

THE POUND-VALUE OF GENOA'S MARITIME TRADE IN 1161

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In his recent study on Genoa's customs John Day was able to assemble an impressive row of figures that allowed him to trace the fluctuation of Genoese maritime trade from 1341 to 1406¹ For the thirteenth century some scattered data has been provided by Heinrich Sieveking.² Further back in time the sources reflect a society and government too rudimentary to have cared for anything approaching statistics. The present essay attempts to supply some meaningful figures for the middle of the twelfth century. The process involves a comparison of losses suffered by the Genoese merchants during the 1162 attack on their colony in Constantinople with some entries in the cartulary of the Genoese notary Giovanni Scriba (1155-64). If successful, the resulting amounts will offer not only a point of departure toward figures given by Sieveking and Day but also a yardstick to measure an early stage of the commercial revolution.

A lengthy discussion of the Genoese colony in Constantinople would be out of place here. Suffice to say that Emperor Manuel's grand design to reestablish the Byzantine rule over Southern Italy and Sicily made him seek the good will of the Ligurian metropolis. Toward the end of 1155 ambassador Demetrio Macrembolite and the consuls of the city concluded a preliminary treaty which among other things gave the Genoese entering the empire a privileged status and promised to them a quarter in the capital.³ The precise location of the future colony was not spelled out, yet the wording of the treaty suggested that it was expected to be near the Venetian and Pisan *emboloi*, both on the southern shore of the Golden Horn. Venice had a quarter here since 1082 and Pisa got its in 1111;⁴ the arrival of a third competitor obviously increased the already existing rivalry. The notarial minutes of Giovanni Scriba show clearly that at least since 1156 Genoese merchants were trading at Constantinople and other imperial harbors, and some even seem to have combined commerce with mercenary service in the Byzantine navy.⁵ Where the

merchants lived while in the capital is not clear, because officially the quarter was not yet in Genoa's possession. In 1157 the Genoese ambassador, Amico di Murta, was dispatched to Constantinople "to exact the promised wharves and the quarter." Three years later another ambassador retraced the route probably with the same assignment. First tangible notice of the quarter, in a later document referred to as the quarter of the Holy Cross, comes with the disaster of 1162.⁶

In spring of that year one thousand Pisans attacked some three hundred Genoese "merchants" with the intention of "despoiling and killing them." The Genoese resisted for a day, but on the morrow the Pisans returned with a reinforcement of Venetians, Greeks, and "other rabble of Constantinople." Overwhelmed by the assailants, they abandoned their lodgings and merchandise, saving nothing but their lives. The Pisans captured the Genoese *fondaco*⁷ with its 30,000 bezants worth of goods and they killed a young nobleman, son of Otone Rufo. The annalist Caffaro, to whom we owe this account, said nothing about the way in which the Genoese were able to escape. Presumably they withdrew to their ships or ship in the harbor and sailed home thirsty for revenge.

The outrage to Genoa's pride and the sting of material loss resulted in a prolonged war between the two republics. It cost thousands of lives, resulted in inestimable damage to trade, and ended only in 1175 when Emperor Frederick I finally induced the parties to negotiate.⁸ In the meantime Genoa began to mend diplomatic relations with Byzantium whose tacit connivance in the upheaval must have been at least suspected. In 1168 the commune dispatched Amico di Murta once more to the shores of the Bosphorus. Restitution to Genoa loomed large in negotiations which advanced but slowly on account of shifting political alliances. A new quarter was assigned to Genoa in 1170 only to be destroyed again, this time by the Venetians. Though grievances against the inept host were piling up, little was undertaken on both sides for a number of years. Then by the latter part of 1174 the consuls gave elaborate instructions to ambassador Grimaldi, who was to bolster his demands with a detailed list of losses. Among the nine major items amounting together to 84,340 bezants, the losses of the first Genoese quarter, assessed to 29,443 bezants, represented the largest claim.⁹ It is this portion of Grimaldi's instructions that will occupy our attention.

The introductory paragraph to the losses of 1162 still echoes bitterness: had not the Genoese gathered securely "in trust and under

the wings of the Empire" when they were despoiled?¹⁰ The list itself is little more than names and quantities of bezants under a laconic title: *Ratio perditarum emboli de Sancta Cruce*. Its precise date of compilation cannot be ascertained, except that it must have taken place after 1165, for one prominent Genoese who was alive in that year is referred to in the list as "late."¹¹ Considering the very young age of the colony at the moment of its spoliation one can be reasonably sure that no trading agreements, of which the list is a reflection, were concluded in Constantinople. This notion is further strengthened by the fact that almost all names, even those of the less prominent travelling agents, can be traced to the cartulary of Giovanni Scriba (1155–1164).¹² Furthermore, neither in the list of losses nor in other instructions that could relate to the year 1162 is there a mention of a notary, without whose help no commercial agreements could have been written down. We have thus in Giovanni Scriba a unique reflection of the *societates*, *commenda*-contracts, sea-loans, etc. that had been drawn up in Genoa on the eve of merchants' departure to Constantinople, i.e. prior to the middle of September 1161.¹³

The ultimate source of the list, that has been published twice in modern times,¹⁴ are two twelfth century manuscripts,¹⁵ one known as "small" or B version, the other as "large" or A version. Both could have been written by the same scribe. Version A is considerably neater and less cursive than B, it obviously represents an enlargement and partial revision of the latter.¹⁶ The total sum of 29,443 bezants lost by the Genoese in goods and currency appear only in the A version. Neither A nor B is free of over-sights, yet taken together they are superior to the modern editions.¹⁷ The manuscripts are also helpful in revealing the rationale of the arrangement which certainly cannot be gained from the most recently printed text.

