

Metabolism.

The relationship between urban and rural contests

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1) WHERE CITY AND THE COUNTRY COLLIDE

A city is an organism, opposed to a mechanical system, made of complex and intricate processes that keep it alive (Geddes, et al., 1976), in a regional balance where the relation between the city and the surrounding agricultural economy is symbiotic (Geddes, 1915).

In addition, the urban context produces a complex dynamism that goes beyond the traditional political, administrative and hierarchical partitions, belonging to the local, regional, sub-national governments. In this current urban scenario a good urban planning and an optimal city management to conserve and save resources can be pursued trying to achieve a balance between tradition and innovation; between the centripetal forces of human interaction in the physical space and the centrifugal flow of data, increasingly evolved by the latest technologies.

With this premise, the authors chose for this paper the topic of urban metabolism, as a part of a metabolic process that involves, on the one hand the ecosphere and its components - air, water, energy and pollution - on the other hand the spontaneous and planned evolution of cities and urbanized land. This scenario is highly topical, not only for experts in the field of research. In fact, widespread issues between institutions and citizens relate to - the future quality of life in rural and urban contexts, which force to translate global guidelines in appreciable local projects. This translation can be oriented through cultural and scientific approaches, legislative measures and technologically advanced operations, in order to reduce the negative effects produced by rising temperature of the planet and by smog which derives from productive activities, from the comfort of buildings (heating and air conditioning) and from agriculture chemical treatments. For these reasons, cities should establish processes to increase the use of renewable energy sources. This process is important because it becomes ever more pressing in the international scenario. These renewable sources must be designed with architectural design because an essential part of the city construction work.

Therefore, International Government consider the quality of the atmosphere a *common good* to be protected but is more complex empowering city dwellers and peasants in the countryside. Environmental sustainability must be considered a common good. To reach this goal, sustainability must respect the rules studied through the metabolic process. Thus, the most emblematic urban

context (used as a study model) is the "border" area between the city and the rural areas that the urban history identifies as a place of critical and economic-cultural conflict.

Moreover, these changes can be understood as a dynamic of rural-city mediation can produce significant effects on the urban suburbs. For this purpose, we have analyze the *identity factors*. This factor (without diminishing the traditional values of the city and the countryside) represents a strategic objective to make the planned consumption of rural area and for the construction of housing necessary to give a home to of people that pressing to reside in the city.

“All cities are in contrast with the campaign, as they form a crack in the unity of rural conditions, a seed of negativity in farming communities. However, at the same time, a rural system for its internal development stimulus to the city, both to create jobs differentiated crafts and trade that for the emergence of farming communities relatively self-sufficient. At different stages of social development, the city can progress from a clearly subordinate position to an equilibrium against the campaign, and remain in this position for a long time or after having exceeded the limits of its rural base, to yield to the hegemony of the earth, when people create an irreconcilable dualism. Consequently, urban life can be taken as to the bottom only through an analysis of the economic relations prevailing in adjacent agricultural context. Despite urban life has generated its rules of social forces, and often has come into conflict with the campaign, was the agricultural economy to establish the historical limits for almost every form of urban development.” (Bookchin, 1975, p.26)

The urban history shows important moments of city planning, which are linked to old economic-urban policies. We need to prevent the new city and suburbs designs that are old even before they are populated. The cultural evolution of populations needs to be evaluated also in relation to the dynamics of the settlements, to the new habits of relationship allowed by new technologies.

In other words, we must reinterpret the problem of "urban suburbs". In fact, often, the suburbs are disaggregated to the cities, in which, with built "popular", are preserved "pieces" of rurality no economic recovery prospects. This is due to the instability of the factors production and markets. So, the metabolic process, in this area, not only involves the urban construction and environmental issues but, causes mutations in consolidated urban habitat and in traditions of rural life. The problem is not simple because the agricultural land should be seen as productive system, settlement system, natural landscape and built. These components of the system must be analyzed with its own rules of organization to be related and in balance with the other components of the territory. Therefore, the planning of agricultural land must be addressed taking into account the fundamental determinants that are productive resource of production activities (installations, infrastructure, etc.) and, finally, of the living environment in a tissue to "large mesh" and a built landscape with historical layers.

