

Hauling Away in Late Medieval Bavaria: The Economics of Inland Transport in an Agrarian Market¹

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Abstract

Using the mid-fourteenth-century accounts of the Bavarian monastery of Scheyern (to the north of Munich), the article scrutinizes the way late medieval landlords went about the organization of transport. Most intricate were the arrangements for the yearly recurring ventures sent into the Southern Tyrol to purchase, cart, and ship home the excellent vintages of *Latin wine*. For most of the relay route, hired carriers were employed, but one stage was turned over to tenants owing the monastery carting services. Other transport needs nearer home made for less complicated arrangements, using a mix of hired labour, permanent servants, and the monastery's own rolling stock and beasts. No attempts were made to improve the technological level of transport, relying instead on a very flexible organization of monetary and labour resources attuned to local circumstances.

THE economic history of later medieval Bavaria is still largely uncharted. This period of decisive political and social development, most of which has been very thoroughly researched, has yet to find its proper treatment for the economy.² Despite the existence of a sizeable number of systematically edited sources³, the main economic developments are left stranded between the purely agrarian treatment accorded by Philippe Dollinger, and the mainly mercantile and industrial interest of Eckhart Schremmer.⁴ The former

did not go further than the thirteenth century and was primarily concerned with the early medieval genesis of social divisions within the rural population. The latter has only a cursory chapter on late medieval developments, and wholly left out the agrarian sector, the one making up the largest part of the Bavarian economy as late as the early twentieth century. The important monograph of Friedrich Lütge on Bavarian landlordship again starts only with the sixteenth century and deals solely with legal matters.⁵ There is thus a gap which is only barely filled by two short chapters on the rural and urban economy in the otherwise magisterial *Handbuch der Bayerischen Geschichte*.⁶

Such a state of research cannot be remedied in a single blow. This paper aims at one sector only, transport, which has however often been credited with a key function in both the traditional and the modern economy.⁷ We shall ask what goods late medieval Bavarians, living in an almost

¹ Some of the ideas developed here were first expressed in a paper delivered in July 1989 in Brussels at a conference on 'Inland Transport and Communication in the Pre-Industrial Period'.

² For an excellent overview on the formation of the Bavarian duchy see M. Spindler, ed., *Handbuch der bayerischen Geschichte*, vol. II, Munich 1969, 2nd ed., 1977. The political and social development of the countryside is amply documented in the series *Historischer Atlas von Bayern*, Munich 1950ff. See Erwin Riedenauer, 'Der Historische Atlas von Bayern', in: *Jahrbuch für fränkische Landesforschung* 43, 1983, 21–58.

³ By now close to forty volumes of sources mainly of monastic origin, edited since 1952 in the series 'Quellen und Erörterungen zur bayerischen Geschichte' under the auspices of the Kommission für bayerische Landesgeschichte at the Bavarian Academy of Sciences, Munich.

⁴ Philippe Dollinger, *L'évolution des classes rurales en Bavière depuis la fin de l'époque carolingienne jusqu'au milieu du XIII^e siècle*, Paris, 1949, henceforth cited in the updated German translation edited by Franz Irsigler, *Der bayerische Bauernstand vom 9. bis zum 13. Jahrhundert*, Munich, 1982; Eckhart Schremmer, *Die Wirtschaft Bayerns. Vom hohen Mittelalter bis zum Beginn der Industrialisierung. Bergbau, Gewerbe, Handel*, Munich, 1970.

⁵ Friedrich Lütge, *Die bayerische Grundherrschaft. Untersuchungen über die Agrarverfassung Altbayerns im 16.–18. Jahrhundert*, Stuttgart, 1949.

⁶ *Handbuch der bayerischen Geschichte*, II, Ch 5, 6.

⁷ For a bibliographical orientation see A. Simon, *Bibliographie zur Verkehrsgeschichte Deutschlands im Mittelalter*, Trier, 1984.

purely agricultural country nevertheless crossed by routes of international commerce, carried hauled and shipped from place to place, and why they did so. What functions did such activities possess in the wider framework of economic needs?⁸ We shall follow a simple procedure, checking first the research literature and edited sources for information on the workings and organization of transport. We shall then attempt to supplement the deficiencies of the fragmented general record by recourse to an especially well documented case study.

I

Transport is mentioned here and there in Bavarian sources as early as the Carolingian period, but most documents belong to the time from the twelfth century onwards. The type of transport emerging from them is part and parcel of the manorial system, involving the tenants in periodical ventures of *corvée* labour where they hauled their own taxes in kind or tithe returns to the lord's manorial centre. Very little direct evidence has survived on such local short range missions.⁹ We are a little better served by the spate of rentals, listing the tenants' duties and dues, of the thirteenth and early fourteenth centuries.¹⁰ Yet even in this better documented period only rarely is there direct evidence for actual transport activities on the local level. But then we

are probably misled by the prevalent legal character of the surviving documentation, which leaves out the manifold forms of free association. Thus a rare sharecropping contract of 1395 specifies also the respective duties of lord and tenant concerning hauling and transport.¹¹ Judging by the surviving bulk of the record, the lords' administrators and scribes paid much more attention to the wide-ranging expeditions aimed at providing the great households with staple goods and especially wine. This was available in good quality only in far away Southern Tyrol (Italian Alto Adige) or in the even more remote Danube region of Lower Austria. Other articles such as salt and cheese too had to be transported over significant distances. Here again the operative principle was the forced participation of tenants in a system of transport along routes lined by stations in which the landlord possessed privileges of toll exemption. These features are nicely brought together in the mid-fourteenth-century evidence of the monastery of Osterhofen.¹² The abbey cooperated with a number of tenements to equip a *currus expeditionis* to be sent to Austria, evidently to collect the wine cultivated there on its holdings and convey it via tax-exempt stages back home. A similar organization is attested as early as the eleventh century for the great Ratisbon monastery, St Emmeram. Its tenants in sub-Alpine Vogtareuth were charged with transporting wine from Bolzano in the Southern Tyrol.¹³ Identical or similar arrangements are found for a sizable number of Bavarian landlords of the twelfth

⁸ In a similar way I have attempted to supply some evidence for another key sector of the medieval rural economy, credit. See my 'Geld und Kredit in einer spätmittelalterlichen Landschaft' in: *Deutsches Archiv für Erforschung des Mittelalters*, 38, 1982, pp 499-550; and my forthcoming 'Local Credit in an Agrarian Economy: The Case of Bavaria (14th to 15th Centuries)' in: P.-J. Schuler, ed, *Local and International Credit*, 1994.

