1 (Ipsen: Cloth Oil)

Carl Ipsen: "From Cloth Oil to Extra Virgin: Italian Olive Oil Before the Invention of the Mediterranean Diet," in Dan Bender and Simone Cinotto, eds., *Food Mobilities: Making World Cuisine*. University of Toronto Press, forthcoming.

©Carl Ipsen

The mobilities paradigm that informs this volume derives from the dramatic increase in the mobility of people and things over the past half century or so and arose in response to a perceived sedentarism in the social sciences dealing with present-day phenomena in this age of rapid change. Arguably, history has long concentrated on mobility – of people, armies, goods and ideas¹ - and this brief look at the history of olive oil attempts to follow in that tradition and so contribute to the larger discussion of food mobilities.

The olive tree itself is bound by place. The oil producing tree was first domesticated from wild oleaster in the Middle East more or less contemporaneously with the invention of agriculture. It spread from there throughout the Mediterranean but not beyond as it could thrive neither in the colder north nor the tropical south. Only in the late modern period did it find its way, following colonial conquest and the expansion of European populations, to the "Mediterranean" climates of Argentina, Australia, California, South Africa and elsewhere. In spite of that geographic specificity, or rather because of it, the fruit of the olive tree, and more importantly the marvelous elixir pressed from that fruit, has long been an item of international trade. In this piece we look first at the Kingdom of Naples, the most important global producer of oil in the eighteenth and nineteenth centuries. Oil produced in the rural hinterlands of Puglia and Calabria travelled to the bustling capital city – Naples only lost its status as the third most populous city in Europe in the early nineteenth century² - but also to ports throughout the Mediterranean and beyond: to Britain and the North and Baltic Seas. Accompanying that trade were of course a host of international sailors, merchants, and modes of transport. Nor did oil

serve a single and unchanging purpose. It was to be sure the staple fat of the southern Italian diet, but the international trade explored here responded initially and primarily to oil's industrial applications, as a lubricant, as fuel for lamps, and for the production of soap. So oil moved not only in place and time but also in function.

Italian olive cultivation and oil production expanded throughout the eighteenth and nineteenth centuries, even as other centers of production, most significantly Spain, grew in importance; meanwhile the demand for industrial oil declined as cheaper seed oil substitutes became available. As a food instead, olive oil from the south and center of Italy followed the foodways of the late nineteenth and early twentieth century Italian diaspora as masses of Italians migrated to other parts of Europe and to North and South America. Yet for all that movement and the global expansion of an olive oil network, still in the 1950s the consumption of comestible oil was largely restricted to its Mediterranean home and to those diasporic communities. As we shall see, while the British experimented with olive oil as food as early as the eighteenth century, a culinary pioneer like Elizabeth David – her *Italian Food* came out in 1954 – still had difficulty finding oil in her native Britain at that latter date. Only in the late twentieth century did this once humble product – compare it to other dietary staples of the European popular classes like rye flour or dried fish – develop into the most celebrated of fats. Today of course, extra virgin olive oil is universally acclaimed. So while seed oils fill the deep fryers of fast-food restaurants the world over and contribute to our global health crisis, and animal fats, many fear, clog arteries and are shunned by vegetarians, only olive oil is everywhere praised for its salutary qualities. There is hardly a television chef who doesn't pour generous quantities of the elixir in the preparation of this dish or that. Extra virgin olive oil has even earned the immediately recognizable (and even pronounceable) acronym of EVOO.

This paper traces the history of olive oil, primarily in Italy, as it moved in time, space and function from the eighteenth century to 1960 when an Italian law introduced the appellation extra virgin to the culinary lexicon. Olive trees have shaped and defined the countryside of southern Italy for centuries; some say millennia. In our period they generated a mobility that started with rural wage laborers, often women, gathering olives from fall to spring. Over a shoulder or on the back of a mule, sacks of the collected fruit were transported to the thousands of olive mills scattered throughout the kingdom where men and beasts sweated over crushers and presses that extracted the oil. Much oil was consumed locally, among that same laboring class, but some continued on by way of an ever more cosmopolitan network that engaged multinational traders in ports like Gallipoli and Naples, feeding and lighting the capital city but also supplying French, British, Russian and other manufacturers of wool and other products. Over time that international network evolved, expanding across oceans and shifting from serving mostly industrial purposes to transporting mostly comestible oils. The story told here ends, not so long ago, when olive oil was still principally a food of the poor and of migrants but was poised, rebaptized as extra virgin, to conquer palates and chefs around the world as the centerpiece of what came to be called the "Mediterranean Diet."

Gallipoli oil

The eighteenth century marks a crucial turning point in the millennial history of olive oil. That century saw production and demand for oil increase dramatically as it came literally to lubricate the wheels of European commerce. At that time, the leading producer of olive oil in the world was southern Italy, in parts of which extensive monocultures had been cultivated since at least the sixteenth century.³ Southern Italy at that time meant the Kingdom of Naples, a territory that occupied the Italian peninsula south and east of Rome plus Sicily (see Figure 1). And that

4 (Ipsen: Cloth Oil)

kingdom's most important export was olive oil: large quantities left the ports of Puglia and to a lesser extent Calabria for Naples and destinations throughout the Mediterranean and northern Europe.



Kingdom of Naples

Figure 1: The Kingdom of Naples

According to Vincenzo Ricchioni, Fascist-era agronomist, politician and some-time historian, in the eighteenth century the Kingdom of Naples satisfied the *entirety* of the world market for oil.⁴ Nor is the eighteenth century an arbitrary starting point. To begin with, that century saw significant expansion of olive groves in the Kingdom. The monarch (Charles, 1734-59, subsequently Charles III of Spain) sought to expand Neapolitan agriculture by exempting the farming of previously uncultivated terrain from taxation for twenty years, and he offered a

special forty-year exemption for new olive groves.⁵ Meanwhile, demand for oil generated a vigorous trade between the kingdom and other European states, from Austria to France to Great Britain to Scandinavia and Russia. Policy and economic opportunity conspired to effect what Piero Bevilacqua has described as an eighteenth-century "intense and grandiose transformation of the southern agricultural landscape," an expansion that with a notable pause centered on the Napoleonic Wars would continue into the middle of the nineteenth century.⁶

Why was Italian oil in such demand outside of Italy? The "Cloth" entry from the second edition of the *Encyclopaedia Britannica* (1778-83) provides a clue:

[The wool] is now in a proper condition to be oiled, and carded on large iron cards placed slopewise. *Olive oil* [my emphasis] is esteemed the best for this purpose: one fifth of which would be used for the wool intended for the woof, and a ninth for the warp. After the wool has been well oiled it is given to the spinners who first card it on the knee with small fine cards, and then spin it on the wheel, observing to make the thread of the warp smaller by one third than that of the woof, and much compacter twisted [sic].⁷

