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THE SPATIAL POLICY FOR THE STRENGTHENING OF EUROPEAN SOCIO-ECONOMIC COHESION

Some Critical Approaches

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THE SPATIAL POLICY FOR THE STRENGTHENING OF EUROPEAN SOCIO-ECONOMIC COHESION

Premise

The policy for the strengthening of socio-economic cohesion in the European Community, promoted by the Single Act and the Maastricht Treaty, is - as conventionally considered - firstly a policy in which spatial dimension prevails. The socio-economic cohesion to improve or strengthen is seen as between various countries and regions of the Union, and not - let us suppose - between different social classes, or different professions.

How may spatial policy give a contribution to the strengthening of of socio-economic cohesion between the various areas and regions of the European Union?

This is one of the questions to which the author - some time ago - attempted to respond (on the invitation of the European Commission together with other experts and with the coordination of the Stuart Holland), in order to underpin a European policy aimed at the strengthening of socio-economic cohesion. This is also the matter that is discussed in this contribution, which in fact has been extrapolated from the report prepared for the European Commission, and concerns directly aspects of spatial policy on a European scale.

In fact socio-economic cohesion on a European spatial and territorial scale is examined here from three points of view: urban planning, environmental planning and transport planning.

Part One

SOCIO-ECONOMIC COHESION AND URBAN PLANNING

1.1. Urban Areas and Economic Progress

The urban function and the "city-effect" are therefore - as has been said - one of the main realities on which economic and social cohesion of the Community can be effectively measured.

This fits well with the consideration that the city is becoming more and more the terrain on which, today, the *real* development of a community or of a country is measured.

In fact, the rethinking of the development policy for "backward" areas as well as for the areas "in decline" (regional policy) today is founded on the observation (which is becoming increasingly common in the literature on development): that, today, one of the most important factors for economic progress is a *good urban organisation*; and that - conversely - one of the principal factors (if not *the* most important) responsible for economic backwardness on the one hand, or economic decline on the other, is *the absence of satisfactory urban organisatio*[n].

Development theory has always striven to discover - since it abandoned a purely academic, historiographical analysis - to concern itself with "development policy, or planning", the "prime factor", or the basic factor, of development itself; to suggest a sort of "big push" for the policy itself. And for many years the prevailing response was: industrialization.

For many years, urban development was seen as a *"posterius"* to industrialisation, a literally "secondary" factor.

Today it has become increasingly obvious that cities should be considered a fundamental "production factor". Where the city functions well, production and productivity also improve; where it does not - for one

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[T]his argument has already been sustained for some time, but it has not been assimilated. For a selective bibliography of the first studies on the matter see Hodge (1969). We would also refer the reader to the essays collected by Warner Jr. (1966), among which an essay by J.Gottmann (1966) on "the growing demand for urban confort".

reason or another - production also goes into crisis.

Furthermore, with the general crisis which has hit basic production, and "heavy" industry (which ranges from mining, through the metallurgy and mechanical industry, to the basic chemicals industry) it has been observed that there is a close relationship between this crisis and the decline also of those areas which are being degraded because of an *"excess"* of industrialisation.

On the other hand, the "new" industrial locations (technologically speaking, ever more "foot loose") above all, search for environmental and urban conditions, rather than anything else. The presence of "amenities" becomes a localizing factor which is much more important than sophisticated financial incentives.

"Town" and "Environment" are becoming two essential terms for the constitution of "regional" policy; and, therefore, of any policy directed towards the strengthening of economic and social cohesion in the Community. This is why both City and Environment must become the principal protagonists of those reforms of structural funds aimed at increasing economic and social cohesion.

_*Agriculture, Industry, Employment, Social Services, Transport* etc. are sectors of human activity which should find in the *Environment* and in the *Town* their programmatic "synthesis", and therefore their critical finalisation. Social well-being itself - which traditionally is the "end of all ends" of every economic and social policy - loses all significance if its not viewed simultaneously with *urban* and *environmental* well-being.

1.2. A New Concept of the City

Also the concept of the city has been greatly modified in the culture and reality of modern times. Or rather it is the city itself and its specific needs which have altered.

In the past, towns or cities were considered nodes or centres of activity "different" from those of the rural areas: for a long time a distinction - if not outright contrapposition - was made between the urban and non-urban, town and country, the town-dwellers' life and rural life. Something similar has remained strongly rooted in and characteristic of the Third World.

In today's industrial society (which some prefer to call "post-industrial" or the "information" society), it is well known that the city expands within the territory, and has become a "city-region". The city has absorbed rural values (for example the requirement for "green" areas) just as the countryside has absorbed city values, in the sense that it is no longer willing to accept a way or style of life that is different from that of the urban society. Town and country have thus become "integrated", "unified", "merged", in a new concept of the city: for the sake of simplicity, let us refer to it as the "city-region" or "urban-system".

However much we are all aware of this, in reality (and even on reflection), the old conceptual classifications are nevertheless slow in disappearing, and often remain fixed in lazy, conventional thinking. Thus the city is referred to still as if it were a *physical* entity of buildings, rather than "functions" (even the physical-perceptive sensibility of the architects, so precious in many cases for urban decoration, has been responsible for the "conservation" of those city concepts which in reality have been completely superseded). Cities are referred to as if they were not (and should not be conceived as being) "city-regions", but as if they were rather agglomerations of particularly dense settlements and thus different from the rest. From this arises the claim that territories should be classified according to the "homogeneity" of settlement characteristics (e.g. "metropolitan" areas, "internal areas" etc.) which in urban planning - that is in the science of planning - not only are of no use, but cause serious errors of assessment.

When, then, one speaks of *good town organization*, one is referring to the city-region, that is, to the "city" as it is conceived in the modern sense, as a collection of various phenomena, (perhaps, historically,

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May I be permitted to refer to one of my books on the subject, published in the 'sixties in which the concept "city-region" and the policies for implementing it are described in a way which is nearly completely in conformity with the present requirements (Archibugi, 1966).

morphologically, naturally or otherwise different), but which all lead to the *requirements which produce an appropriate "city-effect"* (or not, as the case may be).

Therefore it could be quite easy to assert that where the city-region effect is produced, a good urban organization is also achieved; whereas, when these effects are not produced, neither is a satisfactory urban order. And, if that urban and environmental well-being is not achieved, difficulties are created in the reinforcement of economic and social cohesion in European countries.

The theme of urban policy - in the specified sense - as a policy of reorganisation of European cities in such a way as to establish throughout the territory the desired "city-effect", from which regional, territorial and environmental equilibrium can be consequently achieved - becomes therefore *a fundamental theme for a unified European policy of the next decade.* The following paragraphs will detail this policy more specifically.

1.3. The Decline of the Urban Environment

Let us begin with a few considerations on the character of the decline of urban environment .

There can be no doubt that the decline of the urban environment has become one of the most acute problems for European town-dwellers (*"urbanites"*) which represent some 80% of the population of Europ[e.]

It is difficult to assert with certainty whether the emergence of such a problem as this derives from an absolute increase in the decline of the urban environment in comparison with other recent periods of urban history, or from a relative decrease in the level of "other" problems (for example: of revenue, consumption, security and well-being in general) which have had a certain prominence, thus bringing to the foreground the environmental problem. It is a fact however that the decline in urban environment has become a dominant factor in the social malaise, and as a consequence also the political malaise, of our times (as has been proved by numerous opinion polls, among which a few from the EEC itself[).]

[Mo]re details in Hall and Hay (1980).

[Ac]cording to a survey promoted by the EEC in 1983 (EC, Commission, 1983) the problems most deeply felt by the population that was interviewed, with respect to the local environment, are the degradation of the landscape, noise, and atmospheric pollution and these problems grow in importance in the case of those interviewed from the large cities or inhabitants of intensive housing areas.

It is useful perhaps to recall briefly that with regard to the decline in the urban environment, this "malaise" is brought to the foreground under various different and complex points of view: from the viewpoint of the different factors which cause it; in relation to the different "stages" in the urbanisation process.

The factors which characterise the decline in urban environment are well-known: physical pollution, urban traffic congestion, the congestion of activity and the paralysis of its functions; the loss of the "urban landscape"; the loss of human communication in the form of increased "social segregation" (in the "greenbook" on urban environment prepared by the Commission a year ago, there is a thorough analysis of all the factors of decline[).]

Here, we shall limit ourselves to commenting on a few of the tendencies of urban evolution which - despite the fact that they have been held to be crucial for the characterisation of the problem of decline in the urban environment and in the policies able to remove and prevent it - do not, in our opinion, appear to have been dealt with in the correct manne[r.]

1.3.1. Congestion of Activity and Functional Paralysis

Urbanisation, ie the impressive growth of the urban population in comparison with the non-urban population, and the constant increase in the urban functions with respect to those in the towns of the past, has come about without a proportional expansion of urban infrastructure; on the contrary, it has come about by massive overloading of the already existing and old structures (especially the historical town centres, inherited from the past).

This has congested beyond measure the urban activity being carried out in these old spaces: offices, hospitals, schools, shops, recreation and leisure centres. Even the pavements have become congested and difficult to navigate (which has led to the growing number of pedestrian areas in some sections of old towns, these too implemented without adequate proportioning of access infrastructure). This congestion has caused a situation whereby the smooth-running of urban areas has become

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[S]ee EC, Commission, *"Green Book" on the Urban Environment* (1990a), especially Chapter 1.

[W]e will use here many concepts already described in a report delivered at a Conference promoted by the EEC Commission in Avignon (France), at the opening of the consultation and debate which was to lead to the drawing up of the "Green Book" on the urban environment presented both in Parliament and in the Council by the Commissioner Ripa di Meana (Archibugi, 1989a).

paralysed. A reaction to this has been the search for new spaces for this activity, and for the re-activation of the urban functions. Thus a spontaneous "de-congestion" has been obtained with the removal of many activities to the peripheries of the town.

But, whereas the old town-centres - as long as they maintained a certain balance between activity and available space - guaranteed a certain mix (un-congested) of functions, the new sites gained by being de-congested, but lost the mix. Therefore there was - as the result of the congestion of activity and incipient functional paralysis - a loss of "complexity" of urban functions: a "complexity" upon which the quality of urban life has always been based. This loss of complexity is yet another factor in the decline of the urban environment, which has been compromised both by congestion and the process of de-congestion that followed.