Particularly, in new urban settlements, (which do not seem related to the problems of recent immigration) should prevent the culture of social division (between the populations who live in different parts of the city and underprivileged groups) will become an instrumental justification for rejecting the application of immigrants, not only in the periphery but also in *dilapidated blocks* of historic centers. Unfortunately, analysing the migration flows, it is evident that everyday needs are difficult to satisfy. This is one of the many reasons that justify interventions in the suburbs with the construction of disproportionate buildings without a coherent plan and appropriate to receive people from different backgrounds. In some cases, people get to a "gigantism buildings" characterized by a

superficial social homogeneity that conflicts with the city area and the countryside. So, this is a metabolism process (partly spontaneous and partly forced by the "rules") of the city that are not always appropriate to intervene on the socio-economic criticality of the different settlements. With this awareness it is essential to adopt design solutions and dialogue with residents to avoid forms of social ghettoization whose negative effects fall especially on young people and ethnic communities.

The profound modification of the alternative use of the space, is connected with mixed trends in the demand for services. In fact, the few rural areas that still exist, although profoundly changed when compared with the areas of the past, present an obstacle to the new demands of life. For example, some urban manifestations require the use of the living space, (with compact urban aggregate criteria) entirely dependent of equipped service centers. The persistence of rural interests, in the strip of land less urbanized, favors the permanence of its habitat with all the collateral dependencies. Therefore, it expresses a conflict cannot be mediated between the technical factors of the settlement evolving and his own cultural background. The tradition is so damaged by income levels, the availability of land and public intervention weakness, but especially from the planning of the relationship between the rural and the urban contest.

These complex issues (problems cannot be solved only technically) are studied by Public administration when the urgency of the buildings maintenance and social conflicts take on a dimension of risk for residents and citizens. Contrary actions of urban planning process should be born from culture to develop new group identity in line with the origins of urban and rural areas. When solid economic structure is missing, is possible to replace the primitive farming culture to adapt to the city life. The secular structure of the rural society crumbles. This situation causes imbalances whose manifestations are caused by the escape of the campaigns, mass emigration, planning without rules and the absence of planning tools.

However, in some rural areas (as an important economic development) you see a rapid transformation process in social structures. These areas become "rural areas with urban characteristics". From these areas, the environmental and socio-cultural transformations tend to spread to other contiguous areas where there are favourable conditions for development, the kind located on main roads. Therefore, it is inappropriate to outline the differences between the "rural culture" and "urban culture" in the habitat change process, also because there are "rural city" in which you experience high levels of crowding, already classified as low-density urban land. Although the distinction between economic structures (mainly agricultural or industrial activities) is not sufficient to distinguish urban areas from rural areas.

In this paper we do not want to define the differences between urban and rural culture to culture. In fact, we believe it is not arbitrary to identify industrial civilization with urban culture. Nevertheless "rural \ urban" dualism we can identify through four phases typological the differences and additions:

- 1) *rural areas* seen as locations rural culture and the agricultural and pastoral work;
- 2) *the peripheral areas* of the cities in which the determinants of the city, without a coherent programming, determine in their new inhabitants, social unrest and confusion building.
- 3) the *urban areas in evolution* in which the settlement layout it goes equipping of commercial and community services activities.
- 4) urban areas of identity that become an expression of urban culture and entrepreneurial culture different from that of modern agriculture supported by research in the technical means of production.

"As there is a limit beyond which a country becomes a city, although there is a limit beyond which the city denies itself, leading to living conditions even more atomized and culturally and socially more arid than those traditionally attributed to rural life. As usually think of the city such autonomous entity with its own life and its own history, the agglomerations do not differ from the other fields of social activity; as Marx observed, cities grow for the same material conditions that shape the whole society. "(Bookchin, 1975, p.23)

So, you come to the formation of an urban-rural continuum, with the spread of the essential characteristics of the culture and urban society in the territory. On the other hand, the process of development of cities, especially of industrial cities, shows that the development tends to an expansion of the area with the formation of real spatial city. This process universally observed is presented as the last episode of the construction phase of major metropolitan areas. It is useful to consider the effects of metabolism in territorial dimension that becomes the subject of planning. In fact (with the hope that the described metabolism can generate on the territory of the common good effects) one could debate whether to seek a link with the macro-scale factors that define the environmental sustainability levels. A topical issue consider indispensable as evidenced by the last treaty of the United nations conference on climate change in Paris (November | December 2015). In this connection it come to mind the drama of smog in large cities and the "land of fire" (pollution) in many urban suburbs.