⁹ Dollinger, *Der bayerische Bauernstand*, 153-8.

¹⁰ See in general Robert Fossier, *Polyptiques et censiers* (Typologie des sources du moyen âge occidental 28), Tournhout 1978. On the German *Urbare* see K Th v Inama-Sternegg, Über Urbaren und Urbarialaufzeichnungen, in: *Archivalische Zeitschrift*, 2, 1877, pp 26-52. For the Bavarian ecclesiastical ones see Johannes Wetzell, *Die Urbare der bayerischen Klöster und Hochstifte vom Anfang des 11. Jahrhunderts bis 1350*, unpublished doctoral thesis, University of Munich, 1976. For the ducal *Urbare* see now Ingrid Heeg-Engelhardt, ed, *Das älteste bayerische Herzogsurbare. Analyse und Edition*, Munich, 1990.

¹¹ O Engels - M. Thiel, eds, *Die Traditionen, Urkunden und Urbare des Klosters Münchsmünster*, Munich, 1961, 208.

¹² Johann Gruber, ed, *Die Urkunden und das älteste Urbare des Stiftes Osterhofen*, Munich, 1983, entries 467, 470, 474, 730, 1650, 1653, 1663, 1666, 1669, 1671-1766.

¹³ Ernst Klebel, Aus der Verfassungs-, Wirtschafts- und Siedlungsgeschichte der Hofmark Vogtareuth bei Rosenheim, in: *Zeitschrift für bayerische Landesgeschichte* 6, 1933, pp 27-59, 177-216.

to fourteenth centuries, and even as late as the fifteenth century.¹⁴

Yet already by the turn from the thirteenth to the fourteenth century this sort of manorial organization often seems a thing of the past, as evidenced by cash payments indicating in the rentals the commutation of transport duties.¹⁵ This fits in with the general development as manorial corvées were increasingly whittled away by the inroads of the money economy.¹⁶ And indeed, looking back from the early modern period to the thirteenth century, Schremmer sees transport already organized solely along commercial lines, with professional carriers active on the land routes connecting Bavaria with Alpine Tyrol and through it with the high-density economy of Italy.¹⁷ By the same opinion at a later date, to all appearances by the fifteenth century, this system was being supplemented and extended by shipping services on the connecting river routes of the Inn, Lech, Isar, and Salzach.¹⁸ There was also a parallel although less extensive system of transport catering solely for the trade radiating outwards from the salt-mines of Reichenhall.¹⁹

What was this then: a system of manorial transport including far-ranging ventures, which was slowly decaying towards the close of the Middle Ages; or a much more modern 'commercial' one existing already in the thirteenth century? Or was it both? Let us look at the problem from below,

from the local level of a case study. In contrast to the literature and our previous exposition, both based on the prevalent legal sources, this case study uses accounts, a rare type of evidence in medieval Germany which informs us however of things that have actually been done.²⁰ On the other hand a case study, instructive as it might be, has a limited capacity for generalization. Luckily, in our case ecclesiastical aggrandizement has assembled a lordship with possessions in different regions typical of a wider area. This is the lordship of the Benedictine monastery of Scheyern: founded in 1087 in the wilderness of an Alpine valley, it moved a few years later to another Alpine site; relocated again in 1104 to the already settled lowland area to the northwest of Munich; and moved finally in 1112 to Scheyern in the hilly country south of the Danube.²¹ Its main claim to fame lay in the close connections to the counts of Dachau and Wittelsbach, the later dukes of Bavaria, who chose to be buried in Scheyern and had their family history drawn up by the abbey's scribes.²²

II

Of the 650 holdings accumulated by the abbey up to the early fourteenth century, three-quarters were situated in the hilly and woody country bounded by the rivers Lech, Danube, and Isar. This thinly populated and purely agricultural region is structured into tiny areas of settlement and

¹⁴ Herbert Klein, *Die Weinsaumdienste in Nordtirol und Bayern, in Tiroler Heimat*, 13/14, 1949/50, pp 65-77. For the fifteenth century see Friedrich Merzbacher, *Tegernsee und der Südtiroler Wein im ausgehenden Spätmittelalter*, in *Aus Wirtschaft und Gesellschaft. Festschrift für Universitätsprofessor Ferdinand Ulmer*, Innsbruck, 1963, pp 199-213.

¹⁵ For instance in Dießen: Schlögl, *Die älteste Besitzliste*, 51: XXXVI *denarios pro curru*. The instances in the thirteenth- and fourteenth-century rentals are too numerous to be detailed.

¹⁶ Dollinger, *Der bayerische Bauernstand*, pp 140-146.

¹⁷ Schremmer, *Die Wirtschaft Bayerns*, pp 179.

¹⁸ Schremmer, *Die Wirtschaft Bayerns*, pp 181f.

¹⁹ Schremmer, *Die Wirtschaft Bayerns*, pp 178-9; Klein, *Weinsaumdienste*, pp 77-9; Heinrich Wanderwitz, *Studien zum mittelalterlichen Salzwesen in Bayern*, Munich, 1984; for an overview see now Rudolf Palme, *Alpine salt mining in the Middle Ages*, in: *Journal of European Economic History*, 19, 1990, pp 117-136.

²⁰ Although a number of accounts have been published, there is yet no overview available. But see the introduction to my forthcoming edition of the fourteenth-century account-books of the monastery of Scheyern, from which the greater part of the material for the present study has been drawn. I wish to thank the Alexander von Humboldt-Stiftung, Bonn, whose support has made possible my work on Scheyern.

²¹ Michael Toch, *Voralpine Grundherrschaft und alpine Bauern im Spätmittelalter*, in M. Markmüller, ed, *Economies et sociétés de montagne*, Itinera 5/6, 1986, pp 30-37.

²² Jean-Marie Moeglin, *La généalogie des Wittelsbach*, These Univ. Paris, 1982; Wilhelm Störmer, *Die Hausklöster der Wittelsbacher*, in: Hubert Glaser, ed, *Wittelsbach und Bayern. Die Zeit der frühen Herzöge*, Munich, 1980, pp 139-150.

