Planning is commonly conceived of as seeking to reconcile the three-fold demands of society, economy, and environment.

A good place to start considering the meaning of sustainable development is therefore to examine a planning policy from these three dimensions.

Urban planning can act to destroy social networks, as in insensitive urban renewal schemes, or can conversely cultivate opportunities for a rich community life. The sustaining of local facilities and networks depends in part on coherent long-term strategies for housing, economic development and transport.

At the broadest level of influence, local urban planning affects the quality of air, water and soil resources. It also affects the emission of greenhouse gases, particularly in buildings and transport, and thus acts to exacerbate or mitigate the risks of rapid climate change.

The planning system can contribute to the objectives of ensuring that development and growth are sustainable; then there really is a new planning game in town.

Keywords: sustain, ability, town planning

Introduction

There is a close connection between the growing actuality of the issue of sustainable development, the accelerating public and scientific debate on the problems of sustainability and the variety of the perspectives of numerous authors, scientists and public figures often controversial and even conflicting. Every year hundreds of outstanding and not so famous researchers joint the debate and it seems that the statement to be heard most often is that a widely accepted definition could hardly be identified. This often sounds like an accusation without address.

As a matter of fact we have no grounds to expect that a universal definition would cover all aspects of social, economic, environmental and, in general, any type of development of the compound nature of social development at the local, regional and higher levels. Taken separately the economic, social and ecological developments are complicated enough, but any process of development is even more complex, so we should hardly believe that it is possible to merge economic, social and ecological components in a general formulation that should also reflect the dynamics of development and the parameters of sustainability.

Next, it is clear that if a general definition of sustainable development is not agreed upon and more specifically – coming closer to the point of this paper – of sustainable development of human settlements and the sustainable city, then we should not expect that we could easily
draw a general classification of the approaches for realization of sustainability, which could serve as a universal basis for their co-ordination and synchronism. Still it is possible to identify certain groups of approaches, systems or models of intervention. Starting with the approaches resulting directly from the UN World Summits and Conferences in Rio de Janeiro – 1992, Istanbul – 1996, Johannesburg – 2002, three large groups of approaches could be identified. Firstly, we should point the approaches related to protection and restoration of the natural environment. Actually these are mainly ecological approaches, making use of all instruments of the ecological science like measures to preserve the ecosystems, the climate and the natural resources, without adding much new to this area human knowledge, but simply stressing on its enormous significance and further elaborating tools of implementation.

Secondly, we should point the approaches related to the development of human settlements. Important UN forums and documents are focused on these issues (WCED Report-1987, Chapter 9; UNCED-1992 – Agenda 21, Chapter 7; Habitat II –1996 - The City Summit, etc.) In the last decades this approach or rather this group of approaches went through a considerable evolution and actually formed a new major trend in urban sciences, mainly in the area of urban planning and design, including though the whole variety of social, economics, environmental, architectural and other technical studies, related to urban development. It comprises policies and measures like limiting the urban sprawl and imposing more compact development of settlements, reducing car dependence, enhancing the efficiency of natural resources, application of energy-saving communication models and building technologies, etc. In North America this system of approaches is known as the Principles of Smart Development. Other designations are popular too – like the redesigning the city model (Haughton, 1999). Obviously because this planning and design-orientated approach became widely spread all over the world many critics raised their voices stating that such a preponderance of practical orientation of the work on sustainable city actually “reduces the analysis of sustainable urban to a technical matter of 3 institutional restructuring, traffic management, architectural design and the development of green technologies” (Whitehead, 2003, see also Pradic, 2003). These critics argue that such approaches are too concrete and simplify the complex nature of sustainability and that the only proper approach must be holistic, multilateral and versatile. Nevertheless, the approach they advocate eventually stresses on the economic and social analyses of urban phenomena (Whitehead, 2003; Astleither & Hamedinger, 2003) or on the environmental issues. Respectively the policies and measures offered are economic, social and ecological.

There could be identified other approaches or models and systems of activities based on different approaches to sustainability. Graham Haughton, for example, identifies in a case study in the city of Adelaide, South Australia three more models (except for the already mentioned redesigning the city model), named by him as: externally dependant cities’ model, self-reliant cities’ model and the “fair shares cities’ model. Indeed, when discussing and analyzing a notion or a concept of such fundamental significance as the issue of sustainability it is inevitable that different, alternative and controversial approaches should exist.

