

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/289130335>

Case Studies and Sustainable Urban Mobility research schemes: A communication channel among researchers and interdisciplinary community groups

Article · September 2014

CITATIONS

9

READS

542

5 authors, including:



Efthimios Bakogiannis

National Technical University of Athens

43 PUBLICATIONS 35 CITATIONS

[SEE PROFILE](#)



Avgi Vassi

National Technical University of Athens

18 PUBLICATIONS 15 CITATIONS

[SEE PROFILE](#)



Georgia Christodouloupoulou

National Technical University of Athens

9 PUBLICATIONS 10 CITATIONS

[SEE PROFILE](#)



Charalampos Kyriakidis

National Technical University of Athens

41 PUBLICATIONS 38 CITATIONS

[SEE PROFILE](#)

Some of the authors of this publication are also working on these related projects:



CycleCities [View project](#)



The Urban project of HafenCity. European and Greek programmes of Urban Planning [View project](#)

Case studies and sustainable urban mobility research schemes: A communication channel among researchers and interdisciplinary community groups

Efthimios Bakogiannis*, Maria Siti, Avgi Vassi, Georgia Christodouloupoulou, Charambos Kyriakidis

Department of Geography and Regional Planning, National Technical University of Athens, Athens, Greece

Email address

ebako@mail.ntua.gr (E. Bakogiannis), sitim.atm@gmail.com (M. Siti), avgi.vassi@gmail.com (A. Vassi), geo_christ@hotmail.com (G. Christodouloupoulou), kyriakidisharry@gmail.com (C. Kyriakidis)

To cite this article

Efthimios Bakogiannis, Maria Siti, Avgi Vassi, Georgia Christodouloupoulou, Charambos Kyriakidis. Case Studies and Sustainable Urban Mobility Research Schemes: A Communication Channel among Researchers and Interdisciplinary Community Groups. *International Journal of Service Science, Management and Engineering*. Vol. 1, No. 4, 2014, pp. 42-51.

Abstract

This paper examines the usefulness of the case study methodological approach in planning and urban mobility research, bearing in mind complexities as well as any limitations occurring by generalization and identification of common epistemological ground. The importance of the methodology in communicating specific urban schemes among researchers, practitioners and stakeholders is explored. Conclusions are drawn in the basis of their contribution in active learning and transferability of knowledge to non-experts.

Keywords

Urban Mobility, Case Study, Methodological Tool, Research Approach

1. Introduction

Research methods in urban studies have been changing in the last decades with the exploration of case studies being a supplementary element in all stages of research, due to their ability to transfer real world issues and outcomes in relevant schemes. According to numerous researchers, such as Patton (1980, 2003), Appelbaum (2003) and Yin (1984, 2003), they are used for research purposes, for developing a new theory through observation, for testing, evaluating or improving existing theories through their implementation in practice. One of their most important attributes is that they can engage the various participants in the planning procedure, be they students, academics, researchers, planners, stakeholders or citizens by exposing them to real-life situations.

Urban and mobility research is typically conducted through extensive analysis of the existing environment, analysis of secondary data, surveys and tendencies. Presenting a supporting case study in a similar environment could increase

the understanding of a needed transformation or inform about potential inadequacies in implementation.

2. Aims and Objectives

This paper examines the basic issues of the case study methodology in the field of education, research and planning in urban studies.

The main aim of the paper is to explore case studies identifying their strengths and weaknesses. Furthermore, we examine how the case studies are practiced in education and research, specifically in urban and transportation studies. Moreover, an in depth analysis is conducted regarding good practice guides and their usefulness in planning and designing spatial policies with a special focus on their contribution in interaction among researchers, planners and the various stakeholders.

Special analysis refers to case studies as a methodological research tool in participatory planning and as a means of understanding for the stakeholders (politicians and decision

makers).

3. The Case Study as a Research Method

3.1. Theoretical Exploration

Case study research is a form of qualitative descriptive research that is used to illustrate a thesis, a principle or a specific situation. Many researchers have tried to give a definition to the term case study. According to Yin (1984) "case study method is an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used". Moreover, according to Thomas (2011), "case studies are analyses of persons, events, decisions, periods, projects, policies, institutions, or other systems that are studied holistically by one or more methods" and "The case that is the subject of the inquiry will be an instance of a class of phenomena that provides an analytical frame — an object — within which the study is conducted and which the case illuminates and explicates". Both agree that case studies are used for research purposes for developing a new theory through observation and testing, evaluating or improving existing theories through their implementation in practice.

The analysis of a case study is part of the primary research field, according to the classification of Jennings (2001), which is the process of gathering new information, both qualitative and quantitative.

The exploration of successful examples in urban planning and mobility projects allows an actual insight into applied measures, policies and approaches while it offers the potential of comparing similar practices in different urban environments and analyze the complexities arising from the alternative settings, cultures and status of the areas.

