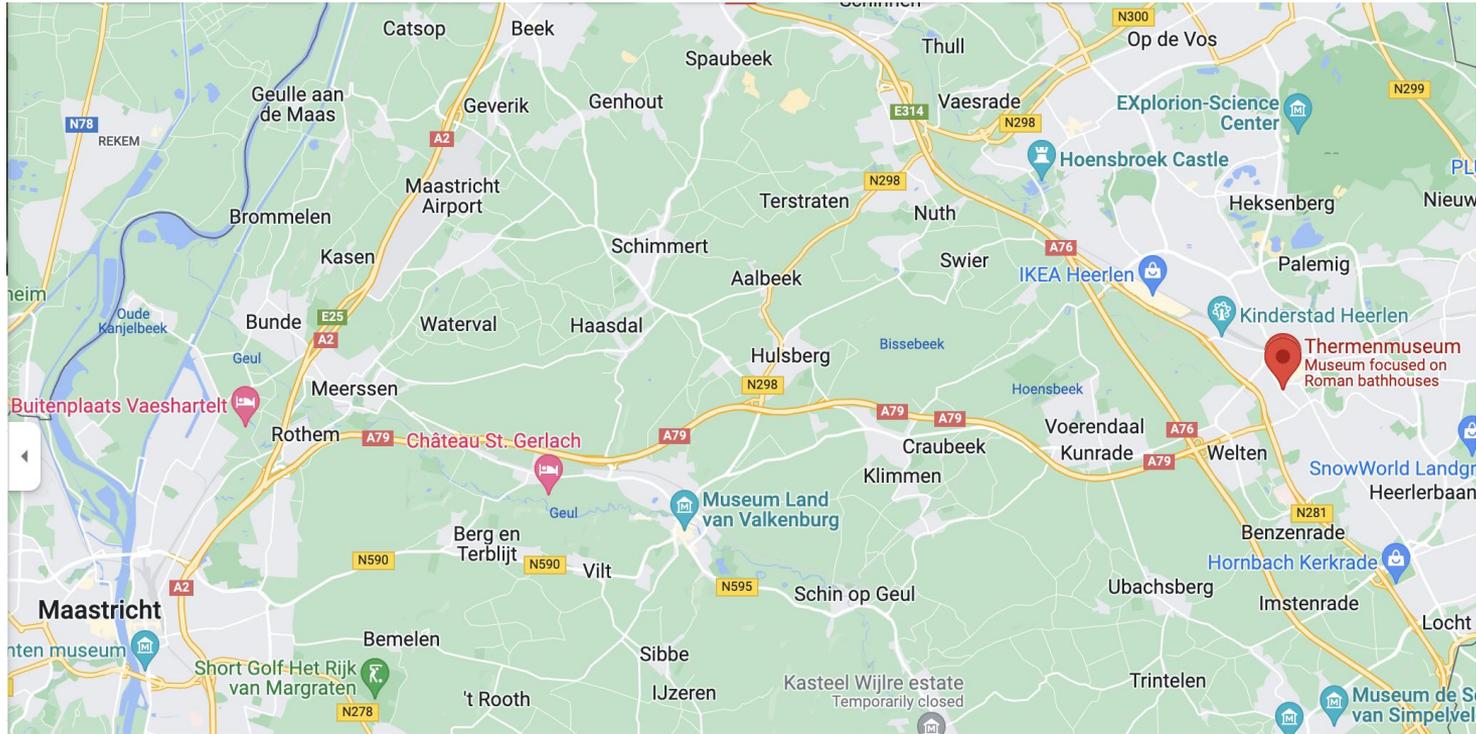


The Oldest Board Game in the Netherlands?

