

The Western Landing Stages (σκάλαι) in the Golden Horn: Some Remarks Relating to the Eleventh and Twelfth Centuries

Since Antiquity, the Golden Horn as a whole was the best harbour of Constantinople¹. The Neorion and Prosfhorion harbours located there developed separately, as scattered archaeological and textual pieces of evidence attest². At the time of the emperor Alexios I (1081-1118), contact with the West intensified, in particular with Venice, Pisa and Genoa, which, for their part, were interested in gaining economic footholds in Constantinople³. This and imperial concessions granting transfers of territory led to changes in the topographical and social structure of the city that also affected the coastal regions of the Golden Horn along the sea wall.

These changes are recorded in a large number of Greek and Latin documents. They have been preserved in Western archives, exclusively, mainly in Pisa and Genoa, and provide a relatively precise and reliable impression of the harbour areas and their topography. Although these documents have been available in editions of a satisfactory quality since the nineteenth century⁴, they have hardly been used until now in the context of the study of topography and material culture (*Realienkunde*).

The right to settle and transfer property within the city walls implied access to the Golden Horn and its harbours. In this chapter, I would like to focus on inshore property, i. e., the harbours, which contemporary evidence refers to as σκάλα (*scala*). Although this term was generally meant to refer to a »ladder« or »jetty«, it could also relate to »landing stages« in the broader sense and thus to a particular area. The evidence does not contain an equivalent for the term »harbour«. The landing stage (σκάλα) and the harbour (λιμνήν) blended into one another. The different pieces of evidence, which will be analysed in the present study provide also an impression of the harbour of the Golden Horn as a whole in the time since around the end of the eleventh century.

Researching the Landing Stages

The present paper will not be able to provide a comprehensive description of the appearance and functionality of the landing stages of Constantinople. Such an endeavour would require a critical edition of the Greek and Latin texts and their annotated translation⁵. Instead, reference will be made to the »old« editions. The landing stages, which as a whole constituted the harbour, represented commercial areas subject to the standards of land surveying (περιορισμός). While the land surveyor, an imperial official, and his assistants could see the site with their own eyes, today's reader of the sources lacks most of the once available measuring points, which are no longer available due to later changes, and thus is solely dependent on textual analysis. In the present case, fortunately, some constants facilitate the reconstruction. The main points of departure are always the sea wall on the Golden Horn and the »public road« (δημοσία ὁδός) which was excluded from the concession. The long side of the harbour is described in the sources as a straight line starting from the sea wall and running east to west (although not always in a straight line), whereas the broad side included the section from the sea wall up to the water adjacent to the Golden Horn (usually termed »sea«). In almost all cases, we can assume that the areas were calculated in rectangles. The broad side towards the sea generally remains unmentioned and, where the sources refer to it, it is measured at around 50 m.

A particular difficulty that has hitherto prevented researchers from using numerical data in this context are the designation of dimensions and their conversion into modern measuring units. The descriptions (περιορισμοί) define the boundaries of the different landing stages throughoutly using the unit of πήχυς (*pēchys*, »ell«), the Latin translations use their equivalent, the *cubitus*. The unit that was generally used in Byzantium to measure plots was the ὀργυία (*orgyia*), a designation mainly found in the monastic documents of Athos, which measured 2.16 m and was meant to relate to the distance

1 See Kislinger, Golden Horn, in this volume.

2 See Kislinger, Neorion, in this volume.

3 For more details, see Lilie, Handel und Politik.

4 Acta et diplomata graeca III. – Sanguinetti/Bertolotti, Documenti. Both editions are not critical-diplomatic editions according to today's understanding, and the

texts must be compared with the originals. The difficulty of using them lies primarily in understanding the material culture (*Realienkunde*).

5 A study on this, including the concessions within the walls, is being prepared by the author.

between the outstretched arms⁶. In the Classical period there were two types of cubit: the standard cubit of 1.5 ft (46 cm) and the »large« cubit of 2 ft (c. 62 cm)⁷. As the areas would have been much too small even if this larger version of the classical cubit had been used to measure the landing stages or the floor areas of property in the Latin quarters within the city walls⁸, there is no doubt that the term πῆχυς used in our texts must relate to the Byzantine ὀργυία of 2.16 m, which was common in land surveying. This empirical and verifiable assessment is confirmed by a few further examples that also point to the interchangeability of πῆχυς and ὀργυία⁹. This definition of the measurements is to provide a concrete idea of the appearance and size of the landing stages and with these of the overall topography along the sea wall (including the plots in the city, which are left aside here).

Description of the Landing Stages in Chronological Order of the Concessions Granted

The Amalfians

As early as the first half of the eleventh century, Latin literary sources mention a quarter of the Amalfians¹⁰, which (according to Pisan documents from the end of the twelfth century) was located north of the (later) quarters of the Pisans (at a more elevated location, but which may have been originally on the Golden Horn). The Amalfians also had a landing stage that was located to the east of the mooring area which the Pisans had received in 1192 (see PISA IV below) and which is known only from the Pisan document¹¹. We do not have a description of its size or appearance.

The Landing Stages of the Venetians

In the *chryso bull* of the year 1082, the Venetians were granted the right to settle on both sides of the *embolos*, the commercial street, which is today's Hasirular Caddesi. The street extended from the Porta Hebraica (east of Balık Pazarı Kapi) to the Porta Viglas (Odun Kapi). In this area, the Venetians (1082) were given three landing stages along the corresponding sea wall (*maritimas III scalas*)¹². However, neither in 1082 nor later were there any documents providing information on the size of these landing stages¹³. One of these three *scalae* is referred to in private documents from the years 1090, 1184, 1206 and 1208 as *scala maior*, another is characterised as *scala Hebraica*¹⁴. An additional example, the *scala S. Nicolai*, is mentioned in a document from 1185, which contains the important information that it was built of stone (*petrinea*)¹⁵. Another document attests that there were twelve houses on this quay, comparable to the Pisan and Genoese landing stages¹⁶. The expansion by the *chryso bull* of 1148 notes that the Venetians at that time received the *scala S. Marciani*, including the houses and workshops located there, so that this section must have resembled the properties of the other sea states described later¹⁷. During the twelfth century, the Venetians received a fifth *scala*, which is mentioned in Latin documents under several similar names (*scala Cacegalla*, *Cuzugaia*, *Cuzogala*) and must have been near the *scala Hebraica*¹⁸. Among these five *scalae* were probably the two that had belonged to the *Alemanni* and the *Francigenae*, which were handed over to the Venetians in 1189¹⁹.

