THE EARLIEST EVIDENCE OF CHESS IN WESTERN LITERATURE: THE EINSIEDELN VERSES

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Every student of western mediaeval literature in the age of chivalry is aware of the rôle played by games as well as by music and jousting in the education and pastime of courtly society.[1] Among games, the game of chess took the lead, as the game of knights and kings, and enjoyed a popularity from the twelfth to the fifteenth centuries which it never attained again. Chess is mentioned in the vernacular and Latin literatures of the western countries from Spain and Italy to Iceland and from Scotland to Livonia and Poland. Students of languages are familiar with the part which chess played in modern terminology like "check" or "cheque," "exchequer," "to be in jeopardy," or *matt*, the German adjective for "weary." Even in modern literature chess continues to be used, at times, for symbolic purposes or as a device for story telling; so, for example, in the scene with Saladin and Sittah in Lessing's *Nathan der Weise* or, in recent times, in Stefan Zweig's *Schachnovelle*.

Apart from these more or less incidental uses of the mediaeval game, there have come down to us many works on or about chess, most of them from the period between the twelfth and the fifteenth centuries, when chess flourished in western society. In his remarkable work on chess Murray divides them into three groups, the purely didactic works like Alexander of Neckham's *De scaccis* (about 1180); the moralizing ones wherein chess serves as a text for a homily or parable, or as a frame for anecdotes, like *Liber de moribus hominum et officiis nobilium* by Jacobus de Cessolis (*saec.* XIII); and the works on chess problems which came after about A.D. 1250 and are "largely still buried in manuscripts." But the question when and where the game of chess, an oriental game, was introduced into the western Christian society has remained an open one. The beginnings are obscure and the

[1] For a brief survey of "The Latin Literature of Sport," see Charles H. Haskins, *Studies in Mediaeval Culture* (Oxford, 1929), Chapter v. The best and most comprehensive treatment of chess in western literature is *A History of Chess* by H. J. Murray (Oxford, 1913), pp. 394–528, to be referred to hereafter as "Murray." Murray makes use of earlier studies by A. van der Linde, and also of those by T. von der Lasa, Fiske, Wackernagel, Vetter, and others listed in his bibliography. To these studies should now be added Adolph Goldschmidt, *Die Elfenbeinskulpturen aus der romanischen Zeit*, IV (Berlin, 1926), 4–8, where Goldschmidt summarizes and interprets his investigation on chess figures in the West. Carl Johann Lamm, *Mittelalterliche Gläser und Steinschnittarbeiten aus dem nahen Osten*, I (Berlin, 1930), 214–217. Cf. also such publications with illustrations on early chess — though they do not advance our knowledge of the earliest date of chess in the West — as *Das spanische Schachzabelbuch des Königs Alfons des Weisen vom Jahre 1283* (Leipzig, 1913), two volumes; Arnold Steiger, *Alfonso el Sabio: Libros de Acedrex* (Geneva-Zurich, 1941), text, translation, commentary and grammatical study [=Romanica Helvetica, x; edd. J. Jud and A. Steiger]; Felix M. Pareja Casañas, *Libro del Ajedrez* (Madrid, 1935); Charles K. Wilkinson, "Chessmen and Chess," *The Metropolitan Museum of Art Bulletin* (New York, 1942), pp. 271–279; M. S. Kogan, *Ocherki po Istorii Shakmat v SSSR* (Moscow, 1938), pp. 9–10; Arnold Boeckler, *Heinrich von Veldeke, Eneide: Die Bilder der Berliner Handschrift* (Leipzig, 1939). I am indebted to Professor Arnold Boeckler of Munich for making the Goldschmidt and other works available to me at Munich, including his own splendid book on the illustrated manuscript of Veldeke's *Eneide*, which was new to me.

dating of important documentary and other evidence still vacillates between the ninth and the eleventh centuries.

The oriental side of the picture, according to Murray and others, looks approximately like this: The game of chess had its origin in India, not earlier than the organization of the army on which it is based, and from India it penetrated to other countries. It may have been introduced to Persia during the reign of Khusraw I Nūshīrwān (A.D. 531–578).[2] Everything points to its existence in the seventh century of our era, the date of our earliest chess documentation, and that it had, at that time, already spread to Persia and, possibly to China.[3] The transmitters of chess to the West were the Arabs, but the game in the western documents differs somewhat from the Arabic forms. Our knowledge is the result of historical, linguistic, and artistic studies, the extant documentary evidence being thought not older than the tenth century. Now, we know that the Arabs were in northern Africa, in Spain, and in southern France, in Sicily and in southern Italy before the tenth century, that is, before the date of our earliest chess documents. Moreover, there must have been oriental contacts with the northern peoples by land routes through Russian territory or by the sea-route, directly from the Mediterranean. The unsolved question before us may be formulated thus: at which point of contact with the hostile or friendly Arabs, at what time and in what way, was the knowledge of chess transmitted to the western peoples?

Murray tried to answer the question and, indeed, he and others made some noteworthy contributions towards solving the problem of the transmission of chess to the West in literature. Goldschmidt, complemented by Lamm, found the evidence on the artistic side in approximate agreement with Murray's more general conclusions.

Murray brought together, and sifted, some evidence derived from the nomenclature of chess and other philological matters and concerned himself with the historic and paleographical aspects of the earliest documents. If we except, for the moment, the earliest chess documents, the significant points in Murray's

[2] Along with the *Kalīla and Dimna*, a book of fables, and the decimal numerals, according to Mas'udi, the tenth-century Arabic writer. For this and the following, cf. Murray, pp. 26, 47, 119 ff.

[3] The oldest contemporary document mentioning chess is assumed to be the Middle Persian romance, *Kārnāmak*, ascribed "with some hesitation" to the reign of Khusraw II Parwīz (590–628 A.D.). The Chinese name for chess is *hsiang ch'i* or "elephant game" to distinguish it from other games. But the word *hsiang* has other meanings, too. The earliest date for *hsiang ch'i* is about 569 A.D., based on a passage in *Chou Shu* or the dynastic history of northern Chou, compiled in 629 A.D. The same source may have been used when L. Carrington Goodrich, *A Short History of the Chinese People* (New York, 1943), p. 109, says, "a tenth-century encyclopedia mentions the game under the year 568." But Murray considers this unsatisfactory evidence, saying that the character *hsiang* represents several different meanings and there is no way of proving that the early passages have the meaning "elephant chess." The earliest certain date in Murray's estimation is A.D. 762, when Niu Sheng-ju (779–847), a minister of the T'ang Dynasty, described the elephant chess in his book *Hüan Kwai Lu* as mentioned in *Ko chī king Yüan* (1735), chapter 59, p. 6 b. Mr T. H. Tsien, Professorial Lecturer in Chinese Literature at the University of Chicago, has had the kindness to check the evidence for me and to provide the following recent reference to chess. In an article "On the Date of Elephant Chess" (as quoted in *Jih ch'ang shih wu chang ku ts'ung shu*, in the section on games and recreation [1946], pp. 2–5) the modern scholar Hu Shih concludes that the game had been introduced long before, but Niu Sheng-ju revised it in the Chinese form.