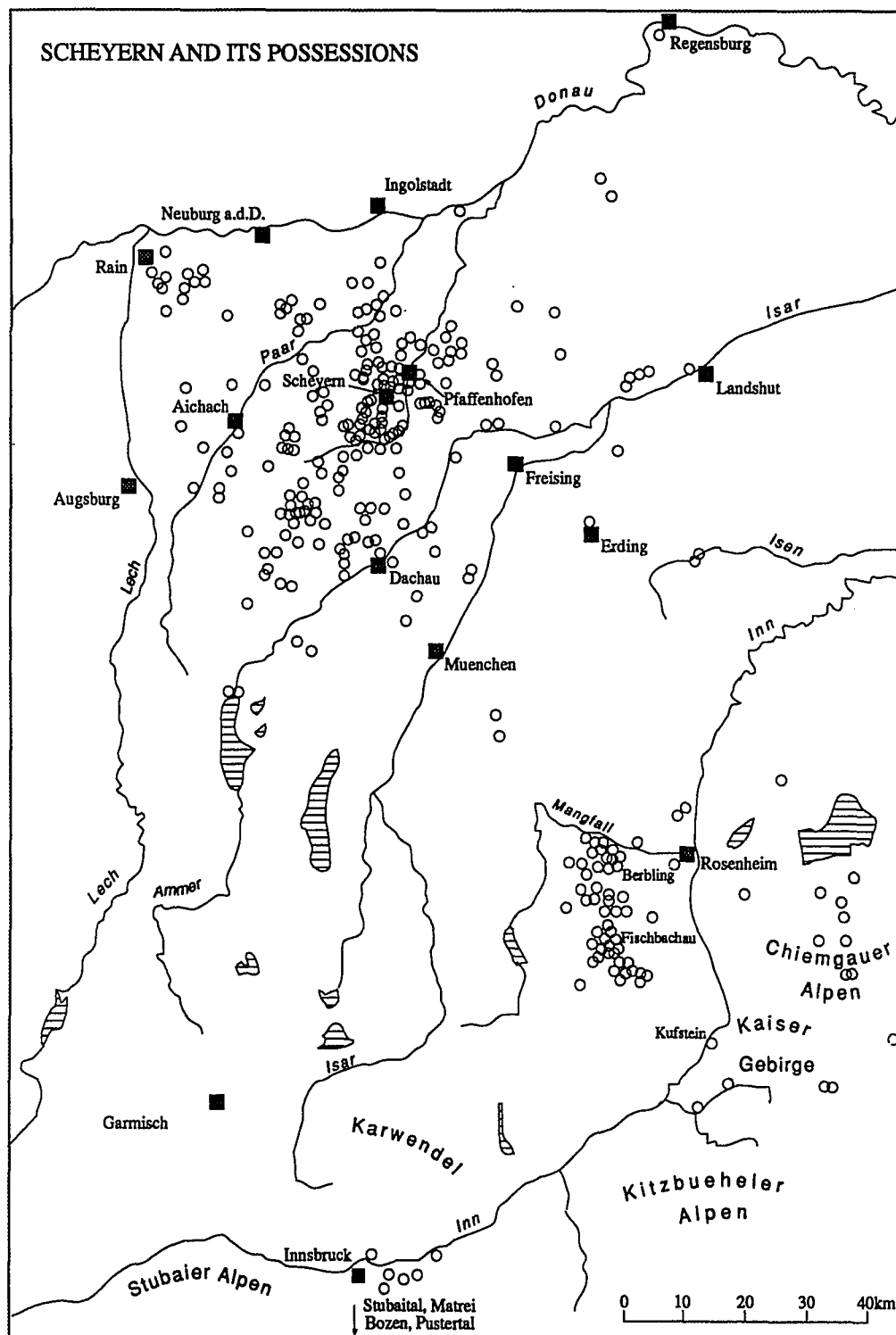


FIGURE 1

cultivation by a number of smaller rivers, low hills and the prevalence of woodland.²³ The inner valleys and relatively short distances of up to forty kilometres from the monastic centre made for easy communication within the lordship of Scheyern. On the other hand this region as a whole was and to this very day still is bypassed by the major routes of trade and transport. Near the site of the abbey there grew up the market-township of Pfaffenhofen an der Ilm. This and similar places (Rain, Neuburg an der Donau, Aichach and Dachau) served as manorial and market centers for the five offices (*officia*) into which the main bulk of Scheyern's lands was divided.²⁴ More sizeable were the towns of Freising and Ingolstadt, situated at similar distances of twenty to forty kilometers 'as the crow flies'. The peasants engaged in the traditional grain-husbandry of the region and fared quite well. In fact, no traces of an adversity of the fourteenth century have been found, nothing to suggest a demographic and agricultural crisis of the later Middle Ages.²⁵ Quite the contrary, the region appears to have enjoyed a moderate demographic growth which by c 1400 led to the division of some of the larger holdings into homesteads for cottagers engaged in agricultural labour and village crafts. This main bulk of the lordship of Scheyern was made up of a knot of small economic areas interconnected by mutual ties of credit, wage-labour, buying and selling.²⁶ This was a region of a low-intensity economy, of the husbandry, rural crafts and small trade normally associated with agrarian inland areas.

The remaining quarter of the abbey's land, administered by three more bailiffs (*prepositus*), was located farther away.²⁷ Of these two lay in the foothills of the Bavarian Alps, eighty to one hundred and ten kilometres from the abbey 'as the crow flies'. One office called Fischbachau was located in an elevated and isolated valley with a harsh climate, in fact the very spot abandoned by the first monks of Scheyern. Its tenants were mainly engaged in Alpine dairy husbandry, yearly producing great quantities of cheese. The second office (Berbling) was situated in the more open country to the west of the river Inn, its tenements straddling the major road from the river to Munich, the political centre of Bavaria. The peasants there produced grains, mainly the oats fitting the rough climate and the traffic location of their region. The last of Scheyern's offices was quite appropriately designated by the vague name 'in montibus' or 'transmontana'. It covered the abbey's spare possessions in the Bavarian and Tyrolian Alps proper. These holdings were widely spread over a huge area: a few in winegrowing Bolzano (Bozen) in the Southern Tyrol, and the rest along the main route leading over the Brenner pass towards Innsbruck and along the river Inn into Bavaria. Most of them had originally been bound to render wine dues but by the fourteenth century such obligations had mostly been commuted to money payments.