A researcher selects a case study because of the nature of the research problem and the question being asked. The case study offers a means of investigating complex social units consisting of multiple variables of potential importance in understanding a phenomenon. Moreover, it offers insights and illuminates meanings that expand its readers' experiences.

Because of its strengths, case study is a particularly appealing methodology for applied fields of study such as education, social work, administration, health, and so on. It has also been proven particularly useful for studying educational innovations, evaluating programs, and informing policy.

In urban mobility planning, case studies are considered as an extremely useful tool to be used along with other research methods (such as surveys and statistics).

Although in planning practice at all levels (local, regional, urban, national, and international) each project has to be examined individually, however there are commons and similarities in relevant projects which can be transferred and support specific attributes of scheme proposals.

3.2. Case Studies in Planning Education

Case studies in education, and planning education particularly, are used as examples of similar projects, in order to strengthen the proposed methodologies, ideas and identify any limitations. Case studies have started being used in planning education and practice mostly around the 1980s. According to Armisted (1984), the first application of them as a primary method of teaching was at Harvard Business School in the 1950s. Educational research has shown that case studies are useful pedagogical tools. Grant (1997) outlines the benefits of using case studies as an interactive learning strategy, shifting the emphasis from teacher-centered to more student-centered activities. Raju and Sanker (1999) demonstrate the importance of using case studies specifically in engineering education so as to expose students to real-world issues. It is a fact that case studies present realistic situations, allowing students to balance theory with practice.

The purpose of using a case study in a teaching environment is to present the student with a scenario or real case as close to what he/ she may encounter in subsequent work, enabling him/ her to handle reasonable and workable situations.

The case study does not provide answers, but it rather raises questions and allows the student to work through the decision – making process and find a preferable solution.

Case studies can help develop the following skills (ICA & IRMT, 1999):

- Identifying and recognizing problems
- Understanding and interpreting data
- Understanding and recognizing assumptions and inferences, as opposed to concrete facts
- Thinking analytically and critically
- Understanding and assessing interpersonal relationships
- Exercising and making judgments
- Communicating ideas and opinions
- Making and defending decisions

A case study may include complexities faced in the natural work environment, such as enquiries of policy making or procedure, issues relating to urban relationships or hierarchies of financial or administrative concerns.

What really separates case studies from other practical forms of learning – like scenarios and simulations – is the ability to compare the learner's recommendations with what actually happened after the implementation of a scheme.

It is worth looking briefly at the various types of case studies used in education and practice as identified by the Writing@CSU and the Colorado State University Writing Center. Among the sub-categories of case studies, there are:

- illustrative case studies, which mostly aim at describing the basics of a situation,
- exploratory -or pilot- case studies, which are studied before the actual exploration of studies as initial findings,
- cumulative case studies, which are used to aggregate past data and allow for safe generalizations,
- critical instance case studies, which mostly answer

specific cause and effect questions.

3.3. Case Study in Urban Mobility Research

Case study research has covered a broad variety of subjects, such as community studies, public health, business and industry, public policy and public administration as well as social problems and controversies. Within evaluation research, case studies of specific programs, projects and initiatives have also been conducted with some frequency. In these evaluative situations, the case studies have commonly been used to document and analyze implementation processes and the outcomes of interventions (Yin 2003).

Case study researchers have explored the methodology through which this type of research is organized and applied in science. The procedure suggested is classified in six (6) ordinary steps, namely:

- determination and definition of the research questions
- Selection of the cases and determination of data gathering and analysis techniques
- Preparation to collect the data
- Collection of the relevant data
- Evaluation and analysis of the data
- Preparation of the relevant report and useful conclusions

As mentioned before, case studies are a qualitative research method. Other similar methods of qualitative research that are used in planning and mobility studies are, along with case studies or individually, statistical analysis, surveys, archival analysis, models etc. Hammersley (1993) argues that "unlike more statistically-based studies which search for quantifiable data, the goal of a case study is to offer new variables and questions for further research".

Although case studies seem to be the preferred strategy when the researcher seeks real life implementations and their outcomes, there are various critics on whether a case study is reliable and objective across the examined subject. Already since the 1920s case studies, when compared to statistics, were considered by many to be unscientific. They were criticized as they failed to provide evidence of inter-subjective agreement and their lack of standardization made the generalization impossible.

The discussion on the strengths and weaknesses of case study research is long. In summary, case studies carry an inherent subjectivity which makes extracting useful outcomes more difficult. One of their key advantages is that they allow for the collection of various attributes in the studied field, which in a quantifiable method would not have been possible. Their flexibility allows the researcher to start the study by setting broad questions and narrow their focus on a latter part of the research where the relevant outcomes are extracted. Moreover, according to the WritingCSU guide (n.d.), "case studies bridge the gap between abstract research and concrete practice by allowing researchers to compare their firsthand observations with the quantitative results obtained through other methods of research".