discussion are these: (1) on phonetic grounds it seems certain that *scac-* was in Latin before the sound laws that modified *sc-* in Germanic and Romance Languages had their effect, in other words, by the tenth century; (2) *mattus "tristis"* is to be found already in the tenth century in a Latin glossary, "Gloss. Paris"; (3) only in the two Iberian dialects which became the literary languages of Spain and Portugal are there traces of the Arabic name for chess (Arabic *ash-shaṭrang*, Spanish *ajedrez*, Portuguese *xadrez*); (4) of the four Arabic names of figures which alone were borrowed or adapted for western chess,[4] *rochus*, the Latin spelling of *rukh*, throws light on the immediate source of European chess, since it shows that the word was taken from Maghrib or the western dialect of Arabic, spoken by the Muslim peoples of the Mediterranean shores to the west of Egypt, and espècially in Morocco and Moorish Spain. Murray sums up his philological discussion thus: "The evidence derived from the nomenclature of chess points to a knowledge of the game and its technicalities in parts of Christian Europe outside of the Iberian peninsula certainly at an earlier date than 1000 A.D. and probably earlier than 900 also." And again, including here the documentary evidence on which before him others had solely relied, "contemporary documents establish a knowledge of chess in Southern Europe at the beginning of the eleventh century, but philological evidence requires that that knowledge must have been commenced at least a century earlier."[5]

Of the points made by Murray, the last two, (3) and (4) above, pertain to the region where chess might have been first introduced into the West. We shall refer to this later, in speaking of the earliest documents. Regarding point (2), *mattus "tristis,"* a word of caution should be said. Murray does not specify which Paris glossary of the tenth century he meant. The fact is that *mattus* or *matus*, defined as *tristis*, occurs in several glossaries, some of the manuscripts of which are as old as the eighth and ninth centuries.[6] The difficulty is that there is uncertainty about the origin of the word *matus* or *mattus*. A likely guess is that *mattus* stood for *maestus* and had no more to do with chess than the *matus* used by Petronius (xli, 25) which is now derived from *mad(i)dus* and means *madefactus*, "soaked," "drunk."[7]

[4] *Firz* (our queen), *al-fīl* (our bishop), *rukh* (our rook) were borrowed for chessmen, becoming *ferzia, alphiles, rochus* in Latinized forms; and *shāh* was adapted as a name for the game.

[5] Pp. 402, 403.

[6] See, for example, *Corpus Glossariorum Latinorum*, edd. G. Goetz, and G. Loewe (Leipzig, 1923 ff.), VI, 684; cf. *Glossaria Latina*, edd. W. Lindsay and others (Paris, 1926), III, pp. xv, 56 [M A 45].

[7] See *Thesaurus Linguae Latinae* (Munich, 1900 ff.), s.v. *mat(t)us*. There are a few other instances of *mattus, -um, -a, -are*, in the meaning of *stultus* or *vestis* and related words, in the vernacular tongues. See A. Walde, *Lateinisches Etymologisches Wörterbuch*, 3rd edition, revised by J. B. Hoffmann, (Heidelberg, 1939), s.v. *mat(t)us;* A. Ernout and A. Meillet, *Dictionnaire étymologique de la langue latine* (Paris, 1939), s.v. *matus;* C. du Fresne Du Cange, *Glossarium mediae et infimae Latinitatis* (1883), s.vv. *mattus, mattare*. See E. Steinmeyer and E. Sievers, *Althochdeutsche Glossen* (1879 ff.), II, 153.53; 778, line 8; IV, 342, n. 5 (for the word *mat* glossed with "psiathium"), and III, 361, n. 8 (for *mat* in an undetermined meaning). In *Deutsches Wörterbuch* by Grimm, in *Etymologisches Wörterbuch* by Kluge and others (15th edition), and in *A New English Dictionary* by James A. H. Murray and others, the references for *mat(t)* or *mate* are not older than the twelfth century.

At first glance the evidence presented for point (1) looks more substantial. It is fortified by a discussion based, as Murray says,[8] on recent discoveries of laws of sound development and their relation to time and place. The argument runs as follows: Up to the fifth century the *sh*-sound was unknown to Greek and Latin and so the Vulgate rendered the Hebrew *Shem* and *Sharon* simply *Sem*, *Saron*. By the eighth century, however, the combination *sc* (pronounced *sk*) came into use and by the thirteenth and fourteenth *sh* had become a usual and recognized European sibilant. Furthermore, the letters *c*, *cc*, *ch* were used to represent the semitic aspirates. If, therefore, the Arabic *shah* was introduced not earlier than the eighth century, the spellings *scac*, *scach*, *scacc*, with or without termination, would all have been normal Latin methods of rendering the Arabic chess word *shah* (no doubt, Murray means, before the eighth century the normal Latin spelling would have been *sac*). Murray gives three reasons for holding that these European forms, *scac*, etc., were pronounced *skak*, etc.: (1) In manuscripts of English origin the variant spelling *skakkus* occurs; (2) in the tenth and eleventh centuries in OHG the word has the form *scâh* (pron. *skakh*) "from an earlier OHG and OLG *scâc;*" (3) the sound development undergone in the transition from Latin to the mediaeval and modern Romance languages (the same as that of Classical Latin words with the initial syllable *sca* —) supports this, showing, as it does, that *scac* (*-us*, etc.) must have been in Latin before the sound laws that modified *sc* — had begun to work on phonetic grounds (Murray means, I presume, not before the eighth century).

It appears to me that Murray's argument implies a contradiction. The "earlier OHG *scâc*" leading to the OHG *scâh* (pron. *skakh*) in the tenth and eleventh century must have been a pre-OHG form, of the sixth century or earlier, inasmuch as the *k*-sound remained a *k*-sound after the High German sound shift had taken place. And how can this be fitted together with the other part of the evidence which requires that *shah* came into Latin as *scac* (pronounced *skak*) only after the eighth century? Incidentally, it should be recalled that Murray takes the position of Fiske before him, who said that the existence of chess in the East is not demonstrable before the seventh century. The main difficulty is that Murray does not give us the needed examples for his arguments, so for his statement that *sc* (pron. *sk*) was used for the *sh*-sound from the eighth century on. What are and of what date are the English manuscripts in which *skakkus* appears as a variant for *scaccus*? Are any earlier than the variant he lists from a twelfth-century manuscript? In giving evidence that there was dice-chess playing in Europe Murray states:[9] "A German glossary of the 11th–12th c. (Gloss. Trev. 9, 10, *Summ. Heinr.* 257) has 'alea, scahzabel' . . ." But I find that in Steinmeyer

[8] In the introduction to his *History of Chess*, H. J. Murray (son of the editor of the *New English Dictionary*) indicates his indebtedness to some leading philologists of his day. For the following résumé see pp. 396 ff. On the linguistic matters pertaining to the Germanic and Romance languages I have benefited by the advice of my colleagues, Professors George J. Metcalf and John Corominas.