6 Schilbach, *Metrologie* 20-25, *Géométries*, index. The many passages on πῆχυς in the *Thesaurus Linguae Graecae* have not been used for this article.

7 Schilbach, *Metrologie* 21

8 The presumption of Schilbach, *Metrologie* 21 is not tenable, that »with some probability, in all texts that mention an unspecified ell, with which property is measured, the large ell can be assumed«.

9 In *Maßtraktat* 322, l.1 (Lefort et alii. in *Géométries* 208) it says: Ἡ ὀργυία ἦγον ἢ πῆχη. In one version of the epic of Digenis Acritis the hero's chest is ὀργυιάν τὸ πλάτος (Digenes Akrites v. 1485, p. 171). Here only the πῆχυς of 2 ft (62.46 cm) can be meant. In *Fragment 1b* by the Greek historian Ctesias, is a Byzantine gloss about an altitude in ὀργυία: ὡς δὲ ἔνιοι τῶν νεωτέρων ἔγραψαν πῆχων (Ktesias 668, frag. 1b, lin. 237). According to the critical apparatus, this gloss comes from John Tzetzes (12th c.), who wanted to record that in his time (when the measurements were also made for the contracts) πῆχυς instead of ὀργυία was used.

10 Hofmeister, *Übersetzer* 225-284. 493-508, see also Falkenhausen, *Il commercio di Amalfi con Costantinopoli* 19-38; Skinner, *Medieval Amalfi* 214-223.

11 *Acta et diplomata graeca* III 22, l. 12. The assertion of Magdalino, *Études* 86, that the landing place of the Amalfians was given to the Pisans is not supported by the wording of the text and is not correct.

12 *Pacta Veneta* 992-1198, 28-48, with the quoted passage on 39. On the contract, see Dölger/Wirth, *Regesten*, regest 1081 and Penna, *Imperial acts* 26-34.

13 See the studies by Maltezou, *Quartiere* 30-61, and Jacoby, *Houses and Urban Layout* 269-282, and Jacoby, *Venetian Quarter*.

14 Maltezou, *Quartiere* 34 and regest 1, p. 42 and 36-37. Anna Comnena also mentions the granting of landing stages, without providing a specific number, in her summary of the *chryso bull*: καὶ τὰς ἐντὸς τοῦ διαστήματος τούτου ἐπεροχομένας σκάλας. Anna Komnene, *Alexias* V 7 (179, 34 Reinsch/Kambylis).

15 Maltezou, *Quartiere* 34 and regest 10 (p. 44-45).

16 Lombardo/Morozzo della Rocca, *Nuovi documenti* 39-40 (no. 35).

17 *Pacta Veneta* 992-1198, 74. Maltezou, *Quartiere* 34-35, Jacoby, *Houses and Urban Layout* 272. – Dölger/Wirth, *Regesten*, regest 1373; Penna, *Imperial Acts* 40-45.

18 Maltezou, *Quartiere* 37-39.

19 *Pacta Veneta* 992-1198, 107 (= *Tafel-Thomas*, *Urkunden* 208). These two *scalae* are connected with rights of establishment, but we are not informed about how they were granted and they were never considered in the literature. The mention of the *Francigenae* could refer to agreements in connection with the marriage between Alexius II and Anna, daughter of Louis VII of France (1179/1180), while privileges for the *Alemanni* might be related to the various negotiations between Emperor Manuel II and King Conrad III. It is less likely that they dated back to Alexius I and the time of the First Crusade. In the *Treaty of 1189* (*Pacta Veneta* 108) it is expressly stated that the two nations almost never made use of their rights and that the *scalae* were therefore revoked. See also Penna, *Imperial Acts* 58 n. 314.

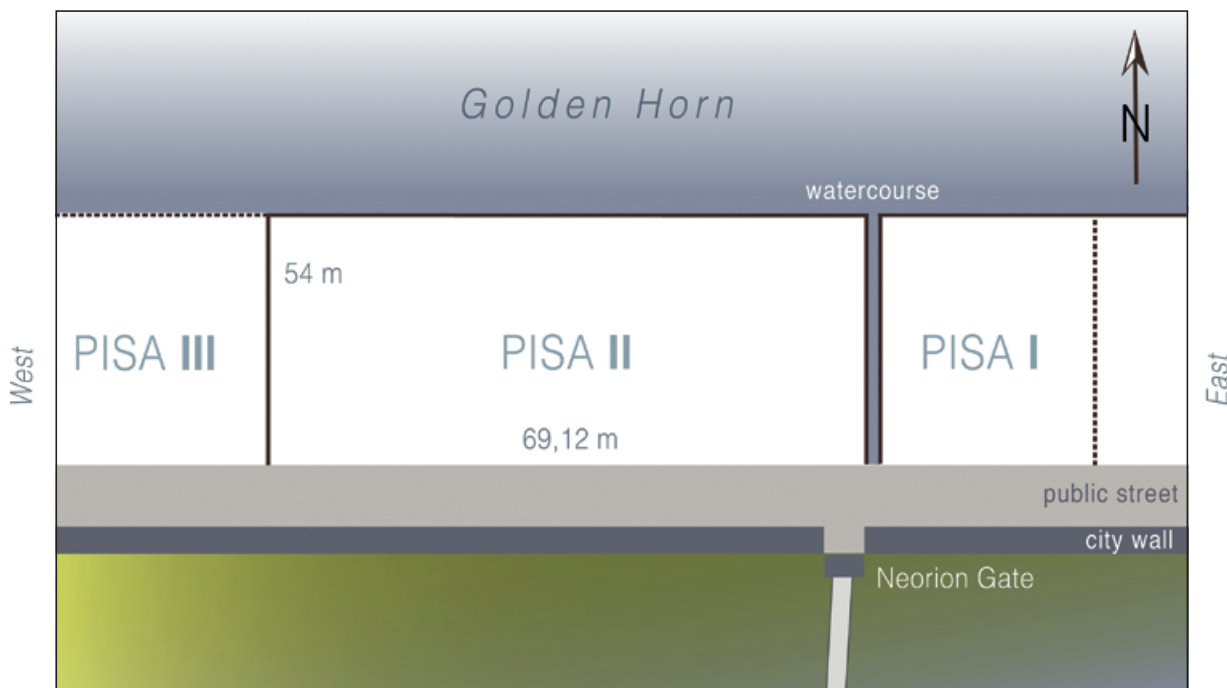


Fig. 1 Map with PISA I/II, 1170 and 1192 (not to scale). – (Map P. Schreiner; graphic design M. Ober, RGZM).