Perspectives to the sustainability of development of urban and natural environment, to the influence of the development of human settlements on environmental or social sustainability
are various and contradictory not only in the field of science, but also in the fields of policy and politics and this often has greater and, unfortunately, negative effect on the development of human societies. Several acts that followed Agenda 21 provided occasions to demonstrate the different and sometimes conflicting attitudes of the developed Western countries, the developing world and the transitional post-communist societies towards the problems of sustainable development. For instance, many objections were raised against two conventions that were signed by the majority of the countries that participated in the Rio Summit – The Convention on Climate Change and The Convention on Biodiversity Preservation. The criticism was based mainly on the perception that these and other documents presented an insult of the developed countries onto the resources of the less developed ones. The Global Environmental Facility like many other international institutions has also been criticized to foster interests of developed nations by imposing restrictions incompatible with the structure and the trends of the economies of the Third world.

The Johannesburg Summit placed special emphasis on the co-ordination of the interests and the attitudes of the developed and the developing world (Johannesburg Declaration, items 12, 14-19, 21-23, 35)

The post-communist countries in Central and Eastern Europe have special place and respectively special perspective to these issues. Culturally and socially these countries are close to the Western states but in the same time the interests and the efforts of societies in the postcommunist societies are directed towards overcoming the economic difficulties and closing the gap in the wealth and quality of life as seen in the Western market societies and this goal takes priority over environmental and resource protection and the stability of social development.(Pradic, 1997)

Urban design has been considered to have the potential to generate benefits for built environment stakeholders.

It is an established assumption in economic analysis that the benefits of most goods and services accrue to those who pay for them and are not extended to a wider group. The exchange value of a good or service is therefore indicated by the price at which it is traded in the market. Market prices are poor indicators of the value of many collective public benefits since their key feature consists of externalities which are not take into account in the price for which the goods are sold. Thus, for example, the social benefits of a high quality public realm and the productivity gains arising from well-designed urban spaces and workplaces occur in the form of externalities. This is a distinctive characteristic of “public goods” that have no immediately identifiable monetary exchange value and therefore not usually considered important by the market. Such goods can easily be undervalued in public and private investment decisions.

The increasing prominence of the sustainability agenda has brought to the fore the issue of how the urban environment should be organized, how it should be managed and how large should be its “ecological footprint”. At the same time the pressures of inter-city competition for jobs and economic activities in a globalised economy have forced the planning and urban policy community to pay greater attention to the contribution that well-designed and managed urban environments might make towards enhancing the economic competitiveness of places.
The result has been the renewed focusing of attention on the quality of the urban environment and the process through which better quality can be produced and maintained. In the context of a diminishing role for the public sector in the direct provision of buildings and public spaces, the focus of that attention has been on the outcomes of largely private sector led development processes.

Demonstrating the value of good urban design, or assessing its costs and benefits (in aesthetic, environmental, health, safety, economic and cultural terms) is part of the effort to link design quality to the decision-making logic of private sector development interests. The other side of the coin is the need to develop an understanding of how the public sector can modify the institutional barriers to good design and introducing incentives to encourage its delivery. Regrettably, commercial pressures often militate against long-term investment in design quality. The problem is compounded because decisions regarding the built environment are often made by those far removed from their impact on the ground, by politicians, district surveyors, housing managers and accountants.

**The ability of sustain a good urban design: historical issue.**

Some of the most highly valued parts of our cities are instances of good urban design, areas which have delivered good investment returns and an attractive built environment for decades or even centuries. The great landed estates of central London are the most significant “modern” examples, modern in the sense that they were the product of contractual relationship between landowners, builders and users of the kind still made today. These areas, such as Belgravia, Marylebone and Bloomsbury, show how an investment in good master planning, systematic regulation if building design and the strategic placing of urban spaces can produce both enduring use values and lasting streams of profits, rents and capital value growth for owners.

In a later period – the early twentieth century- many garden suburbs in Britain, Germany and elsewhere have had the same impact. Although individual buildings may be very variable in quality, the ensemble has been maintained and valued by occupiers and owners alike, often generating fierce protective loyalty in residents. Hampstead Garden Suburb is the best known example; on a larger scale, some new towns are enduring equally well.

Developments were laid out in large enough ownership units to enable the initial promoter to capture (in higher rents and prices) most of the benefits created through good design and high quality public space. In economic jargon, the externalities were internalized within the scheme. The survival and the self-maintaining quality of many of these localities have been helped by the leasehold structure of tenure which meant that the ground landlord had an incentive to maintain the quality in the long-run, and to do so through reinvestment.