On the other hand, weaknesses in the methodology are centered on their subjectivity, insufficient precision and

questioned validity as well as the risks of generalization. The fact that a lot of emphasis is given on the 'deep data', through the analysis of a case, many researchers argue that a number of the extracted information is useless and irrelevant to the studied subject. Furthermore, common complaints refer to the high risk emerging by personal integrity, sensitivity, prejudices or biases of the researcher.

The above issues are widely tackled by reporting preliminary findings, widening the data sources, cross-checking subject sources, properly referencing the collected materials and collaborating with colleagues.

When writing a case study report the researcher needs to discriminate between what is to be included and the variety of evidence that will not appear in the report, but stays in the case study database for potential future use. A common language must be established in order to allow the understanding of the case as well as to make it reliable in extracting the needed information.

There are 3 basic steps in writing a case: research, analysis and the actual writing.

On the 'research phase' there must be library and/ or online research as well as any potential interviews and communication with people who know the place and the situation.

On the 'analysis phase' are included:

- the collection and analysis of all applicable data (including documents, archival records, observations and artifacts)
- the formulation of the research question of the case in a few words

In mobility research, issues of critical importance are the identity of the city in which case studies are demonstrated, transportation and mobility factors such as commuting and leisure trips, primary data such as population density, street delineation, planning system as well as the key research questions which define or not an interesting practice.

Lastly, on the phase of 'writing the Case Study' phase, there should be a well reported executive summary which includes the key points of the analyzed case. In mobility projects an introductory part should contain the characteristics of the study area in terms of urban and transportation attributes and a short section related to the planning rationale of the area / city / country. In the main body, the key aims of the project as well as the reasons / decisions / criteria which are taken into account are briefly reported. Adding to this, the basic data analysis and any obstacles or contradictions faced during the planning or the implementation procedure are provided along with the outcomes. This latter section usually includes maps, diagrams, tables and any other relevant information where extra attention is been paid in using common units, legends and colors. Short conclusions are drawn summarizing the results, challenges and opportunities revealed by such practices and a special section is devoted to highlight transferability potential. Links and any other relevant references are also reported for further research of the particular study. However, when reporting case studies for the purposes of participatory planning, many visual materials

must be used such as pictures and images from the studied project, in order to make the material more communicative, while also study area visits are strongly encouraged.

In order to overcome difficulties related to the reported data of each case study the researcher uses several methods and special methodology tables which somehow assess the given practices. An indicative documentation sheet (fig.1) for the CYCLE CITIES research project is provided below and aims at collecting cases with specific type of public participation in urban mobility schemes.

3.4. Good Practices

Good practices are case studies that have been implemented and have already been proven to be in a way successful. These are programs, activities or strategies that have been shown to work effectively and produce successful outcomes and are supported to some degree by subjective and objective data sources. These cases are used as examples with long term sustainable impact, for both researchers and planners. So depending on the research field, guides of good practices are developed to be used by anyone interested. The key benefits of the collection of good practices are that they show an already positive knowledge and they have been processed and adjusted to the specific research needs. Most of the times good practice guides are easily readable by special and non special public such as stakeholders and decision makers.

Another important attribute is that such guides or platforms include cases that have already been accessed by specialists and have reported all the relative aspects of issues to be solved. Such as (in urban mobility field):

- traffic patterns
- insufficiencies in public transport systems
- general mobility facts
- urban and transport policies
- stakeholders approach
- processes of consultation (duration, stages funds and techniques)

Reporting a case in urban studies appears to be highly challenging and discriminating. There are many aspects on a single case to be examined, such as the main context of the implementation, the key characteristics of the study area, the identification of issues to be solved, the challenges faced, the method used and the outcomes. The criteria to identify a case study as a good practice in urban studies are: the effectiveness and level of impact, any measurable or validated results produced, the end user satisfaction, the level of public participation, the extent of problems encountered in final implementation, the costs in relation to benefits / added value and lastly the proven or potential transferability of the schemes. Obviously, according to the specific aim of collecting good practices, the criteria can vary to fulfil the expert's research question.