This then is the setting for the transport needs of Scheyern. Once again, the duality of economic regions needs stressing: on one hand there was the grain-producing lowland core around the abbey, shot through with a thick web of economic and social connections. On the other hand there was the Alpine appendix, made up of three different groups of possessions each with a different function, far away but of great importance for the consumption

²³ E Meyen - J. Schmithüsen, *Handbuch der naturräumlichen Gliederung Deutschlands*, 1953-1962, pp 72-73, 92-93, 97-99, 107-108, 112-113, 124-127, 131-133, corroborated by a cycling tour of the region.

²⁴ The offices are respectively called Pfaffenhofen, Aichach, Rain, 'in inferiori terra' and Dachau. On their genesis in the thirteenth century see Michael Stephan, *Die Urkunden und die ältesten Urbare des Klosters Scheyern*, Munich, 1988, pp 18*-23*.

²⁵ A preliminary finding to be published in the introduction to my forthcoming edition of the Scheyern accounts.

²⁶ For an analysis of these structures see my forthcoming 'Local Credit'.

²⁷ On these possessions see my 'Voralpine Grundherrschaft'.

needs of the Benedictine monks. Bearing this basic set-up in mind, let us turn to the different forms of transport as evidenced in the sources.

III

In the thirteenth century, Scheyern had arranged for the more elaborate of its transport needs to be met by *corvée* labour. A rental dated to the very beginning of this century and a second one of 1216–1220 define the responsibilities for the transport to the monastery of the already mentioned southern vintages (*Welschwein, vinum latinum*).²⁸ The official in charge was the *prepositus officii in montanis*, who resided in Berbling near the river Inn. His living expenses were to be met from two tenements there, and those of his two sergeants-at-arms as well as fodder for their horses from another holding. There was a bailiff responsible for collecting the dues, who too had a claim to fodder for his horse. One assumes that between them these four organized the wine transports. The whole distance was divided into relays manned by tenants of the monastery supplying both their work and equipment. Near Bozen (Bolzano) and Brixen (Bressanone) in Southern Tyrol, Scheyern owned wine-growing holdings which had to supply the carts and presumably all or some of their product. An additional and probably larger part of the vintage was purchased on the Bozen market. The first relay was located somewhere around Brixen, where four tenants from the adjoining Pustertal should take over, supplying carts, casks and horse-fodder. The next stop was at the holding of Trins, just over the Brenner pass. Its tenant was bound to provide another wine-cart of his own and to guide the expedition

to the relay at the tenement of Volders on the river Inn. There a neighbouring holding had to supply each year the wood for a raft, on which the wine was then to be shipped to Rosenheim. Incidentally, this is the earliest evidence for the regular transport navigation of the upper Inn river.²⁹ In or near Rosenheim the tenants of the office of Berbling, all of which were bound to perform carting services, took over and drove the wine on carts (*in plaustris*) to Munich. The fodder for their horses was to be supplied from the lord's granary at Berbling. There is no indication as to who was supposed to carry the wine on the last leg from Munich to Scheyern. It has to be stressed that such wide-ranging ventures were very much a matter of routine. They are attested in similar terms for some other Bavarian landlords in the eleventh and twelfth centuries, for a greater number in the thirteenth century and for a single one as late as the fifteenth century.³⁰

In contrast, there is no direct information on the organization of low-level transport ventures performed by the peasants themselves, be it in the course of their daily work or in the recurring task of carting their dues to the lords' granaries. This routine traffic must have been especially dense in the core region around the monastery, where tenants frequently went to work with their equipment on the (admittedly small-scale) demesne land and at the lord's granaries. One minor clue is provided by the legal arrangements of tenure. This was a region of short-term leases, ranging (in theory) from one year

²⁸ The manuscript sources for the following are Bayerische Staatsbibliothek, clm 1052 ff. 61^v–63^v; clm 17401, ff. 13va–13vb; edited by Stephan, *Urkunden*, pp 157–161, 189–193, entries 64–89, 353–389. I follow the analysis of the editor on pp 22*–23*.

²⁹ O Stolz, *Zur Geschichte der Organisation des Transportwesens in Tirol im Mittelalter*, in *Vierteljahrsschrift für Sozial- und Wirtschaftsgeschichte*, 8, 1908, p 203. On rafts and river-transport on the Inn see H Gritsch, *Schiffahrt auf Etsch und Inn*, in U. Lindgren, ed, *Alpenübergänge vor 1850. Landkarten – Strassen – Verkehr*, Stuttgart, 1987, pp 47–63.

³⁰ Stephan, *Urkunden*, p 22* note 14; Klein, *Weinsaumdienste*, pp 67–76; Stolz, *Zur Geschichte*, p 204; Merzbacher, *Tegernsee*, pp 199–213. For an overview see Dietmar Stutzer, *Weingüter bayerischer Prälatenklöster in Südtirol*, Rosenheim, 1980.

to a life-time at most.³¹ Scheyern like other landlords did equip its tenants not only with the land and buildings making up a holding. It was also bound by custom and self-interest to guarantee them a whole inventory of implements needed for its running, mainly seed grains and agricultural equipment.³² On the larger tenements situated on the bulk of the monastery's land, this would include also draught animals (oxen and/or horses), different carts and wagons with their ladders and boards, and harnessing gear.

All this sounds very much like the *Naturalwirtschaft* so dear to earlier generations of historians. The evidence, to state the case again, stems from two rentals of the early thirteenth century, which note what ought to be. When we come to the fourteenth century, things look quite different. In place of the earlier wine dues and transport corvées, a rental of around 1300 mentions for the Tyrol mainly cash payments.³³ Only the office Berbling near the river Inn remained burdened with transport duties, which could however be commuted to yearly cash payments.³⁴ In that form they appear again in a rental as late as 1430.³⁵ So here too it seems as if things were going the normal late-medieval way, with the money economy encroaching on, and finally replacing an economy of exchange.

