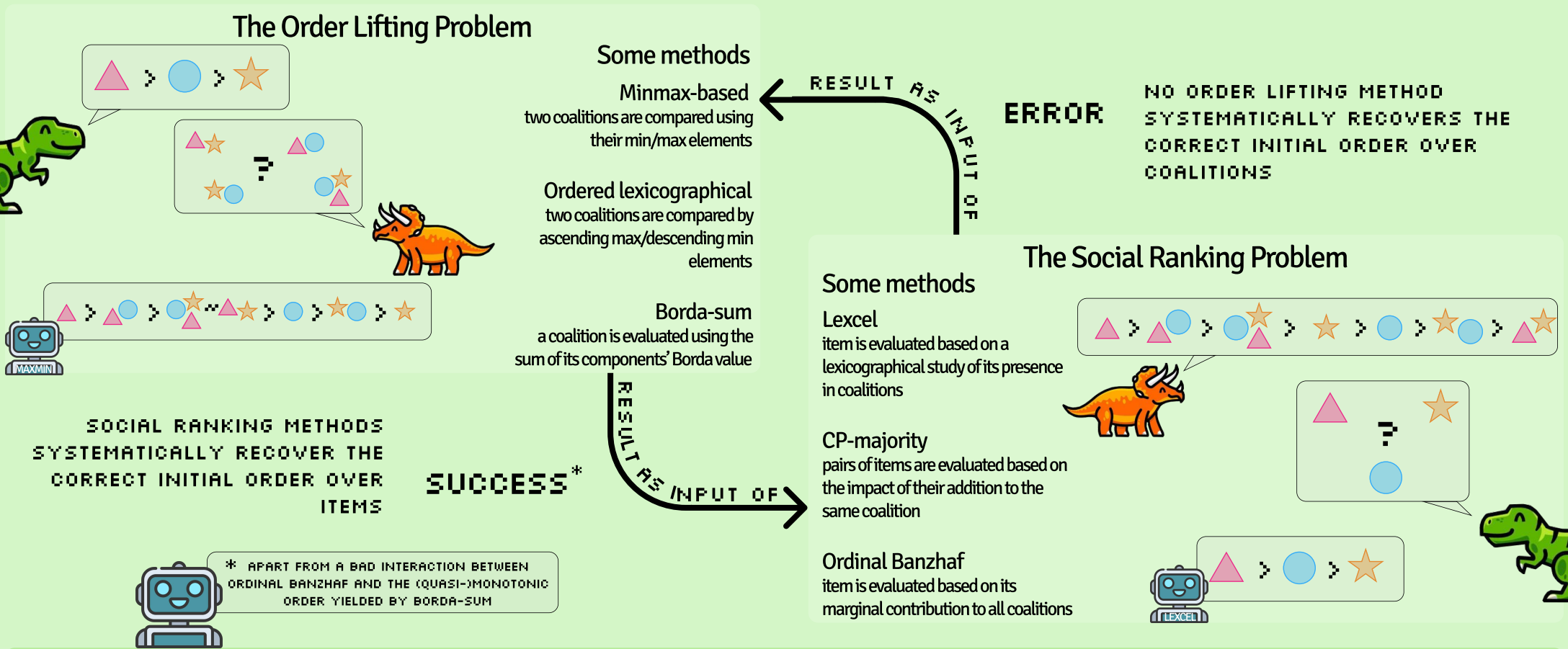


On the complementarity of order lifting and social ranking:
retrieving individual rankings from partial lifted preferences

