

WHITHER THE PLANNING THEORY-PRACTICE GAP? A CASE STUDY ON THE RELATIONSHIP BETWEEN URBAN INDICATORS AND PLANNING THEORIES

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Abstract

This article comments on the urban planning theory-practice gap, focusing on the relationship between the planning theory and the use of urban indicators. The reason for the selection of this case study is twofold. On the one hand it allows us to ascertain whether the gap exists, or is an illusion, while on the other hand it permits a diachronic perspective in the planning theory-practice gap, from which it can be deduced whether the gap, if it exists, has shrunk or expanded during the last fifty years. The study infers that urban planning theory-practice gap is not only evident, but has also expanded during the last fifty years as a result of the theory's transition away from planning practice, and the responsibility for the creation of this gap is assigned to the theorists rather than to the practitioners.

Keywords: theory-practice gap, planning theory, urban indicators, planning standards.

1. INTRODUCTION: THE PLANNING THEORY-PRACTICE GAP

"For as long as I can remember people have bemoaned the divorce between planning theory and planning practice" (Alexander 1997: 3). With the above statement, Ernest Alexander introduced his brief commentary on the theory-practice gap in the *Environment and Planning B: Planning and Design* journal, a commentary which sparked a vivid debate in the journal's subsequent issues (Harris 1997, Allmendinger and Tewdwr-Jones 1997, Alexander 1999). The debate over the planning theory-practice gap was resumed just as vividly a decade later in one of the roundtables of the XXI AESOP conference in Naples (this debate was recorded as a series of papers that were included in the *Planning Theory* journal) confirming that the theory-practice gap is of great interest to the academic community.

Many researchers have contributed toward the exploration and explanation of this gap, although these contributions range considerably. Philip Allmendinger and Mark Tewdwr-Jones (1997: 804) see planning and planners as being involved in a continuous power 'game', in which planners take advantage of the theory-practice gap, while Neil Harris states that the theory-practice gap is beneficial to the theorists (1997: 800). On the existence of the gap, Alexander claims that the theory-practice gap

is unbridgeable (1997: 5), and is mainly produced by theorists who do not elaborate their theories in terms of their applicability (2010: 103). On the other hand, Harris “remain[s] positive that the gap can be bridged” (1997: 800), while Vanessa Watson observes that “over the last several decades planning theory has shifted towards a closer engagement with practice” (2008: 224). Paradoxically, all of the aforementioned positions are valid because of the varying perspectives from which each researcher examines the gap.

However, the current paper is not going to add a new perspective of the theory–practice gap, but instead will try to test if the gap really exists. Such testing would demand an exhaustive survey of all planning knowledge, along with a similarly thorough assessment of practitioners’ needs, in order to conclude whether the theory–practice gap stems from the insufficient development of an appropriate apparatus that successfully connects these two parts. Obviously, the scale of such research is impossible (Alexander 1997: 4). However, it is possible to limit ourselves to a single case study, without losing sight of the ‘big picture’.

Such a case study could be one that delves into the integration of urban indicators into planning theory. Urban indicators are one of the most common and widely-used tools in worldwide planning practice, characteristic that makes them an appropriate case study for this theory–practice gap research. Moreover, urban indicators were and still are ingrained in planning practice, allowing for the historical perspective in planning theory–practice gap. Do planning theories provide knowledge that practitioners can utilise in order to use urban indicators properly? Or, do planning theories eventually either not provide such knowledge or provide it in very abstract form? Have current planning theories abolished their link to the practice of urban indicators? Is the theory–practice gap shrinking or expanding, relative to indicators practice? Such questions comprise the heart of this inquiry.

For this inquiry the study will initially focus on the evolution of urban indicators in order to ascertain their historical role in planning practice. Then, the study aims to understand the role of urban indicators in planning theory and, especially, the negative or positive emphasis that is given to urban indicators from each of the dominant planning theories of the last 50 years. Based on these two explorations, the study will try to conclude whether the gap still exists and if exists the reasons of its production.

2. THE EVOLUTION OF URBAN INDICATORS

Urban indicators can be distinguished in analytical indicators and planning standards (a more detailed typology can be found in Pissourios 2010: 80–84). Analytical indicators indicate the past or current state of a certain social, economic, environmental, etc. aspect of the urban system, while planning standards

portray a desirable and also attainable state of affairs at a specific future time, i.e. a desirable state of affairs within the limitations of certain socio-economic conditions.