In the manuscripts each separate claim is preceded by a paragraph sign (not consistently in A) and by a capitalized *Pro*. An individual claim may contain the name of just one person, e.g., *Pro Oberto malocello perperos cxii*. Frequently a claim included the name of the damaged party and of the travelling agent, e.g., *Pro Stabili perperos cclxxv quos Donundius de balneo ibidem amisit*. In some cases one or several sub-claims, each introduced by *Item*, follow the initial request.¹⁸ The total number of claims following each introductory *Pro* amounts to 104 in B and 108 in A.

The value of the list for the history of Genoa's trade has been noticed before, so too has the fact that many names mentioned in it constituted the "flower of Genoese nobility."¹⁹ What escaped the

older scholarship was the possibility of tracing some commercial agreements found in the cartulary of Giovanni Scriba to the list of losses. In the year 1161 Scriba recorded one joint investment to Romania, i.e. Byzantine Empire, and three to Constantinople. The one to Romania stands apart from the rest. A middle-sized *societas* of slightly more than 47 pounds was drawn up on June 18, well in advance of the late summer when most of the contracts to the eastern Mediterranean were put into writing.²⁰ Since the partners do not appear in the *Ratio*, they were not in Constantinople during the sack. Of no particular value in itself, the document indicates a distinction made by Genoese merchants between the empire at large and its capital.²¹

In Scriba's busiest season, on August 29, a priest by the name of Guglielmo di Langasco, Bertoloto di Campo, and Otone Barba di Latta must have approached him to validate their *societas*.²² Each of the men contributed 80 pounds; Otone was to take the total sum (in merchandise, we presume) and in addition 10 pounds of his own to Constantinople, Alexandria, or wherever else he wished. The increment from his own money he could keep, also half of the profit from the partnership, while the other half was to go to the priest and Bertoloto. Thirteen years later Scriba's minute shrank to a single claim in the *Ratio*: "For Bertoloto di Campo 97 bezants which were lost by Otone Barba di Latta and 27 bezants also of his [i.e. Bertoloto] lost by Bernardo Catenacio."²³ The smaller sum represents undoubtedly Bertoloto's investment with another travelling agent that must have been recorded by one of Scriba's colleagues. Strangely enough, the list does not contain compensations of Otone or the priest. Even Bertoloto's restitution was calculated at 1 pound to 1.21 bezants, an impossibly low rate of exchange, as will be seen later.²⁴ Was the Genoese government asking for its citizens less than their due? Death of partners could be conjectured, yet if so, why did the commune fail to think of the heirs? It is more likely that the bulk of the investment, except perhaps a half or a third of Bertoloto's goods, was transhipped from Constantinople to Alexandria, as the wording of the document vaguely suggests. In such a case a number of rearrangements, such as appointing a new agent, would have been in order. For the present study it is significant to notice that the compilation of the list was not a mechanical prorating of sums of old contracts into Byzantine money.

Closer to the departure of the fleets, on September 8, Stabile and Donadeo, brother of banker Ingone, registered a *societas* of 170

pounds; the former's share was two-thirds, the latter's one-third.²⁵ This amount and 24 pounds invested in linen by Otone of Milan were to be taken by Donadeo to Constantinople. Otone could keep the profit from his investment, whereas the profit of the partnership was to be divided into equal shares. This time nobody was omitted from the roster of losses. Scattered among a hundred odd claims we find: "For Stabile 275 bezants lost by Donadeo *de balneo*," "For Otone of Milan 100 bezants which the banker Donadeo lost in Constantinople," "For Donadeo *de balneo* 171 bezants which his nephew Pascale lost there."²⁶

A striking feature of these claims is an uneven exchange rate between the Genoese pound and the bezant. The two-thirds to one-third division of 170 pounds results roughly in 113 against 57. The ratios of two sets of figures would reimburse Stabile at 1:2.43, Donadeo at 1:3.00, and Otone at 1:4.16. A somewhat similar latitude of variation emerges from three claims of the same list. They are unique in so far as losses are given simultaneously in pounds and bezants.²⁷ The ratios ascend here from 1:2.46 over 1:2.48 to 1:3.00. Our difficulty lies in not knowing enough about the fluctuation of exchange rates in 1161. From one quotation it seems as if the interest-free exchange was somewhere close to 1:2.625.²⁸ Should this equation approach true conversion, then some Genoese were promised less than what they had lost. On the other hand Otone's rate of 1:4.16 was extremely generous. The lesson of these figures is to be wary of any mathematical operations that would entail conversions from one currency to another.

On September 9th four gentlemen pooled their resources to launch one of the biggest ventures of the year. Guglielmo Burone and Idone Mallone contributed to a *societas* 300 pounds, Guglielmotto Ciriol 200 pounds, and Ugone Elie, the travelling agent, 80 pounds.²⁹ Of the first three men's capital a double of 80, i.e. 160 pounds, was to form the *societas* proper, the rest or 340 pounds were treated like a *commenda*-contract from which Ugone could draw a quarter of the profit. Ugone had the option of taking the total sum "wherever he may wish." We would have never known where the investment went, if not for its mention in the *Ratio*. All the claims appear together under a *Pro*-entry without any regard to the complex arrangement: "For Guglielmo Burone, Idone Mallone, and Guglielmo (*sic*) Ciriol 1,500 bezants that were lost in their goods by Ugone Elie, this above 240 bezants of Ugone's own lost by him in the enterprise."³⁰ In this third and last document the rate of exchange is a uniform 1:3.00. It is

important to notice that no provision was made to compensate Ugone for the loss of his labor spent on the *commenda* portion of the contract, a significant fact for the evaluation of the rest of the *Ratio*. Finally, the concealment of destination proves to be something else than letting the travelling party make the decision. Surely, the three prime investors, two of them members of illustrious Genoese families, knew well where their goods were to go. If they kept the direction of the journey secret, it was out of concern for their business venture.