Certainly, the quality of urban life to which we refer, provided by the complexity of the functions, is to a large extent a thing of the past and it is difficult to reproduce it in new settlements. But a simultaneous plan which was conceptually preventive with respect to urbanisation tendencies, could have, and still could - without having to accept the decline in quality due to the congestion of our historical town centres - create new "centres", but ones that are sufficiently "complex" in their functioning as to constitute a valid "alternative" to the "historical" centres; and so as to become, in a short time, with the minimum of "patina" of time, good examples of balanced urban functioning, without however having to downgrade its urban environment (moreover without being already degraded at birth, as has almost always been the case when such centres or districts have been born without an appropriate "complexity" of the urban functions).

All this without considering the case (and this is, without doubt, the Italian case, but also of many other European countries possessing a long-established "ancient" urban framework) where the urbanisation which created the congestion of activity and the functional paralysis, developed parallel with the marginalisation, if not with the actual decline of a large number of small and medium-sized towns; towns which instead could have played the role - with a preventive planning policy - of these new centres giving an alternative to de-congestion while still conserving, or rather updating, their own historical "patina". But to do this there was, and indeed there still is, a need for a conception of urban policy at a national level (and today, supernational) which would safe-guard the urban environment and which still has to penetrate the conscience of political and administrative action.

1.3.2. Loss of Urban Landscape

It is hard to imagine that in the past, towns have presented an environmental decline in their "landscape" - understood as meaning that pleasure to the eye or "aesthetic" given by spaces on the inside as well as on the external perspective - which is compatible with that of the present day. An empirical confirmation of this theory is offered by the observation that all these European towns (East-European mainly) that have been unaffected (for the most varied reasons) by the phenomenon of economic progress or by a substantial urbanisation, have been successfully able to safe-guard their "urban landscape" (although they could have also declined because of other factors than those which are "aesthetic").

In towns where there has been a strong increase in urbanisation, despite the introduction of technical processes of Town-planning, and territorial planning, it has not been sufficient to do more than minimally control and influence the urban space and the land use, which have been almost exclusively at the mercy of spontaneous, casual, de-regulated and abusive intervention (without mentioning, moreover, those "programmed" interventions - especially in regard to urban transport infrastructure - which, as has been already noted, by placing their objectives in one single "function", have completely ignored the "aesthetic" criteria: by which we mean those criteria that are relatively unsusceptible to the changing whims of taste, and thus constitute a set of valued judgements proven through time).

And this has happened despite the fact that never, in the history of the town, (except in the case of it being destroyed by war), have so many factors converging against urban conservation and against the harmonious growth of volume and space for the citizens (and thus creative Town-planning) been registered, as have been in the last decades.

1.3.3. The Loss of Inter-Personal Communication

The physical decline of the urban environment, including that which influences the physical and the mental health of the "urbanites" has also been accompanied by a "social" decline - or rather a decline in "sociability" - of the urban environment, due to the fall in the amount and intensity of interpersonal communication: a loss which has resulted from the congestion mentioned before, loss of time, loss of functional complexity of the various areas and from the specialisation of areas and spaces.

In the traditional (or conventional) opposition between "town" and "country", it can be said that the loss of interpersonal communication in towns, has helped to turn these towns into a "concrete countryside", that is

a space in which interpersonal communication once again becomes scarce: a scarcity which was once a sociological "apanage" of the rural areas. Information - rather than communication - has certainly improved due to the various technologies of telematics and computer-science, in particular television and the incipient televideo communications (such as the videophone, videoconference, etc.). But has this actually improved "sociability"? This, it would seem, has worsened, at least with respect to the standard of requirements demonstrated by today's generation, and which present the urban organisation seems unable to satisfy.

1.4. What Factors Contribute to the Decline of the Urban Environment?

One of the most surprising aspects of the present decline in the urban environment is that it seems to happen with the same severity, irrespective of urban typology: in other words, whether it be a large metropolis, or a small or medium-size town, or even a "new" town; whether it is a "pole" town or a satellite one; whether it is an "industrial" town, or a town whose activity is mainly commercial, or touristic.

Although urban typology can influence the way in which the different factors or aspects of decline present themselves and conjugate, and more precisely effect the "mix" of decline factors, the majority of the factors here mentioned are present almost everywhere; to the point where one can begin to consider that the decline is produced "beyond" strictly urban conditions, but represents by now a constraint of every type of territorial agglomeration.

On the other hand, the "urban condition" (as it was once called, before becoming such a generalised phenomenon as it is today) tends to make a whole of the population, and thus to englobe in its indicators and parameters, every form of localisation of permanent settlement of people. The objective of a national (as well as supernational) "urban" policy cannot but be that of ensuring an acceptable standard of "town" life for every member of the community in question, enabling him or her to thus benefit from the "city effect". It is a question therefore of *restructuring the urban network so that it includes in its general urban functioning 100% of its inhabitants;* and the urban "form" resulting from this is a derivative of this binding-objective, combined - case by case - with the distribution of existing territorial agglomeration[s.]

[Th]is has been the exercise performed, in Italy, by that group of scholars who drew up at the end of the sixties the (programmatic) forecasts for the

In this way, the problem of urban typology should also be "reviewed" in the light of the role that the different types of town can play in a general remanagement and "finalisation" of the urban framewor[k.]

Observation of the decline in the urban enviroment can also be posed independently from the actual stage of urbanisation in any one country or agglomeration to which it refers.

In other words, decline can manifest itself:
either in the presence of the "urbanization" phenomenon, in the sense of a rapid expansion of urban areas parallel with the depopulation of the rural areas;
either in the presence of a "sub-urbanization" phenomenon (usually following the point mentioned above), understood as being that where both the home and the workplace are transferred to the town's peripheries;
either in the presence of a "de-urbanization" phenomenon (to which some refer as "counter-urbanization"), under stood to be one where urban agglomerations on the whole begin to lose residents and work-places;
or finally, in the presence of the phenomenon which can be termed "re-urbanization", when the "heart" of the city (in particular the historical centres) experiences a residential recovery, and at the same time, a restoration of its buildings, (a phenomenon defined as "gentrification").

There does not seem to be any fixed relationship between the decline in the urban enviroment and these stages of urbanisation. On the other hand these stages, even if each is characterised - in a country or town - by its own particular "dominant" phenomenon, correlated essentially to a demographic indicator, which has a precise sign, can in practice be present side by side on different territorial scales, or in different regions within an individual countr[y.]

"Progetto 80", and who tried to fix the basic lines of an urban territorial order to be the alternative to that of the large metropolitan concentrations. Owing to varying factors, the country has in fact grown in the direction hypothesised by the Progetto 80, even if with much disorder which could have been avoided (see RI, Ministero del Bilancio e della Programmazione economica, 1969; and Centro di Studi e Piani Economici, 1971). Also in France, some time later, there were within Datar (*Delegation a` l'amenagement du territoire et a` l'action regionale*) several attempts to construct territorial frameworks *(schemas*) (see Datar 1971, 1974a, 1977) on the national and even European scale (Datar, 1974b).

[Fo]r a more systematic treatment of the typologies regarding territorial strategies, the reader is referred to the book of the author on "*La Politica dei Sistemi Urbani*" (The Urban Systems Policy), Rome 1985.

[On] the recent trends in urbanisation there is a vast literature, which is very

And this mixture of stages, as well as this "indifference of effect" in terms of environmental decline, is a generalised phenomenon linked more to a variety of factors of general socio-economic progress than to urban forms or typology.

If anything, it should be noted that there is a much closer relationship between the progress of these above-mentioned stages and the state of economic-industrial development.

Thus it would seem that urbanization coincides with the first stage of "industrialisation", which everywhere has seen (and still sees for that matter) residents and work opportunities concentrated in existing urban areas. This still happens in all those countries still undergoing a more or less rapid process of industrialization, such as Asia and Latin America (countries whose urban history is considerably different from that of the European towns).

And it would appear that, in addition, the stage of "sub-urbanisation" corresponds well enough to a further stage of industrialisation, i.e. to that of an "advanced" or "forced" industrialisation in which the per-capita income increases, and a higher demand of more spacious housing, preferably with a private garden, develops.

And finally, it would appear that the stage of "de-urbanisation" corresponds to the next stage of advanced industrialisation, i.e. to that of "de-industrialisation", that is, the absolute reduction of job opportunities in industry, and the growth, on the other hand, of tertiary activity; a stage, moreover, in which public infrastructure of all type tends to cover the entire national territory, and those zones which once had a high urban density lose their "comparative economic advantage". This is the stage which corresponds to the commonly defined "post-industrial" or "computer-age" society.

Even the stage of re-urbanisation, which has only just started, appears to be, in effect, a phenomenon which has only appeared on the scene of the cities of those countries economically more affluen[t.]

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dispersive and hardly "heuristic". Among the more concise and intelligent essays we can recommend those collected by Nijkamp & Rietveld (1981). [We] refer to the complex analyses performed by many researchers, among which there are some promoted by the EEC Commission, such as the essays collected by Paelinck (1978) giving particular attention to that of Klaassen on "de-urbanisation and re-urbanisation in Western Europe", a topic covered in depth by the late Klaassen who took up the theme in the essay on "the development of the urban system" (1981). See also the other essays collected by Klaassen et al. (1981) and those in Van den Berg et al., (1982). A vast bibliographic array on the subject has been collected by

It would, in conclusion, seem that decline in the urban environment can be more easily linked with economic progress, than with all the various urban forms and structures. And these urban forms and structures are - in their actual performance - no more than spontaneous or disorganised "responses" to the imbalance that such progress has produced in the use of urban space.

This does not remove, however, the possibility that urban forms and structures could not - if conceived and programmed adequately - contribute in the future to avoiding the imbalance that, in successive stages, economic progress has produced, because of a lack of planning, on the territory. It is simply a matter of reversing the way in which the problem is posed: a question of identifying *in which territorial environment the economic progress can take place without creating a territorial and environmental imbalance*; and binding every localisation and further use of the territory to the modalities defined for its functioning.

In short, it is a question of identifying an "eco-system" in which all the values of modern urban existence can not only be respected, but also exalted, in other words an *"Urban Eco-System"*; and then it is a question of using it as a constraint and framework of reference for all choices of settlement and localisation, which whatever development policy is used should imply.

1.5. The Urban Eco-System

1.5.1. The Decline of the Urban Environment as a "Loading" Imbalance of Urban Functions

As has been stressed, the decline in the urban environment is produced by a functional imbalance of the urban system. In fact, towns can be considered to be systems where a continual process of exchange takes place in the relationship between "territorial demands" (or demands for territorial or environmental resources) determined by production/social consumption needs and the availability ("supplies") of the same territory (or territorial or environmental resources).

