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URBAN DEVELOPMENT AND SUSTAINABILITY

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Abstract

Cities absorb 90% of the natural resources which are exploited on the planet and are the origin of imbalances in sustainability. It is clear that achieving a sustainable balance depends upon cities becoming more efficient in their environmental management and making citizens aware of their responsibility. We consider whether current planning proposals are coherent with this philosophy. Two fundamental arguments of current European town planning are defined: new urban development and the restoration and improvement of the existing city.

Keywords: Sustainability, Urban density, Urban development

1. INTRODUCTION

The rising demand for space for new industrial and associated residential uses has generated large uncontrolled built-up areas, or the appearance of anonymous, repetitive urban fabric – the ‘no place’ that is more representative of developing countries, but which also occurs in many developed cities. Modern built-up areas, on the other hand, grow by themselves but lack the “intelligence” to organize their development (Rosí, 2004). To do so, the city would need to be organized, but this is not easy and, above all, is costly. This is a serious problem in an economy that speculates on a global level, where what is under debate is not the profit of an investment but rather the speed at which it is generated, so financial resources can be moved on to another ‘hot’ investment (Borja, 2003). These conditions are based on the ephemeral, without taking into account later consequences, and do not value general interests beyond those which coincide circumstantially with the investor’s strategy. It is difficult to find a philosophy that is not so closely linked to town planning, which develops over time, seeks general aims, aspires to certain efficiency in resource management, and, at the same

time, recognizes the pressure of land speculation. Everything is overwhelmed by the speed of a global world (VV.AA, 2009).

2. SUSTAINABILITY

The supremacy of the human species has caused environmental changes that are increasing in geometrical proportion in both quality and extent. The situation has become so serious that it is not known how long the planet will be able to “sustain” the evolution of events and so a first step towards the conciliation of sustainable development has been taken: one which maintains quality of life secures continued access to natural resources and avoids the persistence of environmental damage. The idea, however, is too simple for complex reality. Hence the introduction of the notion of a “capital that is transferred from generation to generation, with three components: artificial capital (buildings and infrastructure), human capital (science, knowledge and techniques), and natural capital (fresh air, fresh water and biological diversity).” (Lafferty, 2001). Depending upon whether natural or artificial concepts prevail, we talk of strong or weak sustainability, but we should not deceive ourselves: natural capital cannot continue to be squandered and the margin of manoeuvre is getting narrower all the time. The actual fact is that cities consume 90% of the resources used on the planet; 50% corresponding to the consumption of buildings; the rest being distributed in equal parts (25%) between industry and transport. The influence of town planning on environmental balance has been laid out in various stages (González and Lazaro, 2005a,2010a; González, 2000,2002,2005b,2005c,2006).

1. Changes in the use of space – An area of land is separated from its natural cycles.
2. Waste generation - the inhabitants of urban environments take natural resources from increasingly wider areas and their consumption of these produces waste. The re-use and disposal of waste is possible in small settlements, but growing expansion requires the creation of evacuation systems and possible storage for later dispersion or recycling.
3. Water pollution. – Water is a basic condition for the existence of any settlement. For centuries, it has not only covered the vital necessities of its inhabitants, but has also taken on an important role in regenerating urban residues, with the help of the sun and of diverse micro-organisms. There is a limit to everything, and historically, when this limit has been surpassed, there have been epidemics and temporary deterioration until balance has been restored. For a long time, water has been unable to cope with the pressure of residual organic matter and in order to overcome this problem, drainage networks have had to incorporate sewage treatment plants. There is, however, a more serious type of pollution: chemical pollution associated with the use of certain industrial and domestic products.
4. Air pollution – Industrial development has entailed a progressive increase in energy demands. As nearby sources are exhausted, energy resources are usually taken from an ever-increasing range, resulting in a multiple impact due to the distance from the place of consumption and the need for transportation. Furthermore, polluting gas waste is produced in the places of consumption or production, with consequent effects on the natural and urban environments. Traditional carbon dioxide pollution, which threatens to cause the greenhouse effect and its associated climate change, has had different types of gases added. Serious effects of these include sulphur dioxide and acid rain, chlorofluorocarbons, the destruction of the ozone layer etc.
5. Noise pollution – The presence of a variety of machinery in industrial and transport processes, as well as in certain social events, brings about behaviour and health disorders in citizens; and therefore needs to be limited. It must be acknowledged that not all cultures

and societies have the same attitude towards and perception of noise, and so the problem should be considered as related to noise pollution of technological origin.

