Patterns of Consumption in Renaissance Venice

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Abstract
Reconstructing prices and price indexes for pre-industrial societies is always a challenge for researchers. Despite the fact that several account books have been preserved and may offer purchase and sale prices of a wide range of goods, the definition of a consumer basket – a set of different quantities of goods forming the basic consumption unit for an average individual or family – faces several difficulties. Average consumption is difficult to establish even in pre-industrial times, since buying activities vary of course not only according to wealth and income, but also to social class; and it is usually difficult to record and assess self-consumption. It seems more important to offer some parameters from a single case study, the ledger of a Venetian patrician recording his purchases on a daily basis, in a couple of months in 1455.

Keywords
History of consumption. Cost of living. Consumer prices. Family expense. Material culture. Venetian Republic.

Summary
1 Consumption and Markets. – 2 The Hazardous Reconstruction of Pre-Industrial Costs of Living. – 3 Baskets. – 4 Shopping in Renaissance Venice.

1 Consumption and Markets

Any issue related to the study of consumption in a pre-industrial society usually brings more doubts than certitudes. The act of spending – or, more appropriately, of using money or credit – for having in return a good or a service has traditionally received analytical attention especially when it has been interpreted as an extravagance: from antiquity to late-Medieval and early modern Europe lavish spending was considered inappropriate and ended up being sanctioned (although, usually, in vain). In a highly polarised social world, as pre-modern
Europe was, the act of consuming belonged to those possessing enough means to spend, i.e. generally the ruling classes or those aspiring to the role; in this sense the sociologist Thorstein Veblen coined the concept of conspicuous consumption, a way of spending that reflects the social position. Writing in the late nineteenth century, Veblen juxtaposed the wealthy class against an increasingly discernible working society, and reflected upon consumption as a force to promote emulation and antagonistic distinction associated with richness, while formulating a theory of leisure spending as a way to increase reputation among peers. The concept has been questioned since then, but although Veblen’s sociological theories were ill-founded, his conspicuous-consumption expression has become a familiar term. It matched what Renaissance intellectuals named magnificencia, magnificence – a virtue pertaining to princes and increasingly linked with a way of lavish spending to provide honour and fame to a house.

In its extensive, economic meaning, however, consumption refers merely to the economic action of consumers, who spend their resources (usually, their revenue or part of their savings) to buy goods or services in the market. According to economic theory, consumption has to take place in the market, meaning the exchange of goods and services for money (be it real money or fiduciary money in the form of credit): it still contains the idea of consuming (that is, destroying) what is going to be used, but it points to a distinction between what has to be bought and what can be produced within the family. In other words, economic theory posits a clear distinction between consumption and self-consumption, and places its focus on to commodities, to be produced and traded. A more recent trend in research, thus, has investigated the driving forces of consumption in pre-industrial times – that is, before the historiographic fracture imposed by the industrial Revolution. Possibly, an attitude of consumption that common people were able to express (and that may be labelled as ‘mass’ consumption) quite certainly “preceded factory-style production”, and material life is now believed to have “blossomed” from the fifteenth century onwards in some parts of Europe, such as northern and central Italian cities or Flanders.

Consumption is, however, a more complex phenomenon than an expansion of quality and quantity of goods and services in everyday life.

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1 Veblen, *La teoria della classe agiata*, 31-3, 70-98.
2 Campbell, “Conspicuous Confusion?”. Patterns of consumption determine the concept of ‘distinction’ stated also by Pierre Bourdieu.
3 Clough, “Pandolfo Petrucci”; Guerzoni, *Apollo e Vulcano*, 105-31.
4 Fairchilds, “Consumption in Early Modern Europe”; Berg, “From Imitation to Invention”.
5 Trentmann, *Empire of Things*, 10.
life. It depends on the social position of the individual, on gender (who spends money for the family in pre-modern societies?), on one’s economic means, on the availability of goods. Although contemporary attitudes towards buying goods cannot of course be applied to preindustrial times, consumption is necessarily related to commerce, hence in dealing with late Medieval and early modern societies commercialisation assumes a more pronounced nature in urban settings, although rural areas were not necessarily cut off from market demand and labour markets. Yet it is possible to assume that the less significant presence of market forces in cities was more clear-cut, and fainter the relevance of self-consumption and self-produced goods for everyday life. Richard Goldthwaite has convincingly demonstrated how new consumption habits, different from a ‘feudal’ model of spending and “the values and attitudes associated with it”, which were perceived as increasingly distant “from the realities of life for the urbanized elites of late medieval Italy”, were spreading in cities, mainly in Renaissance Italian cities.

Consumption, as a matter of fact, is also and above all related to necessity, and to surviving strategies that can vary across a wide range of possibilities according to the social status of consumers. Given a consumption model that is socially accepted (the quality of which is often difficult to determine), consumption is then connected to the spending power of the individual or family (hence to the extent of someone’s salary, income or wealth), to the availability of credit instruments, and it is determined by price levels, which in a market economy usually tend to be outside the individual consumer’s control. To determine what kind of response an entirely new object such as the printed book might have had on its first appearance, its expense and its trade-off against other consumables should also be determined. However, this information is usually very difficult to obtain. In a pre-industrial society, any choice might have been guided (indeed, as today) by what shared culture perceived as a necessity, apart from mere living, and surely then as now the rule of addiction created by any cultural consumption, as Gary Becker observes, was true; but our knowledge about most aspects of everyday life remains for the most part fragmentary. Data about purchasing power are scant, and any clue on desire and curiosity as ways of motivating acquisition of new goods has to be shaped in a form that depends mostly on the researcher’s interpretation and imagination.

