Sociedad Urbana

Sumario

PRESENTACION

CASCOS HISTORICOS

Actuación administrativa en los centros históricos: su efecto en la ciudadanía
Fernández-Coronado, Serra Yoldi, Mollá Beneyto

Aproximación sociológica a la rehabilitación de cascos históricos
Miguel A. Gil Zafra

Estudio del casco histórico de Mérida (Yucatán): la formación de la sociedad colonial en Hispanoamérica
Antonio Aledo Tur

La imagen de la ciudad: prestigio e identidad urbana en Valencia (1350-1480)
Amadeo Serra

ARTICULOS

La antropología urbana en España: evolución, problemas teórico-metodológicos y perspectivas de futuro
Emma Martín Díaz

¿Urbanismo sostenible en una sociedad de riesgo? Un discurso conceptual
On-Kwok Lai

Towards a theory of urban sustainability
C. O'Connell y S. Ó Tuama

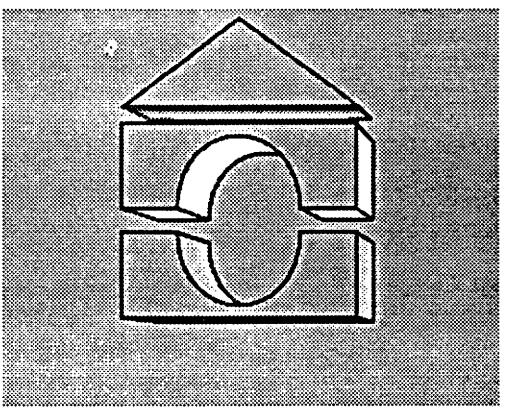
LIBROS

Revista de Estudios Urbanos

nº 2
1995
Primavera

Sociedad Urbana

Revista de estudios urbanos



SOCIEDAD URBANA
Revista de Estudios urbanos
es una revista semestral dirigida a universidades, organismos nacionales e internacionales, profesionales y personas interesadas en el estudio de lo urbano. Su temática abarca distintos aspectos y perspectivas que contribuyen al análisis y al entendimiento de la dimensión urbana de nuestra sociedad.

DIRECCION:
Emilio M. Martínez
Tomás Mazón
Antonio Aledo

CONSEJO ASESOR:
Benjamín Oltra
Gianfranco Bettin
Alfonso de Esteban
José María Tortosa
Juan Monreal
Juan Salcedo
Jaime Martín Moreno
Antonio Alaminos
Eduardo Ruiz Abellán
J. R. Navarro Vera
Jay D. Edwards

CONSEJO DE REDACCION:
Antonio Aledo
Elena Jorge
Aina López
Cristina López
Emilio M. Martínez
Remedios Martínez
Tomás Mazón
Antonio Muñoz
Antonio Sáez

Suscripciones:
Por un año, incluidos gastos de envío:
*** España: 2.200 ptas.**
*** Extranjero: 2.900 ptas.**

Ejemplares sueltos:
*** España: 1.200 ptas.**
*** Extranjero: 1.500 ptas.**

Para suscripciones o ejemplares sueltos, enviar comunicación por escrito o mediante Fax a:
Sociedad Urbana.
Departamento de Ciencias Sociales
Universidad De Alicante.
Ap. Correos, 99
Fax. 96/5903495

Colaboraciones

Solicitar las normas de colaboración a la dirección de la revista. Los artículos, recensiones y libros deben enviarse, igualmente, a la dirección de Sociedad Urbana

Sociedad Urbana agradece a Mª Angeles Casado Díez su colaboración en los trabajos de edición de este segundo número.

Sociedad Urbana, Revista de estudios urbanos se edita en el Departamento de Ciencias Sociales de la Universidad de Alicante con la ayuda de la Fundación Cultural CAM.

ISSN: 1135-044X.
Imprime: Imprenta GAMMA
Depósito Legal: A-1030-1994
Diseño de cubierta y logo: Elena Jorge y Emilio Martínez.