6. Electromagnetic pollution. – The fields induced by the transport of electric energy, telephone transmission etc., are linked to disorders affecting the health of living beings. Although the estimate is relatively recent, more importance will be given to its consideration in the future, along with measures for its correction.
7. Nuclear pollution – Undoubtedly the most feared of all due to its long-lasting, serious effects, and usage risks. Generally, ignoring its military use, its risks are associated with nuclear power stations. These are usually not close to important towns, but it does have some uses in the urban environment and, additionally, there is the serious underlying problem of waste processing.

There may be other types of pollution (such as light or visual) but from the point of view of environmental balance, the above are the most significant. Beyond the urban context, there is a progressive demand for natural resources, with consequences becoming more wide-reaching and more serious with time. It can be stated that:

- The accumulation and concentrated use of natural resources occurs predominantly in urban environments.
- The size of the settlement determines resource accumulation, which grows exponentially rather than linearly, and as a result affects wider areas and has a greater impact. The size of urban development poses qualitative and not just quantitative leaps.
- When talking of the sustainability of global equilibrium, reference must fundamentally be made to the process of progressive urbanization (Sancassiani, 2005, Taylor, 2004).

3. GLOBALIZATION

Henri Lefebvre (1970) wrote about “The Urban Revolution” as a process of the birth of a new post-industrial society: the “Urban Society,” an expression of a process whose virtual objective would be a planetary society, and “the world city.” That virtual objective does not need global urbanization; it is alien to the expansion of urbanized territorial environments (from the megalopolis to the small village). The accelerated development of the means of communication has been enough to speak about a real objective world society, the “global village,” according to the term coined by Marshall Mc Luhan, or the “network society” (Castells, 2004). Lefebvre also pointed out that in the new society “goods that were previously scarce, today are plentiful: bread, and more generally, nourishment. On the contrary, a series of goods that were formerly plentiful are now rare: space, time and desire. And also water, land and light.” The term sustainability was coined then, a term which began to be associated with the idea of globalization. Knowledge of the new situation constituted a “blind field,” because the new urban configuration, about which data of a new complex configuration to be studied in an interdisciplinary way, could not be seen. The agricultural period corresponded to necessity: limited production, subject to nature and interrupted by catastrophes and famines and dominated by scarcity. The industrial period would correspond to work: a productive period, to the extent of fetishising productivity, destroying nature, including that which lives or survives in “the human being.” Will enjoyment correspond to urban society?

The progressive increase in the service economy of the most developed economies seems to point in that direction, but a society of unlimited consumption established in the wealthiest

countries, the north or the “first world,” with irrevocable environmental effects mainly on the south or second world, draws a nightmarish scenario whose outlines are currently being drawn. At a different level, work keeps assuming a fetish role, now that the incorporation of new technologies increases productivity much more than the contribution of manpower, causing a labour surplus whose reincorporation can't be envisioned if former employment criteria are sustained. A global and developed mass society should be concerned about a less intensive occupancy, about providing more spare time for users to enjoy a progressive offer of services, about creating a range of future activities far from primary economicism (Sampedro, 2002).

Unfortunately, environmental considerations are still ignored in developing countries; thus deterioration is brutal and accelerated, especially because of the magnet effect on their natural resources, produced by the increasingly higher demands of developed countries (urbanised).

Similar guidelines appear regarding labour contribution which tends to apply criteria of intensive exploitation. The effect produced results in migratory pressures on the urban areas and, within these, the most developed ones, and which get stronger with time.

Globally, the same process takes place everywhere: the search for opportunities where they are mostly produced, in urban environments within a country and it is also attempted if necessary in a more developed one. Curiously, one of the effects of globalization is that the presence of the first world can be felt everywhere, from China to America (Central and from the south), through urban enclaves or emblematic commerce chains, which show the economic and technical power of the first world with more or less intensity. Simultaneously, the collection of natural resources is perceived, with a varying degree of environmental deterioration, in order to sustain that first world. It is obvious that the perception of sustainability and globalization is radically different between developed countries and developing ones (Borja, 2003).