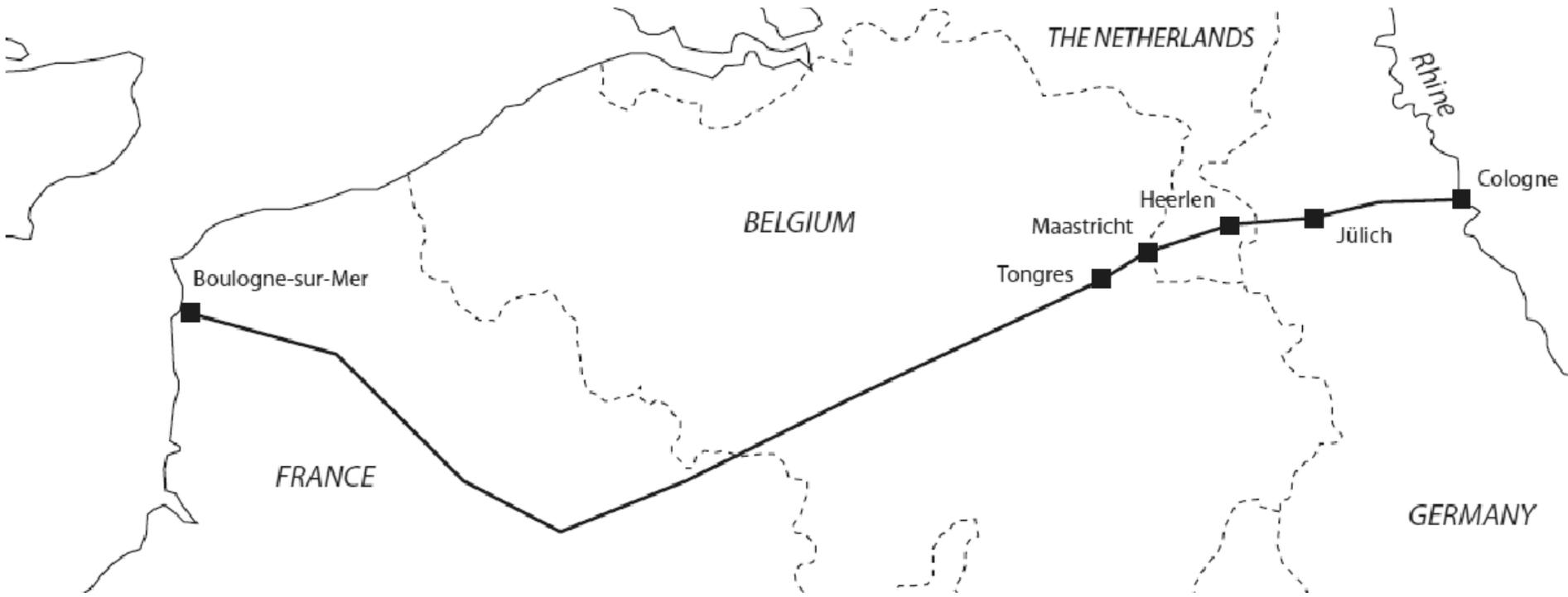
Walter Crist
Game AI Applications for Historical
Games Research
April 13, 2022

Thermenmuseum



Coriovallum





Object 4433



The object

- 21.2 x 14.5 x 7.1 cm
- Made of limestone (from Northern France)
- Roughly but purposefully made
- Unknown provenience; brought to museum at some point in the past
- Lines outlined in pencil
- In the museum since at least the 1960s
- Probably late Roman (4th century CE?)