PRESENTACION

ARTICULOS

Actuación administrativa en centros históricos:
su efecto en la ciudadanía, *R. Fernández-Colorado,*
I. Serra Yoldi, D. Mollá Beneyto..... 3

Aproximación sociológica a la rehabilitación de
los cascos históricos,
Miguel A. Gil Zafra.....23

Estudio del casco histórico de Mérida (Yucatán):
la formación de la sociedad colonial en Hipanoamérica,
Antonio Aledo Tur,.....51

La imagen de la ciudad: prestigio e identidad
urbana en Valencia (1340-1840), *Amadeo Serra*..... 69

Antropología urbana en España: evolución,
problemas teórico-metodológicos y perspectivas de fututo,
Emma Martín Díaz.....87

¿Urbanismo sostenible en una sociedad de riesgo?
Un discurso conceptual,
On-Kwok Lai.....107

Towards a theory of urban sustainability,
C. O'Connell y S. Ó Tuama.....125

LIBROS

TOWARDS A THEORY OF URBAN SUSTAINABILITY

Cathal O'Connel y Séamus Ó Tuama[*]

RESUMEN: Este artículo perfila conjuntamente tres ámbitos sociales de la economía, de la política y de la vida cotidiana en un intento de construir una teoría de la sostenibilidad urbana. Se parte de un enfoque holístico que integre el análisis de estos dominios. Se afirma que una correcta comprensión del concepto de sostenibilidad sólo se puede alcanzar si se incorpora la totalidad de tensiones, balances y dinámicas de los tres ámbitos ya señalados. A la vez se reconoce que el deterioro ambiental es el mayor desafío para la consecución de la sostenibilidad.

ABSTRACT: This article draws together the three societal domains of Economy, Politics and Lifeworld in an attempt to construct a theory of urban sustainability. It takes an holistic approach which integrates an analysis devolving on these three domains. The concern with the urban pivots around the transformed role of cities in the transition from industrial to post-industrial society. It asserts that an adequate understanding of the concept of sustainability can only be grasped if the totality of the tensions, balances and dynamics of the three domains outlined above are fully incorporated into the theory. While it concentrates on these three domains it recognises that ecological deterioration, is perhaps the most pressing challenge to sustainability.

The levels, scope and concentration of problems presenting themselves in the urban setting necessitate the pursuit of means of comprehending them and a mode of intervention. Urban forms therefore present ideal case studies for testing new approaches and paradigms to deal with the unfolding of society which has variously been described as the end of modernity, late capitalist, post-industrial society and post-Fordist. Touraine pointed to the emergence of this new form of society in the early 1970's (Touraine, 1971). Disparate strategies may present themselves in this regard, however, at this time we believe that sustainability offers the most promising option. Redclift suggests that the concept of sustainable development is one in which the paradigms emanating from ecology should be applied to economic development (Redclift, 1987). The Bruntland Report defines sustainable development as:

[*] Centre for European Social Research, University College, Cork (Irlanda)

> Development that meets the needs of the present without compromising the ability of future generations to meet their need (Bruntland, 1987).

Obviously this is a very broadly defined interpretation of sustainability, however, it does form a starting point from which a clearer and more refined definition of urban sustainability can be derived. Bruntland signified a shifting of the agenda from purely quantitative concerns to ones based on qualitative considerations. Soussan develops this point by drawing a sharp contrast between the question of finite resources, such as fossil fuels, as the defined central development problematic of the 1970's and subsequent realisations signalled by Bruntland. The problem was not so much the exhaustion of finite resources, but rather the consequences for environmental processes of economic growth based on such exploitation.

> This reappraisal has given rise to a new approach which seeks to reconcile human needs and the capacity of the environment to cope with the consequences of economic systems. This approach is called sustainable development. (Soussan, 1992)

While the sustainability thesis is attractive and has a very broad remit of applications, some distance still lies between ideals and actualisation of sustainability. Fundamental to this is the evolving status of theories of sustainability themselves. Pearce goes further to suggest that the question of defining sustainability is not the problem per se:

> The difficult issue is in determining what has to be done to achieve it ...Notice that defining sustainable development is not the same thing as searching for the necessary and sufficient conditions for achieving it. (Pearce, 1993).