Deepening the design aspects of the city, it is important to point out the sometimes unpredictable changes of the large size of settlements, that appear visible through the effects of building construction and architecture , aimed at the provision of goods and services as cultural opportunities (eg museums, training centers and universities). In addition, the city, *"grown to also dramatically thanks to new technologies, has entered into conflict with the space, especially where it is resistant or not previously transformed"* (Cacciari, 2009, pp. 54-55). Cities are no longer measured in terms of places, spaces of relationship, but based on the activities and the months of dating.

Therefore, urban architecture no qualify a context, but the functionality of living linked to productivity; and this makes us lose sight, as we said, the synthetic urban design and the characters of habitats. It is problematic phenomena in border areas that, according to Augé, are considered "non-places" as devoid of identity values, relational and historical; but these areas can become anthropological places with different functions ", through a" cultural journey. This is demonstrated by redevelopment and regeneration projects, have now become international goal of policy and planning.

2) METABOLISM AND GUIDELINES

The complexity of social, economic, urban and environmental factors, that interact in the outskirts of the city zones projects in the country, requires, as we have seen, a method of study that can be accepted and adopted by the political and administrative governance. Obviously, the problem arises of how much of the different factors can be extrapolated to become applicable indicator to each context, without precluding the planning of the activities that characterize the structural and dimensional typologies.

The critical factors in urban areas and agricultural zones (characterized by spontaneous urbanism) are industrial ecology, urban ecology, sociology, ecological economics, political ecology, architectural design, natural resource management, waste management and political geography. So, the most difficult problem is that of an intelligent governance that knows how to evaluate the quantitative and qualitative impact of variables, to build a program structure that can bring order to the most urgent actions.

It is no coincidence that in Italy after the Second World War, we are disregarded the rules of landscape design and urban suburbs. In this period they had considerable influence not only the technological innovations especially in infrastructure but the rent of land and the speculative approach on a large scale. In this way it is produced which produced a kind of disorder in contrast with the rural habitat environmental values.

So, scholars must intervene in crucial areas of "disorder metabolism" (areas that produce a marked imbalance on the functioning of the urban system) because it is not easy to evaluate the exchange of relations between local demand and available funding and city organization. For this reason we have to discuss about the temporal and implementation gap, which must be considered transitional to the objectives to be achieved.

In summary, the factors can be "measured" and thus express a concrete tangibility, to "draw" urban development. It is important to take into account other factors, without seat, including energy sources, water resources and disposal of organic waste that are now the subject and objective of smart cities management.

Especially, the city is a concentration of energy, motivation, challenges, programming, which are prerequisites for an evaluation of the potential and future bets on which citizens can confront the world.

Energies that express themselves through, not only physical components, but also intellectual, spiritual, psychological, economic and political, that synthesize the driving ability of cities similar to a magnetic field of "encounters and clashes" between ideas, actions, tools, results desirable.

"In other words, it is a programming problem: assess applications and offers land and environmental resources, and prepare their balance by promoting a selection of priority activities (policies), through the trade-offs between different objectives, and the connection between objectives and means, thoroughly investigated. A degradation of the recovery policy that passes through the identification and construction of an eco-urban system model. Model that can be defined as: the space in which optimizes the different urban functions; space - above all - by which you can balance the demands and offers of land resources of a community at least in the context of

its daily needs and its residential functions. [...] A joint work between different realities would certainly be essential to build this tool of analysis -will decision of an urban policy". (Archibugi, 1989, pp. 15-16).

Therefore, for govern the *forces* it must also take account of other factors than the typologies described so far that have marked the settlement through economic political history, military affairs, customs characterizing the background of the territory. In synthesis, the dimensional and cognitive process - which helps to express the culture of the people who lived, and still lives of the urban space - means that the city will become an active part of a catalytic process in constant evolution as a framework for carrying out human activity and "education" of men and women who combine to represent the community identity of the places (of residence, work, leisure) and other centralized infrastructures, now strategic for the country (airports, shopping centers, parks urban, waterfront).

