

Nine Men's Morris

◦ last updated: 2024-04-23

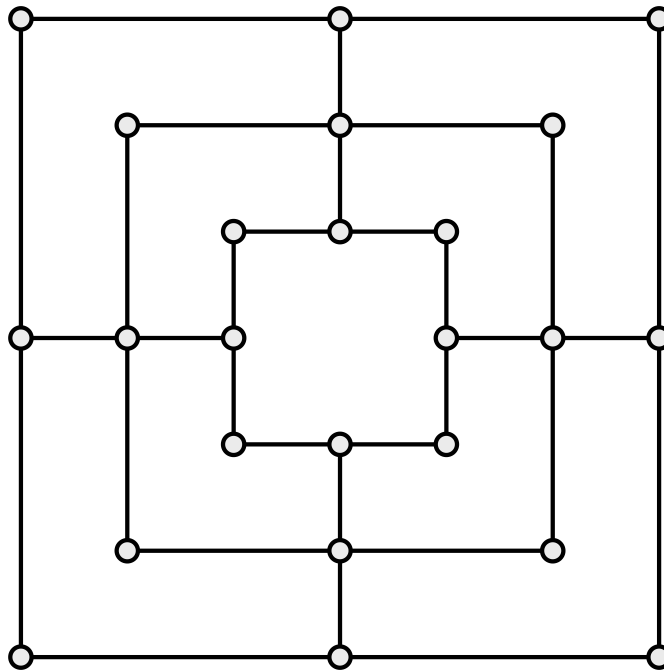
Nine Men's Morris is an ancient mill game dating at least from Roman times. It is the most prominent of all the mill games, played all around the world, but particularly in central European countries. Other variations of the game — such as Shax or Morabaraba — are also played in several African countries.

In addition to being a game, the board itself was used as some kind of talisman or symbol; *The Merels Board Enigma* (p. 330) collects nearly a thousand examples of inscribed mill boards from around the world. Many of these are in vertical positions on walls where they could not possibly have been used for games, and their purpose is at the moment not well understood.

— Play —



A large-format Nine Men's Morris game being played at a festival in Hungary.



Nine Men's Morris is played on the large mill board.

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The game (as most mill games) is split into two phases. During the first (placement) phase, the players take turns placing a single piece at a time onto one of the vacant points on the board. Once all the pieces have been placed, the movement phase begins. In this part of the game, players take turns moving a single piece along a line to another vacant point. Once a player is reduced to three pieces, their pieces can 'fly' and move to any empty point on the board.

Throughout the game, each time a player forms a mill they remove any piece of their opponent's that is not part of a mill. If all their opponent's pieces are in mills, no piece may be removed.

During the movement phase, it is possible to form two mills simultaneously. In this case the player may remove two of the opponent's pieces from the board.

A player loses the game when they are reduced to fewer than three pieces, or if they are unable to make a valid move on their turn.

When played on a board with diagonals, mills are not usually permitted to be made on the diagonal lines. However, this varies according to location and time.

— History —



A Nine Men's Morris board of unknown age in the Roman Agora, Athens.

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A board carved on the capital of the Athenian trophy (or *tropaion*, *τρόπαιον*) from Marathon, which was constructed some time after 490 BCE but destroyed at a later date. An image of the board carved on the decapitated capital *in situ* can be seen in Vanderpool (1966, plate 32).

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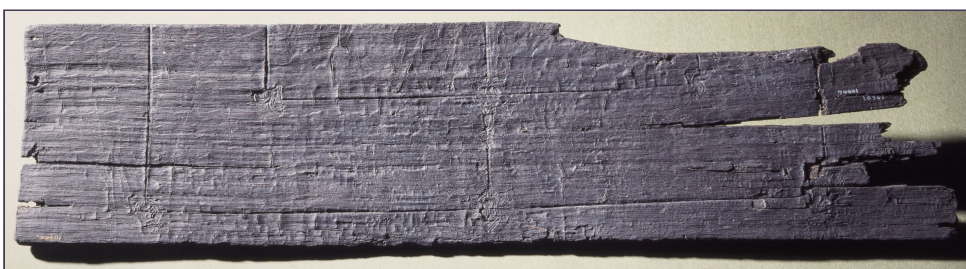
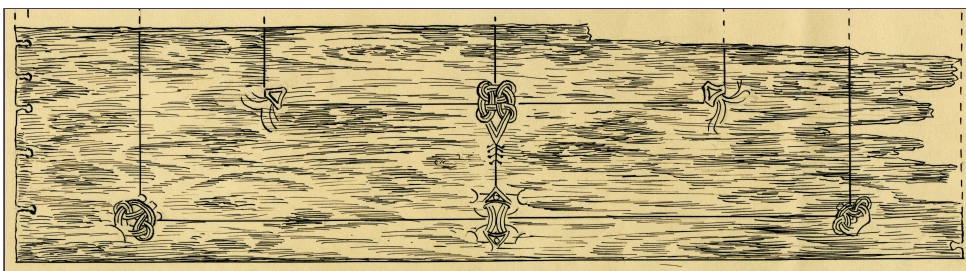
The game dates from at least the late Roman Empire or Byzantine period, and at the moment we do not have solid evidence for an earlier date. ^{C[p. 3]}¹ Earlier dates have often

¹ Sebbane (2000, p. 227) describes a board found in a Byzantine villa in חורבת עקב (Horvat 'Aqav), dated 400–600 CE, while a cache of gaming boards found in a Roman fort at Abu Sha'ar that was abandoned in the late 4th century contained no mills boards. ^E

been proposed based upon the existence of boards carved on ancient monuments such as the Ramesseum ^{F[p. 144]} and the Mortuary Temple of Seti I at Qurna, ^{G[p. 644]} but these are not able to be dated definitively—the monument only provides an *earliest possible* date.²

² This is also discussed at length in Schädler (2021).

