

Hardie, G.J. Johannesburg, South Africa

SIMULATION - A MEANS OF ENGENDERING USER PARTICIPATION
IN THE HOUSING PROCESS

Summary

What does the homeowner prefer in a future house and neighbourhood? The questions of house image, street layout, and house form are three major issues on which the designer can invite human response and action in creating an environment which meets the users' preferences. This paper presents approaches which have been developed to meet this need.

Simulations are shown to be useful tools for enabling communities to participate in the design of their home environment. They offer the designer an opportunity to discover the preferences of communities and to generate information pertinent to the design of homes and residential environs.

Simulations are a means by which participants are projected into a situation where they are confronted with a reality with which they must come to terms. They are forced to make decisions on trade-offs and preferences. Obviously no one can operate beyond personal experience, yet simulations are a means by which new options can be developed. The whole process is carried out in a non-threatening manner, and can even be described as fun, or a game. The use of simulations generates a quality of discussion which would not emerge if the issues were dealt with abstractly. For the designer, the spontaneous, unselfconscious, and uninhibited expression of attitudes and ideas give greater insight into the perceptions of users of their residential environment, and perhaps surprisingly, a level of consensus is usually apparent, with anomalous remarks often turning out to be most useful.

Faced with the problems of investigating the concepts and preferences related to house and settlement form among a mainly illiterate third-world population, the author developed and used various simulation techniques. These elicit a wealth of information, opinion, and attitudes that even observation and in-depth interviews to not disclose. A house modelling apparatus was developed as a research tool to enable people to model their desired house and thus discover their preferences. This apparatus is now widely used in Southern Africa, particularly in self-help projects, as a means by which participants can design their own homes. Various simulation techniques are discussed: why they were developed, the form they take, and the type of information they generate, with emphasis on the usefulness of this information in the design process.