6 The reallocation of resources within the family, with women and children entering the salaried labour force in the seventeenth and eighteenth centuries, created new possibilities for consumption and change in taste, according to the “industrious revolution” hypothesis by Jan De Vries (The Industrious Revolution). Berg, “From Imitation to Invention”, 3-4.
7 Cf. for some results Allen, Weisdorf, “Was There an ‘Industrious Revolution’.”
8 Goldthwaite, Wealth, 161, 176-8.
9 Becker, Murphy, “A Theory”.
Yet, it is not an impossible task. Family account books are copious and scattered throughout European archives; they constitute a precious source unveiling the world of consumption. Venetian archives preserve many, mostly referring to the fifteenth century, and one of them has been chosen as a case study.\(^\text{10}\) It was presented as a court file several decades after its composition; it records daily accounts (sums given and received) from March 1455 to the end of 1457 in a simple double-entry form. It seems to have been conceived as a book of personal expenses, probably one of a series; its owner records his election to a prestigious position in Ferrara in December 1457, while the last pages contain a dense list of manuscripts, a couple of medical prescriptions, proverbs, Latin mottoes, and even a sketch for a chapel fills the first and last papers of this small ledger.

The book belonged to a male member of the Sanudo family; its writer omits his own name, though making several references to his relatives—his brother Francesco, Mattio Sanudo, Marin Sanudo. Reinhold Mueller believes him to be Leonardo di Marino, who was elected Visdomino in Ferrara from 22 December 1457 to 1459 (the book recalls this important event), and who was the father of the celebrated diarist Marin. The Visdomini in Ferrara were ambassadors and consuls, negotiating on behalf of the Venetian republic with the Duke of Ferrara, and helping Venetian merchants to operate in the city itself and in its important river port on the Po. At the time of the account book, the Visdomini acted also as magistrates for Venetian merchants. The anonymous French author of a treatise on the Venetian government reports that it was a well-paid public post.\(^\text{11}\) Leonardo belonged to the main Sanudo branch, whose palace still exists at the edge of the parish of San Giacomo dall’Orio, where the family was registered for tax purposes, and San Zan Degolà, that is St John the Beheaded. He was born on 25 January 1425, probably more veneto, hence 1426, and had begun his public career in 1445 when he was elected advocato pizol; he died in Rome in office on 11 October 1474 during his sojourn as ambassador to pope Sixtus IV.\(^\text{12}\) The Sanudo were traditionally considered as part of the founding hierarchy of Venice.

The Sanudo were traditionally considered among the founding rulers of Venice. Members of the family held important diplomatic

\(^{10}\) The small register is in Archivio di Stato di Venezia [hereafter ASVe], Giudici di Petizion, Rendimenti di conto, b. 2, unnumbered. It has a leather binding, and is thickly written on the inside. The ledger has been studied by Reinhold Mueller, who identified its owner. Traces of the argument that opposed two branches of the family in 1556 (and that probably motivated its presentation as a court record at one of the six Venetian tribunals) can be found in Fondazione Querini Stampalia Onlus, Venezia, Archivio privato Querini Stampalia, b. 2.

\(^{11}\) Braunstein, Mueller, Descriptions ou Traicté, 404-6.

\(^{12}\) Sanudo, Le vite dei dogi, LXXVII-LXXX; Marco Barbaro and A.M. Tasca, Arborii de Patritii Veneti [Miscellanea Codici, I, Storia Veneta, vols. 17-23], vol. VI, c. 560 (ASVe).
roles in the Byzantine empire in the twelfth century; they were included in the reform of 1297, the *Serrata*, which gave to the main governing body, the Great Council, a hereditary character drawing a line between the members already elected, whose families were already considered, or were close to becoming, noble, and commoners, and making “the admission of new families into the governing class [more] difficult in the future”\textsuperscript{13} And, although they could not boast a *doge* among their ranks, in the fifteenth and sixteenth centuries the Sanudo continued to enjoy prestige and wealth.\textsuperscript{14} Notwithstanding their political role, the Sanudo, like most of Venetian patriciate, were deeply engaged in economic activities, practising manufacture and trade as this account book testifies; they still shared with the ruling class of other Italian cities a mixed behaviour that often puzzled members of the feudal nobility. The first entry in the book on March 1st 1455 recalls a payment received on behalf of the company formed by Leonardo and his brother Francesco, and trading operations appear on a daily basis.

This contribution therefore aims to offer an example of consumption expenses through Leonardo Sanudo’s case study, introducing two months in the life of a Venetian family belonging to the ruling class in the mid-15th century.

