



# CHEnalySiS

## 国际象棋数据分析

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2025-12-14



# 目录

1. Chess 介绍
2. 参考资源



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# 1.1 Chess 基本布局

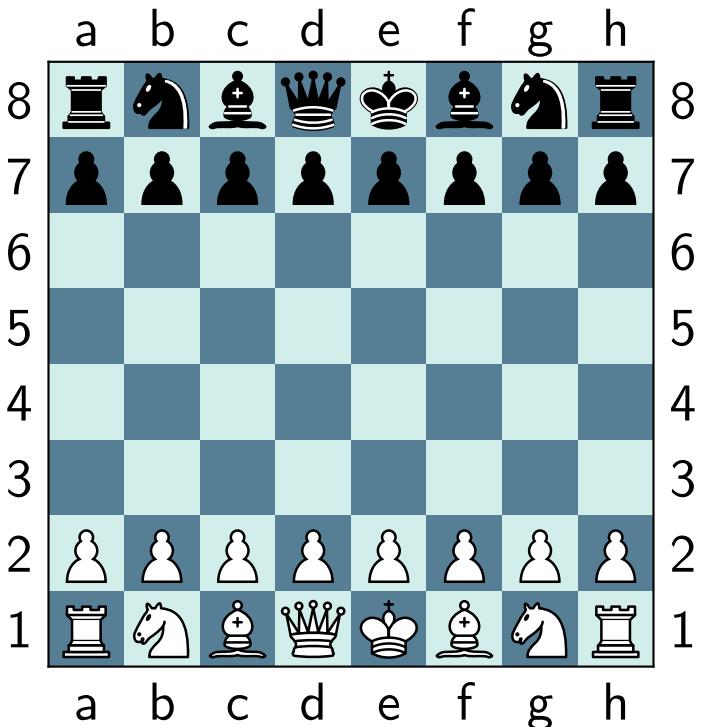


图 1 基本布局



## 1.2 Chess 基本走法

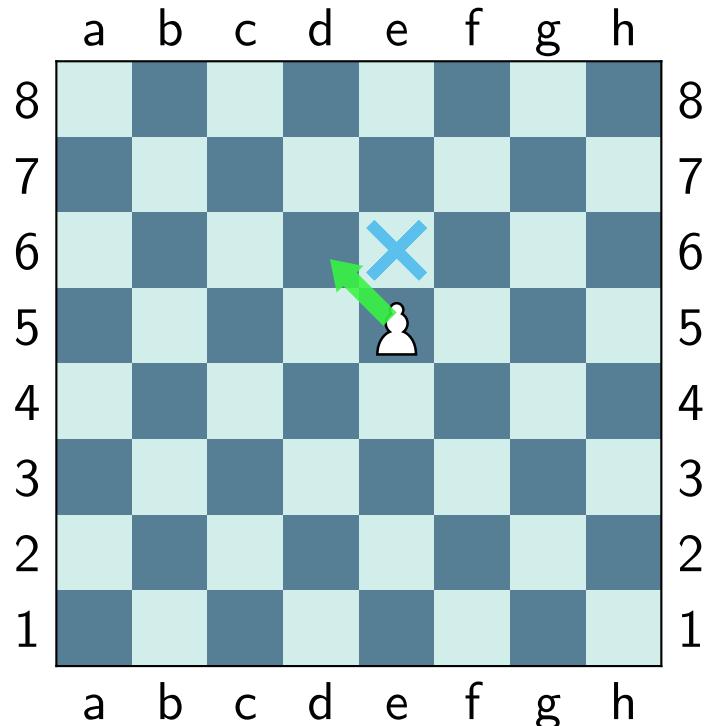


图 2 ♜ Pawn

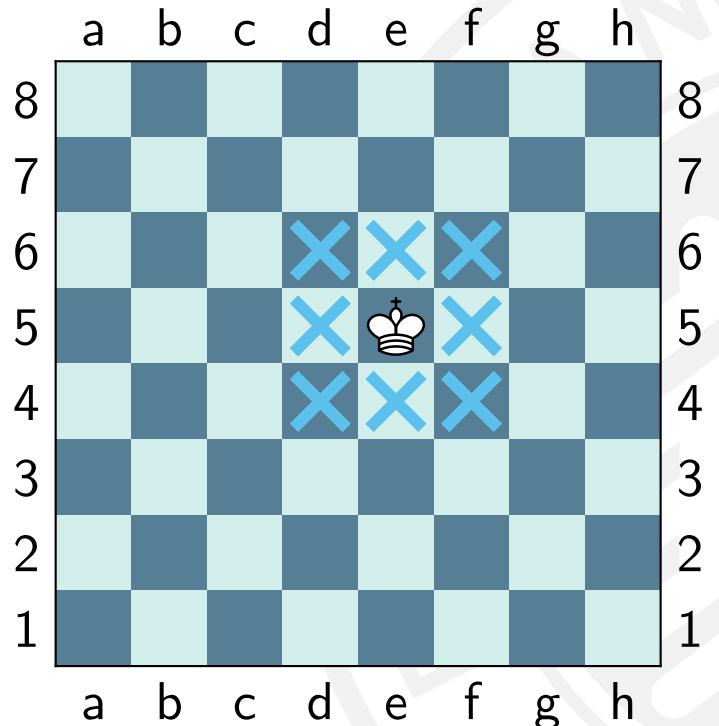


图 3 ♔ King



## 1.2 Chess 基本走法

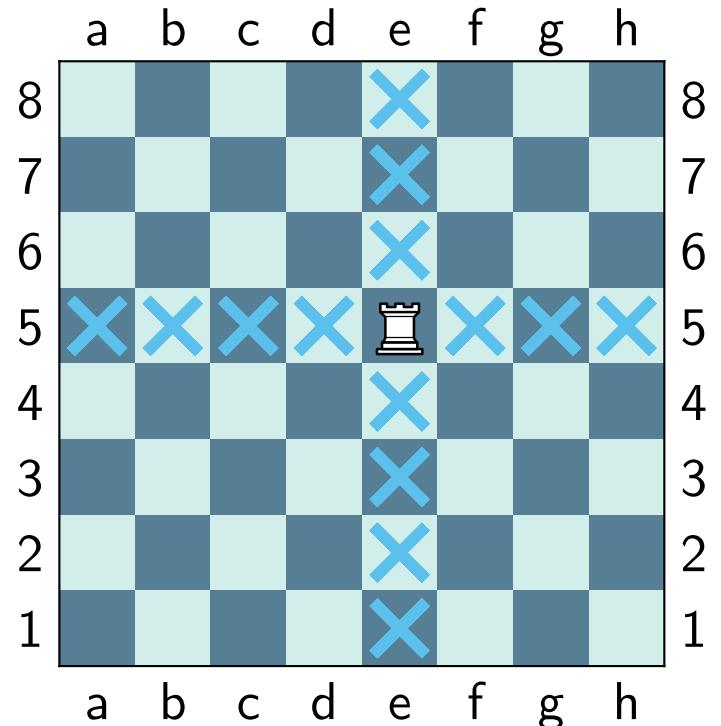


图 4 Rook

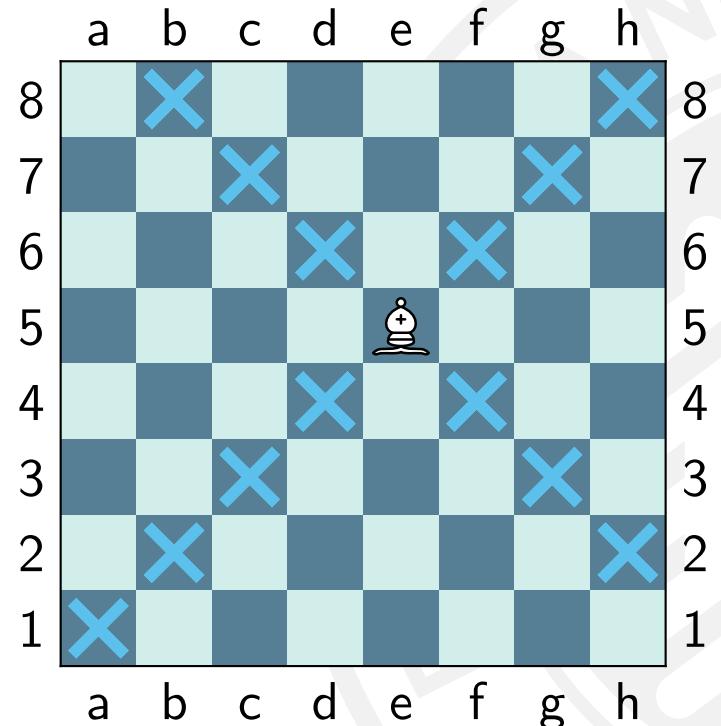


图 5 Bishop