Many cities have large areas which were first developed in more piecemeal ways, but which survive and continue to generate value today. The key to their survival has tended to be the existence of good functional and adaptable street systems and flexibility in the uses to which the building stock can be put, and therefore a responsiveness to the changing needs of users and of markets. An interesting example is Camden Town in London, often scheduled for redevelopment but surviving and thriving largely intact today. The key ingredients of success here include the existence of well-proportioned and interesting street axes, a visually rich and functional layout and the
existence of “backland” and flexible building structures into which commercial activity could grow.

This brief review of historical examples indicates how a set of often simple urban design principles can combine with social and economic circumstances to deliver lasting value to investors, occupiers and society. Clearly the development context is different today from when many of these investments were conceived and realized, not least in the move towards a more short-term investment culture. Nevertheless, the market truism remains the same, that investors seeking profit will favor those forms of development perceived to deliver the highest returns on their investment. Thus, if it can be demonstrated that good urban design pays dividends, then investment in high quality design will be far more likely to follow. Two major problems appear tied ability to get a perspective of sustainability, namely ability in maintaining the built urban environment improvement.

First, how to define the exact scope and nature of good urban design, and second, how to make objective judgments about the relative merits or otherwise of particular design solutions.

Definition of urban design are various. Perhaps the simplest definition is “the art of making places”. Urban design is concerned with all the constituent physical parts of the built environment to which the public have access; with the way these parts fit together to create networks of space and activity; with the functioning of those space networks; with their role as a social venue.

It may synthesize the main objective for sustain a good urban design are: character, to promote character in townscape and landscape by responding to and reinforcing locally distinctive patterns of development and culture; continuity and enclosure, to promote the continuity of street frontages and the enclosure of space by development which clearly defines private and public areas; quality of public realm, to promote spaces and routes that are attractive, safe, uncluttered and work effectively for all in society, including disabled and elderly people; ease of movement, to promote accessibility and local permeability by making places that connect with each other and are easy to move through, putting people before traffic and integrating land uses and transport; legibility, to promote legibility through development that provides recognizable routes, intersections and landmarks to help people find their way around; adaptability, to promote adaptability through development that can respond to changing social, technological and economic conditions; diversity, to promote diversity and choice through a mix of compatible developments and uses that work together to create viable places that respond to local needs.

Research has consistently shown that planners, local politicians, the public and architects have very different perceptions of architectural design. Although similar research on perceptions of urban design has not yet been undertaken, it is likely that these too will differ. Many stakeholders are involved in making, using and managing urban developments. Views on what constitutes good design in the built environment will vary between stakeholders and will depend on the audience perceiving them rather than on the exact nature of the development. Thus an office worker or shopper may have a very different perception of what makes a good urban environment from an estate manager charged with its upkeep, whilst a developer may perceive the added value in a development very differently from a local resident. These differing perceptions needed to be reflected in the research by interviewing all the key
stakeholders involved in each case study. The ability in maintaining a good urban design needs to reconcile a set of often very different private and public aspirations. If the private aspiration necessarily tends to be chiefly one of economic viability the public aspiration is one of social equity in which key public objectives are met through the development process. Economic viability is the first and foremost form of overarching value. But the social benefits that developments deliver provide a second form.

Economic and social value are complemented by a further, less ready apparent put still highly significant, dimension of overarching value, namely the environmental value generated by more ecologically responsible patterns of development. As environmental concerns do not contribute directly to day to day user experience of developments, neither their “exchange value” nor “their” value in use” is readily apparent. The tendency has therefore been to marginalize them. There is three overarching forms of value, along with the seven urban design objectives extend the limited notion of “exchange value” to one of “sustainable value”:

- Economic viability – development that is economically feasible and which remains economically viable over the long term.
- Social benefit – development that responds to broader public objectives and concerns and which as far as possible benefits from the support of the local community in which it sits.
- Environmental support - development that delivers more energy efficient, robust, ecologically supportive and less polluting patterns of urban form.

From ability to sustain urban design to sustain-ability (long term value)

The relevant literature shows two basic approaches to measuring the value of design. The first is a mainly qualitative treatment which focuses on how the value of good design is perceived by the various stakeholders involved in the production and use of urban space, how this perception relates to design-related decision-making processes and how policy influences the outcomes of those decisions. The second is quantitative, econometric treatment. The focus is on measuring the value (or more specifically costs and benefits) generated by given levels of design quality so as to inform the financial decisions of stakeholders. Key issues concern how to convert intangible benefits and costs of design quality into monetary values, the definition of temporal limits for such calculations, the distributions of costs and benefits amongst stakeholders and how these accrue over time. In such cases, assessing value normally, means converting its various components into prices, which can then be compared and benefits offset against costs.