The game became popular throughout Europe: a double-sided game board with a Nine Men's Morris layout on one side was found as part of the Gokstad Viking ship burial (c. 900) which was discovered in Norway. ^{I[pp. 44, 99]} Another boat burial (the “Årby boat”) from around the same time also included a Morris game. ^{J[p. 441]}



Sketch and photograph of the board from the Gokstad ship.

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One of the earliest written references to the game is in the 10th century *Kitāb al-Aghānī* (“كتاب الأغاني”, ‘book of songs’), a large collection of poems and stories assembled by ‘Abū l-Faraj al-Iṣfahānī (أبو الفرج الأصفهاني, 897–967). One story describes a club from the time of the poet al-Aḥwaṣ (الأحوص, 660–724), along with the board games it held for the use of its members. According to the book, they could play *shitrānj* (شطرنج, chess), *nard* (نرد), or—most importantly here—*qirq* (قرق, morris).^{K[p. 481]} The derivation of the name *qirq* (قِرْق) is uncertain,³ but it is apparently not originally an Arabic word.^{O[p. 37]}⁴

³ It may also be related to the Ge’ez word ቀርቅ ^{L[pp. 424–5]} (*qarqis*), referring to various games, ^{M[p. 443]} or the (Ottoman) Turkish قرق/*kirk* ‘forty (=many)’. ^{N[p. 989]}

⁴ The Imam ‘Abū al-Qāsim al-Rāfi‘ī al-Qazwīnī (أبو القاسم الرافي القزويني, 1160–1226) would later describe *qirq* as the “chess of the Maghrebis”. ^{K[p. 381]} Similarly, Shax is sometimes referred to as “Somatic chess”.

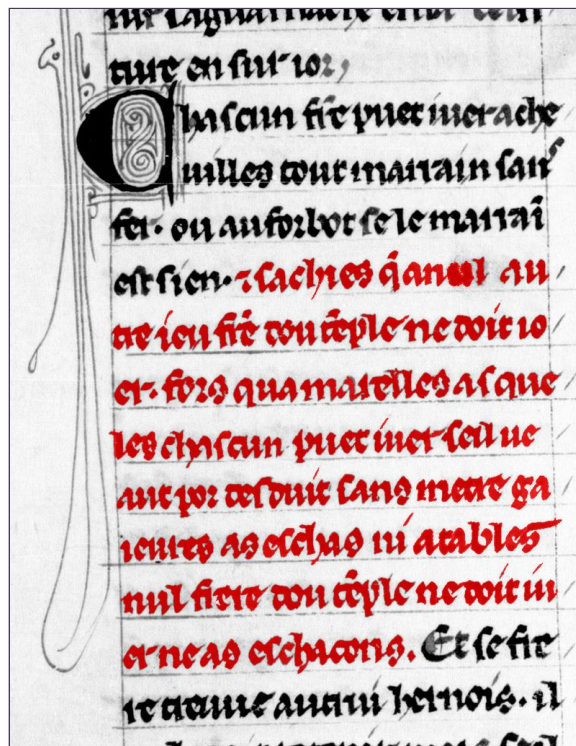
Later, Faīrūzābādī (of whom, more below) would identify *qirq* with *suddar* (سُدَّر), apparently derived from the Persian *se darre* (سه دره), meaning ‘three valleys’. ^{P[pp. 207–9]} However, in other dictionaries *suddar* is identified with other games such as *aṭ-ṭabanu* (الطَبْنُ), which is known as a different game today (modern name *aṭ-ṭāb* (الطاب)).^Q It is probable that in the past, names of games were more fluid, and often referred to families of games. Even in modern Arabic the name *‘idrīs* (ادريس) is used to refer to mill games, but also refers to loosely related games such as Quantik. With that said, a Persian origin for the game does seem likely, given the number of ways that *suddar* is rendered in Arabic dictionaries.⁵

⁵ Other versions of the name are given as سِه بَرَهُون (sih barahun), سِيدَرَه (sīdarahi), سِيدَرَه (sidrah), سِدْ مَزَه (sid mazh), or سِدْ مَرَاه (sid marah).^Q

From the Arabic-speaking world the game entered Spain, where *al-qirq* became *alquerque*, which has remained the Spanish name for this family of games until the present day.

In France the game was in the past called *marelles* (from which we get the English ‘merels’), probably deriving from a word meaning “small stone” or “token”.⁶

⁶ The *marelles* name currently refers to hopscotch, due to the stones tossed upon the diagram.



Text of the French Templar rule from an early 14th-century manuscript edition (with quoted passage highlighted).