4. CITIES AND PLANNING

Cities have become the main setting for social changes, as in other historic periods. In the 20th century, the traditional concept of urban expansion was surpassed and a variety of formal alternatives have been offered (when there was a minimum amount of time for reflective organization), but in most cases these have come after the act itself, as an attempt to alleviate the implacable effects of improvisation and speculation. These circumstances are especially dramatic in developing areas. The urban framework has gone beyond historical scales and has turned into a metropolis, giving way to conurbation and megalopolis (Lazaro and González, 2002).

Planning has come to be the technical application of Urban Development, a science that started this century, studying the shape and the evolution of cities, and has turned into a combined group of multidisciplinary knowledge, with great power of diffusion thanks to the growing development of media, a means of globalization. But this knowledge (of a predominantly ‘soft’ scientific basis due to its social nature and oriented towards long-term action, since the development of the city is a historical process) comes into conflict with the precipitated character of economic processes (Vegara and Rivas, 2004).

The idea of the city as a historical joint effort, a place of trade and exchange of ideas, a shared and symbolic space typical of Mediterranean culture (Maiques, 2003), is incongruous with the most radical demands of some ultraliberal theorists who propose complete deregulation in the interest of economic efficiency. A kind of neutral urban framework is invoked, capable of receiving whatever may be required, without any special measures for protecting the environment. People talk of a certain “diffused city” which would be better

defined as the ineffable “no place.” These ideas certainly have influential supporters. It could be that the market is more intelligent than some of its apparent representatives; this is the reason why the European Union backs urban societies arising from centuries of history, environmental balance, social cohesion and more flexible development strategies to absorb the precipitations of the global market. This backing is coherent with our history but, unfortunately, is rather courageous in view of the problems that our single currency raises (Hesse, 2008).

The experience of more than a century’s worth of planning has had a positive effect on Europe’s cities. Leaving aside the inevitable errors, they have followed criteria of rational development and have created a culture of urban organization (Brune, 2005, Blum, 2003). The demands on the city have also changed; in addition to the need for appropriate new spaces (industrial and tertiary) for the development of new technologies, there are growing calls for amenities and residential use, with fewer people per dwelling and a larger surface area per inhabitant. This process has been especially intense and spectacular in Spain (OSE, 2006), especially over the last twenty years. The city is a valuable object for its citizens, whose conscience extends beyond the urban environment to the natural surroundings, and to the problems of social integration of disadvantaged social collectives or cultural minorities. Political administrations are conscious of this growing awareness and likewise do not accept blind criteria when confronted with market forces guided by criteria of strict opportunity. General plans tend to be converted into strategic documents, where areas of opportunity and consolidation are outlined – and Project-Plans later define the conditions of development. As for the existing city, the main aims are improving quality of life and revaluing space in order to avoid obsolescence (Finn, 2009). The two main arguments of current European town planning are thus defined: new urban development and the recuperation and improvement of the existing city.

4.1. New urban developments

In the perception of the global city, citizens know their urban environment but receive multiple references and simulacra from other cultural environments via different information channels. Thus, the culture which projects the most images or copies of itself becomes dominant when compared with others that are less active but more coherent with the environment which they stem from.

The simulacrum itself has no desire to be long-lasting, its attraction is based on its capacity to change contents, but its applications generate concrete results – habits, forms, urban structures etc. – that unfold in specific surroundings. These displays do not follow criteria of permanence, nor of environmental coherence. They are simply offered as products for consumption that, once their cycle is completed, will be replaced by new elements that were previously simulated by the techno market, as a new trend (MÉNDEZ, 2004). The problem is that we are talking of a very unique market: the city. A city is composed of multiple dimensions and agents, each equally important and whose historical roles should not be forgotten.

The city becomes another consumer product and intensifies the process of demand on natural resources; sustainability once again becomes a point of conflict for urban action. Private promotion, always sensitive to market demands, has thrown itself into this type of action in new urban developments, with the consent of administrations that interpreted the low density as a synonym of advanced urban quality (Anacker, 2008).

