THREE

Rebirth

Starting in the twelfth century, for the first time since the splendours and excesses of the Roman Empire, the Italian peninsula became once again one of the cultural engines of the world. Despite the increasingly fragmented political landscape, marked by frequent wars, foreign invasions, civil unrest and intrigues, Italian cities experienced intense growth in terms of production, trade and social mobility. These rapid changes were reflected in their arts and culture, which flourished in what came to be known as the Renaissance.

The Agricultural Take-off

Enjoying de facto independence from their Byzantine rulers, coastal cities such as Genoa, Pisa, Amalfi and Venice, also referred to as seafaring republics, had reacted to the lack of productivity of their agricultural hinterland by focusing instead on commerce in valuable goods such as wine and olive oil. During the Crusades, the expeditions that the Christian kingdoms organized against the Muslims in the Holy Land, these trading hubs on the Italian coast assumed the role of mediators between Europe and the territories around the Mediterranean under Islamic control.

The most radical changes took place in northern and central Italy, in areas still nominally under the control of the German emperors, who had succeeded the Franks as leaders of the Holy Roman Empire. After centuries of decadence, Italian cities gradually moved towards self-governance, establishing political structures based on voluntary associations of citizens, known as *comuni* (communes). Not only merchants and artisans but also lesser feudal lords who moved their residences from the countryside to the cities dominated civic life. Monetary circulation took off, motivating

Arezzo, Piazza Grande. Squares became the centre for cultural and political life in the Italian cities that adopted self-government under the *comuni*.

landowners to invest in commercial and financial ventures managed by the urban elites. These activities led in turn to the development of banking and credit instruments, such as credit letters, that facilitated long-distance movement of capital. The bustling markets became once again the centre of urban life, absorbing surplus production from the countryside, boosted by technical innovations in agriculture. Commerce turned into a fundamental source of tax revenue for the cities. It became a priority to establish more efficient controls on food quality and consistent forms of measurement for all sorts of products and merchandise.

With the limitations imposed by the conservation techniques available at the time, a few food products from the countryside – especially wines and cheese – acquired renown well beyond their place of origin, thanks to far-reaching trading networks. Parmigiano Reggiano is mentioned in the *Decameron*, the famous collection of novellas written in Italian by Giovanni Boccaccio in the 1350s.[1] Boccaccio describes mountains of grated parmigiano with plenty of macaroni and ravioli rolling down their slopes in the country of Bengodi, an imaginary land of never-ending abundance.[2]

Andrea Mantegna, *Jesus Praying at the Mount of Olives*, 1459, San Zeno, Verona. The painting reflects the careful landscaping and agricultural work on the hillsides close to large towns.

These fantasies on one hand channelled the desire for a life without any worries about lack of food, which indicates that food scarcity was a widespread issue; on the other it reflected new products and customs that were the result of the epochal changes that were taking place in the centre and north of Italy. There, peasants deforested, reclaimed, drained and toiled large expanses of previously abandoned lands in the areas around the cities. Far from the customary control of local lords, the increase in arable land would prove fundamental to feeding the growing population. At times, the intense process of deforestation and the enclosure of previously open fields limited pasturage and the production of forage, with the consequence that cattle could be raised only in low numbers, causing scarcity of dung for fertilization.[3] Some feudal lords improved the productivity of their lands by inviting monks to found abbeys in their domains, especially where draining of marshes was necessary. The monks also contributed to the reorganization of large-scale pasturage, including transhumance: the seasonal movement of sheep between the plains in the south, where flocks spent the winter, and the hills of central Italy, which provided cooler climates and more grass in summer.[4] Inevitably, monasteries increased in size and power, thanks to the frequent donations

from landowners and rural lords. Their lands were worked by hired labour, with monks managing the production and the commercialization of their crops. Over time, monastic diets became more abundant and varied, even if monks still observed the fasting periods and consumed more vegetables and fruit than the upper classes.

Urban centres organized the reclamation and management of nearby territories, especially in the case of hills whose soil conditions deteriorated due to excessive deforestation.[5] Responding to the growing need for timber for construction and firewood, hillsides were subject to clearings, while trees like chestnuts and olives were often planted in open fields. Around the Apennines, especially in times of scarcity, chestnuts were ground into a versatile and filling flour. While fields were usually ploughed straight down hill slopes, increasing soil erosion in some areas of Tuscany, the coast of Liguria, the Amalfi coast and Sicily, where the mountains were closer to the sea and the dangers of erosion and running waters were more urgent, farmers built banks (*ciglioni*) and terraces (*terrazze*) planted with olive trees, grapevines and citrus fruits.

Cities undertook projects to regulate water supply, build irrigation canals and maintain riverbanks. Around the river Po, these interventions increased the use of waterways for transportation and trade and fostered the diffusion of efficient water-powered mills. Technological innovations played a fundamental role in improving agricultural productivity. The introduction of the three-field crop-rotation system replaced the old method of two-year rotation (cereals and fallowing), allowing farmers to

Around the Apennines, especially in times of scarcity, chestnuts were ground into a versatile and filling flour.

plant fields with autumn crops (wheat), spring crops (pulses, barley, rye) and fallow herbs. As metal technologies advanced and iron became more accessible, blacksmiths forged innovative tools such as the heavy mouldboard plough. At the same time, the introduction of the front yoke allowed oxen to breathe better and to pull the ploughs with full force, increasing productivity. Planted by landowners and monasteries, vineyards constituted a common feature of both urban and rural landscapes. However, the productive improvements in the countryside did not always mean better life conditions for the peasants, freed from the traditional powers of feudal lords but increasingly subjected to the control of the urban elites. Contractual relationships were now based on economic and juridical obligations, rather than on tradition, and were designed to intensify efficiency and trade. Rural populations removed from urban centres continued to produce and consume lower-yielding cereals such as rye, oats and barley.

Reclaimed lands closer to cities were frequently planted with wheat, allowing the increase of bread consumption in urban centres. City authorities frequently regulated wheat trade and its taxation to secure supplies.[6] Venice established a flour warehouse as soon as 1228, and in 1284 Florence instituted the *Sei del Biado*, an office charged with grain provisioning and sales.[7] Following the growing availability of wheat, fresh and dried pasta consumption increased in the cities. Fresh pasta, customarily made with soft wheat, was frequently rolled into thin sheets referred to as lasagna, a word already present in ancient Greek texts as *laganon*, testifying to the long history of this product in the Mediterranean. Fresh pasta was produced either domestically by the cooks of the elite families or in specialized shops that sold locally. Dried pasta was called *tri* or *tria*, a corruption of the word *itriyya* that appeared around the ninth century in Syrian and Arabic medical texts and that in turn probably came from the Greek *itrion*, used by Galen in his medical work. Later on, *tria* came to be known as *vermicelli* (little worms). The expressions *fideos* in Sardinia and *fidelli* in Liguria, both deriving from the Arabic *fidaws*, were also employed for vermicelli-like or rice-shaped pasta products.