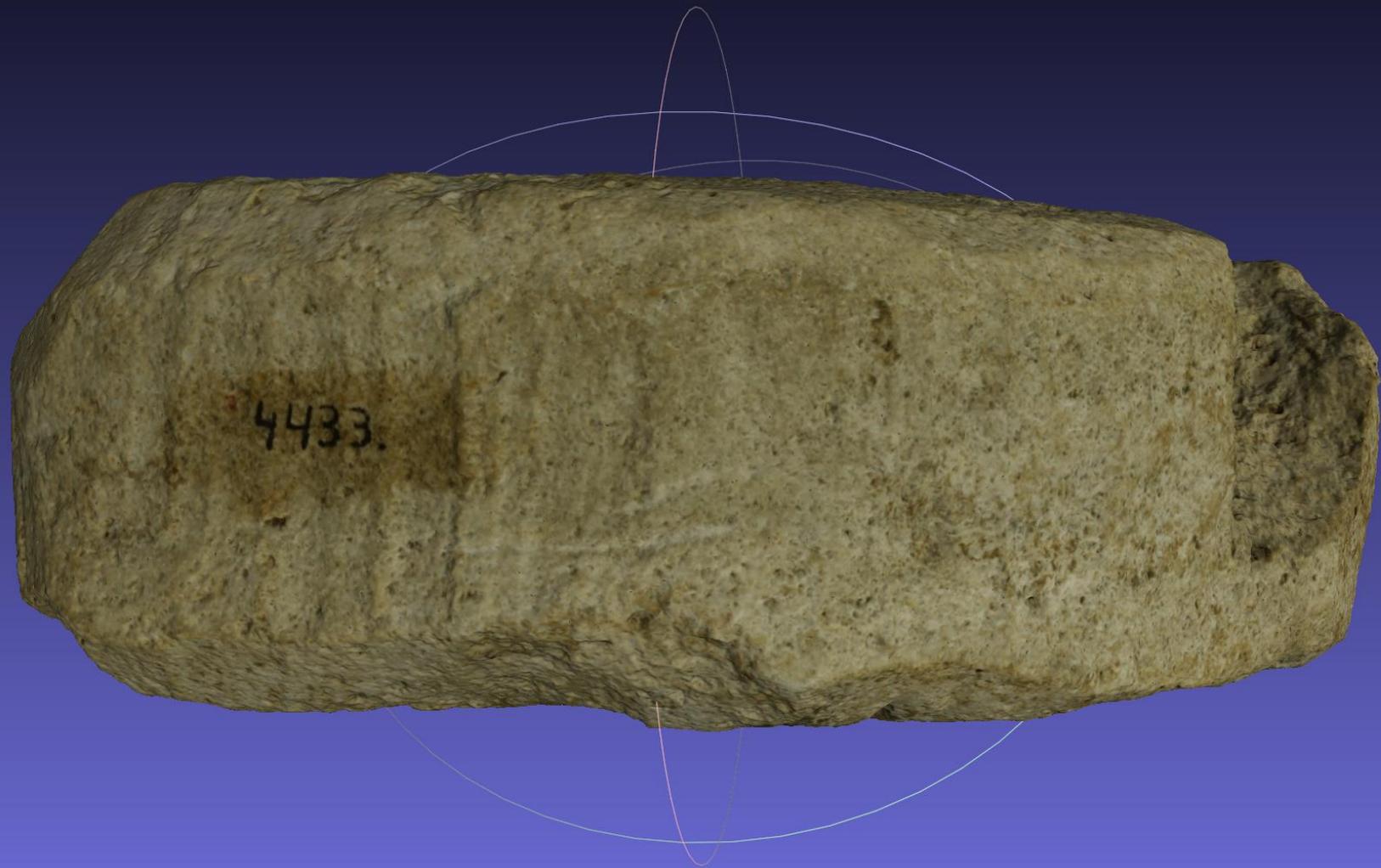


Cleaned object

- Roman game pieces also from Coriovallum
- Photogrammetry



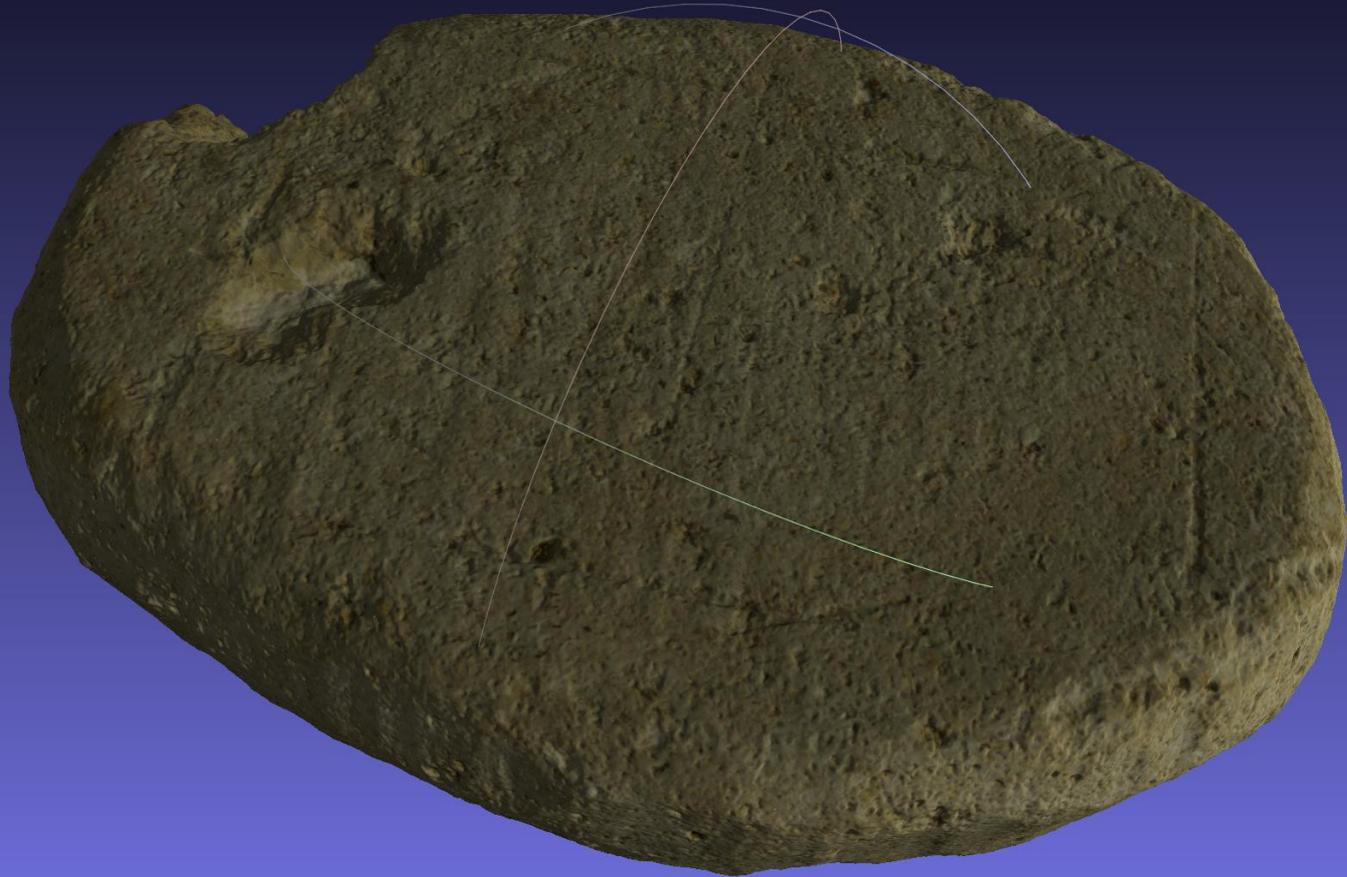




4433.