The Landing Stages of the Pisans²⁰ (figs 1-3)

Landing Stage I (PISA I), before 1192 (fig. 1)

The *chrysobull* of the year 1111 attests that the Pisans received a *scala* »at which your ships can dock and their cargo can be unloaded«²¹. There is, unfortunately, no information about its size or location. As the contents of the *chrysobull*, which must have been issued around 1136 by the emperor John II Comnenus and to the benefit of the Pisans, is unknown, it does not allow drawing any conclusions regarding this particular landing stage and the quarter²². The same is true for the *chrysobull* of Emperor Manuel I from July 1170²³.

The earliest relevant information is contained in a *chrysobull* of 1192 that mentions for the first time »a mooring that persists since ancient times outside²⁴ the Neorion Gate and opposite the Monastery of the former Logothetes (Μονή τοῦ ἀπὸ τῶν λογοθετῶν)²⁵. It was located to the east of the landing stages allocated in 1192 and to the west of the mooring area of the former Logothetes Monastery, from which it was separated by a »canal« (fig. 7)²⁶. It is impossible to tell whether this landing stage was identical to the *scala* mentioned in the year 1111. Since it be-

longed to the group of pre-existing buildings (which were described in earlier, now lost documents), the evidence lacks measurements, although there is mention of a διπλῆ σκάλα (»double *scala*«, which may have merged with an earlier *scala*, or, which appears more likely, provided two landing stages – like GENOA I – which would also explain its designation). On this site, there have been two ground-floor buildings with monopitch roofs and a money changer's table (καταλλακτικὸν τραπέζιον).

Following a brief description of the existing buildings, the *chrysobull* gives a general overview of new concessions provided outside the walls before it describes them individually²⁷: there are three landing stages (PISA II, III, IV) between the one mentioned above (PISA I) and the landing stage of the Monastery of St Anthony. They were fenced off by palisades and separated by »canals« whose function, however, is not clearly described here and sometimes contradicts the individual descriptions. In 1192, the nine houses along the wall were transferred to Pisan ownership.

20 All information about the possessions of the Pisans can be found as fully inserted texts in the *chrysobull* of Emperor Isaac II Angelos of February 1192, edited as Acta et diplomata graeca III 3-23 (Greek text) and Müller, Documenti sulle reazioni delle città toscane 40-58 (with Latin *Authenticum*), cf. also Dölger/Wirth, Regesten, regest 1107 and Penna, Imperials acts 119-130.

21 Acta et diplomata graeca III 11, ll. 26-27, Dölger/Wirth, Regesten, regest 1255; Penna Imperial acts 115-118.

22 Dölger/Wirth, Regesten, regest 1310a.

23 Dölger/Wirth, Regesten, regest 1499; Penna, Imperial Acts 115-118.

24 Greek ἔξωθεν here means »east of«. The Golden Horn is topographically described from »outside« (east), the confluence of the Bosphorus and the Sea of Marmara, inwards (west). Therefore, in this context, ἔξωθεν means the eastern direction as seen from a certain object (here the Neorion Gate). See also n. 46 below.

25 Acta et diplomata graeca III 21, ll. 6-20.

26 For κἀναλός (here and in other places), which means »watercourse«, not »navigation channel«, see below 158.

27 Acta et diplomata graeca III 21, ll. 20-33.



Fig. 2 Map with landing stage PISA III, 1192 (not to scale). – (Map P. Schreiner; graphic design M. Ober, RGZM).

Landing Stage II (PISA II)²⁸ (fig. 1)

Situation: west of landing stage I (PISA I).

Dimensions: 32 cubits (69.1 m), running parallel to the city wall (from east to west), and 25 cubits (54 m) from the city wall to the sea; area 3731 m².

Development: no buildings mentioned, one money changer's table (stated in PISA V).

Landing Stage III (PISA III)²⁹ (fig. 2)

Situation: west of PISA II, it was located in the west on a »canal«, although it remains unclear whether there was another canal to the east (to PISA II) or merely a fence.

Dimensions: 21 cubits (45.3 m) running parallel to the city wall and 17.5 cubits (37.8 m) on the waterside. The width from the city wall to the water is not mentioned, but is probably comparable to PISA II (54 m). The property was not rectangular³⁰, but assuming the same width as PISA II, the area would have covered 2108 m².

Development: there was an undisclosed number of houses along the sea wall; PISA V shows that there was also a money changer's table.

Landing Stage IV (PISA IV)³¹ (fig. 3)

Situation: between landing stages III and IV is the Amalfian *scala*, which was probably not separated from IV by a canal,

but only by a board fence; the western side of IV was only separated from the *scala* of the Monastery of St Anthony by a board fence.

Dimensions: 20 cubits (43 m) of length, parallel to the sea wall, but 23 cubits (50 m) in the middle, allowing only an approximate estimation of its area to around 2446 m².

Development: it was probably undeveloped given that houses are only mentioned on the western side of the *scala* of the Monastery of St Anthony; however, there is a money changer's table mentioned for PISA V.

Landing Stage V (PISA V)³² (fig. 3)

Situation: to the west of PISA IV was the *scala* of the Monastery of St Anthony³³, which (as the text expressly states) remained the property of this monastery; to its western side, and separated from it by a »canal«, was the *scala* of the Monastery of the Forty Martyrs³⁴, which was given to the Pisans.

Dimensions: this is another lot with different dimensions, measuring on the side of the wall 22.5 cubits (48.6 m) and on the sea side 29 cubits (62.6 m); no measurement is provided for the width from the wall to the sea. Since the Hikanatissa Gate is specifically mentioned (the position of which is known), the *scala* must have been in this area.

