Chess Game Visualization

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1 Interpretation

We display 16 line charts, each line chart tracks the moves at positions for a pair of analogous pieces. For example, the 'a pawn' line chart shows how the pair of pawns starting on the 'a' column, i.e a2 and a7 chess squares move throughout the game. The color channel is chosen to indicate the category of the pawn (Black/White).

The x-axis is marked from 0 to N where N is the number of moves. The initial position 0 for every piece is its starting square.
The y-axis is marked according to the 64 square-positions of the chess board from $a1, a2...a8, b1..$ all the way to $...h7, h8$

Note: Move here means a single round of move which involves a turn for both the white and the black pieces

If a line discontinues after a certain move that indicates that the piece in question has been captured.
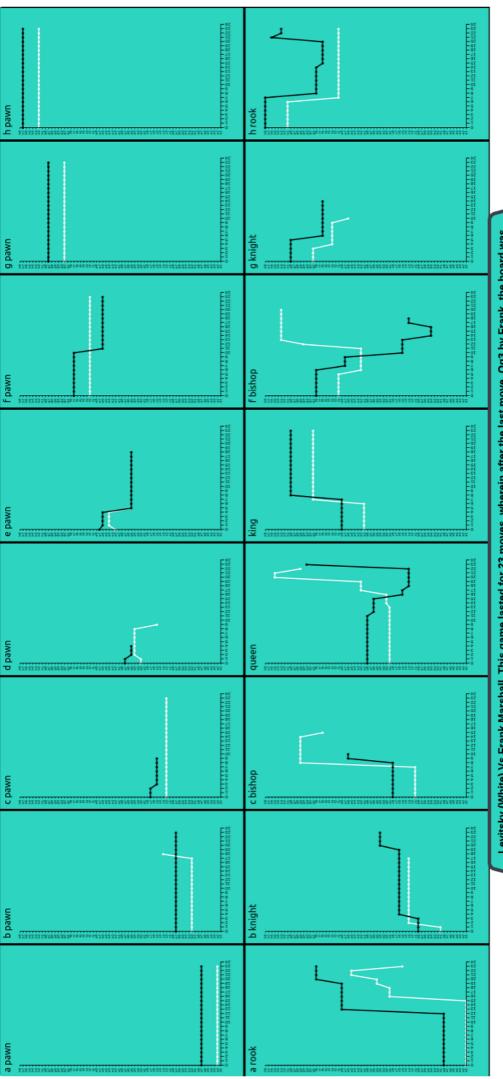
2 Applications

We chose to show three games for varying levels of interpretation, the first game, the famous "Gold Coin" game is a complex game of 23 moves, which may not be easy to interpret by novice chess players whereas the last game of Magnus Carlsen should be relatively easy to interpret for all types of visualizers.

Apart from that this visualization also describes how the movement of pairs of pieces on the board throughout the game. Chess Players of various ranks can be asked on what moves were good or blunders.
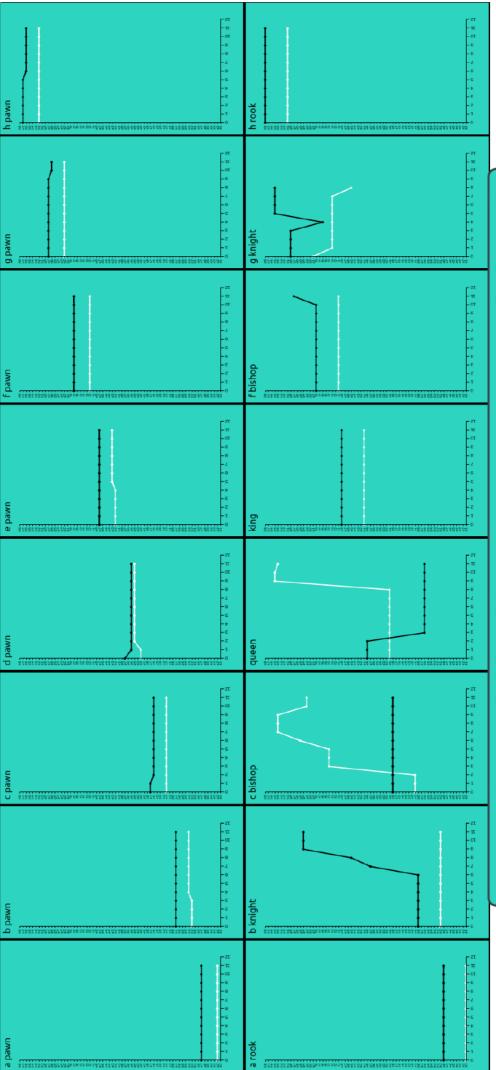Given a particular move, which piece to move would have been a better choice is also a good question which can be raised.
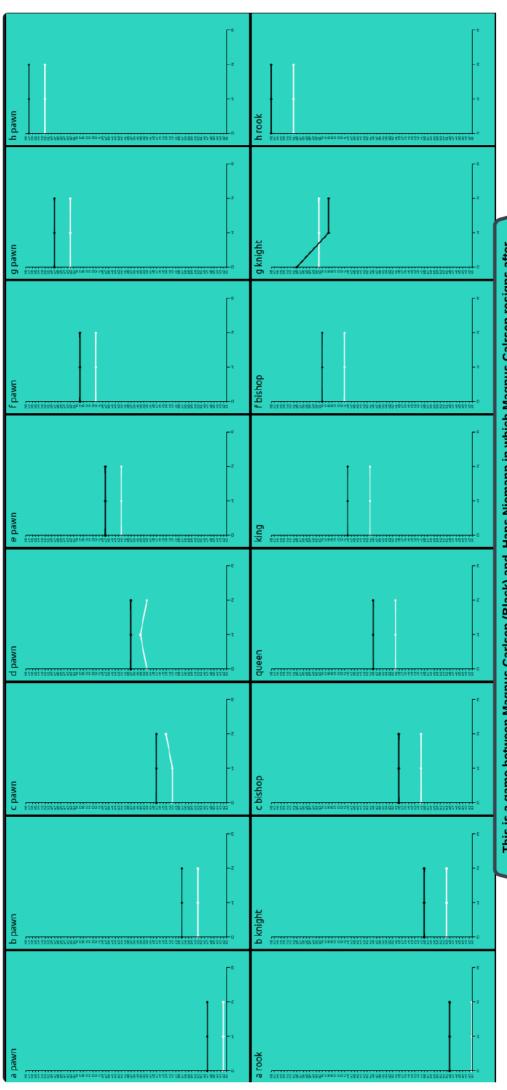
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Levitsky (White) Vs Frank Marshall. This game lasted for 23 moves, wherein after the last move, Qg3 by Frank, the board was showered with gold coins. The visualization shows how each pair of peice moved throughout the game. This visualization could be a brainteaser for professional chess players where we could ask them which move were mistakes by Levitsky

Evgeny Bareev vs Hikaru Nakamura (Black). The visualizaiton showcases a popular Queen Pawn Game opening by Hikaru (First move of black is the dpawn). The game only lasted for 11 moves but each move but each move carried alot of depth behind it. Bareev resigns after Hikarus f-Bishop to g7 as his position was falling apart and there was nothing he could do to save it. The interpretation of this game requires hands on chess experience.

This is a game between Magnus Carlsen (Black) and Hans Niemann in which Magnus Calrsen resigns after 2 moves showing his firm stance to not face against Hans, whom he had accused of unfair play in a game prior to this. The interpretation of visualization on how the game developed is easiest for this game.