Use-wear analysis

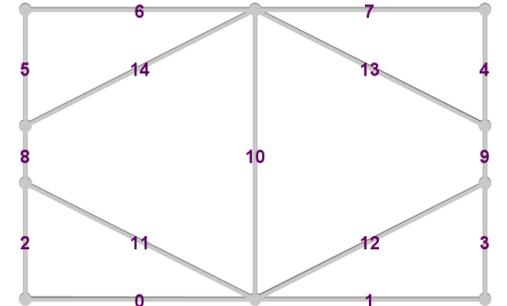
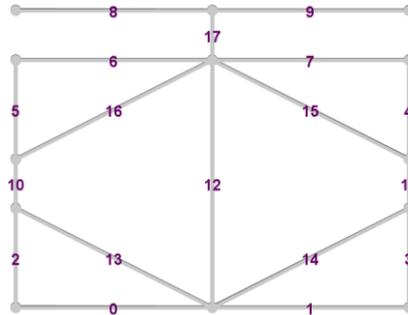
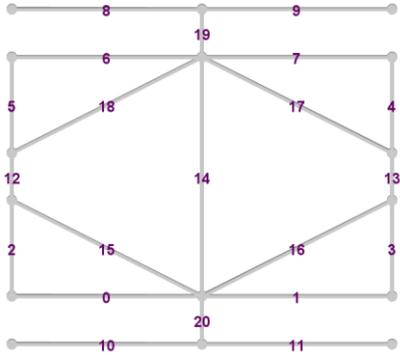
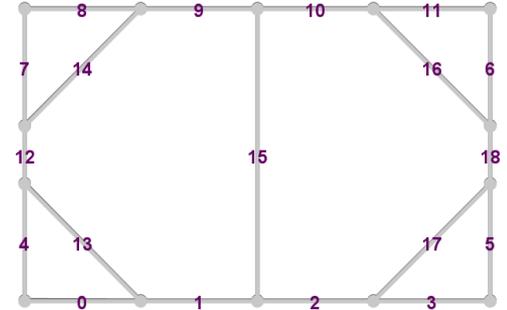
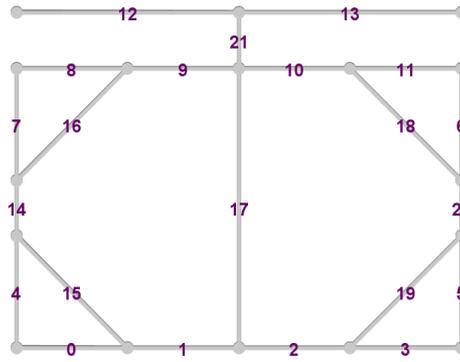
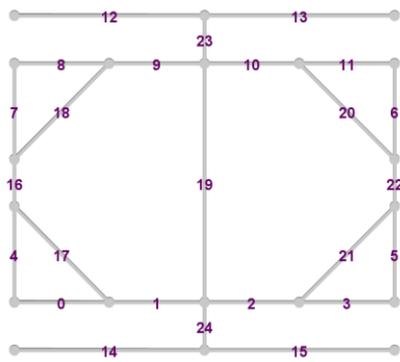
- Examination of damage to surface caused by human action
- Particularly useful for stone objects
- Abrasion
 - Smoothing of surface



Implementation in Ludii

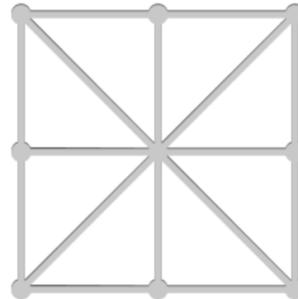
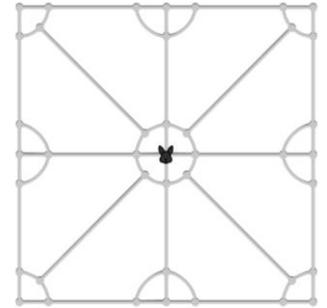
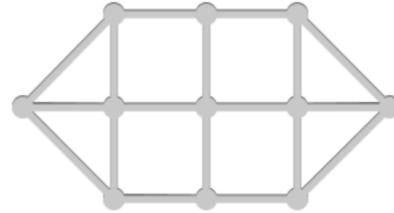
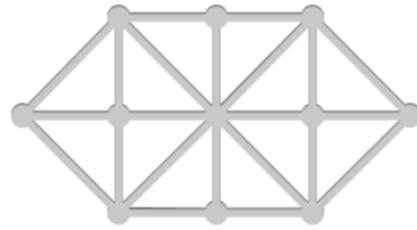
- What is the board?
- What rules to apply?