Development: there was an unknown number of houses on the side facing the wall.

28 Acta et diplomata graeca III 21, ll. 33 – 22, l. 5.

29 Acta et diplomata graeca III 22, ll. 5-10.

30 Unequal plots are often encountered in the land survey, see Schilbach, Quellen 61. 63. 76. 89. 95, and Géométries, nos 116. 118. 125. 138. 140. 175.

31 Acta et diplomata graeca III 22, ll. 10-24.

32 Acta et diplomata graeca III 22, ll. 24-23, l. 14.

33 On the monastery, see Janin, Sièges de Constantinople 39-41.

34 This is probably the *scala* of the Church of the Forty Martyrs on the (Golden) Horn (τοῦ κέρρατος), see Janin, Sièges de Constantinople 483 (with typographically unclear references).

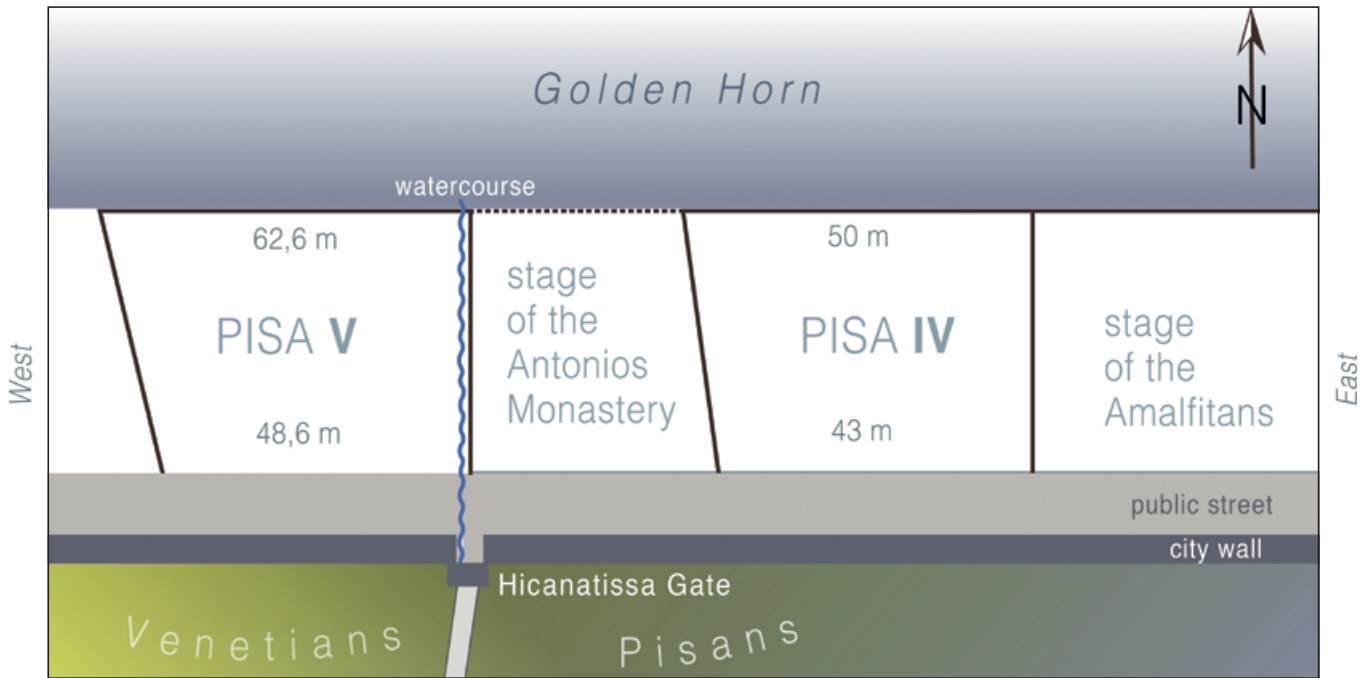


Fig. 3 Map with landing stage PISA IV/V, 1192 (not to scale). – (Map P. Schreiner; graphic design M. Ober, RGZM).

The Landing Stages of the Genoese (figs 4-6)

Landing Stage I (GENOA I) (fig. 4)

As a result of long negotiations with Emperor Manuel I, various treaties were concluded with Genoa in 1169 and 1170³⁵. One of those is the protocol of 10 April 1170 (only preserved in Latin), which contains a description of the first landing stage at the time around 1170³⁶.

a) Data for the year 1170³⁷

Situation: the landing stage was divided by a watercourse (*aquae cursus*) that emerged from the city wall at the *porta Bonu* and belonged to the Monastery of Manuel until it was granted to the Genoese³⁸. A topographical determination is difficult given that the *porta Bonu* is only mentioned in this particular document³⁹ and there is no conclusive evidence proving that the Monastery of Manuel had any possessions on the Golden Horn⁴⁰.

Dimensions: 31.5 cubits (68 m) along the sea wall (east-west) and 22 cubits (47.5 m) from the wall to the sea.

Development: eleven houses with a single floor; two houses with two storeys and workshops, to which two small canals (or watercourses) led; ten more houses with monopitch roofs in the area of the public road along the city wall.

b) Data for the year 1192⁴¹

Situation: some new elements have been added compared to the description of 1170 (above). The landing site was delimited to the east by a «canal», east of which was another *scala* (ἑτέρα σκάλα) of the Monastery of Manuel; the *porta Bonu* is not mentioned by name, but a «Gate of the Old Raiktor» (πόρτα τοῦ παλαιοῦ ραϊκτορος) is noted, which may be identical to the former⁴².

Dimensions: 33 cubits (71.28m⁴³) in length on the side of the sea wall; no measurements provided for the width, but it is described as ranging »from the wall to the sandy beach«.

Development: the type and number of buildings changed considerably between 1170 and 1192, viz., four single-storey houses with monopitch roofs and sales booths on the public road (along the sea wall); two workshops with monopitch

35 Lilie, *Handel und Politik* 87-100; Penna, *Imperial acts* 133-156.

36 *Codice diplomatico* 117-121 (no. 52), cf. Dölger/Wirth, *Regesten*, regest 1495.

37 *Codice diplomatico* II, 120, ll. 28-121, l. 8.