Dried pasta was instead produced for long-distance commerce. With vast durum wheat cultivation and its location at the heart of the Mediterranean, Sicily was the perfect place for this activity. In twelfth-century Sicily, *itriyya* pasta was manufactured not far from Palermo and traded by the shipload to Calabria and other Christian lands. This activity was mentioned in the work of al-Idrisi, the Muslim geographer at the court

of the Norman king Roger II. Genoa and the area of Naples would later emerge as relevant centres for this commerce but until the fourteenth century the only competition was Sardinia, which under the control of the Aragon king produced great quantities of durum wheat and traded in *obra de pasta*, as pasta merchandise was defined by the local customs officials. Dried pasta was rarely mentioned in the recipe collections of the time, reflecting its contested place in the diet of the nobility. The upper classes preferred fresh and perishable products, perceived as more desirable and consonant with their status than dried or cured ones, as employing cooks who made fresh pasta whenever needed was plausibly considered a sign of distinction and wealth. However, dried pasta did appear among the products provisioned for the court of Aragon and it was consumed by well-off urban dwellers.[8]

Urban Culture and Culinary Refinement

In the burgeoning cities, professions connected with food became increasingly specialized and regulated. To elevate their status, artisans established guilds (*arti* or *corporazioni* in Italian), which, under strict control from the local authorities, imposed standards and procedures on production. Accessible only after long apprenticeships, guilds ensured employment to their members and assistance in case of accidents. At the same time, by limiting access to the profession, they kept the prices for their services high. Among the most respected categories were flour millers, breadmakers, who prepared breads and cakes with the flour provided by their clients, and oven owners, who eventually baked the final products. The breadmakers from Piacenza were so highly regarded that they were allowed to pay for one of the pillars of the local cathedral, with images of their activities sculpted on its capital. Even tavern keepers and butchers, who in the past had almost been considered sinners, were allowed to organize themselves in guilds. Foodstuff was often produced and processed in the outskirts to keep bad odours and filth out of the cities, as in the case of butchers, cold cut curers, and cheesemakers.[9] Butchers left the messier aspects of their activities to other artisans, such as tripe vendors, *lardaroli* and *salaroli* (lard and salami makers). Tavern keepers thrived on the intensification of market activities, selling wine, bread and cheese (less often cooked meals) to travellers.

The expansion of trade and artisanal production, together with a wider availability of food due to the increased output of agriculture,

Spices and explorations

Spices, considered luxury items, featured prominently in Italian culinary texts from the end of the Middle Ages. Coming from India (pepper), Sri Lanka (cinnamon) and places such as the faraway Moluccas or Spice Islands (clove and nutmeg), they reached the Mediterranean and the Christian kingdoms of Western Europe through the trade routes controlled by Islamic rulers. In the fifteenth century, the Portuguese were stimulated by the expulsion of the Moors from Spain and Portugal and were also determined to break the monopoly held by the Egyptian Mamluks and the Ottomans over the trade in gold, slaves and the precious spices that trickled into Europe through Venice and a few other ports. They thus embarked in a programme of explorations under the guidance of Henry the Navigator (1394–1460), brother of the Portuguese king Edward.

The colonization of Madeira (1420s), the Canaries (1430s) and the Azores (1440s) became stepping stones for the introduction of Old World crops such as sugar and bananas into the Atlantic world. After establishing trading bases in Senegal and in the Cape Verde islands off the western coast of Africa, the Portuguese passed the Cape of Good Hope in 1487, imposing their presence along the Indian Ocean trade routes. They did not establish colonies but opted for the

Nutmeg was among the most priced spices in the Renaissance.

occupation of crucial ports, such as Hormuz in the Persian Gulf, coastal towns in Mozambique, Aden at the entrance of the Red Sea and Malacca in today's Malaysia. Furthermore, the Portuguese established bases in Macao, to trade directly with China, and Nagasaki, opening the first commercial gateway to Japan.

These developments temporarily limited Venice's spice trade at the beginning of the sixteenth century, but it seems that later on the flow of spices found its way back to the Mediterranean, partly as a result of the inefficient control over the Red Sea and the Persian Gulf by the Portuguese functionaries in India. The Venetians focused on Alexandria in Egypt and Aleppo in Syria, located on the caravan routes from Basra and Baghdad. As a consequence of the greater availability of spices, and in particular pepper, their consumption increased greatly in Europe.

transformed diets and culinary habits all over Italy. The nobility and the urban upper classes were able to afford frequent banquets that shone with refinement, elegance and the choice of prestigious ingredients. The ideal of the noble warrior who displayed his physical prowess, wealth and social capital through the ingestion of enormous quantities food was outmoded. Instead, diets and table manners became markers of social distinction. On formal occasions guests shared bowls, goblets and trenchers, usually slices of bread or pieces of wood on which solid foods were placed. Spoons were available to serve soups and food with sauces. Guests used their fingers to eat, cleaning them on the tablecloth, a new addition to the decoration of the table. It was considered impolite to suck one's fingers clean, to put back the food taken from the serving dish or to spit close to the table. Wine was likely to be found on all kinds of tables, with price, quality, origin and prestige determining its status and its use among different classes. According to medical and dietary practices, wine was nutritious for everybody, regardless of age, season or location. It prevented and cured illness and was considered 'hot' in humoral theories. As such it was believed to favour digestion and the production of blood.

Refined dishes tended to incorporate expensive spices such as cinnamon, ginger and pepper. During the Crusades, the growing connections

with the eastern Mediterranean had rekindled interest in exotic styles and ingredients. Saffron gave golden hues to food, while sugar – at the time considered a spice – decorated and enriched many recipes.

On well-off tables, game was side by side with poultry, pork and mutton. Meat was often poached before roasting in the pan or on skewers. Medical theories often indicated that vegetables and pulses were too heavy for the delicate stomachs of the nobles, due to their cold and humid nature. However, as we will see, the Italian upper classes seemed to have fewer qualms about their consumption. Growing close to the earth, they were more suitable for the lower classes. Instead fowls were considered proper nourishment for the sophisticated palates of the upper classes. Noble natures were to consume lighter and more refined food, while workers and countryside dwellers could digest heavier fare like black bread or wild grass. Individual bodies were supposed to reflect the make-up of the universe, determined by God in his infinite wisdom, and diets followed the alleged divine order of the world, which included the organization of society and its different classes. Dietary habits were not interpreted as a consequence of economics, but rather as the expression of innate instincts that reflected spiritual natures.[10] Flavours, reflecting the humoral traits of foods, were considered important not only for the enjoyment of a meal, but also for the health of the eater, since when one ate with pleasure, one digested more easily. Beside the categories of sweet, bitter, salty, sour and acid, traits like astringent, unctuous, spicy and the mysterious *ponticus* were employed to describe flavours.[11]

It is not by chance that the first appearance of cookbooks in Italy of the late Middle Ages coincided with the agricultural take-off, the expansion of urban life and the profound changes in the way the upper classes thought of and performed food consumption. The first cookbook we know of, the *Liber de coquina*, was written in Latin at the end of the thirteenth century, probably at the Anjou court of Naples. As very few people were able to read and write, and books were rare and precious objects, the recipe collection reflected the culinary style of the higher classes. It was meant for well-educated readers, probably nobles who could use it to choose dishes and give orders to their staff, or who were interested in the topic. The *Liber de coquina* refers to recognizable local traditions within Italy, like the *tria* from Genoa or cabbage in the Roman style. It also mentions more exotic fare from other countries, revealing European circuits of recipes and cooks that moved from court to court. The book includes recipes for vegetables, disdained by nobles in other parts of

Europe. Made luxurious by expensive spices and refined preparations, vegetable dishes suggest permeability between the practices of different social strata, as many cooks came from the lower class and cooked for the high. Towards the end of the fourteenth century, various collections in local dialects and in Italian appeared, such as the anonymous *Libro per cuoco* (Book for the Cook) in Venetian dialect. Books written in the vernacular, where recipes included practical directions on ingredients, cost, preparation time or necessary tools, were probably directed at professional cooks who were able to read, indicating their upward status.