Was this really so or is this yet another interpretation inherited from more positiv-

istic days? Thanks to the account books of Scheyern, this issue can for once be addressed with safety. We are using the accounts of the years 1339, 1347, 1349, 1352-1355, 1358, 1363, the only ones out of a larger number extant from the fourteenth century.³⁶ They contain for each accounting year the expenses occurred and income received by the bailiffs of the monastery's offices, as well as expenses in money and kind of some of the officials stationed at the abbey itself, such as the cellarer and steward. The purpose of the accounts was not to get a full picture of the economic state of the abbey, but rather to exercise control over both the monastery's servants and its rent-paying tenants. The account-books extant from the fifteenth century possess a different structure and contain only little of the information we are here looking for.³⁷

The complex ventures into the Southern Tyrol envisioned in the rentals of the early thirteenth century did indeed take place, at least in the fourteenth century. For this we have consistent evidence from the account-books for the years 1339, 1347, and 1349, and in a fragmentary way for the years 1352 and 1358. This information is combined and presented in the following listing. A closer sense of the evidence can be derived from the appendix. The stages and elements of these yearly recurring expeditions were thus the following:

1. at Bozen purchase of wine, payments to watchmen at the vineyards, toll-duties and gratuities to the toll-officials³⁸
2. on the Brenner route running from Bozen to Innsbruck, toll-duties at two customs points (Lurx vor dem Brenner and Lueg), gratuities to the customs officials, wages of carriers³⁹

³¹ H. Lieberich, *Die Rechtsformen des bäuerlichen Besitzes in Altbaiern*, in *Mitteilungen für die Archivpflege in Oberbayern*, 6, 1941, pp. 159-176; L. Holzfurtner, *Die Grundleihepraxis oberbayerischer Grundherren im späten Mittelalter*, in *Zeitschrift für bayerische Landesgeschichte*, 48, 1985, pp. 647-75. For the actual practice see the following reference, and in full my forthcoming book on the late medieval Bavarian peasantry.

³² Michael Toch, 'Lords and Peasants: A Reappraisal of Medieval Economic Relationships', *Jnl Eur Econ Hist*, 15, 1986, pp. 167-173. On the broader social and political implications of such arrangements see Michael Toch, 'Ethics, Emotions and Self-Interest: Rural Bavaria in the later Middle Ages', *Journal of Medieval History*, 17, 1991, pp. 135-147.

³³ Hauptstaatsarchiv München, KL Scheyern 54, edited by Stephan, *Urkunden*, pp. 195-271. The relevant entries are 738-796.

³⁴ Stephan, *Urkunden*, pp. 253-257, entries 662-683.

³⁵ Hauptstaatsarchiv München, KL Scheyern 56.

³⁶ Hauptstaatsarchiv München, KL Scheyern 77. For fuller details on the source see the introduction to my forthcoming edition of the Scheyern accounts.

³⁷ Hauptstaatsarchiv München, KL Scheyern 78-82, for the years 1413-1420, 1436-1448, 1450-1466, 1467-1483, 1484-1489.

³⁸ Appendix, entries 10-16, 30-1; 1670, 1678, 1684-8.

³⁹ Appendix, entries 17-19; 1671, 1677, 1679.

3. at Innsbruck expenses for casks, toll-duties and gratuities to the toll-officials, payments to an innkeeper and his dependents, as well as to a Jew and his servant⁴⁰

4. at nearby Hall on the river Inn, expenses for the unloading of the carts, the chartering and loading of a ship (not a raft anymore!), the purchase, repair and filling of casks, and the provisioning (of the ship's crew?) with wine⁴¹

5. at the stops along the river (Hall, Rattenberg, Kufstein) outlays for safe-keeping and custom dues⁴²

6. at an unidentified place called Roetenuelt (possibly Rott am Inn) expenses for the unloading and guarding of the cargo.⁴³

Up to this point the whole venture was a distinctively commercial one, involving, besides the abbey's official in the Tyrol, carriers chartered for the land-route over the Brenner pass and the navigation of the Inn, carters and porters, toll-officials, an innkeeper and his dependents, watchmen, and a cooper. In Bozen and Innsbruck there is also mention of a Jew to whom wine is sold, and of his servant who got a gratuity.⁴⁴ The role of both is yet far from clear, but the connection appears again to be a commercial one. Latin wine was occasionally also purchased at Hall on the river Inn (1347)⁴⁵ and at Kufstein (1352)⁴⁶, thus saving transport costs. In conclusion, each of the stages of the journey was directed and paid for by the monastery's official in charge, the actual work being carried out by paid personnel. There is only one stage missing from the evidence, the one leading after the discharge of the wine-ship to the north of Kufstein by land-route via Munich to Scheyern. The solu-

tion to this difficulty appears to lie in a number of entries located elsewhere in the accounts. There is yet another person found spending money and natural produce for the transport of the Scheyern wine, namely the monastery's bailiff of the Alpine offices Fischbachau and Berbling.⁴⁷ His outlays are accounted for in phrases like *de vectura vasorum*; *ad vecturas vini*; *ad currus vini* and are thus clearly connected to the wine-expedition. But unlike the previous stages, the one under his direction was carried out by the tenants of the Berbling office who had featured so prominently in the manorial set-up of the thirteenth century. Most of them had indeed commuted their corvée services by cash payments. But a number of tenements actually did convey wine as well as the cheese dues rendered by some Tyrolian tenements: *vecturam expeditit vehendo vinum*⁴⁸, *duxit caseos decimales de Chufstain*.⁴⁹ One holding was even permanently assigned to the route: *hec curia pertinet ad viam*.⁵⁰ However, their labour seems to have been supplemented by the one of paid carriers.⁵¹

So there were peasant transport services in the fourteenth century. But clearly they fulfilled only a minor role. Along the greater part of the Tyrolean wine route transport was a matter for paid carriers, not for the amateur peasant. But who were these 'professionals' if not peasants? We have known for long that in the Tyrol peasants earned an additional income by catering on a rota basis for the trade passing through or near their villages.⁵² Why not

⁴⁰ Appendix, entries 20-23, 30, 37; 1683.

⁴¹ Appendix, entries 24-28; 1672, 1675, 1680-1, 1687; 2801-2, 2805-8, 2812.

⁴² Appendix, entries 32-34; 1673-4, 1676; 2803-4, 2809-10.

⁴³ Appendix, entries 35-36, 39; 2811.

⁴⁴ Appendix, entries 12, 21, 30, 31, 34.

⁴⁵ Appendix, entry 1669.

⁴⁶ Appendix, entry 3336.

⁴⁷ Appendix, entries 571, 594, 636-7, 1914, 1933, 1956, 2477, 6732.

⁴⁸ Toch, Scheyern accounts entries 121 (1339); 1922 (1347); 2390 (1349); 5383-5 (1355), 6747-9, 6758, 6770, 6772 (1358).

⁴⁹ Toch, Scheyern accounts, entries 3321 (1352), 4035 (1353), 4487 (1354), 7151, 7162 (1363).