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|---|--|---------|--------------------|----------|-------------|--|------------------|---------|----------|--|-------------|----------------------|-------------------|-----------------------|---------------|--|--|-----------------------|---|--|---------------------------------|--|--|-----------------------|------------------------------|---------------------------------|--------------------------------|----------------------|------------------------|---|---------------------------------|
| 1 | TITLE OF PROJECT | VOTING/INFORMATION CAMPAIGN/INPUT IN PLANNING/INDIVIDUAL'S OPINION - OBJECTIONS | PLACE IDENTITY | | | | 3 | STUDY AREA (AS INDICATED IN THE MAIN MAP) | | | 4 | | | | | | | | | | | | | | | | | | | | | | |
| | TYPE OF PARTICIPATION | | VOTING | COUNTRY | REGION/ PREFECTURE | CITY | | AREA/ NEIGHBORHOOD | POPULATION | AREA | | DENSITY | GDP | REFERENCE POPULATION | INITIATION MOTIVE | LEGISLATIVE FRAMEWORK | PROJECT TITLE | WHO TOOK THE INITIATIVE (PERSON, ORGANIZATION, AFFILIATION ETC.) | COST OF PREPARATION FOR THE CONSULTATION | PREPARATION TIMETABLE | TYPE OF PUBLIC PARTICIPATION (input in planning, oppositional participation, information campaigns) | WHO WAS INVITED TO PARTICIPATION / WHO WAS THE TARGETED AUDIENCE | TYPE OF PARTIES INVOLVED | PARTICIPANTS (GROUP/ AGE/ ORIGINS/ PROFESSION) | NOTIFICATION OF PUBLIC CONSULTATION (WHO WAS INFORMED/ HOW WAS CONSULTATION CONDUCTED) | MEANS OF CONSULTATION | DESCRIPTION OF THE PROCEDURE | DURATION OF CONSULTATION PERIOD | COST OF CONSULTATION PROCEDURE | CONSULTATION RESULTS | PROJECT IMPLEMENTATION | IMPACTS OF PARTICIPATION IN THE IMPLEMENTATION OF THE PROJECT | UNEXPECTED PROBLEMS ENCOUNTERED |
| 2 | MAP ATTACHMENT containing: | INFORMATION CAMPAIGNS FOR THE DEVELOPMENT OF A PROJECT ETC. | RANKING MAIN ISSUES RELATED TO RESEARCH OBJECTIVES | 1 | 2 | 3 | MODAL SPLIT | PRIVATE CAR | PUBLIC TRANSPORT | WALKING | CYCLING | POTENTIAL TARGET REGARDING MODAL SPLIT | PRIVATE CAR | PUBLIC TRANSPORT | WALKING | CYCLING | 5 YEARS | 10 YEARS | 20 YEARS | YES/ NO | IMPACTS OF PARTICIPATION IN THE IMPLEMENTATION OF THE PROJECT | UNEXPECTED PROBLEMS ENCOUNTERED | ADMINISTRATIVE ISSUES | MAIN REACTIONS, OPPOSITIONS AND OBJECTIONS | COMMENTS/NOTES | RELEVANT PRACTICES | | | | | | | |
| | REQUIRED FORMAT: kmz, kml, jpeg, shp | ACTUAL PARTICIPATION OF STAKEHOLDERS IN PLANNING | POSITIVE OR NEGATIVE CONTRIBUTION OF INDIVIDUALS | 5 YEARS | 10 YEARS | 20 YEARS | PRIVATE CAR | PUBLIC TRANSPORT | WALKING | CYCLING | 5 YEARS | 10 YEARS | 20 YEARS | PRIVATE CAR | PUBLIC TRANSPORT | WALKING | CYCLING | 5 YEARS | 10 YEARS | 20 YEARS | YES/ NO | IMPACTS OF PARTICIPATION IN THE IMPLEMENTATION OF THE PROJECT | UNEXPECTED PROBLEMS ENCOUNTERED | ADMINISTRATIVE ISSUES | MAIN REACTIONS, OPPOSITIONS AND OBJECTIONS | COMMENTS/NOTES | RELEVANT PRACTICES | | | | | | |
| 5 | KEYWORDS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | LESSONS LEARNED | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | ADDITIONAL INFORMATION | attach flyers, logos, videos, photos, website | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | CONTACT WITH THE PERSON RESPONSIBLE FOR THE GP | Y/ N | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | NAME | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CONTACT DETAILS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ORGANIZATION/ AFFILIATION | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ROLE OF HIS/ HER CONTRIBUTION IN THE GP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Fig. 1. CYCLE CITIES case study documentation sheet (at CYCLE CITIES: Good Practice Guide in participation strategies in reshaping urban mobility in Europe, Sustainable Mobility Unit, NTUA)

4. Case studies in planning practice: Research vs. Practitioners

This section of the paper interrogates the role of collocating case studies as a means of communication between researchers and practitioners in the planning practice, while it aims at addressing an inquiry for the usefulness of the various available planning tools in the above dipole. It is generally perceived that case studies can add on the existing analysis and prediction tools and benefit planners in understanding the application of narratives in the elements of the urban environment.

The low implementation integration of academic research in actual planning procedures is advocated by numerous researchers and planning practitioners. Banister (2005), Cervero (1998), Meyer and Miller (2001) argue that a better integration of transport and land use planning models in actual practice is believed to be crucial in achieving more sustainable mobility patterns in urban areas. Supporting to the above argument, TeBrömmelstroet (2010) and Vonk (2006) state that there are many examples that show the difficulty by which the practitioners endorse this theory and generally the low implementation rate of academic research in the planning practice. TeBrömmelstroet (2010) concluded to that by a survey he has conducted among Dutch land use and transport planners. As seen (fig.2) the results of the survey presented the “low communication value” and “not user friendly” factors being among the most important in using software models and their integration in the strategy making process.

