
Section III : Provisioning Towns

TOWN AND COUNTRYSIDE IN MEDIEVAL ITALY : A CRITICAL EVALUATION OF THE SOURCES FOR UNDERSTANDING THE MECHANISMS OF SUPPLY AND DEMAND

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Summary

This paper focuses upon food production, distribution and consumption in past societies, and in particular on animals and animal products. Most of the data available at present relate to consumption. This is particularly the case in urban contexts, although it is also perhaps applicable to the limited number of excavated rural contexts. Particular emphasis is placed upon the large sample of animal bones recovered from excavations in the Palazzo Vitelleschi, Tarquinia, material which has been interpreted as the refuse of an affluent urban household in c. 1390. Having described the probable consumption patterns of this household, an attempt is made to comment upon the related production and distribution systems. The enormous value of documentary sources to the archaeozoologist is demonstrated through the use of examples from Bologna, Massa di Lunigiana, Viterbo and Alto Monferrato. It is urged that an interdisciplinary approach is adopted wherever possible.

Key Words

Animal bones, Medieval Italy, Food-consumption, Food consumption, Food production, Documentary sources

Introduction

Within archaeology in general there has been much discussion recently upon mechanisms of production, distribution and consumption. That information of some form upon these three aspects of the system is contained in the archaeological record can surely not be denied. An initial major limitation is our capacity to interpret

Résumé

Villes et campagnes de l'Italie médiévale : évaluation critique des sources pour une compréhension des mécanismes de l'offre et de la demande.

Cette communication analyse les moyens de connaître la production, la distribution et la consommation des aliments dans le passé et en particulier le rôle des animaux et des produits animaux. La plupart des données disponibles actuellement a rapport à la consommation. C'est surtout le cas dans les contextes urbains, mais aussi probablement dans les contextes ruraux (fouilles en nombre limité). Une importance particulière est donnée aux échantillons d'ossements d'animaux issus des fouilles du Palais des Vitelleschi à Tarquinia, qui ont été interprétés comme les déchets d'un riche ménage urbain aux environs de 1390. Après avoir décrit les aspects les plus probables de la consommation du ménage, quelques observations traitent des moyens de cerner les problèmes de la production et de la distribution. La grande valeur des sources documentaires pour l'archéozoologue est démontrée par des exemples provenant de Bologne, de la Masse de Lunigiana, de Viterbe et du Haut Monferrato et de l'interprétation qui peut en être faite. Il est indispensable que les recherches concernant cette question soient abordées de manière interdisciplinaire.

Mots clés

Ossements d'animaux, Italie médiévale, Consommation des aliments, Production des aliments, Sources documentaires

the evidence correctly and "make good use of bad rubbish" (BERESFORD, 1977). A second major limitation is the problems encountered in our attempts to link production and consumption, whether directly or via the intermediary distribution mechanism. Obviously we can only begin to appreciate the total complexity of an economic strategy, including factors which

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determine supply and demand, once the complete cycle is identified, described, and critically assessed.

In interpreting the archaeological data, we must be very clear in our minds as to what the data refer to : that is, do certain objects reflect upon production or are they an indication of consumption, or both. It should, of course, be noted that for any particular commodity the producer may be the consumer : however, from later prehistory this has become increasingly rare, the distance and relationship between producer and consumer being extremely variable.

This paper will focus upon food consumption and production in past societies, and in particular upon animals and animal products. Most of the data available at present relate to consumption. This is particularly the case in urban contexts, although it is also perhaps applicable to the limited number of excavated rural contexts. In fact, it may be suggested that all samples of animal bones will reflect consumption rather than production : the exception to this may be the find of complete carcasses of animals which had been raised by man, but had died because of disease, as a result of which they were not considered to be fit for human consumption. In other words, consumption is a logical corollary to production and, unless the system is interrupted for whatever reason, we must perceive production through the filter of consumption. However, from a careful and critical assessment of the data resulting from consumption, some information upon the associated production and distribution system or systems may be gleaned.

