Chapter 2
"Trading Zone": A Useful Concept for Some Planning Dilemmas

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Abstract In this chapter I use the concept of trading zone to reflect upon a planning experience of which I have been directly responsible: the strategic plan for the Milan's province. In the first part I briefly describe the process and the results of this very intense experience. It was conceived to be an inclusive planning process capable to involve and therefore convince all the relevant actors to converge on the vision proposed. In the second part, describing the many difficulties of the process and the few positive results, I hold that while the participatory approach risks to be quite neo-technocratic and is unable on the end to deal with radical conflicts, the trading zone concept encourages to look for the elaboration of an intermediate language that allows the production of partial agreements and the discovery of boundary strategies accepted by different parties. The suggestion of the chapter is that this change of perspective is not only important to deal with the problems of participatory planning but also for planning in general.

Keywords Participation effectiveness • Habitability • Inclusive approaches • Participatory arenas • Thin descriptions

2.1 Introduction

This chapter is the result of the reflections developed during a sabbatical year which I spent in 2009, firstly at the Aalto University of Helsinki and then at MIT in Cambridge (USA).

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Part of my work consisted of thinking on problems encountered in planning activities on which I had worked in recent years within the Department of Architecture and Planning of Politecnico di Milano.

I have affirmed elsewhere (Balducci and Bertolini 2007) that under determined conditions, work by academia on concrete planning activities is an essential form of input for scientific knowledge in our field. It allows us to work with that particular material of which planning practices are composed in a research context – linking reflection and action.

I feel that using the trading zone concept proposed by Peter Galison, I have arrived at some useful conclusions on recurring planning problems in contexts of strong interaction, which may perhaps furnish some useful ideas both on the more circumscribed discussion on participation (Laino 2010) and also, perhaps, on a more general discussion on the challenges which urban planning continues to face (Mäntysalo et al. 2011).

I would like to present these thoughts in the way in which they emerged in my work, and I must therefore describe, at least briefly, the planning experience which drove me to move in this direction, the Strategic Plan of the Province of Milan, a project in which a large group from my department was fully involved and which was suddenly shelved after the last elections due to a change in the government of the province (Balducci et al. 2011).

2.2 The Context of the City of Cities Project

The urban region of Milan, one of the most dynamic in Southern Europe, has been faced for some time with a serious problem of governance for development, which is linked to two different, but connected causes. The first is the lack of overriding powers able to impose limits on development driven by municipalities which are locked in a vicious circle: what drives them to accept and promote building development is their expectation to obtain the meagre additional resources that they require to pursue non-ordinary policies. However, with this behaviour they lay the foundations for their own crisis in terms of new demand for services, congestion and environmental problems on which they are unable to have any impact.

Between 1999 and 2004 – when we started to work on the plan – 690 ha of agricultural land were urbanised each year in the Province of Milan (Pileri 2007). Leaving full responsibility for decision-making in the hands of mayors and private developers led to an intensification of the urbanisation process which resulted, as a consequence, in the growth of conflict between resident and temporary populations in many central areas and the establishment of a development model that was unsustainable in the medium term. Naturally the question of sustainability is not the only issue. Any decision which produces impacts at local level is difficult to take in a situation in which there is no power to impose decisions by government bodies at a higher level than that of the municipalities: road infrastructures constitute a typical example, having remained particularly underdeveloped in recent decades, are today the number one concern of businesses and politicians.

Various attempts have been made in the past to establish intermediate levels of government with planning powers, but all have failed in some way (Balducci 2005).

At present the ordinary planning powers of provinces and regions are severely limited by the resistance of municipalities to comply with their policies.

The second problem is that the process of the expansion of the urban region precludes any chance of establishing a border for the metropolitan area in a simple manner. The very concept of a metropolitan area in this context seems misleading, since it is no longer possible to recognise a single centre surrounded by a large peripheral area. On the contrary, a thick network of towns exists, some of which form dense urban agglomerates which are relatively independent from the provincial and regional capital.

The idea of formulating a strategic plan for the province was conceived in this context. The objective of the provincial government was to work on a document containing development prospects for the urban region. This should have involved municipalities in a process of thinking and action with the aim of producing a cultural change that would have generated forms of self-control.