In the early 12th century, the game was mentioned in the French Rule of the Templar order (probably written between 1139 and 1147 CE ^{R[p. 12]}), as the only board game allowed

to be played by Templar brothers. It is possible that the order picked up the game through their contact with the Arabic-speaking world:⁷

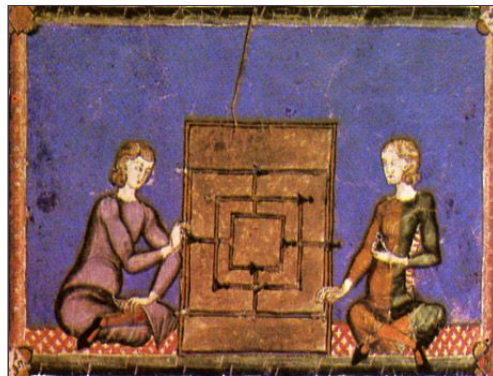
⁷ Indeed, a board has been found inscribed upon a stone in Château Pèrelin, a fortress constructed by the Templars in what is now Israel – although it could have been placed there any time since the fortress was built. ^{S[p. 60]}

Et sachiez que a nul autre jeu frere dou Temple ne doit joer, fors qu'a marelles as queles chascun puet juer se il veaut por desduit sans metre gajeures. As eschas ni a tables nul frere dou Temple ne doit juer, ne as eschaçons. ^{T[p. 185]}

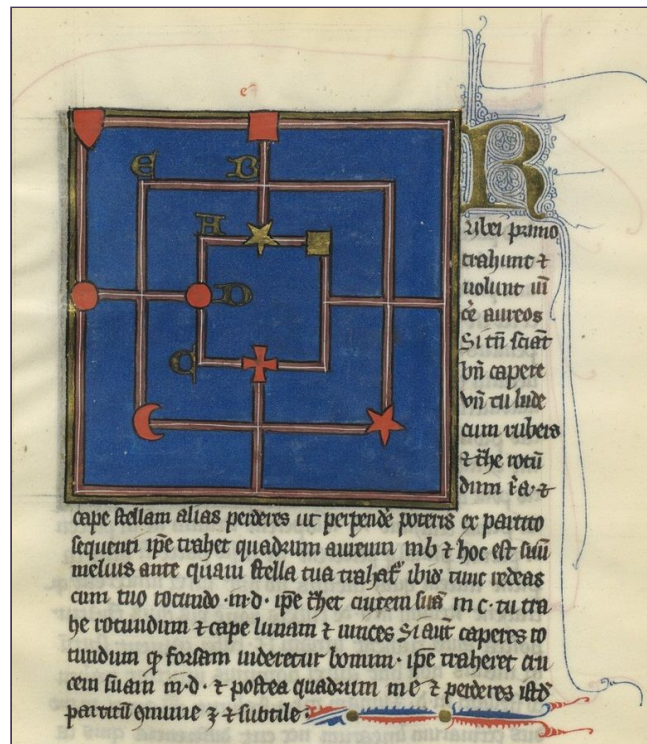
And let it be known that a brother of the Temple should play no other game except *marelles*, which each may play if he wishes, for pleasure without placing wagers. No brother should play chess, backgammon, or *eschaçons* [an unknown game]. ^{R[p. 90]}

It is unclear *why* mill games were permitted by the Templars, but, reading the rest of the passage (not quoted above), the intent of the Rule seems to be to prevent playing games for money – bets were allowed to be placed on games, but only with worthless items such as wooden tent pegs. Viewed in this light, perhaps mill games were considered less susceptible to gambling, and therefore permissible.

In 1283 it appeared in the Castilian king Alfonso X's *Libro de los Juegos* (*Book of Games*), where in addition to the standard game, rules for playing with dice are given (see below).

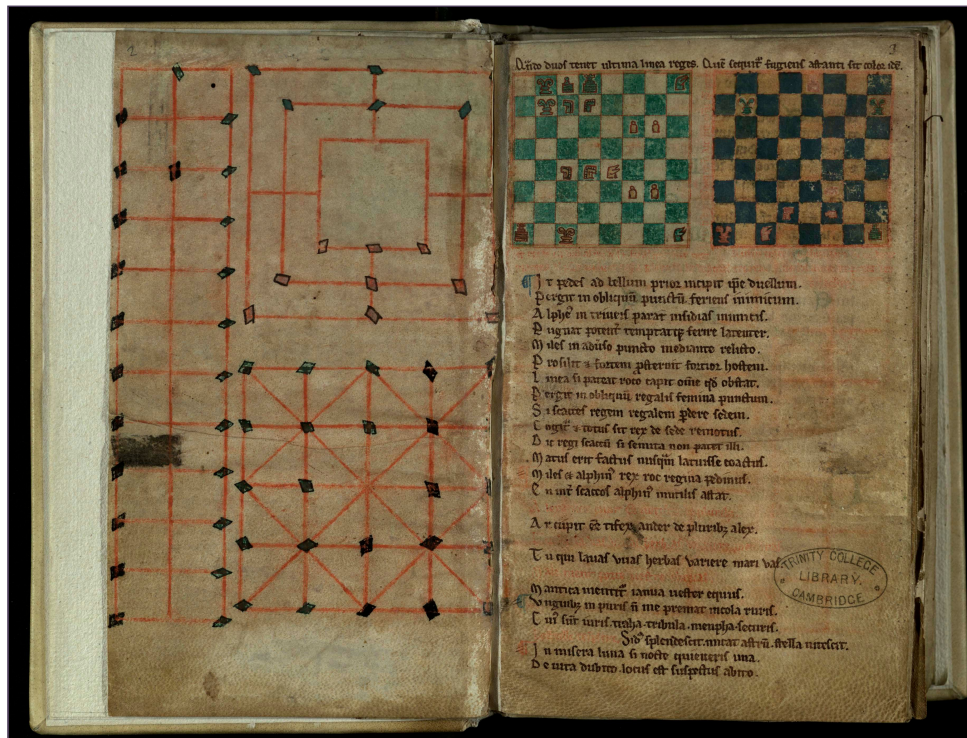


From Alfonso's *Book of Games*. ©



The first problem in one of the *Bonus Socius* manuscripts written in Picardy (MS Latin 10286). The different shapes of the pieces in the diagram are used to identify particular pieces in the accompanying text.