[9] P. 409. Though he does not say so, I presume he took over this reference from W. Wackernagel's "Das Schachspiel im Mittelalter," incorporated as it is in F. Vetter's *Das Schachzabelbuch Kunrats von Ammenhausen* (1892), a work expressly used by Murray (see p. 24).

and Sievers[10] the only such gloss occurs in the *Summarium Heinrici*, thus: "*alea: scahzabil*" (or *scahzabel, schahzâbel, schazabel,* depending on the manuscript). Of the five manuscripts containing the gloss, three (Einsidl. 171, Vindob. 2400, and Clm. 2612) are of the twelfth century, the other two (Trevir. 31 and Prague, Lobk. 434) of the thirteenth. Since the entry is a part of the original or "genuine" material, for which a *terminus non ante quem* is A.D. 1007, we have evidence here for the eleventh century. Perhaps this was the gloss which led Murray to speak of a "10th–11th c. OHG form scâh." But where is the "earlier OHG scâc form" to be found, from which he says it came?"[11]

In assembling the linguistic evidence for the early appearance of chess in the West, Murray might have been misled by another *scah* with which the chess *scah* was easily confused. We may well ask, can it be proven that the form *scah* did not result after all from a popular adaptation or confusion of the word for chess and the earlier Old High German *scâh* "*praeda*" "*furtum,*" and *scâhari* (cf. *Schächer*) meaning "theft" and "robber," respectively?[12] One more suggestion may be in order. It is generally assumed, by Romance and Germanic lexicographers, that the Arabic *shah* entered the vernaculars through an intermediate Latin *scac* form. Could not the chess word *shah* have come directly into OHG, say, in the tenth century and, in so doing, might not the resulting form have been something like *scah*?

The linguistic evidence, thus, rests on still uncertain ground and does not help us much for the period before the eleventh century. More conclusive is the documentary evidence. Whereas others before him had thought that an earlier date was possible, Murray's meticulous sifting,[13] distinguishing between guesses or ascriptions and documentary proof, leaves only the following for our purposes. A *terminus non post quem* for chess is given by two Spanish bequests. The earliest, dated A.D. 1008 or 1010, says that Ermengaud I, count of Urgel (of the counts of Barcelona) gives his chessmen to the convent of St Giles for the "work" (*opera*) of the church. Presumably the convent of St Giles at Nîmes is meant. The will was dated at Tuxen (Tujent), in the Spanish marches of France, in the twelfth year of Robert of France, but probably not executed until 1010 A.D., the year of the battle in which the count was killed. A similar document is the will of Count-

[10] *Op. cit.*, III (1895), 162; cf. also pp. 708, 712 for dating this gloss. Apparently Murray did not consult Steinmeyer and Sievers' work.

[11] Of the OLG *scâc* or *skâk* Murray says (p. 397) that it is "not yet recorded." There is a possibility that *scâh* was pronounced *shakh* before the eleventh century. Certainly the *sc* was tending in that direction. Professor Taylor Starck of Harvard University kindly informed me that he believes the shift was complete in South Germany by A.D. 1000 or soon thereafter. He bases this on Notker's orthography (e.g., *disg* for *disc*) and on the fact that also initially *sg* was written for *sc* in many texts and glosses of the early eleventh century.

[12] See E. G. Graff, *Althochdeutscher Sprachschatz,* VI (1842), s.v. *scâh, et similia;* Fr. Kluge and others, *Etymologisches Wörterbuch der deutschen Sprache* (1951), s.v. Schächer; Fr. Diez, *Etymologisches Wörterbuch der romanischen Sprachen* (1887), s.v. *scacco;* E. Gamillscheg, *Etymologisches Wörterbuch der französischen Sprache* (1928), s.v. *échec.* Cf. also the confusion resulting in the application of the ancient *ludus latrunculorum* to the mediaeval chess game, and other similar associations in the Romance languages.

[13] Cf. Murray, pp. 403 ff.

ess Ermessind, widow of Raymond Borel, elder brother of the Count Ermengaud. The date is 6 March, in the twenty-seventh year of Henry (of France), that is, A.D. 1058. The bequests include crystal chessmen that are to go to St Giles at Nîmes. The next fairly precise date for chess is a letter by Peter Damiani (A.D. 1007–1072), who as bishop of Ostia writes to Pope-elect Alexander II and the Archdeacon Hildebrand (later Pope Gregory VII), expressing displeasure in seeing members of the clergy engage in games of chance and, among these, mentions chess with dice. Apparently the date for the letter is A.D. 1061 or 1062. Thereafter occur other references to chess in Italian and Spanish documents and, somewhat later, also in documents of other countries. Goldschmidt reports that the earliest reference to chess in the north is when Gunner, prefect of Greenland, sends a chess set made of walrus tusks, together with a white bear, to King Harald Haardraad of Norway (1040–1067) to win his favor.[14]

Among the earlier documents there are three for which the dates taken over or set by Murray are not satisfactory. At least one of these may be quite as old as the Spanish bequests. The three are the *Versus de scachis* in the Einsiedeln manuscripts 319 and 365, the *Ludus scacorum* in a Munich codex (Clm. 14836, ff. 41–41v) and in other manuscripts, and the reference to chess playing in the Mediaeval Latin epic *Ruodlieb*.

To begin with the latter: Whereas for some time the *Ruodlieb* was dated (as Murray lists it) "about 1030," it now seems certain that this epic was written not before the middle of the eleventh century and probably somewhat later, about 1070 A.D., by a monk in or about Tegernsee where the MS. Clm. 19486, presumably an autograph, originated.[15] In the poem the hero, as emissary of the big king, earns access to the little king, with whom peace negotiations are to be initiated, by playing chess with the king's first minister (*vicedomnus*). Once admitted, the emissary plays a tempting game with the little king himself, who for his part insists on playing seriously, regardless of his position of dignity, for money and "for keeps." When the little king loses heavily, he pays up his losses magnanimously to Ruodlieb, to the last cent.[16]

Significant are the passion for chess playing at the court; the reluctance of the hero to engage in playing, because of delicate matters of etiquette involved when a person of lesser station plays with a king — the well-known oriental dilemma;

[14] Goldschmidt, *op. cit.*, IV, 7. For an English donation attributed to King Cnut, presumably to be dated not earlier than A.D. 1016, see Murray, pp. 404, 443, who says it is of doubtful authenticity but he is inclined to think that the attribution may be founded on fact.

[15] Cf. A. Chroust, *Monumenta Palaeographica*, Ser. 2, II (Munich, 1909), Plate 7: Chroust points out that the character of the script relates to the time of Abbot Sigfrid (1048–1069) or even to the beginning of that of Abbot Eberhard (1069–1091); see also footnote 18 below. For editions and literature on the *Ruodlieb* see G. Ehrismann, *Geschichte der deutschen Literatur bis zum Ausgang des Mittelalters*, I² (Munich, 1932), 406 ff., and, for the more recent studies, Wolfgang Stammler (ed.), *Verfasserlexikon*, III (1943), cols. 1137–1147. Cf. Murray, pp. 411–412 and footnote 53, listing the old date, about 1030.

[16] See Fragment IV, lines 187–230, on pp. 223–225 in the edition by Friedrich Seiler, *Ruodlieb* (Halle, 1882). On a connection between this magnanimity with the Augustinian ideal of a ruler see L. Schücking, "Das Königsideal im Beowulf," *Englische Studien*, LXVII (1932–33), 13.

the fairmindedness of the king who enjoys the game whether he wins or not; and, finally, the fact that the king plays for money and, though repeatedly beaten, pays up his losses in full.