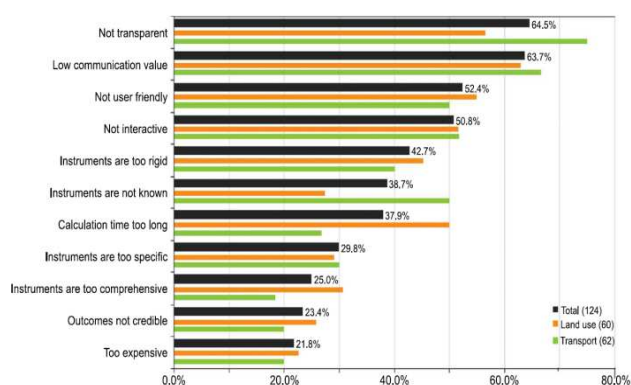


Fig. 2. Bottlenecks that block transport models to be used to support integrated strategy-making processes (Marco teBrömmelstroet, 2010, p. 33)

The nature of urban studies is an action-oriented field, seeking cause-effect understanding to guide contemporary intervention (Campbell, 2003), consequently referring to case studies can ease the identification of causal relationships. Moreover, Campbell (2003) argues that 'lessons learned by the collection of good cases cannot be directly used without major translation and adaptation, and some may not apply at all' which leaves the practitioner and the researcher the freedom to develop their own opinion and interact with each other. However, it is a fact -as highlighted by Campbell (2003) and other researchers- that while practitioners seek

implementations in 'typical' or normal cities, researchers are ideally attracted by the more 'extreme' or interesting ones.

In general though, case studies in the urban discourse allow the application of a specific theoretical concept to be demonstrated, thus bridging the gap between researchers and practitioners. One of the most common practices in academia is describing a theory, a method and/ or a technique and then presenting a supporting case study in which the described theory is applied. This develops a field of straightforward communication as the scientific findings from a specific urban scheme appear evident in the environment allowing the practitioner to identify its qualities and inefficiencies. These case studies are adopted to analyze behavioral patterns in neighborhoods and the public space, as well as provide alternatives in patterns of application, identify tendencies and outcomes and many more. A key attribute that motivates planning and mobility practitioners is that they can be informed in a concise manner for national and international applications enabling them to design in a more holistic approach, without forcing them to visit the places of implementation or impelling them to interact with external stakeholders. They can acquire knowledge and have a detailed insight of a situation before they develop their proposal, which allows for a juxtaposition of arguments and expected outcomes.

On the other hand, researchers in the wide spectrum of urban studies and sustainable mobility field can directly benefit from the use of case studies as they conceive data from applied phenomena and can compare the importance of the various relevant factors in similar applications. Finding, exploring and reporting different case studies exposes the researcher to the complex setting of the implementation, presenting the various parameters which could determine the final product. This can enrich planning theories and boost the development of new tools and methods.

One of the basic characteristics of the current research methodology in urban planning, design and mobility research projects is online research. Many of the ongoing projects, in relevant research laboratories, dedicate a crucial part of their reports in exploring case studies and categorizing outcomes deriving from specific interventions, while the provision of negative impacts can many times rely on previous unsuccessful paradigms.

The use of case studies can also be included in effective planning tools such as online platforms- databanks with collection of successful cases or good practice guides. These can assist both planners and researchers and establish a common language in terms of references and precedents. Some of the famous online platforms which collect and share ideas both proposed and applied are:

- the Sustainable Communities case platform available at:
<http://www.sustainablecommunities.gov/studies.html>
- the Eltis urban mobility portal available at:
<http://www.eltis.org/index.php?ID1=6&id=9>
- the Urban Design Compendium database available at:

www.urbandesigncompendium.co.uk

- the RUDI platform available at: http://www.rudi.net/information_zone/case_studies_good_practice
- the World Habitat Awards database available at: <http://www.worldhabitatawards.org/?lang=00>
- the American Planning Association award platform available at: <https://www.planning.org/awards/>

The above online platforms as well as the various good practice guides are usually developed by a collaboration of governmental bodies, academic authorities or even by collectives of experts which aim to demonstrate practices and their outcomes, showcase impacts and new aspects of planning or just the juxtaposition of projects. One of the most frequent strategies in researchers' and practitioners' charrettes is the discussion of particular theories through the presentation of a selection of case studies. These tools can also be highly effective in participatory procedures, such as workshops and meeting with citizens and stakeholders as explored in the following section of the present paper.

Concluding, the case study methodology can be the basic tool in the common tactic to establish communication among planning practitioners and researchers, which is the development of coalition and dissemination processes.

5. Case Study as a Means of Understanding: Practitioners vs. Stakeholders and Communities

The utilization of case study as a means of communicating planning ideas among non specialized audiences (stakeholders, politicians, decision makers, citizens) and planners is considered an important element in the planning procedure. The collaboration between planners, transport engineers, other relevant experts and the public was always a complicated procedure as it is contradicting to the typical planning systems involving only specialists, as Fainstein (2000) argues. Thus, public engagement converts planning procedure from the traditional hierarchical and 'bureaucratic' top-down approach to a more difficult but inclusive bottom-up procedure (Healey, 1997 and 2003, Stratigea, 2009 and Kyriakidis, 2012).

