



FIG. 154. Two possible arrangements of the counters on an 9×13 grid of squares before any post-depositional movements had taken place

Dr Schädler also makes the point that, as far as can be gauged, rectangular boards like the one in the Doctor's burial, with its width to length ratio of about 2:3 or more, were not latticed. However, all three boards which he cites from Britain as having measurable dimensions (*i.e.* the Doctor's burial at Stanway, Grave 117 at King Harry Lane (Stead and Rigby 1989, 109) and Burial 6 at Baldock (Stead and Rigby 1986, 68–9)) are likely to have been broadly of the same type and may even be from the same workshop, thereby opening up the possibility that they represent a type of board and game not recognised before. Although these boards were not identical (they did not all have metal corner pieces and handles), various features bind them together as a group, *i.e.* a) all three were hinged, b) at least two (Stanway and Baldock) were made of maple, the wood of the third being unidentified, c) Baldock and Stanway were very similar in size and shape, and King Harry Lane could have been the same (same length as the other two but of indeterminate width), and d) leather traces were found on the boards at Stanway and King Harry Lane. All three were found in the territory of the Catuvellauni (and we include Camulodunum in this), although this relatively tight distribution might simply be the result of chance. Thus the three boards, plus those in the Warrior's burial and in Chamber BF6 (pp. 126, 186–90) and the possible board in Grave 309 at King Harry Lane (Stead and Rigby 1989, 109–10, figs 108, 152), could have been part of a distinctive British body of artefacts linked to a specific game popular among a group of Britons in the south-east of the country with strong connections with the nearby Romanised Continent. The case for *fidhcheall* needs to be balanced against the fact that Roman counters and boards in the possession of Romanised Britons provides strong evidence in favour of the playing of a Roman game of some sort.

THE DOCTOR'S GAME — NEW LIGHT ON THE HISTORY OF ANCIENT BOARD GAMES (TABLES 55–6)

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THE BOARD

To judge from the position of the metal corners and hinges, the game board found in the Doctor's burial was a rectangular wooden board of approximately 385×565 mm, which was to be folded thanks to the hinges in the middle of the short sides. In contrast to some other gaming boards, it had no handle.

Gaming boards with metal fittings, sometimes provided with a handle, have come to light at Stanway itself as well as at various other places, as follows.

- 1) The Warrior's burial in Enclosure 3 produced counters and the remains of another gaming board. The board consisted of two parts, but, in contrast to the Doctor's board, the Warrior's

one was not to be folded (at least no metal hinges were found) and had two identical copper-alloy handles (BF64.29a and BF64.29b). The handles are characterised by grooves, a bead between discs in the centre, and recurved terminals each capped by a boss (for comparisons, see Allason-Jones 1988, 167, fig. 79, 78; Allason-Jones and Milet 1984, 164, cat. 3.413; Bushe-Fox 1928, pl. 21, fig. 1, 45; Hawkes and Hull 1947, pl. 100, 3; Riha 2001, pl. 8, no. 99, 28–30 with footnote 57).

- 2) At Baldock, the late Flavian burial no. 6 produced two metal hinges, which were found open lying parallel to each other at a distance of 520 mm. A bronze drop-handle was found near the centre of the presumed third edge of the wooden board to which the hinges once belonged (Stead and Rigby 1986, 63ff, no. 13, 14, 16, figs 28, 30). From the position of the handle relative to the presumed centre of the board given by the hinges, it can be inferred that the board had rectangular proportions with a width of about 400 mm, whereas the length must have been slightly more than 560 mm (distance of the hinges plus their width of 20 mm and 14 mm respectively). These proportions are very close if not identical to those of the game-board in the Doctor's burial at Stanway measuring approximately 385 × 565 mm. Although joints of meat covered what was once the wooden board at Baldock, it is unlikely that the board was used as a tray as suggested by the excavators, since hinges to fold a board and only one handle would not make much sense for a tray. Presumably the metal fittings belonged to a game-board.
- 3) Bronze corner fittings are also known from Heiligenhafen, Germany (Krüger 1982, 242, fig. 47.3–5). Remains of the corner fittings of a wooden board, 58 white and black glass gaming counters, all upside down, and one die were found placed on the legs of the deceased.
- 4) In a rich Germanic 'Fürstengrab' of the 3rd century A.D. at Gommern (Elbe), Germany, 24 dark glass counters, metal corners, and the handle of a game-board came to light (Fröhlich 2001, 158s). Unfortunately, they were irregularly dispersed over a limited area.
- 5) At Neudorf-Bornstein, Germany, several wooden boards in graves dating to the 3rd and 4th centuries have been detected. In grave no. 4 (Schäfer 1968, 49 with fig.), three boards lay one above the other. One board was easily recognisable from the wooden remains with four metal corners still in position showing that the board was rectangular and measured approximately 440 × 760 mm. (Information kindly provided by Ingo Gabriel, Schleswig.) Of a second board, only two metal corner fittings at a distance of approximately 600 mm were found. Between the limits of this board and the former, there were 24 black and 18 white glass counters. Their arrangement suggests that they were not disposed on one of the two boards mentioned, but on a third. A few counters lay in a row, while most of them were scattered irregularly over the ground. It therefore seems that the pieces had been disturbed later. A small bronze handle belonged to one of the boards.
- 6) The remains of a board with pieces were also found in grave 7 (Schäfer 1968, 57, fig. 12). The rectangular board measured 360 × 440 mm. (Information kindly provided by Ingo Gabriel, Schleswig.) It had bronze corners and a bronze handle. Twenty-six glass counters (18 blue, 3 green, 2 brown and 3 white) were lying on the board in somewhat irregular rows.
- 7) At Lullingstone, a wooden board with bronze angle pieces dated to the 4th century appears to have been 470 mm square (Meates 1979, 129–30, pl. 24).
- 8) At the Viking-age site of Birka, Sweden, the iron fittings of three boards survived (Arbmann 1940, grave 58B, 205, no. 624, 886). The board in grave no. 886 (*hnefatafl*) had a raised rim (*ibid.*, pl. 146, 1a), similar to the game board for *XII scripta/alea* found at Qustul (Schädler 1995, 80).
- 9) A game-board with two handles — one at each of the long sides — is also known from Ephesus, where a *XII scripta/alea*-board measuring 390 × 490 mm (without handles) was carved into a marble table plate from one of the 'Hanghäuser'. The gaming table represents the only game-board ever found in a Roman house. It dates to before the middle of the 3rd century, when the roof of the building collapsed. The engraving suggests a wooden board with the two omega-shaped metal handles fixed by two nails to the outer sides of the board. The gaming table is kept in the museum at Selçuk.

THE BOARD — 8 BY 12 SQUARES?

The general proportions of the board as indicated by the metal fittings and the position of the counters in more or less regular rows along the long edges of the board suggested a preliminary reconstruction of the playing surface as one with 8 by 12 squares (pp. 352–3). But much too easily, one may be caught in the trap of a circular argument. Neither is the position of the pieces an *a priori* indication for the design of the board, since we do not know if they were placed in any position relative to the board or game. As an example for a purely decorative positioning of the counters, compare the find from Leuna (*see below*). Nor can the fact that one white counter is much smaller than the others and one blue counter turned upside down *a priori* be taken as an argument for 12 squares, since the assumption that these two counters are extra pieces is not established beyond doubt and depends on presumed rules of the unknown game.

First of all, we do not know if the board did have an orthogonal grid at all. During the Doctor's lifetime, *i.e.* the first half of the 1st century A.D., different designs of game-boards existed in the ancient world. It may suffice to draw attention to the Roman *XII scripta/alea*-boards (Schädler 1995), the Greek 5-lines-boards consisting of parallel lines (Schädler 1999), or the presumed Roman game-board from Augst (Schädler 2002a) with a totally different layout.