The *Ludus scacorum*[17] consists of about sixty lines intended to induct into the art of playing chess and to explain "the battles of the struggle" (*proelia litis*). The functions of the figures are mentioned as the conflict proceeds until at the end the king is declared *mattus*. In some manuscripts the *Ludus* is ascribed to Ovid because it has come to be associated with the *De vetula*, a composition of the thirteenth century ascribed to Ovid in the manuscripts but probably written by Richard de Fournival. In the *De vetula* the author describes his day, his interests and activities; among the latter he lists games and gives a long discourse on chess. The discourse on chess in *De vetula* led to a connection with the *Ludus scacorum*. The *Ludus* itself appears in a number of manuscripts and collections in different countries. Of these Lehmann says the Clm. 14836, of the second half of the eleventh century, is the oldest known to him.

As these two of the three documents at issue take us safely no further back than the second half of the eleventh century, the real problem of the earliest appearance of chess in western literature now hinges on the correct dating of the two manuscripts at the Stiftsbibliothek in Einsiedeln, the codices 319 and 365, which contain verses about chess.[18] These verses first invite the reader to throw off his cares and seek recreation in a game which, unlike the dice games, contains neither deceit nor perjury nor damage of any other kind. The gameboard is then described; the colors and squares, the chess figures and their functions and powers, and finally the contest itself. In fierce battles all may fall, only the king cannot be eliminated. With him the struggle ends.

The Einsiedeln manuscript 365 is made up of fragments, mostly of single or double leaves, which had been formerly used in bindings of other manuscripts. Fragment XVIII, on pages 95 and 94 (bound thus in reverse order), contains ninety-eight lines of *Versus de scachis*, as the title reads, written in two columns, of which the first sixty-four lines are on page 94 beginning with "Si fas est ludos abiectis" and the lines 65–98 on page 95, beginning with "candida si sedes fuerit." The first page of this folio (94) was once quite empty and the second page (95)

[17] The *Ludus scacorum* has been published as one of the *Carmina Burana* from the Munich manuscript, Clm. 4660; it is No. 185 in J. A. Schmeller's edition of 1847. C. Pascal edited the *Ludus* from Italian manuscripts in *Poesia latina medievale* (Catania, 1907), on pp. 137 ff., and in his *Letteratura latina medievale* (Catania, 1909), on pp. 88 ff., he mentions additional manuscripts and collections in which the *Ludus* appears. Paul Lehmann discusses *De vetula* and the *Ludus scacorum* in his book *Pseudo-antike Literatur des Mittelalters* (Leipzig, 1927), on pp. 13–15 and 97, n. 77; he lists manuscripts in which the *Ludus* is ascribed to Ovid and calls attention to the Munich manuscript, Clm. 14836, ff. 41–41v, s. XI *ex.* Murray, pp. 497, 503, 515–516, 520, mentions other publications, discusses difficulties in the textual interpretation and prints his own text from four of the seven manuscripts listed by him. Over Murray's guess that the work is "?12c.," Lehmann's information now takes precedence.

[18] On these manuscripts see the descriptions by Gabriel Meier in *Catalogus codicum manuscriptorum qui in Bibliotheca Monasterii Einsidlensis O.S.B. servantur*, I (Leipzig, 1899), and cf. A. Bruckner, *Scriptoria Medii Aevi Helvetica*, V (1943), Pls. XII, XIII, XXIV, XXV, where some pertinent pages of MS. 319 are reproduced, although not those here discussed.

almost empty; high up above the left column is a sentence in rustic capitals saying that the volume contained St Jerome's tractate on Isaiah. The script appears to be of the tenth (or late tenth) century, and thus the folio fits in meaning and in script as a flyleaf for codex 125 wherein the *tractatus* by Jerome on Isaiah, also of the tenth century, is extant today, and from which it is said to have once been taken. There seems little chance for doubt about the date of the Jerome manuscript, No. 125, and the heading on page 95 in MS. 365 belonging to it; but the *Versus de scachis* themselves have been variously dated. Hermann Hagen who set up the text from both manuscripts says the verses are "s. X–XI."[19] Gabriel Meier in his catalogue dates the verses "s. X." H. J. R. Murray[20] discusses the poem, calls attention to the fact that it has been variously dated (anywhere from 900–1200 A.D.), employs photographs and with the aid of Falconer Madan, his adviser in paleography, dates it eleventh century. In MS. 319 the same verses on chess occur on pages 298–299, but not all of them, only lines 65–98, in other words, only that (last) section of the poem which in MS. 365 is to be found on page 95. In MS. 319 the title is *De alea ratione*, it is done in red, and matches the heading of the preceding section, on pages 295–298, which reads *De ratione abaci*. The text in MS. 319 likewise has been variously dated. Hagen says "s. X," Meier "s. X(?)"[21] and Murray, on the advice of F. Madan, calls the hand "about 1100."

On a recent visit to Einsiedeln[22] I examined among other parts of MS. 319 the *Kalendarium Einsidlense* on pages 3–16. The main hand, dated tenth century by Meier (correctly so, I believe), I shall designate as Scribe A1. After the entries by Scribe A1 had been made in the calendar, another person, Scribe A2, added many names of the dead, in a hand which is a little wavering at times and was probably that of an elderly brother. The entries by Scribe A1 cease with page 16 (not on page 17, as Meier says) but Scribe A2 carries on his listing of the dead, side by side with other hands, up to page 17. Among the names of the dead entered by our Scribe A2 the most recent which I could identify are that of Gregory (on page 15) who was abbot A.D. 964–996 and those of the monks Erkambertus and Bernwardus (appearing on page 4 as Erchanpreth and Berenwarth) and Castrat (on page 7), all three of whom, according to the annals of Einsiedeln,[23] died in the year 997. Possibly one or two other names might be identifiable as those of persons who died a little later still.

As bound together today, the 300 pages of MS. 319 consist of various sections written at different times by several different hands. Some hands are contemporary and even recur in several different parts. Others are clearly later additions.

[19] See Hermann Hagen, *Carmina Medii Aevi maximam partem inedita* (Berne, 1877), pp. 137–141.

[20] Pp. 497–498.

[21] See p. 329, in connection with MS. 365, pp. 95, 94: "Inde ergo manus s.X(?) versus 65–98 p. 94 tantum visibiles, descripsit in codicem 319, p. 298–299.

[22] I am indebted to the Stiftsbibliothek Einsiedeln and, in particular, to the genial librarian, Pater Leo Helbling, who kindly arranged to have me inspect the manuscripts and other pertinent works on the grounds in Einsiedeln and gave generously of his knowledge and time for the study of the documents, in the summer of 1951. For some paleographical aspects of the Einsiedeln manuscripts I have benefited from the judgment of Professor Blanche B. Boyer of the University of Chicago.

[23] Cf., *Monumenta Germaniae Historica, Necrologia Germaniae*, I (Berlin, 1888), 358 f.