The evidence from the three confrontations can be easily summarized. In some cases claims appear lower than the figures known from the minutes of Giovanni Scriba. The rate of exchange is not uniform and one may suspect that the total of losses expressed in bezants is slightly higher than the total investment in Genoese pounds taken to Constantinople. To a certain degree this raising of the rate is neutralized by the fact that the official total of 29,443 bezants when rechecked should be amended to 29,807 bezants.³¹ Instead of trying to adjust all errors and distortions it would be wise to accept the figures of the *Ratio* for what they are, a rather reliable source with a margin of error no bigger than perhaps 5 per cent—not enough to cause serious alarm.

Before proceeding to the main objective of the essay, one remark is in order. Fascination with notarial minutes should not obscure the possibility that investments were taken abroad without being recorded by notaries. A reminder to this effect comes from the first entry of the *Ratio*: "Remember to ask for our chancellor 300 bezants which his son Ugone lost in Constantinople etc."³² From Scriba we learn that on July 19, 1161, Ugone, son of chancellor Oberto, gave at the behest of his father who was personally present *antefactum* (bridegroom's gift to his bride-to-be) to Richelda, daughter of Giovanni Golia.³³ The amount was 100 pounds and it came from Oberto's estate; Nicola Roza received it for her. Though there is nothing to indicate that Ugone took the *antefactum* to Constantinople, the circumstantial evidence favors it strongly. Since Ugone was a minor and still under his father's *potestas*, it can be maintained that no formal agreement was drawn up. With this in mind one could say that the figures of the *Ratio* are more representative of the total investment to the capital of Byzantium than all the notarial minutes of that year, even if they had been preserved.

The next step is obvious. Knowing the number of contracts to Constantinople validated by Giovanni Scriba, the total sum in

Genoese pounds invested by his clients, and the expected compensation in bezants, one could establish at least approximately the share of Scriba's activity in relation to the share of all other notaries put together. For the latter the only available guide is the *Ratio*. There are three ways to approach the problem. Scriba's own cartulary supplies the names of nine other notaries who lived in the city.³⁴ This information is of no great help, because nothing can be said about their activity, nor is the number in itself conclusive.

Had the *Ratio* been composed in a more systematic fashion, one could have reconstructed with its aid the number of all commercial agreements drawn up for Constantinople. Although this cannot be done, there is a circuitous road that leads very much to the same result. In an overwhelming majority of cases commercial contracts involve only one travelling party while the investing party may consist of several individuals. The three *societates* analyzed above are a sufficient proof, for taken together they show seven investors entrusting their capital to three travelling agents. It would be permissible thus to equate the number of travelling agents with the number of contracts. The *Ratio* records a total of seventy-four travelling agents, three of which appear in Scriba's cartulary; the resulting ratio is consequently 71:3 or roughly 24:1.³⁵ This would indicate that Scriba's colleagues authenticated collectively twenty-four times as many contracts as he. The figure is equally of little use, for even an approximate number of contracts, unless one can compare thousands of them, does not constitute a true measure of the volume of trade.

The last and perhaps the best approach would be to compare the claims arising from Scriba's three minutes with the total figure of losses. Expressed in numbers the juxtaposition is between 2,383 bezants and 29,443 bezants.³⁶ Identical monetary units permit simple division resulting in 12.35, a figure midway between nine and twenty-four. Since Scriba catered predominantly to noble families of substantial wealth, it seems reasonable to suggest that all other recorded and unrecorded investments to Constantinople were 12.35 times bigger than those entered on the pages of his cartulary.

The crucial question is whether the ratio 1:12.35 can be applied elsewhere. In 1161 Scriba drew up numerous contracts to other places, such as Alexandria, the Crusading States, Sicily, North Africa, etc. Would it be permissible to assume that the total investments to these areas were also 12.35 times bigger than those registered by Scriba? Admittedly, this is the weakest part of the entire argument and even a novice in the field of Genoese economic history

could point to numerous pitfalls. But precision cannot be the goal of medieval statistics; the question is whether some figures, obviously approximate, are better than none. All that can be said in favor of following computations is that they are based on actual data which had been subsequently augmented by a reasonable multiplier. The left column below represents investments in Genoese pounds as they were recorded for 1161 by Giovanni Scriba. To the right are the projected totals, also in Genoese pounds, which are arrived at via multiplication of Scriba's figures by 12.35.

Alexandria	1,610 pounds	19,884 pounds
Crusading States (<i>ultramare</i>)	1,767	21,822
Constantinople	1,024	12,646 ³⁷
<i>Romania</i>	47	580
N. Africa	725	8,954
Provence and Spain	1,005	12,412
S. Italy, Sicily and Sardinia	1,261	15,573
"To any place"	900	11,115
Total	8,339 ³⁸	102,986

Actually neither of these totals has to be accepted on faith alone. Scriba's figure for the year 1161 is somewhat lower than a true total would have been, because several minutes specified only quantities of merchandise taken overseas.³⁹ No attempt was made to assess their monetary value. A certain control is further provided by juxtaposing 8,339 pounds to totals of other years.