Since the 80's community engagement had become an obligatory term in the planning process discourse (Spyratos, 2010); researchers, professionals and communities should be involved in planning which had been transformed in a pluralistic method (Richardson, 1996. In Tewdwr-Jones *et al.*, 1998).

In order for this type of planning procedure to be successful, societies should learn how (1) to participate actively (2), improve their decisions and (3) express their ideas in a better way (Aravatinos, 2007). According to Healey (2003), learning, which consists one of the important criteria for participatory planning, is defined as the ability to change and manage social relations. A good collaborative planning process does not necessarily need to lead to building of consensus; it could also lead to building a public policy discourse, a way by which parties learn to understand and

respect each other (Healey, 1999).

In order for communities to gain this knowledge (Friedman, 2008), case studies could be illustrative in terms of establishing a common language between specialists and participants in planning procedure, especially when people are not previously trained in participation. There are many cases where case studies used as a learning factor by practitioners for that reason. A typical case where people learned through case studies is Oatlands regeneration in Glasgow, started at 2005.

The main purpose of this project, part of Richmond Park regeneration, was the development of a proper urban environment for 1,290 new houses, 1,077 of which were going to be private and 213 social housing (ClydeWaterfront, 2011). The neighborhood had a strong community spirit and active people who dealt with different matters related to the planning process. In order for the collaborative planning process to be satisfactory, community members travelled on field trip to London to visit relevant projects (case studies). This way people broaden their minds (Vlastos and Athanasopoulos, 2006, p.11) concerning such regeneration and development projects and provide efficient ideas for the sustainable and successful renewal of the area. This was definitely a real groundbreaking way of community engagement which promoted peoples participation in public issues by exposing them to case studies.

Adding to the above, in East Manchester, case studies were also used for the same reason. Residents visited successful projects in Manchester as well as in Amsterdam (Russel, 2008), while in another community engagement procedure Ljubljana, stakeholders were advised to explore other projects via online methods. In this last case, a workshop took place where the participants had the chance to be informed on cycling safety issues in recent developments in Ljubljana as well as elsewhere (Odense, Toulouse and Venice).

Except from means for learning societies, case studies can be used as safety valves, in cases that public participation is not so widespread. Greece is one of these cases, as community engagement is a rarely used method in practice and it usually takes place through a type of bureaucratic consultation (Samaras, 2005) and thus the results are not so successful. In such cases, case studies can provide the stakeholders with information concerning on how and why that other similar projects operated (Schell, 1992). As a result, planners can guess whether proposed ideas could confirm the fulfillment of the desire of community (Beriato, 2008) and as a result whether these ideas could be successful. Thus, by using case studies it is possible for planers to avoid people's reaction as happened in Covent Garden and Doclands in London (Athanasopoulos, 2009).

Finally, case studies have been used as a convincing factor by practitioners to municipalities, local authorities and stakeholders. Many planners illustrate previous similar case studies in neighboring areas, or areas with relative attributes in order to prove that their ideas could be definitely successful.

Summarizing, case studies are used as a creative way to explain, demonstrate and convince the decision makers or

stakeholders for the specific attributes of a scheme. Their role is significant as they could be used as a means of social learning and simultaneously as a knowledge tool for practitioners.

6. Conclusions

Case study research is a commonly used method in various disciplines and its contribution in urban and planning education and practice is apparent. In broad terms the exposure to real settings allows the actual interaction among all participants in the urban discourse, such as researchers, planners and the various stakeholders as well as it promotes vivid discussions on upcoming schemes. Although, the method has been criticized for allowing wide generalization, subjectivity, difficulties in documenting the acquired data in a unified manner, it is considered as ideal in engaging the non-experts in upcoming projects and an important supplementary tool to help research and practice. The main inquiries we have attempted to address in this paper were related to the use of the case study method in education and research, the methodology of reporting them in mobility plans and the benefits deriving from their application in the urban environment. Utilizing case studies as a means to enrich the traditional research can also showcase negative implementations of theories and ideas, providing us with the various complexities of urban phenomena.

Special importance is being paid in the initial setting of the research question as it can drive the reporting of outcomes and avoid any irrelevant data adjacent to the case. The setting of the selection criteria is critical as the acquiring of the needed data should be conducted in a concise and scientifically appropriate manner in order to allow the experts to use only the particular information relevant to the studied subject.

The contribution of case study demonstration is essential in participatory planning as it provides a communicative platform for transferring knowledge from the experts to the public, allows a quick engagement procedure among non-experts and can inform the general public on complex features of scientific attributes.

Further research on the utilization of case studies in urban planning and mobility field is expected to focus on the improvement of documentation methods according to the specific research question. The collection and evaluation of case studies can vary widely depending on whom they are addressed to and by whom they are developed. Although there are good practices in reporting case studies for the dissemination of research among scientists, little has been done in developing concise platforms addressing to the wide public for participatory planning, such as readable and communicative guides with plenty of visual material, interactive tools etc. which could be a next step of the current research paper.

