

DOSSIER

Space and Behavior: a Comparative Perspective

Space is a somewhat neglected variable in observational and experimental studies on developmental processes, particularly in human beings. Developmental Psychology usually gives priority to social aspects of the environment, and overlooks equally relevant physical aspects. In contrast, several lines of research on animal behaviour take space into account, e.g. in the contexts of territoriality and of exploratory behaviour, and place less emphasis on related social dimensions.

The present set of papers was firstly presented as a symposium at the III Congresso Norte-Nordeste de Psicologia, held at João Pessoa, Paraíba, Brazil, in May 2003. It aims at creating an opportunity for a comparative reflection on some relationships between space and behaviour, in three different animal groups, represented here by albino rats, capuchin monkeys and human children, and inspired by three basically different questions.

The first question regards the relationship between behaviour and spatial arrangement and/ or degree of spatial structuring. This question was initially focused in a research program developed since the 80s' by Mara Campos de Carvalho and collaborators, on the relation between the occupation of space by children attending day care centers and the degree of spatial structuring of the immediate environment. The results show that spaces structured in particular ways encourage both child-child interactions and richer adult-child interactions, thus contributing to the quality of the educational environment. The outcome of several years of research on this question is

synthetized in Carvalho's paper *Use of space by children in day care centers*.

Pursuing this same kind of problem, Raquel Martinez and Silvio M. Carvalho investigate the effects of spatial structuring on the exploratory behaviour of adult and pup rats. They found preferential occupation of an open field's more structured, opaque walled sites, and an age increase in this preference, evidencing different exploration patterns in pups and young adults. The results of a set of experiments in this line of research are presented in the paper *Space occupation by adult and pup rats*.

A quite different question is focused by Briseida D. Resende, Patricia Izar and Eduardo B. Ottoni with capuchin monkeys: with a core interest in social learning of tool use (cracking open encapsulated fruits with the help of stones), they investigated the relationship between social play, proximity and events of manipulative activities observed by conspecifics, in order to analyse the dynamics involving spatial tolerance and observation, important factors for an eventual social learning of tool use. The results of these analyses are presented in the paper *Social Play and Spatial Tolerance in Tufted Capuchin Monkeys*.

Getting back to pre-school children, Ana Carvalho and Isabel Pedrosa report observational data on territoriality and social construction of space, highlighting children's precocious abilities regarding the use and understanding of social spaces and the

construction of social relationships. A discussion on the concept of territory as used in the social sciences and in social psychology is essayed, and some differentiation criteria are suggested in the paper *Territoriality and social construction of space in children's play*.

Besides the intrinsic interest of each of the papers, their assemblage in this dossier calls attention to the diversity of relations between space and behavior that can be explored and possibly turn out useful for the understanding

of behavioural phenomena; at the same time, this comparative approach also highlights the specificities of these relations in different animal species.

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