

How Good Was Bobby Fischer In 1992?



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In 1992, former world chess champions Bobby Fischer and Boris Spassky met in a grudge match to finally answer the question, "Who is the better player?" They previously met in single combat. Fischer defeated Spassky to become world chess champion. But the match was more an exhibition of gamesmanship than chess. Fischer retired from competitive chess shortly afterwards.

In 1992, they met again. Once more Fischer prevailed with 10 wins, 5 losses, and 15 draws in 30 chess games. Fischer was no longer internationally ranked, but Spassky's proficiency was deemed to be 2560 international master points. World champion Gary Kasparov was then rated at 2780 master points. How would Fischer have fared against Kasparov?

The proficiency of the leading international players in 1992 can be ascertained from their performance in the top ten tournaments reported in Chess Informant. In most tournaments, 10 or 12 players participated, each playing all others present. The result of each match was recorded, as well as the international ELO points standing of each player according to their career performance. In these tournaments there were 88 different players, with 40 different international standings. Neither Fischer, Spassky, nor Kasparov participated.

The outcome of each encounter between two players was entered as a paired comparison into a data file for analysis by the Facets computer program. The players were identified by their international standings, so that the measure corresponding to each international standing could be estimated from a many-facet Rasch analysis of player performance. Results are shown in Figure 1. Each "X" in the figure corresponds to one of the 88 tournament players. The most proficient player in the tournaments was Anatoli Karpov with a standing of 2715. His measure was 5.4 logits, relative to the overall mean performance level of the 88 players which was set at 3.0 logits.

The diagonal line in Figure 1 is the best-fit line between the international standings and the logit measures. Its slope is 66 international standing points per logit. From this plot, Spassky's 2650 standing would give him an expected measure of 3.4 logits. Kasparov's 2780 corresponds to 6.7 logits. Figure 2 plots match outcomes conceptualized as rating scale categories (win, draw, loss), based on the performances of the 88 tournament players. Fischer's raw score of 171/2 against Spassky's 121/2 places him as .5 logits more proficient than Spassky, i.e., at 3.9 logits. Thus Fischer's estimated international standing is 34 better at 2594 points.

Figure 2 would predict Fischer's outcome in a 30-game match to be 8 wins, 19 draws and 3 losses = 171/2. This is reassuringly close to the observed outcome of 10 wins, 15 draws, and 5 losses. This relative lack of draws by Spassky and Fischer may be explained by players being more ready to agree to draws in tournaments when the overall winner is no longer in doubt.

World champion Kasparov had a standing of 2780. This is 2.8 logits above Fischer's estimated 2615. Fischer's performance against Kasparov can be predicted from Figure 2. The results of a 30-game match would be 5 draws and 25 losses for Fischer without any wins! Nevertheless, Fischer could be proud. Despite his almost 20-year absence from tournament play, Figure 1 shows that his performance would place him among the top twenty of these tournament players.

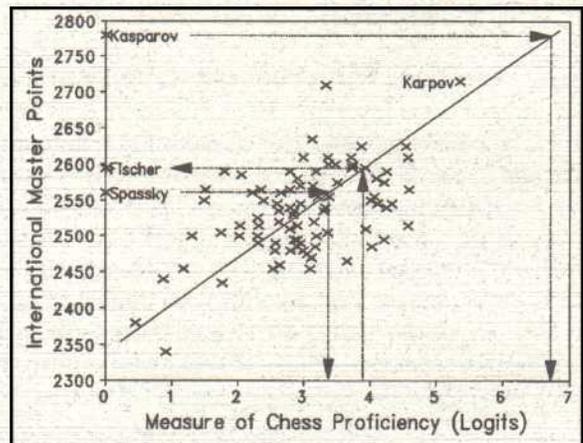


Figure 1. Measures and international standings of 88 leading chess players.

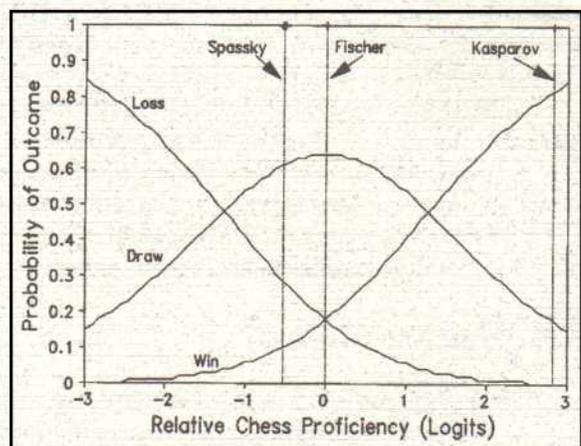


Figure 2. Probability of match outcomes.

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