Preface

AAAI 94 Fall Symposium
Planning and Learning: On to Real Applications

Planning and learning research has been progressing in parallel over the past several years, but very few research projects have bridged the two areas. However, there is a great deal of benefit from their interaction, especially when they are concerned with real applications. As the complexity of planning problems increases, it becomes of particular interest to identify learning opportunities in order to automate the acquisition of a planner's knowledge in new applications. At the same time, planning problems are a useful testbed and a source of challenges for learning research. The goal of this symposium is to discuss the implications of practical planning applications on both learning and planning research.

Symposium participants have done work on a practical planning application or/and have researched topics in planning or learning. Several papers in these working notes highlight empirical work on practical problems as an invaluable source for understanding the complexity of the planning task. Other papers reflect interest in applying theoretical approaches to practical planning problems and to understand the impact of learning in their planning algorithms. In general, most of the papers present practical planning applications that shed light on the challenging issues for learning, knowledge acquisition, and representation in planning domains. We expect the analysis and discussion of practical domains to be a solid basis for turning formal planning and learning algorithms into efficient practical ones.

Specific topics of interest that the symposium will address include: what are the learning opportunities of particular practical planning applications; what tools help extend and maintain planning knowledge; how can a planner improve its efficiency based on its past experience; how can a planner learn to improve the quality of the solutions it generates; and what research issues are raised by several specific real-world planning applications.

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