A fairly large number of ancient gaming boards with orthogonal grids has come to light all over the Graeco-Roman world, many of which are from Roman Britain. Without listing all the known boards of this type, it can be observed that complete ones normally have 7×7 , 7×8 , 9×9 , or 9×10 squares, and very often 8×8 squares (Schädler 1994, 50). A board with 11×12 squares incised into the surface of a former architectural marble block can be seen in the sanctuary of Hera on the island of Samos, and a further board with 8×8 squares of unknown date has been uncovered in the northern cryptoportico of the agora at ancient Smyrna (Izmir). Depictions of real game-boards may be added. A terracotta group dating to the 1st century in the National Museum at Athens shows two persons playing a game on a board with 6×7 squares (Bursian 1855, 55–6; Michaelis 1863; Richter 1887, 100–3, figs 48–9; Schädler 1994, 51 with fig. on p. 53). A terracotta model of a similar board with 6×7 squares and 17 pieces in two colours was found by Flinders Petrie in a grave dating to the Roman period in the Egyptian Fayyum (Petrie 1927, 55 pl. 48, no. 177; Schädler 2002b, 98, fig. 1).

With these last objects having been found in the Greek east, the game depicted was presumably the game $\pi\acute{o}\lambda(\epsilon)\iota\zeta$ ('city' or 'cities') mentioned by Pollux (*Onomastikon* IX 98) in the 2nd century A.D., a game with the same interception method of capture as the Roman *ludus latrunculorum* and therefore supposedly more or less identical with this last (Schädler 2002b, 99). The finds clearly demonstrate that the counters were placed in the squares and not on the points of intersection of the lines. This is also indicated by Pollux, who says that the game $\pi\acute{o}\lambda(\epsilon)\iota\zeta$ 'has fields bounded by lines', as well as by Varro (*De lingua latina*, 10, 12) who compares a declination table (with six columns for singular and plural in all the three genders and six lines for the cases) to a gaming board for *ludus latrunculorum*. We can therefore conclude that at least those two ancient board games were played on the squares.

Having said this, the first observation to be made is that the proportions of latticed game-boards are usually square or close to square, *i.e.* $n:n$ or $n:n+1$ where n is the number of squares in rank and file. On the other hand, a 1:1 ratio of squares does not automatically imply that the proportions of the board itself were square too. A board with 8×8 squares from Chedworth, for example, measures 254×178 mm (*Trans. Bristol Glos. Arch. Soc.* 45, 1923, 285). Many game-boards, especially those carved into pavements or roof tiles, exhibit decidedly rectangular 'squares'. However, it seems that with gaming-boards of finer workmanship, such as the marble board formerly at Zurich (May 1991, 175, fig. 169), care was taken to create square fields. Therefore the assumption that, if there was an orthogonal grid of lines on the Doctor's board, these lines created squares of equal length and width is plausible, although not as obvious as it seems at first sight. On the other hand the assumption of square fields would lead to an unusual and hitherto unique ratio of the game-board of $2n:3n$ or $n:n+4$ squares in rank and file.

The general proportions of the Doctor's board measuring approximately 385×565 mm, giving a ratio of width to length of 0.68, are more consistent with Roman *XII scripta/alea*-boards, composed of three parallel rows of two groups of six spaces. Gaming boards of this type are normally rectangular, usually with a ratio of width to length of about 2:3. Two examples among many others may be quoted relating to boards from Damous-al-Kharita (Tunisia), measuring 490×720 mm and 470×660 mm respectively, thus giving proportions of 0.68 and 0.71 respectively (Delattre 1911, 12). A board in the Roman catacombs of St Tecla measures 460×620 mm (Ferrua 1964, 3, n. 133), and therefore has a ratio of 0.74. At Ephesus, a board carefully incised into a marble block measures approximately 550×815 mm including the raised rim, giving a ratio of 0.67 (Börker and Merkelbach 1979, 226, n. 536). The famous board from Trier (Horn 1989, 154) measures 420×700 mm with a ratio of 0.6. And a board scratched into the pavement of the Tower of the Winds at Athens (Schädler 1995) measures approximately 370×600 mm, *i.e.* a ratio of 0.61. The well-known board for beginners from Ostia (*CIL* XIV 5317) measures roughly 180×290 mm, and has therefore a proportion of 0.62. There are also some boards which are close to square, such as the board from Holt, Denbighshire (Austin 1938, 250), measuring 432×486 mm (0.88), and a few others with even more elongated proportions, such as the board from Porta Portese in the British Museum measuring 370×820 mm (Austin 1938, 250; May 1991, 178, fig. 175).

What might argue against a reconstruction of the Doctor's board as a board for *XII scripta/alea* is the number of pieces, since that game was played with 15 black and 15 white counters. Moreover it was played with dice, which have not been found in the Doctor's burial. And finally the position of the pieces on the board does not correspond to the layout of the game, since we have pieces in the middle of both long sides, exactly where the *XII scripta/alea* boards have an ornament dividing the twelve spaces of each row into groups of six. However, all the three arguments are not convincing enough to discard the possibility completely: the number of gaming counters might not represent a complete set. As a matter of fact, complete sets of counters have been found only in rare and exceptional cases (*see* below concerning the problem of complete sets). At Leuna for example, 59 counters have been found together with a board bearing a grid of lines on one side and a *XII scripta/alea*-pattern on the other – nearly twice the number of counters needed to play *XII scripta/alea*, and nonetheless obviously incomplete. Dice, normally made of bone and often very small, may have decayed. Also, the pieces may have been placed just along the edges of the board and not on regular fields.

Secondly, a closer look at the position of the counters demonstrates that they do not lie as orderly as it may seem at a first glance. In fact, there must have been considerable movement of the pieces after their initial laying out on the board (*see* above). It is the number and position of the counters in particular which may make the reconstruction of a game played with twice 13 pieces on 8×12 squares questionable. There are definitely 13 pieces on both sides of the board. With only 12 squares in one direction and an assumed starting position of 12 pieces in a row, one piece would have to be placed in front of the others. But since 12 is an even number, there would not be a natural place for it, such as a central column. The 13th piece would always come to be placed on an undefined field. The difference between 12 and 13 places in a row is not just quantitative. An odd number of places would create a central column, which is absent on even-numbered boards. On the other hand, the small white counter was placed centrally such that it was flanked by six white pieces, which makes it possible if not likely that the board had 13 spaces in longitudinal direction. Therefore we should take the possibility into account that, if the board did have an orthogonal grid of lines, the counters were placed either on squares formed by a grid of 9×13 (FIG. 153, above) rather than 8×12 lines or on the intersections of a 9×13 grid of lines (FIG. 153, below). Yet another possible explanation would of course be that the counters did not belong to the game-board on the side of the board they were placed upon, but perhaps to a game depicted on the reverse side. Game-boards with two different games on both sides are known from various written sources as well as from archaeological finds.

THE POSITION OF THE COUNTERS — A STARTING POSITION?

The more or less orderly alignment of almost all the counters along the opposite edges of the game-board with only very few exceptions raises the question whether or not the position of the pieces represents the start of a game with only a few moves being already made (Parlett 1999, 236). However, we must be careful in interpreting the layout of the pieces on the board. The interpretation of the position of the counters as a starting position requires some previous assumptions: one has to assume that the person who set out the counters on the board had a particular game in mind when doing so, that he knew that game, and that the number of pieces represents a complete set of counters necessary for it. We have no clues to answer any of these questions. The intention of placing the counters in rows could have been simply to create an orderly arrangement instead of throwing all the counters randomly on to the surface. In grave III/1926 at Leuna, Germany, for example, the pieces were laid out in an ornamental pattern completely independent from the game-board. To judge from one square still preserved at the time of excavation, it could be concluded that the upper side of the board had an orthogonal grid with 13 squares in one direction. Twenty-six out of 30 white and 29 dark stones had been set out in alternate groups of three black or white pieces along one edge and the two adjacent corners of the board to make 18 in a row (Schulz 1953, 22, fig. 37, 28ff). The position of the counters may thus have no relation at all to the game proper.

Several counters on the Doctor's game-board do not stand in line with the others. This may be either because they have been moved or the result of a hard push against the board or by the deposition of the cremated bone or other grave goods. If they were placed like this on purpose, one would raise the question why more than one move has been executed. Assuming that the rook's move was applied, Black would have moved twice (with B3 and B4). If the pieces moved only one square at a time, Black would have had three moves (B3 from C8 to C7, B4 from D8 to D7, and from D7 to D6), and White according to the reconstruction preferred three (FIG. 152: Reconstructions 1 and 3) or even four times (FIG. 152: Reconstruction 2).