Recent attempts to measure urban design quality are discussed in Annex A. Among them are UK research projects supported by the RICS& DoE (1996), a study by the Property Council of Australia (1999) and Vandell & Lane’s work in the USA (1989). The UK research developed a sophisticated assessment tool through which developments were measured against fifty urban design attributes. Assessment was largely undertaken by members of the research team, supplemented by discussions with some of the stakeholders involved in each development. The tool provided a means to develop more objective assessment of design quality, by turning the attributes into quantitative values on a scale of 0 to 4 – the final outcome being an average rating for each of the five developments assessed.
For RICS&DoE is the categories: 1) functional and social use; 2) Natural environment and sustainability; 3) Visual; 4) The urban experience.

For Property Council of Australia is the criteria: 1) degree of “community equity”, measured in public space design, of amenity quality, area accessibility and vitality, and diversity; 3) Responsiveness to qualities of the urban context and landscape, and to historical characteristics; 4) Relevance to present and future, measured through the degree of purposeful innovation; 5) Ability to change over time; 6) Impact on public life and community perception; 7) Professional excellence in inputs such as development concept, planning, architecture and design, facility management and development upkeep.

For Vandell & Lane is the categories: 1) Qualities of materials used in exterior skin; 2) Fenestration: composition and scale of the façade; 3) Massing: compositional bulk and volumetric of the building; 4) Design of interior public spaces; 5) View on skyline: as seen from a distance; 6) Design of exterior public spaces 7) Responsiveness to neighborhood: relationship to abutting uses; 8) Provision of public amenities.

This methodology require objectivity accompanied by inclusiveness. To avoid simply recording design characteristics, each project should be measured against a set of urban design performance criteria and given am mark for how successfully it was judged to have met them.

Each objective corresponds to a criterion of performance:

<table>
<thead>
<tr>
<th>Urban design purpose</th>
<th>Performance criteria</th>
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<tbody>
<tr>
<td>1. Character</td>
<td>A distinct sense of place responding to local context</td>
</tr>
<tr>
<td>2. Continuity and</td>
<td>Continuity of frontages and clearly defined public space</td>
</tr>
<tr>
<td>Enclosure</td>
<td></td>
</tr>
<tr>
<td>3. Quality of Public Realm</td>
<td>Safe, attractive and functional public space</td>
</tr>
<tr>
<td>4. Ease of Movement</td>
<td>Accessible, well connected, pedestrian friendly environment</td>
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<tr>
<td>5. Legibility</td>
<td>A readily understandable, easily navigable environment</td>
</tr>
<tr>
<td>6. Adaptability</td>
<td>Flexible and adaptable public and private environments</td>
</tr>
<tr>
<td>7. Diversity</td>
<td>A varied environment offering a range of uses and experiences</td>
</tr>
</tbody>
</table>

Good urban design can confer two distinct form of benefits. Direct benefits (usually economic) accrue to those responsible for investing in development (whether from the public or private sectors. Indirect benefits (social but also environmental) accrue to others and to society at large. This two form of value can be further distinguished between value that has financial consequences and can be measured through monetary worth (exchange value) and value that is more intangible and does not lend itself to direct financial measurement (value in use). Such value is no less real but is not usually reflected in simple valuation techniques.

Unfortunately, the relationship between design and value is unlikely to be a straightforward correlation between better design and increased value. While in certain respects good urban design may increase value, in others it may increase costs, at least in short term. Such costs may or may not be compensated for by the increases in value.

The sustainable urban design in terms of potential value
The potential components of value generated through good design are:

1) *) Economic value – Financial Tangibles:
Potential for higher land values
Higher sale values
Increased funding potential (public and private)
Higher rental returns
Increased asset value (on which to borrow)
Maintenance of value/income
Reduced maintenance costs (over life)
Better re-sale values
Easy maintenance of high quality materials
Reduced security expenditure
Reduced running costs (energy usage)
Reduced public expenditure (on health care/crime prevention/urban management and maintenance)
Increased local tax revenue
Reduced travel costs

**) Economic value – Financial Intangibles:
Potential for greater security of investment depending on market
Quicker permissions (reduced cost, less uncertainty)
Distinctiveness (greater product differentiation)
Allows difficult sites to be tackled
Better developer reputation (increased confidence/"trademark” value)
Future collaborations more likely
Enhanced design professional reputation
Increased workload and repeat commissions from high quality, stable clients
Competitive investment edge
Higher quality longer term tenants
Happier workforce (better recruiting and recruiting and retention)
Better productivity
Increased business (client) confidence
Fewer disruptive moves
Increased occupier prestige
Increased city marketing potential