And while sheep of course thrived in the British countryside, olive oil was necessarily imported and again mostly from Italy. Indeed, a later edition of the *Encyclopaedia* (1910) specifically identified "Gallipoli oil" (so from Puglia) as the finest for this purpose.⁸

Meanwhile, the Calabrian-Genoese aristocrat and landowner Domenico Grimaldi (1734-1805) included the following in his 1773 *Instructions on the new manufacture of olive oil introduced in Calabria*: "Oil is the most precious product of the Kingdom of Naples. The huge consumption of oil in the capital city and in all the Kingdom's provinces for the daily preparation of foods, for lighting, for textile and soap production, and for other uses make this noble extract deserving of governmental protection... The northern nations, that have long needed our oil for the manufacture of wool and of soap, have recently begun to use it for other purposes and as a welcome condiment for various foods." Oil was again a staple of the southern Italian diet and fueled lamps throughout the kingdom; quantitatively we may never know which was more

important. Meanwhile, already in the late eighteenth century, olive oil had begun tentatively to penetrate northern European foodways, a process that would take two more centuries to complete. More significant in the "northern nations" at the time was the use oil for soap manufacture, to lubricate machinery, and, as described above, for processing wool. It was of course in eighteenth-century Britain that technological advances and expanding wool production provided the spark for the Industrial Revolution, ¹⁰ a process in which the humble Puglian peasant also played a role as the oil he hauled from the Salentine groves to the port of Gallipoli literally greased the wheels of European commerce.

Oil production can vary dramatically from year to year, and production statistics from the eighteenth century are in any case of questionable reliability. That said, Grimaldi and other sources¹¹ suggest that oil production from the eighteenth-century Kingdom of Naples amounted to about 100m liters per year. Today Italy might produce four times that, most coming from the regions that made up the former kingdom, so our historic estimate seems reasonable. Oil was in fact the Kingdom's most important item of foreign trade, and legal exports, according to those same sources, ranged between 2m and 16m liters per year (with perhaps another 30% in contraband). Two-thirds of those exports came from Puglia and the rest from Calabria (while Sicily, important in the twentieth century, does not really figure in eighteenth-century discussions of olive oil).¹²

The leading oil provinces in the kingdom were the Terra d'Otranto - often referred to as the Salento or the Salentine peninsula - and the Terra di Bari which together made up two-thirds of the present-day region of Puglia, Italy's heel, followed not too far behind by Calabria Ultra, the toe (see figure 1). Each of the oil-producing provinces in Puglia occupied 5-6000 sq. km. and, already in early modern times, olives constituted a true monoculture there. According to one

eighteenth-century estimate, three-fifths of the arable land on the Salentine peninsula was planted with olives, while another describes two-thirds of the Terra d'Otranto and the Terra di Bari as covered with groves. ¹³ A nineteenth-century British source further discussed below observes: "All that part of Italy which is known as the heel of the boot is little else than one continuous olive grove... Starting from Gallipoli, as I have often done, and travelling to the Cape Santa Maria di Leuca, or to Taranto, or to Lecce... you literally are scarcely ever ten minutes out of the shade of olive-trees..." ¹⁴ It is worth recalling that this author was traveling on horseback, so in those ten minutes might have travelled as little as one kilometer. In response to a network of demand that stretched to points scattered across Italy and Europe, olive groves dominated the Puglian landscape as far as the eye could see. ¹⁵

In the pre-Napoleonic decades, the best cloth oil came from the Terra d'Otranto. Indeed 50-70% of the kingdom's oil exports left from the modest Ionian port of Gallipoli, and more than half of those exports went to England. According to a later source, as many as 70 ships at a time might anchor in the bay north of the island city (see figure 2). Gallipoli oil was prized as fatter and more expansive than other oils so that a similar quantity could lubricate more wool than that from other locales; it was also clearer and could reportedly resist rancidity - the normal and inevitable deterioration of oil over time that is hastened by exposure to air and light - for several years. In a typical year in the eighteenth century, Gallipoli might ship 5m liters of oil abroad (Britain, Holland, northern Germany, Scandinavia, Russia) and a like amount to the city of Naples. So important was this fundamental foodstuff and fuel to the Parthenopean capital that maintenance of social order required a steady supply of inexpensive oil lest the urban masses revolt in protest. Meanwhile, oil from Terra di Bari went mostly northward to Ferrara in the Papal States, Venice, and the Austrian port of Trieste, while oil from Calabria, more turbid and

generally considered inferior to Puglian oil, shipped mostly out of the Tyrrhenian port of Gioia (or simply from the beaches) and found buyers in Genoa and Marseille (mostly for soap). These latter two locales were well-known for producing some of the best food oil in the world, but the quantities produced were always small compared to Puglia. Just as British wool manufacture relied on imported oil, so French *savon de Marseille* would likely not have gained its international reputation had it not been for oil supplied from Italy. The eighteenth-century oil network was vast, and Gallipoli oil in particular travelled well-established Mediterranean and Atlantic trade routes on sea voyages that might exceed 4000 nautical miles.¹⁶



Figure 2: Jakob Philipp Hackert, Gallipoli (1790)

Domenico Grimaldi and Giovanni Presta

In terms of domestic consumption, oil was a staple and a necessity: olive oil circulated through the Neapolitan body politic as a sort of life blood, carrying both nutrition and, literally, enlightenment throughout the kingdom. According again to the imperfect statistics that we have, domestic oil consumption may have been as high as 10 liters per person per year and perhaps 14 in the city of Naples itself, not too far below where it is today, though the historic figure

represents both food and fuel.¹⁷ According to one nineteenth-century source, the *oliondolo* or oil vendor wandered the streets of Naples carrying an oil-filled *otre* or goat-skin bag calling out "*uoglie*" to announce his arrival. With a set of measuring cups and a funnel he distributed oil door to door to the city's inhabitants in small quantities. That source *only* refers to the use of oil for lamps though surely the *oliondolo* was selling food oil as well and indeed most consumers at the time used the same oil interchangeably.¹⁸

Our best sources for eighteenth-century Neapolitan oil production are the already cited Domenico Grimaldi and Giovanni Presta, a producer from Gallipoli in the Terra d'Otranto, who published his famous Degli ulivi in 1794. 19 Both call for improved methods and describe how to make better oils, and both give us a glimpse into what were at the time standard practices, practices sure to make the present-day producer shudder and wonder at the reputation of Gallipoli oil. In both regions, rather than harvesting olives at the moment of ideal maturity, usually in November or December, Calabrian and Puglian growers waited for the olives to fall naturally from the trees and gathered them off the ground, a process that stretched out to April or May. Gathered olives were then stored in vats (in Terra d'Otranto cut into the earth) where they heated up and naturally fermented for days, weeks or even months as they awaited processing. They were then crushed on the familiar rotating stone crusher and subjected to multiple pressings; the later pressings employed hot water to extract additional oil (see figure 3). Both Grimaldi and Presta called for early harvesting, avoiding fermentation by getting the olives quickly to the press, and the segregation of a first pressing performed without any hot water from subsequent ones. That first cold pressing would produce *olio fino*, the best quality comestible oil. Both men claimed to make oils that could compete with the fine oils made in Provence (Aix), Tuscany (especially Lucca), and Genoa, considered the best food oils of the day.²⁰