Finally, as a more general reflection it can be observed that the experience with chess and draughts sometimes leads to the premature assumption that a board game would naturally require a starting position. This is not the case. According to our knowledge, the board games known in antiquity only rarely had a starting position. The literary sources never describe any such arrangement. Only the ancient Greek board game conventionally called '*pente grammai*' ('five lines'), according to depictions on Greek vases, Etruscan mirrors and a terracotta model at Copenhagen, seems to have had one, in that all the pieces were placed on the opposite ends of the parallel lines (Schädler 1998, 16–17; Schädler 1999, 42). No such initial position is known from Roman board games. It has often been taken for granted that *ludus latruncularum* had a starting position in opposite lines, but especially in the light of *Laus Pisonis*, the most detailed description of the game dating to the 1st century A.D., this assumption can be ruled out with a fair degree of plausibility (cf. Schädler 1994, 52). The author of *Laus Pisonis* describes the beginning of the game with the following words: '*callidiore modo tabula variatur aperta calculus...*', translated by Roland Austin (1935, 30) as 'cunningly the pieces are disposed on the open board'. All six words in this short phrase strongly speak against a fixed initial arrangement and in favour of the possibility for the players to choose where to place the pieces: '*callidiore modo*', '*variatur calculus*' and '*tabula aperta*'. A standard position of counters with equal strength does certainly not offer the possibility to place the pieces in an 'intelligent way' (*callidiore modo*). Moreover the term '*variatur*' clearly means 'distribute' and not 'arrange pieces in a straight line or order'. And finally the 'open board' (*tabula aperta*) does not refer to a folding board opened, but indicates that the playing area was empty at the start. To understand better the meaning of the phrase quoted above, we have to follow yet another line of argument, *i.e.* that the aim of the author is to show Piso's qualities and that the purpose of the passage dealing with the board game is to emphasise Piso's ability as a military leader. This is the reason why the game is described in terms of military terminology, comparing the game to a real battle. According to the literary sources dealing with strategy in ancient Greek and Roman times, the first phase of a battle consisted of arranging the troops. The general was free to arrange his

troops according to the circumstances in which he found himself (the enemy's weapons, the strength and position of the enemy's army, the topography of the battle site, the weather, etc.). The arrangement of the phalanxes, legions, cavalry, or auxiliary units before the battle started was a constant and most important part of Greek and Roman warfare, and is therefore always mentioned in the ancient texts such as Arrian's report about Alexander's campaigns, Caesar's *de Bello Gallico*, and Frontinus' *Strategemata*. It was by the clever positioning of the troops that the general was able to demonstrate his strategic skills, and often the sources underline the fact that the initial arrangement of the army proved decisive in the battle. The readers of *Laus Pisonis* found the expected description of this initial formation in the phrase '*callidiores modo tabula variatur aperta calculus...*' quoted above. Therefore it seems obvious that in the *latrunculi* game the players had the choice of placing their pieces deliberately on the open board, without any obligation to arrange them in opposite lines. Such a starting position in rows would anyway lead to a boring initial phase of the game, where the pieces move towards each other without anything of interest happening. Moreover, capture by enclosing an enemy piece from two sides would hardly work this way. Hence it is likely that the game proper started when all the pieces had been placed, just as supposed by R.C. Bell (1979, 82) in analogy to the North African game of Seega or Kharbga.

From a historical point of view, the introduction of starting positions in ancient board games was a development which seems to be connected with a desire to accelerate games. This tendency can be observed not only in ancient Rome where, for example, the number of dice used in *XII scripta* was raised from two to three between the 3rd and 5th centuries (Schädler 1995). Most successful was the reduction of the number of rows from three to two and the introduction of the starting position still applied in modern backgammon. According to literary sources, it was invented in Persia about the same time, reducing the length of the track compared to the Roman game, where all the pieces had to be entered on the board first. The desire for more dynamic board games is still omnipresent in the book of games commissioned by the Spanish king Alfonso from 1283 (Schädler and Calvo 2006), where dice are explicitly introduced into chess to make it faster, before the new queen's and bishop's moves were invented with the same effect shortly before 1500. A second motivation for the introduction of a starting position into board games may have been the invention of a special piece, such as the king in the *tafl*-games (*see below*), which rather automatically leads to the question where to put it if not in the centre.

B13 AND W13 — TWO EXTRA COUNTERS?

All the counters are relatively equal in size. Therefore the smaller white piece (W13) standing close to the centre of the board is striking. It is possible that it was a replacement for a counter of normal size which had been lost. On the other hand, one blue counter (B13) has been found turned upside down, which raises the question if this was deliberately done in order to compensate for the absence of a similarly smaller blue counter. After a thorough re-examination of the excavation process and the documentation, it can be excluded with a fair degree of plausibility that the counter flipped over during excavation or as a consequence of the deterioration of the wooden surface it was placed on. But nevertheless it remains a possibility that the person who placed the counters on the board turned over this one blue piece intending to create a blue equivalent to the small white piece, in the absence of a blue counter of different size or shape. Based on this assumption, the question arises whether or not these two pieces might have played a special role in the game.

There are several arguments against this hypothesis. First of all, the position of the blue counter B13 as found seems somewhat accidental. It has been found at the corner of the board, whereas the small white counter W13 was placed exactly in the centre of the white side. Therefore one cannot ascribe a special function to that inverted blue counter without making assumptions about the way the game was played, by inventing a rule that the players could choose where to place the special piece after having set out the other pieces on to the first row of squares.

Secondly, ancient Greek or Roman board games with an extra piece are not known. Several authors assumed that the terms *latrones*, *bellatores*, *milites* or *latrunculi* used by Roman poets to designate the counters of *ludus latruncularum* indicated gaming stones of different function (Becq de Fouquières 1869, 429s, 435; Marquardt and Mau 1886, 856; Decker 1972, 19; May 1991, 174), an assumption already convincingly rejected (Blümner 1911, 415; Lamer 1927, col. 1928; Owen 1967, 255). The differentiation in terminology is due to the poetic character of the sources, with the poets aiming at avoiding a repetition of words (Schädler 2003). A good comparison in this respect may be Seneca's *Apocolocyntosis* (15, 1), where the author uses *alea*, *talus* (*i.e.* the knucklebone) and *tessera* as synonyms for the cubic die in one and the same short poem of eight verses about the emperor Claudius playing at dice in the underworld.

These observations would lead to three possible conclusions.

- 1) Neither piece had a special function in the game, *i.e.* the blue counter was inverted by chance and the small white one is a reserve piece.
- 2) Both pieces had a special function; if so, the game is probably not a Roman game, but was to be played with Roman material, which would explain the absence of especially designed extra pieces and the *ad hoc* improvisation.
- 3) Only the small white counter served as a special piece, so that we are dealing with an asymmetrical board game: 13 blue counters against 12 + 1 white counters. If so, the game is probably not a Roman game since, with the only possible exception of a presumed gaming board at Augst (Schädler 2002a), no asymmetrical board games are known from the ancient Roman world.

THE GAME — PRELIMINARY CONCLUSIONS (TABLES 55–6)

'Owing to the meagre and vague character of the evidence, the student who would elucidate the nature of the various board games ... must tread warily. Not only is the evidence slight and ambiguous but it is sometimes contradictory. However some possibilities and probabilities can be shown, and a few impossibilities likewise.' This statement by Eóin MacWhite (1946, 25) with regard to ancient Irish board games also holds true for the study of ancient board games in general. Taking into account that there are no certainties, and the lack of detailed information and unambiguous evidence prevents us from getting in touch with the object of our research and keeps us at a certain distance, I would like to present the following reflections.