The use of analytical indicators is ingrained into the planning practice of the last fifty years and never experienced a downturn. The review of any urban plan/scheme of the last fifty years is able to confirm this position. Moreover, the use of analytical indicators during the last two decades has been applied more broadly and the trends indicate that analytical indicators will continue to affect the core of planning practice. The most evident sign of their growing use is the emergence of specialised observatories that systematically collect analytical urban indicators. The case of the Global Urban Observatory and the case of Urban Audit are two representative examples (UNHSP 2004 and EU 2004). The thematic range of this collection of analytical indicators is very broad, covering from social and economic aspects, to environmental and traffic aspects of the cities.

A second indication of the increasing use of analytical indicators derives from the shift in some English-speaking countries' urban planning practice towards the evidence-based planning approach. This approach was initially shaped in the United Kingdom, based on the pragmatic approach of evidence-based policy (Solesbury 2002, Campbell 2002, Böhme 2002, Davoudi 2006, Faludi and Waterhout 2006, Krizek et al. 2010), in which policies need to be based on evidence (i.e. quantitative measurements and indicators by and large) that justify the proposed policies and aim towards the monitoring of these policies and their side effects. This approach has a decisive influence on modern urban planning legislation in Great Britain (see: ODPM 2004: 6, 30-33, 40, 48, 78 and Planning and Compulsory Purchase Act 2004, § 35) and other countries, such as Australia, Canada and New Zealand (Davoudi 2006: 14).

Regarding planning standards, their 'golden' era is identified as having occurred after World War II, when planners had unfortunately overestimated the importance of standards to urban planning and had formed the erroneous impression that their main task was to identify and implement the 'right' standards. This impression was established just before World War II in Germany, where the concept for 'order' (offspring of the totalitarian regime) was translated to urban planning as a meticulous standardization of all required facilities of a settlement (Aravantinos 1997: 324) and continued after World War II to the socialist countries, mainly to the Soviet Union (see: Feder 1939 and USSR 1962, originally published in Russian in 1958).

Nowadays, the use of planning standards has been significantly altered compared to their use in the middle of the last century. They have evolved from a tool of definitive determination of the necessary facilities of a settlement, to a more flexible tool that provides general guidance to land-use planning. The

consequence of this shift is mainly the elastic definition of planning standards value range (minimum – maximum values). Moreover, their use has been expanded internationally and they now comprise part of the planning practice in most economically developed countries. The aforementioned positions are based on the review of the urban planning practice within six states, which are explored in greater detail below.

Specifically, four European countries were selected for the study: England, Germany, Italy and Greece, while, outside of Europe, the Special Administrative Region of Hong Kong in China and the State of California in the United States were studied. In three of these cases, namely Greece, Italy and Hong Kong, the use of planning standards is binding, according to their planning legislation in force (see respectively: GGG 2004, OGRI 1968 and HKPD 2010). In Germany and the United States, the use of standards is not binding, as the federal administrative structure of these countries does not allow the development of central planning legislation. However, the study of urban plans of certain German and United States' cities highlighted the extensive use of standards that derive from various sources (see: Ernicke & Partner 2002, Ötisheim and VVM 2006, SPFS 2009, City of Sacramento 1988, 2005, 2008a, 2008b and SFPD 1990, 1997a, 1997b, 1997c, 2004, 2007). In England, an intermediate situation was detected. Specifically, the use of standards is not binding, although the standards used by planners were provided by Ministries and other governmental departments (e.g., The Department for Education and Employment, or the London Healthy Urban Development Unit). This suggests a substantial involvement of the central government in standards identification.

In conclusion, it can be assumed that the use of planning standard has remained steady over the last fifty years. While, on the one hand, the range of the standards used in practice has been reduced, on the other hand, their use has been expanded internationally. Currently, the use of standards forms a substantive part of everyday planning practice internationally.

3. THE ROLE OF URBAN INDICATORS IN PLANNING THEORY

3.1. The evolution of planning theory

It has been 50 years since Thomas Kuhn (1962) first described a model on the succession of theories, introducing the concept of paradigm which provides a genuine new understanding of how theories supersede one another. However, the application of this model in several scientific fields showed that Kuhn's model sits comfortably only within natural sciences, where the paradigmatic theory totally supersedes former theories. This does not occur in social sciences and professional disciplines such as urban planning, where the concept of paradigm should be advanced and accepted in no more than a

metaphorical sense (Muller 1998: 291). As Allmendinger states (2002: xii), “unlike Kuhn’s model what does not happen in planning is the total replacement of one school of theory with another. One may become more dominant academically and politically, but the result is a more crowded landscape”. Due to this crowded landscape, this research has to be resolved to the study of the relationship between urban indicators and each of the, more or less, dominant planning theories of the past 50 years. These are the systems planning theory, the rational process theory, the New Right and the communicative approach to planning, and are presented by chronological order of their appearance in the discipline.

