

World Chess Championship Blog

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Magnus Carlsen: The World Chess Championship begins this Wednesday, and there's quite a bit of coverage online, including predictions by respected statistical blogs such as 538 (<https://fivethirtyeight.com/features/as-chess-booms-magnus-carlsen-returns-to-defend-his-crown/>). Chess is both very easy to predict (elo rating gives rough odds of victory for each player in any match) and very difficult (small head to head sample sizes against the best players). Nepo and Carlsen have only played 12 classical matches. Nepo leads Carlsen head to head, but it's difficult to say how important that is compared to their elo ratings.

One factor that's not discussed much is how correlated a player's elo is with their playing strength in "important" games. Elo is computed based on all of a player's results, not all of the games a player is trying to win. Very strong super-gms are usually able to guarantee advancing out of group stages very early in tournaments, after a few quick wins. After this point, the best strategy for winning the tournament shifts away from trying to win games and towards saving energy and not giving away their opening preparation, resulting in many quick draws. Some of these draws are against lower rated players and bring down the strong player's elo.

My goal is to compile a dataset of "meaningful" games for Carlsen and Nepo, by removing games that were played after the outcome of the current tournament round was already decided. I will use these games to recompute elo ratings for Carlsen and Nepo to make a more accurate prediction for this World Chess Championship, since every game will be meaningful and neither player has a reason to save any preparation. By backtesting this "Meaningful Elo" rating, I can check whether it is more or less correlated to World Championship performance than traditional elo over time.