2 \textbf{The Hazardous Reconstruction of Pre-Industrial Costs of Living}

For any pre-industrial society lacking, obviously, a national statistical institution, the reconstruction, or the approximation, of a cost of living generally poses considerable challenges to researchers. In fact, they almost never have all the data they really need. According to economics, the cost of living identifies the total expenditure of a household or an individual on its own consumption. It is deemed able to measure the variation in time of such expenditure, and allows us to measure also the well-being of a society and the extent of economic inequalities within it; finally, it consents comparisons with different countries or societies. The cost of living thus depends both on the level of prices and on consumption preferences, which identify the different consumption choices. It also depends on disposable income, i.e. the financial flow from wages and annuities that allows the perpetuation of the life of a family or an individual, minus the share of direct taxes and savings. In contemporary advanced economies this indicator is calculated on the basis of a very large set of goods and

\textsuperscript{13} Lane, *Venice*, 113.

\textsuperscript{14} Caracciolo Aricò, “Marin Sanudo il Giovane”, 423.
services that are considered to be representative of household consumption within a nation, the so-called basket. And it is understood that the cost of living measured by the level of current prices implies an economic system based on market exchange.

The basic idea and concepts forming a contemporary index for the cost of living face several practical obstacles when applied to the pre-industrial age. First, it is believed that the reconstruction of a price index, which is necessary to build the cost-of-living index, in pre-industrial economies is almost never able to take into account all the different spheres of monetary circulation – that is, one related to international trade with coins issued in gold; another one using silver, which makes it possible to interpret the values expressed in money of account in ledgers and real life with real coins; and a third one consisting of coins made of a copper-based alloy, which formed the everyday circulation of low-value currency. The reconstruction of price indexes usually relies on the official lists of grain prices, which – as well as any value recorded in accounting books – refer to virtual coins (moneys of account) expressed basically in terms of silver. Between the thirteenth and the early seventeenth centuries moneys of account multiplicated with the issue of a great number of new coins, especially in silver and gold to be used in the increasingly growing international commerce; the gold/silver ratio ruling the relative value of both metals also varied substantially in this period, increasing the uncertainty of the monetary means used. Any measure in money of account, hence, does not consider the practical difficulties of paying for anything in everyday life. Whenever recorded in accounting books, even daily purchases were in fact registered in money of account. Moreover, consumer credit was very common, and accounts were cleared in various ways several weeks, months, and even years later, to avoid the use of coins. When accounts had to be converted into real money, however, it was the so-called ‘small’ money that was used; minted in copper or metal alloy, it nearly always bore a disadvantage compared with the ‘large’ coins, i.e. those minted in gold or silver, which gave the standard of value to the moneys of account. Any price index, and any cost of living for pre-industrial periods, hence, contains distorted information, which does not represent everyday reality in the past. In Venice for instance, as in every other Italian city, the monetary circulation ran in different sectors with different coins – minted in gold, silver and alloy – with little mutual interference. Everyday life and the payment of wages mainly used alloy coins, which were continuously susceptible to government intervention to avoid their sudden depreciation, while money of account (the ducato di conto) remained at a fixed rate with the relative value of lire, soldi and denari that were to form it, and that were converted into real money.

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15 Lane, “The Mobility and Utility”.
16 Tucci, “Prezzi e autoconsumo”, 769-70.
A second difficulty emerges when grouping together different series of goods, as the building of an index requires. It is difficult to dig out coherent series of data, despite the commendable efforts made by researchers in the central decades of the twentieth century.\textsuperscript{17} In all probability, price series are heavily overbalanced in favour of cereals traded on urban markets, with a price that has been recorded (mainly wheat), at the expense of minor grains that were instead consumed by a large section of the population even in cities; or, price series consider data for international products such as pepper, which were indeed important, but could not aspire to enter into everyone’s daily diet, and which are not necessarily recorded at their local market value. The function of this indicator risks, thus, to be seriously out of true.\textsuperscript{18}

Finally, a price index necessarily includes only products that are to be sold on the market and receive a monetary counterpart. However, it is assumed that the share of self-consumption may be present in various ways, depending on the social level and on economic means, even within cities and also among the well-off parts of urban population. And in pre-modern society the circulation of goods connected to the practice of the gift, the resale of objects (both by ragmen and by public authorities with official auctions) and to testamentary legacies was widespread and essential for material life.\textsuperscript{19}

All these different forms of circulation, and the deferment of payments through consumer credit, were used indiscriminately by everyone. To offer a Venetian example, in the 1530s the patrician Francesco Priuli went personally to the market to buy fruit and fish, to public auctions to look for bargains and buy second hand goods and clothes, and to the Ghetto to buy jewellery for his wife; other family members and the servants took care of daily shopping. Only his wife, as was common, could not go out and do shopping; but she regularly attended the annual fair of the Sensa in St Mark’s place.\textsuperscript{20}

