

# Pattern Languages for Interaction Design: Building Momentum

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## Keywords

Pattern language, patterns, interaction design.

## INTRODUCTION

The potential of pattern languages as a vehicle for the dissemination of human-computer interaction design knowledge has been recognized within the CHI community (e.g. [4]), stemming from the ideas of the architect Christopher Alexander, for recording the designs of 'living buildings' [1-2]. Patterns record the invariant property that must exist in a design detail which resolves the conflicting social, cognitive, and technological forces which are ubiquitously present in constructions of that type. Patterns are interlinked into a network (a pattern language) so that details that are required to complete a design may be identified, and the larger issues surrounding a particular design decision may be recognized.

These ideas have been taken up by the object-oriented computing community [5], developments there being recorded in the series of Pattern Language of Programming (PLoP) conferences. In that community it is the usefulness of patterns as a way of recording reusable design that has dominated. However, as Alexander pointed out in an invited address to OOPSLA '96, there are other, deeper aspects to patterns. As he envisaged pattern language, it records an aesthetic of design which makes for liveness, that 'quality without a name' which supports human well-being. Alexander has challenged the computing community to explore this aspect, and clearly, there is most scope for this exploration within the CHI community. Thus this workshop will: promote the development of pattern languages for interaction design; refine and develop the application of pattern languages in this area; develop understanding of the relationship between interaction design and software engineering patterns; extend the community of pattern writers.

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## BACKGROUND

A first workshop on pattern languages in human-computer interaction took place at CHI'97, spreading the idea of interaction design patterns to the CHI community. However there were a variety of views as to what interaction design patterns could be.

The next major meeting on interaction design patterns took place at ChiliPLoP'99. The software engineering community present expressed very different views of interaction design patterns. It became clear that interaction design patterns would be a good means to simplify communication between software engineering and HCI. An initial definition and classification of interaction design patterns was produced [3].

These initial attempts were refined and extended substantially at an INTERACT '99 workshop. The particular issues recognized were: interaction design patterns have social, cognitive, and technological aspects; different levels of interaction design patterns need to be inter-networked; a classification scheme and method are required. An initial classification scheme was proposed.

The workshop at CHI2000 will build on these previous efforts, and push the field of interaction design patterns further. In particular, placing emphasis on Alexander's deeper aspects of patterns and attempting to incorporate his latest work could help to resolve crucial issues for the development interaction design pattern language.

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