38 On the Monastery of Manuel, see Janin, *Siège de Constantinople* 320-322.

39 The possessions of the patrician Bonus (7th c.) were in a completely different part of the city (Berger, *Untersuchungen* 613-614).

40 Janin, *Le siège de Constantinople* 320 assumes possessions of the monastery in this area, but the Genoese documents provide no information. Kislinger, *Better and Worse Sites* with n. 87, in this volume, conjectures that the three *scalae* would have been below a palace of (emperor) Romanos I, but find no support in the passage cited there (Theophanes Continuatus, *Chronographia* VI 433, ch. 50). However, *scalae* are always associated with nearby or easily accessible

property. The topography of the *scala* of the Monastery of Manuel that has now been established must lead to new considerations about its location or properties on the Golden Horn.

41 *Acta et diplomata graeca* III 53, l. 28-54, l. 12. Latin translation I libri Iurium I 2, 196, no. 354. The Greek *prostagma* is inserted into the *prostagma* of Alexius III Angelos from October 1201 (Dölger/Wirth, *Regesten*, regest 1661a); Penna, *Imperial acts* 195-197.

42 See n. 50 below.

43 The length differs slightly from the information in the Latin translation from 1170 (above) and is probably based on a new survey, in which the «Gate of the Old Raiktor» was added. Perhaps, this is only one of the inaccuracies known in such surveys, cf. *Géometries* 263-265.

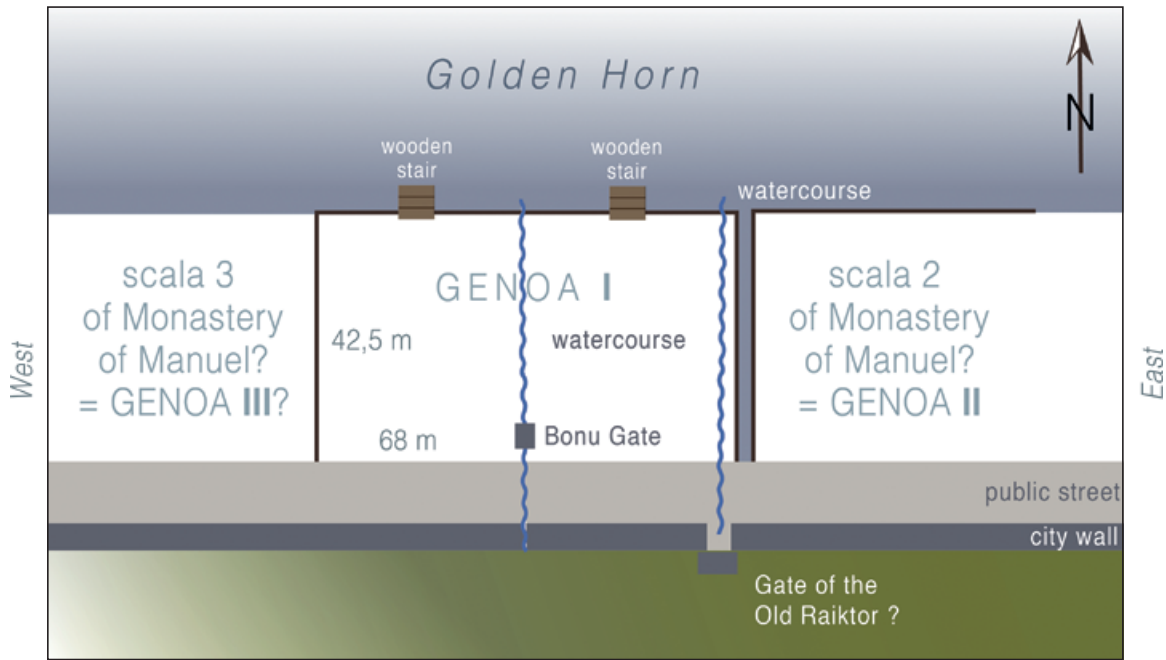


Fig. 4 Map with landing stage GENOA I, 1170 and 1192 (not to scale). – (Map P. Schreiner; graphic design M. Ober, RGZM).

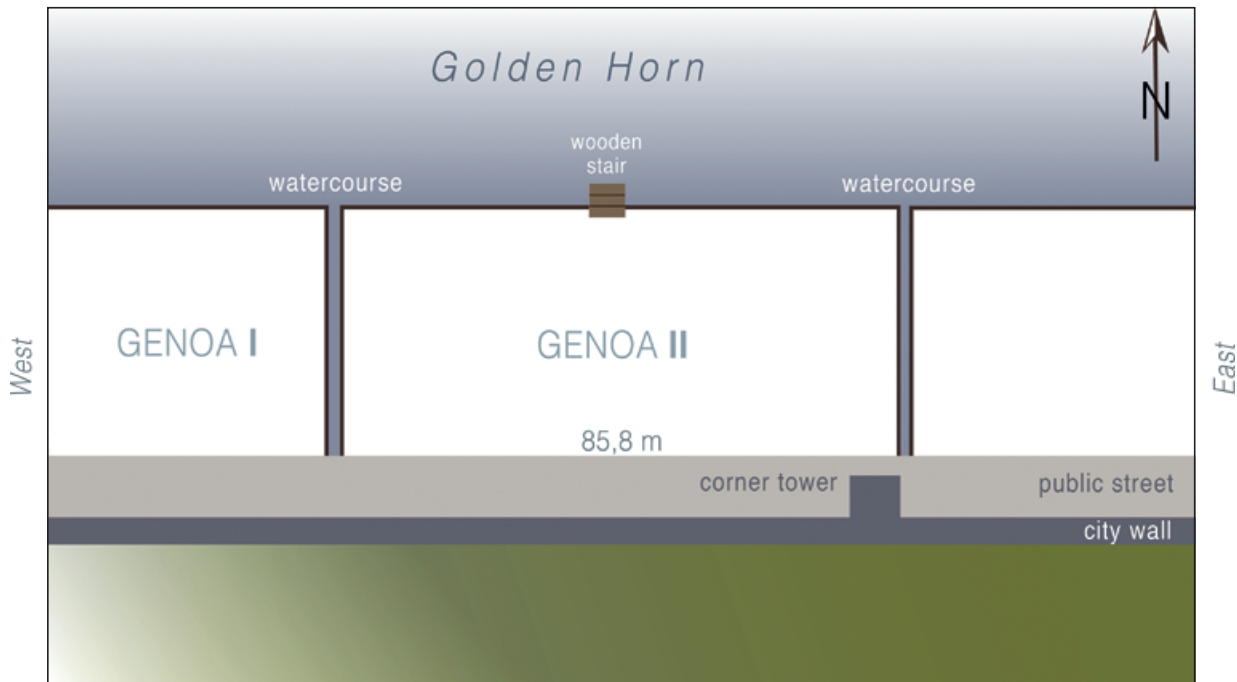


Fig. 5 Map with landing stage GENOA II, 1192 (not scale). – (Map P. Schreiner; graphic design M. Ober, RGZM).