If the demand exceeds availability, there is an *overloading* on the territory of excessive weight, and an imbalance (or deficit of space) is created which tends, in one way or another, to be compensated. Often balance is searched for and found by enlarging the space of the urban system and enveloping new territorial resources. This often causes an

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Cheshire, Hay and Carbonaro (1986) for the EEC Commission.

imbalance on another territorial level. As with firms, towns have also the tendency to "externalise" the cost of urban equilibrium.

But if a saturation point is also reached in the environment external to the system, it is also necessary to "internalise" this cost, to find an equilibrium between the supply and demand of territorial resources within each system.

Positive theory, in effect, supposed that in the search for "environmental well-being" (i.e. a balance between activity which requires resources and the resources available) there is a constant tendency to "balance" supply and demand, and it is from this that urban shapes are derived, and - perhaps - the (spontaneous) optimisation of the urban environment.

This could also be true: but in the long run...!

The decline in urban environment which is present everywhere shows that between the situation and balance present at the "starting-point" (which corresponds to any stage of urbanisation and economic progress, as has been described) and the new eventual balance at the "point of arrival" (in the long term), there is a considerable temporal and material *gap*, the so-called "transitional period", of *imbalance which produces serious breakdowns which need to be faced, contrasted, reduced to the minimum, "minimized"*: so as to maximise - on the other hand - environmental well-being.

Positive analysis (theoretical) is always *ex-post*, but to minimise the unbalance and the breakdowns (however transitory they maybe) an *ex-ante* analysis is necessary, and a consequent *preventive* action. This analysis should develop theoretical hypotheses of development factors and simulate their equilibrium (according to the method or approach which I call "planological"[).]

In other terms, it is a *planning problem*: a question of assessing the demand and supply of the territory and environmental resources, and preparing for "balancing" them; and then promoting a selection of priority activities (*policies*), through a *trade-off* of the various objectives, and the connection between appropriately reached objectives and means.

A recovery policy for decline in the urban environment therefore is only obtainable through the identification and construction of an *urban eco-system model*. A model which can be defined as: *the space in which the different urban functions are optimised; the space above all in which the supply and demand of the territorial resources of a community can be balanced, at least within the framework of its daily requirements and residential functions.*

[T]he reader is referred to my work *Introduction to Planology*, Draft, Planning Studies Centre, Rome, (1992).

The model does not actually exist. And even the attempts to construct one - here and there - would need to be confronted and compared. The best system of confrontation would be to compare them in their different realities (for instance in Europe), precisely to avoid the risk that the parameters measured would be too dependent on historical circumstances and geographical determinants (urban typology or phase of urbanisation or economic progress): which would not render them more stable and significant because of the changing urban conditions of the areas for which the model was constructed.

A joint research between different realities would be essential to construct this instrument of decision analysis and assessment of urban policy. And should this model not be developed best at a level of European Community cooperation?

Obviously, a model thus constructed should incorporate all the possible factors involved in the urban environmental decline. And it should incorporate not only the *direct* factors of the decline, but also the *indirect* factors, those which lie, in turn, at the base of the direct factors. For example: if the atmospheric pollution of towns is caused by the level, modality and intensity, of motor vehicle traffic, then the latter is, in turn, caused by the activity demand, the localisation of such services which the town-dwellers need, and the spending capacity of people etc. It is difficult to exclude apparently indirect variables from the urban eco-system model, because very often they are the key variables for the evolution (decline or recovery) of the urban eco-system itself.

1.5.2. Towards a "Program Structure" and a European System of Urban Indicators

The modelling of an urban eco-system, as defined above implies a preventive determination of the variables and parameters to be taken into consideration. This determination corresponds to *social concerns* which an urban and/or national (or why not? supernational) community can draw up with a view to improving the urban environment.

These social concerns can be expressed in the form of a set of objectives, which can be united - after adequate study and assessment - with a set of means and instruments designed to fulfil these objectives. As is well known, the objectives, as well as the methods, are sometimes compatible, and sometimes not. They can even be "synergetic", but can often be in conflict, either in their ends, or by the means used and resources drawn on in order to achieve them.

The objectives are "chained" on different hierarchical levels. An

objective on an inferior level can be a means for achieving an objective on a superior level; and viceversa a means on a superior level can be an objective for an inferior instrumental level.

The logical framework of this system of connected aims and methods, is usually called, in planology, the *"programme structure"*. Well, it would seem vital that a reference policy aimed at reducing urban environmental decline should be able to organise the mass of problems, concerns and aspirations through the instrument of programme structure. It would be more than ever recommendable if this structure could be developed at the European Community level in an operation which obtains solidarity at more than one territorial level of the Community.

A system of objectives organised within a framework of a programme structure should be expressed through quantitative and/or estimated values, that is through vote or judgement. Every social concern or objective which regards urban environment (as, on the other hand, with any other factor in the comprehensive well-being of the Community) should be measurable and measured by one or more *indicators*. These indicators (or measures) indicate the level of satisfaction or dissatisfaction in relation to the concern and objective under consideration, or a level of achievement of a certain state of affairs with respect to that particular concern or objective.

To illustrate this, we shall refer to a few programme structures and indicators of objectives and achievements, which have emerged from some studies which have already obtained a certain international consensus: we shall refer to the OECD studies which have been carried out at different points in time. The work of the OECD has not resulted in a wide political application: it would have required a certain constancy in time, an appropriate pressure on governments, at least in order to institute a periodic collection of data in the indicated direction. Furthermore, the whole study would have gained, if instead of stopping there, had it continued with the development (as a next step) of a model for an urban eco-system, based on those same variables expressed by the indicators but with more careful attention given to the interrelations existing between those same variable[s.]

It would certainly be opportune if such work (further building of an urban eco-system model and a more precise detailing of a system of indicators for the quality of the urban environment) were to proceed under the initiative of the European Economic Community itself.

The documentation produced (in the scientific field) testifies in the first

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[On] the works of the OECD, the reader is referred to numerous reports of the "Working Group on social indicators" which have followed each other over time (OECD, 1973, 1974, 1976, and 1980). On the "urban indicators" see especially the OECD volume of 1978.

place to the non-novelty of the approaches here suggested, and offers the possibility of starting from a level of research and reflection which is not completely at quota zero. Furthermore, it is observed that the oldest studies (1960's) conformed perfectly to today's needs, which shows that scientific approaches - if they are good and pertinent - age gracefully and retain their validity for a long time, if only they are be followed up and up-dated constantly.

It is a shame however, that despite having progressed well in methodological reflection, there has not been - on the behalf of the national or international public organisms, responsible for this work - an adequate *follow-up*; so that one still has the impression of starting from zero (sometimes these same researchers are even negatively influenced by the behaviour of public decision-makers, and reveal themselves to be ill-informed about the work done by preceeding colleagues).

1.6. Prospectives for a European Community Urban Environment Policy

Urban policy lies within the "competence" of - on the basis of the institutional order of the different European countries - a plurality of political organs. In particular, there is a certain pluralism of competence at the territorial level: national, regional, local. Almost everywhere, the local level has a certain priority of competence, compared with other levels. Almost everywhere, there occurs a certain conflict (political and/or administrative) of "competence" between the various levels, a conflict which in the worst instance produces a certain paralysis of political-administrative action[s].

The European Community level represents yet another level in this pluralism. Those who are contrary to this level tend to point out its "centralism". Often the most "centralist" countries on a national scale are those that are most critical of European centralism (this is the case of the British Government which tends to constrain the role of local government).

In general we can say that the European Community level would

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[Am]ong the many we would like to single out the now classic work of Harvey S. Perloff (1969) on the "Quality of the urban environment" and of the other authors who contributed to it.

[I]t is sufficient, in order to gain some idea of the latent "multi-level" conflictuality in the matter of urban politics, to follow the numerous documents and resolutions of the "Standing Conference of Local and Regional Authorities of Europe".

almost certainly find itself in good company with the national governments in their attempt to win a certain area of competence with respect to local government. As in many other sectors of intervention the availability of financial means of intervention, constitutes a good reason for retaining certain competences. And their use will surely trigger off a certain conflict of opinion for the management of such funds.

It is important to emphasise that, the more widespread the pluralism of competence, the more the occasions for an *unequal* management of urban environment will arise. If there can be inequality in the efficiency and capabilities of the governments of the Fifteen Member States in their own national policies, then one can well imagine the gaps in efficiency and capability that there could be between the thousands of local urban governments of the Community! There would be local governments at the forefront of development who would adopt advanced measures and obtain excellent results; and there would be other local badly-managed governments, whose administrators, whether for cultural, educational, or professional, ethical reasons etc. are not up to the mark. In a general context of this sort it is difficult to formulate "prescriptions" for an improved distribution of responsibility.

One fact becomes increasingly obvious with regard to the environment. That policies (or their absence) at the local level, as well as at the regional and national level, have an effect which concerns everyone, and not only the communities directly concerned. Emphasis on this fact is the best way of conjuring up the principle of "subsidiarity".

This is evident in the case of those great risks to the planet which arise from "unsustainable" development with respect to the scarcity of available territory and environmental resources. But today the awareness that even cities are an *unrenewable asset* is emerging and that they are deteriorating because of the senseless use which is made of them. And that policies which protect the urban environment today are policies which carry with them risks and objectives which are common both to national and supernational level[s.]

The growing responsibility of the urban environment policy at a national and supernational level cannot avoid recognising however that it is

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[In] this regard the reader is referred to the work that arose from the OECD Group for Urban Affairs (an organ of which the author is a member) on "the environmental policies for the city in the 1990s" (OECD, 1990). For the underlying strategy for a reordering of the urban environment see a report by the author presented in Madrid at the Conference promoted by the EEC Commission, at the close of the debate on the "Green Book", already cited (Archibugi, 1991).

necessary not to extinguish, both financially and psychologically, local government initiative, whether they are not yet able to "do it on their own" or whether they have shown themselves perfectly capable of "doing it on their own". In both cases a "socialisation" of experience and problems would be useful.

In this context, the formal policy of "competence" (recalled above with its relative conflictuality) shows itself to be considerably less efficient, to all effects, than a policy of substantial "cooperation", *which leaves aside the question of competence.*

And a substantial policy of cooperation would result from a common acknowledgement of concerns and objectives.