Candidate Rulesets

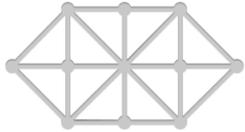
- Asymmetrical blockade games
- Alignment games?
- Played in Europe
- On similarly small boards



Haretavl

Haretavl (*Harespil*)

DLP Game



1 Player 1  x3

2 Player 2 (Ludi) 😊 



Period [Modern](#)

Region [Northern Europe](#), [Western Europe](#)

Category [Board](#), [Hunt](#)

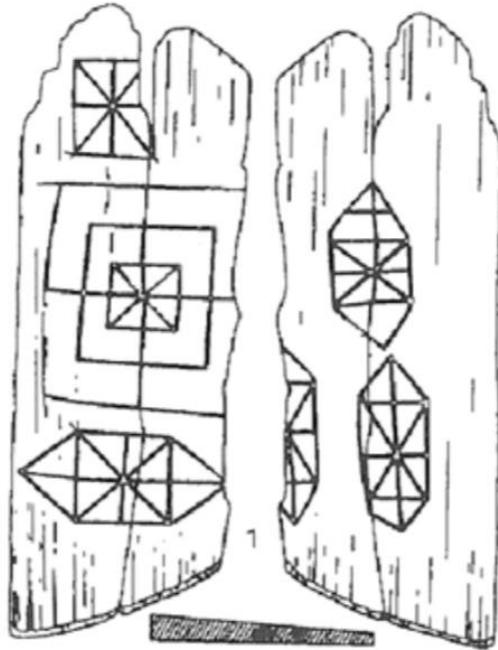
Description

Haretavl is a blockade game from Scandinavia. It is documented from the nineteenth century, but older boards which have the same design are known from the Middle Ages, and thus the game may be much older.

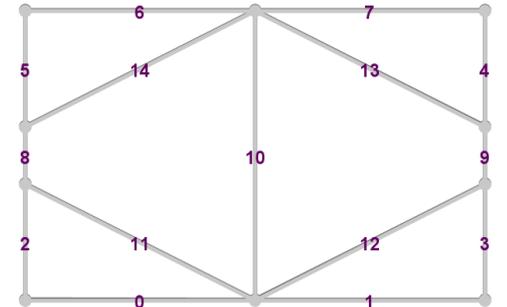
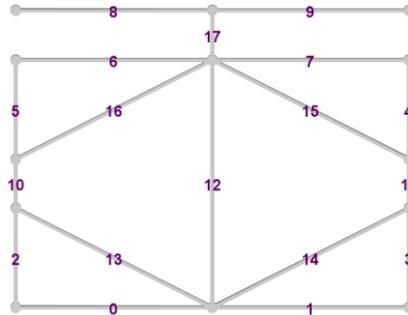
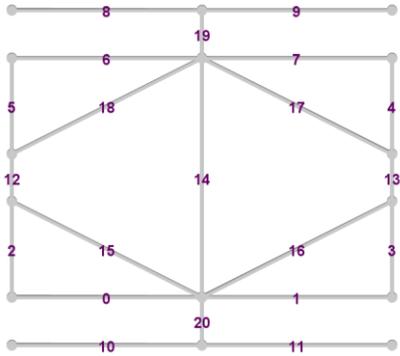
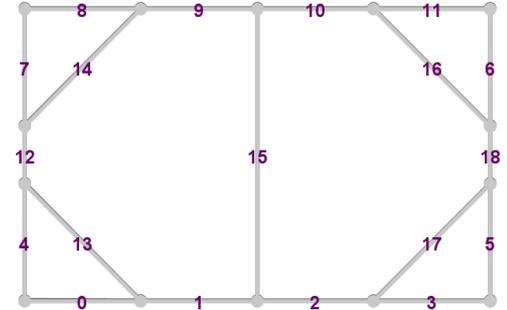
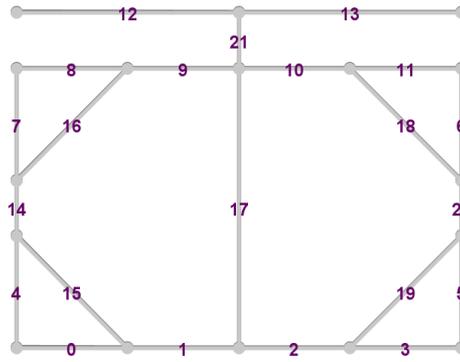
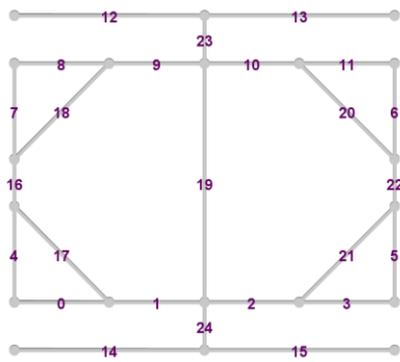
Rules