roofs; one single-storey house with a monopitch roof; one single-storey house with *syrtaria* (i. e., interior fittings for storing small, valuable items); three single-storey houses; one one-storey house with a gable roof; one single-storey house with a living room including a sales booth; one money changer's table east of the canal issuing from the »Gate of the Old Raiktor«; two jetties on the seaward side.

Landing Stage II from the year 1192 (GENOA II)⁴⁴ (fig. 5)

Situation: east of landing stage I, according to the description of GENOA I (1170), owned by the Monastery of Manuel until 1192; bordering another »canal« in the east.

44 Acta et diplomata graeca III, 54, I. 12-25; Latin translation I Libri Iurium I 2, 197.

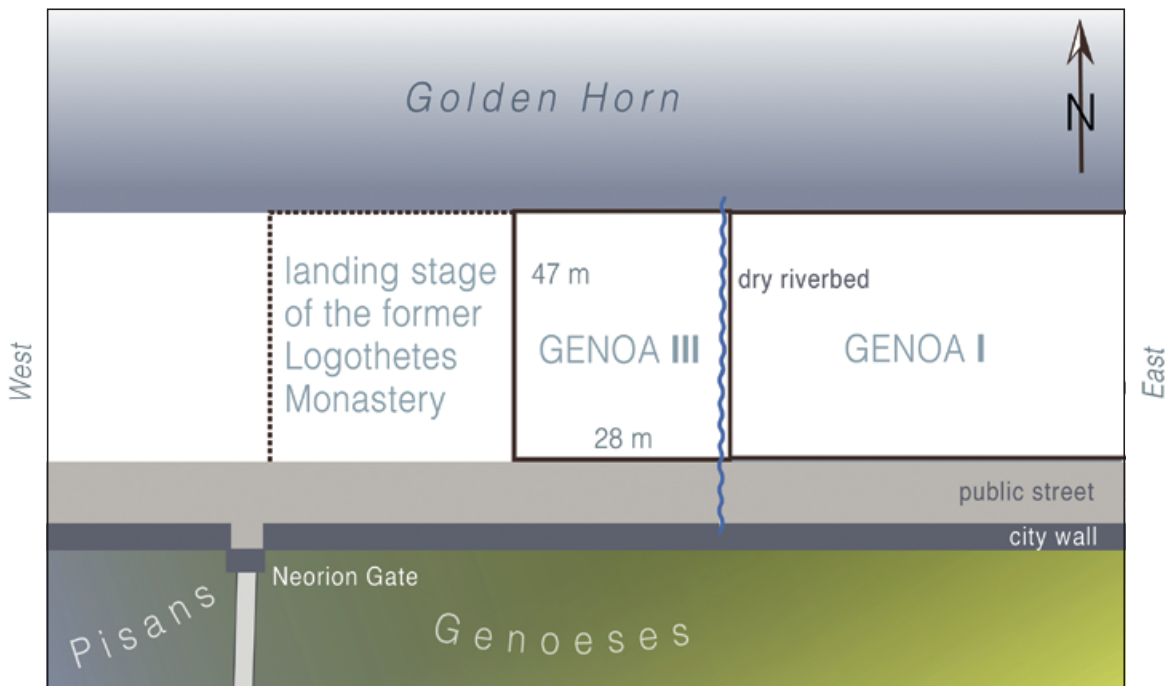


Fig. 6 Map with landing stage GENOA III, 1201 (not to scale). – (Map P. Schreiner; graphic design M. Ober, RGZM).

Dimensions: 39.75 cubits (85.8 m) in length on the side of the wall; no measurement mentioned to define the width from the wall to the »surf«, although it may be analogous to GENOA I with 22 cubits (47.5 m); 3350 m² in area.

Development: two single-story houses with gable roofs and a sales booth; a sales booth with a monopitch roof (remaining in the possession of the porter Theophylactus); three two-storey houses with terraces facing the sea; one storage building with protective grille in a niche in the tower on the wall.

Landing Stage III from the year 1201 (GENOA III)⁴⁵ (fig. 6)

Situation: according to the description, it is located »west« of the »previously mentioned« (τῆς προειρημένης), which should refer to landing stage I⁴⁶; the mooring area previously belonged to the Monastery of Manuel.

Dimensions: 13 cubits (28 m)⁴⁷ along the sea wall; the distance from the wall to the water (width) is not specified although, on the basis of GENOA I, it would be 47.5 m; however, the resulting area of 1330 m² seems a little small in view of the dense development.

Development: two single-storey houses with workshops; one two-storey house with workshop; one two-storey building with a bar on the ground floor; four single-storey houses with workshops.

Topographical Classification of the Landing Stages in the Golden Horn (fig. 7)

The plot descriptions for the Pisan quarter (which could not be presented here) allow a relatively precise assessment of the delimitations on the side of the city wall towards the Golden Horn. The quarters ranged from the Neorion Gate in the east to the Hikanatissa Gate in the west. The analysis of the imperial documents provided for the Genoese quarter shows that this followed the concessions for the Pisans in the east, even if the scope and delimitation cannot be determined as clearly as for the Pisans. In any case, the Neorion Gate in the city wall delimited the area of the Pisans and the Genoese. In the west, starting from the fixed point of the Hikanatissa Gate where the Venetian possessions were located on both

45 Acta et diplomata graeca III, 54, lin. 25-55, l. 7; Latin translation I Libri Iurium I 2, 197.

46 However, it cannot be ruled out that the landing stage was indeed east of GENOA II and that the direction of the compass (πρὸς δύσιν instead of πρὸς ἀνατολάς) is confused in the text.