So in this reality constantly "boiling", the urban plan can play a strategic role for guide future developments. With other words in the Plan process must take into account the close relationship that exists between citizen and reality. Then, in this process we must consider evolution critically of the settlement and development of the common good.

Today we live in a situation of great "environmental crisis" which has arrived through pollution and use of land and ambient resources. This phenomenon is exacerbated by rapid population growth which has resulted in a growing demand for resources to human needs with serious effects on the environment. The interweaving of economic and environmental issues (which are emerging on a daily basis at both the global level and at the regional level) should give rise to some questions difficult to solve: you can think about a substantial reduction in the consumption of resources? What role can have the territory in the conversion process of the traditional development system in sustainable development?

"So, the biggest problem that is facing us today is the dichotomy between the current production system (punctual, peripheral, with few employees), and the pattern of consumption distributed in the territory but concentrated in urban centers, far from the centers of production . Two asymmetric models that have as their physical limit the scope of the networks (electricity, water, and transport). On the other hand the modern city is characterized by a metabolism that causes an urban ecological footprint that is at least an order of magnitude higher than the land area occupied. " (Siniscalco, p.1).

Focusing on the theme of environmental protection, one of the main uses metabolic analysis is to monitor the levels of sustainability in rural and urban areas. This process allows us to collect important information on energy efficiency, waste management, infrastructure, water, nutrients and materials to facilitate a good quality of life of the population. Therefore, it is important to reflect on variations to evaluate the states of balance between the urban dimension and the sustainability of interventions aimed. In other words, the urban metabolism can compare the different stages of development and urban-rural structure; referring to the interactions between the company and its environment allowing to quantify the inputs, the outputs. Therefore constitutes a powerful assessment tool and support to planning decisions.

Reflecting on the relationship between countryside and city to draw the positive, you can not forget the song of Adriano Celentano (1966): "Il ragazzo della via Gluk" (The boy of street Gluk). It was the era in which Italy took place in the great urban transformations after the crisis and the difficulties of post-war reconstruction without urban planning to address. There has been an expansion along the roads where the ground rent was higher, and this has affected the organic development between the mutations of urban suburbs and countryside.

Indiscriminate expansion that "sacrificed" the campaign to "build" the city. In the song emerges forcefully the discomfort of the street boy Gluck when the transfer to the city will deprive him of *"playing barefoot on the grass"*: a loss of freedom and open spaces that will not be compensated *"by the things that you will find in the city and you have not had here "*and especially *"you wash in the house without going down into the courtyard."* The song is an ecological criticism, which forms the thread of the "political" message in favor of the countryside than the city, does not help to evaluate costs and benefits on both sides stemming from the metabolic process. There is a separation between built and landscape thus also in our ability to judge. We must ask ourselves why this gap. In fact, it is not possible that only the building and the ancient cultural landscape there must appear as the bearer of wisdom towards nature, underestimating everything beautiful and addictive has expressed the history of the city, much to characterize landscape patterns of great value.

From this point Italy (with its civic spaces, religious and historical centers of medieval market) is an increasingly important reference. This is true not only because the monumental and cultural heritage values are very important factors, but also because it meets the criteria to present itself beyond the borders as a national model of civic life, open to many different evolutionary factors of the planet. Wanting to actualize this model to understand if the new spaces of relationship can be a catalyst for political and social life, examining the metabolic processes becomes necessary in order to act on the one hand, on the endogenous effects in the population and in the 'organization of city life and, on the other hand, on the prospects of exogenous development more consistent with the changes in reality that can gemmate.

"The medieval countryside was an ecological community in a symbiotic relationship with the forest (other ecosystem) and the city (itself an ecosystem).