From consumption to production : the archaeological data

No sample of animal bones from an urban context will represent the livestock which had been raised locally as part of subsistence agriculture. In terms of the medieval period in Italy three major sources of food may be defined : firstly food was obtained from agriculturally-orientated units, both large and small, at indeterminate distances from the urban markets ; secondly, a discrete amount of livestock kept in and around the town itself could provide some meat and milk ; thirdly, food and other animal products were acquired through hunting and fishing. With reference to the first source, the distances involved between the production centre and the urban market may be extremely varied, dependent not only upon the economic system but also environmental and social

factors. Movement over considerable distances, in some cases involving or subsumed within transhumance, was clearly not regarded as unusual.

The remains of animals which had formed part of the urban food supply must result from a quite complex situation, involving a number of intricate and interactive systems. A radial rather than unilineal pattern should be imagined, different products being supplied by different sources. The sample from a rural settlement might be expected to be representative of local agriculture. However, even in this case, it should be recalled that it will reflect only part of the system, animals and/or their products being distanced from it through the local and/or regional economy. An excellent example of the potential discrepancy between production and consumption is provided by the documentary evidence from Bolton Priory, England, presented by Kershaw and discussed by GRANT (1988). In the account books for 1304 to 1318, sheep were by far the most numerous of all the livestock kept on the priory estates. However, the larder accounts for the same period show that only 40 per cent of the animals killed for use in the priory's kitchen were sheep. Even more striking is the fact that while only 3 per cent of the priory's livestock were pigs, nearly 30 per cent of the carcasses in the larder were of pig.

I shall now turn to an assessment of production and consumption of animals and animal products and the relationship between town and countryside in medieval Italy, concentrating upon a discussion of a sample from one particular site. It should be emphasized at this point that a vital requirement for critical studies is that the archaeological evidence is not viewed in isolation but is integrated with the historical sources which relate to economic factors (CLARK, 1989) and that the environmental context of the site and sample is appreciated. Obviously in few cases will one be as fortunate as IJZEREEF (1989) in his study of seventeenth and eighteenth century material from Amsterdam, but in most cases at least some pertinent data exist.

Tarquinia, a town founded in the eighth or ninth century A.D. and known until 1922 as Corneto, is located on a hilltop, some 5 kilometres from the Mediterranean and some 100 kilometres north of Rome. A series of pits was excavated in 1982-1983 by the British School at Rome in collaboration with the *Soprintendenza ai Beni Archeologici dell'Etruria Meridionale*. The pits were within the present Palazzo Vitelleschi but would have been behind the proto-palace. *Circa* 1390 they were filled with everyday

refuse, useful household effects, valuable personal belongings, all perhaps of one single family, and the carcasses of poultry, rats and other rodents. A faunal assemblage of more than 40,000 fragments resulted (CLARK *et al.*, 1989). Here I shall concentrate upon the evidence for the larger mammals. It is clear that although the meat of wild animals, such as red deer, roe deer and hare, was often eaten, domestic animals formed the basis of the diet.

The most numerous animal was sheep/goat, large and robust individuals being indicated. Sheep were in fact more frequent than goats. Many of the animals present had died whilst relatively young : this has been interpreted as evidence for animals which had been raised and killed specifically as good quality meat animals. The range of anatomical elements present covers the entire skeleton although differences in the frequency of bones from various parts of the body were noted. Cranial and dental elements were common although not excessively so. Fragments of the bones of the limb extremities were present but not numerous, and those of the lower parts of the limbs were rare. However, many of the sheep/goat bones found are in fact those with which the best cuts of meat are associated. The butchery practices seem to have been standard and consistent.

Pigs also formed an important part of the meat resource represented here. They had been killed quite consistently at a young age. In addition, given the presence of a few skeletons of particularly young animals, suckling pigs may have been eaten sometimes, perhaps on festive occasions. A wide range of anatomical elements is present, no particular parts of the skeleton, and by inference cuts of meat or types of refuse, being noticeably over- or under-represented.

Although cattle were less well represented, their contribution to diet may still have been considerable. As animals had died at various ages, it would seem that they were killed as meat was required, or as their use for other purposes declined : that is, they had rarely been raised specifically for meat alone. Most anatomical elements were present, although in some contexts a predominance of cranial and dental elements and of the bones of the upper parts of the limbs was observed.

From these data it has been possible to obtain a fairly detailed impression of the food consumption of a relatively affluent urban family in the late fourteenth century. However, let us now consider what, if anything, this sample can tell us about the associated production systems.