It was the same for Leonardo Sanudo. The ledger omits the name of its writer, however it is written in the first person and it is Leonardo himself who manages the money and does the shopping. Food is bought throughout the week, from Monday to Saturday; between March and April 1455 he went only twice to the rich market in Campo San Polo held weekly on a Wednesday, even if San Polo is a few minutes away from San Giacomo dall’Orio where Sanudo lived; instead he bought

\begin{itemize}
  \item Braudel, Spooner, “I prezzi in Europa”; Dumoulin, “Aux origines de l’histoire”.
  \item Romano, “Introduzione”, xxv-xxx. Price series for wheat can be already found for the fifteenth century in several Italian cities. They permitted urban government to control their food policy and decide the selling price of cereals, allowing it also to set the value of rent for agricultural land, and to regulate the payment of annuities and interests.
  \item Malanima, \textit{L’economia italiana}, 155-6.
  \item Welch, “Sites of Consumption”, 229-30; cc. 201-9.
\end{itemize}
food nearly every Saturday, possibly at the weekly market in Piazzza San Marco where he had to attend his public duties, and in Rialto where an important market operated daily.\textsuperscript{21} He purchased food, candles, soap and offered soldi in charity nearly every day he went shopping. Wine, an essential part of the daily diet, is missing: March 1455 fell under the period of Lent (Easter day being April 6), and the diet was usually affected (no meat was bought, see table 1), however wine was probably provided by other members of the expanded family (the brothers lived together in the same palace), as was firewood which must have been essential at least in March.\textsuperscript{22} Both were probably provided as part of a common way of living together under the same roof and of sharing affairs among the male members of a family branch, the fraterna, a family partnership that allowed to share profits and expenses. The only entry for wine, on April 14, refers to a short trip to the nearby province of Padua, to buy wool. On this occasion Leonardo and maybe one of his brothers took cheese, eggs, oranges, twine and needles to bring home the wool; they paid the ferrymen in the inner canals (the ledger does not mention horses) and Venetian officers. The total amount of the expenses for their trip was less than a ducat; the wool they bought from three shepherds exceeded 87 ducats. When compared to a company’s expenses, everyday necessities ask for a very low sum of money. And, in general, drawing a sketch of the cash flows, the ledger contains, in March and April 1455, food expenses and a few others related to everyday living, such as clothes, candles, the purchase of services such as the weekly barber paid 4 soldi to shave Leonardo, made up a very small fraction of the weekly expenses, mostly related to the trade in wool cloth (panni bassi, which were relatively inexpensive) and pepper. A very rough estimate of the cost of living for Leonardo and his family, excluding firewood, however, can be put together summing up his expenses, and providing a comparison with his cash flow. His income pertained mostly to the family company’s affairs and to the revenue he obtained from his public post, 8 ducati every two months (see graph 1).\textsuperscript{23} Missing data between the fourth

\textsuperscript{21} Welch, “The Fairs of Early Modern Italy”, 31.

\textsuperscript{22} Wine was an important part of the average diet. In February 1458, when Leonardo was in Ferrara and hence outside the fraterna, he had to buy wine for himself: red wine, white wine, malvasia.

\textsuperscript{23} Values in [graph 1] are given in ducati as money of account. The ledger calculates 1 ducat at 124 soldi, although the ducato di conto was officially set at 124 soldi (that is, 6 lire and 4 soldi di piccoli) only in 1456 (Lane, Mueller, Coins and Moneys of Account, 362). Sanudo observes that the account books of his family’s company use a ducat of account set at 122 soldi, and some of the contracts he writes down in his personal ledgers assume the ducat of account at 6 lire and 3 or 3½ soldi. This uncertainty between a ducat of account and its exchange value in coins on the market was officially resolved by Venetian government in 1456, fixing the value of a ducat at 124 soldi. Ducato “meant the gold coin or the money of account based on gold, which was used for wholesale and
week of March and the second week of April indicate that there was no income recorded in the ledger, but it was Easter week, and it seems that Leonardo took his family and relatives to at least two conventual churches (San Pietro Martire in Murano and the Croce) to hear mass and confessions, as his precise registration of money for alms testifies.

Graph 1  Cash flows per week and daily expenses, March-April 1455. Values in ducati. Source: ledger

3  Baskets

What does a pre-industrial basket contain? The law theorised by the statistician Ernst Engel in the nineteenth century identifies an inverse relationship between disposable income and survival expenditure: the lower the income, the higher the percentage of expenditure dedicated to food, which possesses a limited adaptability to variations in price: despite adjustments in quantity made by consumers, it is necessary to have food and, even with indiscriminate price increases, at least a small quantity of food has to be bought. Food hence weighs heavily in the composition of a basket, especially taking into account the structural presence of poor people and families who need continuous assistance to survive, and the innate insecurity of working life: individuals and their families could find themselves in complete poverty from one moment to the next by sudden reversals of fortune. The share of structural and potential poor was estimated in Venice as ranging from 30 to 60% of the urban population in 1661, a figure in line with other cities in early modern Europe.  

international trade and some salaries, while the lira di piccoli, based on silver, was used for wages and retail trade” (Lane, Mueller, Coins and Moneys of Account, 362-3).