⁵⁰ Toch, Scheyern accounts, entries 115, 1297, 2383, 4026, 4479, 5394, 6760, 7147.

⁵¹ Appendix, entry 1922: *Item pro vectura vini nomine colonorum in Germaningen V solidos II denarios*.

⁵² On the *Rodivesen*, the rotation amongst the members of rural communities of commercial transport ventures along clearly marked relay routes see Stolz, *Zur Geschichte*, pp 224-245; idem, *Rechtsgeschichte des Bauernstandes und der Landwirtschaft in Tirol und Vorarlberg*, Bozen, 1949, pp 356-7.

the Scheyern peasants too, situated as they were along a major trade route from the Tyrol into Bavaria, and used for centuries to trek the country roads? The only difference, but a substantial one for those concerned, appears to have been the fact that by the fourteenth century they did so for their own gain rather than at their lord's command. The wages paid them by the abbey of Scheyern seem to have been indirect ones, possibly taking the form of cancellation of arrears of rent due for tenements held from the monastery.⁵³

IV

So much for the areas concerned directly with long-distance operations. What about the inner core, the monastic centre and the offices situated at varying distances around it? In the offices based on the market-towns of Aichach in the west, Rain in the north-west, and Dachau in the south, there were a number of recurring transport ventures, the most important being the carting of tithe-grains for which tolls had to be paid at the market town of Pöttmes.⁵⁴ There were no direct outlays for transport, but the accounts list expenses for the shoeing of draught-horses and the building and repair of wagons.⁵⁵ So evidently the officials used a local 'car park' belonging to the monastery. At the abbey itself there is more evidence for this feature. Excluding the abbot's stable there were the usual horses and equipment, to be exact twelve draught-horses, five wagons, and one cart, but harnessing gear for much more.⁵⁶ The quantities are roughly com-

parable with the ones found during the later fourteenth century in the possession of a knight living not far away.⁵⁷ They were much lower than the amount of equipment held at the beginning of the century by a Bavarian Cistercian abbey, a monastic order here as elsewhere in the forefront of agrarian progress.⁵⁸ But then Scheyern was merely a middling landlord with only one holding under direct cultivation, and this had draught-animals of its own. Whatever the size of transport gear available at the abbey, it seems to have been much used by the officials. One task was getting yearly, on certain feast-days, gifts of sizable number of cheeses to influential people in Freising, Munich, Illmünster and other centres of ecclesiastical and lay power. Another recurring task was the purchase and transport of the local wine, a task carried out by the central bailiff of the monastery stationed at the nearby town of Pfaffenhofen an der Ilm. Such purchases were made in the towns of Ingolstadt and Schrobenhausen, and at the market-place of Pöttmes.⁵⁹ For these tasks there is no mention of peasant corvée services or of payments to hired carriers. But again, there are outlays for repairs and horsefodder.⁶⁰ So use must have been made of the monastery's own rolling stock. Indeed, during the fourteenth century the abbey had on its payroll one to three permanently employed servants of the stable.⁶¹ Sometimes such person is expressively called *auriga*.⁶² In the more orderly accounts of the fifteenth century the head carter took first place amongst the domestic

⁵³ For the system of evening out mutual obligations between landlord and tenant see Toch, *Credit*.

⁵⁴ Toch, Scheyern accounts, entries 1534, 2584, 4643, 5604, 6457.

⁵⁵ Toch, Scheyern accounts, entries 1444, 1845, 3372, 3570, 4081, 4579, 4580, 5607, 6456.

⁵⁶ Toch, Scheyern accounts, entry 1588 (1347), a lengthy inventory taken down at the occasion of a new steward taking office: *Anno domini MoCCCXLVIIo in die penthecostes claves dispensacionis commisse sunt dicto Lepori cum rebus inventis in officinis ut subscribitur ... Item XII equos plaustr (rales). Item III garslaußel. Item V curris. Item I charren. Item XLVIII silsail. Item VI haesail. Item XXX parvos.*

⁵⁷ M. Piendl, *Hab und Gut eines bayerischen Ritters im 14. Jahrhundert*, in D. Albrecht et alia, eds, *Festschrift für Max Spindler*, Munich, 1969, pp. 193–213.

⁵⁸ The Cistercian abbey of Schönbald kept 44 to 82 horses and 21 to 42 oxen to service the monastery and its nine granges: B. Griesser, *Jahresberichte über die Wirtschaftsführung im Kloster Stams*, in: *Cistercienser-Chronik*, 62, 1955, p. 18.

⁵⁹ Toch, Scheyern accounts, entries 777, 1796–1808, 3517–8, 3521–4, 3531–3, 3537–8, 3545–7, 3549.

⁶⁰ Toch, Scheyern accounts, entries 1763, 1799, 3551, 7076–9.

⁶¹ Toch, Scheyern accounts, entries 714, 722, 808 (1339); 1140, 1740, 1754 (1347); 2206, 3062, 3082 (1349); 7028, 7106 (1363).

⁶² Toch, Scheyern accounts, entries 7079, 7093.

servants of the monastery.⁶³ It was he who now carted home the Latin wine bought solely on the Munich market.⁶⁴ Such a shift of purchasing policies, which must have taken place between c 1370 and 1410, explains the total disappearance of the Tyrolian wine ventures from the accounts.

We are left with one last office designated 'in inferiori terra'. Its holdings were more thinly spread over a wide area to the east and north-east of Scheyern. This office carried the bulk of the transport needs of the abbey. There was grain, salt and wine to be carted from Freising; salt from Dorfen; grain and cheese from the tithe-returns at Landshut; wine from Gündelkofen; wine and tithes from Kelheim, Weltenburg, Neustadt on the Danube and Vohburg.⁶⁵ These ventures were usually entrusted to hired carters, with costs much lower than the ones incurred in the wine-expeditions to the Tyrol.⁶⁶

So we have come full circle: from the expensive transport venture organized in the Tyrol and using hired carriers; to its occasional extension by *corvée* labour from the Inn river to Munich; to the journeys organized in the vicinity of the monastery by local officials basing themselves on locally available beasts and equipment; and back to hired carriers in the wider area to the east of Scheyern. Exactly like the evidence from rural England of the period 1200 to 1500, our Bavaria case too demonstrates 'how customary, demesne and contractual carriage could be integrated'.⁶⁷

Behind this locally differentiated structure there was sound economic sense and rationality. The transport of southern quality wine from far-away Tyrol, dependent as it was on distant costs and weather conditions, could not be planned, directed and executed from the monastic centre, but had to rely on organization and manpower on the spot.⁶⁸ There was little reason not to use the expertise of the tenants in the Inn valley for the last leg of the journey which anyway had to be organized in relays. By contrast, in the immediate core of Scheyern's possessions, on the short distances running along inner lines of communication, transport needs could be satisfied by relying on the abbey's own stock and personnel. And finally, it did make sense to leave the frequent transports from the eastern trade arteries of the Danube and Isar rivers to a hired and possibly already professional work force. Like the carriers of the Tyrol they connected the low-intensity region of Scheyern to areas of higher economic pressure linked together by navigable rivers.