For cattle there is no real evidence for specialized consumption : this might be interpreted as a reflection of an unspecialized production system. This in itself would be significant, for it presents a picture that is somewhat different to that seen in the documentary sources, where the role of cattle as working animals is emphasized (see, for example, JONES, 1966 : 380-383). However, the meat of such animals was regarded by contemporary writers such as De Crescenzi (writing at the very beginning of the fourteenth century) as fit only for the lower classes of society, individuals with a very strong stomach or who were particularly active (DE CRESCENZI 1805). Therefore bones of old working animals would not be expected in the domestic refuse of an affluent urban household.

The aspect of a sheep/goat raising strategy which is revealed to us by the sample from Tarquinia is one in which animals had been killed at optimum meat-bearing ages. How this fits into the wider system is more problematic. It could be that meat procurement was the major goal : however, this seems somewhat unlikely given the highly developed economy of this period (DE LA RONCIERE, 1982 ; WICKHAM, 1985 : 448-449). It may be that these animals represent the surplus to flock requirements, from a flock kept for obtaining wool or for dairy products, in a system in which maximal value was sought. Given that a large number of the diagnostic fragments belong to female sheep, it may be suggested that these animals in fact originate from a pastoral system geared towards wool production, either in the surroundings of Tarquinia, or in more distant areas with which it had contacts. From the documentary sources it appears that in the late medieval period Tarquinia was renowned for grain rather than for flocks, for it supplied not only the growing commercial and industrial centres of the Tuscan hinterland, but also Genoa and Rome (ABULAFIA, 1974 : 231 ; CORTONESI, 1981 : 223). It is therefore unlikely that large flocks were kept throughout the year in the immediate vicinity of the town.

How was this household actually obtaining its food ? Archaeologically, it is difficult (perhaps impossible ?) to say. On the basis of the historical context, three major means can be proposed : firstly, that food was bought commercially within the town ; secondly, that food was obtained from a rural unit through rent and contract payments ; and thirdly that the urban household was able to procure food as the yields of its own familial agricultural resources. In essence it would seem probable that it was a combination of all three. Certainly the family seems to have been sufficiently affluent both

to have its own land-holdings within the surrounding countryside, and to be able to advance money and rent animals to peasants and stock-raisers within commercially based contracts. Purchases from the urban market may then have provided those elements not obtained through other means.

Documentary evidence for production and consumption

A brief historical interlude will now be presented in order to demonstrate one valuable source of evidence available for late medieval Italy : that is, records of the taxes paid upon the butchery of animals. The examples used are the Porta Nuova area of Bologna in 1406 (FRESCURA NEPOTI, 1981) and Massa di Lunigiana, a small village in the territory of Lucca in 1401 (LEVEROTTI, 1981). The population of Bologna at this time is difficult to assess : the nearest estimate available at present is for 1371, when a population of *circa* 32,000 inhabitants (8,000 hearths) has been suggested (see FRESCURA NEPOTI, 1981 : 284, and note 13). "Official" butchery was concentrated in two areas of the city, the Porta Nuova and the Porta Ravennana, the latter being the more important (although records are now incomplete). The population of Massa di Lunigiana in 1399 is estimated to have been *circa* 1550 people (346 hearths) but in 1403 it had declined to *circa* 1400 people (313 hearths) (see LEVEROTTI, 1981 : 227, and notes 3-7).

In table 1 the proportions of animals butchered in each month are shown. It should be noted that in both years Lent encompassed all of March. In terms of the number of animals killed, sheep and goats tended to be dominant, in particular from February to September. Cattle seem to have been of more importance in early summer and winter, although exploited in small numbers throughout the year (except for August). Although the slaughter of pigs began in July and gradually increased throughout the autumn, the critical months were November, December and January.

Information is also available upon seasonal variations in the slaughter of particular species. In addition to indicating the proportion of the goat and sheep samples killed in each month, tables 2 and 3 give some impression of the different classes of animal. (The "names" of the animals have been left in Italian, because of potential problems and differences in terminology.) In the case of goats (tab. 2), although a few *capretti* (kids) were killed in February, there is a particularly clear peak in their killing immediately following Lent, and a reasonable number were killed in May : the number then declined gradually. In the case of sheep (tab. 3), it will be clear that quite marked differences occurred between the two sites : unfortunately space does not allow a discussion of this phenomenon here. However, a further indication of the type of data available is provided.

