

The paper I read:

An Empirical Analysis of Some Heuristic Features for Local Search in LPG  
( Alfonso Gerevini Alessandro Saetti Ivan Serina, 2002, 2003 )

The paper give a introduction on the background on LPG, and analysis on the Heuristic evaluation of the Search Neighborhood, and Additional Heuristic Features.

The paper has two three contributions. The first one is they propose some techniques for effectively restricting the search neighborhood of Walkplan, and for selecting the next inconsistency to handle. The second one is they experimentally analyze the main heuristic features for local search in LPG with the goal of understanding and evaluating their impact on the performance of the planner.

Conclusively, their analysis is based on Friedman's statistical test, and it shows that the features investigated are very useful for improving the search in terms of required CPU-time or quality of the solutions. In particular, restricting the search neighborhood using any of the techniques that we have proposed is essential to exploit an accurate neighborhood evaluation function. Moreover, the analysis identifies options for the noise setting and the inconsistency selection that perform better than others.