3.2. *The systems view of planning*

The systems view of planning arose in the UK in the late 1960s through the work of Brian McLoughlin and George Chadwick. The core of this approach was the acceptance of the settlement as a system, i.e. as a complex set of parts standing in interaction. If settlements are perceived as urban systems, then urban planning may be seen as a form of systemic control. To understand the relationship between the use of urban indicators and systems planning theory, it is useful to refer to the operational level of the latter. Systems planning theory is based on the principle of error-controlled regulation, which means that “the system is actuated by a control device which is supplied with information about its actual state compared with the intended state” (*italics are part of the original text*) (McLoughlin 1969: 85).

The contribution of analytical indicators to the description of the actual state was first supported by Alan Altshuler in 1965, who remarked that “we are still lacking a set of social accounts for urban units that would permit policy planners to measure the current state of the city by a few simple indices” (quoted in McLoughlin 1969: 112). McLoughlin shares the aforementioned position and also elaborates it further, highlighting the need of studying trajectories of change through time, based on the periodical calculation of analytical indicators (McLoughlin 1969: 100).

On the other hand, the desired state is defined in the planning programme. The planning programme organises the policies and actions into goals, which have a vague and general character, into objectives which are more precise and clear and into sub-objectives, which comprise detailed instructions for specific actions (McLoughlin 1969: 95, 97, 107 and Chadwick 1978: 125-126). Although goals are too general and therefore can not be quantified, objectives and sub-objectives should be expressed as quantitative measurements and planning standards.

In conclusion, the above analysis reveals the nodal position of both analytical indicators and planning standards in the systems view of planning.

3.3. *The rational process theory of urban planning*

The essence of the Andreas Faludi's rational approach of planning is well illustrated by Patsy Healey, Glen McDougall and Michael Thomas (1982: 8). According to these scholars, the process of rational action involves the systematic analysis and definition of the problems, the programme formulation, the logical production of alternative plans/policies, the evaluation of the latter and the implementation and monitoring of the chosen plan (see also: Taylor 1998: 68).

On programme formulation, Faludi notes that after the first attempt at problem definition, all that one can deduce are some indications of the area of choice (action space). In this action space, more than one programmes can be formulated and the planner needs to select the "best" of these (1973: 92-93), i.e. to seek the most favourable ratio between the attainment of objectives and the expenditure of resources (1973-93). In the case that the variables (objectives and resources) are described quantitatively, then the optimum programme can be selected through optimisation techniques (1973: 94), procedure that implies the use of analytical indicators.

However, on some planning occasions, the planner is unable to formulate a clear set of objectives, as this task involves political decisions. Even in this situation, the rational planning process provides the best approach to formulating a rational programme (Faludi 1973: 95). Specifically, Faludi states that "instead of objectives precisely describing a world in which one source of tension has been removed, one must accept the idea of proceeding on the basis of statements concerning the direction into which one ought to move to reduce that tension" (1973: 95, italics are part of the original text). Although the replacement of objectives by directions is a good choice in terms of the rational planning process, it may be subject to criticism in terms of the amount of resources spent on the attainment of fixed objectives. Faludi, realizing the impact of his proposed methodology, suggests that the planner should seek "the most favourable ratio between the extent to which one moves towards that ideal (measured in terms of some standard like number of houses, or jobs, or acreage of open land), and the amount of resources spent" (italics are part of the original text) (1973: 96). As it is seen, Faludi brings forward the use of planning standards.

In the above, the discussion was focused on Faludi's rational planning process towards finding the optimal solution. However, Faludi states that the controlled suspension of rational planning process is also rational when finding the optimal solution is impossible or undesirable, for which he proposes the satisficing strategy, which is based on the identification of the minimum requirements (Faludi 1973: 114). According to Faludi, in physical planning a wide range of minimum requirements exists (1973: 114-115). These minimum requirements do not differ from planning standards discussed earlier, apart

from the fact that they comprise the bottom end of the planning standards' value range, i.e. are minimum standards.

In conclusion, Faludi implies the use of analytical indicators, however in the case of planning standards there are much clearer references of their use.

3.4. *The New Right approach to planning*

By and large, the New Right is based on a combination of a market-orientated competitive state (liberalism) and an authoritarian strong state (conservatism) that became well-known for its hostile attitude towards the idea of planning. In reality, however, the New Right accepts the positive role of planning when the planners' function is either to correct malfunctions in the market place or to facilitate market processes (Sorenson and Day 1981: 393 and Taylor 1998: 135). In any case, urban planning should be comprehended as a supporting mechanism of the free market.

