

Chapter 20

A Dynamic Method and Interactive Software to Monitor and Design Place Identity

Marichela Sepe

Consiglio Nazionale delle Ricerche, Istituto di Ricerche sulle Attività Terziarie and Università di Napoli Federico II, Dipartimento di Progettazione Urbana e di Urbanistica, Italy

ABSTRACT

The rapid consumption of culture for chiefly economic benefit is leading the contemporary city towards the loss of place identity which is increasingly becoming hybrid, transitory and compromised. In order to analyse the new urban complexity several researchers have tested methods, maps, multimedia images, hypertext, and software. Indeed, computer science has in recent decades become a useful support for improving studies and applications in the field of area investigations. Starting from these premises, the aim of this chapter is to propose the PlaceMaker method and software as well as a synopsis of the experiments which were carried out. PlaceMaker is an original urban analysis and design method which both detects elements that do not feature in traditional mapping and constitutes the contemporary identity resources of the places, and it also identifies appropriate planning interventions also related to new needs and enterprises related to cultural resources. The questions related to the software development will complete the chapter.

INTRODUCTION

The complexity of urban dynamics affecting the contemporary city is mainly due to the acceleration of urban transformation and changes in land use (Christensen, 1999). A characteristic of the resulting instability, which leads to situations

of transience and transformation, fertile ground for regional marketing operations, is rapid consumption of culture devoted to chiefly economic advantage and to the loss of place identity that increasingly becomes hybrid and compromised (Butina, Bentley, 2007; Carmona, Heath, Oc and Tiesdell, 2003; Carter, Donald and Squires, 1993; Urry, 1995).

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The identity of places is related to their urban fabric and their morphological, natural, historical and cultural invariants (Lo Piccolo, 1995). These invariants are closely related to the life of the city and its inhabitants and the perception they have of that place. At the same time, the colours, materials, smells and sounds become an inseparable part of that piece of the city and emotional components of the recognized and shared heritage (Barbara, 2000; Lynch, 1960).

The new urban features are not easily identifiable and cannot be easily represented through traditional cartography. Indeed, the questions connected to the study of aspects that are not univocally translatable into objective facts regard three aspects in particular: scientificity, hence the objectivity of the results and repeatability of the method in different kinds of contexts; the updating capability, hence the possibility of adding new data, to modify existing data, to obtain other results; the times, and hence the sustainable possibility of using the results whilst respecting the evolution of a sustainable programming and town planning process.

In this regard, computer science has in recent decades become an increasingly useful support and more a for improvement of studies and applications in the field of area investigations (Ayeni et al., 2004; Ratti, Hillier, Stutz, 2004; Iac Metápolis, 2003; Marinelli, 1999; MVRDV, 2002).

The considerations set out above led to the creation of a method, PlaceMaker (Sepe, 2006a), and subsequently its supporting software (Sepe, 2010a) able at interpreting the territory in all its complexity, decomposing it in its elements and peculiarities and then awarely reassembling and redesigning it.

The original PlaceMaker method was conceived in 2001 and has been regularly updated since its pilot case studies started in 2002. Developed in the framework of an agreement between National Research Council and Urban Design and Planning Department of the University of Naples

Federico II, this is a method for analysing and planning the urban landscape which both detects elements that do not feature in traditional mapping and which constitute the contemporary identity resources of the places, and identifies appropriate planning interventions also related to new needs and enterprises related to cultural resources. Two final complex maps – the first of analysis and the second of planning – respectively represent the identity of places and planning interventions. Aim of this study is to illustrate the PlaceMaker method and software and a synthesis of the experiments which were carried out. The main problems and questions which are emerged in the software development will complete the paper.

The paper is organized as follows: section 2 illustrates contemporary approaches to urban landscape analysis and design; section 3 and 4 illustrate the PlaceMaker method and software respectively; section 5 shows a synthesis of the experiments which were carried out; section 6 illustrates future research directions; and finally, section 7 draws the conclusions.

CONTEMPORARY APPROACHES TO URBAN ANALYSIS AND DESIGN

In last decades, computer science become very useful in the urban analysis and design. In order to explain the new sites of the contemporary city and give new terms, several researchers have tested new multimedia images, hypertext, software, able to render this complexity and to permit readability.

At least four kind of approach which use specific software in order to support the urban studies may be recognised: the virtual; the multiscale; the configurational; and the complex-sensitive.

The virtual approach to analysing urban places is an approach that finds its expression in the myriad of sites created through the use of the network. These are spaces, squares, architecture, platforms and gateways which, despite borrowing

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