In the same century the *Bonus Socius* series of manuscripts contained problems for the game, alongside other problems for chess and various table games. ^{U[p. 619]} Chess historian H. J. R. Murray describes the problems as being of very high quality, and that in fact “they leave a more favourable impression of the ingenuity of the mediaeval composer than is the case with the problems of chess or tables.” ^{U[p. 703]}



A 13th-century English manuscript (MS O.2.45) from Cerne Abbey shows a Nine Men's Morris board alongside an Alquerque board and another unidentified board (possibly Daldøs).

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By examining depictions of the game in artwork, we can understand the attitude towards the game at the time the image was produced. In the manuscript image below (c. 1340), nobles of opposite sex face each other across a game board. Evidently the game was considered worthy of being played by the nobility, and suitable for men and women to play together:



A woman and a man playing Nine Men's Morris together, miniature from a copy of the *Romance of Alexander* (produced 1338–44).

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The previous scene is in stark contrast to this German woodcut by Hans Weiditz from *Trostspiegel in Glück und Unglück* (p. 24) — a version of Petrarch's *De remediis utriusque fortunae* published some 200 years later in 1572. In this image we can see Chess being played by nobles and Backgammon by ordinary men, but Nine Men's Morris is evidently only suitable to be played by monkeys:



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The board with diagonals seems to appear first in Arabic sources;^[p. 43] it is shown—as the only drawing—in the famous al-Qamūs al-Muḥīṭ dictionary (“القاموس المحيط”, ‘The Surrounding Ocean’) of Fairūzābādī (فیروزآبادی, 1329–1414), published at the start of the 15th century.^W

In China the game is mentioned by the Ming Dynasty author Xiè Zhàozhè (谢肇淛, 1567–1624 CE) in his *Five Assorted Offerings* (《五杂俎》),^X and game-boards (almost entirely of the ‘diagonals’ type) have been found in China, starting from boards dated to the 8–9th centuries in the Uighur Khaganate in what is now Mongolia, to the Balhae kingdom in the 9–10th centuries, and eventually spreading throughout the rest of China through the Liao/Song, then Jin and Yuan dynasties (10–14th centuries). It seems probable that the game reached China through the Silk Roads from the Middle East.^X



The entry for “القرق” in the Qamūs. The game is here identified with *suddar*.

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In later English history the game developed an association with rusticity, often mentioned as a game played by shepherds. In such guise it famously appears—albeit relocated in time and place to a fictional ancient Athens—in Shakespeare’s *A Midsummer Night’s Dream* (c. 1595), where, thanks to a feud between Titania and Oberon (queen and king of the fairies), the natural state of the countryside is upended, and:

The ox hath therefore stretch’d his yoke in vain,
The ploughman lost his sweat, and the green corn
Hath rotted ere his youth attain’d a beard.

The fold stands empty in the drowned field,
 And crows are fatted with the murrion flock;
The nine men's morris is filled up with mud,
 And the quaint mazes in the wanton green
 For lack of tread are undistinguishable.

The game can be seen in English history through its appearance in visitation records; one instance from the parish of Bitteswell records that in 1634 a certain Robert Lord the Younger was “admonished and dismissed” for “plaieing at nine men’s morrice in the Churchyard on Sundaie”. ^[p. 497]



A Nine Men's Morris board alongside what seems to be a Daldøs board, on a barrel-end from the wreck of the English warship 'Mary Rose' (1545).

© The Mary Rose Museum,
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Detail from the 16th-century tapestry *Suite des Nobles Pastorales*.

RMN-Grand Palais (musée du Louvre)/Jean Schormans ©

In colonial America, the game began to be played with twelve pieces (exclusively on the board with diagonals) and thus became the standard American form, known as Twelve Men's Morris.⁸

⁸ Rules for a game called *alquerque de doze*, sometimes translated as Twelve Men's Morris, are given in Alfonso X's *Book of Games*, but it describes a game of a different form.

Nomenclature

Other English names for the game have included:

- Blind Men's Morris (Leicestershire ^{Z[p. 130]})
- Bushels ^{P[p. 204]}
- Buttons (played on a slate with buttons in 1890s New Zealand ^{AA[p. 151]})
- Figmill (in Clarence, New York, USA) ^{AB} (This name derives from an American manufacturer of equipment, but originally might derive from the Swiss term «*Figgi und Müli*».)
- Morris (Cornwall ^{Z[p. 130]})
- Madell or Medal ^{AC[p. 333]}
- Marl (Wiltshire ^{Z[p. 130]})
- Marlin ^{P[p. 204]}
- Marrel('s) ^{AD[p. 416]} or Marrells ^{AC[p. 173]}
- Marnull ^{AC[p. 28]}
- Maurice or Morrice (Norfolk ^{Z[p. 130]})
- Mill (Devon ^{Z[p. 130]})
- Meg Merry-legs (Lincolnshire ^{Z[p. 130]})
- Merils (Essex ^{Z[p. 130]}), Merrills ^{AD[p. 414]}, or Merrills ^{AC[p. 173]}
- Merelles ^{AD[p. 415]} ^{AC[p. 90]} ^{Z[p. 130]} or Merell(s) ^{AD[p. 416]}
- Merls (in Cleveland, England) ^{AD[p. 419]}
- Merry Hole (Northamptonshire ^{Z[p. 130]})
- Merry Peg (Oxfordshire ^{Z[p. 130]})
- Morels ^{Z[p. 130]}
- Murrells (Cambridgeshire ^{Z[p. 130]})