47 However, the text says διάμετρος (diameter), but according to topographical understanding, only the route along the city wall can be meant.



Fig. 7 Map of the landing stages in the Golden Horn (not to scale). – (Map P. Schreiner; graphic design M. Ober, RGZM).

sides of the *embolos* reaching as far as the Vigla Gate. The available Venetian deeds of ownership do not provide any measurements⁴⁸.

Thanks to the close arrangement of the quarters (on the seaward side), we have a solid basis for the reconstruction of the sequence of the landing stages. The description may be followed using **figure 7**. PISA I, the so-called »old landing stage«, went back to a time when the Pisan possessions were not yet extensive. They were situated »outside« (ἐξωθεν)⁴⁹ the Neorion Gate and »opposite« the Monastery of the former Logothetes, which was located in the Genoese quarter within the walls, and is also mentioned several times in reference to the Genoese quarter⁵⁰.

To the west (with an unknown gap between them and PISA I), the landing stages PISA II and III followed, which were located to the west of the Neorion Gate and »within«

the Pisan possessions. West of PISA II was the landing stage of the Amalfians, whose dimensions are unknown, followed by PISA IV and PISA V, both of which were interrupted by the landing stage of the Monastery of St Anthony. According to the evidence, which is not always topographically clear, PISA V lay opposite the Hicanatissa Gate, where (within the walls) the Pisan possessions ended and the Genoese began. The Pisan part of the sea wall, which is still walkable and measurable today, is approximately 250m. The total length of the PISA II-V landing stages adds up to 195m, to which the landing stages (of unknown dimensions) of the Amalfians and the Monastery of St Anthony must be added, and, of course, the area of the so-called canals located between some of the mooring areas. As a result, almost the entire coastline from the Neorion to the Hicanatissa Gate must have been filled with landing stages (including four of the Pisans).

48 In any case, the Venetian quarter (at the end of the 12th c.) was considerably larger than those of the Pisans and Genoese, although the political restrictions of the Byzantine emperors limited Venetian trade activities from 1171 to 1204 and strengthened those of Genoa and Pisa.

49 For the topographical meaning of this information, see n. 24 above.

50 Janin, *Siège de Constantinople* 41. – Jacoby, *Venetian Quarter 1560* wrongly locates the monastery »outside the Neorion Gate«.

The topographical placement of the Genoese landing stages is less certain. They are connected to unknown positions on the sea wall, i.e., the *porta Bonu* in GENOA I from 1170 and the πόρτα τοῦ παλαιοῦ ραίκτηρος, also in GENOA I, from 1192. This landing stage, according to GENOA I from 1192, was located outside (ἔξωθεν) of the »Gate of the Old Raiktor« and thus, analogous to the information related to the first mooring area of the Pisans, east of this gate⁵¹. GENOA II was located to the east of GENOA I and thus also outside the »Gate of the Old Raiktor«, although the text is not *expressis verbis* on this point. GENOA III was a concession from the year 1201 and was probably located west of GENOA I, provided that there is no error made in referring to the direction of the compass, which would mean that the *scala* would have been situated east of GENOA I/II. In any case, the *scala* of the former Logothetes Monastery must have separated the Genoese landing stages from the Pisan mooring areas. The length of the Genoese landing stages (parallel to the city wall) is measured at around 180 m, without the »canals«, which is only slightly less than that of the Pisans⁵².

The exact sequence of the *Venetian* landing stages has to remain largely open, since the mentioned Venetian private documents relating to property within the walls do not contain any specific topographical information related to the *scalae*.

The External Aspects of the Landing Stages

The documents related to the imperial donations to the Pisans and Genoese are the only descriptions of landing stages available from the Byzantine Empire⁵³. These descriptions cannot be generalised in every case since they represent a very specific image of the »harbour« in these particular areas of Constantinople. In spite of their Graeco-Latin name *scala*, the landing stages were not only jetties, but lots outside the sea wall, on a shelf or on alluvial land, which along the wall were connected by a »public road« (δημοσία ὁδός). They were separated from each other either by wooden fences or watercourses (κάναλος, κανάλιον; or even dry ditches like GENOA III) pouring into the sea from the heights of the city. There is no mention of special shipping channels on the broad sides of the landing stages. Although the sources do not always mention the dimensions of the broad side of the respective mooring areas (from the wall to the sea), it appears that they all roughly measured around 50 m, so that it is also possible to have an idea of the diameter of the land plinths at these points⁵⁴. In some cases, the previous owners of the

landing stages are mentioned: the hospice of the Church of the Forty Martyrs (PISA V) and the Monastery of Manuel, which owned all three Genoese landing stages until they had been withdrawn between 1170 and 1201.

A special characteristic of these landing stages is their extensive development, with the exception of PISA II and IV, especially on the side of the sea wall where the road was located. Dimensions for these buildings are not provided by the sources. Most of them were single storied, but always with a monopitch or gable roof, which, in view of the mild climate in Constantinople, points to stability and durability, as well as their material value⁵⁵. They occasionally served as workshops and GENOA III also contained a bar. Sometimes these houses were also connected to booths for the sale of goods (προβολαί). In general, these houses were probably of simple construction and there is rarely mention of a *triclinium* (living room). In the Genoese harbour area (GENOA II), however, there were also more luxurious houses with vault-like ceilings (ζυγώματα) and sea-facing terraces.

Money changer's tables (καταλλακτικά τραπέζια) could be found at almost all of the landing stages. These were covered and constituted small banking premises. Overall, the description of these buildings gives the impression that they were occupied only during the daytime and that the workers went home to their dwellings located behind the city walls in the evening.

There are no references to facilities for shipbuilding or large warehouses. Thus, it appears that goods were stored there only temporarily and that they were later brought to locations within the quarters. There is evidence for workshops producing materials required in shipping. However, the documents do not mention technical equipment for mooring ships or special masonry on the seaside, but it is likely that such details did not belong in a land survey. The reference in GENOA I that the property extended to the »sandy beach« (μέχρι τοῦ ψάμμου) suggests that ships were pulled onto land for unloading. The floor generally consisted of compacted earth (or gravel), the mentioned Venetian landing stage being the only documented stone *scala*⁵⁶.