One of the most frequently cited problems of post-industrial society is that of the viability of the city system. In the industrial period the city became the focus of production, consumption, decision-making, and culture. This modern period is characterised by Cooke in a bifurcated model derived from Berman which draws together the concepts of *modernization* and *modernism* . Modernization is described in the following terms:

> A diverse unity of socioeconomic changes generated by scientific and technological discoveries and innovations, industrial upheavals, population movements, urbanization, the

> formation of national states and mass political movements, all driven by the expanding capitalist world market. (Cooke, 1988)

On the other hand modernism refers to the cultural vision which attends in contradictory form this unleashing of change through the overturning of the previous order.

These underlying assumptions on the role of the city are now subject to scrutiny. Castells has posited that cities are becoming technopoles that is to say they are being fundamentally structurally altered and are on developmental trajectories fuelled by the interplay of three interrelated historical processes. These three processes are a technological revolution based on information technology, the formation of a global economy and the development of new management and production techniques based on knowledge which changes the production process from a linear quantitative process to a flexible qualitative one (Castells, 1993). One of the sources of this examination arises from a concern with the saturation of various urban systems which have given rise to crisis symptoms in such diverse areas as social alienation, democratic deficits, crime, unemployment, economic decline, urban decay, decline in the physical environment, and congestion. These symptoms point to the necessity for developing new paradigms of analysis capable of accommodating their complexity, diversity, and depth. Sustainability is about reimagining how problems are comprehended. This is attained partly by challenging the disjunctions that have emerged through a linear process of problem identification, classification and policy response.

In this article we explore a number of sites central to testing the sustainability thesis. While we accept that sustainability is an evolving worldview this exercise represents an attempt to take stock of its current applicability, and its potential to meaningfully address the unfolding urban scenarios of the future.

Sustainability raises important issues about several societal domains. The concept of sustainability requires an integrated analysis, which devolves on Economy (e.g. limits of economic growth, ecological deterioration), Politics (e.g. democratic deficit, post-modern political forms), and Lifeworld (e.g. decline in social cohesion, decision-making problematics). This paper will examine the issue of sustainability in its urban applications. To bring an adequate understanding on

the concept of sustainability the totality of the tensions, balances and dynamics of the three domains outlined above for sustainability must be fully grasped. With this in mind it is our intention to employ the following conceptual parameters, i) Economy; ii) Decision Making/Politics; iii) Culture/Lifeworld.

i) Economy

The economy is the most dynamic and least constrained of the three domains. Advances in technology have further enhanced this. The post-modern era has been characterised by the unleashing of new economic paradigms, assisted by the technological leaps of the 20th century, the assumptions which underpinned the modern economy are no longer valid in this new context.

The tension inherent in the relationship between the concept of sustainable cities and spatial-economic competition as a basic feature of the urban setting is a critical problematic which has to be addressed in devising action strategies concerning sustainability. Nijkamp has proposed a particular perspective on what some of the components of a definition of urban sustainability should contain.

> "Sustainability in an urban setting describes the potential of a city to reach qualitatively a new level of socio-economic, demographic and technological output which in the long run reinforces the foundations of the urban system although its evolutionary path may exhibit various stable or unstable temporary fluctuations" (Nijkamp, 1994).

This definition is limited as it does not take account of the lifeworld, one of the three central domains of society. Lifeworld includes the symbolic (e.g. language, meaning), normative and cultural aspects of society. Non Sustainability in the urban context may exhibit itself as saturation of city variables (quality of air, transport infrastructure, traffic), the economic base, environmental decay, disintegration of the solidaristic networks and social cohesion.

The fundamental urban dynamic is spatial economic competition. The continuity of a given city may be largely a function of its competitive advantage. This immediately creates a tension between the concept of sustainability and the necessity for competitive behaviour which militates against the under lying orientation of sustainability.