- Ninepenny ^{Z[p. 130]} or Ninepenny Morris (in Gloucestershire – but played with 12 men) ^{AD[p. 416]}
- Nine Holes (North of England ^{Z[p. 130]})
- Nine Mens Morals ^{P[p. 204]}
- Nine Men’s Morrice (in Hampshire or Holderness ^{AD[p. 419]})
- Nine Men o’ Morris ^{AC[p. 89]}
- Nine Men’s Welcome ^{AE[p. 103]}
- Nine Peg O Merryal (North Lincolnshire ^{Z[p. 130]})
- Nine Pin/Penny Miracle ^{P[p. 204]} ^{Z[p. 130]}
- Nine Pin/Penny Moris ^{P[p. 204]}
- Nine Pin Merells ^{P[p. 204]}
- (Nine) Peg Morris (by John Clare, a rustic English poet) ^{AD[p. 416]}
- Nine Stone Morris ^{AC[p. 89]}
- Peg Meryll (played in Hargrave with 11 men, and ‘flying’ at 5 men ^{Z[p. 133]}) or Merrilpeg ^{AD[p. 416]}
- Puzzle-Pound ^{AC[p. 333]}
- Study, in the north of England ^{AF}

In other languages it has been called:

- Bangla: ন গুটি (*na guṭi*) ‘nine beads’, or পাইত(-পাইত) (*pāit(-pāit)*) ‘get(-ting)’ ^{AG}
- Chinese:
 - An old name is 馬城 (Mandarin: *mǎ chéng*) ‘horse walls’ ^{X[4]}
 - More modern names include: 成三棋 (Mandarin: *chéng sān qí*) ‘achieving three game’, ^{X[4]} or simply 三棋 (Mandarin: *sān qí*) ‘three game’ ^{AH[102]}
 - 連棋 (Mandarin: *lián qí*) ‘lining-up game’ ^{X[4]}
 - 連環馬棋 (Mandarin: *lián huán mǎ qí*) ‘interlinked horses’ ⁹ game’ ^{X[4]}

⁹ “Horse” is the standard term for a game piece.

- 捉三 (Cantonese: *zūk¹ saam¹*; Mandarin: *zhuō sān*) ‘catching three’ ^{AF}
- 直棋 (Mandarin: *zhí qí*) ‘line game’ ^{X[4]}
- 吉日格 *jí rì gé*, ^{X[4]} apparently derived from the Mongolian name for this class of game, жигрэг (*ᠵᠢᠭᠢᠷᠭᠡ*) ^{AI[39-40]}
- In Teochew it can be called 直直 (*dig⁸ dig⁸*) ‘straight line’, ^{AJ} and there was a Teochew proverb that “[Chinese] chess is for immortals; straight-line is for beggars” (仙棋乞食直 *siēng¹ gi⁵ keg⁴ ziah⁸ dig⁸*). ^{AJ10}

¹⁰ Much thanks to Brandon Seah for helping to figure this transliteration out.

- French: *le jeu du moulin* ‘the mill game’
- Greek: τὸ τριόδι ‘trio’ ^{AK[p. 295]}, or τριώδιον ‘triodium’. ^{P[p. 205]}
- German: names are based on the number nine, e.g. *Neunstein* ‘nine stone’, *Neunten Stein* ‘ninth stone’, *Neunemahl* ‘nine flour’; or on the mill, e.g. *Mühlespiel* ‘mill game’. Research by Jonas Richter indicates that the ‘nine’ names are the older form. ^{AL} In 1575 *Johann Fischart* included it in his version of *Gargantua* as *Fickmül*. ¹¹

¹¹ See the *Gargantua* article for more about Fischart’s list.

- Gujarati: નવ કાકરી (*nav kākarī*) ‘nine pieces’
- Hindi: नवकंकरी (*navakaṅkarī*), ^{AM} or नव गोटी (*nav gōṭī*), both meaning ‘nine pieces’
- Kannada: ನವಕಂಕರಿ (*navakaṅkari*) ‘nine pieces’, ಒಂಬತ್ತು ಕಾಯಿಯ ಆಟ (*ombattu kāyiya āṭa*) ‘game of nine nuts (=pieces)’, or generically ಸಾಲು (ಮಣಿ) ಆಟ (*sālu (maṇe) āṭa*) ‘row (board) game’
- Korean: 곤질 (고누) (*gonjil(-gonu)*) ¹²

¹² Given as *kon-tjil* in older books. ^{AH[p. 102]}

- Mono: *yakamaido* ‘square game’ ^{AN[p. 796]}
- Ottoman Turkish: طقوز طاش (*dokuz taş*) ‘nine stone’, or دقورجين (*dokurğın*) [something to do with nine?] ^{P[p. 206]}
- Swiss: *Nüünischtei*. ^{AO}
- Telugu: దాడి (*dāḍi*) ‘attack’
- Urdu: نو گولی (*nau guṭī*) ‘nine pieces’ ^{AP[p. 145]}



A *jeu du moulin* in the south-west wall of the Château du Moulin (Loir-et-Cher, France). Built between 1480–1501, this is a punny reference to the name of the original owner, Philippe du Moulin. There is another Three Men's Morris board on the eastern wall, and the nearby Château de Gien has a similar motif. ^{A[p. 103]}