The documents for GENOA I/II describe wooden walkways (ξυλόσκαλα) on the seaward side. It has been shown that the broad sides of the landing stages did not provide any or only insufficient space to be accessed from the sea. This is why only the sea sides of the landing stages, of different lengths, were available for access by the ships: PISA II 69 m, PISA III 37.8 m, PISA IV 50 m PISA V 62.6 m, GENOA I 68 m (or 71 m), GENOA II 85 m, and GENOA III 28 m. It is likely that the five

51 See n. 24. – Asutay-Effenberger, *Porta veteris rectoris* 129-142 does not clarify the topographical question. – Berger, *Ufergegend* 160 fig. 2 suspects the *porta* at the end of the Genoese quarter, but this cannot be true from the description in GENOA I. The gate in the Genoese part of the sea wall cannot be determined with the data known so far.

52 The calculations by Balard, *Romanie génoise* 180 are based on unreliable figures derived solely from the Latin translation and the Genoese ell.

53 *Scalae* are also mentioned in monastery documents, especially on the Holy Mountain Athos, without further description.

54 The research of Mango, *Shoreline* refers to a different epoch and a different topographical area.

55 Schreiner, *Haus* 277-320. – The documents on the quarters in Constantinople were not fully evaluated.

56 See, n. 15 above.

scalae of the Venetians had similar lengths of around 60 m, especially since their share of the seafront was much larger with around 500 m (on the side of the wall). The shipwrecks from Yenikapı (Harbour of Theodosius⁵⁷) attest that, in our period, the average length for medium ships was 10-12 m and for large transport ships 17-19 m⁵⁸. This means that up to five ships could be unloaded at the *scalae* at the same time. The available surface in the »harbour« in 1201 amounted to approximately 10 600 m² for the Pisans, 7 800 m² for the Genoese, and an estimated 10 000 m² or more for the Venetians.

The treaty that was concluded in 1201 with Genoa was apparently the last negotiated with a Western state that involved territorial and commercial concessions before the Latin conquest of Constantinople in 1204, a situation from which entirely new conditions emerged⁵⁹. As it seems, the quarter and *scalae* of the Pisans remained largely intact⁶⁰. The rights of the Genoese, however, expired⁶¹, although we do not know whether the Venetians had *de facto* taken over their landing stages, given that the Genoese quarter had remained outside the Venetian part of the city of Constantinople⁶².

Summary / Zusammenfassung

The Western Landing Stages (σκάλαι) in the Golden Horn: Some Remarks Relating to the Eleventh and Twelfth Centuries

Thanks to a large number of Greek and Latin documents in the archives of Genoa and Pisa, we have relatively detailed information about the development, number and appearance of the landing stages (*scalae*) of the city states of Venice, Pisa and Genoa on the Golden Horn since the eleventh century. Documents of this kind have not survived from Venice, thus we can only arrive at generalised assumptions about the Venetian landing stages.

The information in the documents is always related to the granting of trading quarters in the city: Amalfi since the beginning of the eleventh century; Venice since 1082; Pisa since 1111; and Genoa since 1170. Based on the surviving descriptions of the terrain – concrete, but not always exact – we can calculate an approximate conversion to modern measurements. »Landing stages« are always plots of land outside the city walls on the Golden Horn, from the Porta Viglas (Odun kapi) in the west to the present-day Sirkeci quarter in the east. They are connected to the respective quarters inside the walls and are several times interspersed with landing stages of third parties. The buildings comprise warehouses for the temporary storage of goods, smaller workshops and houses with exchange tables (»banks«). For unloading cargo, the ships docked on the seaward side of the plots lying on the Golden Horn, the actual *scala*.

Die westlichen Landeplätze (σκάλαι) am Goldenen Horn: Einige Bemerkungen zum 11. und 12. Jahrhundert

Dank einer größeren Anzahl griechischer und lateinischer Urkunden in den Archiven von Genua und Pisa sind wir über Entwicklung, Anzahl und Aussehen der Landeplätze (*scalae*) der Stadtstaaten Venedig, Pisa und Genua im Goldenen Horn seit dem 11. Jahrhundert verhältnismäßig detailliert informiert. Da Urkunden dieser Art aus Venedig nicht erhalten sind, sind zu den venezianischen Landeplätzen nur verallgemeinernde Angaben möglich.

Die Nachrichten stehen immer in Zusammenhang mit der Vergabe von Handelsquartieren in der Stadt (Amalfi seit Anfang des 11. Jahrhunderts, Venedig seit 1082, Pisa seit 1111 und Genua seit 1170). Es liegen konkrete, wenn auch nicht immer leicht verständliche Beschreibungen des Geländes vor, die eine angenäherte Umrechnung in heutige Maße erlauben. »Angelegstellen« sind immer Grundstücke außerhalb der Mauern am Goldenen Horn, von der Porta Viglas (Odun kapi) im Westen bis zum heutigen Viertel Sirkeci im Osten, die mit den jeweiligen Quartieren innerhalb der Mauern in Verbindung stehen und mehrfach von Anlegeplätzen Dritter in ihrer Abfolge unterbrochen werden. Auf ihnen sind Bauten zur vorübergehenden Aufbewahrung von Waren, kleinere Werkstätten und Häuser für Wechslertische (»Banken«) errichtet, während die Schiffe (zum Löschen der Ladung) an der am Goldenen Horn liegenden Seeseite der Grundstücke, der eigentlichen *scala* anlegten.

57 Cf. Külzer, Harbour of Theodosius, in this volume.

58 Kocabaş, Old Ships 102. The dimensions given for Venetian ships by Martin, Art 207-209 (appendix 3) are few in number and are inconsistent (15-17 m).

59 Another agreement with Genoa dated May 1203, preserved as a regest, which I had pointed out a long time ago (Schreiner, Genoa), probably refers to the treaty of 1201 (cf. Dölger/Wirth, Regesten, regest 1663c).

60 Jacoby, Venetian Quarter 160-161.

61 Balard, Romanie génoise I 39. – The role of Genoa in the city of Constantinople itself between 1204 and 1261 has not been studied in detail.

62 Jacoby, Venetian Quarter 154 (location map).