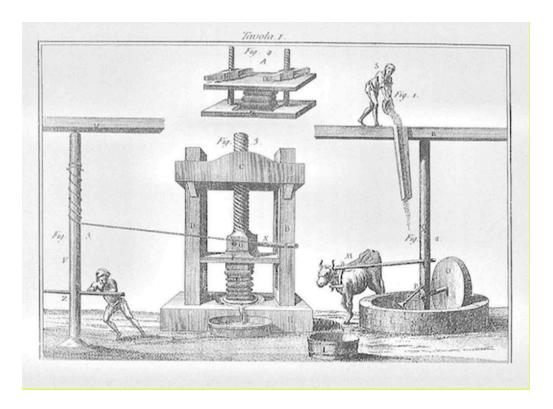


Figure 3: Domenico Grimaldi (1773)

Presta's work also gives us an insight into a term little used at the time but crucial to our story. He describes obtaining a "virgin" oil by taking a wicker basket and pressing it into a bucket of crushed (but not pressed) olives. The basket then functions as a sieve, allowing high quality oil to seep into it: virgin in that it has never been subjected to the olive press. Presta uses the term *olio vergine* on just three different occasions in *Degli ulivi* (362, 434, 500) and refers once to *huile vierge* (462) made in Aix. Grimaldi instead never uses the appellation in either of the works cited here. *Olio fino* was the term generally used for good-quality food oil at the time, though even *olio fino* was a rare commodity. According to Presta, a remarkable four-fifths of oil production at the time was used by the wool and soap industries. The remaining 20 per cent, presumably of marginally better quality, served as food and as lamp oil. Lamp oil, moreover, was better quality than soap oil, and *chiaro*, *giallo*, *e lampante* was a positive descriptor for oil: clear and yellow but also *lampante* which might refer to the oil's brilliant quality but also to its

use in oil lamps; today instead *lampante* is the term used for the lowest quality oils. Presta adds that perhaps only one per cent of production at the time (the late eighteenth century) was devoted to *olio fino*, a more expensive product that graced the tables of the rich.²¹ Nor did domestic oil figure as an especially prized fat in the pantry (dare I say larder) of the Neapolitan aristocracy and bourgeoisie. On the king's table, one apparently found oil from Provence or Lucca rather than the homegrown product.²² And again there is reason to believe that much cooking for the better off at the time was done with animal fats.

The relative scarcity of good quality food oil also owed much to the technological limitations of the day. Based on an as yet unpublished calculation, I estimate that eight men working a standard press (one crusher and two presses though many were larger) could process 3 batches of olives (*macinate*) per shift (two groups of four men working 12 hours each). To produce the estimated 100 or so million liters of oil then would require about 700,000 round-the-clock person-days of crushing that to be accomplished in six months would need over 4000 mills with a workforce of about 32,000, mostly in Puglia and Calabria. That calculation assumes a high level of efficiency, so the numbers are likely higher still. To the men working the mills need also to be added animals, mostly oxen, turning the crushers and the thousands of women, children, and men who gathered and cleaned the olives and transported them to the presses. A massive undertaking. This calculation is based on a series of informed if shaky assumptions. Still, it may give us some sense of the scale of the operation. Given that it took many months to crush all the olives grown and harvested, it was impossible at the time that more than a small fraction of those olives was processed according to best practices to produce *olio fino*.

The Salento boasted another feature that distinguished it from other oil producing regions: many of the presses there were built underground (*frantoi ipogei*), carved out of the soft

local stone (*pietra leccese*). This practice offered several advantages. Much oil is produced in the colder months while oil yields increase at higher temperatures, and so the underground presses took advantage of geothermal heating. In addition, carts of olives could simply be dumped into ground level pits that opened below to the crushers, facilitating the transport from tree to press. At the same time, these underground presses must have constituted an infernal environment. In caverns with little air circulation, perhaps half a dozen men worked around the clock. The olfactory experience must have been intense: human sweat, excrement and exhalations from oxen used to turn the crusher, oil lamps and fires used to heat water, and fermenting olives all combined to create a heady atmosphere and not one (as Presta notes) ideal for producing *olio fino*.²³

European industry and would eventually conquer palates the world over. Most eighteenth-century oil, whether comestible or industrial, was produced in lurid conditions like those described above and was generously described as "strong" oil. Only a tiny minority of consumers at the time demanded, enjoyed, and appreciated *olio fino*. That minority would grow over the following centuries and follow the expanding global network of the olive oil trade and olive cultivation. That earlier tension, however, between the *olio forte* of the peasants and the *olio fino* of the wealthy remains in some sense unresolved. Today almost all oil is "extra virgin," but an often-unappreciated chasm exists between the inexpensive oils sold in supermarkets, some indeed fraudulent or blended, and the high-quality oils made by the best producers. As we continue to explore below, throughout this history, oil moved in a complicated space where levels and perceptions of quality were anything but straightforward.

The Statistica murattiana

It was, again, initially industrial demand that linked the toiling peasantry of the Kingdom to other parts of the Mediterranean and to northern Europe. So while Sicilian or Balkan wheat might fill Spanish and Dutch bellies, most food oil was still consumed not far from where the trees grew. Oil production and exports nonetheless increased steadily throughout the eighteenth century and enjoyed something of a golden age in the years leading up to 1790-91. After that, multiple forces conspired to buffet the trade. Revolution and war disrupted the usual export channels and poor harvests raised fears among the Neapolitan rulers that Naples itself might run low on oil. Shortages of oil, as much a necessity as bread, raised the specter of urban uprisings by the poor, and this just a couple of years after the outbreak of the French Revolution. There followed export bans in 1793, 1795 and 1797 and while calm was maintained in the capital, the rural populations in Puglia and Calabria suffered miserably.²⁴ We might even imagine a period of relative oil immobility imposed by political crises, doubtless creating an incentive in Britain and elsewhere to develop alternative fats, in particular seed oils, that might again serve both industrial and culinary needs.