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— Analysis —

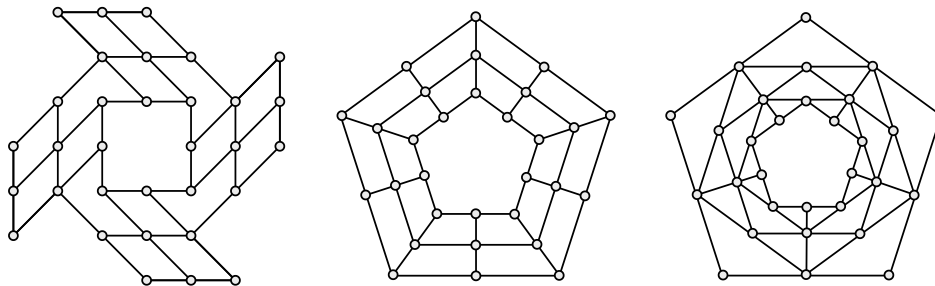
With perfect play, the game is a draw. ^{AQ AR} Interestingly, it is possible for the starting player to make a losing move as early as their third turn. ^{AQ[112]}

— Variants —

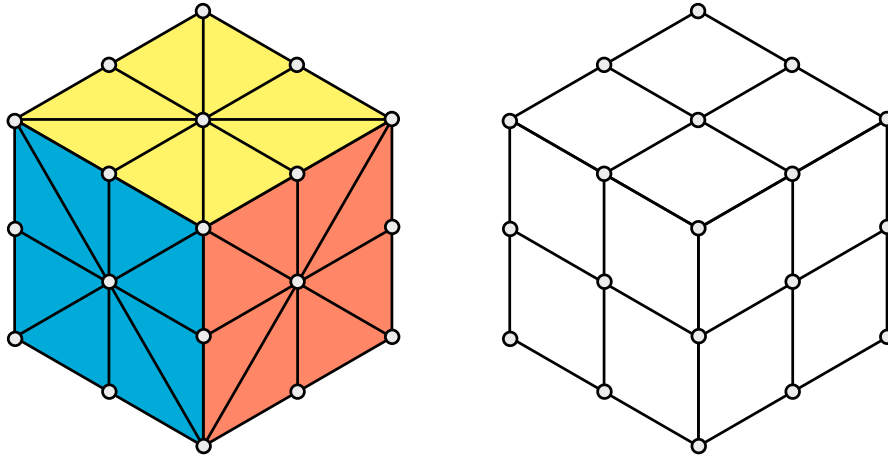
Alternate boards

The standard rules can be adapted to play on many different boards. As in standard Nine Men's Morris, mills must always be in a straight line and may not turn corners.

Babbage also apparently experimented with differently-shaped boards, in both triangular and pentagonal shapes, ^{AS} but I have not yet been able to see the manuscript in question.

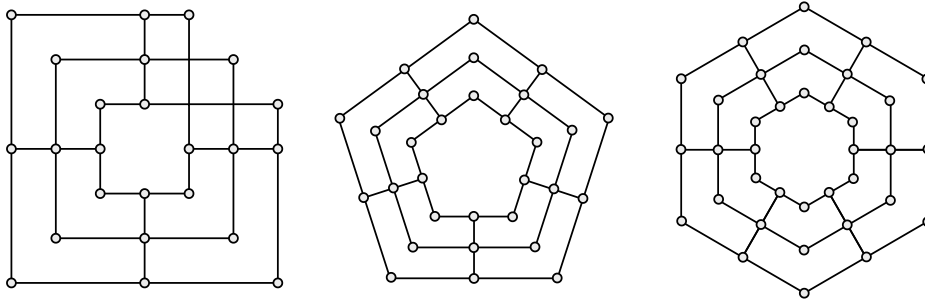


Alternate boards of German origin: ^{AT[p. 58]} a 'sun-mill' (played with 12 pieces each), and two boards constructed from nested pentagons. The first pentagonal board is played with 11 pieces each, the second is designed to be played by two or more players: for two players use 12 pieces; for three, 8; for four, 6; and for five, 5.



Two variations of a ‘cube’ board by David Parlett. ^{AV[p. 122]} On the coloured board, a mill may not cross between differently-coloured regions, and the middle point may only be taken to complete a mill or prevent completion of a mill on the next turn.

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The Möbius board (invented by Ingo Althöfer), another pentagonal board (without joined corners), and a hexagonal board.

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Twelve Men’s Morris

This is played with twelve pieces per player, on a board that has diagonals. ^{AV[p. 7]} ^{O[p. 48]} In all other respects, the game is the same.



A Twelve Men's Morris game being played.

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Nomenclature

In other countries or languages Twelve Men's Morris has been known as:

- Bengali: বারো গুটি (পাইত পাইত) (*bārō-guṭi (pāit-pāit)*) 'twelve bead [unsure]'. ^{AP[p. 145]}
- Sri Lanka (Sinhala): නෙරෙඬි or නෙරිඬි (*neremci*¹³ or *nerimci*), possibly named after a

¹³ Also transcribed as *Nerenchi* or *Niranchy*.

plant that has very thorny seeds. ^{AV[p. 16] AW[p. 34] G[p. 577]}

- Urdu: بارہ گولی (*bārā guṭī*) 'twelve pieces'.





With Dice



A game being played with dice, from Alfonso X's *Book of Games*. ©

Alfonso X's book of games describes a variant played with dice. ^{AX} While it is unclear from the manuscript what the exact rules are, Ulrich Schädler offers the following interpretation: ^{AY14}

¹⁴ This interpretation disagrees with previous interpretations given in *A History of Board-Games Other Than Chess* and *Board and Table Games from Many Civilizations*; see the article for full details.

1. During the placement phase, no mills may be made.
2. During the movement phase, each player rolls three dice before moving a piece. If they roll any of the special rolls , , , or , they may ‘fly’ a piece from anywhere on the board to complete a mill (or two mills). For any other result, the player moves as normal.