> "Thus spatial economic competition is a basic feature of urban dynamics: the more competitive an urban species the higher its continuity chances consequently this competitive behaviour of cities has to be seen as a rational decision making process

in which the decision making agencies are inter alia the business sector, the public sector, the public at large and so on."(ibid.)

Nijkamp has placed special emphasis on spatial-economic competition and ascribes to it a central function. While we recognise the centrality of spatial-economic competition, as stated previously it fails to give a fully rounded account.

One strategy to maximise competitive advantage and chances of continuity is specialisation. This results in cities accentuating their specific competencies, geographical advantage, infrastructural provision, political influence and other factors which gives that city certain advantage over other competing cities in a specialised economic field of activity. Pursuing strategies of sustainability through competitive behaviour creates situations where through maximising its own continuity prospects it compounds or contributes to the ultimate non-sustainability of competing cities, especially in the restrictive opportunity structure of the post-industrial environment. In other words the efforts of individual cities to maximise their strategic viability can exacerbate problems for other cities.

*** Nodal Super Cities**

Three cities, London, Tokyo, and New York have taken on the central global economic role. They have achieved this through the development of previously unimaginably complex and technologically advanced management, networking and service systems. Their ability to establish themselves in this pivotal position in the global economy, has to some degree been at the expense of other less dominant cities. They have been able to compete and maintain their position through a combination of competitive advantage over other cities and through a top level symbiotic relationship which at one level sees them held in a competitive tension and at another sees them operating in what Sassen describes as a triad. She estimates that between them New York, London and Tokyo control 84% of global capitalisation and the largest concentration of commodity and currency markets.

"New York, London, and Tokyo function as one trans-territorial marketplace. These three cities do not simply compete with each other for the same business. They also fulfil distinct roles and function as a triad."(Sassen, 1991)

Sassen stresses the importance of focusing on production in an understanding of the role to the city in the post-modern context. She identifies four key points in this regard: i) it identifies specific modes of integration of these global cities into the world economy; ii) it offers an opportunity to add variables like labour categories and work processes to the analysis; iii) focusing on individual cities gives us a perspective which includes individual free-standing firms of each city and not just the major multinational players; iv) looking more closely at production and production sites gives a breadth to analysis such that it incorporates the role of key city actors in the global economy. Financial services are the key economic activity in Sassen's thesis. She sees the growth of the services sector not so much taking the place of mass production, but in fact an outcome of it. Given the pre-eminence of the financial services the role of the three key actors has grown in importance and has both been facilitated and made possible only through the development of technology

> "In an era of global telecommunications, we have what is reminiscent of the role of an old-fashioned marketplace, which serves as a connecting and contact point for a wide diversity of often distant companies, broker, and individuals" (ibid.)

The post-industrial economic reality points to a centralisation of the global economy through the concentration of control and steering capacity of international finance. In this context London, Tokyo and New York hold a pre-eminent position. These can be constituted as nodal super cities, concerned with the production, processing and consumption of capital. These super cities through technological advances such as neural networking are capable of processing the bulk of this capital. It is however necessary, strategic and profitable for a considerable share to be decentralised through a lower a layer of major international cities. We suggest that in this context there are layers of sustainability - with the three super cities being the clear economic winners.

The second layer perform functions necessary for the maintenance of the global economy, such as manufacturing, certain services, market penetration, investment opportunities, etc. This requires the restructuring of the indigenous system and cultural infrastructure to accommodate and maximise the potentials offered through association with the central nodes. In certain cases such strategies will in fact enhance the sustainability of key secondary cities like Frankfurt, Paris, Barcelona, Amsterdam, or Milan. Others, however, may be forced to make too great a concession which could undermine their already precarious

sustainability, here we speak of cities like Bilbao, Lyon, Dublin, Glasgow, or Oporto or in an even more pronounced sense in the third layer cities like Bristol, Palermo, Rennes, Cork, Lerida, or Patras. Symptoms of this phenomenon can be seen in the diversion of capital resources to compete with other cities, counter bids for international events, risks to and depletion of the physical environment, over generous tax concessions, restructuring the labour market, gentrification.