It was obtained from forest resources such as water, wood, game but was returned work, while keeping the undergrowth in order; the second gave you food, but if they drew tools and fertilizers. [...] The farmer put intelligence in its activities; the work was flexible and divided according to ability. In contrast, factory work was always the same, repetitive and without intelligence. There was no relationship with nature and the outdoors. [...] The daily lives of people, especially in rural areas as in cities, was organized around the social relations based on status rather than on the contract " (Mattei, 2012, pp.28-29)

We can not homogenize the value of the positive factors of the campaign compared to the positive factors of the city because they are two different worlds that still coexist with their specific structural, cultural and organizational. Two world that conflict when the urban settlement planning tools distort the structure of the rural system, and aspects of the agricultural construction, both of the hydrogeological underground. In these cases, it is implied the ecological and irreversible environmental damage. In contrast, dynamic urban sprawl can be positive if properly guided to

make the territory complex residential and punctual service equipment compatible with the most suitable places and based on a design aimed at ensuring community of citizens culturally prepared to interpret and to live territories as a common good.

It is necessary to understand that, the success of these actions, depends greatly on the size of the interventions to enable aggregation, sharing, tolerance and a spirit of service. This action did not happen in big interventions (for example Corviale in Rome, the Scampia in Naples and the Zen of Palermo) because the building type and size have encouraged the negativity of the social discounts rather than the construction of proactive habitat. Mutations have had another boom in the seventies century just ended for the illegal building to "patchy" (*macchia di leopardo*) that consumed apparently less valuable agricultural soils which, however, formed a sort of protective green belt. In fact, the same city, at that time, reflects its rural outskirts more fully than is the case today, because incomes were dominant over those of other sectors, and because of its public activities flanked by those of the agricultural market exporter commodities and importer of manufactured goods. The completion of the belt device, behind the aggregate principal urban and done more recently associated with the transformation of economic structures, which have risen the tertiary and residential functions with the emergence of industrial activities in the area wide.

Today the implications of the "city" project involving multiple levels and factors, sometimes interconnected whose objectives are especially the recomposition of the urban form. The regeneration of urban areas to optimize taking into account the levels of environmental sustainability, with particular attention to verse areas as air pollution compensatory factor and waste. In fact in Italy the "mending" suburbs practice is taken to change some sample areas with architectural interventions and street furniture capable of involving the people "neighbours" to collective action aimed at the protection of assets made and to their use. Interventions are valuable but minor in the sea of city-suburban-rural issues

As a new dimension in the interpretation of the place as urban space, or as a product composed of multiple relationships qualitatively, some contextual and other timeless, which distinguish a place of memory (Nora, 1984), one spirit of the place (Augé1993) and soul of the place (Hillman, 2004). In all it declares symbolic dimensions, and cultural identity; an entire tangible and intangible heritage as a community or an entire society recognizes itself and its history to look at the future. Remains open the following issue: urban planning is based on the size of the settlement and the relational factors expressed through the places of socialization, services and infrastructure that deserve thorough answers even with the help of other experienced professionals on the increasingly complex problems of the city (geographers, hydro geologists, economists, anthropologists, sociologists, psychologists, philosophers, etc.) to decrypt the determinants of the territory and habitat behaviours.

These historical references contribute to consider important the fringe areas planning not only because the connection with the centre of the city but also for the interface with the productive rural fabric.

From this point, we must now take into account that the "farming community" has changed, because the figure of the "traditional peasant" that "nostalgic postcards" depicting as the one who "leads the oxen with the plow in the small farm" has been replaced by a capitalist structure

(business or craft) that grows and sells in a technologically and biologically processed product markets.

In this context, the metabolism takes another interpretation: the physical locations of the fickleness of political and economic fluctuations. Therefore, it is important to interpret the behaviour of metabolic macroscale factors influencing the territory to plan.

In this context, one should not underestimate the issues "intangible" that contribute to the structural metabolism even more so if they can influence the political and socio-economic system that are decisive in the formation of new habitats and environmental sustainability procedures.

In assessing inputs that the campaign can express against the city seems still effectively a part of the "de senectute" Cicero book, in which it is possible to read: *"the life of the fields is not good only for the crops, meadows, vines and shrubs: is beautiful for the gardens, orchards, cattle pastures, for the swarms of bees, for the infinite variety of flowers. And do not you feel joy only to sow and to plant, but also to engage, the most ingenious of agriculture found. "*

In this phrase the "graft" verb can be read metaphorically as input to the countryside to the cities. This is an input of ecological proposals, culture and behavior, simple life to counteract the hectic life of large urban areas. So a specific recommendation for the management of the green and natural environment, waste treatment, the use of water resources and the health of the area. Another effective image, is the one used by the anthropologist Bauman. (1925). He summarizes the "liquid city" not only the physical city, projected on the waterways, but the whole society, metaphorically connected to the constant changes of the settlement fabric intersects, producing fruitful connections.