24  Pullan, Rich and Poor, 989-90.
There has been a long debate on the supposed deterioration in the living conditions of wage-earners as a result of the industrial revolution; undoubtedly, even in the centuries preceding the eighteenth, living conditions depended drastically on fluctuations in the price of cereals, and consequently on the annual policies of the city governments. Yet research conducted in the last three decades has shown how, from the sixteenth century onwards, the progressive globalisation of trade brought undoubtedly several benefits in contexts that indeed were not so dramatic in Europe, mainly in urban settings. The situation was better especially in the urban centres of the most developed areas of Europe (north-central Italy and the Netherlands), which were crossed by international trading routes and water courses. And, starting with Richard Goldthwaite’s studies, attention has been paid to the growing demand for durable goods expressed in central-northern Italian cities in the 15th and 16th centuries. This relatively new demand obviously involved members of the ruling and wealthy classes, but it also shifted downwards, towards the less well-off, changing the appearance and perception of homes, expanding their spaces and filling them with new objects and furniture. Food, then, was essential, but was not the only category of expenditure.

For low-income families of urban workers – in the nineteenth century, a much later period than the one this paper considers –, Paul Bairoch estimates the percentage of disposable income devoted to non-essential expenses, that is, different from food, clothing, heating and lighting, at 8-9%, taking into account an intake of around 2,000 per day as average amount of calories. The availability of consumer goods the industrial revolution fostered throughout the nineteenth century obviously beggars comparisons with previous periods, however the amount of non-essential expenses in the previous centuries might be debatable, since consumption levels do not seem to change much up to the threshold of the contemporary era. In Roman times, for instance, a ‘respectability basket’ allowed a worker to consume 182 kg of bread per year, along with legumes, meat (about 26 kg), cheese, eggs and wine (almost 70 l per person). The subsistence basket, on the other hand, included only about 10 kg less bread, and bread was much cheaper than meat, fish, eggs and cheese. In the fourteenth century in the cities of

25 Shammas, “Standards of Living”. The standard of living indicates the portion of disposable income spent on food, clothing, housing, fuel.
26 Bairoch, “Écarts internationaux des niveaux de vie”, 145.
27 Goldthwaite, Wealth and the Demand for Art, 212-43; Ajmar-Wollheim, “Sociability”, 206-7.
28 Bairoch, “Écarts internationaux des niveaux de vie”, 149-53.
29 Scheidel, “Real Wages in Early Economies”, 430 tab. 1; Allen, “How Prosperous Were the Romans?”, 333 and 340.
central and northern Italy the consumption of bread, or wheat, might have varied between 550 and 700 gr per capita per day, resulting in an annual amount varying between an astonishing 2 and 2.5 tons, and seemed to remain stable for the next two centuries, rising to 800 gr in the sixteenth century. However, calculations are often distorted by official rules on prices; having to compensate for fraud and omissions on food rations for soldiers and seafarers, governments usually raised caloric requirements while diminishing the real calories they distributed. Venetian sailors, who were undoubtedly employed in an exhausting job, received in biscotto, that is hard tack, and soup 3,636 daily calories in the fourteenth century, and only 3,187 in 1538. But wheat was not the only available resource: in the mid-seventeenth century a worker at the Venetian Arsenal consumed 700 gr of polenta, cooked maize flour, per day, allowing him an intake of about 1,500 calories, together with wine, five sardines and one onion.

What about salaries, then? Available data seem to demonstrate some stability in the fourteenth and fifteenth centuries, and a progressive worsening in the following decades. Estimates on real average wages (compared with cereal prices) in Tuscany remain stable and at a high level between 1350 and 1450, with a progressive decrease up to 1600. Wages of Lombard bricklayers collected by Giovanni Vigo and expressed in kg of bread increase from 7 kg per day in 1391, to 10-13 kg in 1411-1419, to 11-13 kg in 1423-1439, to 13-16 kg in 1462-1474, progressively worsening later (it has to be noted that working days were roughly 2/3 of the entire year). In the following decades wages would probably fell due to the difficult political situation in northern Italy, ravaged by military campaigns at the beginning of the sixteenth century during the so-called Italian Wars, while cereal prices increased. The increase in prices of manufactured goods, on the contrary, was not so marked, thus favouring the wealthier classes whose component of food expenditure remained proportionally lower than that of the families of employees. This was the case of Leonardo Sanudo.

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30 Montanari, *La fame e l’abbondanza*, 132.
31 Tucci, “L’alimentazione a bordo”, 143. The Venetian government estimated its cereal needs – for a population of 190,000 people at the beginning of the fifteenth century – in 1422 at over 23,000 hl per month, but just over 16,000 in 1465, a quarter of which had to be employed in hard tacks for sailors; estimates of food needs in wheat, however, are among the first global figures of its economic policy, since wheat had very often to be imported. Tucci, “Prezzi e autoconsumo”, 298.
32 Pezzolo, “L’economia”, 375 tab. 3.
33 Malanima, “Wages, Wages Productivity”, 151.
34 Vigo, “Real Wages of the Working Class”, 387-8.
35 Pezzolo, “Prezzi, moneta e stato”, 299-300.
4  Shopping in Renaissance Venice

What made up Leonardo’s basket? Its diet is interestingly more varied in March, where some limitations were imposed by religious practice in time of Lent, than in April, after Easter had passed \[\text{[table 1]}.\] If it is Leonardo doing the food shopping, the book however does not tell how many mouths were to be fed. Leonardo married three times, and in 1455 he was probably living with his wife and possibly two girls and a boy, Jacomo.