In this formulation, there is an enormous space to be covered, since at all levels of territorial government, there is still almost nothing in the way of a drawing up of a "systematic" policy for urban environment. Certainly there are many interesting initiatives - at the local and regional level - which it would be worth drawing attention to in the framework of an intensive exchange of ideas and experience, at the Community level. But an organic approach to this policy through a *programme structure* and a *system of objective indicators* is still unknown.

There is a strong need, on the other hand, to acquire a knowledge not only of the implementations, but also of the assessment and the methods used in different countries by different local governments, whether by official or non-official elements of the European Community. Would it not therefore be appropriate to advise the European Community, and in particular the Commission, to launch decisively a study in this direction, proceeding thereafter with the design of a *programme structure* common to all the different countries, and of a system of indicators for the quality of the urban environment?

To put such a *European programme* into action, it is necessary, first of all, to organise the collection of experiences, case studies, evidence of this or that problem, for this or that town, through a "conception" (less near, apparently - but only apparently - to the political/administrative practice) of *taxonomic* classification of the objectives; and to thus build a *reference model for an urban eco-system,* to which exactly the different cases under examination can be referred for assessmen[t.]

[A] work of this type has certainly been set off by the publication and the distribution of the "Green Book" on the urban environment on the part of the EEC Commission. In this direction, the deliberation of the Council of Ministers of the EEC (January 1991) concerning the follow-up to be given to the "Green Book", with the constitution of a Committee of experts, was fundamental. It would be highly desirable: a) that the work of this

Once this work of "conception" has been accomplished at the Community level, with the widest possible participation of experts bringing their own "local" experience, the attention of political decision-makers at different levels (local, regional, national) could be drawn, and study could be made of the various forms of intervention that, at each level, could be taken into consideration.

Committee be translated into operational proposals; b) that it be strongly coordinated with that of the "Committee on Spatial Development" which was born from the "Europe 2000" (EC Commission, 1991a).

Part Two

SOCIO-ECONOMIC COHESION AND ENVIRONMENTAL PLANNING

A policy of protection of the environment constitutes today another fundamental *pivot* of a territorial policy (intended as a "new" regional policy). It is therefore a basic element of a policy of economic and social cohesion.

Under this aspect a "strengthening" of economic and social cohesion will be obtainable if *the quality of the physical environment* also tends to level out within the Community, and if the physical environment is saved and considered of value in the different European countries through common operational procedures and common instruments.

In this case also, however, the environmental policy must be subject to the same revisions in its approach regarding regional polic[y:] namely to pass from measures and regulations which have an "indirect positive effect" on the environment, to a system of territorial objectives in which the environment is *preventively* safeguarded; or else to a series of curative interventions - in those cases of areas of degradation or damage - for which the result obtainable is both preventively and objectively estimated and measured.

[Se]e the already mentioned Report to the European Commission on the strengthening of European socio-economic cohesion (which the author has further developed in an ad hoc essay (Archibugi, 1993).

2.1. A Policy of "Prevention" of Environmental Damage

It is by now of commonplace agreement that it is better to protect the environment by interventions and policies which tend to prevention *ex-ante* of adverse changes in the environment rather than intervening to remedy *ex-post* damages that have already taken place.

In reality, however, we are continually chasing "emergencies" where things only get done after the "foul deed" has been committed and there has been a public outcry - not necessarily mobilized for rational motives.

But in order to adopt an environment policy of "prevention" rather than just "cure", it is necessary to become sensitive to a different form of "urgency": that of establishing *guidelines* (in all fields and sectors that have anything to do with the protection of the environment) which would act in the *medium-* or *long-term*. This would mean the designing of *programmes which in order to be effective need to be planned on a relatively long-term basis without expecting or demanding spectacular short-term results.* In effect this would imply the introduction of a *system of programming* for environmmental policy, or, more simply, *"environmental planning"*.

It is vital that these plans should be projected for the medium and long-term (which in the by-now established jargon of forecasting and planning usually signifies a time schedule of between five and fifteen years), because it is only with this sort of prospective that it becomes possible to analyse the predictions and decisions for economic growth (production and consumption) of a community, and the impact it would have on the environment in terms of using up irreplaceable resources. It is only in this prospective that it is possible to calculate *compensatory measures* which could effectively "prevent" irreparable damage; that is measures which can anticipate the effects thus allowing the ecological system to absorb the alterations brought about by human activity and to neutralise, "metabolise" the impact on the environment of the human development process.

The medium or long-term temporal horizon is also necessary to ensure the work of certain administrative measures and policies which often require quite a lot of time to be studied and then put into action; and their efficiency can therefore only be assessed against an appropriate and extended time trajectory.

Thus there arises an urgency to design a European Environmental Policy on a medium or long-term prospective. This is given more urgency by the fact that some European countries have already prepared *long-term environmental "plans":* this is the case in Holland, France, the strategic prospective of the British "White Book", etc.[1]. It is therefore necessary that

[1]In a pamphlet drawn-up by the Dutch government, and in which there is a summary

at the Community level as well, environmental planning takes on a more incisive presence. It is true that at the Community level, in June 1992, a Programme of Action was elaborated (EC Commission, 1992) which - unlike the four previous plans of action that have followed each other from 1973 up until the present time - comes closer to the type of programme hoped for; although it is still far from the mark. On the one hand, it gets closer because it establishes a direct relation between specific objectives, means to achieve them, and times allowed for their realisation. But, on the other hand, it is insufficient because such objectives are neither expressed nor quantified by means of appropriate indicators. A plan of this type should have behind it a great deal more work of study and evaluation than that which is notoriously carried out by the Commission, and a very different type of unified and integrated cooperation with the member governments.

2.2. Territorial Planning and Environmental Planning

A policy of environmental prevention and programming is nevertheless guaranteed by the introduction of a more organic and incisive *territorial planning.*

The objectives of a European Territorial Policy - or rather a policy of

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of all the Plans of environmental management of the European countries (The Netherlands, Ministry of Housing, Physical Planning and Environment, 1991), there is contained good argumentation for the introduction of what is defined a *"strategic environmental management"* (SEM). "*Strategic Environmental Management (SEM) is the term used for the processes of developing and implementing a long term policy that will deliver measurable improvement in environmental quality on a sustainable basis. Traditional environmental approaches have tended to concentrate on the regulation of substances or processes that pose a risk to human health. Measures were designed to restrict the amount of discharge or emission to the environment. SEM sets out environmental objectives in quantitative terms, establishes the targets required to achieve those objectives and develops a long-term programme of actions required to ensure the targets are achieved. The planning phase therefore requires identification of the sources of pollution (or other impacts) and the factors that influence those sources: less energy consumed means fewer fossil fuel pollutants are released; less packaging means less solid waste; designing for recycling reduces wastes from materials processing and post-consumer waste streams*".

The Dutch plan was probably the first, at least in Europe, and as such constitutes an excellent example to be followed by all the European countries and to be transferred to a Community scale. See the various texts of each of the national plans: for Japan (Japanese Government, 1986), for the Netherlands, (Netherlands, 1988-89), for France (RF, Secrétaire d'Etat pour l'Environnement, 1990), for Great Britain (*"This Common Inheritance" - Britain's Environmental Strategy*, UK Government, 1990), for Canada, (Canada, Government of, 1990) and finally Italy (RI, Ministero dell'Ambiente, 1992).

European territory - are the subject - of a *Territorial Framework of Reference* and a *Common System of Social and Environmental Indicators*, each an instrument of harmonisation and coordination of a territorial policy on the European scale.

But the destination of use of the European territory, according to rational indicative criteria is - as is known - the best way of implementing a preventive policy of environmental protection; since such a destination of use preventively incorporates an assessment of the environmental impact which each portion of the territory is able to support and an assessment of the types of impact or environmental pressure which each can receive.

The "environmental impact assessment" (EIA) which European legislation requires from each single type of project of intervention or investment, are preventively inserted as requisites of the different types of territory, so that the project-design can take them into account *before* being assessed for its own individual impact. One could talk, as one might say, of a "national" or "european" "EIA" where the objects of analyses are no longer the projects, but the territories and their destinations of use[2].

In this sense, through the existence of a Territorial Framework of reference, even the projects which fall into the various programmes of intervention (amongst which the structural funds of the Community) would come to be preventively assessed on the basis of whether they conform coherently or not to the Framework, predefined (at least indicatively) by the Community organs. And the evaluators would also be advantaged because they would have available, in the Territorial Framework and in the environmental indicators established, a set of reference parameters of a standard nature, on which to base their opinions uniformly.

2.3. The Organisation of Environmental Planning on a European Scale

Just as it is urgent that there be long-term environmental planning, it is also indispensable that a greater order be introduced in the modalities with which planning is performed, seeing that it is the object, in most European countries and also at the Community level, of sporadic and disorganised interventions mainly because there does not exist a methodology and a precise procedure for governing these interventions.

See again the text by the author cited in Note 17 (Archibugi 1993).

[2]The reasons for the utility of supplying "national parameters" (to use the same expression used by those who follow the cult of "cost-benefits analysis" for an analogous reason) for the "evaluation of environmental impact" conducted on single projects or interventions, were developed by the author in an essay (see Archibugi, 1989b).

Firstly, it is advisable to organise a set of *actions* that a European Plan for the environment, in the long term, should consider, into organic *programmes of action,* articulated in great "fields" of intervention.

Secondly, these programmes of action should be connected and integrated better with *other* programmes in *other* operational sectors of the socio-economic policy of the Comunity.

The programmes of action of a European long-term environmental plan would be divided essentially into two categories: those programmes that have as their main and direct aim the *improvement of environmental quality,* at all levels and of every type; and those programmes that are functionally finalised for other aims (production, transport, energy, tourism etc.), but which need nevertheless safeguarding actions aimed at mitigating or controlling, or at rendering "compatible" their impact on the environment. The first could be called directly "environmental programmes", and the second "environment compatible programmes".

Although we do not intend to elaborate here on the contents of each programme, but only to discuss the general spirit that could govern a European Plan for the environment, it would be perhaps opportune to cast a glance at the themes proposed for each programme in question, in order to debate the criteria of ordering and classification of the same.

For further evaluations see an essay by the Author (Archibugi, 1989c), and also the environmental plans for each country (mentioned in Note 17).