<i>Year</i>	<i>Export in pounds</i>	<i>Number of minutes</i>	<i>Remarks</i>
1155	867	33	Scriba works intermittently
1156	6,262	117	
1157	7,762	168	
1158	7,626	196	Threat by Frederick I
1159	2,031	76	
1160	12,640	195	
1161	8,339	143	War with Psia. Jan.-April missing
1162	968	84	
1163	3,399	134	
1164	5,477	157	Most of Jan. missing, ends Aug. 23

The export figures from 1156 to 1161 indicate a steady growth in spite of a temporary threat to Genoa by Emperor Frederick Barbarossa.⁴⁰ Missing folios in the cartulary do not affect 1161 or the preceding years, and except for 1155, 1159, and 1162 there is no in-

dication that Giovanni Scriba was out of town or assigned to special tasks.⁴¹ In the decade represented above, 1161 was certainly a good but by no means an exceptional year.

To check the grand total of approximately 100,000 pounds is much more difficult. A crude test can be conducted with pound values of ship cargoes, our only guide to the "capacity" of vessels in the twelfth century.⁴² Considering the variety in sizes of water conveyances, references would have to be restricted to "big ships" (*magnae naves*) found in Genoese and Pisan annals. In 1136 Genoese galleys captured "a big and rich Saracen ship" the cargo of which was valued at 8,400 pounds.⁴³ "Two big and rich" Genoese ships, one returning from Syria, another from Constantinople, and an unspecified vessel coming from Sicily were captured by the Pisans in 1162 when the war between the two communes broke out. Their combined cargo is said to have amounted to more than 20,000 pounds. Occasionally the booty was smaller. In the same war, four years later, the Pisans detained three Genoese galliots and a "big ship" on its home voyage from Morocco. The value of the catch "exceeded" only 5,000 pounds.⁴⁴

The very source that proved so helpful in previous calculations, the 1174 directive to Grimaldi, supplies valuable figures on Genoese merchantmen. The ambassador had orders to seek restitution in five cases of damage to Genoese cargoes. While four ships were small or middle-sized, the *navis* of Villano Gauxano must have been big, for eighty persons lost their investments when its cargo fell prey to looters. The losses were set up in two parallel columns, one in Genoese pounds, the other in bezants. In the manuscripts only the latter was added up, showing a figure of 23,216 bezants. Because of fluctuating exchange rates, which can be read off from juxtaposed numbers, an independent addition of the pound column is a surer way to a precise total, in this case 8,658 pounds.⁴⁵ The figure comes surprisingly close to the data furnished above by the annals.

In assuming that a *magna navis* carries approximately 8,500 pounds worth of cargo, it would be necessary to concede that some twelve of such ships could have expedited the entire export of 1161. Needless to say, such a conclusion is at variance with reality. Genoa's merchant fleet may have had three or four big ships, the rest would have been smaller. Grimaldi's instructions reveal that of the four smaller crafts three carried cargoes worth one-fifth and one a cargo worth one-tenth of Gauxano's *navis*.⁴⁶ While this breakdown is accidental, it can serve as a basis for a little play of numbers. For

example, four "big ships" could have conveyed 36,000 pounds, thirty-three "middle-sized" 56,100 pounds, and ten "small" 8,500 pounds. For all we know, small crafts may have shunned Byzantine waters. Certainly, closer to home they would have been much more numerous.⁴⁷ What matters is not the distribution of ships but the feeling that 100,000 pounds for a year's export has the marks of a realistic figure, well in agreement with other sparse data of the period.

Before 100,000 pounds can be arranged along the figures gathered by Heinrich Sieveking and John Day, a brief explanation of the latter's nature is in order. Extraordinary expenditures during the war with Pisa and subsequent colonial adventures made the consuls of Genoa seek revenues commensurable with the fiscal drain.⁴⁸ By the second decade of the thirteenth century the so-called *collecta maris* (later known as *denarii maris*) must have become one of the main sources of communal revenues. In 1214, to take a specific case, the consuls decreed that for the duration of six years 4 den. per pound be collected from the export-import trade by sea.⁴⁹ The commune farmed out the tax for 38,050 pounds, counting thus on a sure income of 6,342 pounds per year. Since 4 den. constitute one-sixtieth of each pound assessed, the farmers of the tax must have anticipated a minimum taxable figure of 380,520 pounds. To be able to make profit, they hoped of course for a still larger amount. Given the provenance of 380,520 pounds one may well suspect that, all possible irregularities of collection apart, it is lower than the true figure would have been.

The 100,000 pounds of export in 1161 cannot match the other numbers, unless one can project the return cargo bought by the above sum. Of course, the value of the import will include the gain realized in the preceding sale. Since nothing is known about the method of assessment, one could suppose that the return cargo was valued at the prices current in Genoa. From a few notarial minutes of Scriba it seems as if forty per cent profit on commercial contracts was the average.⁵⁰ This would make the export-import for 1161 roughly equivalent to 240,000 pounds.

Ten selected figures from 1161-1406 should give some idea of the rate of growth, occasional lows, and the downhill trend toward the end of the period.⁵¹

1161	240,000	1361	1,756,440
1214	380,520	1371	2,388,960
1274	720,000	1372	2,105,040
1341	1,403,400	1399	1,171,200
1345	993,840	1406	1,173,600

As so often, numbers do not tell the complete story. The growth from 1161 to 1371 was not tenfold, as the figures may indicate. The intervening centuries experienced a substantial debasement of coinage and a concomitant rise of prices. To cite but one example, a hundredweight (*centenarium*) of pepper cost in Genoa close to 4 pounds 6 sol. in 1160–62, 12 pounds 15 sol. in 1291, and 24 pounds in 1377.⁵²

It would take a much broader and longer study to set the figures quoted above into proper perspective. Such an endeavor may also find the percentages indicative of tax-farmers' profits. Another line of inquiry could concentrate on the period around 1161 which is marked by Frederick Barbarossa's effort to capitalize on the commercial and industrial wealth of Italian cities. How does, for example, the figure of his anticipated revenue from the reacquisition of the regalia compare with Genoa's export? More daring would be to explore the decades prior to 1161. Perhaps a judicious application of the rate of growth since 1161 could allow some cautious estimates as to when the commercial revolution must have become a recognizable factor. Whatever the potentials, a reasonably accurate figure for Genoa's maritime export in 1161 is a marked advance over the older fragmentary evidence built exclusively out of sums furnished by Giovanni Scriba.