Tuscany emerged as a centre for cookbook production in vulgar Italian – the forefather of the modern standard Italian language – with the *XII gentili homini giotissimi* (The Twelve Very Gluttonous Noblemen), a collection probably meant for the upper bourgeoisie, and the *Libro della cocina*, heavily indebted to the *Liber de coquina* in Latin but with a larger section dedicated to vegetables and written between the end of the fourteenth century and the beginning of the fifteenth. The two recipes I have translated here suggest a collection targeted towards well-to-do households who could afford the services of professional cooks. Both dishes display a certain flair for spectacle, which assumes their use in formal banquets.

How to Stuff a Peacock

Skin the peacock, leaving the feathers on its head. Take some pork meat, not too fat, and grind and pound it together with some of the peacock meat. Also pound cinnamon, nutmeg and the spices that you prefer. Mix them carefully with egg whites and the meat, and beat them with energy. Put the yolks aside. Stuff the peacock with the ground meat mixed with spices, then wrap it with pork caul fat [the lacy white 'net' around a pig's intestines] and secure it with wood skewers. Place it like this in a pot of warm water and let it simmer gently. When it has lost some of its volume, roast it on a skewer or grill it, and brush it with some of the eggs yolks you had set aside. Don't use them all, but save some to make meatballs. To do so, finely chop a raw pork loin with a knife and beat it hard; mix the meat with the yolks and the spices, then make small balls

with the palms of your hands. Roll them in yolks to give them colour and boil them in water. After boiling them, you can roast them and decorate them with egg yolks, using a feather. You can place these balls inside the peacock or underneath the caul fat. When you are done, dress the peacock back inside its skin, with all its feathers, and bring it to the table.

Trout Pie

Make some hard dough [with flour and warm water] and mould it in the trout's shape or in a round shape. Gut, scale, wash and salt the trout, place it in the dough mould and put ground spices, oil and saffron on it. Close the mould following the shape of the trout, and make horns at each end, like a boat. Make two small holes in the dough, at each end, or make just one in the middle. Cook it in the oven, or in between testi [hot stones]. When it's well cooked, pour rose water or the juices of oranges or citrangole [a variety of orange with a stronger taste that was appreciated for its medical qualities]. During the times of the year when meat is allowed, put some melted lard in it instead of oil. You can make similar pies with other fish: sardines, anchovies, red mullet and others.

Crisis and Recovery

The economic and social ferment did not extend to all of Italy. In the south, still under Norman rule, political autonomy and economic entrepreneurship were not allowed to flourish and commercial agriculture lost some of its relevance for lack of specialized labour. In the thirteenth century, King Frederick II of Hohenstaufen, who happened to be both king of Sicily and the Holy Roman Emperor, because of dynastic intricacies, tried to revamp the cultivation of indigo and sugar, together with more common products such as oranges, aubergines and almonds. He employed members of the dwindling local Muslim communities and hired specialized farmers from Muslim countries. However, after Frederick's death these attempts at reviving cash crops were abandoned,

and only revived at the end of the fourteenth century, thanks to the investments of foreign merchants.[12]

Frederick II enforced strict controls over trade. The chronicler Riccardo from San Germano informs us that in 1232 the king issued an edict against offences that included exchanging sows for pigs, selling the meat of dead animals or tainted food, keeping perishable goods for long periods and watering down wine. The merchants who were caught infringing the edict were condemned to the payment of an ounce of gold, or two if the transgression was committed against pilgrims. If they did it again, a hand was cut off, while for the third offence the punishment was death by hanging.[13] The edict demonstrates the widespread mistrust of merchants and the market and the king's will to assert his rights against local traditions and prerogatives, extending his direct control over city life and commercial activities.

The Norman rule over southern Italy ended in 1268 when Charles of Anjou, a son of Louis VIII of France, seized power with the help of the pope, who felt threatened by the union of the crown of Sicily with the Holy Roman Empire. Although Jews in southern Italy were forced to convert en masse, some maintained their cultural and religious identity in secret, while others migrated to the eastern Mediterranean communities.[14] The Anjou presence in Naples lasted until the mid-fifteenth century, but their power did not survive in Sicily, where in 1282 they were ousted by local nobles who chose the king of Aragon, in Spain, as their lord.

After the end of the thirteenth century the economic and demographic expansion that had stimulated Europe and Italy for two centuries slowed down. The climate got colder and wetter, causing frequent famine. The Black Death killed millions, striking Italy in 1347 after sweeping across the eastern Mediterranean. Arable lands and whole villages were abandoned. High demographic density and unhygienic conditions inside cities made urban dwellers particularly vulnerable. The shrinking population caused food demand to drop, which in turn depressed the price of wheat. With the exception of Lombardy, where agricultural activities remained stable, at the end of the epidemics landowners had a hard time finding cheap labour. Many survivors occupied the plots left available by the deceased, bargaining for higher salaries and developing forms of sharecropping, or *mezzadria*, particularly in Tuscany and central Italy, where farmers owned cattle and tools.

In the south, however, where feudal property was still prevalent, French and Spaniard lords colluded with the local nobles to circumvent

royal controls, enclosing common agricultural lands and expanding theirs 'preserves' for sheep pasturing in response to the growing demand for wool.[15] While in the north cattle breeding developed around stable farms, the centre and the south of the peninsula saw the expansion of the transhumance system. Revenues from flocks that spent winter in Apulia were collected by the *Dogana delle pecore* (literally the Customs of Sheep) established in 1447 by King Alfonso I of Aragon, first in Lucera and then in Foggia. The popes created a similar institution in the Agro Romano. Southern peasants lived in dramatically poor conditions, as the nobility had little incentive to embrace agricultural innovations. Additionally, there were only limited attempts by the kings of Naples and the popes to reclaim marshy lands and to adopt new technologies.

