

An Analysis of Chess Ability

By CARL EKOOS

What is chess ability? Why is Dr. Alekhine the world's champion? Why are certain aspirants to his crown so proficient in the playing of chess? Why is one person a stronger chess player than another?

Questions of this nature will invariably draw a volley of answers from any chess gathering and the variety of solutions proposed will coincide perfectly with the number of chess enthusiasts present, for every one seems to possess his favorite opinion. Because of the inadequacy of any single explanation it is possible that a rather scientific approach to the problem might help to identify some of the factors producing the pattern which we term chess ability.

An opportunity to conduct an organized study presented itself in 1931, when a group of high school boys (Hayward Union High, Hayward, Calif.) formed a chess club and entered into league competition with other schools. Accurate individual records were kept of the high school life of every boy in the club and a faculty committee assisted in the gathering of the evidence used. Special standardized tests were given to measure school intelligence, reading and retention ability, and school grades. Careful estimates were made of the time spent for school studies, time spent for chess, and the previous chess experience enjoyed by every player before joining the club.

The seven players who composed the chess team for three successive years, were graded one to seven in each ability accordingly as they ranked one with another. A grade of seven in school intelligence would not necessarily indicate low intelligence but rather designate that player as the seventh best in this selected group. In fact, the player with this ranking was in the highest ten percent of the entire school, which is a very good indication of the quality of the material available. It might be noted that the players were unaware of the existence of this study.

The results were tabulated and are illustrated in two charts. Chart I contains the chess team rankings for three successive years. Chart II contains the comparative rankings of every player in those abilities which were considered to be some of the reciprocal forces which determine chess ability.

PARTIAL INTERPRETATION

Players C., E. and G. had had considerable

I.

POSITION ON TEAM

Board	1932	1933	1934
	PLAYER		
1	C	C	A
2	E	A	B
3	G	B	C
4	D	E	D
5	F	D	E
6	B	G	F
7	A	F	G

previous chess experience prior to the formation of the team, and this factor was instrumental in assisting them to earn boards one, two, and three, on the 1932 team. During 1933-4 however, other factors were in evidence, and it is the purpose of this study to identify some of these contributing forces which caused the chess rankings to fluctuate.

Players A. and B. started on boards seven and six in 1932, rose to boards two and three in 1933, and competed on boards one and two in 1934. Their rapid rise to chess superiority over the group might be accounted for by their high comparative intelligence rating, their reading and retention ability, and their intense study of chess books, periodicals, and masters' games.

Player D. was very constant in all his abilities.

Player F. presents an unusual situation. He seldom played or studied chess other than challenge rounds or team matches with other schools, yet he was able to maintain his place on the team while more ambitious players tried to displace him.

Attention might be drawn to the fact that in 1932 previous chess experience was the determining factor which enabled players to secure their rankings, while in 1933-4 the rankings became so altered that it is impossible to select any special factor as the sole determining agent. Some positive correlation, however, is noted between intelligence and the 1934 rankings.

Column 7 contains the averages of all the measurements secured and in column 8 these

A COMPARISON OF VARIOUS FACTORS

by

COMMITTEE ESTIMATES

STANDARDIZED TESTS

TRANSPOSITION

Player	1	2	3	4	5	6	7	8
	<i>Previous Chess Experience</i> 1932	<i>Chess Study</i> 1932-3-4	<i>School Study</i> 1932-3-4	<i>School Grades</i> 1932-3-4	<i>Reading and Retention Ability</i> 1932	<i>Intel- ligence Rating</i> 1934	<i>Average</i>	<i>Index to Chess Ability</i>
A	7	1	3	3	1	1	2 4/6	2
B	6	2	2	1	2	2	2 3/6	1
C	1	5	5	7	5	5	4 4/6	5
D	4	4	4	4	4	4	4	4
E	2	6	6	5	7	6	5 2/6	6.7
F	5	7	1	2	3	3	3 3/6	3
G	3	3	7	6	6	7	5 2/6	6.7

are transposed into ratings comparable to those in the other columns.

In column 8 (Index To Chess Ability) an attempt has been made to derive an index which would indicate the potential ability of every player. For example, player F. should, according to the index, attain a chess ranking of at least third in this group whereas he was only able to enjoy sixth place on the team. Might we reasonably assume that if he had applied himself more to the study and practice of chess (column 2) he would have more closely approached the index prediction? Using the index key in this manner it might interest the reader to make other comparisons noting player G. in particular.

It becomes apparent that this study was not intended to become an exhaustive analysis of chess ability for there are many other important abilities that would have to come under consideration. Competitive inclinations, temperament, physiological and environmental conditions, and a host of other factors would assist toward the formulation of a final chess ability prediction. Nevertheless, we may draw some very definite conclusions from the evidence here presented.

CONCLUSIONS

The factors which influence chess proficiency may be in accord or at variance with one another.

One player will excel another in direct proportion to his excellence in all of the contributing factors.

The preceding observations indicate that chess ability is not the result of any single factor but rather a summation of many reciprocal abilities with fluctuating tendencies and values.

BOOK REVIEW

MY 101 BEST GAMES

By F. D. YATES

In spite of the title, the book actually contains 109 games, thirty of them annotated by Yates, who was engaged on the work when he died suddenly two years ago; and the rest annotated, very capably, by W. Winter.

Yates' games reveal a greater capacity for good chess than the actual results achieved by him in tournaments would indicate. He exerted himself more when up against a master than against weaker opponents. He defeated Dr. Alekhine more than once, and every active master except Capablanca fell a victim to him on at least one occasion.

The games he won, were won brilliantly. Blackburne is the only other British player whose games can compare with his. Whether it was a complicated middle-game attack, in which he had few superiors, or an end-game, he was always dynamic, always punching. In the last decade of his life, Yates became less attacking, and developed a fine end-game technique; many of his end-game wins, squeezed out of a stone, are delightful.

The appreciations by W. H. Watts, Dr. Lasker, Sir George Thomas, Frank Marshall, and E. G. Twitchett, are very interesting, as also is the longer introduction and biography by Winter. What impresses most is the general agreement among these writers that Yates was never known to utter an unkind word about anyone. He was a very reserved man, except to his intimate friends, among whom, on the contrary, he was noted as a wonderful talker on any subject that could be raised.—A. C. R.