Naples had its own brief and bloody revolutionary moment in 1799, followed by
Napoleonic conquest in 1806. The subsequent French occupation lasted until 1815 and was
dominated by Napoleon's brother-in-law, Joachim Murat, crowned King of Naples (meanwhile
the Bourbon King Ferdinand retreated to Sicily where he enjoyed British protection). Exports to
England were blocked throughout this period, and so Gallipoli lost one of its primary clients.
With the rationalist zeal that characterized Napoleonic rule, Murat's administration sought to
better know its territory by the collection of "statistics" and sent out a questionnaire in 1811 to
all of the provincial *intendenti* (prefects) that included queries regarding territory, climate,
population, foodstuffs, agriculture, hunting and fishing, manufacture, customs and more. The

responses were compiled in the justly famous *Statistica murattiana* (after Murat). Included were questions on oil cultivation and manufacture and about the use of oil as a food, though curiously not about its other applications (wool, soap, lighting).²⁵

The first thing that strikes one in the report is that while oil was an essential food for the poor, it was less so for the rich. Predictably, the poor consumed an inferior quality and so less expensive oil. The *redattore* from Abruzzo Citra - *redattori* were the provincial census takers who responded to the survey - reports: "Delicate oil [*olio dolce*], made from selected, freshly harvested olives, is consumed by the well-off populations in the major population centers. Strong oil [*forte* or *piccante*] instead, made from olives that have sat long fermenting in vats, is used by the peasants, artisans, and all those living in small towns. Strong oil has a spicy, disgusting flavor that attacks the throat, but the common people prefer it, either because they are used to it or because with a small amount of oil one can flavor a large amount of food." [I: 229, 264]

Meanwhile in Calabria Citra: "The rich use [oil] very little to flavor their foods, while the poor do instead use it." [II: 334] And in Calabria Ultra: "The common people [*popolazzo*] use oil every day to flavor their foods and it is rare that they substitute instead pork fat." [II: 540] In Abruzzo Ultra: "The poor use oil to excess." [I: 67]

Oil consumption was predictably widespread in the major oil producing provinces, like Calabria Ultra (cited above) and Terra di Bari: "All classes flavor their foods with oil; the common people (basso popolo) and the peasants use it the most, dressing greens and legumes;" wealthy baresi predictably paid more to get delicate olio dolce. [II: 44] While in Terra d'Otranto: "The peasants know no other condiment." [II: 178] Finally, in Terra di Lavoro (which included the capital city of Naples), "all the classes use [oil] generally, but the poorer classes more than the wealthy. The latter use it on a small number of foods (for frying fish, for dressing cooked or

raw greens [insalate], on legumes); the poor on the other hand use it on greens [erbe] polenta and the occasional legume that make up their usual diet." [II, 233] Indeed the popular classes in this period ate meat rarely – perhaps 2-3 times per year²⁶ - and so oil served as an essential fat for their vegetarian fare. One reads of oil being used in a wide array of foods: greens, salads, legume soups, green and white soups, boiled or soaked bread, panzanella, polenta, hard lasagna, frascarelli or millefanti (a simple pasta of water and flour finely broken up or sgranellata), pancotto, maccherini. A couple of redattori also mention fish.

Vegetable substances

Overlooked in the *Statistica murattiana* is the long crisis that characterized the oil trade from the 1890s and throughout the French occupation. We get some insight into that period from a remarkable and anonymous British source. In 1833, The Library of Entertaining Knowledge published a volume with this catchy title: *Vegetable Substances: Materials of Manufactures*. It includes a short section on olive oil obviously penned by an Englishman who had spent an extended period in Gallipoli, probably a trader.²⁷ Regarding the Napoleonic period he remarks:

The hilarity of the Gallipolitans when I first became acquainted with them might have been heightened by an agreeable contrast, for it was shortly after the fall of Bonaparte, whose system, whatever good parts of it may have done in the rest of Italy, was certainly most ruinous to the provinces of Lecce and Bari. Unable to export or to find other markets for their produce, the proprietors in many parts of those provinces let the olives lie and rot upon the ground. For some years the price of oil hardly paid the price of preparation...

I have been in no part of Europe where the benefits resulting from the peace were so broad and tangible as here... 28

Our British observer goes on to offer a vivid portrait of the renewed post-Napoleonic mobility of Puglian oil, from the groves and mills of the countryside to the tiny - less than a square kilometer! - city of Gallipoli, frequented by ships and traders of many nationalities: "The oil is carried to Trani, Barletta, Bari, Mola di Bari, Molfetta, Giovinazzo, Brindisi, Otranto, Taranto, and some other sea-ports, but its great *depôt* for some ages has been the town of

Gallipoli, which gives its name to the oil imported in such great quantities by the English, French, Americans..."²⁹ He then describes the oil warehouses which occupy the ground floors of many of the town's residences and include multiple cisterns, each for a different quality of oil, cut into the soft stone that constitutes the island. Even the most turbid *olio mosto*, "dark and black as pitch," would quickly become bright and yellow (*chiaro*, *giallo e lampante*) in these "excellent cisterns." He also refers to American ships at Gallipoli, a reference not found in earlier sources cited above. That presence corresponds well with the establishment and growth of wool manufacturing in the United States, manufacturing that surely also needed oil. Nor was oil alone among the Italian agricultural products crossing the Atlantic: Sicilian citrus also notably found markets in both northern Europe and the US at about this time. Still predominantly agricultural, nineteenth-century Italy predictably engaged with the global economy and so foodways by offering its bountiful produce (and eventually also its labor).

Our trader goes on to describe the intense traffic of the long oil season. Peasants come to Gallipoli from throughout the Terra d'Otranto and even from Terra di Bari leading mules laden with oil-filled goatskin bags - the roads were generally too poor for wheeled transport - that are emptied into the underground cisterns. On a single afternoon he has counted as many as a hundred mules trekking back homeward from the port. Once clarified and ready for shipping, the oil is again transferred into goatskin bags and porters carry it on their shoulders down to the water's edge where it is poured into wooden barrels that are then sealed up by coopers. The barrels are lashed together with rope and floated out by sailors to the waiting anchored ships. In 1816, our source reports having seen at one time "nine English, two American, two French, and six Genoese vessels (not to mention some small craft from the Adriatic)" waiting to be loaded up with oil.³¹ This would have been just the first or second post-Napoleonic harvest: suppressed

during the previous years of conflict, the global oil network quickly revived with the return of peace. Thousands of peasants, day laborers, mill operators, porters, oil merchants, tradesmen, and sailors once again followed the oil from the fruit's maturation in the Puglian groves to places as far flung as Russia and America.