The concept of sustainability can in effect be undermined by this competitive quest within which the second and third layer of cities seek global economic relevance. In particular this could have negative implications for the sustainable capacity of both the lifeworld and the political and decision-making apparatus.

The problems of sustainability are becoming manifest ever more acutely in the contemporary period, poised as it is between the modern and post-modern epochs. These problems have indicated themselves in a series of symptoms, including the international debt crisis, stagflation, obsolescence, mass unemployment, capital migration, fossil fuel depletion, ecological exhaustion, pollution, congestion, sprawl, demographic imbalances. We do not suggest that this list is comprehensive, but merely indicative. In any proposed study careful consideration would need to be given to a number of these economic factors which are especially relevant to the sustainability of cities.

ii. Politics and Decision Making

Beck claims that governance is being displaced from the political institutions and apparatuses associated with modernity, e.g. party, parliament, government; to techno-scientific and economic rationality. These lack the attributes of accountability, discussion, consent etc. associated with modern democracy. He constitutes this as two contrary processes for organising social change:

> "The establishment of political parliamentary democracy and the establishment of an unpolitical, non-democratic social change under the legitimating umbrella of progress and rationalisation.(Beck, 1992)

Technological innovation presents contemporary society with a dichotomy. Firstly as Beck illustrates it provides the opportunity of increased well-being for both the individual and society. These must be weighed against the negative effects of de-skilling, unemployment, risks to health and the environment. Society has implicitly accepted this payoff. It has placed standard of living before the other constraints. Sustainability presents a different picture. Society can no longer operate in the blind optimism of ever increasing growth which prevailed from the beginning of industrialisation until the recent past. There is now the restraint of limited economic growth and severe environmental limitations. Even the aspiration of ever increasing standards of living is no longer blindly accepted. The trade off now is not so much standard of living as much as quality and sustainability of life. The reproduction of human society is no longer guaranteed through continued economic expansion and exploitation of the world's resources, the latter is restrained by factors such as degradation of the physical environment. Beck describes the traditional view of progress in the following terms:

> "progress becomes a substitute for questions, a type of consent in advance for goals and consequences that go unnamed and unknown". (ibid.)

This paradigm is almost precisely reversed in a world faced with the tight realities now prevailing. The very goals and consequences are the essence of public discourse, they are in fact the keys to sustainability. Again Beck points us in the direction of the central theme that is unfolding in contemporary society and crucial to this debate. He points to the breakdown of the divisions that neatly separated the political from the non-political. He announces the 'unbinding of politics'.

The displacement of modes of governance, which characterised the institutions of modernity, by techno-scientific concerns and economic rationality have generated a new post-modern politics, e.g. new social movements. This new politics emerged as a consequence of new realities exhibiting themselves both from the political realm of the modern period and the advances arising in the techno-scientific and rational economic realms. This arose in the case of the techno-scientific through a withdrawal of legitimacy through a failure of the techno-scientific domain to take on board consensus forming principles. This is explicable through an evaluation of the context prevailing in the modern period. Here the political domain still possessed considerable control and steering

capacity. Additionally the techno-scientific domain was able to deliver an ascending opportunity for enhancing life quality and economic growth. At the end of the modern period this began to unravel. In fact the institutionalisation of the Welfare State and the emergence of planning can be interpreted as an attempt to stymie the unravelling of certainties of the modern period at the end of the initial industrial surge.

***Technological Innovation**

Rapid advances in technological innovation particularly in electronic engineering since the second world war have had far reaching implications for urban society particularly in the area of manufacturing industry. Many cognitive functions within manufacturing have been rationalised fundamentally through the application of computer technology, for instance neural networking. Such applications now encompass the monitoring and control of processes in a diverse range of industries such as steel making, brewing, chemical manufacture and also in predicting the behaviour of financial markets and trends in consumer demand. Neural networks will extend both their capacities and range of applications rapidly between now and the end of the century. We will see breakthroughs in such areas as continuous speech recognition, handwritten character recognition, autonomous vehicles or robots. Apart from these we can expect neural networks to impact in other areas concerning urban sustainability examples include postal and telecommunications, traffic management, urban transit, dealing with congestion, early warning systems for weather, tides, floods, water quality, sanitation systems, air traffic management, consumer and consumption trends. It is also likely to have a strong influence on social policy allowing strategic interventions based on high quality data generated through neural understandings of demographic trends, morbidity, age, skills inventory, education, housing demand patterns and depreciation. It is likely that neural networks will combine with other technological innovations such as sensors to control a new generation of self-learning robots for both the work environment and the home. Neural networks will continue to play major roles in industrial, defence and particularly the medical sectors.