The overall proportions of the Doctor's board correspond fairly well with ancient Roman *XII scripta/alea* boards. With these boards having three parallel rows of 12 spaces, it would be difficult to imagine any particular relationship between the 13 counters on each side – *i.e.* two counters less than necessary to play the game – and the layout of the board. As regards the white counters, one might imagine that they have been placed on regular spaces with the small white piece on the central ornament that such boards usually have. On the other hand, the position of the pieces and their more or less uniform distances relative to each other seem to speak in favour of an orthogonal grid of lines, assuming the counters were set out on regular places of the game-board. If so, the number and distances of the counters in relation to the overall proportions of the board and the fact that the latter was a work of craftsmanship and not just a game spontaneously scratched into a flat surface, suggest a grid of 8×12 or 9×13 squares of equal length and width. This ratio of squares does not find any parallels among ancient Roman game boards, with only one possible exception: the board from Leuna obviously had 13 squares in one direction and, given the *XII scripta/alea* board on the reverse side and the usual rectangular proportion of these boards, perhaps 9, 10 or 11 in the other. Assuming the counters represent a complete set, their number (13 on both sides) suggests that the game was played on the intersections of the 9×13 lines of a board with 8×12 squares or on a board with 9×13 squares, although we cannot definitely ascertain if the counters were placed on the cells or on the points of intersection. It is the fact that on both the blue and the white sides, there are two pieces bunched in the corner (W11 and W12, B12 and B13) which suggests that by some means the board moved slightly to the left during the burial rite, and consequently the pieces on it moved to the right, where the

TABLE 55: SETS OF GAMING COUNTERS ASSOCIATED WITH CREMATION AND INHUMATION BURIALS IN BRITAIN (after Cotton 2001a–b). Grave type: crem. cremation, inhum. inhumation, (m) male (f) female

<i>Site</i>	<i>No. of counters</i>	<i>Mat.</i>	<i>Grave</i>	<i>Date</i>	<i>Main reference</i>
Welwyn Garden City, Herts	24 (4 × 6)	glass	crem. (m)	c. 10 B.C.	Stead 1967, 14–19
King Harry Lane, Verulamium, Herts	21 (10 decorated, 11 plain)	bone	crem.	A.D. 1–40	Stead and Rigby 1989, 108, fig. 137
Stanway, Colchester, Essex (‘Warrior’s burial’)	20	glass	crem. (m)	c. A.D. 43–50	pp. 186–90
Stanway, Colchester, Essex (‘Doctor’s burial’)	26 (2 × 13)	glass	crem. (?m)	c. A.D. 43–50	pp. 217–20
Alton, Hants	19	glass	crem. (?m)	A.D. 45–65	Millett 1986, 43, 53–6
Litton Cheney, Dorset	20 (2 × 10)	chalk/ pottery	inhum. (m)	mid 1st	Bailey 1967, 156–9
St Martin’s-le-Grand, London	?	bone	crem.	?mid 1st	RCHM 1928, 154
King Harry Lane, Verulamium, Herts	22	glass	crem. (m)	A.D. 80–90	Niblett 1990, 412–13
Grange Road, Winchester, Hants	18 (2 blue, 4 black, 12 white)	glass	crem. (?f)	A.D. 85–95	Biddle 1967, 243
The Looe, Ewell, Surrey	10	bone/ pottery	crem. (m)	late 1st– early 2nd	Cotton 2001b
Old Kent Road, London	26	bone	crem.	late 1st– early 2nd	R. Jackson, pers. comm.
Mansell Street, London	24	glass	inhum.	late 1st– early 2nd	A. Wardle, pers. comm.
Old Newton, Suffolk	10	glass	crem.	late 1st– early 2nd	Philpott 1991, 185
Colchester, Essex	24 + 3 cubic dice	glass	crem.	early–mid 2nd	May 1930, 275, Joslin Grave group 81 a–b/94
Elsenham, Essex	19	glass/ bone	crem.	mid 2nd	C. Johns, pers. comm.
Victoria Road, Winchester, Hants	29	bone	crem.	mid–late 2nd	Rees <i>et al.</i> forthcoming
Ospringe, Kent	24 (12 white, 4 black, 4 yellow, 1 blue, 1 green + 2 dice)	glass/ bone	crem.	late 2nd	Whiting 1925, 95
Trentholme Drive, York	46 (12 with graffiti)	bone	crem. (m)	late 2nd	Wenham 1968, 97 no. 46
St Pancras, Chichester, W Sussex	25/6	bone	crem.	A.D. 150–200	Down and Rule 1971, 83, fig. 5.15
Elms Farm, Heybridge, Essex	14	bone	crem. (child)	2nd	Atkinson and Preston 1998, 28
St Pancras, Chichester, W Sussex	23	bone	crem.	3rd	Down and Rule 1971, 83, fig. 5.15
Holgate Bridge, York	20 +	bone	inhum. (child)	?3rd–4th	RCHM 1962, 101
Lullingstone, Kent	30 (15 white, 15 brown)	glass	inhum. (m)	late 3rd–4th	Meates 1987, 123–5, 139–42 no. 391
Lankhills, Winchester, Hants	26	glass	inhum.	late 4th	Clarke 1979, 251–4

TABLE 56: SETS/GROUPS OF GAMING COUNTERS FROM NON-FUNERARY CONTEXTS
(after Cotton 2001a–b)

<i>Site</i>	<i>No.</i>	<i>Material</i>	<i>Context</i>	<i>Date</i>	<i>Main reference</i>
Skeleton Green, Herts	4 pegs	bone	well	c. 10 B.C.–A.D. 20	Partridge 1981, 61, fig. 26
Tooley Street, Southwark, London	12	bone	floor	late 1st– early 2nd	Sheldon 1974, 100, fig. 47
Caerleon, Gwent	28	bone/ glass	drain	late 1st– early 2nd	Zienkiewicz 1986, 155–6, 202–7
Castleford, Yorks	18	bone/ glass	floor	late 1st– early 2nd	Cool and Philo 1998, 362
Brecon Gaer, Powys	8	bone	drain	early 2nd	Wheeler 1926, 120
Corbridge, Northumberland	54	glass	box	early 2nd	Allason-Jones and Bishop 1988, 82
Caerleon, Gwent	40	bone/ glass	drain	late 2nd– early 3rd	Zienkiewicz 1986, 155–6, 202–7
Ravenglass, Cumbria	126	bone/ glass	floor	late 2nd– early 3rd	Potter 1979, 75–87
Church Street, York	45	bone/ glass/ pottery	sewer	late 2nd– early 3rd	MacGregor 1976, 2–4, 21–2
Corbridge, Northumberland	20	bone	road	?	RIB 2, fasc. 3, no. 2440
Balkerne Lane, Colchester, Essex	12	bone	pit	1st–4th	CAR 2, 91, fig. 94

rim of the board prevented the pieces close to the right-hand corner of the board falling off it. A reconstruction of a grid of 9×13 squares fits more closely with this scenario, since all the pieces appear to have moved to the right, whereas on a grid of 8×12 squares most of the white counters but only a few of the blue appear to have shifted. What argues against a grid of 9×13 squares is the fact that the two halves of the folding board would meet in the middle of the central row of squares, which does not seem very practical.

Concerning a presumed particular function of the small white and the inverted blue counter, no definite conclusion can be reached. The assumption that the small white counter served as an extra piece seems plausible. Although in asymmetrical board games the number of pieces on one side usually exceeds by far the number of pieces on the other, its position in the centre of the white counters argues in favour of this hypothesis. A remarkable find from the King Harry Lane site at Verulamium may further strengthen this suggestion. In burial no. 249, dating to the first half of the 1st century and therefore contemporary with the Doctor's lifetime, 21 gaming pieces in the shape of pegs were found, 11 of which were plain while 10 had decorated heads. Moreover, one of the decorated pieces is further distinguished by a dot in a circle (Stead and Rigby 1989, 108, 339, fig. 137). The excavators assumed that one piece of the decorated group is missing from a complete set of twice eleven counters. The find suggests that the pegs belonged to an asymmetrical board game with $9 + 1$ or $10 + 1$ pieces on one side and 11 on the other, played on a board with holes, similar to the Viking-age game boards from Ballinderry (Hencken 1933; Hencken 1937; Sterckx 1970, 604, with bibliography and fig. 1) and Knockanboy (Simpson 1972).