Lastly, the establishment of a common language in identifying common principles and setting common goals between specialists in the various subjects of specific thematic areas (i.e. land use planning, mobility management, urban

regeneration etc.) is important for further analysis on case studies aiming at the improvement of the planning education and practice.

Acknowledgements

We, as authors of this paper, would like to thank Professor A. Siolas and Prof. A. Vlastos from NTUA for their helpful guidance and specific comments. We have benefitted a lot from their supervision and teaching skills regarding the methodologies in planning and urban mobility academic field and this paper could not have been completed without their contribution.

References

- [1] Aravantinos, A., 2007, *Urban Planning: For a sustainable development of the urban space*. Athens: Simmetria Publishing.
- [2] Banister, D., 2005. *Unsustainable Transport: City Transport in the New Century*. Routledge, London
- [3] Blaxter, L., Hughes, C. and Tight, M., 2006. *How to research*. 3rd edition. Berkshire: McGraw-Hill.
- [4] Burns, R. B. 2000, *Introduction to Research Methods*. 4th edition. London: Sage Publications.
- [5] Cervero, R., 1998, *The Transit Metropolis: A Global Inquiry*. Island Press, Washington, DC.
- [6] Consulting, E., 2003, *Community engagement in the NSW planning system*. Planning NSW. Available at: http://www.communitybuilders.nsw.gov.au/community_engagement_handbook_part_1.pdf (Accessed at 12 May 2014)
- [7] Davies, M B. 2007. *Doing a Successful Research Project: Using Qualitative or Quantitative Methods*. Palgrave Macmillan
- [8] Davis, C., Wilcock, E., (2003) *Teaching Materials Using Case Studies*, Publ. the UK Centre for materials education. Available at <http://www.materials.ac.uk/guides/casestudies.asp> (accessed at 6 February 2014) book
- [9] Department of sustainability and environment (DSEa). 2005 *Effective engagement: building relationships with community and other stakeholders*. Book 1 an introduction to engagement. Available at: http://www.dse.vic.gov.au/_data/assets/pdf_file/0019/105823/Book_1_-_An_Introduction_to_Engagement.pdf (Accessed at 1 June 2014)
- [10] Eisner, E.W. 1991. *The enlightened eye: Qualitative inquiry and the enhancement of educational practice*. Old Tappan, NJ: Macmillan.
- [11] Emory, C. W., Cooper, D. R. 1991, *Business Research Methods*. 4th edition. Homewood: Irwin.
- [12] Erickson, F. 1986, *Qualitative methods in research on teaching*. In M.C. Whittrock (Ed.), *Handbook of research on teaching*. (3rd ed.) (pp. 119-161). Old Tappan, NJ: Macmillan.
- [13] Eysenck, M. W. 2004. *Psychology: An International Perspective*. New York: Psychology Press.