The general state of uncertainty and unrest led *comuni* from central and northern Italy to hire professional leaders, called *potestà*, whose task was to find a balance among divergent interests and factions within the cities. When this kind of solution did not work, various forms of autocracy became common, such as *signorie* (when an individual seized power and the *comune* recognized his position) and *principati* (when the new leaders were, at least at first, representatives of higher powers, such as the emperor or the pope). This turn towards oligarchic and aristocratic systems had already taken place in Venice, where in 1297 access to the

Venice merchants built their wealth – and the splendid palaces that reflected it – on the spice trade with the eastern Mediterranean.

governing Great Council was barred to those individuals who had not been members in the previous years. The ruling elite abolished the *commenda* contract, actively eliminating upward mobility for new merchants, and limited access to international trade only to the nobility – especially in the lucrative routes to the eastern Mediterranean.[16]

The aristocratic turn in politics, however, had positive consequences for land management in many parts of Italy, increasing yields and rural production. Especially in the Po plain, the concentration of power around Milan and Venice allowed a better coordination of public works, particularly in terms of sanitary improvements, canalizations and irrigation systems. Each court financed projects to increase agricultural revenues and to showcase power and wealth, recruiting technicians and scientists from all over the peninsula. Canals in the Po plains divided the land into fields with quadrangular shapes, with banks planted with trees, shrubs and grapevines festooned from trunk to trunk.[17] The diffusion of this landscape, known as *piantata*, corresponded to the diffusion of mulberry trees from southern Italy, where they had been introduced by the Byzantines.[18] Mulberries stimulated the growth of the silk industry, which is still relevant in the area. In the fifteenth century, improved water control allowed the expansion of rice cultivation, which thrived in northern Italy thanks to the involvement of the local political powers. Modern farms were established where crop rotation was practised together with well-organized cattle breeding, cheesemaking and dung collection, which in turn ensured manure for the soil. Alfalfa, sainfoin and clover were planted to ensure the fertility of the fields and provide forage for cattle.

Political Instability and the Renaissance

With the establishment of *principati* and *signorie*, each using diplomacy and intrigue to expand at the expense of its neighbours, Italian cities and kingdoms were frequently involved in wars. Foreign powers such as France and Spain took advantage of this situation by extending their influence over the peninsula, often descending on their enemies with massive armies that brought chaos and destruction. Despite the long-lasting political instability, fourteenth-century Italy saw a deep cultural transformation marked by the rediscovery of classic Roman and Greek arts, the increased relevance of lay literature and philosophy over the traditional teaching of the Church, and an overall re-evaluation of the

Italy, 1635.

role of people in history and nature. The arts flourished thanks to the patronage of the Italian courts (including the pope's), each displaying their magnificence by competing to hire the best artists.

Each state had its own legal and commercial system, its own currency and even its own weights and measures. If this situation hindered the circulation of goods, still subject to scarcity, drought and war, it also made the possibility of accessing products from elsewhere more attractive, in some cases turning certain goods into novelties and markers of social status.[19] Cities in northern and central Italy became engines of conspicuous consumption. Marketplaces were important public spaces where customs, taste and social relationships were negotiated. They were politically crucial, since the disruption of the provisioning channels was likely to incite social unrest, and morally problematic, if not dangerous, partly because of the presence of taverns and brothels. It was not considered proper for respectable women to shop unaccompanied or to look lingeringly at goods in various establishments.[20]

The physical environment of the market facilitated the surveillance of trade by functionaries and passers-by, with customers milling in the open

space of the street or the square and sellers behind the counters of shops. Porticos and other permanent structures were built, although food was also sold in temporary markets that took place regularly in locations established by tradition and sanctioned by local authorities. Farmers coming into town from the countryside were allowed to sell their goods from stalls, tables and even just cloth on the ground, after paying a fee to the market functionaries. Cooked food was available from street vendors selling from carts, shops with permanent kitchens and counters, taverns and inns that also offered lodging to travellers. To avoid fraud, states and cities organized forms of control with the collaboration of ecclesiastic institutions and trade guilds, which maintained their medieval functions and structure to dominate many sectors of food sales, production and transformation. Male cooks belonging to organized guilds were hired by the elites to coordinate kitchen servants, often women, who were also in charge of food preparation in common households.

Courtly Spectacles

The variety and abundance that consumers could enjoy in the marketplace was reflected in the domestic environment. The renewed interest in the sensual aspects of human life, often neglected in previous centuries, influenced the social and aesthetic appreciation of food.[21] During the Renaissance banquets remained an important form of socialization for the upper classes, where excitement, entertainment and visual dazzle were as significant as the quality of food and the cooks' skills.[22] The relevance of these occasions is revealed by their frequent representation in many paintings of the period, as artists focused on an activity that was likely to entice viewers, while paying homage to the wealth and refinement of their patrons.[23] Banquets were so spectacular that public authorities all over Italy attempted to pass sumptuary laws meant to curb excesses in the quantity and the quality of the food consumed, as well as the number of guests.[24] The extreme display of wealth was considered not only morally reprehensible, but also dangerous in terms of public order, especially during periods of food scarcity. Even in fasting periods (Wednesdays, Fridays, many holiday eves) great care was given to copious and sophisticated menus. However, sumptuary laws had to be reissued frequently, revealing the low level of respect held for these provisions by the upper classes.

Banquets were structured in a number of successive 'services', composed of several dishes placed on the table at the same time. Guests could taste

what they wanted or, more often, what they were closer to. Presentation was paramount: fowls would be served dressed in their own feathers, and rams in their own skins. In the Italian courts, meals frequently included an alternation of 'kitchen services', or warm dishes, and 'sideboard [*credenza*] services', consisting of lighter or cold dishes. The meal usually began with a sideboard service and included at least two kitchen services. At the beginning of the meal, it was not unusual to offer a 'service' of fresh fruits or salads seasoned with oil and vinegar, which were thought to prepare the stomach to receive more substantial dishes. Grand banquets required specialized servants such as the *trinciante*, who spectacularly carved meats tableside, off skewers and serving forks. All the staff were coordinated by the *scalco*, who also supervised the cooks and established the sequence of the services with the host. He was also helped by the *credenziere*, in charge of the *credenza*, and the *spenditore*, who scouted the markets to secure the provisions.[25] Wine was highly appreciated in all social classes, but during banquets only the best quality was offered: the *bottigliere* (bottler) was in charge of choosing, buying and pairing wines with the dishes, while a *coppiere* (cup bearer) served them.