## 1.2 Chess 基本走法

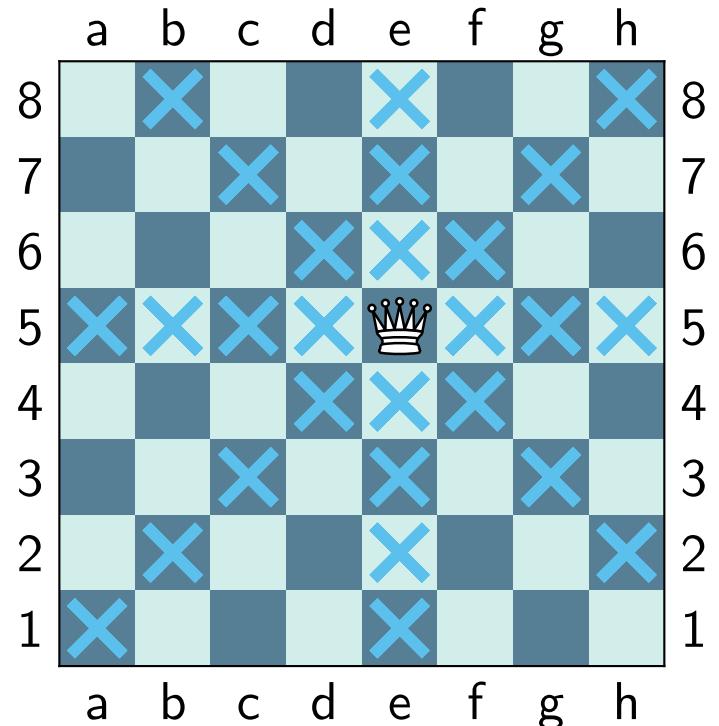


图 6    Queen

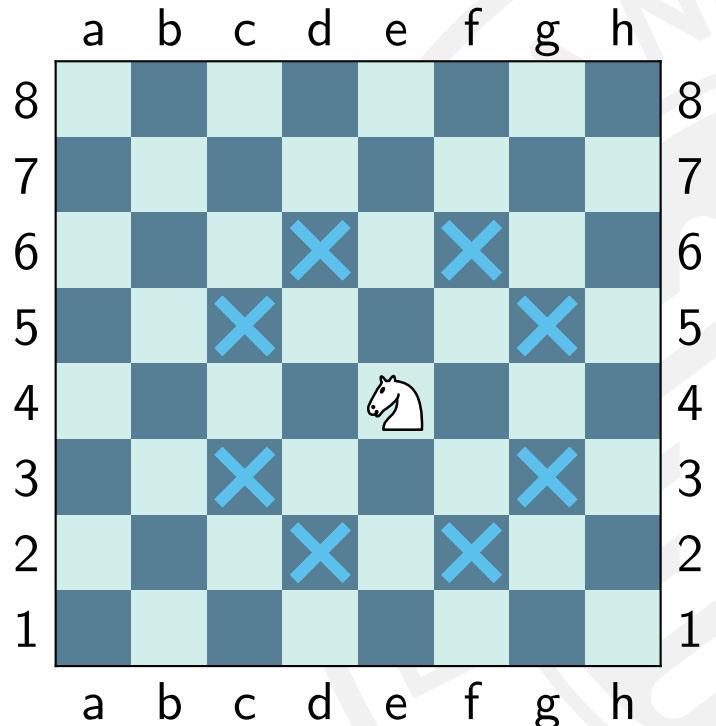


图 7    Knight



## 1.2 Chess 基本走法

- **Castling** 王车易位
- **Promotion** 升变
- **En passant** 过路兵

## 1.3 Material Points

Piece	♟	♞	♝	♜	♛	♚
Pawn	1	3	3	5	9	$\infty$
Material Points	1	3	3	5	9	$\infty$

表 1 Chess Standard Material Points System

Piece values exist because calculating to checkmate in most positions is beyond even top computers. Thus, players aim primarily to create a material advantage, which is helpful to quantitatively **approximate the strength of an army of pieces**.<sup>1</sup>

<sup>1</sup>Chess piece relative value: [https://en.wikipedia.org/wiki/Chess\\_piece\\_relative\\_value](https://en.wikipedia.org/wiki/Chess_piece_relative_value)



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## 2. 参考资源

- (1) [lichess.org Open Database](#): 国际象棋开源对局数据库
- (2) [Disservin/chess-library](#): c++ 棋谱解析库
- (3) [nlohmann/json](#): c++ JSON 数据解析库
- (4) [Chess piece relative value Wikipedia](#)

Thanks for Listening!