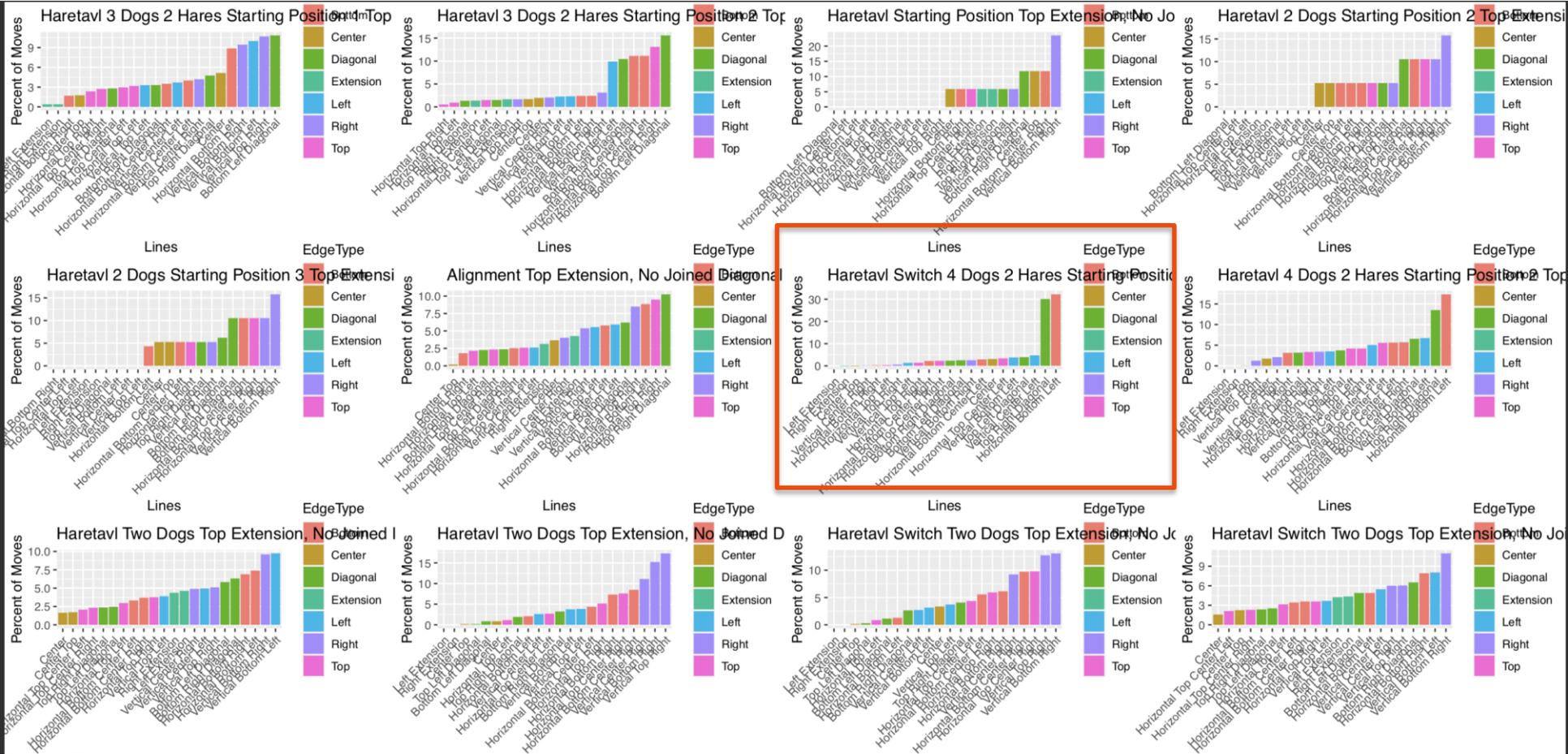
Square board, divided into eight equal triangles, with the central horizontal line extended past the square on either side and lines connecting the end point to the two nearby corners of the square. One player plays as the hare, the other player as three hounds. Players take turns placing one of their pieces on the board. When a player has placed all their pieces, they move to an adjacent empty spot. When the hounds block the hare from being able to move, the hounds win.

Michaelsen 2014.



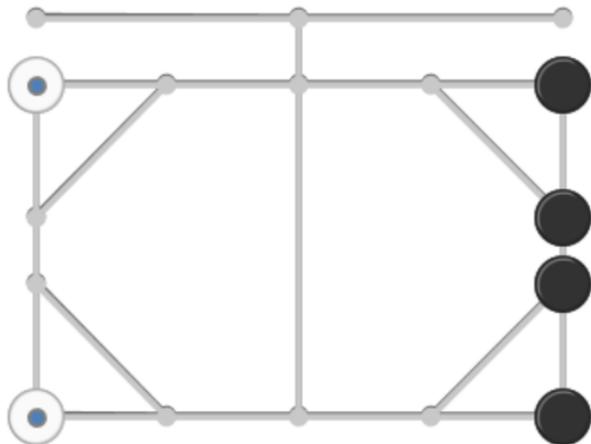
Riga, Latvia, c. 1300 CE





Thermenmuseum

Ruleset: Haretavl Four Dogs Two Hares Switch Starting Position 2 - Top Extension No Joined Diagonal