Great attention was paid to etiquette, reflected as early as the late thirteenth century in *De quinquaginta curialitatibus ad mensam* (Fifty Courtesies at the Table), written by the lay friar Bonvesin da la Riva. The short poem, with a Latin title but written in Italian, describes 50 forms of courtesy around the table, including washing one's hands, waiting politely before sitting down and keeping one's elbows off the table:

> The eighth courtesy, God will, is to avoid stuffing your mouth excessively and eating too fast; the glutton who eats quickly and with his mouth full would have problems responding when talked to . . .
>
> The sixteenth courtesy is to be careful about how you behave when you sneeze or have a cough; be courteous and turn in another direction, so that saliva does not fall on the table.
>
> Another courtesy is not to put your fingers in your mouth to clean your teeth, while you are eating with educated men.[26]

Manuals on good manners developed into their own literary genre, peaking with the *Cortegiano*, published in 1528 by the diplomat Baldassarre Castiglione, and the 1558 *Galateo* by the archbishop Giovanni della Casa. Guests were expected to restrain from excessive gluttony and from

Limonaia, Villa La Pietra, Florence. Renaissance villas had large gardens that were often used for entertaining and outdoor dinners.

conversing openly about the dishes they were consuming (with the exception of wine). Rinsing bowls, napkins and tablecloths helped improve hygienic conditions. In the case of formal banquets, several tablecloths were placed on the tables to be removed after each course. Dinner tables were not permanent yet; food was still served on planks placed on portable trestles, which allowed meals to take place not only in formal rooms, but also on terraces, under loggias and in gardens. The fork was adopted as a sign of personal refinement. Although the two-pronged fork was a common serving and carving implement, its use for individual eaters spread among the upper classes of Italy only in the fifteenth century. We already see it in the painting *The Wedding of Nastagio degli Onesti* (1483) by Sandro Botticelli. By the sixteenth century the tool was widely employed for consuming fruit and sweetmeats.[27]

While wooden eating vessels were still prevalent among the lower classes, ceramics were appreciated among more affluent diners, who showed preference for individual dinner plates. Since the late Middle Ages, pharmacists had used ceramic vessels for storage with the name of the content clearly painted on, to keep herbs and spices in good condition.[28] During the Renaissance, beautiful ceramics, tin-glazed and brightly hand-painted over an opaque white background, were manufactured in specialized centres such as Faenza in Romagna, Castelli in Abruzzo,

Early 15th-century jar from Faenza, one of the main Renaissance centres of ceramic production.

Deruta in Umbria, Ariano in Campania and Laterza in Apulia.[29] Technical improvements were probably connected with the diffusion of methods and procedures from the Islamic world.[30] Similar dynamics also took place in glass production, with the appearance of thinner materials, clearer hues and original shapes that fitted well with the demands of the elites.[31] Venice, and in particular the tiny island of Murano, became famous centres of glass production.[32] From the sixteenth century, serving vessels made of metal became fashionable, allowing artists like sculptor Benvenuto Cellini to show off their skills and originality. The production of table objects such as salt cellars reflected the sensibilities of the new and intellectually sophisticated style known as Mannerism, which aimed to surprise with inventiveness, wit and recourse to compositional complexity.[33]

In the sixteenth century, Italy was the epicentre of innovation and fashion in high-end food, a role later taken on by Spain in the first half of

the seventeenth century.[34] Elements from lower-class food customs were introduced into courtly cuisine, such as wider use of cheese (cookbooks mention pecorino, *provatura*, parmigiano, *caciocavallo*, mozzarella and Sardinian cheese), offal (brain, ears, even eyes) and vegetables such as fennel and artichoke. Beef and veal appeared on refined tables as did fish like cod, sturgeon and caviar, especially during 'lean' days of liturgical fast. Bartolomeo Scappi mentions goose foie gras, which Jewish communities produced in Ferrara, Piedmont and Veneto.[35] It was still impossible to identify what we now refer to as 'national cuisines' – a set of ingredients, techniques and dishes that characterize the food customs of a specific nation state. All over Europe, elites shared a wide canon of dishes and a similar style that maintained medieval traits, such as the lack of clear distinction between sweet and savoury courses, the abundant use of spices, sour sauces bound with breadcrumbs or ground almonds, and visually stunning dishes meant to impress diners. However, cookbooks identified dishes with specific foreign origins, exhibiting the circulation of techniques and ideas among professional cooks working in the courts of Europe.

It is difficult to establish the precise sway of one cuisine over another. Scholars contest the theory that in 1533 the arrival of Caterina de' Medici in France as wife of the future king Henry II, together with a cohort of cooks from Florence, established the Italian influence over French culinary arts starting from the sixteenth century. This initial introduction was probably limited to the incorporation of Italian table manners, including the fork, the taste for fresh vegetables and the techniques for the use of sugar in confectionery, jams and candied fruit.[36] Triumphs and decorative sculptures made of sugar were also in fashion, as Venice and Genoa imported the sweet substance from the new Portuguese colonies of Brazil and Madeira and exported it all over Europe.[37]

Health, Diet and Cooking Manuals

During the Renaissance, as intellectuals emphasized the centrality of man in the universe and in culture, cuisine became a field of learned reflection built on moral principles and health theories. This approach was ushered in by the rediscovery of the ancient Greek and Roman medical texts that had been lost in Western Europe during the Middle Ages. The Islamic world played a fundamental role in the transmission of the medical sciences and the dietary principles codified by Galen and other authors from antiquity, based on the humoral theories discussed

Homo signorum, or the Man of the Zodiac Signs, from an almanac of 1580. In the late Middle Ages, the human being was considered a reflection of the universe and its rules.

previously. This corpus of knowledge, transmitted throughout the Byzantine Empire, had been translated by Nestorian refugees into Syrian and later brought to Persia, where it was made available to the local scholars and eventually integrated into the scientific discourse of Islamic intellectuals. Humoral theories were further enriched by authors such as Averroes and Ibn Sinna, also known as Avicenna. Avicenna, who lived between the tenth and eleventh centuries, reorganized the humoral theories in his canon of medicine (*Qanun*), an encyclopaedia in five volumes that became the authority in the field. Much of this information was later arranged in tables that took the name of *taqwim al sihha*, meaning 'summary' or 'organization of health' in Arabic, which in turn gave birth to the genre of the *Tacuinum Sanitatis*, propagating medical information about diet.[38] Starting from the eleventh century, the ancient texts were translated back into Latin, as the work by Costantitus Africanus in the Benedictine abbey of Montecassino (near Rome) indicates. In the twelfth century, the school of medicine founded in Salerno, near Naples, compiled the *Regimen Sanitati Salernitanum*, a dietary manual

in the form of a poem that embraced the humoral theories and popularized them all over Italy. Here are some excerpts:

> The best wines are white and sweet.
> If you drank so much at night that you feel sick, drink again the morning after: it will be your medicine.
> With sage, salt, pepper, garlic, wine and parsley, you can prepare a great sauce, as long as you do not corrupt with other ingredients.
> Drinking only water during the meal provokes great disturbance

Page of a *Tacuinum Sanitatis* from the 14th century, explaining the medicinal qualities of wine.

to the stomach and blocks digestion.
After a peach, eat a walnut, and after meat, cheese.[39]

In the heart of Salerno, the Silvatico family built a garden filled with officinal plants used for therapeutic purposes, organized according to the humours they represented. A doctor from the Silvatico family, Matteo, used it to teach the students of the medical school, showing them the plants, their names and their characteristics. Only recently was the garden rediscovered and restored to its original plan.[40]