Table 1  Food expenses per week in March and April 1455. Values in soldi

| weeks  | March | April | Sums |
|--------|-------|-------|------|
|        | 1     | 2     | 3    | 4    | 1    | 2    | 3   | 4    |
| fish   | 61    | 42    | 24   | 45   | 16   | 22   | 238 |
| meat   |       |       |       |       | 34   | 43   | 30  | 107  |
| vegetables | 5  | 11   | 1    | 6    | 5    | 4    | 1   | 2    | 35  |
| oil    | 92    | 92    |      |      |      |      |     | 184  |
| wheat  |       |       | 38   | 20   |      |      | 58  |      |
| cheese | 8     | 8     |      |      |      |      | 8   |      |
| eggs   | 8     | 8     |      |      |      |      | 8   |      |
| fruit  | 1     | 1     |      | 8    | 10   |      |     |      |
| almonds| 15    |       |      |      |      |      | 15  |      |
| capers | 5     |       |      |      |      |      | 5   |      |
| raisins| 6     | 2     | 2    |      |      |      | 10  |      |
| honey  | 1     | 1     |      |      |      |      | 2   |      |
| candied fruits | 1 |     |      | 1    |      |      |     |      |
| salt   |       |       | 4    |      |      |      | 4   |      |
| bakery | 8     |       |      |      |      |      | 8   |      |
| milk   |       | 1     | 1    | 2    |      |      |     |      |
| wine   |       | 8     |      | 8    |      |      |     |      |
| Total amount spent in food | 792 |

Graph 2  Daily distribution of expenses by food category, March-April 1455. Values in soldi. Source: Table 1. Wheat is not included
The basic necessities for Sanudo are mostly for fish and meat, which is of course completely absent in March (Easter fell on April 6, 1455) and is replaced by legumes; varieties of fish are not specified, however dried fish and one turbot are recorded. Vegetables (erbe) are also a constant supply, rarely with the addition of fruit (just 2 soldi in March). Cheese and eggs, two dairy products which are supposed to be consumed frequently, appear instead only when Leonardo goes outside Venice to buy wool, as a sort of packed lunch: but we might wonder if they are supplied by some other members of the Sanudo fraterna. Even milk appears only twice. This situation seems to contradict what general models of food consumption attest. Sanudo was of course a member of the ruling class, who could afford a varied diet where no lack of vitamin intake from vegetables emerged, and where carbohydrates were present; his and his family’s diet over two months depended on seasonality, although religious traditions had a bearing, but dairy products seem completely absent.

Fish is purchased constantly, apart from one week in April, and remains the largest food expenditure; when Lent has passed, however, Sanudo buys more meat than fish. A large supply of oil goes into the basket; large quantities are bought every month, it seems, for family use, and its expense is registered in the second week of both March and April with the same amount, 92 soldi for 1 miaro of oil and its transport to his house. But the largest amount spent is on wheat.

On April 14 Sanudo records the purchase of nearly 190 kg of wheat for 3 ducats and 75 soldi; the wheat is then ground and 32 soldi are due for this service, and baked at a baker’s shop as was customary. This purchase affects the trend of food expenses, which seems otherwise fairly constant along the eight weeks considered [graph 3]. Fluctuations, however, responded probably to family and daily needs: in a society with no effective ways to store fresh food and where waste was banned and recycling the norm, daily expenses varied according to necessity.

36 One miaro corresponds approximately to 16 litres. Luzzatto, Studi di storia economica, 294, giving a measure for edible oil in mid-fourteenth-century Venice. Mattozzi, “Crisi, stagnazione e mutamento”, 199, refers to a different value for one miaro (corresponding to 631 litres) three centuries later. The high amount of oil could be explained considering the extensive consumptions of the fraterna, and the food for servants.

37 Sanudo bought 3 stara of wheat at 4 lire and 10 soldi per staro. One staro is approximately 63 kg. Mattozzi et al., “Il politico e il pane”.

[Graph 3: trend of food expenses]
A second, and relevant, expense involves wardrobe [table 2]. Leonardo spends for his wife and children, buying cloth, shoes, silk to prepare belts, and pays a tailor and a shoemaker; a pattern for a gown (forma da veste) is mentioned as well. The highest sum goes, however, to two separate purchases of wool cloth for Celestina (it is not possible to know if she is his wife or one of his daughters or a female relative), and to ermine and vair skins, both for himself and for Celestina. He buys as well a few second-hand ermine and squirrel furs, which he specifies ‘of good quality’ (bone), from one of his relatives.

Even wardrobe expenses, however, seem to take place on a weekly base, apart from the last two weeks of April.