Following generations of neural networks could be employed to contribute to more sophisticated and integrated planning techniques to enhance quality of life, physical environmental standards, global balance in planning, development, energy consumption and ecological safeguards. While technological innovation of the this scale can point to an enhancement of the quality of life and welfare, they must be contextualised in the unbinding of politics paradigm proposed by Beck.

The characteristics which describe difficulties in the post modern political realm include alienation of community, loss of legitimacy, perceived inadequacies of representation, bureaucratic saturation, inefficient response and communications channels between the body politic and political institutions and political actors.

The emergence of the new social movements highlight the inadequacies of traditional representational politics. These influences plus the influence of the feminist, ecological and civil rights movements have created a new political space where mainstream politics has failed to acknowledge the existing deficit. In highlighting the problems they have also pointed to solutions to the democratic and governance deficit. Through the promotion of ideas like transparency of decision-making, bureaucratic and governmental accountability, reform of bureaucracy, introduction of circular decision-making processes, holistic perceptions of problems and solutions, new perspectives of gender, race and hierarchy and many other changes throughout society these movements have effected fundamental attitudinal and behavioural shifts.

iii) Lifeworld

The third domain in our analytical framework, the lifeworld, embodies the symbolic reproduction of society. This can be taken to include cultural reproduction, social integration and socialisation. Crisis within the lifeworld has been extensively documented and in brief includes such phenomena as loss of meaning, normlessness, and personality disorders. In the context of the sustainability of cities it is as central as the other domains, and indeed has been conferred with greater significance within many of the new social movements.

Traditional ties, norms and understandings were eroded in the modern period through the capitalist mode, bureaucratisation and the formalisation of the legal system. This signalled a progressive encroachment of the lifeworld by both the economy and system (politico-legal). In the contemporary era new social

movements can be characterised as reconstituting the realm of the lifeworld, but the steering capacity of the economy and the political system has not yet fully begun to comprehend and accommodate this trend. The degree to which the public sphere has been encroached can be ascertained by examining the public sphere. Habermas makes a forcible observation in this regard:

> The public sphere assumes advertising functions. The more it can be deployed as a vehicle for political and economic propaganda, the more it becomes unpolitical as a whole and pseudo-privatized (Habermas, 1989)

The supplanting of the integral functions of the public sphere is a process which a sustainable approach must begin to address. What has been passed off as a public sphere may in fact be no more than a *virtual reality* as Benhabib ably distilled:

> The autonomous citizen, whose reasoned judgement and participation was the sine qua non of the public sphere, has been transformed into the *citizen consumer* of packaged images and messages or the *electronic mail target* of large lobbying groups and organizations. This impoverishment of public life has been accompanied by the growth of surveillance and voyeurism (Foucault) on the one hand and the *colonization of the lifeworld* (Habermas) on the other. (Benhabib, 1992)

Our basic premise is that sustainability is a holistic concept which requires a dynamic balance between the three subsystems outlined above viz. Economy, Political (System) and Lifeworld. This perspective is widely discussed in social theory and is particularly developed in the work of Habermas and others. Because each of the domains contains contradictory imperatives a sustainable city (society) must seek to mediate these counter forces. Offe, employing some of the constructs introduced by Habermas highlights the inherent pitfalls in addressing systemic tensions in policy intervention:

> "... in such a way that one type of problem is not solved by aggravating another"(Offe, 1984).