The nineteenth century: fine oil and refined oil

Demand for good-quality food oil grew throughout the nineteenth century, both at home and abroad. Scottish economist John Ramsey Culloch, for example, describes so-called "Florence oil" being used in Britain for culinary purposes circa 1850.³² But Florentine production was necessarily limited and in response to the demand for food oil, important strides were made in Terra di Bari (whose industrial oil had always been inferior to Gallipoli oil). Pietro (or Pierre) Ravanas, a trader from Aix en Provence, came to Bari in 1826 to purchase oil and remained to try his luck as a producer. Ravanas introduced improved crushers and hydraulic iron presses and insisted on harvesting olives directly from the trees. So while Terra d'Otranto continued to make the "disgusting" olio forte described in the Statistica murattiana, Ravanas within a few years was producing an olio fino that fetched double the price of the usual oil from Bari (or Gallipoli). Despite local opposition from jealous growers, he expanded his operation with a large (above-ground) olive mill and exported oil to his brother in France where it competed with oils from Genoa, Lucca and even Aix itself. And compared to these other regions, Puglia always enjoyed the advantage of a much greater volume of production (and no danger of destructive winter freezes). Ravanas' business sense eventually failed him and he went bankrupt in 1840, but not before his innovations caught on and other producers in Bari also began to produce fine oils. Indeed within a few decades it was being celebrated as the finest oil in Italy.

And they produced a lot of it: according to one estimate, by mid-century Bari was on its own producing half the kingdom's oil.³³

The Kingdom of the Two Sicilies, as the southern kingdom was known after the Bourbon restoration in 1815, did not survive the forces of Italian nationalism that led to its incorporation into a new Kingdom of Italy in 1860-61. In a spirit much like that of the *Statistica murattiana*, the new regime undertook an important agricultural study directed by Stefano Jacini, a Lombard economist and political figure. On the subject of Puglian oil, the *Inchiesta Jacini* (1877-86) relates: "The provinces of Bari and Lecce [which coincided approximately with the Neapolitan provinces of Terra di Bari and Terra d'Otranto] surpass all others for oil production... In the *Barese* alone there are more than 30 steam-powered mills; and the superfine oils (*olii sopraffini*) made there rival the best in Italy, including those of Lucca."³⁴ Another contemporary observer, the Tuscan Alessandro Bizzarri, noted in 1879 that "The province of Bari has made great strides in oil production. Its comestible oils now travel around the world, and it can be described as a model southern province... Today the two best oils in Italy are the oil of Lucca and the oil of Bari."³⁵

Oil geography underwent other important changes in the nineteenth century. Previously, Naples and Italy had produced oils of varying qualities for domestic consumption and for export that arrived to consumers more or less in the same state as they left the mills and cisterns. By the late 1800s instead, technological developments allowed for the processing or refining of oil, while the production of cheaper seed oils encouraged the blending of those with olive oil to increase profit margins. Neither of these developments on the face of it presented particular problems, though as we shall see both processed and blended oil would be advertised as pure or fine (eventually virgin) olive oil and so create the complicated and occasionally duplicitous

situation that characterizes the olive oil market up to the present day. Moreover, processing and blending created a demand for, especially, low-quality olive oil and seed oil in Italy itself which became as a result both an importer and exporter of oil, adding new vectors to the mobility map outlined above. Some oils would indeed be imported into Italy for refining and/or blending only to be then re-exported (as Italian oil).

Bizzarri devotes a portion of his 1879 text to chemical methods used to refine olive oil (his term is *depurazione*). These methods led to the establishment of oil refineries, especially in southern France and Liguria (and later in Puglia), that became of major importance in the twentieth century. Refining methods generally lowered acidity and rendered oils that burned cleaner and made better soaps; those oils, however, also became of increasing importance as food oils. Indeed Bizzarri's work betrays a changing meaning for *olio vergine*, namely oil derived from the first cold pressing of olives and not subjected to chemical treatment, i.e. not refined.³⁶ The already-cited *Inchiesta Jacini* from this same period also describes the frequent blending of olive oil with cotton seed oil. The Italian government had by then imposed an import tax on seed oils to discourage this practice, but apparently to little avail. The problem was so widespread that a Milanese journalist commented in 1881: "Nowadays it is more difficult to find pure olive oil than to find an honest man." And according to the Sicilian Antonio Aloi in the 1890s. "Today it is a rare bit of luck to find pure olive oil for sale." "

Laws and migration

It was concern about blending and fraud that led to Italy's first olive oil legislation. A law in 1890, reinforced in 1908, decreed that whoever blended olive oil with other oils was obliged to label their blends as such. One ruse had been to simply label the cheaper blends as *olio* or more cleverly something like *olio di Lucca*. A still more extensive law was passed in 1925: it

stipulated that only pure olive oil could be labeled as either *olio di oliva* or even simply *olio*. Blended oils were permitted and could be labeled as such (*miscela*) providing they contained at least 50% olive oil. If the percentage were lower, they had instead to be labeled as seed oil. That law also forbade the sale of *olio di sansa* (oil derived by chemical extraction from the pits) as food oil, but that provision was reversed the following year. As the relative proportion of food as opposed to industrial oil increased, chemical treatments that seemed reasonable for the production of industrial oil raised instead public health concerns when that same oil was marketed as comestible.

Following unification, the new Italian state began collecting statistics on agriculture (and much else). Oil production figures generally ranged between 200 and 300 million kilograms per year for the century or so after unification (1860-1960). Exports for the decade and a half before 1914 meanwhile averaged 32m kg, and while exports to Europe were declining in those years, those to Argentina and the US each accounted for about 20 per cent of the total and were increasing. These were of course exactly the years of massive Italian migration to those two destinations, migration that created a market for olive oil and other Italian foodstuffs. ³⁹ Indeed, it is really only with the Italian diaspora in these very decades that olive oil as food broke out of its Mediterranean homeland, planting the seed for its eventual conquest of foodways in Europe, the Americas and beyond. Meanwhile, and as a harbinger of things to come, Italian oil exports encountered growing competition in the early twentieth century from, especially, Spain. Just as the oil geography within Italy had altered, incorporating both exports and imports, so the global mobility of oil became more complicated with the development of new nodes of both consumption and production.

A work from 1940 by the geographer Luchino Franciosa provides a concise snapshot of interwar oil production. Regionally, Puglia accounted for about ½ of Italian oil and Sicily and Calabria 13-14% each. The most significant central region was Tuscany at 10% while Campania, Abruzzo and Lazio all accounted for 6-8% each. Meanwhile, Italy imported a large quantity of oil, principally from Spain which by then had surpassed Italy as the world's leading producer in terms of quantity. In part that oil served to make up shortfalls in bad years, but as Franciosa observes, 80 per cent of the imported oil, generally of poor quality, was "rectified," i.e. treated chemically to mask defects, in refineries located mostly in Puglia and Liguria, and then reexported to foreign markets that wanted "Italian" oil. Between 1928 and 1938, annual imports ranged between 10 and 80 m kg. Some of that refined oil also went to northern Italy where consumers preferred an oil lighter in both color and body (or indeed seed oils). Franciosa also cites results of a provincial level study that found a range of consumption levels that went from 3 liters per adult per year in rural Milan to over 25 for peasants in Lecce. 40

As those latter figures suggest, olive oil had not yet conquered all of Italy. A journalist for the Milanese *Corriere della Sera* paints a telling picture of the oil market in his city in 1929. According to his informants, you can count on one hand the shops in Milan that sell pure oil. That is not too surprising for, as he describes it, olive oil is "a condiment not much cared for in Milanese cuisine which prefers butter or even margarine. One need only mention spaghetti dressed in oil to certain Ambrogian traditionalists [a reference to Milan's patron saint] to see them turn up their noses; at best oil might dress a salad or at the absolute limit be used to fry fish on days of abstinence." ⁴¹ Indeed the Milanese make little distinction between olive oil and peanut or linseed oils. So while olive oil by this time had followed southern Italians migrating throughout the world, it had yet to make much progress across the Apennines.