The need to work across the borders was recognised by the government leading, on the one hand, to identify intermediate aggregations between municipalities inside the province being also ready, on the other hand, to go beyond the provincial border, given the geographical size of the urban region (OECD 2006).

However, if some features of what should have belonged to a strategic plan were recognised – an informal document, a vision, containing medium term objectives and strategies – many differences of opinion existed. In some important sectors of the province concern over the impacts of continuous urbanisation and over the related environmental problems was less important than concern over the need to build new road infrastructures to facilitate mobility and increase the ability of the province to compete economically. As a consequence they saw the strategic plan as an instrument with which to achieve those results. This ambiguity in the conception of the strategic plan was used by the new councillor with responsibility for the strategic plan (Daniela Gasparini) and by us, her advisors, as a means to obtain consensus over the initiative despite the differences in viewpoints.

We therefore organised a process consisting of different courses of action basically designed to deepen the process of involvement and of seeking a shared vision of the problems and opportunities that presented in the specific situation. The objective, sought through a number of different actions, was that of allowing a new "policy discourse" to "travel" and establish itself in different arenas by achieving visibility, support and legitimation, as suggested by Patsy Healey (2007).

An initial strategic document performed the role of a "white paper" for the problems of the urban region, with the launch of the two key terms of the project: the "City of Cities" image, an interpretation of the urban region as a set of multi-municipality urban contexts with their own identities, and the theme of *habitability*, identified as the fundamental strategic problem to be addressed to overcome the limits to the future development of the area. The "message" of the "white paper" was that the most important objective for the progress of the urban region was the conquering of a better *habitability,* which could have been attained through various policies (related to affordable housing, sustainable mobility, new local welfare, the

diffusion of cultural policies, the investment in new public spaces, etc.) and favouring the cooperative work of multi-municipal aggregations which could have given structure to the urban region as a "City of Cities".

On the basis of this document we launched a competition for projects and best practices for the habitability of the urban region with the objective of collecting ideas, examples and proposals and of soliciting the involvement of a vast audience of actors.

A third course of action consisted of work within the provincial administration to prepare an "atlas" of policies and projects already introduced by the province in the sphere of habitability.

We therefore organised a large exhibition held at the Milan Triennale Museum on changes in the metropolis which was later transformed into a travelling exhibition, and finally we produced a planning document which attempted to set the guidelines for the building of longer-term policies on habitability.

2.3 Thoughts Based on Practices

I feel it is important to underline some of the limitations and some of the opportunities encountered in the process.

I have already said (Balducci 2008) that in situations of great complexity, when there is no clear decision-making centre – as in the case of an organisation or a single city – it is necessary to conceive of strategic planning as a field of different practices (Balducci 2010), as a process of "strategic navigation" as Jean Hillier affirms (Hillier 2011), rather than as a "road map".

If there is no authority to impose decisions on other actors in a situation of high fragmentation, the only potentially effective exercises to perform are those of argument, persuasion and inclusion (Majone 1989). Being aware of these particular context conditions, we were guided during the project by a few principal theoretical references as follows:

- Lindblom's conception of strategic planning which urges the use of the "intelligence of society" (Lindblom 1965, 1975), in a mix between technical analysis and interaction.
- Patsy Healey's conception, which describes strategic planning as an activity which is able to select single processes of social innovation, favouring firstly the transformation of the processes into institutionalised practices in order possibly to attempt to then modify governance culture (Healey 2007).
- Albrechts and Van den Broeck's conception (Albrechts and Van den Broeck 2004) of four basic lines of strategic planning around which to organise different actions: the construction of a vision, the introduction of immediate actions, the involvement of stakeholders and reaching public opinion.

These to some extent converging references directed us, giving us a sense of exploration (Balducci 2011) and enabling us to identify possible subsequent paths at each stage of the process.

After the abrupt interruption of the process following the local elections, it seems important to reflect on the results achieved and on the further interpretations that we can give to the events which characterised it.

There have been, as always, negative and positive results.

