various regulations have been adopted to facilitate border crossings e.g. the 3925/91 and the 1832/92 on checks and baggage transport, fiscal directives (91/680/EEC and 92/12 EEC) aimed at facilitating tourist purchasing beyond their place of residence, with tax free concessions too.

Another stimulating effect of the Community directives on the competition and growth of tourism has been the creation of an internal transport services market. The White book, which deals with future development of Community transport policies integrates an improvement in and a more rational use of infrastructures, improved safety standards, and better environmental protection.

Tourism could also have a special interest in the Community actions under way to create and develop trans-European networks in the field of transport, telecommunications and energy, provided for by article 129B of the treaty.

The Commission, in applying competition regulations and sanctions, is particularly attentive that neither member states nor companies attempt to falsify tourist market conditions with the view to distorting reality and delaying or impeding a balanced development. Some agreements or help can be negotiated if, for example, they accelerate structural adaptation of the tourist industry or they contribute to regions which are lagging behind. Competition policy has helped the tourist trade, through the creation of a real space without frontiers, economic or social cohesion, thanks to the opening of markets protected by cartels, abuse of dominant positioning or by State help.

The second three year action plan, with respect to article 129A, has given rise to work on selling at a distance, consumer justice, time sharing of buildings (94/47/EEC) and abuse clauses (93/13/EEC). On the other hand, protection of tourists as consumers has already been regulated by Council recommendations 86/665/EEC and 86/666/EEC, relating to standardised information, fire protection in hotels and a directive on the subject of "all included" trips (90/314/EEC).

Funding has been aimed at economic and social cohesion, as defined in art.130A. Help has been directed to regions with

major delays in development (objective 1), regions hit by industrial decline (objective 2), and regions involved in rural development (objective 5).

These areas have priority in the allocation of structural funding. Tourism has priority status within the framework of support, in operative programmes and planning documentation. Some actions are about to begin and are based on special Community initiatives (Leader, Interreg, Regis etc.) in favour of regional development in the Union. The programmes Envireg, Recite, Pacite and Overture, likewise, have sections which provide opportunities for tourism: the creation of networks, the experimentation of new forms of action geared towards the exchange of experiences, in particular in the field of sustainment and local initiatives. In the period 1989 - 1993, according to the region and the objectives, tourism received from 2% to 20% of structural funding to a total amount of 3 billion ECU. The aid, in the form of co-financing, was directed to investment and infrastructure projects for tourism, as well as actions to enhance the cultural and historical resources in late developing regions, to improve the tourist structure's offer, and to develop new activities in the regions in industrial decline, to develop facilities, protect the environment, diversify activities and promote tourism in rural environments, especially in terms of creating a complement to farmers' incomes.

Important actions have also got under way, in favour of training and instruction, both through the European social fund and through initiatives provided for in articles 126 and 127. The "Force" (continuous training) and "Petra" (initial training) initiatives, provided human resources development while the "Leonardo" programme just begun, should prolong Community training through its trans-national exchange and pilot projects.

Extract from the European Community Commission's Green Book, dedicated to the role of the Union in the matter of tourism

REGULATIONS ITALY

page 109

A POSSIBILITY TO BE EXPLOITED

Legislation does not provide a precise definition of measures on transport with regards to tourist problems, but there are a series of references, which, if taken up could lead to an ample evaluation of the sector

The General Transport Plan doesn't dedicate a specific area or a special methodology to the relationship tourism-transport.

This is perfectly all right, since a different attitude would

almost imply that the demand for transport for tourism was not a normal and fundamental component of the demand in its entirety.

The Plan refers to the evaluation of the tourist industry, indirectly, e.g. in the improvements necessary in inter-city connections, in modal re balance, recovery of environmental aspects, energy saving and the pressing need for capital investment in urban transport.

The criterion implies that, following a correct readjustment of the transport world, there will follow an interdisciplinary link between many sectors, that of tourism included. There have been, however, very few legislative provisions of any importance, in favour of tourist transport on a national level.

There is, fortunately a marked difference of attitude on local, regional and basin level.

The territorial situation, in itself, implies the necessity for a series of checks on the transport response in respect of the need to evaluate local tourist potentiality from the environmental, historical and artistic point of view. It's evident that in some areas where demand is weak, there will be little possibility to exploit the richness that tourism can bring, without the help of specific intervention.

This concept is not and must not be seen as the consequence of an "assistance" mentality, but should be directed towards the just contribution in helping an area exploit a series of opportunities which can create work, artistic retrieval and all that is required to bring out the cultural and environmental quality of a place.

Some Italian regions have done a lot in this field, it's enough to look at the alpine regions, for example, with their improved accessibility and ski plants, or the Umbria region with its decisive contribution to the accessibility to some of its historic cities i.e. Perugia, Orvieto and Cascia (see page 50-56 for details). But the ideas which come to mind regarding this problem, tend to throw out what has just been said: the tourist potential of this county is so obvious and enormous that it is this sector itself which can supply the principal impulse to the development of collective transport.

It is optimistic but realistic enough to imagine that a pilot experiment, with a financial contribution from both public and private sectors, to create infrastructures designed to meet wider demands than that of tourism, and which could not justify the expenditure on their own, without the advantage of a tourist offer being enhanced, could be explored.

The fundamental element in this is that the local authorities are quick about seeing the opportunities and about financing them too.

Let us not forget that the great roads constructed by the ancient Romans were not solely for bellical reasons but were also for access to incredible natural beauty at a time when tourism was certainly more élite than it is to-day.

Amedeo Gargiulo

QUARTERLY
OF TRANSPORT
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Publisher
Scripta Srl
8, via Canova, 20145 Milano
Phone: +39 2 313525
Facsimile: +39 2 313563

Editor
Fabrizio Bonomo

Scientific Committee
Chiara Borgnolo
Rinio Bruttomesso
Mario Castaldo
Leonardo Cavalli
Giulio De Carli
Amedeo Gargiulo
Giancarlo Laguzzi
Enzo Porcu
Gianni Scarfone
Mario Virano

Administration
Piera Galli

Editorial Assistant
Anna Biserni

Graphic design
Gisela Ernst
Marco Matricardi

Translations
Colour Computer srl
Jennifer Kane

Consultant
Ars Media Communication srl

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Detail of the rest area at Jugy,
on the A6 Paris-Lyons
motorway, which has been
equipped for children's
amusement and play (photo
Saprr - Bruno Bade).

The impact of transport and
its infrastructures on the
environment will be the main
subject of the next issue.