- [14] Feagin, J., Orum, A., Sjoberg, G., 1991. *A Case for Case Study*. Chapel Hill: University of North Carolina Press.
- [15] Hall, P., 2002, *Cities of tomorrow*. Blackwell publishing. Malden-Oxford-Carlton.
- [16] Hamel, J., Dufour, S., Fortin, D., 1993, *Case study methods*. Newbury Park, CA: Sage.
- [17] Hammersley, M.E., 1993, *Social research: Philosophy, politics and practice*. Newbury Park, CA: Sage Publications.
- [18] Harold J., Noah & Max A. Eckstein, 1969, *Toward A Science of Comparative Education*. New York: Macmillan, pp. 3-7, 80-82, 112-122, 183-191.
- [19] Healey, P., 1997, *Collaborative Planning – Shaping places in fragmented societies*. Houndmills and London: MacMillan Press.
- [20] ICA, IRMT, 1999, *Writing Case Studies: A Manual*, in *Managing Public Sector Records*, A training program, International Records Management Trust, London UK. Available at: http://www.irmt.org/documents/educ_training/educ_resource/IRMT_ed_rec_writing_cs.pdf (Accessed at 1 June 2014)
- [21] Jennings, G., 2001. *Tourism Research*. Publ. John Wiley & Sons, Australia.
- [22] Leedy, P.D., Ormrod, J.E., 2005, *Practical Research: Planning and design*. 8th edition. Pearson Educational International and Prentice Hall: New Jersey.
- [23] Merriam, B. S., 2009. *Qualitative Research: A Guide to Design and Implementation*, chapter 3, Publ. Jossey-Bass A Wiley Imprint 989 Market Street, San Francisco, CA 94103-1741 Available at <http://cgi.stanford.edu/~dept-ctl/tomprof/posting.php?ID=1013> (accessed at 2 March 2014) book
- [24] Meyer, M.D., Miller, E.J., 2001. *Urban Transportation Planning: A Decision-Oriented Approach*. McGraw-Hill, New York.
- [25] Miles, M.B., Huberman, A.M., 1984, *Qualitative data analysis: A sourcebook of new methods*. Beverly Hills, CA: Sage.
- [26] Patton, M.Q., 1980, *Qualitative evaluation methods*. Beverly Hills, CA: Sage.
- [27] Roberts, M., Greed, C.(eds.) 2002. *Approaching Urban Design: the design process*, esp. Lloyd-Jones, T 'Unit 5 The Design Process' (for guidance on urban design methodology) Longman.
- [28] Russel, H., 2008, *Community engagement: Some lessons from the New Deal for Communities Programme*. London: Communities and Local Government Publications.
- [29] Sarkissian, W., Hurford, D., 2010, *Creative Community Planning. Transformative Engagement Methods for Working at the edge*. Earthscan London UK. Available at: http://library.uniteddiversity.coop/REconomy_Resource_Pack/Community_Assets_and_Development/Creative_Community_Planning-Transformative_Engagement_Method.pdf (Accessed at 12 April 2014)
- [30] Silva C.N., 2012, *Online research methods in Urban and Planning studies: Designs and Outcome*, University of Lisbon EISBN13: 9781466600751. Available at: <http://www.igi-global.com/pdf.aspx?tid=79390&ptid=56007&ctid=15&t=preface> (accessed at 5 April 2014)
- [31] Simons, H., 1980, *Towards a science of the singular: Essays about case study in educational research and evaluation*. Norwich, UK: University of East Anglia, Centre for Applied Research in Education.
- [32] Silverman, D.(ed.) 1997. *Qualitative Research: Theory, Method and Practice*, Sage Publications, London
- [33] Silverman, D., 2000, *Doing Qualitative Research – A Practical Handbook*. London: Sage Publications.
- [34] Stake, R.E., 1995, *The art of case study research*. Thousand Oaks, CA: Sage.
- [35] Stake, R.E., 2005, *Quantitative case studies*. In N.K. Denzin & Y.S. Lincoln (Eds.) *The Sage handbook of qualitative research* (3rd ed.) (pp. 443-466). Thousand Oaks, CA: Sage.
- [36] Taylor, S., Bogdan, R., 1984. *Introduction to Qualitative Research Methods*, Publ. John Wiley & Sons, Inc..
- [37] Veal, A., 2006, *Research Methods for Leisure Tourism – A Practical Guide*. Third edition. Harlow: Pearson Education.
- [38] Yin, R.K. 1984, *Applications of Case study research (Applied Social Research methods)* California Sage Publications.
- [39] Yin, R.K., 1984, *Case study research: Design and methods*. Newbury Park, CA: Sage.
- [40] Zikmund, W. G., 1999, *Business Research Methods*. 6th edition. Fort Worth: Harcourt College Publishers.
- [41] Blichfeldt, B. S., & Andersen, J. R., 2006, *Creating a wider audience for action research: Learning from case-study research*. *Journal of Research Practice*, 2(1), Article D2. Available at: <http://jrp.icaap.org/index.php/jrp/article/view/23/43> (Accessed at 10 May 2014)
- [42] Brömmelstroet, M.t., 2010, *Equip the warrior instead of manning the equipment Land use and transport planning support in the Netherlands*, *Journal of Transport and Land Use*. Available at: <https://www.jtlu.org/index.php/jtlu/article/view/99> (Accessed at 26 May 2014)
- [43] Eisenhardt, K. M. 1989. *Building theories from case study research*. *Academy of Management Review*, 14(4), 352-550.
- [44] Fainstein, S., 2000, *New Directions in Planning Theory In Urban Affairs Review* March, 35(4), pp. 451-478.
- [45] Flyvberg, B. (2006). *Five misunderstanding about case-study research*. *Qualitative Inquiry*, Vol 12(2), 219-245. Available at: <http://arxiv.org/ftp/arxiv/papers/1304/1304.1186.pdf> (Accessed at 20 May 2014)
- [46] Friedmann, J., 2008, *The Uses of planning theory: a bibliographic essay*, In *Journal of Planning Education and Research*. 28, pp. 247-257.
- [47] Grant R., 1997, *A Claim for the Case Method in the Teaching of Geography*, *Journal of Geography in Higher Education* Vol. 21 No 2 pp. 171-185
- [48] Halkier, B., 2011, *Methodological practicalities in analytical generalization*. *Qualitative Inquiry* Available at: <http://www.uk.sagepub.com/dqr4/study/Student%20resources/Chapter%209/Halkier.pdf> (Accessed at 13 April 2014)
- [49] Healey, P., 2003, *Collaborative Planning in Perspective*, In *Planning Theory*, 2(2), pp. 101-123.

- [80] Ward, K., 2012, A world of cities? Comparison across the disciplines. Workshop, The University of Manchester. Available at: http://www.cities.manchester.ac.uk/medialibrary/events/major_events/WorldofCities.pdf (Accessed at 30 April 2014)