2.3.1 The "Environmental" Programmes

Programmes are the first category of in the operational field and could represent programmes of "action" in the following directions:

A programme of actions for the improvement of the *Urban environment*

A programme of actions aimed at the improved *conservation of the naturalistic patrimony* (flora and fauna) and at the organisation of recreational greenery

A programme of actions for the improvement of the *quality of the atmosphere* and for the control of atmospheric emissions (including noise, indoor pollution, etc.)

A programme of actions for the improvement of the *quality of water* (in underground layers, on the surface, inland or maritime)

A programme of actions for an improved *conservation of the soil*

A programme of actions for the improvement of the *treatment of waste*

A programme of actions aimed at *forestation* and *reforestation*

A programme of integrated actions aimed at the *defence and the valorisation of the coasts*

A programme of actions for the reduction of *environmental risks*.

These divisions largely conform to already existing international documents and programmes (see for example the "Strategy for 2000 and After" of the UN-ECE, Geneva)[3]. Though strong interactions are evident between these (e.g. between water policy, soil conservation, forest etc, all strongly linked to the topic and functions of water basins). But as "National Programmes" (whose concrete territorial dimensions are guaranteed by single territorial projects, which constitute another "level" of operation for environmental policy) it would seem appropriate to divide them in this way so as to facilitate the application of their objectives and instrumentation.

As an operational instrument, the EC Commission should establish a "task-force" for each Programme which should include high-quality experts endowed with the job of drafting a programme in a reasonable amount of time (let us say, six months).

The Programme should contain *guidelines* for a programme of action which should span a time period of *at least ten years*, and it should identify expected results and the financial resources deemed necessary to bring the programme to its conclusion.

(Even in this case, the Commission could provide a similar document listing *terms of reference* for the drafting of programmes by the various task-forces).

The *task-forces* could then serve as controlling and supervising organism for the plans, programmes and projects which stem either from the program itself, or autonomously, for the parts of the programmes which are of "technical-scientific" competence.

With their pluriennial financial budgets, these programmes would come together in a process:

of analysis and assessment of Community spending programmes as well as National Government spending;

of analysis of the macroeconomic and macrofinancial compatibility of available public resources in a pluriennial public budget consolidated for

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[3]See the *Strategy for environmental protection and rational use of natural resources in EEC member countries, covering the period up to the year 2000 and beyond*, by the Economic Commission for Europe of the United Nations in Geneva (UNECE, 1988).

The list of proposed programmes, in their mere nomenclature (which follows as has been mentioned the proposal by the UNECE) does not greatly differ from any taxonomy of the fields of environmental policy. (For example see the good digest of the Community environmental policies by Johnson and Corcelle, 1989, and for a comparison with the corresponding American policies, the good digest cured by Portney, 1990). What is recommended in any case is the *"program-oriented"* approach to the task, since it only through this that it is possible to effectively assess the relationship between the means and the results obtained and therefore what is normally defined as the economic "costs and benefits" of the environmental policy.

the Community as a whole.

2.3.2 "Environment-Oriented" Programmes

The policies of "environment-oriented programmes" include that group of operational guidelines in certain fields (classic or less so) of economic and social action, which aim to promote or protect environmental values. They include the following programmes[4]:

1. *An environment-oriented energetic programme.* For example oriented and/or finalised at:
   - savings in energetic consumption through rationalisations
   - increasing the use of renewable sources of energy (wind, solar, bio-mass etc.)
   - increasing the efficiency of energetic inversion (cogeneration)
   - research into the territorial impacts of regenerable sources of energy, etc.
2. *An environment-oriented agricultural programme.* For example oriented and/or finalised at:
   - the reduction of the use of agro-chemical means (fertilisers and fito-pharmaceuticals)
   - the rationalisation of the disposal of zootechnical waste
   - the increment of genetic diversification, through the re-introduction of improved eco-types and through the reconstruction of the agro-systems
3. *An environment-oriented transport programme.*
   For example oriented and/or finalised at:
   - the minimisation of the impact of the infrastructures
   - the reduction of pollution from combustion, acoustics, etc.

[4] Even though the studies aimed at assessing the relationship of impact between some human activities (production and consumption of energy, industry, agriculture, transport etc.) and environmental conditions are numerous, and also numerous are the studies aimed at identifying which policies for energy, for industry, for agriculture, for transport etc. could diminish the relative pressure on the environment and so condition the success of each "protective" environmental policy itself, we are still struggling to see emerge fully comprehensive environment-oriented policies, "merged" with the sectorial policies to such a point as to constitute "programmes" of well-determined action. This is principally due to the existence in the different public organs of separate managerial structures, which not only produce separate "optics" but also often separate goals, if not completely divergent ones. The schematisation, which will here be made in only a thorougly indicative and summary manner, serves only to underline the importance of "programmes" of action, explicitly oriented towards environmental protection or towards "environmental compatibility".

- the reduction of the intensity of traffic and of the demand for transport by means of urban eco-systems (see Part 3)
- the decreasing of risks of accidents.

4. *An environment-oriented industrial policy programme in general*, and *of the chemical industry in particular*. For example oriented and/or finalised at:
   - the assessment of the environmental compatibility of the productive processes in being and of the technologies currently in use (through sampling of the flow of materials and energy for each process and the definition of standards of compatibility for each given process; and the assessment of deviances from the standard processes);
   - the improvement of environmental compatibility of the processes in being (with reduction of the energetic consumption and reconversion of the source of energy; and reduction of the quantity and the harmfulness of the waste deriving from the productive processes;
   - the checking of the environmental compatibility of new processes and products (be they substitutes of raw materials or be they newly designed products).

5. *An environment-oriented programme for housing and for building technologies*. For example oriented and/or finalised at:
   - construction technologies favourable for the economy of space and of materials as well as energy
   - reduction of the energetic consumption of buildings (thermal-isolation; "bio-climactic buildings")
   - reduction of "indoor" pollution from construction materials and from materials in common use

6. *An environment-oriented touristic policy*. For example oriented and/or finalised at:
   - fixing optimal load standards for certain areas or zones of intensive touristic use
   - distributing in a more equilibrated fashion the touristic flux throughout the territory with a touristic vocation
   - creating disincentives for the abuse of construction aimed at tourism (for example "second houses" for families)
   - creating incentives for the full usage of the receptive infrastuctures for tourism.

And perhaps others policies and programmes might also be included.

As an instrument of operation for each of these so-called "programmes", the Community should institute the above-mentioned special "task force", made up of experts and representatives from the administrations involved, whose job would be to complete in a few months a Guidance Document.

For the drafting of the document, the Commission could draw up the *terms of reference*, that is, a list of instructions, or guidelines for the drafting, so that the work of the Task Force would provide expected results for each, without too much heterogeneity in their structure and methods of exposition.

The Task Force could then take on the permanent function of updating and overseeing the *on-going* policies.

The Task Force could also, in its area of competence, institute criteria for the assessment of *on-going* policies (with regard to environmental problems), and stimulate and control public spending analysis (Budgetary planning), in sectors of intervention of its own competence.

2.4. Concerning Some Principles of Environmental Planning

It is worth, at this stage, expressing - apart from the operational contents of a Community Environmental Planning to be undertaken in both the medium- and long-term, which we have just outlined - also some general considerations on some of the basic criteria on which such a planning attempt should be inspired[5].

2.4.1 Urban Well-Being and Environmental Well-Being

A first, significant, basic guide-line which should inspire medium or long-term environmental planning concerns the assumption of a more precise awareness of the close relationship (so close as to be considered an *identity*) between *urban well-being* and *environmental well-being*.

The argument - even though some aspects of it appear somewhat "oldhat" and some even appear to be redundant - deserves to be reviewed.

First and foremost, it would start from a more precise observation of the substantial changes which have, in the last twenty years or so, been registered in the relationship between man and the environment. It is mostly the technology which scientific progress has put at man's disposal to live and produce (and which is of a "planetary" impact) which plays the principal role in this changing relationship. At the same time, even the institutional financial and technical organisation of the economy has a

[5]I here develop some concepts already expressed in the "*Report to the Minister on the lines of environmental policy for the medium- and long-term*" which was drawn up by a "Study Group" (presided by myself) instituted in 1987 by the Italian Minister of the Environment, Giorgio Ruffolo (see Ri, Ministero dell'Ambiente, 1989).

direct effect on the phenomenon.

The man-nature relationship does not only apply to areas inhabited by man, which remain still only a relatively minor area of the earth's surface, but it also has its effect in the "natural" space, for example, mountain areas, areas that are climatically or geologically impervious, desert regions or those covered with dense vegetation thus rendering them inaccessible, and so on.

The technological potential and organisational structures available to modern man therefore have determined a new global "permeability" of the space in which man is active. Nature by now, knows no limits to the spread of alterations caused by man. Nor do these changes diminish in intensity with the distancing of the epicentre which generates them directly. In short, there does not exist any natural area on the earth's surface which is "safe" from the effects of anthropogenic changes.

This is particularly true in the case of small countries with a long-established population (as are most European countries) where it is almost impossible to distinguish between nature and history. In any case, the increased weight of urbanisation has today reinforced this human presence even in those "natural" areas, in that it has become impossible to associate the "urban" concept only with those compact-constructed areas and with the "closed" city of the past; and that by "urban" one understands the new way of being and behaviour in a society which has been taken over by the process of industrialisation of the economy.

In this sense, these natural areas have inevitably become part of the "urban" space, either because they have been utilised for touristic-recreational ends (in, until recently, unknown proportions), or because of the limits and controls put on them by environmental policies in order to protect cultural assets, or by the more general territorial policies. Conversely, the "urban" space has spread to all parts of the globe, for one reason or another, and has given place to a so-called real "ecumenical" city (I cannot help but, at this point, recalling the important contribution given to the evolution of a unitary and integrated concept of the use of space by a Greek scholar who has been much too ignored, Doxiadis, 1968).

The first consequence of this phenomenon - which is quite new - is a net overcoming of the dichotomy between "built-up" areas and "natural" areas. And, to compensate the spread of "urban space" into "natural space", a conscious effort is being made to reintroduce nature into urban areas as well as to soften the negative effects of too high a concentration of people, human activity and traffic in compact urban areas.

In this sense it can be said that, just as natural areas have taken increasingly "urban" characteristics (whether because it has become an important resource for urban society, or because of the overflow of

negative environmental effects from compact urban areas) environmental well-being has become synonymous with urban well-being to be pursued in conjunction, and not separately, from this latter.

"Urban well-being", in this way, can be conceived above all (and distinctly more so than in any other period of history) as a product of the balance between "nature" and "city". And the most "livable" cities today - in the light of these relatively new criteria - are precisely those which have been most successful in achieving this balance.