In contrast, the response that the city can give to the campaign is based mainly on the provision and supply of the collective and the individual, public and private services such as those prevailing for the educational and training health care, businesses, public companies, etc. But *"The quality and the urban effect fullness does not depend on the amount of population, buildings, objects, but the intensity of the total components, abstract and concrete, visible and invisible, that make up life, behaviors, tensions of the inhabitants. In this sense, the city is no longer seen as a part of social and productive life, but as a society. "(Guiducci, 1975, p.243)*

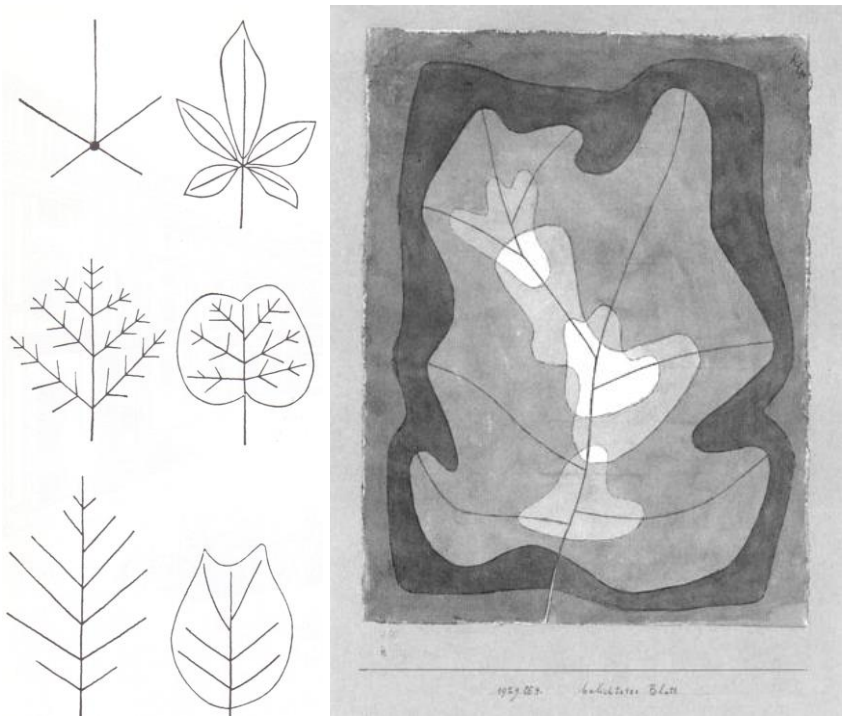
In fact, need to evaluate the balance between give and take that requires a structural set in a systemic key, supported by the knowledge and use of computer technology. Then you need to study inflows and outflows of the population mainly "educated" the city with the inhabitants "peasants and workers" of farms and industrial. In fact, cities are living contradictions of complexity that characterize our global society: on the one hand, they are crossed by cross-networks that make problematic the unified identity; on the other hand, they are presented as individual actors or groups that are claiming its own cultural and political space. In this context, governance is partnership between institutionalized public entity and private entity. Namely, the formulation of public decisions that cooperate with local authorities, representatives of categories, companies, public companies, etc.

"The city of the future is able to guarantee the accessibility and solve the critical issues, environmental and technological risk situations, the city is able to regulate the kind of attendance of spaces and this vigilance even in real time, subject to access control , the regulated traffic and

guarded strategic points and management responsibilities. It provides the mapping of services and their degree of integration with the city, with other services and transportation, for comparing the environmental performance of different neighborhoods with the human presence in them. "(Moracci, 2013, p.36)

The progress carried out by this method are obvious. In fact the progress allow not only the classic iter exceeded the planning in which you experience the decision-making process, but also provide guidance to expert knowledge and common to models open to dynamic socio- environmental mutable. So it is appropriate that the strategic metabolism cooperate to block the decision fragmentation. In fact, the metabolic study should not facilitate planners projects based on logical settlement, but must implement the projects based on the logic of urban and environmental integration. Especially, this study should tackle individual projects that do not implement a consistency check processes and territorial compatibility.