One would suspect that this last feature of transport, functioning as a valve between regions of different economic intensity, was not particular to Scheyern. The prevalence of foreign wine transports among the total transport needs of so many Bavarian lords, whether ecclesiastical or lay ones, would indeed support such a proposition.⁶⁹ As to its overall economic impact, one must ask how typical or important was this type of transport geared towards the needs of a handful of Benedictine monks. Hektor Ammann, who possessed an intimate knowledge of the late medieval commercial economy, thought very highly of the monasteries' power as consumers and employers.⁷⁰ Our own research into the

⁶³ Hauptstaatsarchiv München, KL Scheyern 78, ff. 126 (1418); 172 (1419); 230 (1419); Lit. 79 ff. 112' (1439), 154' (1441), 155', 156 (1440), 158 (1443).

⁶⁴ Hauptstaatsarchiv München, KL Scheyern 78 f. 127'; KL Scheyern 79 f. 29 (1436).

⁶⁵ Toch, Scheyern accounts, entries 652-3, 657-9, 663, 1852-1871, 1880-1, 2638, 2644-7, 2654, 4708-18, 4730-2, 5666, 6513-9, 6531, 6534-5.

⁶⁶ Toch, Scheyern accounts, entries 653, 667 (1339); 1856-7, 1859, 1861, 1867-7, 1878 (1347); 2638, 2644-6 (1349); 4712, 4717 (1354); 6516, 6534 (1358).

⁶⁷ David L Farmer, 'Marketing the Produce of the Countryside, 1200-1500' in Edward Miller, ed. *The Agrarian History of England and Wales, volume III 1348-1500*, Cambridge, 1991, pp 347-358, here p 355.

⁶⁸ For a sober evaluation of such problems by another Bavarian landlord of the period see Merzbacher, Tegernsee, 211.

⁶⁹ Klein, Weinsaumdienste, 67-76.

⁷⁰ Hektor Ammann, Klöster in der städtischen Wirtschaft des ausgehenden Mittelalters, in *Argovia*, 72, 1960, pp 102-33.

economic history of Scheyern and other Bavarian abbeys indicates in detail the overwhelming weight possessed by even a middle-sized monastic establishment in an agrarian and small-town surrounding.⁷¹ In a similar vein, one might ask how typical was the recurring appearance of bulky and relatively cheap articles, the grains, cheese, and wines, we have found to be the staple transport goods? Similar consumption and thus transport needs can be found in the accounts of some Southern-German lords.⁷² Yet other lords again had no demand for such transport ventures, by simple virtue of their location at or very near a sizable market place. The great monastery of St Emmeram at Ratisbon for instance incurred almost no expenses for transport. The only outlays mentioned in its early fourteenth century account books are on one hand for the lord abbot's travels to the papal court at Avignon and the sending back of barrels of books purchased there, and on the other hand for the humble carting of humus soil and manure to the abbey's vineyards in the neighbourhood of the town.⁷³ All the rest, actually tremendous amounts of produce needed to feed and sustain this huge establishment, must have been purchased and conveyed locally on the great market place of Ratisbon.

V

Thus there is no clear-cut chronology of a closed manorial system of transport decaying and then being replaced by a commercial one. Still less is there a definite

dichotomy between a natural economy based on exchanges in kind and a monetary one. The change from one to the other, which did indeed occur during the later Middle Ages, was a very much gradual and uneven one. Our findings indicate a high degree of local specialization, with variations in transport needs and solutions attuned to varying local circumstances. Such skilful management of resources, born of necessity rather than of choice, seems to have been a general feature of the period. It is characteristic of the way Scheyern and indeed many other lords had to balance their limited monetary resources against what little remained of their ancient power of command over the work of their tenants.⁷⁴ Unlike their shipbuilding Hanse contemporaries of the urbanized German North, rural Bavarians of the later Middle Ages did not yet attempt to overcome the limitations and constraints put upon productivity (here transport) by raising the level of technology. Rather, they put their faith in organization. One might therefore conclude, as has been stated for late medieval rural England, that communications were indeed still adequate for the needs of the parties concerned.⁷⁵ As for so many other aspects of economic development, the driving forces for a better system of road transport were not to be generated from below, from the manorial and agrarian level treated here. As witnessed by the sixteenth-century history of the Fugger enterprises in mining, commerce, and communication, or the still later post-system built by the Thurn-Taxis, such impetus developed only after the close of the Middle Ages, from above, from the needs of warfare, early-capitalistic trade and the extensions of dynastic concerns stretched all over Europe. In this sense the

⁷¹ I have outlined these preliminary results in my forthcoming 'Local Credit'. They are to be published in full in a larger work in progress.

⁷² Emil von Ottenbach, *Die ältesten Rechnungen der Herren von Schlaudersberg*, in *Mitteilungen des Instituts für österreichische Geschichtsschreibung*, 2, 1881, p 610; Franz Bastian, *Das älteste Aldersbacher Rechnungsbuch und die Verwendung der klösterlichen Zollfreiheiten im bürgerlichen Handel*, in: *Staat und Volkstum, Festgabe für K. A. v. Müller*, 1933, pp 31-33.

⁷³ A preliminary result of my reading of St Emmeram's accounts for the years 1325, 1327 to 1333, the manuscript sources of which are located in Hauptstaatsarchiv Munich, KL St Emmeram 19 1/2.

⁷⁴ Gero Kirchner, *Probleme der spätmittelalterlichen Klostergrundherrschaft in Bayern. Landflucht und bäuerliches Erbrecht*, in: *Zeitschrift für bayerische Landesgeschichte*, 19, 1956, S 1-94.