For example at the end of *Hrabanus de computo*, on page 274, the date of writing is stated as A.D. 996. On page 275 there is an epitaph for Hermann, who was abbot of Einsiedeln A.D. 1052–1065, an entry which therefore cannot have been made before A.D. 1065. Of more immediate interest for us are the epitaphs at the beginning, preceding the Einsiedeln calendar. On page 1 there is the epitaph for Gregory the Great, on page 2 an epitaph for the abbot Gregory (A.D. 964–996) which, as we are told in the manuscript, was published by Wirunt or Verendus, his successor (A.D. 996–1026).[24] There follows the epitaph for Wirunt, brought out by his successor Embrich (A.D. 1026–1052).[25] Whereas for the recording of the epitaph for Gregory the Great there is a considerable temporal latitude, the epitaphs for the abbots Gregory and Wirunt naturally could not have been copied into the manuscript before A.D. 996 and A.D. 1026, respectively. In other words, the epitaphs were added in stages, on an empty page or two. Now it appears that the hand which wrote the epitaph for Gregory the Great on page 1 and the three lines preceding the epitaph for Gregory, the abbot, on page 2, looks like the one which wrote the epitaph "Gregorii Papae" on page 110 and the verses about chess on pages 298–299. Moreover, it is a hand not dissimilar in character and time to that of Scribe A2, the recorder of many of the *nomina defunctorum* which again appears on pages 296–298, in *de ratione abaci*. Without straining our point, since Scribe A2 is dated and the chess verses were written after the abacus verses, we can safely maintain that the *terminus non ante quem* for the chess verses on pages 298–299 is about A.D. 997. It stands to reason, then, by paleographical and internal evidence, that the related parts of MS. 319, including the verses about chess, were written about the year 1000 A.D. and not much later. The character of the script makes it unlikely that the verses were written after about the first quarter of the eleventh century.

The situation regarding MS. 365, pp. 95–94, can be stated more briefly and simply. The character of the hand which wrote the *Versus de scachis* is hard to fix in time. It might have been written as early as the middle of the ninth century (ligatures, the open *g*, the free and irregular ductus, etc.) as, indeed it had at one time been dated. On the other hand, if the style in writing was conservative at Einsiedeln it might have been written as late as the end of the tenth century. The dating can be narrowed down a little more if we consider the use to which the manuscript was put. As has been said above, the fragment was once a part of Codex 125 at Einsiedeln, containing a work by Jerome. Codex 125 is beautifully and regularly written in a hand which is assigned to the tenth or late tenth century. There is no reason for supposing that the sentence referring to Jerome's work, on page 94 in Codex 365, is not of the same time. Therefore the *Versus de scachis* ought not to be older than the tenth or late tenth century. They may have been written down a little later than Codex 125 and the sentence on page 94 which once served as flyleaf for Codex 125. This brings us again close to 1000 A.D. but in this case rather before than after 1000 A.D.

The question of the interdependence of MSS. 319 and 365 is a particularly

[24] "editum ab successore suo Verendo."

[25] "ab successore suo Embrico prolatum."

puzzling one. Hagen's dating and that of Van der Linde and Von der Lasa would have precluded the relationship later assumed by Meier and Murray. The latter believe that the chess verses in Codex 319 were copied from those in Codex 365. Viewed superficially, their supposition looks convincing.

Whereas there are inaccuracies in both manuscripts, 365 (A) and 319 (B), on the whole A has a somewhat better text. Moreover, some corrections have been made in the text of A, e.g., 12 ferox^{a} 37 locati^{n} (the *n* being misplaced, however) 61 tenet^{ns} 66 hac^{n}. What reason can there be for not supposing that the verses in Codex 319 were copied from those visible on page 94 after page 95 had been pasted down?

Strange as this may seem, if we examine the readings in detail, everything points away from rather than toward such a dependence. In the section common to both manuscripts (lines 65–98) I have noted these possible errors, among which a few (marked*) may be debatable.

In A: 73 istorum *for* istarum 74 petet (*?*) *for* pete *75 sibi *for* tibi 79 contempuit *for* contempnit *89 carpit *for* capit 82 alternaū *for* alternatim *87 hic *for* hi (*before* certamen) *88 cadunt *for* cadant.
In B: 65 fides *for* sedes 66 hinc *for* hanc (*ex corr.*) 66 aliquanda *for* aliquando 80 carpit iter *for* capit eum 81 hanc *for* hunc 87 hic *for* hi (*before* certamen).

Most troublesome are the variants. For if we assume that B was copied from A the variants can hardly be accounted for. They are as follows:

65 sedes A fides B 66 hac^{n} A hinc B 66 aliquando A aliquanda B 73 istarum A istorum B 75 sibi A tibi B 75 tercia A tertia B (likewise 80) 77 preterea A pręterea B 77 facesš A facessunt B 77 æqtes A equites B (likewise 39, 87) 79 contempuit A contemnit B 80 carpit eū A carpit iter B 81 alternaū A alternatim B 82 q̄at A queat B 84 racio A ratio B (likewise 19, 26, 36, 45, 63) 85 fas ÷A fas ē B 85 quattuor A quatuor B 85 g̃ssum A gressum B 88 cadunt A cadant B 88 pene A poene B 88 p̄lia A proelia B (likewise 50, 88, 90, 93, 98).

Although in at least two instances probably both A and B are wrong (80 carpit eum A carpit iter B 87 Hic certamen AB) we cannot assume from these variants that B copied from A.

Equally difficult would it be to account for the readings if A had been copied from B. Nor should it be forgotten that the headings for the verses are different. Additionally it should be observed that A is as consistent in not using the traditional spelling as B is in adhering to it. A spells regularly *c* for *t*, as in *racio, tercia; ae* for *e*, as in *aequites* for *equites; e* for *ae* or *oe*, as in *pene*.[26]

[26] Hagen's text is based on B rather than A. There are a few errors. In the text: *for* 23 numeros *read* -us; *for* 43 secundas *read* -dus. In the apparatus, *omit:* 66 *an* alternus ? 74 nam A 94 *an* sit? 97 cobit A; *and add:* 75 sibi A 75 tercia B 75 istarum A 84 ratio B 81 alternaū. The following emendations are not good or not necessary: 20 repandit 43 retinetque is 48 recta 53 figendi 53 oblata 58 dum cecidit 80 cepit eum 86 Itque 96 fato. — Hagen not only follows the traditional spelling of B but standardizes the spelling throughout; but Hagen attempts to record in his critical apparatus all the variants of both manuscripts and his own deviations. Murray does not attempt an apparatus criticus; he merely lists some variants from B. Since Murray's text is somewhat better than Hagen's and closer to the manuscripts, I shall attempt

With such inconclusive material to go on, the question of the relationship, if any, of the chess texts in MSS. 319 and 365 remains an open one, if not entirely negative. Not so the question of the place of these verses in the early history of chess.

The Einsiedeln verses are the first instance of chess in western literature. Together with the approximately contemporary Spanish bequests, the Einsiedeln verses constitute the earliest chess documents in the western world. They are older than the manuscripts of the *Ruodlieb* and older than those of the *Ludus scacorum* if they have been dated correctly.