However, neither of the other possibilities for the small white and the inverted blue counters can be discarded with certainty (*i.e.* that both counters served as an extra piece, or that neither of the counters served as an extra piece, with the former being less likely). The question as to whether or not counters B13 and/or W13 served a special function in the game seems to be linked to the interpretation of the position of the pieces as a starting position. From what has been said above, it seems that the introduction of an extra piece rather automatically leads to a starting position (as attested for the *tafl*-games), whereas a game with undifferentiated counters such as *ludus latrunculorum* would not necessarily require an initial arrangement.

Other finds of gaming counters from graves of Roman Britain provide no help (TABLES 55–6 generously provided by Jon Cotton of the Museum of London; Cotton 2001a–b): the numbers of counters and the distribution of colours differ enormously. The difference in numbers may result from the fact that distinguishing between glass gaming counters and pieces of stone during excavation may sometimes be difficult, so that not all the counters may have been identified. Another reason may be that it was not the intention of the people who arranged the grave goods to lay down ‘complete’ sets of counters, but just the counters possessed by the buried person. One has to consider the everyday culture of play at the time. With so many game-boards being scratched into the pavements of public places, it is obvious that anyone wanting to play had to bring his own dice and counters, which had to be sufficient in number to play different games. With three counters one could play three men’s morris, with fifteen a game of *XII scripta* was possible and seventeen counters, for example, made sure that there were still enough in case a counter got lost, or stuck between two slabs of the pavement. The expectation of finding complete sets of counters seems to be strongly influenced by the modern market in boxed games. A set of counters can only be complete with regard to the standard of one particular game.

It may, on the contrary, have even been the intention to lay down incomplete sets of counters. As has been observed with the much later finds of gaming counters in Germanic graves, there are reasons to believe that here the pieces have been deliberately reduced in number: in several instances there are one or two counters fewer on one side. To quote a few examples: in grave III/1926 at Leuna, Germany, 30 white and 29 dark stones have been found (Schulz 1953, 22, fig. 37, 28ff). Fragments of 26 or 27 white counters and between 25 and 27 multicoloured ones have been uncovered in a male grave at Emersleben, Germany (Schulz 1952, 108, 131). In a female burial (grave I) at Sackrau (Zakrzów), Poland, 19 white and 20 black counters came to light (Kosinna 1922, 125; compare Schulz 1953, 64: 18 and 19 counters), while in another grave at the same site (grave III) 14 greenish-white and 15 black counters have been excavated (Schulz 1952, 132). And among the grave goods of a burial at Vallöby, Sweden, there were 31 black and 29 white counters (Schulz 1952, 132; Schulz 1953, 64).

A possible explanation for these unequal sets of counters could, of course, be that the counters belonged to an asymmetric game such as the *tafl*-games, with one player having an extra piece. But the finds quoted above did not contain specially designed extra pieces (such as the king in the *tafl*-games). Moreover, as will be shown below, not one of the numerous sets for the game of *hnefatafl* found in the Viking-age graves at Birka seems to be complete according to the rules given by the literary sources. It is therefore possible that the number of counters has been reduced on purpose to remove the games from secular use, in the same way other grave goods were often deliberately destroyed.

A SUGGESTION FOR A SCENARIO AND THE GAME

With regard to the possible identification of the board game in the Doctor’s burial, attention has focused on the *ludus latrunculorum*. However, this is simply because it is the only Roman board game known that was played with counters on a latticed board. Nevertheless, a closer look at the evidence comparing the archaeological evidence from Stanway with what literary and archaeological sources tell us about the *ludus latrunculorum* shows that this assumption can be ruled out with a fair degree of confidence. Since we cannot definitely be sure either about the special function of the small white and the inverted blue counters or the starting position, there are two major arguments:

- 1) The *ludus latrunculorum* was played on a more or less square board with a ratio of squares of $n:n$ or $n:n+1$. The proportions of the board in the Doctor’s burial suggest a more rectangular gaming area of $n:n+4$ squares.
- 2) The interception method of capture applied in the *ludus latrunculorum* requires more pieces than twice 12 or 13 on a board with at least 96 (8×12), if not 117 (9×13) squares. Even on the small terracotta models of games in course of play (*i.e.* with less than the complete number of counters on the board) quoted above, there are relatively more pieces per square

left on the board: one calculates 2.47 squares/counter on the model in the Petrie Museum, 3.5 squares per counter on the little board in Athens, whereas the Stanway board would have 3.69 squares/counter with a board of 8×12 and even 4.5 with a board of 9×13 . The Malayan game of *sodok-apit*, where the same interception method of capture as in the *ludus latrunculorum* is applied, is played on a draughts board with 16 pieces on both sides (Samusah 1932, 130), *i.e.* 2.00 squares/counter. Therefore it seems rather unlikely that the Doctor played at the Roman *ludus latrunculorum*.

Philip Crummy described in detail how the counters must have moved significantly on the board after their initial set up. A possible explanation for this would be a hard knock against the right-hand side of the board during the deposition of the grave goods (pp. 356–7). If a grid of 8×12 squares is assumed, the white pieces appear to have shifted while the blue counters remained more or less in position, a fact that requires explanation. Reconstructing 13 squares on the long sides of the board would provide a more consistent picture, with nearly all the pieces having shifted slightly to the right. On the right-hand side of the corner, the raised rim of the board stopped the counters from slipping off the board, which would explain the clustering of the pieces in both the corners. Is it possible that B13 was pushed against the raised lip of the board and turned around? As the photograph reveals (FIG. 124), the counters which seem to have been moved intentionally as in a game towards the centre of the board are in the same area where the cremated bone was subsequently deposited. It may, therefore, have been during the deposition of the cremated bone that these pieces were dragged across the board. This does not seem to hold true for the small white counter, W13. Despite its small size, it seems rather unlikely that the counter could have been shifted so far. Its position close to the centre of the board suggests instead that it was placed on the central space of a 9×13 board right from the beginning. This position, with six white counters on either side, compared to the rather accidental position of the inverted blue counter B13 on the one hand and the remarkable find from Verulamium on the other would argue for the assumption that the piece served as an extra piece of the white party and placed in the centre of the board, and that the game was to be played by $12 + 1$ white counters against 13 blue pieces.

A game like this is not known from Roman sources, nor is — as already observed — a rectangular game-board with 8×12 or 9×13 lines or squares. One may raise the question therefore whether we are facing not a Roman but a Celtic board game. Given the typically Roman glass counters, the possible Roman system of measurements used in the design of the board, and finally the degree to which the members of the local upper class were already Romanised in the early years of Roman presence in Britain, one would perhaps expect the game to be Roman. Nonetheless, a closer look at what we know about board games in Iron Age Britain may be fruitful.

ANCIENT CELTIC BOARD GAMES

Our knowledge of ancient Celtic board games is even more limited than that concerning Roman games. That there was an indigenous tradition of board games is strongly suggested by the exceptional find from Welwyn Garden City. In a rich grave dating to the last quarter of the 1st century B.C., four groups of six glass counters in four different colours as well as six fragments of glass beads and bracelets with worn edges, which apparently were used as dice in the game, came to light (Stead 1967, 14–18, fig. 10; Harden *et al.* 1968, 35, n. 42). The counters do strikingly resemble much older Celtic military helmets (*see* Feugère 1994, 23). If this is a complete set of counters, it would suggest a game for four players. This would be the oldest four-handed board game in Europe, since all other ancient board games are for two players only. One exception might be the ‘game of twice the 20-squares’ found in ancient Egypt, which consists of two boards of the game of 20 squares (Pusch 1977), and therefore might perhaps have been played by four players.