⁷⁵ Farmer, *Marketing*, p 358.

generalizations drawn exactly forty years ago by Roberto Lopez from the highly developed economy of medieval Italy hold true even for the case of agrarian landlocked Bavaria.⁷⁶

Appendix

Expenses of the monastery of Scheyern for the purchase and transport of South-Tyrolian wine (1339, 1347, 1349, 1352, 1358).

Source: Hauptstaatsarchiv München, Kl.-Lit. 77; ed. by Michael Toch, *Die ältesten Rechnungsbücher des Klosters Scheyern (1339-1363)*, Bayerische Akademie der Wissenschaften München, forthcoming.

1339

- 9 Distribucio predictorum denariorum.
- 10 Primo Bozani XXXII libras ad prohibitionem aque.
- 11 Item IIII libras Veronensium saltneriis vindemiatoribus.
- 12 Item emit iudeo IIII urnas et III pacidas pro XVIII libris Veronensium, quibus inclusis dedit iudeo III carradas vini et dimidiam urnam.
- 13 Item pro I urna vini infusi ad vasa dominorum IIII libras Veronensium.
- 14 Item pro trunco et recessu I libram Veronensium Bozani.
- 15 Ibidem XIX grossos pro theloneo et honoranciis thelonei.
- 16 Item pro letteris thelon(ei) IIII libras cum dimidia.
- 17 Item in thelon(eo) episcopi Aug(ustinensis) XVIII grossos.
- 18 Item in dem Lu\og pro thelon(eo) et honoranciis IIII libras II grossos.
- 19 Item vectoribus XLI libras III grossos.
- 20 Item in Insprugga pro vasis dominorum III libras minus II grossis.
- 21 Item pro vasis iudei III libras.

22 Item pro thel(oneo) et honoranciis thel(onei) I libram Veronensium.

23 Item pro thelon(eo) minuto ibidem VIII grossos.

24 Item pro eductione vini et pro depositione ad navim XVI grossos, et IIII\or grossos de anno preterito pro dominis in Wiltina.

25 Item curribus de vectura ad navim VIII grossos.

26 Item vasifici II grossos pro debito sui vini.

27 Item naute VIII 1/2 libras Veronensium.

28 Item pro vino ad navigium X grossos et pro arra.

30 Item familie hospitis in Insprugga VI grossos, pro recessu ex parte iudei III grossos.

31 Item servo iudei III libras Veronensium pro honorancia et IIII grossos pro sumptibus et IX grossos Bozani.

32 Item in Ratenberch XVI grossos pro thel(oneo).

33 Item de custodia nocturnali II grossos in Hall(e) et Cufstein.

34 Item iudici in Chufstein I grossum pro gustacione vini iudei.

35 Item in Ro\etenuelt II grossos de custodia et vigilia vini.

36 Item famulo petenti currus ibidem II grossos.

37 Item hospiti Insprugge in debitis suis X libras Veronensium et V grossos.

39 Item de exempcione vasorum a navi IIII grossos.

42 Summa distribucionis XXIII marce VII libre VI grossi.

571 Anno domini millesimo CCC\oXXXVIII magister Celle, prepositus in Vischpach, distribuit recepta per eum ut subscribitur.

594 Item de vectura vasorum I libram denariorum.

636 Item X caseos ad vecturas vini.

637 Item in Roetenuelt Ruedlini II caseos.

⁷⁶R. Lopez, 'The evolution of land transport in the Middle Ages', *Past & Pres*, 9, 1955, pp 17-29.

1347

1668 Anno domini ut supra hec est distribucio facta per Gopold(um) prepositum in montibus.

1669 Item dedi in Hall XI marcas IIIIor libras IIII grossos, pro quibus comparavi vinum.

1670 Item in Bozano emi duas legenas pro III grossis.

1671 Item dedi pro vectura de Bozano omnibus computatis LIII libras Veronensium.

1672 Item dedi appositoribus in Hall III libras Veronensium.

1673 Item theloniatori ibidem IIII libras.

1674 Item pro thelonio in Ratenberch XX grossos.

1675 Item pro V vasis VII libras minus IIII grossis.

1676 Item vmb zolbrief in Tiral IIII libras et IIII grossos.

1677 Item pro caseis stratoribus IIII grossos.

1678 Item pro II pacinis vini I libram et VI grossos.

1679 Item stratoribus X libras.

1680 Item nautis pro valet VI grossos.

1681 Item portatoribus vinorum XV grossos.

1682 Item Perchtoldo dicto Stainpoch pro runcacione VI libras I 1/2 grossos.

1683 Item fur Wazzerphennig X libras.

1684 Item saeltnaeriis I libram.

1685 Item fur wimerlon X grossos.

1686 Item de orto pro vectura in civitatem XIII grossos.

1687 Item dimidiam libram Veronensium pro infusione vasorum.

1688 Item pro V urnis vini XXV libras Veronensium in Bozano.

1692 Item in primo introitu expendi XII libras.

1693 Item pro introitu et exitu secunda vice IIII libras.

1914 Item XXVI denarios pro vectura unius legene de Roetenuelt et pro expensis Gopoldi.

1922 Item pro vectura vini nomine colonorum in Germaningen V solidos II denarios.

1933 Item I modium pro pane ad currus vini.

1956 Item XII caseos ad currus vini.

1349

2477 Item pro caseis ad vinum in Roetenueld XII denarios.

2801 Item dedit vasatori in Hall VIII libras Veronensium.

2802 Item nautis pro precio VII 1/2 libras Veronensium.

2803 Item pro honorancia thelon(ei) Hallis I libram Veronensium.

2804 Item pro minori thelon(eo) Hallis VIII Veronenses.

2805 Item pro vino ad replenda vasa XLVI Veronenses.

2806 Item portatori I Veronensem.

2807 Item pro vectura vini ad aquam VI Veronenses.

2808 Item appositoribus et depositoribus VI Veronenses.

2809 Item in Ratenberch pro thelon(eo) VIII Veronenses.

2810 Item custodi II Veronenses.

2811 Item in Rotenuelt II Veronenses.

2812 Item dedit III pro arra dum convenit nauta.

2813 Item pro expensis IIII libras Veronensium.

1352

3336 Item pro vino latino de Chofstain II libras denariorum et pro expensis.

1358

6727 Nota prepositus in Vischpahaw, caseorum in Osterhofen per ipsum receptorem dedit plebano in Vischpahaw C caseos.

6732 Item ductoribus vini latini dedit XIII caseos.