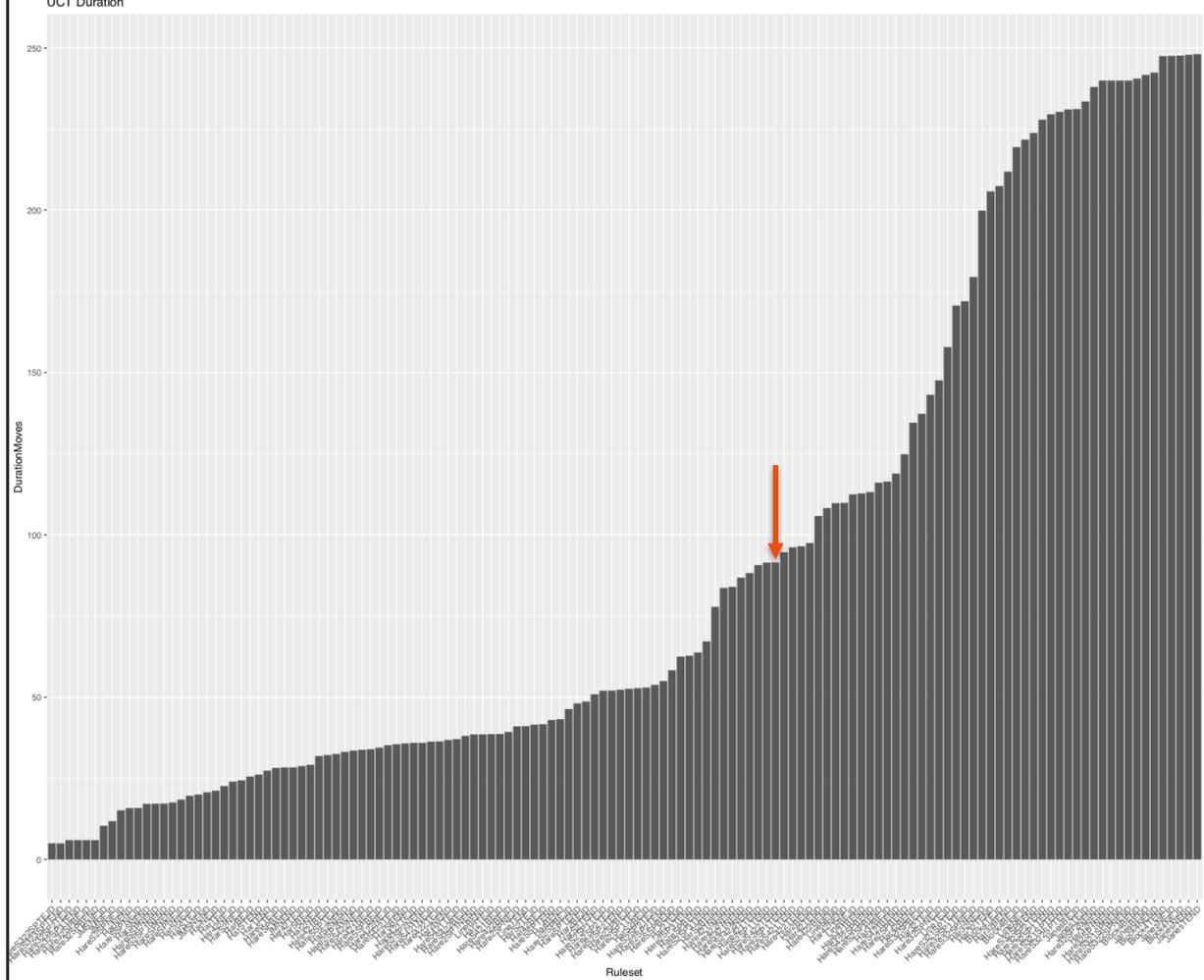
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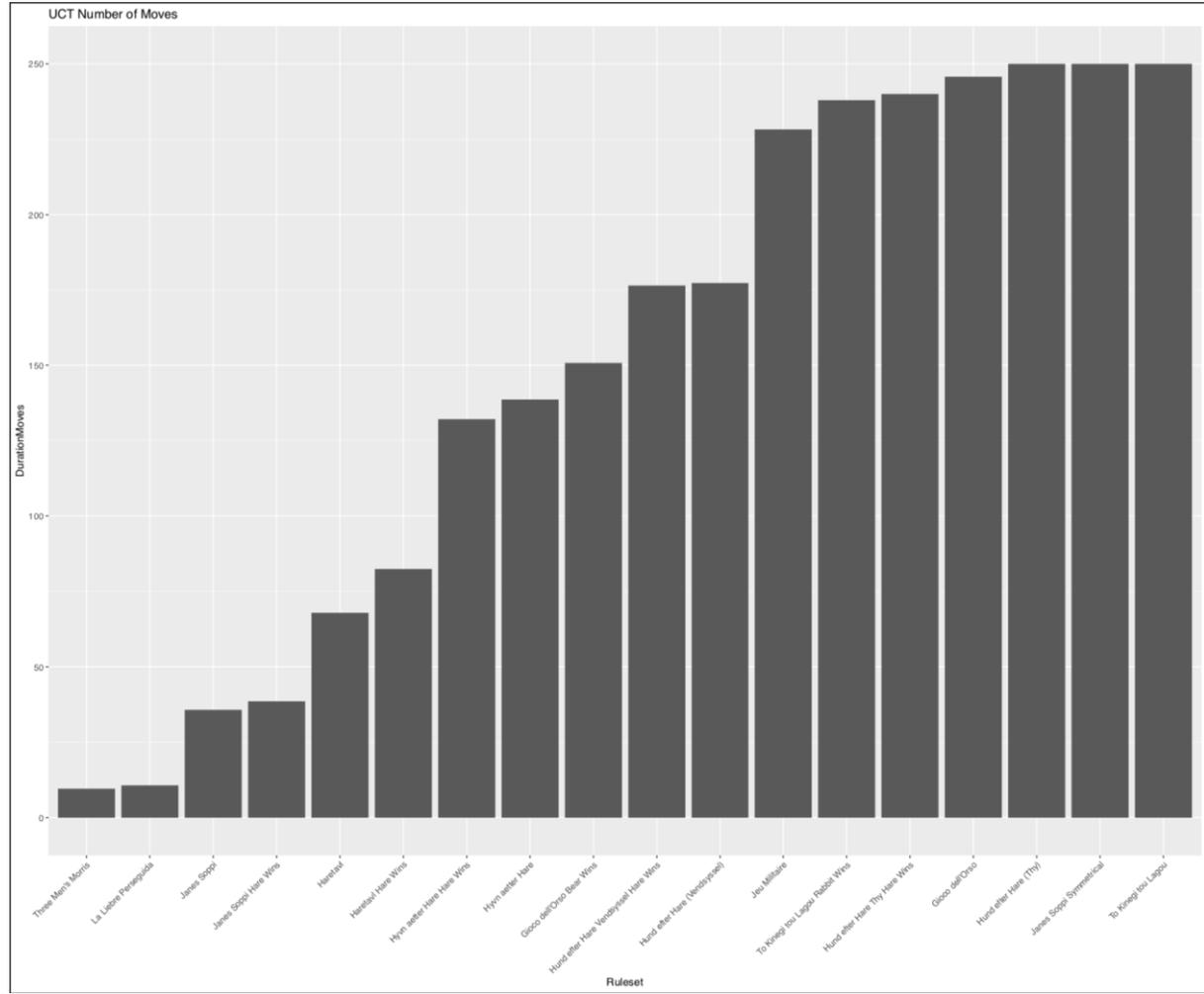
Player 1