While "environmental well-being", in turn, can be conceived, above all (and distinctly more so than in any other period of history) as a product of that same balance between city and nature. Therefore "nature", the natural environment, including even the "wildest" areas, has a chance of being, not only conserved, but even "recognised" as such, if it becomes the object of attention, organisation, human "civil" or "political" planning, that is "*urban*" in the true sense of the word.

Even using the most ordinary phraseology, such as for example: "respect for nature is a sign of civilisation", this "urban" character of nature is reconfirmed. Without "civil" (or urban) culture there is no respect for nature, and this same 'naturality' is destroyed.

We have already developed these basic concepts which make up a wider conception of environmental, territorial and urban planning, when we have talked of the evolution of the concept and of the realities of the city as we understand it today (see Part 1).

2.4.2. Socio-Economic Well-Being and Environmental Well-Being

Another fundamental direction can be singled out in a more precise perception of the relationship (which even here is so narrow as to be translated into identity) between *socio-economic well-being* and *environmental well-being.*

In this case also, such an identification had not until very recently been so precisely identified, or with such an abundance of evidence.

Obviously the quality of the environment has progressively become a decisive factor when considering the quality of life as human pressures (demographic, industrial, consumistic etc.) on the natural environment have increased making the environment an ever rarer asset, and thus increasingly more "in demand", compared with other assets. But it is also true that more "attention" has been paid to the natural environment, not only because it has been disappearing, in the face of human pressures, but also as a direct result of cultural evolution, especially in Western countries. In these countries, in fact, socio-economic development has, to a large extent, succeeded in satisfying other primary needs and in turning the

consumers' attention to less essential, more "intangible" assets: among these (despite the fact that there is nothing that can be considered more "material" than nature itself) even "nature" is seen as an expression of man's cultural and spiritual "needs".

In other words, material factors and cultural factors are fairly interwoven, and it would be unwise to try to establish, decisively, a unidirectional causal relationship between the two. In reality, there is a strong interaction between material and cultural factors in the evolution of modern "environmentalism".

It is a fact that, on the scale of social preferences, the environment has moved to the topmost position, and that when one talks of "economic" progress or of "income" it is not possible to avoid including that well-being (whether or not it can be measured in monetary terms) which is derived from "environmental" well-being. While, in traditional evaluations of 'economic' progress, this category of well-being was not normally considered.

In effect, by persisting with a sectorial vision (i.e. partial, and not "comprehensive" or "global") of economic development, environmentalism necessarily became the *antithesis* of that economic progress: economic progress in which (in the assessment of social well-being) was not included - as it should have been - the new environmental well-being and the new "economic" preferences. The concept of "zero-growth" came about because the units of measurement of growth were partial and fundamentally did not reflect the various new growth assessment factors. Ecology was necessarily opposed to the economy, only because the economy was not able to include it, to absorb it into a new, more complete picture of economic well-being and its progress[6].

But, by remaining in opposition, even ecology risked becoming partial. It is only by establishing a new conception of the identification of a relationship between economic and environmental well-being that "optimal" choices and decisions can be made and that a balance between the various factors making up "well-being" can be achieved. It is only by not insisting on the single ecological point of view as being distinct from the "economic" point of view, that an appropriate level of integration, and synthesis in environmental policy can be reached.

In principle, there should be no difficulty in reaching a consensus on this point; but in practice a large part of the debates, and also the political, administrative, and assessment applications of this, often forget to maintain a rigorous coherence with this criterion, or orientation of environmental

[6]On these points let me refer to the papers collected in *Economy and Ecology* edited by the author in cooperation with Peter Nijkamp (Archibugi and Nijkamp, eds., 1989).

policy: that economic well-being and environmental well-being are not two different things, but should be conceived as being one and the same thing; and thus the *economic paradigm should include the environmental factors of well-being, and the environmental paradigm should have an economic dimension, and include the other social aspects of well-being.*

It is not inopportune therefore to reassert more strongly, that if environmental well-being is an integral part of social well-being, then it is necessary to construct instruments which can appropriately assess one and the other "simultaneously", and not separately and in different phases. A great many of the systems of cost evaluation or assessment of environmental impact which are proliferating today (as in the past did systems of economic "cost-benefit evaluation", in the traditional sense of the word) are afflicted - despite the consensus that, in general, is drawn from the abovementioned criteria - by this defect of partiality and non-integration.

2.4.3. An Integrated Assessment of Social Well-Being and Development Planning

The most immediate implication of adopting an orientation such as has been here described, is that environmental costs cannot be excluded from an evaluation of social and economic well-being, but also vice-versa: that economic and social costs cannot be excluded from an evaluation of environmental well-being.

(There is no doubt that in recent historical experience environmental costs have been sacrificed and underestimated in comparison with socio-economic costs in developed countries, and, today, also, and particularly, in less-developed countries. It would however be a serious error - under environmental pressure - to bring about a simple reversal of this "partiality").

Thus arises the need to introduce a comprehensive and integrated system of evaluation; and consequently a new system of social and economic accounting (of the type currently being experimented in some countries) which incorporates both the cost (or benefit) typologies (socio-economic or environmental) in a single, integrated calculation[7].

[7]This is not the occasion to remind the reader of the broad debate held on the significance of the System National Accounting (SNA) with respect to the emergence of social costs and benefits, factors not assessable by means of the accounting schemes of neither gross nor net "national product" (neither by Gnp nor by Nnp) (social costs and benefits among which those pertaining to the "environment" have always constituted a central reference). We will point out among the most significant literature on the argument

In addition, it should not be forgotten that, despite the fact that there may be conflictual factors between economic costs (in the traditional sense) and environmental costs (as between economic and social costs) of progress, there are also considerable "synergies" between environmental benefits and economic benefits which are often neglected or ignored. The "new" paradigm for development is one which would aim to minimise conflicts and maximise the "synergies" of economic and environment policies[8]).

It is a question, finally, of being able to choose the right economic policies and the right environmental policies; and, above all, it is a question of placing them in the same evaluation and decision process, linking them to the same temporal horizons. In fact, if they are "out of phase", things are only rendered more complicated and ideas become confused; even though they can appear to be more "pragmatic" in this way and more realistic, and easy to deal with because more strongly linked to "habit".

This single process of assessment and decision-making is called *"Development Planning*" (economic - social - environmental).

Here then we shall reaffirm that the lines of long- and medium-term environmental policy necessarily imply a "planologic optic", which, if it does not presuppose a "planning system" for development, it will postulate it. In practice, this signifies that on the one hand, the lines of environmental policy presented require this "planning system" as a condition for the efficient working of its own decision-making; and on the other hand, it contributes to its construction by providing methods, procedures, circumstances, and cognitive instruments and parameters[9].

In the definition of an environmental policy in the medium- and long-

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an old debate inside the National Bureau of Economic Research of New York (Moss ed., 1973), a sanctuary of national accounting studies, and a more recent treatment of the argument by the World Bank and UNEP (UNEP-World Bank, 1989). It is in any case important to remember that in the United Nations the work is quite well underway, not only in terms of revision of the SNA (UNSO, 1990), but also in terms of the attempts to introduce an "integrated system" of environmental costs (see UNSO, 1993). For a "survey of resource and environmental accounting in industrialized countries" see also Peskin and Lutz (1990). And it would be very opportune that Eurostat - which it is not difficult to imagine studies and follows what progress is made in this direction on both an international as well as a national scale - should develop a programme for the introduction of an integrated system of economic and environmental accounting in a much more rapid and timely fashion than has hitherto occurred.

[8]On this point there are excellent considerations in the report by a study group of the OECD on the monetary evaluation of environmental benefits (Pearce & Markandya, 1989). A theoretical and concise treatment of the debated problem of the measurement of the economic benefits of the environment policy, recommendable for its completeness, is the work of Johansson (1987).

[9] See further arguments in Archibugi, 1989a.

term, there is however an obvious prejudice in favour of the development of a process of *comprehensive planning* (which is based on the presupposed identity of economic well-being and environmental well-being); as far as it concerns the technical possibility and feasibility, there seem to be no impediments (if not deriving from the political "will" or from the existence of a general "culture" of planning).

However, the evaluation synthesis between environmental costs and social costs (or, and it is the same thing, between environmental well-being and social well-being) can only be achieved through an appropriate development planning system (which should have at its disposal also the new systems of integrated accounting). It would provide the basis for its decisions on two fundamental mainstays:
the opportunities offered by research and progress for developing new production technology which are "clean" and which gradually reduce the impact on the environment until finally eliminating them altogether;
the opportunities offered by an appropriate territorial planning, which "foresees" the use of territory and environment organising them in such a way that it can effectively control the negative effects.

The criteria and directives which reaffirm the relationship between urban policy and environmental policy, between economic-social policy and environmental policy, and which imply the coordination of these specifications within a comprehensive development plan, are the same criteria and directives which insist on priority being given to "preventive action" in protecting the environment as opposed to an aftermath "cleaning-up" operation.

2.4.4. Distribution Mechanisms for the Costs of Environmental Policy

Comprehensive planning for development and the approach to a medium- and long-term plan also for environmental planning which postulates this former, do not exclude, but rather suggest that - with the exception of different and concretely preferable social opportunities arising (with the availability of precise figures) - the best system of "social" distribution of the costs of environment protection policy would be that of incorporating them into the market price of goods produced, and thus according to "market" mechanisms, and according to the "Polluter pays" principle.

This principle should not be understood as naively as its "popular" definition would imply. In fact, who "pays" could quite easily be the consumer, or final user of the goods or services which have a "high pollution content", precisely in order to obtain a first "market" evaluation

of the relative value to be attributed to this or that product, without hidden costs or privileges.

In fact the usefulness of distributive mechanisms in the "market" in order to perform more efficiently the choices of compatibility between economic and environmental policies, should not be underestimated. It is by means of these mechanisms, for example, that the "polluter pays" principle can be implemented. It is a matter of ensuring that the burden of protecting the environment, decided by public authorities is then redistributed throughout the producer-consumer chain: initially at least the burden should rest on the producers' shoulders, who are effectively in control of technology, in order to encourage them to search for, and use technology and products which are less damaging to the environment. But, no less compatible with such a principle, and in fact rather desirable, would be that the costs of reducing pollution be, subsequently, either in part or completely transferred via an increase in prices, from the producer to the end-user, making him thus aware of the scarcity of the unpolluted environment and inducing him to use only those goods which are less damaging to the environment and which have been produced by environmentally "clean" methods[10].