More can be said about another group of board games known from archaeological as well as literary Scandinavian and British sources, *i.e.* the so-called *tafl*-games. By combining a

description by Carl von Linnée in 1732 of the game *tablut* played by the Saami of Lapland with various literary sources, it has been possible to establish that the games variously called *tafl*, *hnefatafl*, *tawlbwrdd*, *brandubh*, and *tablut* all belonged to one family of asymmetrical board games popular during the Viking period and the early middle ages in Scandinavia and Britain (Murray 1913, 445–6; 1952, 55; Articus 1983; Sterckx 1970; Parlett 1999, 196ff; Helmfrid 2000). These games were played on latticed boards with an odd number of places in both directions (*i.e.* 7×7 , 11×11 , 13×13 , 15×15 or 19×19 cells or lines). The two players had unequal forces at their disposition: one large group of attackers tried to capture the king-piece, initially placed on the central square or intersection of the board. The king's defenders are outnumbered by the attackers 2:1. As in the *ludus latrunculorum*, a piece was captured when enclosed from two sides. As to the use of dice in the game, never mentioned in the sources, the term *tawlbwrdd* has created some confusion, since it has been suggested that the term, which can be translated as 'throw-board', is connected with the throwing of dice (D.P.F. 1860, appendix E, li; Bell 1979, 2, 44). A closer look at the meanings of the noun *tawl* and the verb *tawlu* (Owen 1803) though reveals that the 'throwing' is unlikely to refer to the rolling of dice but to the counters thrown off, taken off, and put aside from the board when captured. It is a board for a game where captured pieces are thrown off, so that *tawlbwrdd* may be more adequately translated as 'throw-off-board'.

Among the most important archaeological evidence connected with the *tafl*-games, wooden and stone gaming boards as well as counters may be mentioned. A gaming board from the Gokstad ship dating to the 9th century has a nine men's morris on one side of the board, while the other side has an orthogonal grid of probably 13×13 squares, of which 13 squares in one direction, but only 4 in the other are preserved. Two wooden gaming boards with holes for counters in the shape of pegs (Hencken 1937, 158, fig. 26b, 165) have been found at Ballinderry in Ireland. While one of the boards is only partly preserved (Hencken 1937, 149), the other one is broken but complete. It shows 7×7 holes, the central hole and the holes in the four corners marked by a circle and quarter-circles respectively (Hencken 1933, pl. 1; 1937, 135, 175ff, pl. 25; Murray 1952, 59, fig. 23), a feature to be compared to an engraving of a gaming board on a rune stone from Ockelbo, Sweden. Probably dating to the later 10th century (Hencken 1933, 93), it is now kept in the National Museum of Ireland in Dublin. Most significant is a find from Knowth, Ireland (Eogan 1974, 68–70, 76–80), from a double inhumation grave dated 'perhaps not later than the middle of the millennium', *i.e.* about A.D. 500. Here 13 bone pegs for a game board with holes such as the Ballinderry board and three long dice numbered 3-5-4-6 came to light. The type of long dice is, according to Krüger, typical for the Celtic *oppida* on the Continent and Germanic sites (Krüger 1982, 187), thus demonstrating that the British Isles were 'ludographically' connected with the Iron Age Continent. Also from Ireland comes a similar board found at Knockanboy, which is perhaps even earlier in date than the board from Ballinderry, but appears to be lost (Simpson 1972, 63–4). The drawing by J. Bleakly dated 25/26 March 1838 shows 7×8 peg-holes, but this may be due to the sketchy character of the drawing. Comparable boards with 7×7 lines and the central intersection marked by a circle have been found carved in stone at the 9th-century Viking settlement of Buckquoy on the Orkney Islands (Sterckx 1973, 675–89). One of the boards (*ibid.*, figs 1–2, pl. 3) apparently was used as a teaching board where, by drawing circles on the intersections and retracing the lines, somebody tried to explain that the pieces had to be placed on the intersections and not on the squares. A fragment of a wooden board of 15×15 squares dating to the 10th century has come to light at Coppergate, York (Hall 1984, 114). Toftanes Eysturoy, Faroes, produced a board with 13×13 squares, which is also dated to the 10th century and kept in the Foroya Fornminnissavn at Torshavn (Roesdahl and Wilson 1992, 311). At Trondheim, Norway, more than one half of a board dated to the 12th century was discovered (McLees 1990, 80–1, pl. 11; Roesdahl and Wilson 1992, 378), which is kept in the Vitenskapsmuseet; it has 11×11 squares, of which the central square and the 2nd and 3rd squares from the edges in the 6th column and line were marked by a cross. The reverse side bears a nine-men's morris. Also from Trondheim comes a wooden fragment with three

incomplete rows of at least ten squares (McLees 1990, 81, pl. 12). From late Viking-age Norway comes a board with 13×13 squares found at Bergen, Tyskebryggen, with the 4th, the 7th (centre), and the 10th squares of the central row marked by a cross (Articus 1983, 95, fig. 11). A set of gaming pieces made of walrus bone and ivory, including a king piece made of bronze, has been found in a rich grave at Oldenburg, Germany, dating to the middle of the 10th century (Gabriel 1985, 207–15). Many of the 10th-century graves at the important Viking-age settlement on the island of Björkö, Sweden, produced a considerable amount of gaming equipment. Among the sets of counters which, to judge from the existence of a distinctive piece and two different groups of counters, most clearly belonged to *tafl*, those from the following graves may be mentioned: grave no. 523 contained a king piece and 5 and 14 men all made of glass, which were originally deposited in a leather bag (Arbmann 1940/43, 157–60 pl. 148.1). The king-piece found in grave no. 524 is distinguished by crossed grooves imitating a helmet (*ibid.*, 160, pl. 149.1), while the king in grave no. 624 has a hat of gilded bronze (*ibid.*, 205–7 pl. 149.3, 150.6). The extraordinarily rich burial no. 581 of a man with two horses produced an Arabic coin struck under caliph al Muktadir (301–20 H = A.D. 913–33) and a set consisting of a king-piece, six defenders, and 20 assailants, together with three cubic dice (*ibid.*, 188–90, fig. 143, pl. 147.3). The set found in grave no. 750 consisted of 17 pieces of light-blue-green glass and eight of opaque dark green glass plus a dark green larger piece fashioned like a man with a head (*ibid.*, 147, 271). In grave no 986, a pawn-shaped king with six decorated and ten undecorated men were found (*ibid.*, 412, pl. 150.2, 6). The gaming equipment found in a chamber grave (no. 644) with a double inhumation of a woman and a man is unusual, and roughly dated by a Samanid coin struck for Nasr ibn Ahmad in the year 308 H, *i.e.* A.D. 920–1 (*ibid.*, 221–6, figs 182, 183, pl. 148.2). Apart from three long dice, the set consisted of two nearly identical king-pieces with 20 glass counters of the same manufacture as the pieces in grave no. 523. Numerous other finds of single gaming stones, king pieces or incomplete sets shed no more light on the nature and history of the game.

Among the most important literary sources (*see* Murray 1952, 61; Sterckx 1970) is a document dating to the 10th century in Oxford, conventionally called *alea evangelii*, containing in particular a drawing of a board of 19×19 intersections (Bell 1979, 80, fig. 68, and pl. 5), where 48 black stones attacked 24 white ones and the *primarius vir*. *Tawlbwrdd* is frequently mentioned in the 'Ancient Laws of Wales' ascribed to the king Howell Dda (10th century) although, according to Murray, not older than the middle of the 13th century. It demonstrates that 8 men defended the king against 16 white attackers. A description of *tawlbwrdd* and a drawing of a board with 11×11 squares can also be found in a Welsh manuscript by Robert ap Ifan from 1587 (Welsh National Library, Peniarth ms 158, p. 4) — the latest reference to the game in Britain. It may be interesting to note that none of the sets of *tafl*-counters found in the Birka graves correspond with the number of pieces mentioned in these literary sources, nor are there twice the number of attackers in relation to the number of pieces on the king's side. The variability of the numbers of counters at Birka would lead to two possible explanations: either the number of pieces varied depending on convention or nearly all the sets are incomplete. The presence in some of the burials of dice, not mentioned in the literary sources, does not indicate that the *tafl*-game was played with dice but that, in addition to the counters for the *tafl*-game, dice to play dice-games were themselves offered to the dead.