**Table 2** Wardrobe expenses per week, March-April 1455. Values in soldi. Source: ledger

|          | March | April | Sums  |
|----------|-------|-------|-------|
| March    | 1     | 2     | 3     | 4     | 1     | 2     | 3     | 4     |       |
| ermine skins | 380   | 420   | 260   | 47    | 16    | 22    | 1,107 |
| wool cloth | 7     | 960   | 680   | 43    | 30    | 1,647 |
| silk cloth | 7     | 6     | 5     | 4     | 1     | 2     | 57    |
| second-hand furs | 7     |       | 92    |       |       | 19    |
| leather  |       |       | 447   |       |       | 22    |
| canvas   | 38    | 20    |       |       |       | 15    |
| belts    | 10    |       | 8     |       |       | 10    |
| bags     |       | 8     |       |       |       | 12    |
| hose     | 1     | 1     | 8     |       |       | 12    |
| shoes    |       |       |       |       |       | 48    |
| **Total amount spent in clothes and accessories** |       |       |       |       |       | **2,949** |

Leonardo’s basket was thus made up with food and clothes: in two months he spent something more than 6 ducats in food (less than the salary for his public post), and nearly 24 in wardrobe items. His expenses for services such as the barber, though regularly registered, counted barely half a ducat, as with the money he spent on alms. Apparently his case study denies the material variety that in the fif-
teenth century should have filled up private spaces: he buys a huge marble portal for the restoration work on the family palace for 900 soldi, approximately 7 ducati, and furnishes his gondola with a new oar for 24 soldi, an oarlock for 8 and a pair of wooden benches for 5, but hardly any other commodities appear. His material world, however, extends throughout the entire period the ledger covers: he registers for instance fifty pieces in pewter in June 1456, and in Ferrara he pays regularly two miniaturists to illuminate a manuscript. And his spending in food and wardrobe is varied, though seen only over a two-month period. His pattern of consumption was probably common to other members of the Venetian patriciate, and contributed to render the city a wonderful market.

Bibliography

Ajmar-Wollheim, Marta. “Sociability”. Ajmar-Wollheim, Marta; Dennis, Flo- ra (eds), At Home in Renaissance Italy. London: Victoria & Albert Museum, 2006, 206-43.
Allen, Robert C. “How Prosperous Were the Romans? Evidence from Diocle- tian’s Price Edict (AD 301)”. Bowman, Alan; Wilson, Andrew (eds), Quantifying the Roman Economy. Methods and Problems. Oxford: Oxford University Press, 2009, 327-45.
Allen, Robert C.; Weisdorf, Jacob L. “Was There an ‘Industrious Revolution’ Before the Industrial Revolution? An Empirical Exercise for England, c. 1300-1830”. The Economic History Review, 64(3), 2011, 715-29.
Bairoch, Paul. "Écarts internationaux des niveaux de vie avant la révolution industrielle". Annales. Histoire, Sciences Sociales, 34(1), 1979, 145-71.
Becker, Gary S.; Murphpy, Kevin M. “A Theory of Rational Addiction.” Journal of Political Economy, 96(4), 1988, 675-700.
Berg, Maxine. "From Imitation to Invention: Creating Commodities in Eighteenth-Century Britain". The Economic History Review, 55(1), 2002, 1-30.
Braudel, Fernand P.; Spooner, Frank. "I prezzi in Europa dal 1450 al 1750". Rich, Edwin E.; Wilson, Carus H. (a cura di), L’espansione economica dell’Europa nel Cinque e Seicento. Vol. 4 di Storia economica Cambridge. Torino: Einaudi, 1975, 436-562.
Braunstein, Philippe; Mueller, Reinhold C. (éds). Description ou Traicté du gouvernement et regime de la cité et Seigneurie de Venise. Venezia vista dalla Francia ai primi del Cinquecento. Venezia: Istituto veneto di scienze, lettere ed arti; Paris: Publications de la Sorbonne, 2015.
Campbell, Colin. “Conspicuous Confusion? A Critique of Veblen’s Theory of Conspicuous Consumption”. Sociological Theory, 13(1), 1995, 37-47.
Caracciolo Aricò, Angela. “Marin Sanudo il Giovane, precursore di Francesco Sansovino”. Lettere italiane, 31, 1979, 419-37.
Clough, Cecil H. “Pandolfo Petrucci e il concetto di ‘magnificenza’”. Esch, Arn- old; Frommel, Christoph L., Arte, committenza ed economia a Roma e nelle corti del Rinascimento, 1420-1530. Torino: Einaudi, 1995, 383-97.
De Vries, Jan. The Industrious Revolution. Consumer Behavior and the Household Economy, 1650 to the Present. Cambridge: Cambridge University Press, 2008.
Dumoulin, Olivier. “Aux origines de l’histoire des prix.” *Annales. Histoire, Sciences Sociales*, 45(2), 1990, 507-22.

Fairchilds, Cissie. “Consumption in Early Modern Europe. A Review Article.” *Comparative Studies in Society and History*, 35(4), 1993, 850-8.

Goldthwaite, Richard. *Wealth and the Demand for Art in Italy 1300-1600*. Baltimore; London: The Johns Hopkins University Press, 1993.

Guerzoni, Guido. *Apollo e Vulcano. I mercati artistici in Italia (1400-1700)*. Venezia: Marsilio, 2006.