So much has been assured by our investigation. We must now search for an answer to these questions: When did the knowledge of chess come to these localities? Had chess been recently imported or long ago and perhaps undergone some changes? Did the game and the verses come by only one route — by way of Italy or Spain or Byzantium or North Africa? Or was it imported by several routes?[27]

Of more than incidental interest to the discussion are the results of the study of chess figures in the artistic tradition. Inasmuch as most of the extant mediaeval chessmen are made of ivory, walrus tusks or bone, Goldschmidt[28] takes up the whole formal tradition of chess figures, not overlooking the implications of the literary evidence. When chess had travelled from India to Persia into the world of Islam, and thence brought to Europe by the Arabs, the Arabian chessmen came to differ from the original Persian or Indian men not so much in their meaning as in their outer form. Since the Koran forbade the representation of the human figure, the chessmen of the Arabs are merely abstractions of originally personal forms of the king, the vezir, the elephant, the horseman (rider), the war-chariot, and the foot-soldier. The abstract forms, once they were introduced to Europe became again figurative,[29] some of them assuming different functions and all of

to perfect his text by here listing (a) readings in A from which Murray deviates, mostly with obvious justification but without indication: 2 aliquid 5 fraudis 12 ferox 16 ocies 17 duplicis 19 *after* imago *a sign or two letters eser.* 37 hic inde locati 40 calle] colle 43 retinetquis 51 nam dum 53 fingenti 61 tenet 81 alternaū 87 hic (AB) 88 plia (likewise 90, 93, 98); (b) variants in B which Murray omits: 73 istorum 74 contemnit 77 prȩterea 80 tertia 81 huc 85 quatuor 87 hic (AB) 88 poene; (c) some improved readings for Murray's text. I read: 43 Hos qui praecedunt retinet quis ordo secundus 62 quaeque (*with* Ha) *for* quemque (A) 73 istorum (*with* B) *for* istarum (A) 75 tibi (*with* B) *for* sibi (A) 88 cadant (*with* B, Ha) *for* cadunt (A).

[27] The dating of the Einsiedeln verses takes away from the emphasis on Spain toward which Murray found all his evidence pointing. Murray (p. 404) does, however, recognize Italy and Spain as the two localities where early chess was played. He considers three possible ways for transmission: (a) in trade, as via a large harbor like Venice; (b) in schools, as in Arabic centers of learning in Spain; and (c) in everyday life during peaceful contacts, as longest and earliest in Spain. Since, to his knowledge, the Spanish bequests are the "earliest reference to Christian chess," his case for Spain appears strong.

[28] See A. Goldschmidt, *Die Elfenbienskulpturen aus der romanischen Zeit*, IV, 4–8, and for early examples of chess figures, II (1918), 9, 35, 43; III (1923), 41; IV (1926), 46–48, 51. Goldschmidt leans strongly towards Murray's literary results.

[29] The original forms can be reconstructed from Indic forms and those of Egyptian style found in lower Italy.

them a new ornamental form. Their significance was in part quite incongruous with the original function or meaning of some of the chessmen, so, for example, we find Christian scenes carved on chess figures whose original significance was a military one in heathen countries.

The starting point for the Arabic dissemination of chess in Europe Goldschmidt supposes to have been in Spain where the Arabs were at home, but he tells us that there exist also some fairly early chessmen from the Arabic territory in Southern Italy.

Among his earliest evidence Goldschmidt counts a chess figure of ivory at Berlin,[30] in whose male profile he sees Byzantine traces. He connects the figure stylistically with other art from the region of Cologne, and dates it as probably from the second half of the eleventh century. Another ivory of the eleventh century, adorned with scenes from Christ's youth, probably of French origin, is now at Paris in the Musée de Cluny[31] coming from the treasure of the cathedral of Reims. A figure of bone, also of the eleventh century, from Darmstadt,[32] shows a king on a throne almost encompassing him. Whereas the throne speaks more for oriental or Spanish origin, according to Goldschmidt, the figure of the king looks more occidental in character. It was found in an old castle in the village of Langenbogen in the province of Saxony. Several magnificent chessmen of the same ivory set in the Cabinet des Médailles in Paris[33] once belonged to the treasure of St Denis and were believed to have been presented by Harun-al-Rashid to Charlemagne. But their style, not only the lack of literary evidence for the period before the eleventh century, points rather to lower Italy, to some ivories in Salerno, and to the silver Antependium at Salerno. Their date is the end of the eleventh century.

In any case, Goldschmidt finds two main lines of transmission in the pattern of chess figures, the southern way of the Arabs through the Mediterranean countries, as recognized in a group of figures from the eleventh to the thirteenth centuries, and a direct northern line by sea or Asiatic landroute from the Orient to the northern territories of the British Isles and the Scandinavian countries, the main representatives of which are the figures carved of walrus-ivory found on the Isle of Lewis in the Hebrides of the late twelfth century.[34] In his conclusions

[30] II, 9, 35, No. 81.

[31] II, 43, No. 143.

[32] III, 41, No. 159.

[33] IV, 46, No. 161, and the notes on this and the other figures of the set. In 1763 the set was transferred from St Denis to the Cabinet des Médailles in Paris.

[34] IV, 49, Nos. 182–187. They are now in the British Museum, in the National Museum, Edinburgh, and in Dublin. Cf. Murray, pp. 758–759. For the Asiatic landroute, cf. also M. S. Kogan, *Ocherki po Istorii Shakhmat v SSSR* (Moscow, 1938), pp. 9–10, who makes the following points: According to a Russian theory by Savenkov, there is a possibility that the knowledge of chess moved northward from Iran in the fifth and sixth centuries along the Caspio-Volga trade-route and that it may have reached the Russian Slavs in the eighth and ninth centuries. Arabic coins of the eighth to the eleventh centuries, found in excavations, attest the commercial relations between the Russian Slavs and the Arabs and so do the accounts of the Arab geographer, Ibn Fodlan-Mas'udi of the tenth century. Possibly, there were other routes. But the earliest proof for chess in Russia is a reference in the *Kormchaya Kniga*, a collection of church laws in the thirteenth century (second half)

Goldschmidt states that the evidence of the earliest extant chess figures points to the introduction of chess into the Occident not before the eleventh century. By evidence he means their style and the fact that the literary sources as investigated by Murray do not reveal the knowledge of chess before the eleventh century.

Carl Johann Lamm discusses chess figures incidentally in his extensive work on mediaeval glass.[35] Not unlike Goldschmidt, Lamm concludes that there is no absolutely certain evidence for the existence of the game of chess in Europe before the eleventh century.

Among the chess figures he discusses, there is one set made of glass, now at Cairo; many examples cut out of rock crystal, in German, French, and Spanish territories; and twelve pieces carved out of carnelian and amethyst in Aix-la-Chapelle. Most of these, he says, are of Egyptian origin, dated tenth century or later.