Lasker Morris

This variant was developed by Emanuel Lasker, who was World Chess Champion from 1894 to 1921. It unifies the two phases of the game into one.

Play is as in the standard game, except that each player has 10 pieces instead of 9, and on a player’s turn they may *either* place a new piece or move a piece that is already on the board.

With perfect play the game is a draw. ^{BA AR}

— See also —

Other general references include *The Oxford History of Board Games, Math Games & Activities from Around the World* (p. 12), *Board and Table Games from Many Civilizations* (vol. 1, p. 93), *A History of Board-Games Other Than Chess* (§3.5.4, p. 43), Goddard (1901), *Notes and Queries* (pp. 28, 89–90, 173, 333), and *Played at the Pub* (p. 150).

— References —

- A. Uberti, Marisa (2012). *The Merels Board Enigma*. Marisa Uberti. ISBN: 978-88-6755-413-3.
- B. Vanderpool, Eugene (1966). ‘A Monument to the Battle of Marathon’. *Hesperia: The Journal of the American School of Classical Studies at Athens* vol. 35 (2): pages 93–106.
- C. Schädler, Ulrich (2013). ‘Games, Greek and Roman’. In *Encyclopedia of Ancient History*. Wiley Blackwell: Hoboken, NJ, USA.
- D. Sebbane, Michael (2000). ‘Two Game Boards’. Pages 226–231 in *Ramat Hanadiv Excavations*. The Israel Exploration Society: Jerusalem, Israel.
- E. Mulvin, Lynda and Steven E. Sidebotham (2004). ‘Roman Game Boards from Abu Sha’ar (Red Sea Coast, Egypt)’. *Antiquity* vol. 78 (301), September 2004.
- F. Crist, Walter, Anne-Elizabeth Dunn-Vaturi, and Alex de Voogt (2016). *Ancient Egyptians at Play*. Bloomsbury Academic: London, UK. ISBN: 978-1-4742-2119-1.
- G. Parker, Henry (1909). *Ancient Ceylon*. Luzac & Co.: London, UK.
- H. Schädler, Ulrich (2021). ‘Some misconceptions about Ancient Roman Games’. *Board Game Studies* vol. 15 (1), Tuesday, 27th April 2021: pages 79–97. De Gruyter Open.
- I. Nicolaysen, N. (1882). *The Viking-Ship from Gokstad*. Alb. Cammermeyer: Oslo, Norway.
- J. Hall, Mark A. (2016). ‘Board Games in Boat Burials: Play in the Performance of Migration and Viking Age Mortuary Practice’. *European Journal of Archaeology* vol. 19 (3): pages 439–455.
- K. Rosenthal, Franz (2015, originally published 1975). ‘Gambling in Islam’. Pages 338–516 in *Man versus Society in Medieval Islam*, edited by Dimitri Gutas; Brill Classics in Islam volume 7. Brill: Leiden, The Netherlands. ISBN: 978-90-04-27089-3.

- L. Dillmann, Augusti [Christian Friedrich August Dillmann] (1862). *Lexicon Linguae Aethiopiae* volume 1: ‘U: — ኀሀረ:’. T. O. Weigel: Leipzig, Germany.
- M. Leslau, Wolf (1987). *Comparative Dictionary of Ge‘ez*. Otto Harrassowitz: Wiesbaden. ISBN: 3-447-02592-1.
- N. Mallouf, Nassif (1867). *Dictionnaire Turc-Français* volume 2: ‘ی-ع’. Maisonneuve et Cie: Paris.
- O. Murray, H. J. R. (1951). *A History of Board-Games Other Than Chess*. Oxford University Press: Oxford, England, UK. ISBN: 0-19-827401-7. i 1978 reprint available here
- P. Hyde, Thomas (1694). *De Ludis Orientalibus Libri Duo* [Two Books On Oriental Games] volume 2: ‘*Historia Nerdiludii* [History of the Nerd-game]’. E Theatro Sheldoniano: Oxford, UK.
- Q. Hawramani, Ikram (2021). ‘Arabic-English Lexicon by Edward William Lane (d. 1876): طين’ [archived]. *The Arabic Lexicon*.
- R. Upton-Ward, J. M. (1992). *The Rule of the Templars*. The Boydell Press: Woodbridge, Suffolk, UK. ISBN: 0-85115-315-1.
- S. Johns, C. N. (1936). ‘Excavations at Pilgrims’ Castle, ‘Atlit (1932-3); Stables at the South-West of the Suburb’. *The Quarterly of the Department of Antiquities in Palestine* vol. 5: pages 31-61.
- T. De Curzon, Henri (1886). *La Règle Du Temple*. Librairie Renouard: Paris, France.
- U. Murray, H. J. R. (2012, originally published 1913). *A History of Chess*. Skyhorse Publishing: New York, NY, USA. ISBN: 978-1-62087-062-4.
- V. Petrarca, Francesco (1572). *Trostspiegel in Glück und Unglück*. Frankfurt.
- W. القاموس المحيط [Muḥammad ibn Ya‘qūb al-Fīrūzābādī] (c. 1414). ”محمّد بن يعقوب فيروزآبادي“ [The Surrounding Ocean]. i Published 1350-1450?
- X. Wu, Song and Pauline Sebillaud (2020). ‘Research on the merels game in medieval China’. *Asian Archaeology* vol. 4 (1), Wednesday, 16th September 2020: pages 41-52.
- Y. Anonymous (1907). ‘The Metropolitan Visitation of Archdeacon Laud’. *Associated Architectural Societies Reports and Papers* vol. 29: pages 477-534. Edited by A. Percival Moore.
- Z. Baker, R. S. (1871). ‘Peg Meryll’. *Associated Architectural Societies’ Reports & Papers* vol. 11 (1): pages 127-134.
- AA. Sutton-Smith, Brian (1972). ‘The Games of New Zealand Children’. Pages 5-257 in *The Folk-Games of Children*. The American Folklore Society. ISBN: 0-292-72405-5.
- AB. Heist, William W. (1951). ‘Figmill’. *The Journal of American Folklore* vol. 64 (253): pages 303-306. American Folklore Society.
- AC. John C. Francis (publisher) (1898). *Notes and Queries* volume 12 (Series 8). John C. Francis: London, England, UK. i See page 333 for replies about Nine Men’s Morris (F. C. Birkbeck Terry, George E. Dartnell).
- AD. Gomme, Alice Bertha (1894). *The Traditional Games of England, Scotland, and Ireland* volume 1: ‘Traditional Games’. David Nutt: London, UK.
- AE. Finn, Timothy (1981). *Pub Games of England* (2nd edition). The Oleander Press: Cambridge, England, UK. ISBN: 0-900891-66-1.
- AF. Lister, Alfred (1870). ‘Tipcat, and Other Chinese Games’. *Notes and Queries on China and Japan* vol. 4: pages 125-128.
- AG. Tarafder, Shabbir Ahmmed (2018). ‘লৌকিক খেলা - পাইত | Folk game - pait’. *YouTube*.
- AH. Culin, Stewart (1895). *Korean Games with notes on the corresponding games of China and Japan*. University of Pennsylvania: Philadelphia, PA, USA.