2

Player 2 (Ludii) 😊

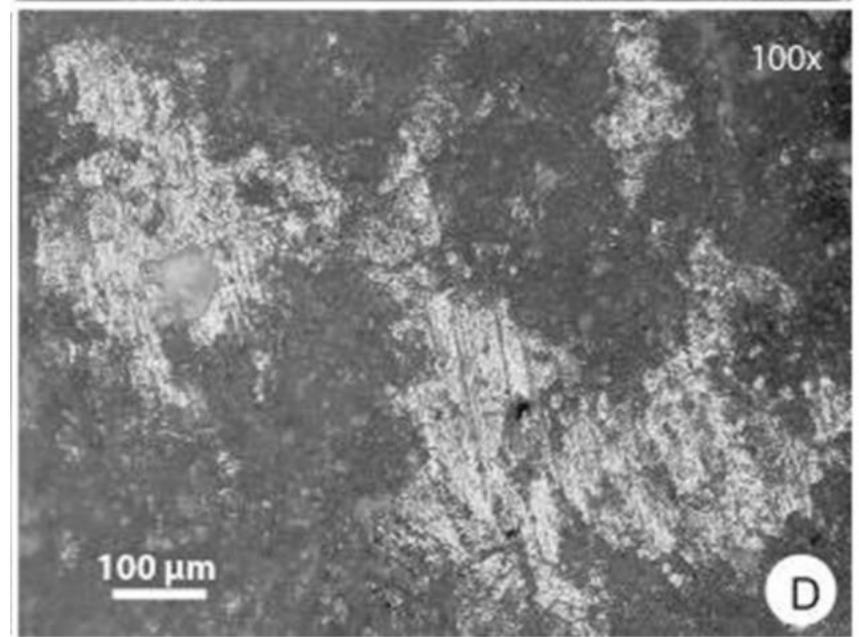






Preliminary Conclusions/Future Work

- Starting position produces disparity in edge use
- Explore behavior metrics more thoroughly
- Microscopic use-wear analysis



Limestone-on-limestone abrasion

Thank you!

- Karen Jeneson at the Thermenmuseum
- Niels Stoffel and Luke van Goor at Restaura