The family of *tafl*-games has hitherto mostly been connected with the Scandinavian peoples, who would have introduced it to Britain during the Viking age. When and where this group of games originated is unknown. Archaeological evidence to corroborate Murray's statement, that the *tafl*-games were 'already played by the Scandinavian peoples before A.D. 400' (Murray 1952, 56), *i.e.* in the Roman Iron Age, is rare. To judge from their exceptional size and shape, some of the glass counters found at Lundeborg, Denmark, may have been used as king pieces in *hnefatafl* (Michaelsen 1992, 46–8; 2002, 73), but they date no earlier than the 3rd century. It is of note that none of the Germanic sites which provided game-boards, dice, and counters, studied by Krüger, has produced any evidence for counters with a special function required for the *tafl*-games (Krüger 1982, 161). Kosinna's interpretation as a gaming piece of a cone-shaped

bronze object from Kommerau (Komorow, Poland) dating to the 3rd century (Kosinna 1922, 122, 127, figs 15, 15a) has been rejected by Krüger (1982, 139, 224, fig. 29.8).

On the other hand, an earlier date for the game is suggested by its affinities to Roman games, in particular to the *ludus latrunculorum*. The capturing method of enclosure common to both games seems to indicate that the latter exhibited a certain influence on the *tafl*-games. Moreover the name *tafl* derives from the Latin *tabula* meaning '(gaming)board' or 'counter'. Finally, the fact that the boards from Vimose (c. A.D. 400) (Engelhardt 1869, 11, pl. 3.9–11; Schulz 1953, 64, fig. 75.1–3; Krüger 1982, 222, fig. 10.7–10; Michaelsen 2002, figs 3, 14) and from Leuna (3rd century A.D.) bear a *XII scripta/alea* on one side (Schulz 1953, 65, fig. 76; Krüger 1982, 233, fig. 38.10–11) clearly demonstrates a close connection between the Germanic and the Roman world of board games. In fact, the central ornament of the outer row of the board from Leuna, consisting of one half of a six-petalled rosette inscribed in a semi-circle with its ends scrolled to the inside (Schulz 1953, 29, fig. 56), finds close parallels in several game-boards from all over the Roman empire. For the semi-circle, compare boards from Damous al-Karita (Delattre 1909, 375; 1911, 12ff, fig. on p. 13; Schädler 1995, 88, fig. 7b) and Rome (Ferrua 1964, 17, fig. 7m; 1948, pl. 4.7). For the three-leaves motif in a semicircle, see for example a game-board found near Porta Portese in Rome now kept in the British Museum (Austin 1938, 251, figs 2 and 3; May 1991, 178, n. 283, fig. 175), a board in the Roman catacombs (Ferrua 1964, 17, fig. 7n) and a carefully executed gaming-table at Aphrodisias (Roueché 1989, 110, pl. 16, n. 69). The indication of the houses through circles divided into two groups by a larger semi-circle, as executed on one of the boards from Vimose, was very popular, especially in the eastern part of the Roman empire. No less than nine such game-boards can be seen on the steps of the stadium at Aphrodisias. Their exact location is as follows:

- 1 northern part of east curve, 1st segment after curve
- 2 eastern part of north side, 3rd step from above
- 3 western part of north side, 5th segment from west, 2nd step from above
- 4 western part of north side, 5th segment from west, 2nd step from above (another one)
- 5 north side, 4th segment from west
- 6 north side, 3rd segment from west, 2nd step from above
- 7 north side, 2nd segment from west, 4th step from above
- 8 south side, 5th segment from east, uppermost step
- 9 south side, 2nd segment from east, uppermost step.

Three other gaming boards of the type can be seen at Ephesus, two on a threshold in the street between the theatre and the stadium, and another one in the street of the *curetes*, close to the *nymphaeum* of Trajan.

There are several parallels for the houses marked by semi-circles, as on the second board from Vimose: a board found at Avenches, Switzerland (May 1991, 181, no. 284, fig. 177), and a board from the theatre at Leptis Magna, Libya (Caputo 1987, 121, no. 4, 122, no. B, pl. 94.4). The triangular ornament in the semi-circle finds a close analogy on a late antique gaming-board in the portico of the agora at Perge, Turkey (Mansel 1975, 79 and fig. 43 on p. 81).

Thus there are good reasons to believe that the *XII scripta/alea*-boards as well as the latticed boards from Vimose are imported boards of Roman manufacture.

Although the latticed board from Vimose is often quoted by authors dealing with the *tafl*-games, it is not clear which game was played on the board. In particular, only one side of the board is preserved completely, showing that there were 19 lines or 18 squares in one direction. Some authors have questioned the figure of 18 squares, but with the diagonally cut joints of the frame being preserved on both sides of the fragment, there can be no doubt that the preserved edge represents the first complete row of 18 squares. Since the outermost lines appear to be too close to the rim, it seems that the board should be regarded as consisting of squares rather than a grid of lines. With 18 squares in one direction, the board cannot have been used for a game of the *tafl*-type, which required an odd number of cells or lines. On the other hand, grids of 18

squares in one direction are hitherto without parallel in the Roman world, which makes it rather unlikely that the board was used for *ludus latrunculorum*. Moreover, the usual assumption, that the board consisted of 19×19 lines or 18×18 squares, ignores the possibility that the fragment shows the reverse side of one of the *XII scripta/alea*-boards. With these boards usually being rectangular, a square shape for the orthogonal grid of lines or squares could definitely be ruled out. The same holds true for Leuna, where, although the board has an odd number of squares (13) in one direction, the fact that its reverse side was prepared for *XII scripta/alea* makes a square grid of lines or squares unlikely. Moreover, no special piece was found among the uniform white and dark glass counters. Nor have Roman *latrunculi*-boards with 13 squares in one direction hitherto come to light. So we have to reckon with yet another board game played in Roman times with uniform counters on a rectangular grid of (an odd number of?) lines or squares. The fact that the *XII scripta/alea* on one side is a Roman game does not automatically imply that the game on the reverse side was a Roman game as well. Given the prestige as status symbols of board games (*see below*) on the one hand and Roman imports on the other, there are reasons to believe that such 'Roman' gaming boards may have been manufactured especially for Germanic (or Celtic) clients, and may therefore have been equipped with a Roman game on one side and an indigenous game on the other. The same may, *mutatis mutandis*, hold true for the Doctor's game board.

A possible candidate for the game we are looking for would be an ancient board game called *fidhcheall* or *ficheall* in Ireland and *gwyddbwyll* (*gwyzbwyll*) in Wales (MacWhite 1946, 25–35; Murray 1952, 34; Nuti 2001). According to the literary sources, it was played on a rectangular board by two players with equal forces of undifferentiated counters, and may therefore be regarded as a closer relative of the Roman *ludus latrunculorum*. Most interesting in the context of the present discussion is the statement in Cormac's Glossary (O'Donovan and Stokes 1868) that 'it is a different person who wins every other time', a statement confirmed by other sources as well (Nuti 2001, 25, 27). While MacWhite (1946, 33) expressed his irritation concerning this piece of evidence which appeared to him to be incompatible with the statement that the forces were equal, Sterckx (1970, 600) was led to infer that one side obviously had a certain advantage. Recently Nuti observed that the game is often mentioned in tales and episodes about a king being challenged by another person, and argued that '*anche un eventuale medesimo numero di pedine per entrambi i giocatori non implica necessariamente che in un gioco non vi sia una pedina che svolga un ruolo centrale; specificamente, un pezzo accostabile alla figura del re*' ('also a possible equal number of pawns for both players does not necessarily imply that in a game one pawn does not play a central role; specifically, a piece approximating to the figure of the king') (Nuti 2001, 27).

It seems to me that in the light of the finds from King Harry Lane and Stanway, those seemingly contradictory statements in the literary sources make sense, inasmuch as they describe an asymmetrical board game, where one of the otherwise equal forces was distinguished by a special piece.

CONCLUSIONS

The evidence from the Doctor's burial at Stanway is not as self-evident as it might seem at first glance. In fact it is difficult to interpret the remains of the game board and the number and position of the blue and white counters on it without making assumptions on games and their rules and of people, their knowledge of games and the intentions they had when they placed the game into the grave. To judge from the rectangular form of the wooden board alone, which seems to be of Roman manufacture, one would expect the game to be a *XII scripta*. No Roman board game played on a rectangular latticed board is known to have existed in the 1st century A.D., neither from archaeological nor literary sources. If so, the twice 13 pieces would neither represent a complete set of counters for this game nor would their position on the board have a closer connection with the game, nor would the small white counter and the inverted blue one have had a special function. This would not at all contradict the interpretation, since these assumptions are absolutely consistent with what has been observed in numerous other places.