NOTES

1. John Day, *Les douanes de Gênes*, (École Pratique des Hautes Études. VIe Section. Centre de Recherches Historiques. Ports—Routes—Trafics, 17; 2 vols., Paris, 1963), I, xvi–xviii.

2. Heinrich Sieveking, *Genueser Finanzwesen mit besonderer Berücksichtigung der Casa di S. Giorgio* (2 vols., Freiburg im Breisgau, 1898–9), I, 67. Volume I has a separate title: *Genueser Finanzwesen vom 12. bis 14. Jahrhundert*.

3. For documentary evidence see Gerolamo Bertolotto, "Nuova serie di documenti sulle relazioni di Genova coll' Impero Bizantino," in *Atti della Società Ligure di Storia Patria*, XXVIII (Genoa, 1896), 339–573. Many of these sources can be consulted in a more recent edition by Cesare Imperiale di Sant' Angelo, *Codice diplomatico della Repubblica di Genova*, in *Fonti per la Storia d'Italia*, LXXVII, LXXIX, LXXXIX (3 vols., Rome, 1938–42). The Genoese annals, commonly known as *Annales Ianuenses*, are best consulted in *Annali Genovesi di Caffaro e de' suoi continuatori*, ed. Luigi Tomasso Belgrano and Cesare Imperiale di Sant' Angelo, in *Fonti per la Storia d'Italia*, XI–XIV bis (5 vols., Rome, 1890–1929). Hereafter these basic sources will be cited as Bertolotto, *Cod. dipl.*, and *Ann. Ian.* The series of *Atti* will be referred to as *ASL*.

Among the secondary accounts basic is still Camillo Manfroni's "Le relazioni fra Genova, l'Impero Bizantino e i Turchi," *ASL*, XXVIII

(Genoa, 1896), 577-787. See also the classic Wilhelm Heyd, *Histoire du commerce du Levant au moyen-âge*, tr. Furcy Raynaud (2 vols., Leipzig, 1885-6), I, 198-212, and Adolf Schaube, *Handelsgeschichte der romanischen Völker des Mittelmeergebiets bis zum Ende der Kreuzzüge* (Munich and Berlin, 1906), pp. 228-234. A good summary is found in G. I. Bratianu's *Recherches sur le commerce génois dans la Mer Noire au XIIIe siècle* (Paris, 1929), pp. 61-89. These four studies will be cited as Manfroni, Heyd, Schaube, and Bratianu.

For the opening of diplomatic relations between Genoa and Byzantium see Bertolotto and Manfroni, 343-5; 596-602 and *Ann. Ian.*, I, 41-2.

4. On *emboloi* in Constantinople see Robert Mayer, *Byzantion, Konstantinopolis, Istanbul. Eine genetische Stadtgeographie*, in *Denkschriften der Akademie der Wissenschaften Wien. Phil.-hist. Klasse*, LXXI, 3 (1943), 118-20. On Venice at the Bosphorus consult Horatio F. Brown, "The Venetians and the Venetian Quarter in Constantinople to the close of the Twelfth Century," *Journal of Hellenic Studies*, XL (1920), 68-88; and Heyd, I, 108-20, 215-20. For Pisa see also Heyd, I, 192-8, 212-4.

5. *Il cartolare di Giovanni Scriba*, ed. Mario Chiaudano and Mattia Moresco, in *Documenti e Studi per la Storia del Commercio e del Diritto Commerciale Italiano*, I-II (2 vols., Turin, 1935). Occasionally the reader may find it necessary to consult the older edition in *Chartarum* II, in *Historiae Patriae Monumenta*, VI (Turin, 1853). In this study all references, unless otherwise stated, are to the new edition, cited as G. S.

On the Genoese entering the imperial navy see G. S., nos. 84, 97, 219, 615, 666, 674, 676, 995, 1014-16. For a comment see Schaube, p. 230.

6. On the two embassies and the sack see *Ann. Ian.*, I, 47, 60; 67-69. Caffaro is of no help in determining the time of assault. The Pisan annals by Bernardo Maragone report under June 20, 1162 (common calendar) the sudden retaliatory attack of the Genoese against Pisa. Counting backward from this date, the dispoiled Genoese must have returned home in late May or early June. The sack occurred thus either in March or April; see *Gli 'Annales Pisani' di Bernardo Maragone*, ed. Michele Lupo Gentile, in *Rerum Italicarum Scriptores*, new ed., VI, pt. 2 (Bologna, n. d.), 27; cited hereafter as *Ann. Pis.* The months of March and April coincided with the Venetian *muda* for ships coming from Constantinople, on which see Frederic C. Lane, "Fleets and Fairs," now easily accessible in *Venice and History. The Collected Papers of Frederic C. Lane* (Baltimore, 1966), 131.