As far as concerns the economic instruments for protecting the environment, some hundred different types of "ecological taxes" are now being levied in countries with various economic systems. Implemented as instruments intended to be complentary to direct regulations, so as not to construct in any sense a "license to pollute", these levies - in proportion to the quality and quantity of the pollution - have the joint objective of discouraging the sources of such pollution, and to collect sums which are then spent in protecting the environment. (Recently, in the United States and the Federal Republic of Germany - under the strict control of the authorities - "markets" of pollution rights have been created with the aim of efficiently implementing restrictive environmental standards, especially with respect to air pollution)[11].

Given the complexity of environmental problems, it would seem opportune not to cease, at least, the experimentation with the more advanced of these instruments, rendered still more useful by the growing severity of environmental policy, and also in view of the unification of the EEC market, which most probably will introduce a harmonisation also in this field, among others, for reasons of equal competition conditions[12].

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[10]These are also the conclusions of the report of the task force which the EEC Commission instituted in 1988-89 (see EC Commission, 1990a).

[11]On "permit trading" see Joeres and David (1983) and Tietenberg (1985).

[12]A good survey of the "state of the art" in the matter of economic instruments for environmental policy is in a recent study promoted by the OECD (OECD, 1989). Within

It has been said that the main objective of all environmental policies should however be the *prevention* of damage, rather than reparatory intervention. But, as has also been said, there are principally two ways of attaining this prevention objective: on the one hand, territorial planning and on the other hand, the introduction of "clean" technology, including the use of processes and products which have a less damaging effect on the environment. These technologies, on the other hand, represent the strong link between economic progress and protection of the equipment, because they allow for the transformation of the production system along environment-oriented lines.

2.4.5. The Identity of Environmental Planning and Territorial Planning: A Synthesis of Criteria Described

At present, environmental policy is performed essentially through three basic forms of intervention:
emergency intervention aimed at distancing risk conditions with the re-entry of compromised environmental situations, above the minimum threshold of tollerability recognised scientifically, and, hopefully, identified by legislation;
interventions aimed at the "cleaning-up" in the medium- and long-term of fundamentally altered environmental situations, with the aim of rebuilding territorial frameworks which are in line with the planned-for environmental well-being;
interventions aimed at the protection, preservation and handing down of intact "environmental monuments" which have been recognised as having value as environ mental and/or cultural assets.

In practice, although these three types of intervention play a praiseworthy role, environmental policy cannot consist of these alone, in that the basic objective of environmental well-being *is that of establishing a "balanced" rather than conflictual relationship between man and nature,* and the three types of intervention, by themselves, cannot adequately guarantee this aim.

In fact, it is not only a question of identifying thresholds beyond which the alteration of this relationship becomes a situation at risk. But it is a matter of pursuing the aim of ensuring that human activity *always*

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the Environment Committee of the OECD itself, "directional guidelines for the application of economic instruments in environmental policies" (OECD 1991) were subsequently drawn-up, which have not yet found their rightful recognition within the European Community.

conforms to natural processes so that they are not damaging to these latter, be it in the short- or long-term; and this would apply even to those forces and natural processes which seem to be apparently to man's advantage. It is a question therefore:
of knowing and emphasising the relationship between man and the environment, in *all* of its values: firstly by adopting a *system of objectives* which concern precisely, the *globality* of the man-environment relationship, which are inherent to the whole of man's habitat, and represented by those which normally are defined by a comprehensive conception such as "urban values";
to systematically measure the *effects and compatibility* of human action pursuing the above-mentioned aims for equilibrium and natural processes, and therefore to introduce *instruments of measurement and assessment* which take simultaneously into account both the social and environmental value of progress;
to choose the aims of *socio-economic policies* (not environmental) *in such a way that they are not incompatible with environmental policies*, accelerating or slowing down the environmental dynamics that are in action; (and this even by adopting a perspective that is not necessarily immediate but that is historic, or secular).

The three aims-conditions mentioned above would be carried out within the framework of interventions, of which current environmental policy is usually composed, in a *medium- and long-term territorial planning process*, based on methods of assessment and integrated perspective accounting, and on an intense commitment to research aimed at introducing technology (and relative "applicative policies") which is environment-oriented. It is only within this framework that a "preventive" policy can be efficiently constructed and that the inspiring principle of achieving a balanced and non-conflictual relationship between man and nature can be respected.

An environmental policy which is to base itself on this new plan, therefore, cannot but assume the following as a preliminary step:
the definition of objectives, compatibility, methods and instruments of qualification for the urban environment and its assessment;
the setting-up of a *Territorial Framework of Reference* in which both the major prevention policies for safeguarding environmental assets (air, water, coastline, forests, "biotopology", countryside etc.) as well as production policies (energy, agriculture, industry, transport, etc.) converge in the conviction that *the best environmental policy is always that which coincides with the most appropriate policy for the use of the territory*.

2.5. Environmental Planning and Planning in General

We have tried to emphasise, from various points of view that environmental policy in the medium- and long-term requires a more extensive planning process, and forms a "cross" coordination of sectorial policies and programmes.

Environmental problems are present and emerge in all aspects of the economic and social life of a country and of the Community as a whole: and to face them with a view to preventing them, necessarily implies considering them along with all the other economic and social problems in existence, and not as a separate issue. From here comes also the need to place the individual safe-guarding or preventive environmental actions within a "comprehensive" social-economic-territorial program which takes in all sectors of economic and social life, whether at a national or community level; an "integrated" programme which is able to distinguish the working interconnections between the various needs and different sectors of community intervention, and which enables decisions and choices to be made that are not only "sectorial", and thus mutually incongruent (as often is the case at present in the Community organisation).

This is why consideration of an environmental policy for the medium- and long-term period should be performed in an "optic" of comprehensive Community development planning.

Here then is one of the most important tasks for "medium- and long-term" planning: to coax European policy out of its present "sectoriality".

One of the first steps towards *integrated planning* is that of defining more precisely some common criteria and requirements for the conception, construction and management of plans and projects whatever the sector they belong to. This more thorough detailing would seem to be particularly useful in the form of a final reconsideration of the methods by which structural funds can be used to reinforce European economic and social cohesion.

Part Three

SOCIO-ECONOMIC COHESION AND TRANSPORT PLANNING

3.1. The Importance of Transport for Greater Economic and Social Cohesion

It is quite clear that a European policy for transport aimed at bringing closer the territories of the Community has a direct and guaranteed impact on the strengthening of economic and social cohesion.

Moreover it may be said that a determined policy of rienforcement through transport-systems of spatial accessibility to all European regions, constitutes a policy which is *emblematic* of greater economic and social cohesion: as though it were the "symbol" of what a more *cohesive* community, both economically and socially, might be.

On the other hand transport has always had in history - and even more so in the recent history of industrial western society - a strategic function in unifying and integrating territories that are not very integrated. It will have a decisive function in the process of social and economic European integration, which will follow Economic and Monetary Union (EMU).

Transport represents ease of access, both for people and goods. Its cost influences the overall costs of goods and therefore influences the actual directions of mercantile traffic.

The ease of access for people and goods has had the capability of multiplying "cohesive effects" on the territory.

It should be considered that, during the selection-process of territorial projects aimed at greater cohesion (obviously by using appropriate parameters of evaluation), transport projects (if well established) will be those that will head up the best requirements for a strategy of cohesion.

3.2. The Field of Transport as "Symbolic" of the New Conception of Territorial Policy

But under another aspect a European transport policy here acquires, in our examination, a great importance.

It constitutes, because of its very nature, a "symbol" - also - of the passage from the old regional policy to the new territorial polic[y.][A]

In fact, few objectives better lend themselves to incorporating the

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[A] passage which we have described in the already cited work (see Note 17) by the author on "European Regional Policy" (Archibugi, 1993).

concept of interventions on the territory *according to specific spatial objectives, rather than according to the requisites of a backward area,* than does that of a European strategy for transport.

And only few objectives are as logically incompatible, with what is only a "regional" vision of development, as is such a strategy.

Basically, what characterises the passage "from regional policy to European spatial policy" is the different approach of the two different policies:

in the case of the first, the approach remains that which, in spatial economy theory, is commonly called the *homogeneous areas approach* (and in this case the homogeneity is given by the requisite of "backwardness");

in the second case, there prevails the approach that - always according to the same theory - is called the *gravitational area approach*, that is, that of functional relationships between the territories (and in our case this is a matter of territories on a European continental basis[).]

It is unnecessary to point out that in this new territorial policy it is at this second approach that we should fundamentally look. We should look at the *functional relationships* of the territories, rather than at their intrinsic characteristics of backwardness.

And greater "cohesion" of the European territories (as expressed in the Single European Act) is seen in the new concept as the manifestation of the "relationship" between the different parts of the territory (and not just as the mere equalisation of absolute levels of development). In fact, in the world, we can come across areas which reach the same level of development (for example expressed in the pro-capite Gnp) but not for this reason are they "cohesive" areas. What makes the cohesion is a convergence of their positions but *in the relationship*, and *because of their relationship.*

It is therefore those actions which strengthen *this relationship* (and that type of relationship which particularly favours cohesion), which a European policy, aimed just at such cohesion, must in the first place enact.

A functional and homogeneous network of European transport, which does not marginalise any one community territory but rather places these in equal conditions of accessibility (except for geographic factors) is one of the things which most favours cohesio[n.]

[Th]e two approaches are similar to those defined by a document of the Council of Europe (CEMAT, 1991) - the "regional" approach and the "guiding image" approach.

[In] this case also one cannot fail to recognise the function of precursor that the Council of Europe has had, and in particular the CEMAT (European

3.3. A Common European Transport Policy

Up until now it has been a diffuse opinion that a common European policy for transport has been "*both limited and piecemeal*". But one can say even more: that it has been more oriented at the elimination of obstacles in the way of "free competition" rather than at a truly European integration of the transport systems.

A common transport policy had an important place in the Treaty of Rome. But it had this place on the foundation that - with the free movement of productive factors (work, capital, services) - the conditions of competition would have been "distorted" if significant disparities in tariffs and transport systems of each country were maintained.

But despite the fact that the transport sector has always been that in which the influence of the State has been much greater than that in other sectors, it is this sector which has also been the productive sector furthest away - at least in the experience of the EEC - from creating real conditions of "equality" between the different countries (in its tariffs as in its systems).