In the second half of the fourteenth century, intellectuals such as the poet Frances Petrarch fought against the influence of religion and Church-approved philosophy over medicine and other sciences. The terrors of the plague of 1348 convinced many of the powerlessness of current medicine. After the fall of Constantinople in 1453, numerous Greek scholars came to Italy, boosting the cultural overhaul that was sweeping the country. From the 1470s to the first half of the seventeenth century, a great number of dietary volumes were published, stimulated by the invention of the printing press. The first works, still deeply influenced by the Muslim teachings, were destined for the courts. As Greek original sources became available, scholars embraced the moderation they extolled to critique the lifestyle of royal and noble households – including the papal court in Rome – for their excess, often labelled as gluttony. At the same time, the spreading Reformation undermined traditions connected with Catholicism such as Lent fasting and abstinence. Although Leonardo da Vinci had already gained an understanding of digestion in terms of mechanical forces, it was only at the end of the sixteenth century that independent investigation flourished, often revising the received wisdom derived from ancient sources.[41] Scholars such as Andreas Vesalius and Gabriele Falloppio demonstrated the weakness of the anatomical concepts in the Galenic theory by dissecting corpses. Numerous authors, including Gerolamo Cardano, Alessandro Petronio and Giovanni Domenico Sala, opposed widespread nutritional concepts, basing their critique on personal observations.[42]

Considering the growing cultural and political relevance of banquets and the influence of learned reflections on health and diet, it is not surprising that cookbooks flourished. The most famous recipe collection from the early Renaissance, Maestro Martino's *Liber de arte coquinaria* (Book on the Art of Cooking), was probably written between 1464 and 1465.[43] We have little information about the life of the author, whose

work is available in five manuscripts. Providing few references to specific local traditions, Maestro Martino's work was groundbreaking in many ways. For the first time, recipes were placed in coherent chapters and provided precise information about the necessary ingredients, procedures and even the required tools, unlike previous works that tended to hide this kind of information, which was likely perceived as trade secrets. The recipes testify to the slow transformation of courtly food in the Renaissance, when refinement and sophistication were embraced not only by nobles, but also by the bourgeois notables that actively participated in the civil and economic life of the Italian cities. While still focusing on the spectacular aspect of the dishes and reflecting the popularity of Catalan cuisine at the beginning of the fourteenth century, Maestro Martino's recipes also reveal the influence of Muslim culinary traditions, probably filtered through Sicily, in the use of rice, dates, bitter oranges, raisins and prunes. The distinction between sweet and savoury dishes became more noticeable.

Vegetables and legumes are conspicuous in Maestro Martino's collection, showing how fresh produce was reaching the table of the elites. He offers recipes for peas, fava beans, turnips, fennel, mushrooms and cabbage 'Roman style,' seasoned with pork fat and stewed in meat broth. Garlic, parsley, elder, thyme (*sarpillo*), mint and other aromatic herbs are widely included. The presence of urban orchards and markets dedicated to the sale of herbs and vegetables in many Italian cities proves that their consumption was much more common than contemporary dietary treatises suggest.[44] The elites appreciated the fruit of their own properties, as suggested by Maestro Martino's inclusion of recipes for cherries, quinces and even prunes. Noble households often used fruits as gifts, but since self-sufficiency was impossible they bought provisions from merchants, preferably from those they knew and trusted. Of course, for the elites, raw and cooked vegetables were just a small part of a meal, prepared in dishes ennobled by the presence of spices such as pepper, saffron, ginger and cinnamon, intended to entertain and impress guests as an aspect of what historian David Gentilcore defines as 'reverse snobbery'.[45] Later on, as the Counter-Reformation led to a more controlled and orthodox cultural climate, especially in the pope's territories, painters and writers employed fruits and vegetables as sexual metaphors and sources of humour, reflecting the cultural relevance and the ubiquity of these foods on the upper classes' tables.[46]

The influence of Maestro Martino is confirmed by the incorporation of his recipes in the book *De honesta voluptate et valetudine* (Honest

Pleasure and Health, 1474) by Bartolomeo Sacchi, also known as Platina, a food connoisseur and a librarian at the Vatican, who wrote in Latin and acquired fame all over Europe. Platina, trained in the study of classic literature, stressed the cultural aspects of dishes and products, giving cuisine a higher status while renewing its association with the medical and philosophical theories of the time. He gave a new interpretation to the concept of culinary pleasure, far from the excesses of gluttony: 'Who is so removed from the life of the senses out of sanctity or severity of customs, who is so silly that he does not want to provide pleasure to body and soul, eating with measure to ensure good health?'[47] He frequently referenced local dishes and ingredients, especially from the areas he was most familiar with – Rome, central Italy and the Po river plain – connecting their specific qualities with their places of origin. Platina acknowledges that most of his recipes came from Maestro Martino, whom he knew well and admired to the point of defining him as a 'prince of the cooks' who taught him all he knew about cooking.[48] Platina's Latin work was translated into many vernacular languages all over Europe, helping to make Italian courtly cooking the culinary standard of the time and the centre of all gastronomic innovation.

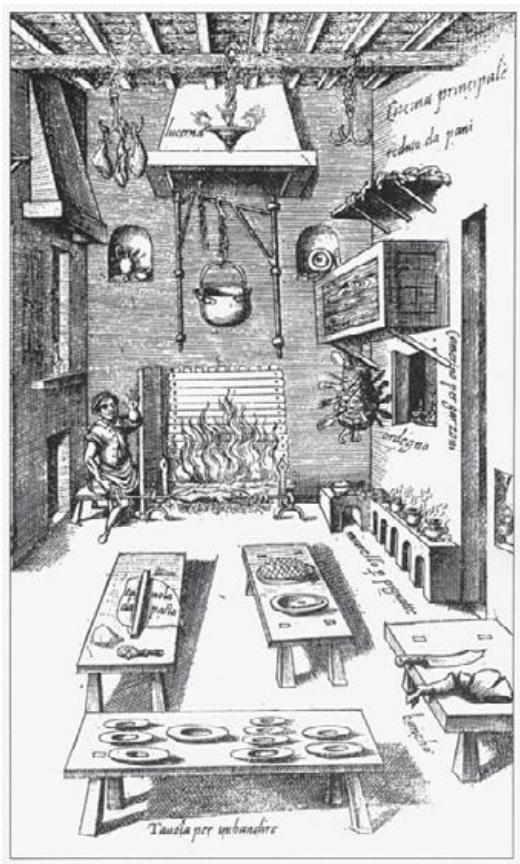
In the following decades, Italian banquets became more complex in terms of dishes, service and vessels involved, reflecting the taste for complexity, originality and inventiveness that Mannerism was expressing in the arts. Most cookbooks were written by *scalchi*, the professional in charge of the choreography of the meal, the composition of the menu and the order of the services. At the same time, the expansion of the printing industry made these works available in unprecedented numbers, spreading the technical information and the aesthetics they contained. Cristoforo Messisbugo, with his *Banchetti, compositioni di vivande, et apparecchio generale* (Banquets, Course Composition and General Preparation, 1549), and Domenico Romoli, author of *La singolar dottrina* (The Unique Doctrine, 1560), exemplify the prestige of banquets where the variety and the inventiveness of the services was meant to dazzle diners and emphasize the taste and the wealth of the host. While sugar and spices were still very much in evidence, a leftover of the medieval style, Romoli highlighted vegetables in many recipes, dedicating a whole section to ordinary meals.