The extensive city has predominated in the results of town planning in new urban developments due to its low density and its sole residential function, in contrast with the historic city development areas which are more compact and have a wider variety of uses (González, 2004 2005a, 2006, 2010, 2010a, 2011, 2011b). From an environmental point of

view, the extensive city generates a greater demand for space that entails transforming a natural environment into an urban one (González, 2002, 2005, 2005a). This is expressed in a very elementary way in the following table, comparing a Consolidated Centre of 100 houses/ha (a modest density when referring to urban expansion areas and historic centres), urban development referring to 75 houses/ha, and an urban development of typical semi-detached houses of 25 houses/ha (20-30 houses).

General Systems Demand				Gross area associated to demand			
Green Areas		Amenities	Road Network	Total	Gross Area (m ²)	Gross Density (houses/ha)	Space per house (m ² built land /houses)
25 houses (25-30 houses.)	425	425	3,000	3,850	13,850	18	769.4
75 houses	1,125	1,125	3,000	5,250	15,250	49	311.2
100 houses	1,400	1,400	3,000	5,800	15,800	63	250.8

Source: *City councils. General Town Planning, Partial Plans and Housing Estate Projects*

The average population has been estimated at 3.4 inhab. per house in the “ciudad jardin” (garden city: an area of the city consisting of terraced houses, each with a small garden – a set-up which is unusual in Spain) and 3.00 in developments of 75 houses/ha and 2.8 in Consolidated Centres. These parameters have a tendency to decrease in our urban context, since another tendency in developed zones is the increase in the ratio of square metres constructed per inhabitant. The demand for general systems is established on the basis of 5m²/inhab. In green areas, the figure is the same for Amenities, and a generic estimation for road networks. It can be noted that the land required for an extensive development of individual houses is more than triple that associated to the Consolidated City (historic centres and urban expansion areas).

The city’s energy management supposes another important negative effect. Extensive urban developments require wider infrastructures, and longer travelling distances (González, 2005, 2005 b, 2011, 2011b). Almost forty years after the first energy crisis (1973), the energy performance of vehicles and buildings has improved, but the contribution of renewable energies is still minimal (Brugmann, 1992). Curiously, the urban frameworks of our cities have a greater energy dependency and a more negative impact on the environment than at the time of the crisis. These aspects obviously need to be corrected – traditions and culture need to be maintained, and care should be taken not to introduce alien elements into historic areas. The biggest difficulty resides in the clumsiness of “educated” discourses compared with the positive reception the marketing of certain “urban simulacra” has had on a popular level. These would be of no importance if they remained in the virtual field from which they originated, but unfortunately we must recognize that the most influential city thinkers are no longer of historical importance (philosophers, town planners, architects, sociologists, engineers, etc.). Ironically, the real world becomes more tangible in the virtual atmosphere of television studios, cinematography, computer systems, etc., but above all, continues in some Boards of Directors, who do understand what global economy is.

4.2. Importing foreign models

This refers to the profusion of extensive low density urban development. Over the last twenty years, semi-detached housing appears to have become the alternative to the traditional city in the Mediterranean culture. Cities with multiple overlapping uses, and densities that enabled a variety of activities to be carried out and citizens to meet and mix with each other in public places, have been spurned. Instead, a residential mono-cultural social fabric has been created, whose natural communal areas are concentrated in large leisure and shopping areas (OSE, 2006). This model generates much higher energy costs, and also has a greater impact on the environment due to territorial occupation. The European Community itself has recognised that our culture is based on cities and is undertaking their revitalisation and promoting actions such as the URBAN programmes, which are considered to be the reference to achieve this. It is not a question of denying the existence of this type of housing which, understandably, has many defenders, who are not always aware of its consequences, but of preventing it from becoming the predominant fabric of urban expansion.

The case of small developments of the above-mentioned semi-detached housing in municipalities bordering cities is more worrying. They are the result of the search for cheaper land prices outside the urban setting, in areas that do not have decent amenities. These developments are low quality and lack minimum urbanistic integration, as they are added to limited pre-existing rural nuclei (Vegara and Rivas, 2004). They are mainly occupied by young couples who will need welfare and school facilities, etc... They have to go into the city to find these facilities, and the roads are not adequate to cater for the resulting flow of traffic caused (González, 2002, 2005, 2011, 2001b). Thus, small peripheral agglomerations are created, the environmental integration of which is usually debatable. They lack adequate services and facilities and apparently respond to the imported urban development model, creating unsuspected Metropolitan Areas around average cities. The deregulation of land, under the primary assumption that all land can be built on, except protected areas, has not lowered the price of land, but favoured this type of "opportunistic" development. Proposals for the reclassification of rural land for building such developments are more and more common at Territorial Commissions for Urbanism (Mora and Saez-Fernandez, 2009).