Only for the chessmen at Osnabrück and at Aix-la-Chapelle does Lamm consider German origin not out of the question. If Egyptian, the Osnabrück figures, which are of rock crystal, were done "s. X–XI," their forms being Fatimid; if German they are to be dated "s. XII–XIII *in.*" A German date is given for some of the chess figures of carnelian and amethyst at Aix-la-Chapelle; they were attached to the ambos of Henry II before 1014 A.D. Lamm, too, recognizes a northern and a southern route for the chess figures coming from Islam.[36]

With Goldschmidt's and Lamm's conclusions on the artistic tradition in mind, let us turn again to the literary tradition. The Spanish bequests of circa A.D. 1010 and 1058 speak for themselves. Besides we recall here what Murray reported about the evidence derived from the nomenclature[37] that Arabic chess shows closer connection with Spanish and Portuguese chess than with that in the rest of Europe. There is good evidence for traffic between Spain and northern Germany in the tenth century; for example, in the Pelagius legend in Hrotsvit of Gandersheim the heading reads "martiris qui nostris temporibus in Corduba martirio est coronatus." John Gorze left a record of his embassy for Otto II to Caliph Abdurrahman III (912–961) in Spain.[38]

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where chess is among the forbidden games. For the interpretation of this Russian text I am indebted to my colleague, Professor George V. Bobrinskoy. Murray (p. 380) like Savenkov, believes that the Volga trade route brought chess to Russia, but only in the twelfth century.

[35] See the reference to Lamm in footnote 1 above and I (1930), 10, 101–102, 183, 186, 220, 520; II (1929), plates 31, 76, 87.

[36] Lamm, *op. cit.*, I, 214, says, rather vaguely, regarding the chess figures at Aix-la-Chapelle, attached to the ambos of Henry II, and the figures at Osnabrück, that some of these pieces may have been made in Germany, "dies umso mehr als in Europa bei der Herstellung von Schachsteinen des nördlichen Typus auch der Bergkristall zur Anwendung kam." For evidence of oriental contact in Sweden during the Viking age, see C. J. Lamm, *Oriental Glass of Medieval Date found in Sweden and the early History of Lustre Painting* (Stockholm, 1941), pp. 7–12.

[37] Murray, pp. 395–400.

[38] Cf. Paul von Winterfeld *Hrotsvithae Opera* (Berlin 1902), p. 52, and Rudolf Koepke, *Ottonische Studien*, II (Berlin 1869), 76. The latter refers to the missions going back and forth between Otto and the Caliph Abdurrhaman, about 951–961. Cf. also *Monumenta Germaniae Historica, Scriptores*, IV (Hanover, 1841), 369–376, for John Gorze's embassy as told in his *Vita*.

But for Tegernsee where the *Ruodlieb* was written another possibility suggests itself. In Tegernsee as in many a western cultural center in the tenth and eleventh centuries there are signs of Byzantine contacts,[39] maintained, for example, through monks and other persons in imperial and ecclesiastical service. In the time of the Ottos, the imperial house had special ties with and interest in Byzantium. Under the protecting concern of Otto II, whose wife was the Greek princess Theophano, the monastery of Tegernsee began to flourish again. Before he became emperor, ever since A.D. 995 Henry II had made donations to this monastery and in 1011, as emperor, he enlisted it for his program of colonization in the East. In the *Ruodlieb* we read of Byzantine gold coins and signs of Byzantine influence have been noted in the animals, the precious objects, the court tents and the ceremony and dress in the court and palace scenes.[40] Suggestive for Byzantine contacts with Germany are the Byzantine traces in the early chess figures pointed out by Goldschmidt.[41]

Einsiedeln likewise was closely associated with the imperial house. Otto I and his successors, Otto II, Otto III, and Henry II, granted special privileges and distinctions to members of the community, and members of their families patronized the monastery. Thietland, the second abbot (958–964), was of the dukes of Swabia and Gregory, the third, of a noble Anglo Saxon family.[42] It should be recalled that the deaths of Thietland and Gregory are recorded in the Einsiedeln Calendar, in MS. 319, which also contains the chess verses as was stated above. Perhaps Einsiedeln, too, received the knowledge of chess from German territories.

A word should here be said about the chess terminology in the three pieces under consideration. In the *Ruodlieb*, probably by nature of the work, the technical terms are almost completely absent. The game of chess is mentioned in an episode, in a typically oriental situation but without the fatal oriental consequence. There is no didactic and explanatory account of chess in the episode. The little king to whom the hero (Ruodlieb) has been admitted calls for the chess board ("rex poscens tabulam"), saying that he wishes to learn some moves ("uolo tractus discere"). The only Arabic word in the episode is "chess" as used in the phrase "scachorum ludo temptat me uincere crebro, Nec potuit."[43]

[39] Cf. Friedrich Specht, *Geschichte des Unterrichtswesens in Deutschland* (Stuttgart, 1885), p. 368. Gottfried Zacher, *Das Kloster Tegernsee um das Jahr 1000* (Leipzig, 1935), pp. 164–165. B. A. Mystakidis, *Byzantinisch-deutsche Beziehungen zur Zeit der Ottonen* (Stuttgart, 1891). Cf. also Lamm, *Mittelalterliche Gläser* . . . I, 24, 188, 186, 214, 504, 517, 520.

[40] E.g., *Ruodlieb*, III, IV, V, 1 ff., XV (tents and ceremonies); V, 82 ff. (animals and other gifts); V, 314 ff. (Byzantine coins, etc.). Widukind, *Res gestae Saxonicae*, III, cap. 56, relates that legates of the Romans, Greeks, and Saracens brought many kinds of gifts of vases, ivory, etc., including lions, camels, monkeys and ostriches, to the German ruler Otto I in the year 955.

[41] II (1918), 9, No. 81: "Die Bekanntschaft mit byzantinischen Arbeiten ist dadurch erwiesen, dass die Maihinger Szenen auf der Rückseite der Halbfigur einer byzantinischen Madonna geschnitzt sind, die ursprünglich das Mittelstück eines Triptychons gebildet hatte."

[42] See Odilo Ringholz, *Geschichte des fürstlichen Benediktinerstiftes U.L.F. von Einsiedeln*, I (Einsiedeln, 1904), 25 ff. Cf. Goldschmidt, *op. cit.*, II, No. 2, and Ernest T. de Wald, "The Art of the Scriptorium of Einsiedeln," *The Art Bulletin*, VII (1924), 79–90.

[43] *Ruodlieb*, IV, lines 194, 207, 187 resp.

The Einsiedeln verses, too, are strikingly free from Arabic terminology. "Chess" occurs only in one of the headings; "mate" does not occur. Within the poem there are many Latin terms: *aequor* (board), *tabula* (square), *rex*, *regina*, *comes*, *eques*, *pedites*, *cursus* and *tabella*. The only Arabic survival is in the latinized form of *rochus*, but, as Murray tells us,[44] this has an interesting setting. *Rochus* is here featured not only with a two-wheeled chariot, reminiscent of its original meaning, but with the alternate German title of margrave: "Extremos retinent fines inuectus uterque Bigis seu rochus, marchio siue magis."[45] Thus the designation is taken from the political not the military organization of Germany. From this it would appear that the game of chess had been acclimated in German territories by the time the Einsiedeln verses were written down in Codex 365.