On the location of Genoa's oldest quarter Manfroni first quoted Cornelio Desimoni's reasoning by which *apud Constantinopolim* (Bertolotto, 391, 393-5) "seems to indicate rather outside than inside" the city, but later in his text he admitted that "L'embolo di Santa Croce era assai probabilmente dentro la città," 607, 612. Desimoni's view has been accepted by Bratianu, 64 and Robert S. Lopez, "Silk Industry in the Byzantine Empire," *Speculum*, XX (1945), 40. Manfroni's second thought gains ample support from the use of *apud* in the cartulary of Giovanni Scriba; see e.g., "debeo tibi apud Alexandriam bisancios centum decem . . ." or "promitto dare . . . apud Alexandriam bisancios .iii. minus quarta . . ." G. S., nos. 111, 117. These payments must have been made in the city. Moreover, the notion of "outside the city" was usually rendered by *ultra* or *trans*, Man-

froni, 611, 617. Finally, the failure of the Byzantines to separate the fighting parties can be explained only by their proximity to each other.

7. The literature on *fondachi*, or combinations of warehouses and hostels for merchants, is quite extensive. For an attempt to reassess the origins and the importance of this institution see my "Ecclesiae mercatorum and the Rise of Merchant Colonies," *Business History Review*, XLI (1967), 177-197.

8. The above cited annals of Genoa and Pisa are an eloquent testimony to the carnage. On Frederick's peace see *Cod. dipl.*, II, 227-31.

9. On these events consult Bertolotto and Manfroni, 347-405; 602-34, and *Cod. dipl.*, II, 99-102, 104-16, 117-23, 204-23, and many other documents indirectly connected with the war. The instructions to Grimaldi are found in Bertolotto, 368-405 and *Cod. dipl.*, II, 206-22. The general instructions to Grimaldi, without the detailed lists of losses, were first edited by Ludovico Sauli in his *Colonia dei Genovesi in Galata* (2 vols., Turin, 1831), II, 183-8, doc. no. 3.

10. Bertolotto, 370; *Cod. dipl.*, II, 208-9.

11. In Bertolotto, 393 and *Cod. dipl.*, II, 209a. "Pro filiis et nepotibus quondam Cafari" refers apparently to the annalist Caffaro who died in 1166, see *Ann. Ian.*, I, lxxxi. This would indicate that four years lapsed before the Genoese drew up the *Ratio*. The *terminus ante quem* is September 1174.

12. Identification is impossible in the case of Angelerio di Camilla's serfs, Guglielmo and Fulco, Bertolotto, 390; see also 391 under "Pro Philippo de Brasili." Occasionally names were rather nicknames, e.g., Cennamello, Ingone *ferro cincto*, Guglielmo *bucca fuira*, *ibid.*

Of the five agents whose names do not appear in Giovanni Scriba none could be called a non-Genoese, a Greek, or an Easterner in general.

13. In 1157 the last contract involving Constantinople was drawn up on August 27, in 1158 on August 30, in 1160 on August 27, in 1161 on September 8, in 1164 on August 21; see *G. S.*, nos. 254, 468, 752, 899, 1299. Toward the end of the century the departure was a month later; see *Oberto Scriba de Mercato* (1186), ed. Mario Chiaudano, in *Documenti e Studi per la Storia del Commercio e del Diritto Commerciale Italiano*, XVI (Turin, 1940), nos. 42, 96. The dates of these two last documents of the year 1186 are September 25 and October 8.

14. The *Ratio* has been published by Bertolotto, 389-397, where it is based on the B and A manuscript versions. The edition in *Cod. dipl.*, II, 207-11 rests exclusively on the A version.

15. Both manuscripts are located in the Archivio di Stato di Genova, Materie Politiche, mazzo 1-2720. They are designated as "due quaderni cartacei, uno di 51 facce manoscritte [B], altro di facce 49 manoscritte [A]." Versions B and A are respectively "small" and "large" not on account of number of pages, but because A contains more material, its writing being more compact.

The folios of B are unnumbered; in A they have Arabic numerals, yet what should have been f.6 was left unmarked and the number 22 was skipped altogether.

16. Although Bertolotto did collate the two manuscript versions, he was not always consistent, for he omitted the important opening entry of B

which reads as follows:

M.C.LXXIIII. Indictione sexta mense septembri. Ordinationes et memorialia data Grimaldo misso legato ad constantinopolitanum imperatorem per consules communis Januae.

This establishes B as the older instruction. The "sixth indiction" shows that its composition fell between September 1 and 24, 1174. A was written in the interval December 25–31, 1174.

17. No full list of errata can be given here. A few major mistakes are, however, worth noting. *Pro Ioanatho ferri* or *Pro Ionatha Ferri* (Bertolotto, 390, *Cod. dipl.*, II, 208a) should be *Pro Ionatha Serri*; see *G. S.*, no. 1188. The sign for pounds, i.e. *lb.*, after Cerriolo and Ogerio pedicule should be changed to a *b* crossed by a bar signifying bezants (Bertolotto, 395). The *cum tertia* or *inde terciam* should be *minus tertia* (Bertolotto, 396, *Cod. dipl.*, II, 210b). In *Mementote petere pro Ogerio et Bonovassallo de pallo ppos cxxx* the amount "130 bezants" is omitted in the A version and therefore it does not appear in the edition of *Cod. dipl.* (Bertolotto, 397, *Cod. dipl.*, II, 211a).

18. For samples given above see Bertolotto, 391, 392, 393–4.

19. Manfroni, 605–6.

20. *G. S.*, no. 840.

21. Same is true for the Venetians who distinguished between Constantinople and Romania Bassa; see Frederic C. Lane, "Fleets and Fairs," 131.

22. *G. S.*, no. 895.

23. Bertolotto, 392.

24. See below, note 28.

25. *G. S.*, no. 899.