Meanwhile, Italian olive oil legislation continued to grapple with the issue of fraudulent and poor-quality oils. A 1926 law imposed an upper limit on acidity (4%) for all comestible oils, meanwhile bowing to industry pressure and allowing for the sale, correctly labeled, of both refined oil and olio di sansa as food oils. 42 Production of the latter two involved chemical extraction, and while it was generally agreed that they were inferior products compared to pure olive oil made by traditional mechanical methods, consumers, especially in northern markets like Milan, might not be especially discerning. Laws seeking to protect and promote quality oil came instead in 1929 and 1936. The first outlawed blending with seed oils altogether, stipulating that seed oils simply be labeled as such.⁴³ The second instead introduced the first legal classification of olive oils. In 1935, Mussolini, who sought to organize the Italian economy along corporatist lines, created an Oil Corporation. One of the topics at the Corporation's first meeting was olive oil classification: a seven-level hierarchy was proposed which had as its highest grade: Olio di oliva di prima pressione extra vergine. 44 Extra virgin, however - still unusual terminology at the time - did not make it into the final version of the law. The 1936 law did instead introduce a fivepart classification starting with Olio sopraffino vergine di oliva. This virgin olive oil would be produced only by mechanical means and have a maximum acidity of 1.2%. Similarly, olio fino di oliva (max. acidity 2.5%) and olio di oliva (4%) were ostensibly oils made exclusively by mechanical (as opposed to chemical) means, though loopholes in the law meant that the only oil that was certain to be made by non-chemical methods was olio sopraffino vergine (providing it was correctly labeled). 45

Olive oil, more and more exclusively a food, continued to be an important item of domestic consumption and of trade, both export and import, in the interwar period, so attention to correct labeling does not come as a surprise. A quintessentially Italian product, its

consumption *in* Italy would also seem to fit well with the Fascist emphasis on self-sufficiency and so an alimentary policy was in some sense one of food *immobility* insofar as it encouraged the consumption of homegrown foodstuffs over imports. Yet while wheat, the primary focus of that policy, was a prestige product that the Italian masses had only come to enjoy broadly in the decades leading up to the Great War - wheat bread and pasta instead of preparations made from maize (polenta), chestnuts, potatoes, rye or lentils – olive oil remained a product often associated with poor southerners. Mussolini himself came from a part of the country (Romagna) that preferred animal fats to olive oil, so it is perhaps little surprise that while attempts were made to regulate and classify, oil was not yet celebrated in the interwar period as an essential ingredient of the Italian diet in the way that it would be in the late twentieth century.⁴⁶

The 1936 law remained in place for a quarter century. During that time, unblended first press *olio sopraffino vergine* and *olio fino* accounted for 20-30% of production while the rest consisted of blended and refined oils. The oil most in demand as food oil was reportedly a blend of 20% virgin and 80% refined. Although a minority objected to treating refined oil as comestible (especially *olio di sansa*), clearly the quantity of virgin oil produced fell short of satisfying Italian demand (not to mention demand abroad), and oil refineries were at the time an accepted and dominant component of Italian oil production.⁴⁷ The weight of public and political opinion awoke instead to continued reports of oil fraud: in addition to the century-old practice of cutting olive oil with seed oils (and selling it as pure olive oil), a newer process used to neutralize *olio di sansa*, "esterification," could also be used to extract oil from animal parts and from soap; and the resultant products were being marketed by disreputable sorts as comestible olive oil. News reports of those practices, and of massive quantities of imported raw soap that

seemed to vanish into thin air,⁴⁸ mobilized trade groups and Italian lawmakers, leading to a new olive oil law in 1960 and creation of the *extra* virgin category.

The triumph of extra virgin oil

That law marked the beginning of what we might call the modern history of olive oil. The best quality oil – acidity less than 1% and made exclusively by mechanical means – would henceforth be labeled *olio extra vergine di oliva*. The law also specified other less virgin categories, while both refined *olio lampante* and *olio di sansa* could still be sold as food; oils obtained by esterification instead could not.⁴⁹ By 1960 most olive oil was food oil and had come to represent Italy's most important comestible fat.⁵⁰ Still, only about 20 per cent of Italian oil at that time was reportedly *vergine* - less than 4 per cent acidity and made by mechanical means - and still less extra virgin; the rest was instead refined.⁵¹ Olive oil was still hard to find outside the Mediterranean, save among diasporic communities who consumed imported olive oil, much of it Italian. Whether in Italy or abroad, extra virgin olive oil was still a rare product.

The introduction in 1960 of this new category, extra virgin, came at a propitious moment for several reasons. Technological innovations introduced starting in the early '60s revolutionized oil production, replacing traditional crushers and presses with a mechanized continuous cycle process that increased productivity by a factor of 10 or 20, reduced oxidation, and indeed made it possible to increase the overall proportion of virgin and extra virgin oils. This accelerated production process along with increased global wealth and more rapid transportation all combined to create the phenomenon that is present-day EVOO.

Olive oil also achieved extra virginity just as American physiologist Ancel Keys was carrying out his Seven Countries study (1958-64). That study lay the basis for the so-called "Mediterranean Diet," and while Keys' research was flawed in various ways, the Mediterranean

Diet - difficult as it has been to define - was a triumph, and all agree that olive oil is an essential ingredient, perhaps the most essential of all. Enthusiasm for an olive oil-based cuisine has indeed been such that UNESCO, while declining to identify any of the specific foods it might include, added the Mediterranean Diet to its *Representative List of the Intangible Cultural Heritage of Humanity* in 2013.⁵²

Conclusion

Over two centuries earlier, in the 1790s, Giovanni Presta estimated that 80 per cent of olive oil in the Kingdom of Naples served industrial purposes, while the remaining 20 per cent was for domestic consumption; only one per cent was best-quality *olio fino*. In 1960 a similar proportion of Italian oil, 20 percent, met the new virgin standards. At that later date, olive oil was still hard to find in Britain and little appreciated, for example, in northern Italy (except by a growing segment of migrants from the south). In the decades since, olive oil, and specifically EVOO, has conquered Milan, Britain and the world. That history includes European legislation; oil consortia, test panels, and competitions and prizes; the planting of olive groves in far-flung parts of the globe; fraud; television chefs; and the seemingly never-ending struggle of quality producers to get consumers to distinguish between high quality oil and the sometimes dubious product frequently found on supermarket shelves at impossibly low prices. Today indeed all oil would seem to be extra virgin.