The first included the following:

– *Scarce success in co-ordinating other local government departments.* Even though the strategic plan was supposed to become a co-ordination instrument and mechanisms were put in place to regulate the involvement of all the main departments, with much energy expended, the participation of other departments depended much on the possibility of being able to achieve their own objectives through it and this produced modest results. This issue of inter-sectoral co-ordination is a problem typical of all planning activities, but it must nevertheless be remarked that the great effort made for involvement, right from the initial stages, was unable to create true participation in the project, despite the verbal declarations that were always made. Each councillor responsible for a department constantly focused on their own activities and only became actively involved in the strategic plan when this could play a role in support of their own policies.
– *Visibility in the media was fairly low.* Newspapers are not generally interested in planning activities, and in this case the lack of attention was even greater, because it was an informal instrument and did not require "approvals" which might at least have constituted a "news item". We were always convinced that the contents of our project – the issue of habitability and the interpretation of the urban region as a "City of Cities" – and its participatory instruments such as the competition for projects and best practices, which aroused great interest, would have attracted the attention of the media because of the arguments and the very great involvement in the project. The most important Milan newspapers are generally attentive to quality of life issues, but the connection was not made.
– *The president of the province did not support the project adequately.* The scarce attention on the part of the media was partly linked to the limited involvement of the president and its powerful press office. The project was given a non-priority status in the communication policies right from the beginning. Here, too, we were convinced that this project could have given the province in general and the president in particular a significant political advantage in local debate. The province was the only level of government occupied by the centre-left in a regional context dominated by the centre-right and its neo-liberal policies, fairly insensitive to environmental issues. City of Cities was a project which made it possible to define environmental policies in a non-partisan political way and to connect government action with public consensus feeling, which clearly suffered from the poor quality of living in the urban region. Despite our convictions, the president had decided to play a different political card. He wanted to demonstrate that he was a leader able to create infrastructures, mainly road, in great demand in business environments. He also worked politically during his period of office to create a new level of government in the metropolitan area to replace the province and which would have greater power with regard to the Municipality of Milan.

It was a position which seemed technically weak to us, considering the many failed attempts in the past. Support for the project was therefore always very lukewarm and linked to the fact that it did not interfere with his objectives and that at each stage it obtained a success with the public (administrators, local organisations, citizens) towards which politicians are always sensitive.

A series of positive results were also observed (Balducci et al. 2011):

– *The idea of habitability has "travelled".* It was a fairly academic, unconventional concept, and we succeeded in using it even with its untypical content in political language. At a certain point in the project, the title of the councillor Daniela Gasparini was changed to "councillor for the strategic plan and the habitability", a sign also of the degree of absorption in the institution of a definition designed to underline the multidimensional nature of the very taken-for-granted issues of the quality of life. Slowly the councillors in charge of other departments started to use it, and it spread into use in political language. Also the subsequent proposal to present Milan as a candidate for the 2015 Universal Exposition by the province was made in the context of the emergence of a city with a more welcoming and *habitable* image.
– *The response of many actors in the community to the competition initiative was very positive.* Wide participation in all editions of the competition demonstrated great interest on the part of local society in playing a more active part in policymaking. That same idea of a competition which is not designed to award prizes but for use as a planning device, able to generate innovative actions and proposals, was not only repeated but also imitated by other local government departments. Nevertheless despite the success of the formula, the provincial government was unable to modify its practices to make full use of the potential that might result from the construction of a true and genuine "policy community" to support the project.
– *There was a significant involvement of actors normally distant from or in conflict with the province: the Municipality of Milan, the Region of Lombardy, the Chamber of Commerce and the Fondazione Cariplo, the main banking foundation.* These important actors saw a potentially interesting ground for co-operation in the City of Cities project because it was relatively neutral as a ground not already organised like that of conventional urban and regional planning, which traditionally sets the city of Milan, the province and the region against each other. Here, too, it must be said that the potential was not fully exploited. For example, the exhibition at the Triennale was jointly financed and the initiatives in the "theatre of the City of Cities", inserted as part of the exhibition, saw the participation of all those financing it with the presentation of their policies to improve habitability, but in the end the hoped for outcome, that of the creation of a permanent organisation for communication between institutions (the so-called Metrocenter), was not to happen.
– *Some initiatives which originated during the project did actually take-off,* because they succeeded in attracting the interest of some actors who took them on. This happened with the Metrobosco project, the University Portal and the integration of the Northern Green Dorsal with the new Pedemontana motorway, to which we will return later.