	Jan	Feb	Mar —[Lent]—	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Bologna - Porta Nuova												
Pig	54	8	0	0	0	0	0	2	23	38	50	62
Cattle	27	25	0	20	26	30	15	0	25	37	34	34
Sheep	19	62	0	36	55	68	82	96	51	23	15	3
Goat	0	4	0	44	19	2	3	2	<1	1	1	1
Total												
No.	269	227	0	535	487	409	475	657	273	227	196	211
Massa di Lunigiana												
Pig	33	11	0	0	0	0	0	10	29	32	38	59
Cattle	27	0	0	1	0	8	8	0	4	16	28	9
Sheep	40	21	0	28	33	59	46	40	58	48	34	32
Goat	0	68	0	71	67	33	46	50	8	4	0	0
Total												
No.	15	19	0	181	63	51	37	30	24	25	29	22

Table 1 : Monthly butchery records for Bologna-Porta Nuova (1406) and Massa di Lunigiana (January - November 1401, December 1398). Figures for each animal are percentages of the monthly total (after FRESCURA NEPOTI, 1981 ; LEVEROTTI, 1981).

	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
	— [Lent]											
Bologna - Porta Nuova												
Percentage of yearly total killed each month												
	0	3	0	63	24	2	4	3	<1	1	<1	<1
Number killed each month (annual total 375)												
	0	10	0	237	90	7	13	12	1	3	1	1
Monthly proportions by age/sex class												
capretto	0	80	0	95	99	43	15	8	0	0	0	0
becco	0	0	0	0	0	14	54	33	0	0	0	0
capra	0	20	0	5	1	43	31	58	100	100	100	100
Massa di Lunigiana												
Percentage of yearly total killed each month												
	0	6	0	55	18	7	7	6	1	1	0	0
Number killed each month (annual total 235)												
	0	13	0	128	42	17	17	15	2	1	0	0
Monthly proportions by age/sex class												
capretto	0	100	0	99	90	88	29	40	100	100	0	0
caprone	0	0	0	0	0	6	47	13	0	0	0	0
capra	0	0	0	1	10	6	24	47	0	0	0	0

Table 2 : Seasonal patterns in the butchery of goats at Bologna-Porta Nuova and Massa di Lunigiana (after FRESCURA NEPOTI, 1981 and LEVEROTTI, 1981).

	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
	— [Lent]											
Bologna - Porta Nuova												
Percentage of yearly total killed each month												
	2	7	0	9	12	13	18	29	6	2	1	<1
Number killed each month (annual total 2183)												
	51	141	0	190	269	280	390	634	139	52	30	7
Monthly proportions by age/sex class												
<i>agnello</i>	100	99	0	100	88	82	39	30	10	21	7	0
<i>castrone</i>	0	1	0	0	5	6	14	24	50	33	37	86
<i>montone</i>	0	0	0	0	4	7	11	2	1	2	3	0
<i>pecora</i>	0	0	0	0	3	5	36	44	39	44	53	14
Massa di Lunigiana												
Percentage of yearly total killed each month												
	3	2	0	28	11	16	9	7	8	7	5	4
Number killed each month (annual total 184)												
	6	4	0	51	21	30	17	12	14	12	10	7
Monthly proportions by age/sex class												
<u>agnello</u>	17	50	0	55	71	13	29	33	29	25	10	0
<u>castrone</u>	33	0	0	45	24	70	35	25	50	0	30	0
<u>montone</u>	33	50	0	0	5	17	35	42	21	58	50	57
<u>pecora</u>	17	0	0	0	0	0	0	0	0	17	10	43

Table 3 : Seasonal patterns in the butchery of goats at Bologna-Porta Nuova and Massa di Lunigiana (after FRESCURA NEPOTI, 1981 and LEVEROTTI, 1981).

VALUE	SHEEP/GOATS
High	<i>castrati</i> <i>agnelli da latte, capretti, pecore</i> with fewer than 4 teeth
Medium	<i>pecore</i> with 4 teeth or more
Low	old <i>pecore</i>
	CATTLE
High	<i>vitella da latte</i> <i>asseccaticce</i> (1-2 years)
Medium	<i>annotule, ioveni</i> (more than 2 years)
	<i>vacche</i>
Low	<i>boves antiqui</i>
	PIGS
High	<i>porci</i>
Low	<i>scrofe</i>

Table 4 : Relative values of different animals in the price lists (*calmieri*) of Viterbo in the fourteenth and fifteenth centuries (after COCCIA, 1985-86)

In brief, documentary sources indicate that seasonality has an important part to play in urban supply and/or demand. It is obviously a quite complex issue to comprehend for an accurate assessment and correlation is needed of the month of birth and the month of slaughter of each animal. However, such data have enormous potential for archaeology, especially given the present trends in faunal studies involving a search for more refined techniques and methods for the accurate ageing of animals and consequently determining the year and season of their death.