Benhabib, drawing on Hernes, has gone on to state that welfare societies are ones in which reproduction has gone public. She says that this however has often led to a *patriarchal-capitalist-disciplinary bureaucracy* which gives rise to the disempowering of women in particular. She list a spectrum of previously private concerns which are now subject to public intervention, including child-rearing, care for the sick, the young, and the elderly, reproduction, domestic violence, and child abuse. She argues for the forging of a critical model of public space and public discourse. This in effect means creating a balance between a move towards juridification on the one hand and on the other opening these to public debate, reflection and normative scrutiny. How this scenario has arisen can be explained in part by a reconstruction of the public and the private. This can be seen even at the level of spatial organisation as Siegel observes in New York in what he terms as defensible space and insulation.

> All of these projects organised around the concept of *defensible space*, illustrate how urban planning, both public and private, is now driven in considerable measure by attempts at *insulation*. (Siegel, 1995)

Therefore this *insulation* works in the context of spatial forms and also in terms of media mediated discourse. In this sense discourse is largely uni-directional and consumer oriented. Developments like Internet have the potential to challenge the demise of the public sphere and may even have the potential to regenerate it despite spatial arrangements. This of course introduces the *Glocal* dialectic, where global sustainability in these terms does not necessarily serve the imperatives of local sustainability. It also raises questions of access and exclusion, but cities like Wellington, New Zealand through imaginative deployment of technology can reduce the barriers to access and also introduce a local dimension.

While systems theory offers very valuable insights on the nature of crisis in contemporary society, its perspective is primarily drawn from an analysis of state intervention, which is now widely seen as part of the problem as confirmed by Benhabib (Offe, 1984).

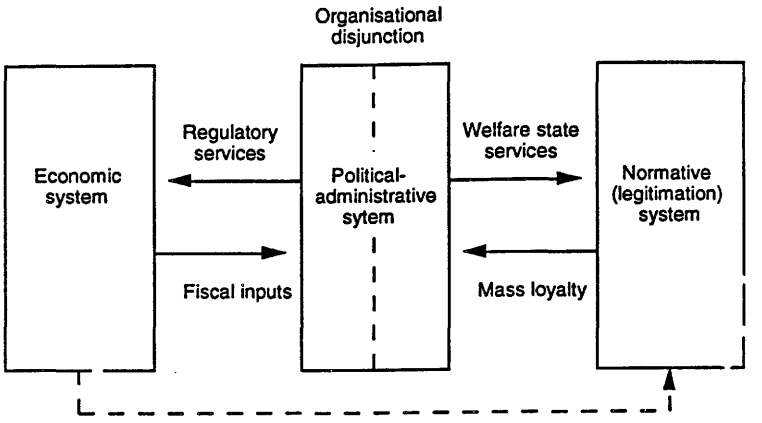


Figure: Three subsystems and their interrelationship
(Offe, 1984)

A theory of sustainability must go further than this, it must address society's problems in an integrated and interactive way, which contrasts with the systems theory approach which is deconstructive in nature. The systems theory, described by Offe as "a crisis of crisis management", reflects a model of crisis maintenance, which if the crisis exacerbates beyond a certain point it will be helpless to defuse. We propose that sustainability is a collectivity of theories and models acting in compliment. This could manifest itself in a diversity of approaches, each of which pursues a sustainable route. This could be by way of a recycling policy for waste, waste reduction, ecological friendly mass transit systems, reorganisation of work by technology, renewable energy sources, energy conservation policies, fiscal policies, extended producer responsibility, ergonomic planning, land use policies, consultation and decision-making pathways, in fact a sustainability appraisal could be applied to every facet of life in the urban context. They must however exclude the possibility of new oppressions such as patriarchy, feminisation of poverty, or new forms of exclusion. A model of sustainability encapsulating a highly evolved public sphere and underlining the integral role of the lifeworld is imperative to avoid replicating non-sustainable indicators carried over from the pre-sustainability order.