Messisbugo provides a detailed description of a few banquets that he organized. For instance, on 8 September 1531, the day celebrating the birth of the Holy Virgin, Bonifacio Bevilaqua had him 'prepare the table with two tablecloths, napkins, knives and saltcellars, and place a twisted

Cristoforo Messisbugo, in *Banchetti, compositioni di vivande, et apparecchio generale* (Banquets, Course Composition and General Preparation, 1549).

bread and a small marzipan biscuit for each guest'. The menu includes a first course comprising figs, eel pies, small puff pastries filled with *farro* in the 'Turkish style' and stuffed eggs, among other dishes, followed by little tarts 'Italian style', fried sea bream, pike tails, stuffed veal in broth 'Lombardy style' with yellow mortadella, bread tarts, pork loins, small quince pies and a sweet green sauce. Of course, other courses would follow, highlighting the skills of cooks and *scalco*, and the munificence of the host.[49]

Bartolomeo Scappi's *Opera* (Works, 1570) constitutes the epitome of the late Renaissance cooking style. In Rome, Scappi worked for cardinals and two popes (Pius IV and V), becoming one of the great innovators in Italian cuisine by providing precise instructions, guidance regarding table arrangements – often inspired by architecture – and the use of ingredients from America, such as turkey.[50]



Kitchen scene from Bartolomeo Scappi's *Opera* (Venice, 1574 edition).

> It is necessary, as I understood in my long experience, that a wise and careful cook who wants to have a good start, a better middle and the best end, always honours his work as a judicious architect would do. After a good design, he lays good foundations and building on that he gives the world the gift of useful and wonderful edifices. The cook's design has to show beautiful and secure order, based on experience that needs to be so extensive that it is easier for him to work as a *scalco*, than for a *scalco* to work as a cook.[51]

Structuring his monumental book as an encyclopaedic treatise, Scappi reveals his interest in the ingredients that were available in the markets of Rome, both local and imported from other Italian states. In fact, he includes culinary elements from the Po river plain and from southern Italy, commenting on the difference between the east and the

west side of the peninsula, especially when it comes to fish.[52] This allows us to explore the regional cuisines of the time, highlighting the most renowned products for each area and explaining methods and recipes to prepare each dish.[53] The same interest for local customs and ingredients emerges in Ortensio Lando's *Commentario delle più notabili e mostruose cose d'Italia e d'altri luoghi* (Commentary on the Most Notable and Surprising Things in Italy and Other Places, 1548). The book, describing the travels and discoveries of an imaginary 'Aramaic' foreigner in Italy, includes descriptions of foods from different parts of the peninsula.

Mainstream and Minorities

Despite the lack of the advanced and sometimes extravagant equipment that adorned the grand kitchens of the elites, like copper pots and kettles, griddles, iron skillets, long revolving spits and grills, the basic cooking procedures employed in households from every walk of life were similar, designed to respond to fuel scarcity. The deforestation and expansion of arable land that had transformed Italy starting from the twelfth century had made wood hard to come by, especially in the cities. Roasting and baking were rare among commoners, and people brought foods and breads to ovens in specialized shops. Braising in closed metal or earthenware vessels on embers was popular. Boiling and stewing remained common cooking methods, as liquid ensured that no substance was lost during cooking.[54] The fire was moved from the centre of the main room of the house to a fireplace located along a wall and connected to a chimney.[55]

Grains still constituted the bulk of the diet of the lower classes, both in the cities and in the countryside. While wheat remained prevalent in the south, in the countryside of the north other grains were common, such as buckwheat, often ground and mixed with corn flour, and rice. At times the latter was acquired by local authorities as food for the poor to be distributed in case of scarcity or famine. The availability of wheat made cooking with dough more common. *Pasticci*, two layers of hard dough filled with all kinds of ingredients, were popular as a cooking implement, placed on the embers in the hearth and then frequently discarded. *Torte* and *crostate* were similar to *pasticci*, but the dough was thinner and had butter or lard kneaded into it, which made it edible and tasty. Scappi mentions *torte* in Naples which, less than half an inch thick and without a dough lid, were the likely progenitors of pizza. The

consumption of fresh and dried pasta increased thanks to technical innovations such as the manual break to knead greater quantities of dough and the extruder to shape it. Commercial production became more efficient, more affordable and of better quality. As the control by city authorities over pasta production intensified between the end of the sixteenth and the first half of the seventeenth century, fresh pasta artisans, known as *lasagnari* or *vermicellari*, became autonomous from bread-makers and established their own professional associations.[56] The use of butter spread among all classes as its consumption was allowed on 'lean' days to replace lard, but olive oil was only available to the most affluent strata of society. Most protein for the lower classes came from sheep, goats and, above all, pigs, with cured cuts prevalent in the cities, where direct access to fresh meat was more expensive.

The Italian population was far from uniform and this diversity was reflected in culinary customs. However, no minority stood out as much as the Jews, whose culture set them apart from all Christians, whatever ethnicity or nationality they belonged to. Jewish culinary customs were largely influenced by frequent contact with fellow communities in the Middle East who still lived in Muslim environments. Among the more characteristic traits were sweet and sour seasoning, the incorporation of pine nuts and raisins in savoury dishes, little pieces of various foods covered in batter and deep-fried, and the use of exotic ingredients such as aubergine, considered dangerous by other Italians (the Italian word for aubergine, *melanzana*, derives from *mela insana*, unhealthy apple).[57] Of course, it is not possible to generalize: upper-class Jews showed a strong resistance to aubergines right into the nineteenth century.[58] Many of the Jews who were expelled from Spain in 1492, as well as from Sicily and Sardinia under Spanish control, moved to the Italian peninsula.[59] These arrivals were soon followed by an influx of German Jews escaping the persecutions that took place during the Reformation. The newcomers settled in Ancona, in the Marche regions, Rome and Venice, which in 1516 established a policy forcing Jews – who previously were not allowed to reside in the city – to live together in the same area, grouped according to their origins: *Tedeschi* from Northern Europe, *Levantini* from Egypt, Syria and Turkey and *Ponentini* from Spain and Portugal, each with their own culinary traditions.[60] The area where they lived came to be known as the ghetto, from the Venetian word *getar*, 'to smelt', because it used to have a foundry. In 1555, Pope Paul IV adopted the same policy in

A kosher baker's in the former ghetto in Venice.

Rome, obliging Jews to stay in the ghetto at night and to wear a yellow hat. Jews expelled from Avignon in 1570 moved to the Piedmontese town of Cuneo, preserving some of their French habits. In Trieste, a major port with strong ties to the Habsburg Empire, central European influences shaped the local Jewish traditions.