However, the context of such documentary sources must be appreciated, as must that of an archaeological sample. A warning against oversimplification is provided in the case of Bologna by a comparison of the documentary data for 1414 in particular (FRESCURA NEPOTI, 1981) and the faunal remains, studied by Dr Judith CARTLEDGE (1979), from excavations at San Petronio, in the city centre : in archaeological terms, 70 per cent of the cattle reached at least 3-3.5 years, whilst in the registers 70 per cent of the animals are described as calves ; apparent discrepancies also exist for sheep/goats.

Other sources of information upon the role of animals and animal products in medieval Italy include rent contracts ; *in soccida* contracts ; laws and statutes ;

catastral returns ; inventories ; customs duties and taxes ; salaries, pensions, accounts ; personal diaries, letters and accounts ; agricultural treatises ; and price lists (see CLARK, 1989 for a fuller discussion of these sources). Although the precise figures given in the price lists for various districts may be difficult to compare and regional and perhaps also seasonal variations to be expected, some idea of the relative values of different animals may be obtained. Examples of these are the price lists (*calmieri*) of Viterbo (COCCIA, 1985-86), summarized in table 4, and those of a rural settlement in the Alto Monferrato (AIRALDI, 1972). At Viterbo, the meat of younger animals tended to be of greater value and that of older animals of lesser value. For example, in the case of cattle, the meat of calves was expensive, that of 1-2 year animals slightly less so, and that of *annotule* and *ioveni* (animals of more than two years of age) even less. The meat of *vacche* (that is cows who had presumably reached the end of their productive lives) was slightly dearer than that of cattle that had been kept as working animals, this being the cheapest of all cattle meat.

At Alto Monferrato, the following prices (in denarii per pound) were noted in the fourteenth century : *manzo lattonzolo* 9, *capretto* 8.5, *castrato* (quarter less than 12 lb) 8, *castrato* (quarter more than 12 lb) 9, *agnello* (less than 3 lb) 6, *agnello* (more than 3 lb) 7, *porco* 8, *scrofa* 6, adult *pecora* with teeth 6.5, suckling *pecora* without teeth, plump 5.5, suckling *pecora* without teeth, not plump 5, *capra brumeta* (which has not yet given birth) 6, *capra* (which has given birth) 4.

Artistic representations constitute a further valuable source of information, particularly for example, on butchery techniques, on which the documentary sources are largely silent, but on which archaeological samples can provide important indicators.

Conclusions

Finally, to return to more general considerations. The precise nature of the food supply may have been influenced heavily by general economic factors such as the need for and value of wool, the necessity to dedicate a certain amount of land to arable production, and by religious taboos. The data which exist at present concerning animals and animal products relate primarily to consumption. Critical and detailed analysis of the faunal evidence may in fact result in quite clear and precise pictures of food consumption. In addition, through the filter of consumption, it may be possible to

comment upon production, or at least upon aspects of it. Obviously in this area much work is required. In the case of medieval Italy, more samples from rural settlements would be of great assistance, for at present such evidence is rather limited (HODGES, 1990). That is not to say that such samples will be a direct reflection of production, but from them we may be able to describe different aspects of the production system from those revealed by samples from larger, often urban settlements. A small but critical point is that care should be taken in distinguishing the probable stage in the production - distribution - consumption network to which any particular body of data relates and in the use

of appropriate terminology. As to the distribution system and to mechanisms of supply and demand, much at present is conjecture, based upon knowledge, however imperfect, of the encompassing economic and social systems. However, by developing our understanding of production and consumption and considering all available sources of data, that is, viewing the archaeozoological data within their historical, economic, social, environmental and archaeological contexts, and by co-operating with scholars working in related fields, major advances will be possible and we shall be able to "make good use of bad rubbish".

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