26. Bertolotto, 392, 395, 396. The dispersion of these claims over the *Ratio* suggests an oral inquest by which the losses were established. In other cases it is rather obvious that *cartae* served as documentary evidence.

27. Bertolotto, 395, 396. In the third case, *Item pro Adalasia* etc., observe the correction of *cum tertia* to *minus tertia*; see note 17.

28. This figure derives from a secondary agreement, a little Genoese *societas ultra societatem*, so to say, found in *G. S.*, no. 840. The agreement's date is June 18, 1161 and the destination of the investment Romania or Byzantine Empire.

The parties and figures of the principal *societas* are followed by this statement: "Ultra etiam dedit ipse Philippus [investing party] ei [Petro nepoti Bernardi, traveling party] s. xx pro quibus in Romania quo iturus est cum hac societate Petrus ponere debet .iiii. perperos minus quarta et ad eos de aliis rebus quas illuc habet perperum unum et novem kart. etc." Since one bezant contains 24 karats, the matching figures are 20 sol. or 1 pound and 4 bezants, 3 karats. These sums are obviously not equal, but following the custom of Genoese *societates* one must be twice as big as the other. If 20 sol. are twice as big as 4 bezants, 3 karats, then 20 sol. equal 8 bezants, 6 karats, which in the light of available exchanges from other documents is completely unrealistic. The only alternative is to assume that 4 bezants, 3 karats are twice as big as 20 sol. This would make 20 sol. equal 2 bezants, 1½ karats or 3/48 of a bezant which in decimal fractions cor-

respond to 2.625. Since this ratio can be the only correct one, the conclusion would be that in the *ultra societatem* the travelling party contributed twice as much as the investing party.

29. *G. S.*, no. 901

30. Bertolotto, 395. The spelling of proper names follows the Italian versions given in *G. S.*

31. Obviously some items have been skipped or misread during the addition. Since the numerals were Roman, there was no incentive to write them out in columns.

32. Bertolotto, 389-90.

33. *G. S.*, no. 941. Considering the frequent exchange rate of 1:3, 100 pounds would make precisely 300 bezants.

34. These are the names of other notaries as they are given in Latin of the original: Bonus Johannes scriba (no. 1222), Girardus notarius (no. 338), Iordanus Alinerie notarius (no. 217), Macobrius notarius (no. 40), Obertus scriba (no. 583), Ogerius scriba (no. 594), Oto notarius (II, p. 310), Philipus notarius (no. 202), Wilielmus notarius (no. 412).

35. There is no need to give the exceedingly long list of travelling agents. Among the sixty-seven contracts of 1161 only one had two travelling agents; see *G. S.*, no. 824.

36. The sum of 2,383 bezants is put together from compensations claimed in the three cases discussed above. The component parts are 97, 546, and 1740 bezants.

37. At this point it would be legitimate to ask whether 12,646 pounds correspond to the official loss of 29,443 bezants. The ratio between the two figures is 1:2.33 or 0.3 lower than the free-of-interest rate 1:2.625. Surely, the figure in pounds is higher than it should have been, because, as indicated above, not every investment destined originally for Constantinople reached the city. What was meant to be disembarked at the Bosphorus could have been taken to Alexandria. Given our interests in totals, variations among the component parts are of little consequence.

38. A number of years ago Eugene H. Byrne published the annual figures of Genoese export to Syria and Alexandria. Although he did indicate that they stem from Giovanni Scriba, some of his statements were vague enough to create the impression that he was presenting totals. For his study and its criticism see "Genoese Trade with Syria in the Twelfth Century," *American Historical Review*, XXV (1919-1920), 191-219, and Frederic C. Lane, "The Merchant Marine of the Venetian Republic," in *Venice and History*, 147.

39. Five of Scriba's minutes specify export of merchandise or foreign exchange without giving their value in Genoese money, *G. S.*, nos. 832, 849, 882, 889, 894.

40. Late in January of 1159 Emperor Frederick Barbarossa subdued and destroyed the city of Crema. The Genoese, who had reached a compromise with the Emperor a year earlier, were afraid that he may press once more for the surrender of the regalia. During 1158 and 1159 the commune made every effort to extend and to strengthen its walls; see *Ann. Ian.*, I, 49-59.

41. Missing folios in Scriba's cartulary have been discussed in detail by the editors; see *G. S.*, xvi-xviii.

What kept Scriba from working steadily in 1155 is hard to tell. Perhaps he was involved in government's effort to overcome the fiscal crisis which had been brought about by Genoa's crusade against the Moors of Minorca, Almeria, and Tortosa, 1146-48, see *Ann. Ian.*, I, 33-5, 79-89. On the crisis itself consult Hilmar C. Krueger, "Post-war Collapse and Rehabilitation in Genoa, 1149-1162," in *Studi in onore di Gino Luzzatto* (4 vols., Milan, 1949), I, 117-28.

In 1159 Scriba kept books on the building of the last stretch of the municipal wall. Caffaro goes to some length to explain his task which consisted of recording days and hours spent on the work by the masons and indigent who were paid by the commune; see *Ann. Ian.*, I, 54. In 1162 Scriba was a member of an embassy which accounts for a gap in his entries from May 15 to June 13; compare *G. S.*, nos. 948 and 949, *Ann. Ian.*, I, 66.

42. The first Genoese ship with known tonnage was *Paradisus Magnus*. In 1251 a consortium of merchants chartered it to convey from Tunis to Genoa a cargo of 8,000 *cantaria*, "equivalent to 600 tons, dead cargo weight"; see Eugene H. Byrne, *Genoese Shipping in the Twelfth and Thirteenth Centuries* (Cambridge, Mass., 1930), pp. 10-1.