A common transport policy was included in the Treaty of Rome together with the free movement of goods and with agriculture and with the free movement of people, services and capital, in the part on the "foundations" of the Community (second part). While economic policy and social policy (and today - with the Single European Act - also socio-economic policy, that of technological research and development, and,

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conference of the Ministers responsible for territorial planning) in fixing the strategies of this type. In the well-known "Chart of Torremolinos", adopted by CEMAT in May 1983 ("European Chart for Territorial Planning") it is affirmed among other things that *"l'Amenagement du territoire poursuit le developpement socio-economique equilibre' des regions"* and that *"en tenant compte des processus economiques qui concernent l'Europe entiere, des speci ficites regionales et de l'importance du role des axes de developpement et des reseaux de communications, il doit controler la croissance des regions congestionnees ou de celles connaissant une evolution trop rapide, encourager le developpement des regions presentant un certain retard, maintenir ou adapter les infrastructures indispensables pour un nouvel essor des regions en declin ou menacees par de graves problemes d'emploi.... Les regions peripheriques qui ont des exigences specifiques et disposent d'un potentiel structurel de reequilibrage socio-economique doivent etre mieux raccordees aux centres industriels et economiques de l'Europe."*
The reader is referred to Arbuthnott and Edward, 1989 (2 ed.), p.69.

lastly, that of the environment) were included in the third part: that pertaining to "implementation policies of the Community".

This privileged role had a precise significance: transport policy was recognised to have a circumstantial value for the entire operation of the "common market", in terms of the free circulation of goods and factors. It was not a policy subject to particular choices, nor was it tied in nature to the operation of "the common market" as were economic and social policies.

But that role, so essential to common transport policy with the aims of a common market, limited its nature and scope. It was thus limited in fact to common administrative norms applicable to international transport by and for the territory of each member state. Common norms which eliminated negative impacts on free circulation of goods and factors (above all transport enterprises) and on competition, and nothing more[!]

This has prevented transport policy from expressing - in positive terms - an active intervention in the process of European integration: an intervention which, in other terms, could have an active role in implementing a greater accessibility on a European scale between the different territories of the Community, above all for those territories which today are the most "marginalised" geographically and economically.

But this latter role is instead that which is most natural for a transport policy on a national scale: a) of assuring an equal condition of accessibility to all those territories which belong to the same national community; b) of eliminating what is otherwise known as "spatial marginalisation"; c) of so strengthening economic and social cohesion, within each national community.

It is therefore towards this active role (typical of any transport policy) that we should orient and reform our common European transport policy if we wish to render it an efficient instrument of a more pronounced economic and social cohesion.

And the new concept of spatial policy - through which European regional policy, at least as we have hitherto conceived and practised it, should become reformed - would only favour such a reform of a transport policy, in as much as it would derive from the same criteria of approach.

[A] brief historical overview of the Common Transport Policy exists in the divulgative pamphlet: *The European Community's Transport Policy*, edited by the EEC Commission (1984); in it there is also a bibliographic selection on the subject. As works of great documentary value and scope we can recall those of F. Santoro, *La Politica dei Trasporti della Comunita' europea* (1974) e di L. Schaus, *Les Transports dans le cadre de l'integration europeene* (1977).

Between the new spatial policy, to be set up, and the new transport policy, to be reformed, there are in fact strong "interactions" and strong synergies.

3.4. The Criteria of a New Transport Policy on a European Scale

In order to strengthen the economic and social cohesion of the member countries, a new transport policy could have three principal orientations:
Design an *essential system* of infrastructures and of services of *European interest;*
Design the essentials of a *metropolitan transport system* capable of developing cohesion within a network of European urban systems (see Part 1);
Establish the essential guidelines of a European development of *transport compatible with environmental objectives.*

3.4.1. An Essential Network on the European Scale

The essential network on the European scale would be that transport network - relatively independent of the variable "current demand" - which is capable of rendering accessible all community territory.

Such a network would be the principal characteristic - as can well be understood after all we have maintained above - of a new transport policy aimed at greater economic and social cohesion.

The design of such a network would imply the marking (also in cartographic terms) - in red - of all those *deficient infrastructures*, those found lacking with respect to the objectives of the "Framework". And moreover it would imply both indirect action - at a local, regional and national level - and direct action - through its own financial instruments - in favour of intervention capable of covering such *deficiencies*.

Such a design - or the subsequent decisions of European decisional bodies - could moreover place those deficiencies in some order of importance and of priority.

Obviously the network about which we are talking should pay attention to the infrastructures and the services belonging to all *modes* of transport: the railways, the motorway network, maritime, "internal" and aerial navigation.

And the network should be conceived with a marked distinction (justified in every mode of transport) between transport of goods and transport of persons. Moreover, precisely because this distinction emerges as a necessity, with which transport technology has largely come to terms

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Some timid attempts in such a direction have been made. The Memorandum of the EEC Commission (1979) for a global action in the matter of transport infrastructures has given birth to a correct orientation towards the identification of a *European network of communications of the programmatic type,* defined at the correct scale of "interest to the Community". But, however, of such a net work as described, that is to say of a "balanced network of transport" in the Community territory, they offered no further more precise territorial indications, while they remained only outlines of the general principles. Naturally, many works have been financed - even with the structural funds - which could be considered contri butions to a "more balanced network" of European transport (in this regard the reader is referred to the list of works recalled on p.107 of "Europe 2000", EC Commission, 1991a). But their selection has not taken place on the basis of an organic plan of the needs, which would seriously have allowed a decision to be made on the priorities. And also many studies activated within the Commission have not been explicitly aimed at the construction of a "balanced network" of transport, as a framework of reference for the decisions of the investments of the structural funds or for the recommendations to be made to the various governments (for an overall frame of reference on the state of transport policy see a pamphlet by the same EC Commission, 1991b).
The reader is referred in this regard to the study of "Tecnecon, Economic and Transport Consultants," *Future Evolution of the Transport Sector, Major Implications for Regional and Future Transport Planning* (jointly commissioned by DG VII and DG XVI of the Commission) Tecnecon, 1991); the study of "W.S. Atkins Planning Consultants", *The Future of the Transport Sector* (commissioned by DGVII) (Atkins, 1990); and the study of DG III (1990b) *Trans-European Networks*. And, with regard to the high-speed railway, the study - again by DG VII - *The European Highspeed Train Network* (1990c).

the world over (finding however the usual resistences of habits, inertia and prejudices), it could be included among the principal explicit objectives of a *common European transport policy.*

This objective could have its most evident effect in the planning of a motorway network: the only mode of transport in which the traffic of goods and that of people is still dramatically undivided.

3.4.2. The Definition of the Principles of a Metropolitan Transport Planning

In the territorial Framework of reference, a spatial policy on a European scale would be concerned with defining a network of "urban regions" or a European "network of urban systems", as a model of an urban unit compatible with socio-economic and environmental objectives, and with an efficient measurement of the degree of achievement with respect to those objectives, and therefore of the degree of achievement with respect to economic and social cohesion (see Part One).

In many cases, the attainment of this "network" of urban systems would be difficult in those territories where the urbanisation presented is still diffuse and little polarised, and therefore of poor quality, and still far from reaching levels of population and of users of urban services sufficient to produce a *city-effect*, understood as modern urbanisation.

An important instrument for this growth of networks of urban systems is that of a policy of urban-metropolitan transport which can polarise accessibility in well-determined territories with little cohesion and can therefore create the conditions for accessing that "urbanity-objective".

In this case one of the objectives of a (common) European transport policy could be that of placing itself at the service of such a policy of urban transport favouring operations aimed at the implementation of urban-metropolitan transport "systems" coherent with the urban systems indicated in the Territorial Framework of referenc[e.]

[N]aturally, it should be possible to select, either on a priority basis or by way of example, an urban System which might be considered highly "exemplary" of the new European policy for urban systems and which might be recommended at the Community level.

3.4.3. Environmental Compatibility of Transport Systems

A final privileged objective of a (common) European revised transport policy should be that of promoting and favouring the construction or the reorganisation of transport infrastructures with the object of rendering them "compatible" with the objectives and the constraints inherent to a policy for environmental protection (Para. 2.3.2[)].

[It] is worth recalling a series of "principles" and "directives" emanated over time by the Council of Europe: for example, Resolution No. 170 (1986) of CEMAT on "La planification des Transports: comments arbitrer entre l'economie et l'ecologie?".

CONCLUSIONS

In conclusion, we have wished here to underline the role and importance of a spatial (urban, environmental and transport) policy for the purposes of the sought for greater socio-economic cohesion, which is the objective reiterated officially by the most recent policy documents of the European Union (Single Act and Maastricht Treaty).

In our opinion the European Commission is not devoting enough attention to this policy. As we have said several times in this panorama of approaches and views of such a spatial policy, there are numerous interventions on the part of European institutions (Council of Ministers and Commission) which can be attributed and referred to such a policy; interventions in the field of urban design, environmental plans, and various transport plans and projects. There are furthermore also other community projects with definite spatial relevance such as those for agriculture, or training. However there is hardly present an overall and integrated vision of spatial policy. And likewise there is little coordination between the various programmes and projects, which should be inspired, to be efficient, by an overall approach to spatial policy.

Some initial attempts have been made by the European Commission with the "Europe 2000" programme (managed in the framework of regional policy), and it has already been said how innovative this approach is in comparison to the traditional regional policies of support for this or that area or region in the Community with "assistance" with subsidies or particular kinds of support.

But this programme, and the studies carried out for it, have not yet managed to provide a Framework of territorial reference that is sufficiently clear and explicit with regard to the territorial goals of growth of the Community (such as those dealt with in the preceding paragraphs of this writing); and they have not managed either to construct "new" criteria for the management of the so-called Community structural funds.

For example, it is our opinion that an organizational structure of the

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[S]ee for this the previously mentioned writing, which is also part of the report on the strengthening of socio-economic cohesion (Archibugi, 1993).

environmental and urban territory of the Community should give rise to a total rielaboration of the five objectives (which have become by now "classic"), that have for some years presided over the application of the Structural Funds: in fact such objectives belong to the concept and method of the old policy of assistance and support for "defined regional areas" of the Community, and not to overall strategies, with a typology of intervention aimed at the achievement of territorial policies, such as those emerging from a Scenario of the "Europe 2000" type.

A strengthening of socio-economic cohesion will not take place only with the assistance for the weaker regions, or those with particular problems, but by integrating better the functionality of the European Community territory overall.

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