Urban legislation has converted low density into an absolute value, ignoring the symbolic and functional meaning of our city culture. The dispersion of cities, rather than their regeneration, is being advocated, thus contributing to converting their historical form into an empty shell. Invoking sustainability parameters produces results that are hardly sustainable, and which imply high maintenance costs and the deterioration of the urban and natural peri-urban environment. The situation is made worse by high land prices and population ageing.

From the sustainability perspective, basically only three processes can lead to a reasonable reduction in energetic needs or the load on the environment: restoring existing buildings; replacing ecologically wasteful old buildings by new low consumption ones and closing interstices between buildings. Urban expansion must be carried out according to urban, ecological and sustainable environmental architecture, the directives of which are indicated in local Agenda 21 (Sancassiani, 2005).

According to Ramón López Lucio, "High density in all old cities is the precondition for daily functioning made possible by a determined technical level. It is not by chance that the present day imperial metropolis exports low density dispersed models.....In the face of an urbanised field or a ruralised suburb, European cities want to revalue their inheritance and its meaning. By recovering their constructed heritage - they show more interest in actions and legal regulations on rehabilitation - and also by reconsidering public spaces. Streets, avenues, boulevards and squares are once again being examined, measured and drawn, prior to being redesigned and readjusted to new circumstances: also for their paradigmatic value as a guide

to new experiences.” This opinion of the Historical City is still valid and responds to a level of consensus. It has recently been enriched because its philosophy has now been extended to other spheres of the city and because of the greater complexity of the analysis of and proposals for urban regeneration.

The process of globalisation also shows us how complex these actions are, and makes it easier to exchange ideas and promote the most interesting ones, which are considered to be “good practice”. Also, a global feeling towards interaction between local, environmental problems and the rest of the planet is generated (Blanco et al., 2009). Citizens must take on an active responsible role with regard to consumption and their environment in a culture of sustainability. They should avoid squandering resources and causing pollution, and defend the natural environment. To sum up, it is a question of thinking globally and acting locally, which we refer to as “glocalization” (Bolívar, 2001).

4.3. Urban regeneration

Urban Regeneration, understood as the physical and functional recovery of obsolete zones of the city by establishing environmental, social and economic conditions which promote sustainable development and a balanced quality of living for the population must be the primary aim of any urban strategy for our cities. This approach transcends the purely physical aspects which are identified with rehabilitation, assuming a multidimensional character which seeks social cohesion, sustainability and citizen participation in an ordered urban environment (Middleton, 2003).

The starting point must be Consensus, Complicity and Concentration, Consensus politics means the agreement of public agents to avoid the field becoming a scene of political battles and to guarantee the development of framework agreements. Social complicity means integrating all the public and private powers in one programme; it is fundamental to assume that this is a document based on consensus and not on imposition. Concentration of actions is needed to guarantee perception of forceful actions which transmit and generate synergy for new initiatives. The phenomena of urban metastasis, which can spoil isolated or insufficient actions but whose willpower does not guarantee their efficacy, must be avoided.

The physical practice of Urban Regeneration is Urban Rehabilitation. This must choose a generic planning framework which will condition other actions. To be exact, the following can be considered in the existing urban structure its:

SUBSTITUTION

- Change typology
- Reduce Density

CONSOLIDATION.

- Maintain typology
- Maintain Density
- Increase Density

Typological change substitution usually jeans increasing public spaces, which can amplify room and green areas, achieving prosperity of the urban fabric.

However, actions in less singular zones are demanded more and more. In some cases they are quarters whose urbanisation or building were never properly finished, others are cases of deterioration because of lack of maintenance, etc. In the general practice of urban regeneration these actions will be fulfilled by the incorporation of social cohesion programmes, oriented towards the integration and training of the most disadvantaged collectives; renovation and innovation of the existing productive fabric, including new economic activities and services; encouragement of citizen participation; to achieve regeneration processes whose success lasts (Marling et al., 2009).