I feel there is a thread, which runs through the considerations that we can make on the successes and failures of the City of Cities initiative. We thought from the beginning that the various actors involved would have progressively and naturally supported the City of Cities proposal due, on the one hand, to the open and participatory character of the programme which we had planned and, on the other hand, to the strength and the validity of the arguments which we made. We were obliged to recognise with difficulty during the process that the other actors had different perceptions and objectives:

- As already said, the president of the province had set his sights on the creation of road infrastructures and his election interests.
- Other councillors and heads of department were interested above all in their own projects.
- Even our own councillor whom we were advising was guided by an understanding of the effectiveness of planning action that was different from ours.
- The municipalities that participated with conviction in the planning process were seeking funding for their policies, knowledge of urban and regional dynamics that would help them with policymaking and the construction of intergovernment relations that might be useful for them.
- The citizens' groups and associations which took part in the competition sought the chance to obtain recognition as credible partners in the construction of public policies.
- We ourselves sought the chance to demonstrate that our theories of the urban region and strategic planning in contexts of great complexity actually worked in practice.

Even in this very short account, one important point and a limit on participatory approaches is extremely tangible here. The initiation of processes and accurate and non-distorted communication does not guarantee convergence. In fact, on the contrary, this conviction may result in a neo-technocratic attitude in the belief that the actors who do not become involved in a project are simply bearing "private" interests which conflict with the public interest declared by the process of involvement and public debate. In reality the world of practices demonstrates that many conflicts are irresolvable not because there is no possibility for open communication and dialogue, but for two different reasons. On the one hand, it is difficult to reconcile opposing interests (opposing definitions of the public interest with regard to investment priorities). On the other hand, because the interactions occur within a diversity of arenas without the constant participation of all the actors, only those responsible of the planning process attempts with difficulty to hold it together by defining a viewpoint which is only recognised as central by a limited number of actors.

2.4   "Trading Zone" and "Boundary Objects"

It was by seeking an answer to these questions that, thanks to discussion with Finnish colleagues, I ran into Peter Galison's "trading zone" theory.

Since he wrote his best known book in 1997 "Image and Logic: A Material Culture of Microphysics", Galison has defined "trading zones" as those infrastructures and those concepts which function as "exchangers" for dialogues between different subcultures. He shows through empirical observation of how innovations in science occurred historically – ranging from physics to nanotechnologies – and how these give rise to concrete spaces or conceptual spaces where scientists belonging to different disciplinary fields are obliged to find simplified and intermediate languages to be able to work together. It is from this essential communication, which requires partial agreements, that innovations are born.

A trading zone is a platform where highly elaborate and complex questions can be transformed into "thin descriptions" (as opposed to "thick descriptions"), with the objective of exchanging information in a specific local context.

What had attracted Galison right from the start of his research into scientific innovation was the capacity to build co-ordinated forms of mutual interaction, despite a limited capacity on the part of each group to understand the conceptions, the methodologies and the objectives of the others. He makes reference to the pidgin language of immigrants to explain the concept. It is a simplified language which allows communication and which in colonisation contexts may evolve into a more complex creole language.

> In colonised societies, artificial *pidgin* languages have been generated between the very different parent languages of the immigrants and the indigenous people, as localised linguistic practices of trade – some of which may have later "naturalised" into full-blown languages, *creoles* (Galison 1999, pp. 673–674).

Another concept which forms part of the same universe of meaning is that of "boundary objects" formulated by Star and Griesemer to explain the positive results of interaction between groups either in conflict or with opposing objectives (Star and Griesemer 1989). The hypotheses put forward is that in order to succeed in carrying out projects of any nature in complex contexts, it is necessary for these to belong to or intercept different strategies without requiring them to converge.

> Boundary objects are objects which are both plastic enough to adapt to local needs and the constraints of the several parties employing them, yet robust enough to maintain a common identity across sites. […] They have different meanings in different social worlds but their structure is common enough to more than one world to make them recognisable, a means of translation (Star and Griesemer 1989, p. 393).

Star and Griesemer claim that the creation and management of *boundary objects* is a crucial process in the development and maintenance of coherence between different worlds which intersect.