On cargoes and their value in later periods see the stimulating articles by Jacques Heers, "Il commercio nel Mediterraneo alla fine del sec. XIV e nei primi anni del XV," *Archivio Storico Italiano*, CXIII (1955), 157-209, and Domenico Gioffrè, "Il commercio d'importazione genovese alla luce dei registri del dazio, 1495-1537," in *Studi in onore di Amintore Fanfani* (6 vols., Milan, 1962), V, 115-242.

43. *Ann. Ian.*, I, 28.

44. *Ann. Pis.*, 27, 38-9. Galliot's carried small cargoes. In 1165 the Genoese captured two Pisan galliot's; together they ferried 92 merchants and were worth 1,200 pounds; see *Ann. Ian.*, I, 179.

Only once for the entire twelfth century does one find a prize valued at a higher sum. In 1129, during an earlier war between the two communes, the Genoese captured a Pisan ship carrying a "precious cargo"; they took it to Genoa, "et decem milia librarum ualens de nauī habuerunt." The last phrase suggests that 10,000 pounds were realized from the ship and the cargo; see *Ann. Ian.*, I, 24.

45. Bertolotto, 378-83; *Cod. dipl.*, II, 211b-213a.

46. Bertolotto, 386, *navis de Syo*, 2,390 bezants; 387-8, *navis de Nigrampo*, 4,980 bezants; 397-8, *navis Lanfranci Grancii*, 5,365 bezants, 398-9, *navis de Rodo*, 5,200 bezants.

In two cases Grimaldi's instructions reveal prices of ships. The *navis de Nigrampo* was assessed at only 353 bezants. An empty ship burned by the Venetians at Almyro was priced at 1,856 bezants; for the latter see Bertolotto, 388-9.

47. The annalist Bernardo Maragone claims that in 1165 Pisan galleys captured forty-eight Genoese ships returning from the fair of Fréjus in Southern France; see *Ann. Pis.*, 37. Like the ships carrying grain from the same area, the majority of them must have been small crafts. Of course, we possess no knowledge of the overall number of Genoa's seagoing vessels. The closest estimate comes from Caffaro's narrative of the 1147-8 campaigns against Almeria and Tortosa when he remarks that the Genoese "set out with 63 galleys and 163 other ships." However, the number of ships

participating in separate exploits of this war was much smaller; see *Ann. Ian.*, I, 80.

48. Genoa's war with Pisa, a brief truce aside, lasted from 1162 to 1175. During ten of these thirteen years the consuls of Genoa levied a *collecta* that increased from 6 den. per pound in 1165 to 13 by 1173; see *Ann. Ian.*, I, 188-9, 200, 206, 214, 229, 241, 246, 257, 260. *Collectae* were levied in 1185 and 1196, *Ann. Ian.*, II, 20, 60. Between 1208 and 1212 the attempts of Count Enrico Pescatore to capture Crete from the Venetians and to hold it, compelled Genoa to give his native son every conceivable support. The *collecta* authorized in 1210 was to cover Enrico's expenses; see *Ann. Ian.*, II, 109-10, 114-5, and Heyd, I, 277-9. On the origins and evolution of *collecta* see Sieveking, *Finanzwesen*, I, 37-8, 67 and Day, *Douanes*, I, v-vii.

49. In his detailed survey of communal revenues the annalist Ogerio Pane did not specify that the *collecta maris* was to be levied from both export and import trade. That it must have been self-understandable to him becomes apparent from two entries in the *Annales*. While speaking of the *collecta* of 1210 for the benefit of Count Enrico Pescatore same Ogerio Pane said that two pennies per pound were levied "de mobilia que per mare portata uel missa fuerit." Several decades later, Iacopo d'Oria, the last of the great Genoese chroniclers, spoke of four pennies per pound collected "a nauigantibus euntibus et redeuntibus"; see *Ann. Ian.*, II, 114-5 and V, 172-3.

Strangely enough, neither of these levies is a guide to export-import figures. The first was an extraordinary assessment to help Count Enrico to keep Crete. Its two pennies, its spread over six years that would have resulted in overlapping with the levy of 1214, finally its low tax-base of 250,800 pounds, all attest to its irregular nature. The second, referring to the year 1293, is most likely exaggerated, for it presupposes an annual taxable base of 2,940,000 pounds which, as can be seen below, surpasses by far the best known to us year of the fourteenth century. Would not Iacopo d'Oria's credibility be an important factor in deciding when the economic crisis of the early Renaissance began?

50. *G. S.*, nos. 48, 640, 1224.

51. The figures for 1214 and 1274 have been given by Sieveking, *Finanzwesen*, I, 67, 196. He, incidentally, did not accept Iacopo d'Oria's sum, calling it "extraordinarily high." The remaining figures are from John Day's column of forty-six yearly amounts paid by the tax-farmers; see his *Douanes*, I, xvi-xviii.

52. On depreciation of Genoese coinage see Sieveking, *ibid.*, note 4, and Schaub, p. 812. Prices for pepper are found in *G. S.*, nos. 19 (1155), 173, 176, 319 (1157), 461 (1158), 706 (1160), 940 (1162), 1099 (1163); Archivio di Stato di Genova, Not. Angelino di Sigestro, V, fol. 74 (1291); and John Day, *Douanes*, I, xxxviii.

A short hundredweight or *centenarium*, as the word indicates, comprises one hundred pounds. Pietro Rocca in his *Pesi e misure antiche di Genova e del Genovesato* (Genoa, 1871), 110 equates the Genoese pound to 0.316750 kg. A *centenarium* would thus correspond to 31.675 kg or roughly 70 English pounds.