5. CONCLUSIONS

Our cities undergo general processes: they expand by means of suburbs and do not achieve satisfactory results in the recuperation of their historic centres. The new buildings are often incongruous in their surroundings, as a result of a combination of popular demand (modelling the “simulacrum”) and the decisions of the administration which permit physical and partial restoration of the state heritage. This is not a promising path within a philosophy of sustainability. In the Spanish community, the situation is more pronounced because our historic centres are depositories of important cultural heritage and are crucial in the urban structure, but they can reach a state of “assumed obsolescence”.

Historic Centres, as we all know, are beautiful, we love them... but only people of a certain age are willing to live in them – because they have always done so – students and immigrants. If the people who live in H.C. are not comfortable they will end up leaving and in the long run these areas will no longer regenerate and will deteriorate. Many World Heritage cities in Spain, such as Segovia or Toledo, find themselves in this situation. Centres are affected by so many restrictions that they can only focus on a touristic use, which is seasonal and does not occupy every hour of the day.

Tradition is the law of progression. A progressive design does not destroy what has existed before, but rather places it in a new dimension. This declaration should be adopted in order to confront the problem of the Historic City: new dimensions must be found for it, as has happened throughout its existence. Citizens must be re-educated in the face of certain urban life styles, they must be shown the distinct criteria of sustainability that different options of urban lifestyles imply. The city should be recovered as a place for coexistence by creating models of urban solidarity. Historic centres should guarantee quality of life in their homes and public places, extending these selectively when necessary. Experiences with the introduction of pedestrian areas have been positive, but vehicular access must be guaranteed, at least for residents and services, establishing priorities for networks, timetables and traffic. Extreme solutions that consider automobiles as outlaws must be avoided in spite of their theoretically negative presence.

The pledge of our cities should be to

- focus on criteria of urban solidarity that restrict suburban developments with high environmental costs
- reinvest the benefits of these developments as a commitment to active intervention in the historic centres by means of land policies, housing and social programmes and the recovery of their economic fabric.

Sustainability should be a basic objective, reducing the impact of our cities (Historic Centres and their Urban Expansion Areas) on the environment and on energy. Variety of usage should be encouraged as well as valuing the importance of public space, guaranteeing the quality of life of the population in accordance with current criteria. By doing so we could then bring back their integral and multidimensional character, proposed by the URBAN and RE-URBAN programmes, for our town planning.

At times urban planning is no more than a mere system for checking the load capacity of the territories and of the landowners taking over rights and duties; sometimes for the sole purpose of guaranteeing greater ease in managing the different interests at stake. But with the change in State Legislation, Ley de Suelo 8/2007 (Land Law), and the introduction of a strong correction factor in the construction sector due to the change in the economic situation,

it seems that this culture is beginning to change, demonstrating that land is a limited, non-renewable resource which we must use responsibly.

Urban Regeneration is a global process of cities; it is the first and most elementary criterion of Sustainability to avoid greater deterioration of the Natural Environment surrounding us. Unfortunately a global trend of population loss in cities, associated with extensive development of the outskirts and neighbouring towns can be observed. This progressive emptying of the centre has significant social, welfare and economic consequences which have a marked effect on municipal management. New urban developments are necessary to achieve new general systems which the city demands, but they must be based on realistic economic criteria, not just on their execution (though it seems that the Market absorbs everything) but rather, in particular, on their maintenance.

REFERENCES

Anacker, K. 2008. Post-Suburban Europe: Planning and Politics at the Margins of Europe's Capital Cities. *Journal of the American Planning Association*: 74(1):148-149.

Blanco, H. et al. 2009. Shaken, shrinking, hot, impoverished and informal: Emerging research agendas in planning. *Progress in Planning*: 72: 195-250.

Blum, A. 2003. *The imaginative structure of the city*, Mc Gill-Queen's. University Press, Montreal.

Bolívar, A. 2001. Globalización e identidades: (Des)territorialización de la cultura (Globalization and identity). *Revista de educación* (Número extraordinario), pp. 265-288.

Borja, J. 2003. *La ciudad conquistada (The conquered city)*. Alianza, Madrid.