It is not the capacity to make the right choices, from the viewpoint of the contents and the working method, which leads to the successful involvement of other actors. In this context it is the ability to propose an action that is a boundary object between the different strategies of the actors involved: the municipalities, different councillors, associations, citizen groups, other institutional actors, media, etc.

From this viewpoint, to complain about those who do not agree with our "messages" is merely a sign of weakness or of misunderstanding of the situation. In this sense,

it seems to me that these are theoretical contributions which go beyond a nevertheless useful indication of what should be done, but which help to interpret the difficulties of planning practices and perhaps indicate possible interesting solutions to various dilemmatic situations.

2.5 To Plan Is to Build "Trading Zones"

What I found promising in the concepts of "boundary objects" and of "trading zone" is their applicability not only in situations of participatory planning but also for interpreting planning successes and failures in general.

For some time now urban planning has run into the problem of implementing plans, projects and programmes.

The policy approach was important precisely because it underlined the fallacy of a conception of urban planning as merely planning by experts and politicians or one might say planning by a single actor, the urban planner, who, receiving a clear political directive, thinks she/he can co-ordinate the action of all the others on the basis of objective reasoning. If the plan of a city is to be implemented, it interferes with the action of public and private actors and therefore it must co-ordinate them. The plan is therefore intrinsically good, rational and legitimate, and the problem of implementation is one of conformance. And here we have the "*nomo-dependent*" (dependent upon laws) attitude of planning, as Pierluigi Crosta defined it, the continuous demand for laws which grant greater overriding powers to planning activities and to planners (Crosta 1995).

The other side of this same attitude lies in the fact that for many years the urban planning debate was focused on plan making rather than on the results of the plans. The problems of effectiveness were to be solved by the demand for greater powers, while the technical issues turned on how to make plans (the successive "generations", the different "schools", etc.) without any effective assessment of the problems of effectiveness.

The policy approach laid bare the power relations and underlined the fact that the urban planner is just one of the actors who can deploy resources of authority and expert knowledge, while many other actors involved in urban change processes can also deploy their own resources.

If planning is to be effective, it must come to terms with a number of different actors, with conflicts, the role of ordinary knowledge, etc.

Charles Lindblom is used within this framework to explain the processes of interaction but also (by some) to justify the usefulness of participation.

Participatory or inclusive approaches assume that the urban planner is a third party. By realising that each actor is a bearer of specific information and a specific philosophy, intelligent urban planners open up the process to involve all the actors, they build arenas for negotiation and the exchange of information in which probing can develop (Lindblom 1990) and they use the intelligence of democracy to construct a shared plan.

What happened to processes designed through participatory approaches, even the most pragmatic and open and those which actually reduced the role of the urban planner to that of a facilitator?

Often they have also failed, on the one hand, because the participatory arenas always form only part of a more complex process; on the other hand, because the presumed third-party nature of the "facilitator" is never one of true neutrality; and finally because many compromises give away the high ground: they lower the quality of the results.

However, the aspect which persuaded me most to explore other interpretations based on the City of Cities experience was that in particularly complex situations, where content and process objectives are intertwined – objectives linked to a specific result and objectives linked to the role in the process that the actor wants to see recognised independently of the result (Fareri 2009) – and when we ourselves have contents to establish, it is not sufficient to open up the process to the participation of the actors involved, because there is no single arena in which the issues are addressed. There are many arenas, the actors participate intermittently and the "travelling" of visions and strategies runs into an infinity of obstacles and changes of plan.

In these situations it is naive to think that all the process can be kept within a single universe of relationships in which authentic communication can occur.

Participatory approaches frequently fail in their objectives for a number of basic reasons:

- Because urban planners themselves, as is only right, are the bearers of content and process objectives.
- Because there are important actors who are not interested in being involved in the planning process and they too have content and process objectives.
- Because the participation of some actors (e.g. grass roots organisations) must inevitably be occasional.
- Because the definition of what the process is and where it must take place is a construct and not a fact.

In what sense then do boundary objects and trading zone offer promising prospects for this type of problem? Initially the idea of boundary objects seemed interesting to me because it says: the problem of planning and its implementation is not that of finding a strategy on which all may agree and that is shared because all have been involved in it and they are convinced of the effectiveness of the solution. Or to put it better, this is only possible for relatively simple problems, where a recognised arena can exist as the principal decision-making place and where open probing mechanisms can operate leading to an agreed upon solution, also thanks to the influence described by Jon Elster as the "*civilising force of hypocrisy*" (Elster 1993).