- AI. Kabzińska-Stawarz, Iwona (1991). *Games of Mongolian Shepherds*; The Library of Polish Ethnography number 45. Institute of the History of Material Culture, Polish Academy of Sciences: Warsaw, Poland. ISBN: 83-85463-02-X.
- AJ. Newell, W. H. (1959). 'A Few Asiatic Board Games Other than Chess'. *Man* vol. 59, February 1959: pages 29-30.
- AK. Abbott, George Frederick (1903). *Macedonian Folklore*. Cambridge University Press: Cambridge, UK.
- AL. Richter, Jonas (2023). 'German Names for Merels'. *Board Game Studies* vol. 17 (1), Thursday, 19th October 2023: pages 167-204. De Gruyter Open.
- AM. Raghavan, Raamesh Gowri (2020). *Ancient Indian Board Games*. Centre for Extra-Mural Studies, INSTUCEN Trust: Mumbai.
- AN. Culin, Stewart (1907). *Games of the North American Indians*.
- AO. SRF Schweizer Radio und Fernsehen (publisher) (2014). 'Mundart-Lexikon'. SRF Schweizer Radio und Fernsehen.
- AP. Das-Gupta, Hem Chandra (1926). 'A Few Types of Sedentary Games prevalent in the Punjab'. *Journal of the Asiatic Society of Bengal* vol. 22: pages 143-148.
- AQ. Gasser, Ralph (1996). 'Solving Nine Men's Morris'. Pages 101-113 in *Games of No Chance*, edited by Richard J. Nowakowski; MSRI Publications volume 29. Cambridge University Press: Cambridge. ISBN: 978-0-521-64652-9.
- AR. Gévay, Gábor E. and Gábor Danner (2016). 'Calculating Ultrastrong and Extended Solutions for Nine Men's Morris, Morabaraba, and Lasker Morris'. *IEEE Transactions on Computational Intelligence and AI in Games* vol. 8 (3): pages 256-267.
- AS. Singmaster, David (2004). 'Sources in recreational mathematics' [archived].
- AT. Bücken, Hajo and Dirk Hanneforth (1990). *Klassische Spiele ganz neu*. Rowohlt Taschenbuch Verlag: Germany. ISBN: 978-3-499-18901-2.
- AU. Parlett, David (1999). *The Oxford History of Board Games*. Oxford University Press: Oxford, England, UK. ISBN: 978-0-19-212998-7.
- AV. Zaslavsky, Claudia (1998). *Math Games & Activities from Around the World*. Chicago Review Press: Chicago, IL, USA. ISBN: 1-55652-287-8.
- AW. Ludovici, Leopold (1873). 'The Sports and Games of the Singhalese'. *The Journal of the Ceylon Branch of the Royal Asiatic Society of Great Britain & Ireland* vol. 5 (18): pages 17-41. Ceylon Times Press: Colombo, Sri Lanka.
- AX. Alfonso X (publisher) (1283). *Libro de açedrex, dados e tablas*. Alfonso X: Toledo, Spain.
- AY. Schädler, Ulrich (2000). 'Medieval Nine-Men's Morris with Dice'. *Board Games Studies* vol. 3: pages 112-116. Research School CNWS: Leiden, Netherlands.
- AZ. Bell, R. C. (1969, originally published 1960). *Board and Table Games from Many Civilizations*. Dover Publications: New York, NY, USA. ISBN: 978-0-486-23855-5. i Two volumes republished as one.
- BA. Stahlhacke, Peter (2003). 'The Game of Lasker Morris'.
- BB. Goddard, A. R. (1901). 'Find of another Nine Men's Morris Stone: Comments of Mr. Goddard'. *Saga-Book of the Viking Club* vol. 3: pages 20-21.
- BC. Taylor, Arthur (2009). *Played at the Pub*. English Heritage: Swindon, England, UK. ISBN: 978-1-905624-97-3.