Chapter 24
Children's Maps in GIS: A Tool for Communicating Outdoor Experiences in Urban Planning

Kerstin Nordin
Swedish University of Agricultural Sciences, Sweden

Ulla Berglund
Swedish University of Agricultural Sciences, Sweden

ABSTRACT

Since 2002 the authors have successively developed "Children's Maps in GIS", a method for children's participation in spatial planning. Their studies show that 10-15 year-olds are capable of reading maps and using a GIS-application for communicating their interests in a stable and useful manner. The purpose of this article is to discuss the first stages of implementation in a real world project, in relation to ICT. The authors report experiences from a Swedish municipality using Children's Maps in GIS in a survey with over 600 children as part of a comprehensive planning process and give examples of how data can be visualized. A significant digital divide between different parts of the administration is noted. In the ongoing development into an Internet version of the method the authors aim to increase the access to the GIS-application and develop standard procedures for categorizing and analyzing data.

INTRODUCTION

It is considered that children (0-18 years) should be afforded the opportunity to influence those matters that affect or concern them, as outlined in Article 12:1 of the UN Convention of The Rights of the Child (UNICEF, 1990), a convention signed, and in effect implemented, by most countries around the World. The local environment is such an issue concerning children, this is identified in the UN action plan Agenda 21 (United Nations, 1993) where it is stated that young people's participation is vital to the realization of a sustainable society. Therefore there is an expectation for young

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people's experiences and wishes to be included in local-authority planning.

In the background section of this article we report on our theoretical framework and describe the method Children's Maps that we have developed through our research. In the result section we document how this method was used outside the research-context in a municipal as a part of a comprehensive planning process. In the discussion section we comment on the results and make comparisons with experiences from previous research-pilots. Finally we draw conclusions on further development of the method.

BACKGROUND

This paper reports on research carried out within the discipline of Landscape architecture although the theoretical framework shows an interdisciplinary approach including planning theory, social theory as well as theory of environmental psychology, geography and GIScience.

Children, Planning and Participation

In today's construction of childhood, children are acknowledged as active social and cultural actors (Holloway & Valentine, 2003; Christensen & Prout, 2002). According to Christensen & O'Brian (2003, p. 2) they are also recognized as informants and participants in research, having "emerged as key source for understanding their everyday life". Christensen further stresses the relevance for planning of children's "emplaced knowledge […] full with personal and social meaning, built up through their everyday encounters" with their local environment" (Christensen, 2003, p.16). The overall idea of governance using communicative planning (e.g., Healey, 1997; Healey, 1999) with reference to Habermas' theories on communicative rationality and communicative action (e.g., Habermas, 1984) today is widely practiced in developed countries. However, this practice is criticized for lacking strategies for handling of biased power relations. This means that less powerful stakeholders, and especially those whose perspectives deviate from existing policies, are at risk of being unable to achieve the influence that their arguments call for (Flyvbjerg, 2001; Sager, 1994; Sager, 2006).Children and youth tend to fall into this category, putting their participation at risk of being reduced to pseudo-democratic practices, such as manipulation, decoration or tokenism, the lower steps in the "Ladder of Young People's Participation" (Hart, 1997). Case studies in various European countries highlight tendencies towards superficial participation resulting in little real influence (Rogers, 2006; Tonucci, Prisco, & Horelli, 2004) and unwillingness or inability from decision-makers to take children's interests into account has been noted by many researchers (Chawla, 2002a; Lynch, 1977; Matthews, 1998; Wilhjelm, 1999; Woolley et al., 1999).

Conversely, literature shows a strong support for the idea that planning and design of the physical environment attracts the interest of young people and it is therefore possible to include them in society's democratic processes (Horelli, 1998; Percy-Smith & Malone, 2001; Urban Green Spaces Taskforce, 2002; Norsk form, 2005.) Furthermore, following our personal experiences, there is a desire among many planners to engage children and youth to a larger extent. We, as well as Freeman & Aitken-Rose (2005) have noticed a growing interest toward child-focused and youth-focused methodologies for working with adolescents.

There is an obvious need to find solutions to the dilemma of how to incorporate young peoples' perspectives into local planning processes (e.g., Christensen & O'Brian, 2003; Driskell, 2002). A model for enhancing children's participation in decision-making is the "Pathways to participation", developed by Shiers (2001). Shiers, drawing on Hart (1997), identifies five levels of participation. The model can be used as a tool for planning for participation. Level 3, "Children's views are taken into account" is the minimum