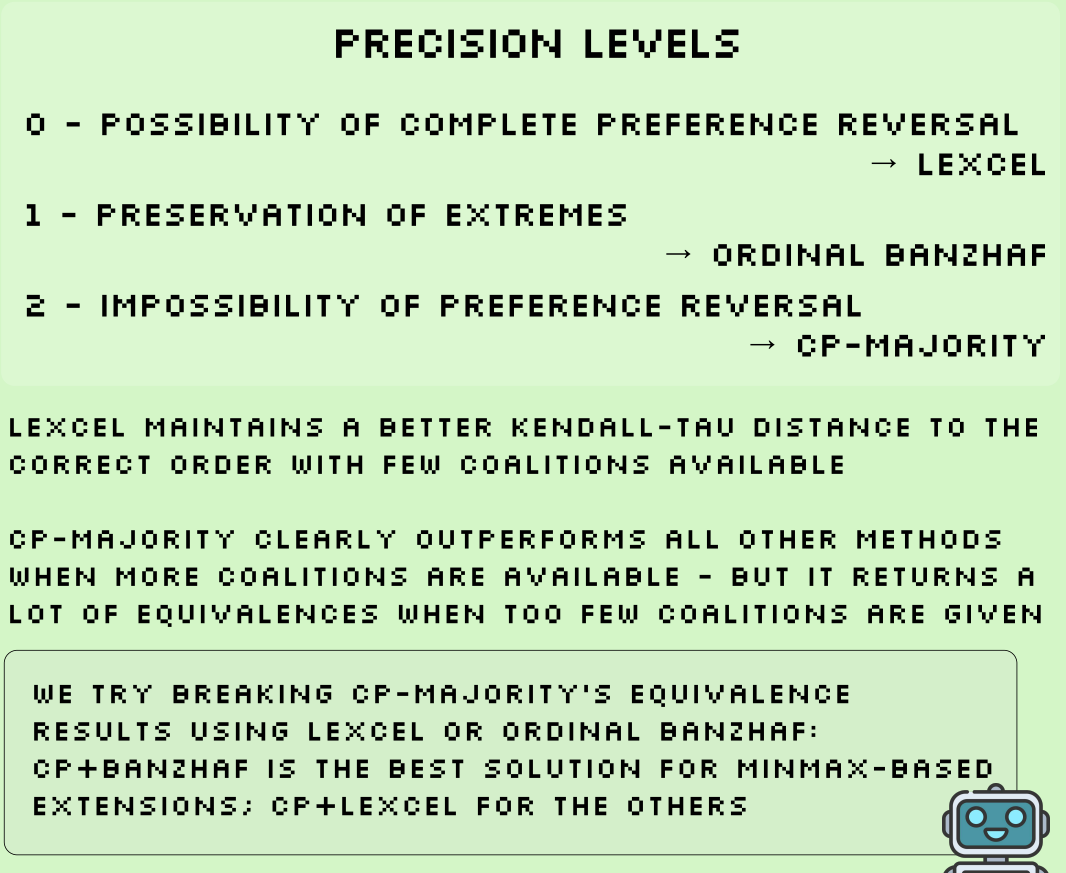
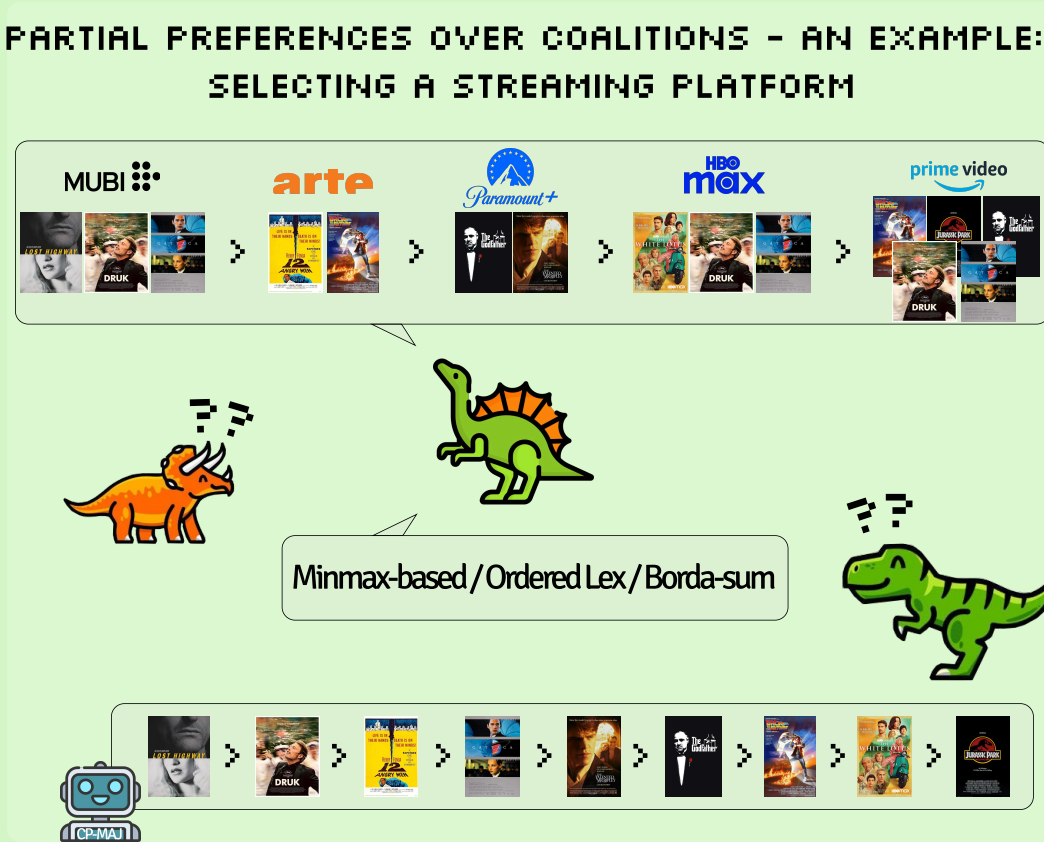
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COMPLEMENTARY PROBLEMS?




UNDER PARTIAL INFORMATION



STRUCTURED PARTIAL PREFERENCES: CONSIDERING (SOME) K-SIZED COALITIONS

FIGURES OF EXPERIMENTAL RESULTS ARE AVAILABLE ON OUR WEBSITE!



(2) WARNINGS

» ORDINAL BANZHAF IS NO LONGER USABLE

» UNDER MAXMIN-BASED EXTENSIONS, LEXCEL AND CP-MAJORITY CANNOT RECOVER THE CORRECT ORDER IF $K > N/2$

NOTABLY, EVEN WITH A SMALL K AND FEW COALITIONS, SOCIAL RANKING METHODS RESPOND WELL TO BORDA-SUM RANKINGS

THE CLOSER K GETS TO $N/2$, THE FEWER COALITIONS ARE NECESSARY TO RECOVER THE CORRECT INITIAL ORDER

REGARDLESS OF K AND THE NUMBER OF COALITIONS, THE COMBINATION OF CP AND LEXCEL IS THE BEST PERFORMING METHOD

K

2

$N/2$

$N-2$