Brugmann, J. 1992.: *Managing Human Ecosystems: Principles for Ecological Municipal Management*. ICLEI, Toronto.

Brunie, J. 2005. *Cosmopolitans urbanism*. Routledge, London

Castells, M. 2004.: *La era de la información: Economía, sociedad y cultura (The Information Age: Economy, Society and Culture)*. Siglo XXI, Madrid.

Finn, D. 2009. Planning support systems for cities and regions. *Journal of Planning Literature* : 24(1): 37-38.

González González, M.J. 2000. Estructura residencial y organización del espacio en la ciudad de León (Residential structure and spatial organization in the city of León), *Boletín de la Asociación de Geógrafos Españoles* (A.G.E.) : 29: 549-557.

González González, M.J., 2002. La ciudad sostenible. Planificación y teoría desistemas(System theory and planning), *Boletín de la Asociación de Geógrafos Españoles*, (A.G.E), :33: 93-103.

González González, M.J., 2004. Amenagement du territoire et gestion urbaine dans le milieu rural (Espagne). *Sud -Ouest Européen* :17:111-124.

González González, M. J.- Fernández, I., 2005. Características y perspectivas del transporte por carretera y ferrocarril en la Comunidad Autónoma Gallega (Characteristics and prospects of road and rail transport in the Galician Community). *Anales de Geografía de la Universidad Complutense* :25: 203-230.

González, M.J. - Lázaro, M.L. 2005a. Indicadores básicos para la planificación de la sostenibilidad urbana local (Basic indicators for the planning of local urban sustainability). *Biblio 3W. Revista Bibliográfica de Geografía y Ciencias Sociales (Serie documental de Geocrítica)*, volumen: X, nº 586, 11 p. Universidad de Barcelona, Barcelona. Accesible en <http://www.ub.es/geocrit/b3w-586.htm>

González González, M.J., 2005 b. El desarrollo económico sostenible de los centros históricos (Sustainable economic development of historic centres), *Ería* , 68, pp.365-272.

González González, M.J. et al., 2005 c. *El transporte y la vivienda desde una perspectiva sostenible* (Transport and housing from a sustainable perspective). CERSA, Madrid. Publicación en CD.

González González, M.J., 2006. La sostenibilidad de los centros históricos en los albores del siglo XXI (The sustainability of historic centers in the twenty-first century). *Anales de Geografía de la Universidad Complutense* :26: 49-63.

González González , M.J. - Lázaro y Torres, M.L., 2010. Recent problems of the historic centres in Spain. *Journal of US-China Public Administration* :7(6) (Serial No.56): 82-91.

González González, M.J., 2010 a. The changing structure of households and families, and its impact on health in Spain. *Finisterra*, XLIV, 89, 2010, pp. 9-22

González González, M.J.,2011. El pensamiento estratégico como motor de la gestión de cambio en el territorio (Strategic thought as an engine of change management in territory) . *Boletín de la Asociación de Geógrafos Españoles*, 55 :211-230

González, M.J. – Gutierrez, F.J. 2011 b. Urban structure and transport . In: Christopher D.- Thomsen - Eric R. G. (Eds.) , *Transport policy*. NovaPublishers, USA.

Hesse, M. 2008. Planning cities for the future: The successes and failures of urban economic strategies in Europe. *Growth and Change*, 39(3), pp. 534-536.

Lafferty, W.M. (Ed.) .2001. *Sustainable Communities in Europe*, Earthscan. London, U.K

Lázaro, M.L. - González, M.J. 2002. Reflexiones sobre la terminología para designar a las ciudades que encabezan la jerarquía mundial (Reflections on the terminology used to designate the cities heading the world). In: López, L., Relea, C.E. and Somoza, J. (Eds), *La ciudad, nuevos procesos, nuevas respuestas*. Universidad de León, León, Spain, pp. 65-76.

Lefebvre, H. 1970. *La Révolution urbaine (The urban revolution)*. Gallimard, París, France.

López de Lucio, R. 2003. Transformaciones territoriales recientes en la región urbana de Madrid (Recent territorial changes in the urban region of Madrid). *Urban* :8 : 124-161.