But since our knowledge of ancient board games is rather limited, and the findspot is located in an area of cross-cultural interchange, the possibility exists that the game was a Celto-Roman hybrid. In fact, in Britain an independent tradition of board games existed long before the Roman presence. And from contemporary archaeological as well as later literary sources, we learn of an asymmetrical board game with a special piece on one side, called *fidhcheall* or *gwyddbwyll* in later Irish and Welsh sources. It was played on a latticed board with an odd number of spaces. This game seems to be similar to or a kind of predecessor of the Scandinavian *hnefatafl*. In the light of the asymmetrical sets of gaming pegs including one special piece found at Verulamium, it seems not impossible that, also in the Doctor's game at Stanway, the white party of 13 counters was distinguished by such a special piece. Moreover, the more or less regular arrangement of the counters seems to speak in favour of a board with an orthogonal grid of lines and squares. Therefore it may not be completely absurd to say that the Doctor's game possibly testifies to such an asymmetrical 'special piece game' as early as the Augustan age in Britain. Both suggestions — the *XII scripta* and the latticed gaming surfaces — need not necessarily exclude each other. In fact double-sided gaming boards existed at the time, and the board from Leuna with a *XII scripta* on one and a latticed board of 13×9 , 10, or 11 squares on the reverse side, would offer an excellent yet much later parallel.

It is a world-wide phenomenon that in ancient civilisations board games were used not only as symbols of wealth and fortune, but apparently also of virtue. Gaming boards, dice, and counters often belong to the repertoire of grave goods in burials, especially of members of the upper classes. In direct relation to the wealth of the burial, these games often appear as luxury goods, elaborate and artistic products of skilled craftsmanship, often made of prestigious materials. Examples may be quoted of the Royal game of Ur (Woolley 1934), the well-known gaming tables in the grave of Tut'Ankhamun (Tait 1982), the fine wooden board game from the graves of the kings of Meroë in Qustul (Emery and Kirwan 1938, 345ff, fig. 111, pl. 87; Emery 1948, 46, pl. 8, 32; Horn 1989, 152, figs 16–18), as well as the games found in rich burials in ancient China such as the *Liubo* in the grave of emperor Zhao Mo from 122 B.C. (Prüch 1998; Röllicke 1999, 26, no. 9). In the Viking-age burials at Birka (Sweden), glass gaming stones mainly belonged to those who were distinguished members of the society, as evidenced by far-reaching contacts documented by Arabic coins. Board games were also found in Germanic *Fürstengräbern* such as those at Gommern (Fröhlich 2001, 158) and Leuna. Generally speaking these games can be explained in that they symbolise a peaceful and carefree (after)life not only of the wealthy but also of the brave. Already in Greek archaic vase paintings depicting the heroes Ajax and Achilles playing *pente grammai* (Schädler 1999, 40ff), the idea seems to be inherent that bravery and play belong together. Particularly in ancient Rome, the focus obviously lies on the virtues of the players. Several hexagrams of Roman game boards for *XII scripta/alea* demonstrate that bravery in warfare was looked on as the prerequisite for peace and public wealth and consequently the possibility of playing with neither fear nor sorrow (Schädler 1995, 80; 1996, 72): VIRTVS IMPERI HOSTES VINCTI LVDANT ROMANI (Ihm 1890, 238, no. 49; Huelsen 1904, 143, n. 1), HOSTES VICTOS ITALIA GAVDET [LVDI]TE ROMANI (Huelsen 1904, 143, no. 2; Ferrua 1948, 33, no. 79), PARTHI OCCISI BR[I]TT[O] VICTVS LVDIT[E R]OMANI (Huelsen 1904, 142; Ferrua 1948, 33, no. 80) and ... [GENTES] PACATE [LVDIT]E ROMANI (Ihm 1890; 238, no. 50; Huelsen 1904, 143, no. 3). On a pyrgus dating to the 4th century from Froitzheim (Germany), one reads PICTOS VICTOS HOSTIS DELETA LVDITE SECVRI (Horn 1989, 139ff esp. 146). Finally, a hitherto unpublished *XII scripta/alea*-board incised into the pavement of the palaestra of the Petronii in the summer baths at Thuburbo Maius (Tunisia) may be mentioned, reading: PATRIA SANCTA FACIAS UTMEOS SALVOS VIDEAM. These mottoes allude to the bravery of the members of the society and the virtues of the political system they were part of, which guaranteed peace and wealth as a pre-condition for people passing their time by playing games instead of struggling for daily survival. Although this interpretation refers to Roman board games, especially of the 3rd and 4th centuries, it may also hold true for neighbouring peoples. It is certainly not coincidence that *XII scripta/alea*-boards in particular have been found in Germanic contexts (Vimose, Leuna).

However, later British sources such as the Ancient Laws of Wales demonstrate that, in Britain, board games had a prominent role in the installation in office of dignitaries, inasmuch as they were used as insignia (Forbes 1860). When admitted to his office, a chancellor in Wales received a gold ring, a harp and a game from the king, which he was expected to preserve for the rest of his life. A judge of court received playing pieces made of sea-animal bone from the king and a gold ring from the queen, which he likewise was expected never to sell or give away (Forbes 1860). Possibly the feature from Welwyn Garden City must be seen in the same context. Apart from the extraordinary glass gaming pieces in the burial which, to judge from the presence of imported Roman silver and bronze vessels, belonged to a high-ranking personage, iron fittings were found which probably had served for a carefully executed repair of a wooden gaming board (Stead 1967, 31–6, figs 20, 21). This would be an early archaeological reference for the particular role of board games as status symbols in Iron Age and Roman Britain.

THE SALT BRIQUETAGE (FIGS 35–6; TABLES 57–8)

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DESCRIPTION (TABLES 57–8)

The ditches of the ?mortuary enclosures in Enclosures 4 and 5 produced several sherds of briquetage from rectangular troughs used in the Late Iron Age and early Roman periods in the production of sea-salt at 'red hill' sites on the Essex coast. Further fragments came from the southern arm of the main eastern ditch of Enclosure 4. The contextual information of the briquetage is summarised in TABLE 57, together with the sherd count and total weight per context. The following two fragments are illustrated.

BF30.2 FIG. 35. BL21 B283. ?Mortuary enclosure ditch, Enclosure 4. Rim sherd from the corner of a rectangular vessel. The knife-trimmed rim has sagged downwards from the corner. Surviving height 76 mm, maximum thickness 31 mm. Weight 223 g.

CF44.1 FIG. 36. C140. ?Mortuary enclosure ditch, Enclosure 5. Large wall sherd. Surviving height 115 mm, 23 mm thick. Weight 223 g.

The fabric of all but one of these sherds is typical of the Type A briquetage found in north-east Essex, usually about 19 mm thick, sometimes much greater, and with much vegetable tempering (Rodwell 1979, 149–53; Fawn *et al.* 1990, 11). The surfaces are in general oxidised, but several have some reduction on one face and in the core. Surviving rims have been knife-trimmed, and one has been thumb-pressed. One sherd is only 11.5 mm thick and has rather less vegetable tempering. It has fired to a regular brown colour throughout. This piece belongs to Type B, production of which centres on the red hills to the south of the county, around Canvey Island. It is rarely found in north-east Essex.

The 29 recovered sherds had a total weight of 1343 g. Few of the sherds were abraded, and only one markedly so. As deposited (several pieces are friable and have broken at excavation or later), the average sherd weight is 46.3 g, which is substantially greater than that recorded at some other Essex sites (TABLE 58), although individual sherds from elsewhere in the county have equalled the largest here (Sealey 1995, 66, fig. 2) and both weight and sherd count are rarely given in the majority of reports. The low level of abrasion and the high average sherd weight together suggest that the majority of the vessels from which these pieces derive were broken not long before being deposited in the ditches.

DISCUSSION

Made from coastal alluvium mixed with much chopped vegetable matter, large quantities of vessel briquetage are found at the Essex salt-production sites, red hills, together with settling tanks, hearths, and hearth furniture such as firebars and pedestals (Fawn *et al.* 1990, 69). The