

HOW TO WIN AT 7 WONDERS?

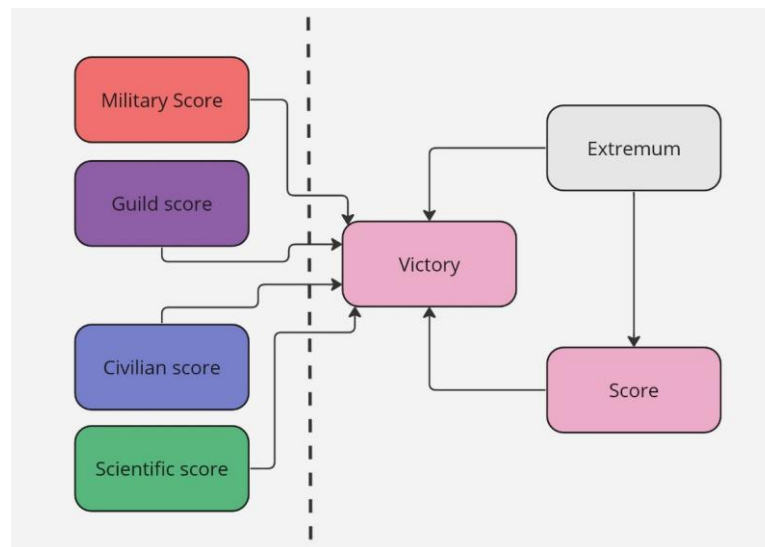
PRE-REGISTRATION

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Problem: Which strategy maximalize the chances of winning at the board game 7 Wonders?

Dataset: combination of three sources into a merged dataset : 1 online dataset from <https://alt-gr.tech/pages/seven-wonders> , 2 created with hand-reported data from scorecards of two boxes of 7 Wonders (Pradel and Lapray families).

Directed Acyclic Graph:



Predictions:

- P1. A better score calls for victory.
- P2. An extremum allows a bigger total score.
- P3. An extremum in the scorecard brings victory.

- P4. Military strategy wins.
- P5. Guild strategy wins.
- P6. Civilian strategy wins.
- P7. Scientific strategy wins.

Models:

- P1 + P2 – Multivariate ordinal regression
 $Victory \sim Score + Extremum$
- P3 – simple linear regression
 $Extremum \sim Score$
- P4, P5, P6 and P7 – ANOVA
 $Strategies \sim Score$