In this regard, it is effective to mention Italo Calvino: through the "always active construction site" ensures continuity of generations to urban population, through a "do and undo" cyclical and endless. This is all the more significant if the size and type of large residential containers will force to revolutionize the structural criteria of the urban plans and the functional and structural characteristics of homes and offices to adapt to new ways of living with the availability futuristic telematics equipment.



“KLEE ON MOVEMENT SYSTEMS

As in nature, the life forces of design must flow freely before rich flowering and fruitful forms can be produced. The diagrams based on Paul Klee's work, [...] illustrate the flow of lines of energy along the veins and sub-veins radiating outward from the stem of the leaf, and from them, the outward flow of the flesh of the leaf. This flow of energy expires in space, the points of expiration determining the form of the leaf. [...] The Klee water-color on the opposite page adds another dimension to the structural movement of energy within the city: the creation of fields of quality at the points of convergence of movement systems. Since the veins of a leaf or the branches of a tree are comparable to the channels of movement of people and goods within a city [...] we see the parallel between organic structural forms and the city movement System, their sequential effect on the sensibilities of the people who move over them, and the resulting effect on the appearance and character of the city adjacent to them. In this painting we see that it is the movement systems which determine the shape of the fields of influence. These vary in intensity with the degree of movement, overlapping one another as they radiate outward.”

Retrieved from: the book **Bacon E. N.**, *Design of cities*, Penguin Books, New Jersey, 1974, pp128-129
 Image Retrieved from: **Paul Klee**, *Illuminated Leaf*, http://huntersandgatherersathome.blogspot.it/2011_04_01_archive.html

3) *FUTURE GROWTH MANAGEMENT*

With these objectives, the research that is taking place in the department of DICAAR 'University of Cagliari, plans to contain the social impacts arising from the design of the new settlements environmentally and technologically sustainable.

For this purpose it is crucial to study the effects that these models determine on cities; in particular by deepening the identity resources, social status, access and cultural and recreational activities without neglecting the substantial economic component. In fact, these are spaces that, reframing theory of Geddes (1954-1932), despite the fact they accept all the impulses of globalization, remain the keystone of every social process, urban and political, which influences the development of the city.

We believe just as decisive reason metabolism "imponderable" that acts on people, to measure the urban energy field as a reference field of urban sustainability. Of course we must take into account that the nature of social change will vary with the type and size of the development project and the determinants of the community. Therefore, it is expected that in the final stages of research will take into account the models of smart cities to coordinate the evolutionary phases of the city and the most appropriate ways to respond to structural changes. Based on these assumptions, you can estimate how much weight the overall relationship between the city and the rural interface device to give to those responsible for political governance and technical proven intelligent planning tools.

This is possible thanks to the theoretical sizing of the project which has been concentrating mainly on urban policies, inclusive of management mechanisms and the analysis of social networks. After testing the progress of the work it will enable public administrations to optimize, with empirical method, the bureaucratic times, the use of legal and technical tools, system indicators, planning support tools and guidelines of government.

Comparative measurements allow beneficial for the government's actions, for planning activities and forms of cooperation carried out to stimulate the development and growth with the following effects:

- a) lead to positive results on the adjacent territory to which the plan interventions relate;
- b) generate positive outcomes for the training of local actors in order to achieve greater levels of accountability and transparency in decision-making;
- c) stimulate broad discussion of territorial development strategies of large area with the help of the most accredited stakeholders to exchange information and knowledge, in the quality of life of citizens and enterprises;
- d) to stress the need for a critical-interpretive attitude, even in legal terms, oriented strategic management of the city.

The main objective of this course is to learn the methods of territory organization in a systematic way to identify, learning and implementing more effective policies. These are aimed at improving the overall performance of urban governance which should work on these three guidelines:

- 1) the "factory" of project ideas,
- 2) the governance of urban systems and connections with the local area under the technical-administrative terms,
- 3) the political governance in relation to the constitution that regulates every country with its citizens.

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