Lane, Frederic C. “The Mobility and Utility of Moneys of Account”. *Rivista di storia economica*, 1, 1984, 7-26.

Lane, Frederic C. *Venice. A Maritime Republic*. Baltimore; London: The Johns Hopkins University Press, 1973.

Lane, Frederic C.; Mueller, Reinhold. *Coins and Moneys of Account. Vol. 1 of Money and Banking in Medieval and Renaissance Venice*. Baltimore; London: The John Hopkins University Press, 1985.

Luzzato, Gino. *Studi di storia economica veneziana*. Padova: CEDAM, 1954.

Malanima, Paolo. *L’economia italiana. Dalla crescita medievale alla crescita contemporanea*. Bologna: il Mulino, 2002.

Malanima, Paolo. “Wages, Wages Productivity and Working Time in Italy, 1270-1913”. *Journal of European Economic History*, 36(1), 2007, 127-71.

Mattozzi, Ivo. “Crisi, stagnazione e mutamento nello stato veneziano sei-settecentesco: il caso del commercio e della produzione olearia”. *Studi veneziani*, n.s. IV, 1980, 199-276.

Mattozzi, Ivo; Bolessi, Francesco; Chiasera, Carmen; Sabbioni, Daniela. “Il politico e il pane a Venezia (1570-1650): calmieri e governo della sussistenza”. *Società e storia*, a. VI, 20, 1983, 271-303.

Montanari, Massimo. *La fame e l’abbondanza. Storia dell’alimentazione in Europa*. Roma-Bari: Laterza, 1993.

Pezzolo, Luciano. “L’economia”. Benzoni, Gino; Cozzi, Gaetano (a cura di), *La Venezia barocca. Vol. 7 di Storia di Venezia*. Roma: Istituto della Enciclopedia italiana, 1997, 369-433.

Pezzolo, Luciano. “Prezzi, moneta e stato”. Bizzocchi, Roberto (a cura di), *Ambiente, popolazione, società. Vol. 10 di Storia d’Europa e del Mediterraneo. Dal Medioevo all’età della globalizzazione*. Roma: Salerno editrice, 2009, 275-316.

Pullan, Brian. *Rich and Poor in Renaissance Venice. The Social Institutions of a Catholic State, to 1620*. Oxford: Blackwell, 1978.

Romano, Ruggero. “Introduzione”. *I prezzi in Europa dal XIII secolo a oggi. Saggi di storia dei prezzi raccolti e presentati da Ruggiero Romano*. Torino: Einaudi, 1967, ix-xliv.

Sanudo, Marino. *Le vite dei dogi (1474-1494)*, vol. 1. Edited by Angela Caraccio-lo Aricò. Padova: Editrice Antenore, 1989.

Scheidel, Walter. “Real Wages in Early Economies. Evidence for Living Standards from 1800 BCE to 1300 CE”. *Journal of the Economic and Social History of the Orient*, 53(3), 2010, 425-62.

Shammas, Carole. “Standard of Living, Consumption, and Political Economy Over the Past 500 Years”. Trentmann, Frank (ed.), *The Oxford Handbook of the History of Consumption*. Oxford; New York: Oxford University Press, 2012, 211-26.

Trentmann, Frank. *Empire of Things*. London: Penguin, 2017.
Tucci, Ugo. “Prezzi e autoconsumo nel Medioevo italiano”. Romano, Ruggiero; Tucci, Ugo (a cura di), *Economia naturale, economia monetaria*. Vol. 6 di *Storia d’Italia. Annali*. Torino: Einaudi, 1983, 271-336.

Tucci, Ugo. “L’alimentazione a bordo delle navi veneziane”. *Studi veneziani*, n.s., 13, 1987, 103-45.

Tucci, Ugo. “Monete e banche nel secolo del ducato d’oro”. Tenenti, Alberto; Tucci, Ugo (a cura di), *Il Rinascimento. Società ed economia*. Vol. 5 di *Storia di Venezia dalle origini alla caduta della Serenissima*. Roma: Istituto della Enciclopedia italiana, 1996, 753-805.

Van Zanden, Jan L. “Wages and the Standard of Living in Europe, 1500-1800”. *European Review of Economic History*, 3(2), 1999, 175-97.

Veblein, Thorstein. *La teoria della classe agiata. Studio economico sulle istituzioni*. Torino: Einaudi, 1949.

Vigo, Giovanni. “Real Wages of the Working Class in Italy: Building Workers’ Wages (14th to 18th Century)”. *Journal of European Economic History*, 3(2), 1974, 378-99.

Welch, Evelyn. “Sites of Consumption in Early Modern Europe”. Trentmann, Frank (ed.), *The Oxford Handbook of the History of Consumption*. Oxford; New York: Oxford University Press, 2012, 229-50.

Welch, Evelyn. “The Fairs of Early Modern Italy”. Blondé, Bruno; Stabel, Peter; Stobart, Jon; Van Dammen, Ilja (eds), *Buyers and Sellers. Retail Circuits and Practices in Medieval and Early Modern Europe*. Turnhout: Brepols, 2006, 31-50.