This perspective has a crucial practical implication on planners' practice, as it forces the planner to delve into the running trends of the marketplace and to align these trends with the planning objectives. In order for such an alignment to be achieved, it is assumed that the planner should supply as much urban land so as not to distort, but rather to support, the operation of the free market. Regarding the supply of adequate surface of urban land, it follows that a study, based on analytical indicators, of the rate by which urban land is occupied is necessary, in order for the planners to schedule the future expansion of the city plan.

Nevertheless, urban planning does not solely concentrate on urban uses that are closely associated with the operation of the free market (e.g. shops, offices, industry). There is also a need for a variety of public goods and services, such as law enforcement agencies, the judiciary and social services for the poor (Sorenson and Day 1981: 391). "Their justification is supported on three inter-related grounds: (i) improving the performance of market economies; (ii) ensuring certain minimum social standards; and (iii) maintenance of the integrity of the state" (Sorenson and Day 1981: 391-392). Even if the "ensuring of minimum social standards" is one the three grounds on which the provision of a variety of public goods and services is based, this should not to be translated as a direct promotion of the use of planning standards. Specifically, the New Right proposes "a withdrawal from some areas of detailed planning control and a greater emphasis on consumer choice and professional advice rather than derived standards and coercion" (Sorenson and Day 1981: 400). However, what is criticised here is not the usefulness of planning standards, but their uniform application across communities with different needs. Local communities should negotiate with the planner on the types of facilities that are best for

them or are needed more urgently (see: Sorenson and Day 1981: 400). However, in my opinion, when the type of facilities is agreed (for example it is decided the establishment of a new school) then planning standards could “ensure the minimum social standards” attainment (i.e. by defining the physical dimensions of a proper school).

Following the presentation of the ideas of the New Right and their application in urban planning, the existence of a positive relationship between this planning approach and the use of analytical indicators is evident, though this positive relationship is not expressly stated. On the planning standards, neither a positive nor a negative relationship is deduced, as the use of standards can be either evadible (if applied uniformly) or welcomed (if ensure the “minimum social standards”).

3.5. *The communicative approach to planning*

The communicative approach to planning was developed in the 1980s and 1990s by John Forester and Patsy Healey (Taylor 1998: 123). According to Healey (1997: 29-30), the key emphasis of communicative planning theory is the recognition that knowledge has many forms and all these forms are socially constructed, and that the relations of power and the social context affects the preferences of individuals, as well as to the view that planning is based on consensus-building practices. In this way, planning work is embedded in its context of social relations through its day to day practices and has a capacity to challenge and change these relations. What is apparent from this epigrammatic presentation of communicative planning principles has been successfully pointed out by Allmendinger, who states that communicative planning theorists, in seeking to translate the ideas of Habermas, have simply moved from the highly abstract to the abstract. Therefore, it is difficult to point to communicative planning as an alternative planning theory (Allmendinger 2002: 201).

Concerning the case study of the current paper, the question emerges of whether we are able to infer from the abstract ideas above what the relationship might be between urban indicators and the communicative approach to planning. As expected, it is highly risky to affirm the possibility of a positive answer, however it is possible to highlight some aspect of this relationship and make certain general observations to draw a general conclusion.

Regarding analytical indicators, we suspect that under a communicative approach, they will have a very limited contribution to urban analysis. Healey states that “the development and communication of knowledge and reasoning take many forms, from rational systematic analysis, to storytelling, and expressive statements, in words, pictures or sound” (1997: 29). However, it seems reasonable that if a planner adopts analytical indicators for urban analysis he may not be very enthusiastic about using stories and expressive statements in words, pictures and sounds in order to understand urban space

and vice-versa. The positive approach (analytical indicators) and the phenomenological approach (expressive statements etc.) comprise two extremes, as the first is analytical, while the second is holistic, and the communicative approach sits on the phenomenological side (see: Healey 1997: 28-29).