2) *) Social Value – Financial Tangibles:
Regenerative potential (encouraging other development)
Better security and less crime
Less pollution (better health)
Higher property prices
Less stress (better health)
Reduced travel costs

**) Social Value – Financial Intangibles:
Reduced public/private discord (more time for positive planning)
Greater accessibility to other uses/facilities
Increased public support (less opposition)
Increased cultural vitality
Better quality of life
More inclusive public space
A more equitable/accessible environment
Greater civic pride (sense of community)
Reinforced sense of place

3) *) Environmental Value – Financial Tangibles
   Reduced energy consumption
   Reduced resource/land consumption

**) Environmental Value – Financial Intangibles
   Less environmental damage
   An ecologically diverse and supportive environment.

Good urban design offers the opportunity to give something to community and public interests as well as to private promoters of schemes.

Urban design is a public activity, with impacts felt in the public sphere and often well beyond the site boundaries. However, the nature of development as perceived by the private and public sectors differs greatly.

The public sector primarily sees development as a way of furthering the public interest- raising local tax revenues, creating other investment opportunities and supporting public services and those sectors of society poorly served by the market. The private sector is broadly influenced by the demand for particular forms of accommodation, the cost and availability of financing, by the physical structure of the environment and by the ability to secure all the necessary regulatory approvals without undue delay.

The public sector tends to have long-term goals. Many of the stakeholders in the private sector have shorter time horizons. In part, this is because much of the debate over financing urban design projects comes down to the interplay between two basic fiscal concerns – capital costs and operating costs.

Conclusions
The value of urban design lay qualitative assessments of the value based on stakeholders’ perception of value in the context of their own motivations. Furthermore were complex econometric exercises aiming towards a cost-benefit analysis of good design. The best way of assessing value in urban design was through an eclectic “common sense” approach. This looked at how different stakeholders perceived the value, or the broadly defined costs and benefits, of urban design and compared it with quantitative indicators of success. Quantitative and qualitative assessments of the costs and benefits of good design are closely interlinked. The measurable commercial success of good design in the form of higher rents, turnover or capital values reflects how developers, investors, occupiers and the general public perceive the attractiveness of certain types of urban location and developments. Any qualitative-type studies observe the way investors, developers and occupiers view urban design quality and the costs and benefits associated with it. Design quality emerges as the result of the attitude of developers, investors and occupiers to the perceived balance between the associated costs, benefits and risks. However, the balance is different for each of those stakeholders, and might vary with time. Moreover, the nature of the development process itself and the dynamics of the various sectors of the property market condition how the balance works out, with some stakeholders favouring an “appropriate” view of design quality.
(i.e. the minimum necessary to secure that a development is bought or leased, or that it can accommodate a particular use), whereas for others it makes sense to invest in better quality (the “sustainable” quality view).

The qualitative approach did not aim to assess the value of good urban design directly. However, it did examine how design quality is taken into account by developers, investors and occupiers and how it is weighed against other concerns on their decision-making. It showed how value is assessed by the main participants in a development according to their own specific range of considerations.

The quantitative approach measures impacts of better design. Two methodological key issues underpin these approaches. The first concerns the areas of the economy to which the costs and benefits of better design are most significant, such as property values, job creation and health care (the way it is tackled being dependent upon whose benefits and costs the research is trying to assess). The second concerns how to convert to monetary values the intangible benefits and costs of design (the externalities produced by good design) and simultaneously how to ascribe these to specific stakeholders.

The definition of the impact of better design suggests that the ability to sustain good urban design has two dimensions. The first is a measurable part accruing either to those directly concerned with the building (e.g. value achieved through optimum use of site or energy efficiency), or to the wider society (e.g. the regenerating impact of flagship developments on the local economy). This dimension makes its case by referring to findings elsewhere based on performance indicators such as savings in energy consumption, variations in rental values, jobs created, tourist spending in the local economy.

The second consists of the intangible components which can only be gauged by indirect methods and approximations. These are assessed through the perceptions by relevant stakeholders of the merits of better design and its effects in individual and social wellbeing. It reveals itself through surveys of factors underpinning locational decisions of occupiers, changes in design practices of developers, recognition of the importance of design by statutory bodies, and indirect statistical measurements (e.g. the increase on footfall on an area). However, these perceptions are linked to assumptions about causal relations between design quality and social and economic processes which are not always easy to demonstrate. It seems, by offering solid evidence that good urban design can deliver better value (social and environmental, but particularly economic) will be sustainability guaranteed. By placing better urban design on the positive side of the balance sheet, a change in private as well as public investment decisions might be secured.

References