To assume that this is possible in all other situations leads us to judge all the actors who do not support our model as having "counter-interests", as "enemies" (Galison 2010).

The concepts of trading zone and boundary object suggest us that instead of seeking to create a general agreement we must try to seek those solutions which

can belong to different lifeworlds and to the different strategic viewpoints of the actors involved, while at the same time assuming that these actors are and remain in conflict.

In some respects this is the opposite of the agreement on principles recommended by the negotiation approaches: we do not discuss solutions, we build an agreement on the principles and then from this an agreement on the solution will naturally arise (Fisher and Ury 1981). It seems to me that the trading zone and boundary object viewpoints suggest the exact reverse: we should try to create a trading zone in which to find boundary objects which may belong to different objectives and principles, and this will allow us to implement initiatives and projects, even if we disagree.

The example on which this viewpoint seemed to throw light was our relationship in the City of Cities Project with the president of the Province, who, as has been said, was playing a different game with no interest in supporting our viewpoint, however brilliant it may have been, because he was mainly interested in building road infrastructures. In particular he wanted to demonstrate that he was able to realise a new motorway, the so-called Pedemontana, that all the public actors had attempted to realise for decades but that had been blocked by many conflicts and inefficiencies. Having this in mind as the most strategic choice of the province, the president did not support our plan. In our project at the same time we were proposing a greenway, the Northern Green Dorsal, crossing the northern part of the urban region because we thought that this would have been a much more relevant infrastructure for the habitability. Working in the same administration we realised that the two projects were not necessarily alternative. Road engineers started to talk with us, urban planners and landscape architects. Through this dialogue we realised that we could have created the greenway together with the Pedemontana motorway by using the environmental compensations from the infrastructure plan and that the two projects would have benefited each other: they had found a way to render the infrastructure more acceptable to the communities, and we had found the economic resources to build the green infrastructure. Without convincing each other we had developed an interlanguage and had identified a boundary object which allowed us and him each to pursue our different strategies with a common project. And the implementation of both the projects then began. If we had taken this approach, instead of complaining about the lack of (his) consensus, we could have and should have discovered this opportunity earlier for this and for many other possible actions.

This is only an example that demonstrates the change of attitude that can explain failure and partial successes in our planning process.

What does the trading zone viewpoint add therefore to the planning debate? I believe it tells that the problem of innovation in general is a problem of creating intermediate languages which permit communication between actors belonging to different lifeworlds.

The problem of planning is therefore that of constructing a "pidgin" language for urban change, a simplified intermediate language which would permit understanding between different actors with different strategies and objectives but who manage to communicate and construct partial agreements. If this communication is reiterated, the *pidgin* can evolve into a *creole* language, and this is probably dependent on the

starting points as well as the general conventions which hold together a society. It is easier in Helsinki than in Milan for the different amount of social capital available in the two cities (Donolo 2011).

This type of conceptualisation seems promising for dealing with the problems of participation in urban planning, because, to go back to Lindblom, it enables us to say that agreements can be built even between parties in conflict, and it therefore drives us to look not at the establishment of a single arena for free and non-distorted communication, but to the construction of a discourse that is able to intercept the interests of different actors who operate in different arenas (see Chap. 1).

However, the most interesting aspect is the capacity of this framework to also address the more general problems of urban planning. Are not the constantly frustrated quest for co-ordination, the question of public-private sector relations, or the mere failure to implement plans, all signs that the only way urban planning can succeed is through the creation of a trading zone?

I believe it is an interesting perspective that would deserve an in-depth reflection. In order to probe its effectiveness, we need to work with these conceptual tools and with different case studies.

Starting from my own experience I am convinced that the use of the contribution of Peter Galison in our field could generate a better understanding of what is problematic in managing planning processes, opening at the same time towards interesting normative implications. It is in line with a long-lasting critical reflection in planning theory but with the special character of bringing the theory very close to the world of practice, which is what we really need to interpret and go beyond many of our dilemmas.

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