Petter Næss, commenting on communicative planning, states that “as a reaction to the technocratic elements of the synoptic planning model, alternative models putting more emphasis on citizen participation have been launched. ... With their emphasis on giving the local population as high an influence as possible on their own situation, supporters of this form of planning are usually skeptical to top-down management, for example in the form of national-government directives to the municipalities” (Næss 2001: 514). Ultimately, the communicative approach comprises a representative example of a bottom-up approach to planning (see: Murray et al. 2009: 445), a characteristic that makes it totally unsuitable for the implementation of top-down policies, such as the application of planning standards. The existence of planning standards is based on the assumption that there are some commonly agreed objectives that should be applied almost uniformly throughout the state, an assumption that is challenged from the communicative perspective. In any case, the way that planning standards are formulated is a far cry from the communicative approach to knowledge production as, according to Healey, “knowledge is not preformulated but is specifically created anew in our communication through exchanging perceptions and understanding and through drawing on the stock of life experience and previously consolidated cultural and moral knowledge available to participants” (1996: 246).

3.6. Summarizing the relationship among urban indicators and planning theories

Table 1 summarizes the results of the study on the four dominant planning theories of the past 50 years. In the first column of the table, planning theories are presented in chronological order of their appearance within the discipline, while in the second and the third columns the evaluation of the relationship to each planning theory of analytical indicators and standards is respectively shown. The evaluation of this relationship ranges from outright acceptance of indicators (++), when a theory accepts urban indicators as an inherent part of its application process, to utterly rejection of indicators (– –), when a theory is totally hostile to indicators’ utilisation. In between, the relationship is evaluated as acceptance (+) or rejection (–) of indicators, which suggests the same kind of relation as above, but of lesser intensity. In the case that it is impossible to assess whether the theory accepts or rejects the use of urban indicators, the relationship is assigned as neutral (○).

Based on the above evaluation process, the evolution of the relationship among planning theories and indicators is now crystal clear. Specifically, the outright acceptance of analytical indicators from systems planning theory evolves to acceptance from rational and New Right planning and to rejection from the

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communicative approach to planning (Table 1, second column). In the case of planning standards, their warm acceptance from systems planning theory is gradually transformed to utter rejection in the most recent planning approach, i.e. the communicative ones (third column).

TABLE 1 - PLANNING THEORIES AND THEIR RELATIONSHIP TO ANALYTICAL INDICATORS AND PLANNING STANDARDS.

Planning theories	Analytical indicators	Planning standards
Systems planning theory	++	++
Rational process theory	+	+
New Right planning	+	○
Communicative approach	–	--

++ : outright acceptance of indicators

+ : acceptance of indicators

○ : neutral (neither acceptance, nor rejection of indicators)

– : rejection of indicators

-- : utter rejection of indicators

4. DISCUSSIONS

Based on the findings of this case study, it is possible to discuss some questions related to the theory–practice gap. Does the theory–practice gap really exist, in relation to urban indicators? The answer is definitely affirmative. In the case of analytical indicators, the theory is moving towards the rejection of their use, while the practice is moving towards their proliferation. In relation to planning standards, their use has been always ingrained in planning practice, while planning theory is evolving towards their utter rejection. As it is deduced from the above findings, the acceptance of both analytical indicators and planning standards is negatively correlated with the evolution of planning theory. Moreover, as the utilisation of urban indicators has been quite stable during these 50 years (only analytical indicators have enjoyed significant growth), it is the theory that is moving faster away from practice, creating the relative gap. Eventually, the theory–practice gap is not an illusion, it exists and it is real. Even if it has not possible to measure the gap (whether it is a mile or a millimetre, according to Alexander's, 1997, felicitous wonder), it is apparent that it might have been a millimetre in the past, but now tends to be a mile.

Was this gap produced, as Alexander argued, by theorists who do not elaborate their theories in terms of their applicability? First, it is apparent from our study that no planning theory delves into the use of urban indicators, and the references on them are mostly abstract and limited in number, compared to the wide acceptance and utilisation of indicators in planning practice. The majority of theorists seem to believe that indicators cannot or should not form a coherent part of their theories and only sporadically do they indicate the use of indicators, mainly through examples. Even in systems planning theory, which

is the most enthusiastic theory in terms of the utilisation of indicators, McLoughlin does not annotate the use of urban indicators comprehensively. Eventually, Alexander is right. Theorists should be thoroughly concerned with applicability issues of their theories and should illustrate their expositions with concrete examples and cases from real-world practice.

In any case, what is more crucial for understanding the theory–practice gap is to ascertain the reasons that produce the gap. Evidently, either theory is incomplete, or otherwise, the practice in question is not sound and is thus ignored from theory. However, in the latter case, theory should not only question established practices, but also, if it is concerned with applicability issues, should indicate certain methodologies to be used by practitioners in order to reach sound practice. In my opinion, any planning theory that aims to guide practice should be concerned with the stipulation of methodologies, which ultimately provide the most powerful link of the theoretical and inevitably abstract level with practice; otherwise, it will be neglected by practitioners.

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