López de Lucio, R. 2007. Arquitectura, urbanismo y cambio climático: la "explosión de la ciudad" como metáfora de una urbanidad basada en el consumo masivo de energía (Architecture, urbanism and climate change: the "explosion of the city" as a metaphor for an urbanity based on massive energy consumption. *Tiempo de paz* :85: 51-55

Maiques, J.V.B. 2003. Science, politics and image in Valencia: a review of urban discourse in the Spanish City. *Cities* :20 (6) : 413-419.

Marshall, M.L.1989. *The global village* . University Press, Oxford

Méndez Rubio, A. 2004. *Perspectivas sobre comunicación y sociedad* (Perspectives on communication and society) . Ed. Universitat de València, Valencia.

Mora, F. M. - Saez-Fernandez, F. J. 2009. An Empirical Enquiry into the Impact of Urban Planning Policy on Urban Growth. *European Planning Studies*: 17(5): 791-811.

Observatorio sobre la sostenibilidad en España (OSE). 2006. *Cambios de ocupación del suelo en España. Implicaciones para la sostenibilidad*, (Changes in land use in Spain. Implications for sustainability., Mundi Prensa, Madrid.

Rossi, U. 2004. The multiplex city. The process of urban change in the historic centre district of Naples. *European Urban and Regional Studies* :11 (2):156-169.

Sampedro, J.L. 2002. *El mercado y la globalización (The market and globalization)*. Ediciones Destino, Barcelona.

Sancassiani, W. 2005. Local agenda 21 in Italy: an effective governance tool for facilitating local communities' participation and promoting capacity building for sustainability. *Local Environment* : 10 (2):189-200.

Tabakman, E. 2001. El cas Antic de Barcelona. Actuación urbanística o "limpieza social? (The historic city of Barcelona. Urbanization or "social cleaning"). *Scripta Nova* : 5 : 1-9.

Taylor, P. 2004.: *World city network: a global urban analysis*. Routledge, London.

VVAA .2009. *The Ecological Footprint Atlas 2009*. Global Footprint Network, Oakland, California, United States of America. Accesible in http://www.footprintnetwork.org/images/uploads/Ecological_Footprint_Atlas_2009.pdf

Vegara, A – Rivas, J.L. 2004.: *Territorios Inteligentes (Intelligent territories)*. FEMP/ Fundación Metrópoli, Madrid .

ANNEXES

SUGGESTIONS

The idea of Good Urban Practices is presented within the process of urban regeneration and new urban development. In accordance with the above, a series of suggestions have been made.

Concerning Sustainability

- 1 – The adoption of municipal policies of sustainable development for using natural resources (drinking water, energy, etc...), recycling rubbish, urban transport and criteria concerning this approach.
- 2 - Showing an interest in learning, applying and diffusing these practices. Diffusion is becoming easier via electronic communication. Basic references can be found in the Good Urban Practices catalogues linked to the Habitat-Global Plan of Action Programme, promoted by the United Nations.

Concerning the Approach

- 3 – Using criteria for an approach that favours the urban structure of a compact city, fundamentally in Municipal Urban Plans (Plan General de Ordenación Urbana, P.G.O.U.) for residential developments. Urban developments of 75 dwellings/ha. are perfectly acceptable, as are slightly larger ones, as long as they are in specific areas and have adequate facilities and public spaces.
- 4 - The Municipal Urban Plans (P.G.O.U.) should be active documents that transmit to citizens the idea of the city as an inherited process to be passed on. They form part of teaching and publicity which are important when competing with the media.

Regeneration

- 5 - Systematic intervention criteria should be applied, avoiding isolated actions that are respectable but not very practical in the general context. Action should be promoted via existing mechanisms such as Rehabilitation Areas.
- 6 - Social cohesion should be an objective of the regenerating action. Collaboration from different Administrative bodies with welfare, social integration and labour programmes should be encouraged.
- 7 - Strategies for the promotion of the economic fabric should be promoted and tourist, welfare and crafts services should be promoted. Possibilities for small and medium-sized businesses should be created as well as training for the self-employed.
- 8 - Town councils can promote the compact city in their municipal policies. The most usual methods are: tax allowances in the target areas of rehabilitation, and reinvestment of general capital gains in urban development near the historic centre, as well as financial aid for rehabilitation.