During the Renaissance Jews were not persecuted in all parts of Italy: many sovereigns welcomed them to attract their economic activities. Lively communities flourished in Verona, Ferrara, Mantua (its famous pumpkin *tortelli* may be connected with the Jewish presence), Florence and, above all, Livorno, a port town founded by the Grand Duke of Tuscany at the end of the sixteenth century. Here the Jews found themselves at the centre of trade networks that connected them to North Africa, Greece and the Middle East.[61] Couscous with meat and eggs as well as a fried cod and tomato stew are among the recipes of Jewish origin that are still popular. Some smaller towns in Tuscany allowed the presence of Jews. Among the most interesting is Pitigliano in the area of Maremma, where the Jewish community thrived until the Fascist persecutions. The *sfratto*, a staff-shaped dessert filled with

The small Tuscan town of Pitigliano.

nuts and honey, is a reminder of the stick used to knock on doors and announce the forced eviction (*sfratto* in Italian) of the Jews who then found refuge in Pitigliano.

The difficulty of keeping kosher dietary rules in Italy led rabbinic authorities to grant a small number of women permission to practise ritual slaughtering, although it does not seem this exception implied any change in female public roles.[62] Specialist shops and trades responded to the dietary needs of the Jewish population, as the numerous food-related words in the Italian–Hebrew dictionary *Dabber Tov* (Speaking Well), published in Venice in 1579, indicate. The dictionary's vocabulary does not include New World products such as tomatoes, potatoes or maize, which the Jews had probably not yet adopted. More surprisingly, the volume does not mention vegetables often identified with Jewish customs, including aubergines, artichokes and spinach.[63]

The New World Revolution

The Portuguese exploration of Africa and the Indian Ocean, followed by the arrival of the Spaniards in the Americas, led to the opening of new markets all over the world. Even if the Italian principalities and

kingdoms were not directly engaged in colonization, many merchants from the peninsula were heavily involved in moneylending to princes and lords. Italian navigators such as Cristoforo Colombo (Christopher Columbus), Giovanni Caboto (John Cabot), Antonio Pigafetta, Giovanni da Verrazzano and Amerigo Vespucci made a name for themselves in the explorations financed by Portugal and Spain, later followed by France and England. These events laid the groundwork for the biggest ecological revolution in history, commonly referred to as the Columbian Exchange (after Columbus).[64] A large number of crops and animals were taken from Europe to the western hemisphere, where the Spaniards and Portuguese introduced wheat, olives, grapes and many vegetables like onions and cabbage, together with domestic animals such as chickens, pigs, cows and horses. The same phenomenon happened in the opposite direction. Unknown plants and animals from the Americas became the object of scientific interest, since they did not fit the traditional categories and classifications. The necessity to understand and find a use for the new crops relied on an approach founded upon direct observation that radically shook received wisdom, limited by the adherence to ancient texts, and contributed to the scientific revolution of the seventeenth century.

Some of the American novelties were successfully adopted in Italy as early as the sixteenth century. That was certainly the case for turkey, known as Indian chicken, one of the few animals that had been domesticated in the Americas.[65] However, due to the sense of cultural and moral superiority that the European settlers felt towards the populations they were in contact with, the practices connected with the preparation and consumption of new foods often did not cross the Atlantic. For instance, in Europe, maize was consumed without the process of nixtamalization, commonly applied by the American natives. 'Nixtamalization' derives from the words *nextli*, 'ashes', and *tamalli*, 'corn dough', in the Aztec language Nahuatl and indicates that the grain is hulled only after being soaked and cooked in an alkaline solution, usually limewater, as we will see in the next chapter. The lack of this culinary knowledge would lead to devastating health problems such as pellagra in northern and northeastern Italy, where maize replaced wheat as the main staple as peasants were allowed to grow it without having to pay taxes on it or give it to landowners as rent. Already in 1544 the geographer Giambattista Ramusio documented the diffusion of maize in Venice, and in the following decades its cultivation expanded in Lombardy

and Emilia. Its high yields and capacity to grow on unfavourable soils determined its popularity, and in many areas it was planted in continuous rotation with wheat.

American beans quickly supplanted the older local types, among which only one, the black-eyed bean, survives to this day. The same happened with pumpkins: the new, bigger American varieties almost replaced the local long and thin *lagenaria*. Other plants, like tomatoes and potatoes, went through a much longer process of adaptation.[66] Tomatoes, whose presence is documented at the Medici court in Tuscany as early as the mid-1500s, were at first considered toxic and only good for decoration. In Italian they took the name of *pomidoro*, 'apples of gold', due either to the bright yellow hue of the varieties available at the time, or their addition to a category that included all sorts of soft fresh fruits.[67] Potatoes were not integrated into Italian eating patterns until the eighteenth century. On the other hand, sweet and hot chilli peppers were quickly and widely embraced, and spiciness became a feature of many southern dishes.

New crops were not all that came from the Americas to change the way Europeans ate. In the last decade of the sixteenth century, the price revolution ignited by the flood of gold and silver from the American colonies of Spain and Portugal unleashed its effect on European economies. Coins, made of precious metals, became less valuable and as a consequence prices increased much faster than the salaries of farmers and workers. Landed nobles, whose fixed rents were tied by customary relations with the peasants living on their estates, were at times forced to sell portions of their land to the upcoming bourgeois class, whose growing wealth often allowed them to join the ranks of nobility. The flight of capital towards rural properties would accelerate at the end of the sixteenth century, following the relative decline of artisan and mercantile activities in the cities. The crisis led many banking houses to redirect capital and investments towards agriculture. Towards the end of the sixteenth century the rise of prices, the population growth and the slowdown of technological innovation in agriculture caused social unrest and widespread food crises. As historian Eric Dursteler states:

> During the last decades of the fifteenth century, one in every six harvests failed in the Mediterranean. Between 1375 and 1791, Florence experienced 111 years of famine, and only sixteen harvests that could be classed as very good. The toll of famine

Peppers and squashes were among the crops introduced to Italy after the arrival of Europeans in the Americas.

could be harsh: for example, recurring shortfalls between 1587 and 1595 contributed to Bologna's population plummeting from 72,000 to 59,000.[68]

The anxiety caused by food scarcity was reflected in the work of the writer Giulio Cesare Croce, from Bologna. Croce, better known for his 1606 novel about the comical adventures of the peasant Bertoldo at the court of the Longobard king Alboin, addressed the famine of 1590 in the *Banchetto de'mal cibati* (Banquet of the Underfed, 1608), sketching a parody of the excessive customs of the upper classes and describing the sufferance of the commoners. An anonymous poem from the same period, *Mala cosa e' carestia* (Famine is a Bad Thing) also laments the consequence of lack of food:

> Often I use the stump of cabbages
> Instead of bread,
> In the dirt I make holes
> Looking for different and strange roots,
> And we use that to grease our faces.
> Wish we had that every day,
> It would not be so bad . . .[69]

In many European states, food scarcity was paired with tensions connected to the expansion of Protestant movements. The reaction of the Catholic Church, the Counter-Reformation, would have far-reaching consequences on Italian culture, starting from the seventeenth century.