The mobility of olive oil then, as of much else, has increased dramatically since 1960, with regard to speed of production and transport, geographic scope, and cultural penetration: there is, for example, a growing market for olive oil, and even olive cultivation, in China.⁵³ That said, olive oil was far from immobile prior to that date, and as we have seen, although production was for millennia restricted to the Mediterranean basin, oil itself travelled far and wide, as food

and fuel in the producing regions but also as an industrial product throughout Europe, playing indeed a key role in the Industrial Revolution. It also followed population movements, as a food, across the Atlantic and to the Antipodes, most notably in the late nineteenth and early twentieth centuries. That latter century also saw the gradual conquest of non-Mediterranean palates. By mid-century Elizabeth David was promoting olive-oil cookery in Britain, paving the way for increased imports of good-quality food oil to places where Gallipoli oil had once supplied thriving wooleries. By the early twenty-first century, instead, one might take as an index of olive oil's mobility the fact that "Everyday EVOO," endorsed by US television celebrity Rachael Ray (and made by Italian producer Colavita), can be purchased on-line from Walmart, the world's largest retailer. It is a safe bet that few consumers of EVOO today are aware that once upon a time most olive oil was cloth oil.

_

¹ It is telling that the historical work seemingly most cited in the recent mobilities paradigm literature is Fernand Braudel's study of the Mediterranean in the Age of Philip II, first published in 1949! See e.g. Mimi Sheller and John Urry, "The new mobilities paradigm," *Environment and Planning A* 38, no. 2: 209.

² B.R. Mitchell, "Population and Vital Statistics," in *International Historical Statistics Europe 1750–1988* (London: Palgrave Macmillan, 1992), 72-3.

³ Piero Bevilacqua, "Il paesaggio degli alberi nel mezzogiorno d'Italia e in Sicilia (fra XVIII e XX secolo)," *Annali dell'Istituto 'Alcide Cervi*' 10 (1988): 277. Even today, the Italian *mezzogiorno* accounts for about 85% of Italian national production; Italian regional figures can be found here: https://www.frantoionline.it/uliveti-e-olio/produzione-olio-di-oliva-nelle-regioni-italiane.html.

⁴ Vincenzo Ricchioni, "L'olivicultura meridionale e l'opera di Pietro Ravanas," *Japigia* (1938): 70; Culloch offers that in 1830 of the 2.8m gallons of oil imported by Britain, 2m (70 per cent) came from Italy. There is no reason to imagine that the percentage was any smaller in the previous century; indeed it may have been larger. John Ramsey Culloch, *A Dictionary, Practical, Theoretical, and Historical, of Commerce and Commercial Navigation*, 2 vols. (Philadelphia: A. Hart, 1852), 253.

⁵ This decree is oft repeated in the existing literature on olive oil history but never so far in my reading with an explicit citation leading to the decree itself. See e.g. Ludovico Bianchini, *Storia delle finanze del Regno di Napoli*, 3rd ed. (Naples: Stamperia Reale, 1859), 367 (also cited in Ricchioni, "L'olivicultura," 77).

⁶ Bevilacqua, "Il paesaggio," 279-85.

⁷ Encyclopaedia Britannica, 2nd ed. (Edinburgh: Balfour and co., 1778-83) vol. 3, 2021-2.

⁸ Encyclopædia Britannica 11th ed. (Cambridge: Cambridge University Press, 1910-11), Vol. 28, 810.

⁹ Domenico Grimaldi, *Uliveti, olio ed economia nella storia della Calabria*, ed. Francesco Tigani Sava (Catanzaro: Millenaria, 2006 [1773]), 34; Grimaldi published two important works on olive cultivation and oil production. The one cited here in 1773 and then another ten years later: Domenico Grimaldi, *Memoria sulla economia olearia antica, e scavamenti di Stabia* (Cosenza: Pellegrini, 2000 [1783]). Worth noting, he makes no reference in this passage to the export of lamp oil and indeed lighting in northern Europe was fueled primarily with animal fats and

eventually coal derivatives. DiLaura, David. "A Brief History of Lighting," *Optics and Photonics News* (Sept. 2008), 22-28.