CONCLUSION

This article has by definition remained at a high level of generality. We have identified the three primary domains across which sustainability has to be measured. Each of these domains in turn reveals a massive reservoir of sub-texts requiring detailed and extensive examination. It was our intention to propose a broad theoretical framework to contribute to the development of a theory of urban sustainability. Our motivation has been to contribute to a debate which is demanding increasing attention and importance. Sustainability requires to be properly framed, effectively implemented and rigorously evaluated. Our contention is that the latter two cannot be pursued without an adequate exposition of the theoretical underpinnings of sustainability. Although we cannot concede that the theoretical base has been anything like fully developed, we acknowledge the urgency of Soussans call for a rapid move towards implementation of sustainable practices:

> The challenges of the 1990's is to turn the principles of sustainable development into achievable policies which lead to concrete change. This move from principle to practice is far from easy and poses a series of dilemmas from which there are no clear solutions (Soussan, 1992)

In our quest to attain sustainability the fragility of life on this planet must be highlighted. It is chastening to remind ourselves of the delicate ecological balance within which human life exists.

> Human society, for its survival and wellbeing, is totally dependent on the biosphere: the thin layer of air, water and soil surrounding the globe in which life on earth is concentrated. This layer is at most no more 20 km in thickness, which is not more than 0.3% of the earth's diameter, and provides all the physiological necessities of life... (Vellinga et al, 1993)

The proliferation of attempts to physically construct and intellectually conceptualise working models of sustainable urban units like Arcosanti (USA), Crystal Springs (Australia), or Bramberton (Canada) may pose as many questions as they answer. This reinforces the imperative for an even more intensive discourse towards establishing firm theoretical parameters to frame the concept of sustainability. Are these examples and others like them merely isolated capsules reinforcing what Siegal has described as the process of insulation in his

critique of private versions of public space in New York. No doubt the above examples can offer useful case studies from which more universal applications of sustainability can be developed. Habermas offers some indicators in this regard:

> The goal is no longer to supersede an economic system having a capitalist life of its own and a system of domination having a bureaucratic life of its own but to erect a democratic dam against the colonializing *encroachment of* system imperatives on areas of the lifeworld. (Habermas, 1992)

However, the fundamental premise from which sustainability must emerge will have to be holistic. None of this makes sense should there be a major ecological deterioration, which is perhaps the most pressing challenge to sustainability.

REFERENCES

BECK, U.

1992. *Risk Society: Towards a new modernity.* London: Sage

CASTELLS, M. and HALL, P.

1993. *Technopoles of the World: the making of 21st Century Industrial Complexes.* London: Routledge.

COOKE, P.

1988. *"Modernity, postmodernity and the City"*, Theory, Culture and Society, Vol. 5, Nos. 2-3: 475-92.

HABERMAS, J.

1989. *The Structural Transformation of the Public Sphere.* London: Polity Press

1992. *"Further Reflections on the Public Sphere"* in Calhoun, C. (Ed) *Habermas and the Public Sphere.* Cambridge, Mass.: MIT Press.

NIJKAMP, P. and PERRELS, A.

1994. *Sustainable Cities in Europe.* London: Earthscan.

OFFE, C.

1984. *Contradictions of the Welfare State.* London: Heinemann

PEARCE, D.

1993. *Blueprint: Measuring sustainable development.* London: Earthscan.

REDCLIFT, M.

1987. *Sustainable Development: Exploring the contradictions.* London: Routledge.

SASSEN, S.

1991. *The Global City.* New York: Princeton University Press.

SIEGEL, F.

1995. *Reclaiming our Public Spaces* in Kasinitz, P. *Metropolis: Centre and Symbol of our Times.* London: Macmillan

SOUSSAN, J. G.

1992. *"Sustainable Development"* in Mannion, A. M. and Bowlby, S. R. *Environmental issues in the 1990s.* Chichester: Wiley.

TOURAINE, A.

1971. *The Post-Industrial Society*. New York: Random House.

VELLINGA et al

1993. "*An ecologically sustainable biosphere* "in *The Environment: Towards a Sustainable Future*. The Hague: Kluwer.

WORLD COMMISSION ON ENVIRONMENT AND DEVELOPMENT (WCED)

(1987), *Our Common Future (Bruntland Report).* Oxford: Oxford University Press.