The Einsiedeln verses describe the figures located beside the king and queen as "inclined counts"[46]: "Post hos acclini comites, hinc inde locati, Auribus ut dominum conscia uerba ferant." Perhaps it is a coincidence that the "inclined counts" remind one of the passage in the *Ruodlieb* — not, however, in the chess episode — where the faithful in daily attendance on the king are likened to acorn shells (adhering to him and) ever sounding (blowing) in his ears.[47] A more likely parallel for the "counts inclined towards the ears of the king" is in the later portion of the Einsiedeln verses, as the powers of the figures are being defined: "Ast quos uicinos dominis curuosque notaui, Transuerso cursu sat loca pauca petunt."[48] Murray renders *curuos* here with "bent" in the sense of "aged" and associates this with *caluos* applied to the bishop in the Winchester poem and the figure of *der Alte* in German chess poems.[49] In my opinion, the passage refers

[44] P. 498.

[45] Lines 41–42. I understand this to read: "The extreme limits occupy, mounted on a two-wheeled chariot, the two rooks or rather margraves."

[46] Lines 37–38. The passage is not altogether clear, since the text does not construe. I read it to say: "After these are the inclined counts, located here and there, so as to bring knowing words to the ears of the master(s)," understanding *dominum* to stand for a genitive, either *domini* or *dominorum*.

[47] *Ruodlieb*, v, 194–198: "Regis simnistis aliisque fidelibus eius, Eius seruicio qui sunt in cottidiano, Qui ueluti glandes semper fiant regis ad aures Et pro mercedi succurrunt pondere ciuis, Bona dat eximia census ad mille talenta." For the interpretation of *glandes* as "acorn shells" or "balanids" I am adopting the suggestion by Fritz Loewenthal, "Zu Ruodlieb V, 196," in *Studien zur lateinischen Dichtung des Mittelalters: Ehrengabe für Karl Strecker zum 4. September 1931* (Dresden, 1931), pp. 132–133.

[48] Lines 71–72.

[49] Pp. 499, 504. For *senex* in place of *comes* in the *Carmina Burana* see the edition by Schmeller, No. 184: "Roch, pedes, regina, senex, eques, insuper et rex." In the *Ludus scacorum*, the *alficus* (or *arphilus*) is followed by a word which reads variously in different manuscripts. Pascal adopts *arphilus curvus* for his text. *Aficus curvus* is found in the Neapolitan manuscript, BN IV, F. 13, *saec.* XII–XIII. Of the readings in the Milan manuscript, Ambros. H. 23. Sup., f. 77 r, *saec.* XII–XIII (usually adopted by him), Pascal says *alrphilus* is followed by something like *tinius*. Schmeller's text, derived from the Munich codex 4660 (*saec.* XII) reads: *alficus trivius*. Murray, p. 515, had the help of emenders but was not satisfied by their suggestions. He decided on *alficvs triuius* for his text, listing other readings in the apparatus: *alphicus trinus* from MS. Reims 1275 (I, 743), p. 430, *saec.* XIII; *alfinis constat* from MS. Florence Laurenziana, P.L. xci. Sup. 28, f. 97, s. XV/XVI, and *alficus curuus* from MS. Oxford, Bodl., Digby 53, f. 16 b, s.XII *ex*, and MS. Naples, Musei Borbonici CCLXI, iv, f. 13, s. XIV (now Naples, B.N. IV. F. 13). My own view is that these various readings go back to an abbreviated common pro-

back, by word and context, to the *acclini comites* discussed above and means: "But those whom I have noted as neighboring on the masters, and bent toward them, aim in transverse course for rather few places."

Possibly by significant contrast to the two others, the *Ludus scacorum*, having come down to us in many manuscripts of Germany, Italy, England, and France that date from the late eleventh to the sixteenth centuries, contains several Arabic terms: *scachorum* (*ludus*), *mattus* (or *mactus*, in the phrase "rex est mattus" and again in a last line found only in the *Carmina Burana*), *rochus*, and *alficus*, *triuius* or *arphilus curuus*.[50] The genuine Latin terms are *rex*, *femina* (or *regina* when the pawn has acquired special power), *eques*, *pedites*, and also *proceres* and *comites*.

On the other hand, we should not overlook the fact that *Afri* and *Africa* have an important place in that portion of the *Ruodlieb* of which the chess episode is a part. Off hand we associate these references with the current Arabic activities in Africa and Italy. Possibly the confusion of *al-fil*, *alficus* and *africus* played a more immediate rôle than hitherto suspected.[51]

An Arabic transmission by way of Italy and not Spain, or not only Spain, seems to this writer the most likely channel for the earliest application of chess in Einsiedeln and for the knowledge of chess in Tegernsee. Byzantine and Arabic influences were widely at work in Italy during the time of the Ottos, and the Byzantine legations, going back and forth between Constantinople and the Western courts of the north, seem to have travelled mostly if not wholly[52] by the Italian route. Einsiedeln was part of the bishopric of Constance and had intimate associations with Reichenau and other centers located on the roads travelled by the pilgrims to and from Italy. If Petrus Damiani can complain of the ungodly uses of chess in Italy in the middle of the eleventh century, we may assume that the game had been curent for some time. The *Ruodlieb* speaks of the Italian town of Lucca in the scene at the castle where the fine, early courtly society at the castle dresses for dinner. The leggings came from "Lukka."[53]

In the light of these results we may well doubt some of the emphasis placed hitherto on Spain as a cultural bridge, at least for Germany. Certainly the road through Italy must be considered to be an important avenue. Another possible point of contact, the Russian route, has so far received all too casual attention.

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totype, either *curuus* or *triuius;* if *curuus*, it fits with the *comites acclini* or *curui* in the Einsiedeln verses, and if *triuius*, it is in line with the *africus in triuiis* found in the chess verses in the Berne Codex No. 531, s. XV, printed by Hagen, *op. cit.*, p. 141, and in other, especially the later, chess literature. See Murray, pp. 504, 506.

[50] There does not as yet exist a satisfactory text of the *Ludus scacorum*. See footnote 17, above. Presumably the third volume of the *Carmina Burana*, projected by the late Alfons Hilka and Otto Schumann, will bring it.

[51] Cf. Fritz Loewenthal, "Bemerkungen zu Ruodlieb," *Zeitschrift für deutsches Altertum*, LXIV (1927), 129, 131. He notes the identification of the *Saraceni* with the *Africani* in Luidprand, *Antapodosis*, II, 44, and suggests that such an identification induced the author to place the chess scene in Africa. He does not consider the association of *africus* with *alficus*.

[52] See Mystakidis, *op. cit.*, passim.

[53] See XIII, 114–115: "Ille ligaminibus de Lukka crura coemptis . . . cca sibi fluitaret."

We must reckon more realistically with the fruits of direct contacts between Germany and Byzantine or Arabic lands under the Ottos and later. Very likely the contacts contributed significantly to the cultural refinement in the changing social conditions in Germany, which, contrary to the common view, were resembling those of chivalry long before the crusades began.[54]

Whatever the route, the extant literary evidence in this early period may be associated with Goldschmidt's southern chess line. Here again, as so often, the artistic evidence illuminatingly complements the literary tradition.

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[54] On these contacts cf. also Georg Baesecke, *Der deutsche Abrogans und die Herkunft des deutschen Schrifttums* (Halle, 1930), pp. 146–147; F. A. Schröder, "Skandinavien und der Orient im Mittelalter," *Germanisch-romanische Monatsschrift*, VIII (1920), 204–215 and 281–290.