- ¹⁰ David Landes, in his classic work on the Industrial Revolution, describes the importance of wool in eighteenth-century Britain as an initial phase in British economic expansion and industrialization. During that century wool production far outstripped cotton and in the period 1740-70, just when Neapolitan oil cultivation was expanding, grew at a rate of 13 to 14 per cent per decade. David Landes, *The Unbound Prometheus* (Cambridge: Cambridge University Press, 2003), 45.
- ¹¹ There are two fine works on olive oil production and trade in the eighteenth-century Kingdom of Naples, much relied upon in this chapter: Patrick Chorley, *Oil, Silk and Enlightenment, Economic Problems in XVIIIth Century Naples* (Naples: Istituto Italiano per gli Studi Storici in Napoli, 1965) and Aldo Montaudo, *L'olio nel Regno di Napoli nel XVIII secolo. Commercio, Annona e Arrendamenti 9*Naples: Edizioni Scientifiche Italiane, 2005).
- ¹² These estimates and that below regarding Gallipoli are based on Grimaldi, *Memoria*, 34 (who suggests a much larger figure for exports); Chorley, *Oil*, *Silk*, 21-2, 60; and Montaudo, *L'olio nel Regno*, 164-71. The figures in those sources generally cite the traditional oil units of *salme* and *staia*. Conversion figures can be found in Jan Gyllenbok, *Encyclopaedia of Historical Metrology, Weights, and Measures* (Cham: Birkhäuser, 2018), v. 3, 1788. The specific gravity of olive oil is about 0.9 so 1 l. = 0.9 kg, though sources, even official statistical ones, tend to use units of mass and volume interchangeably.
- ¹³ Presta, *Degli ulivi*, 453; Giuseppe Maria Galanti, *Nuova Descrizione Geografica e Politica delle Sicilie* (Naples: Gabinetto Letterario, 1789), vol. 3, 218.
- ¹⁴ The Library of Entertaining Knowledge, *Vegetable Substances: Materials of Manufactures* (London: Charles Knight, 1833), 198.
- ¹⁵ Sadly, outbreak of the *Xylella* epidemic starting in 2009 has drastically altered that centuries-old landscape. See, e.g., Carl Ipsen, "*Xylella fastidiosa* and the Olive Oil Crisis in Puglia," *Gastronomica*, 20 (summer 2020), 55-66.
- ¹⁶ Bartolomeo Ravenna, *Memorie istoriche della città di Gallipoli* (Naples: Miranda, 1836), 105, 114-15; Montaudo, *L'olio nel Regno*, 160-82; Presta, *Degli ulivi*, 366, 369, 412. Presta claims that Salento oil made with ogliarola olives holds up well for two or three years, while the oil from Aix turns rancid after just one.
- ¹⁷ Grimaldi and Chorley give consumption figures for the city of Naples of 5-6m l./year. With a population of about 400,000 estimates for the eighteenth century range from 300 to 438 thousand the capital consumed about 14 l. of oil per person per year. As for the rest of the kingdom, given the above figures and a total population of a bit over 5m people, annual consumption levels would have been about 10 l. per person per year. Grimaldi, *Memoria*, 34 and Chorley, *Oil*, *Silk*, 60.
- ¹⁸ de Bourcard, Francesco, *Usi e costumi di Napoli e contorni* (Naples: Longanesi, 1866), 743-7.
- ¹⁹ Giovanni Presta, *Degli ulivi*, *delle ulive e della maniera di cavar l'olio* (Lecce: Tipografia editrice salentina, 1871 [1794]).
- ²⁰ Grimaldi, *Uliveti*, 65-127; Presta, *Degli ulivi*, 323-72.
- ²¹ Presta, *Degli ulivi*, 239, 426, 430.
- ²² Montaudo, L'olio del Regno, 290.
- ²³ Presta, *Degli ulivi*, 330-32; for more on the Salentine *frantoi ipogei*, see Lucia Milizia Fasano, *Il trappeto sotterraneo in Terra d'Otranto* (Manduria: Cappone, 1991) and Antonio Monte, *Frantoi ipogei del Salento* (Lecce: Edizioni del Grifo, 1995).
- ²⁴ Chorley, *Oil, Silk*, 60-82; Aurelio Lepre, "Una crisi olearia verso la fine del settecento," in idem, *Contadini, borghesi ed operai nel tramonto del feudalismo napoletano* (Milan: Feltrinelli, 1963), 241-68.
- ²⁵ Domenico Demarco, ed., *La "statistica" del Regno di Napoli nel 1811*, 4 vols. (Rome: Accademia Nazionale dei Lincei, 1988); subsequent references in the text refer to volume and page nos.
- ²⁶ See, e.g., Hasia R. Diner, *Hungering for America: Italian, Irish, and Jewish Foodways in the Age of Migration* (Cambridge: Harvard University Press, 2003), 32-3.
- ²⁷ Vegetable Substances, 194-204. This work is also cited in Culloch, A Dictionary, vol. 2, 254-5 and so indirectly in Ricchioni "L'olivicultura," 70, 77.
- ²⁸ Vegetable Substances, 202-3.
- ²⁹ Vegetable Substances, 200-1.
- ³⁰ L.G. Connor, "A Brief History of the Sheep Industry in the United States," *Agricultural History Society Papers* 1 (1921), 89-197.
- ³¹ Vegetable Substances, 202.
- ³² Culloch, A Dictionary, 253.

³³ Montaudo, L'olio del Regno, 24; Angelantonio Spagnoletti, Storia del Regno delle Due Sicilie (Bologna: Il Mulino, 1997), 259-61; the claim regarding Bari's level of production comes from Spagnoletti who cites a figure of 300,000 cantaia. Cantaia would seem to be an alternate spelling for cantari (=89 kg), his figure then comes to about 29m kg (32m l), a bit low compared to our eighteenth-century calculation and to post-Unification statistics cited below. On the other hand, Bari may well have been producing half of the kingdom's olio fino.

³⁴ Stefano Jacini, *I risultati della inchiesta agraria* (Rome: A. Sommaruga, 1885), XII, 104-6.

- ³⁵ Alessandro Bizzarri, L'olio d'oliva: Sulla sua estrazione, chiarificazione e condizionatura per l'esportazione, 3rd ed (Florence: Sborgi, 1879), 5-14.
- ³⁶ Bizzarri, *L'olio*. 22-29.
- ³⁷ Jacini, I risultati, XI, 240; Bizzarri, L'olio, 39; Corriere della Sera, 28 October 1881, 2; Antonio Aloi, L'olivo e l'olio, 4th ed. (Milan: Hoepli, 1898), 329.
- ³⁸ Legge 3 agosto 1890, n. 7045; Legge 5 aprile 1908, n. 136; Legge 15 ottobre 1925, n. 203.
- ³⁹ See, e.g. Diner, *Hungering*, 48-83.
- ⁴⁰ Luchino Franciosa, L'Olivo nell'economia italiana, parte prima (Rome: Failli, 1940), 73-6, 82-3. The regional percentages are an average calculated for the years 1920-37. ⁴¹ *Corriere della Sera* 3 January 1929, 6.
- ⁴² Regio Decreto 1 luglio 1926, n. 1361
- ⁴³ Legge 30 dicembre 1929, n. 2316.
- ⁴⁴ Corriere della Sera 6 July 1935, 2. This is the earliest use I have so far encountered of the term extra virgin.
- ⁴⁵ Legge 27 settembre 1936, n. 1986.
- ⁴⁶ On Fascist food policy, see Carol Holstosky, Garlic and Oil: Politics and Food in Italy (Oxford: Berg, 2004), 63-
- ⁴⁷ Corriere della Sera 14 August 1951, 4; 16 January 1960, 3; 19 January 1960, 5.
- ⁴⁸ Corriere della Sera 7 October 1960, 9; 11 October 1960, 11.
- ⁴⁹ Other categories in the law included: *olio sopraffino vergine di oliva* (<1.5%), *olio fino vergine di oliva* (<2.5%), and olio vergine di oliva (<4%). For analysis of the 1960 law (and others), see Mario Pacelli, "C'era una volta," in Mario Pacelli and Giampaolo Sodano, *Il valore dell'olio*, vol. 1. (Rome: Associazione Italiana Frantoiani Oleari, 2015), 59-115.
- ⁵⁰ Rolando Balducci reports Italian consumption of 5kg of olive oil per person per year as compared to 2kg of butter. Corriere della Sera 30 July 1958, p.4.
- ⁵¹ Corriere della Sera 19 January 1960, 5.
- ⁵² On the problems with Keys' work and the debates over the Mediterranean Diet, see Nina Teicholz, *The Big Fat* Surprise. Why Butter, Meat & Cheese Belong in a Healthy Diet (New York: Simon & Schuster, 2014), 19-46, 174-224. For the official UNESCO statement, see https://ich.unesco.org/en/RL/mediterranean-diet-00884.
- 53 See, e.g., https://daxueconsulting.com/the-olive-oil-industry-inchina/#:~:text=China%20produced%20only%205.000%20tons,%2FConsumption%2FImports%20Reports).&text=T he%20domestic%20production%20of%20olive,oil%20consumption%20in%202016%2D2017.