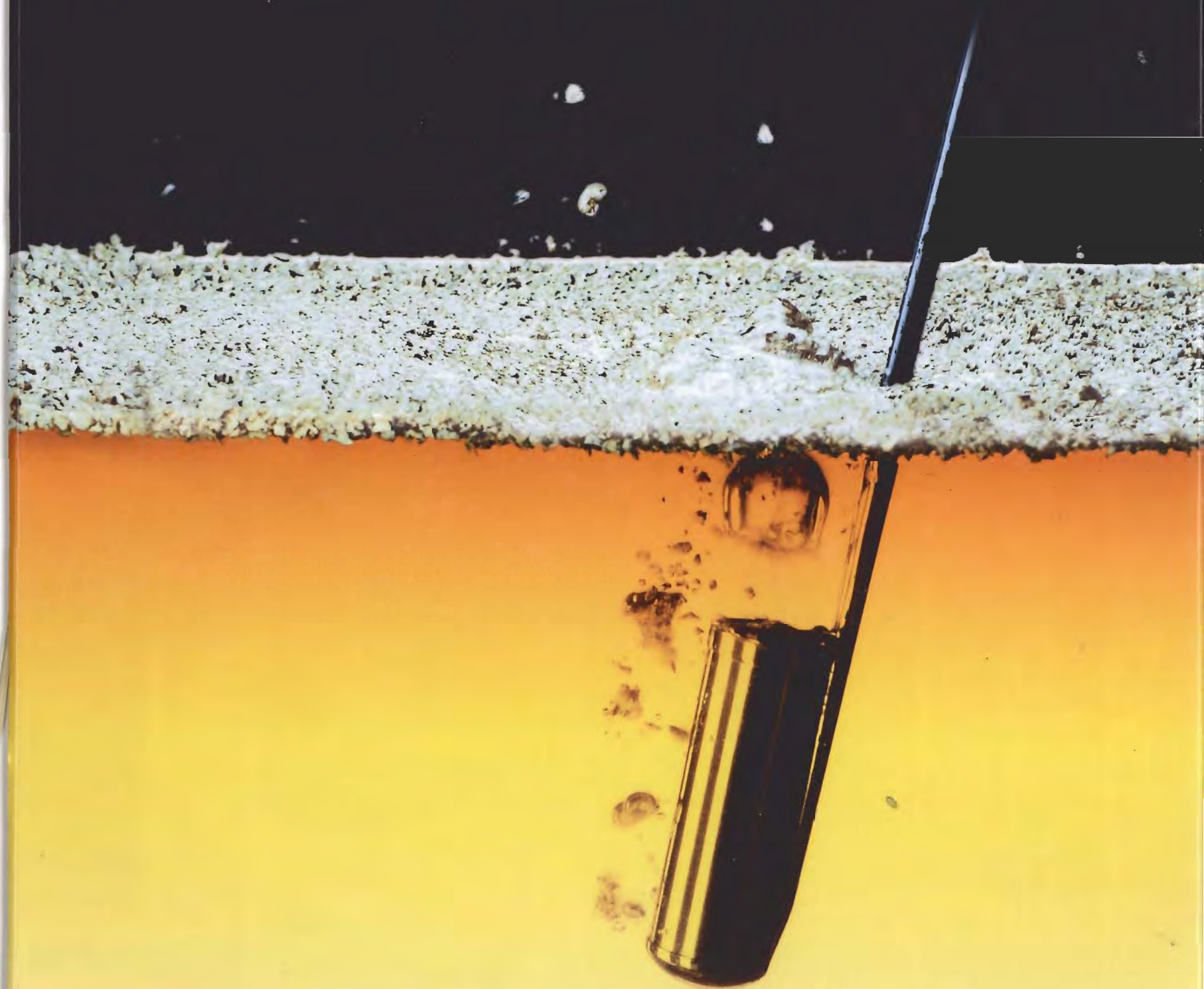


THE BIG BOOK OF
SHERRY WINES





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PREFACE



ISAÍAS PÉREZ SALDAÑA
Minister for Agriculture and Fisheries

The wines from Jerez are among the most emblematic of all Andalusia's food and wine products. The 'Jerez' brand, along with 'Sherry', its equivalent in the English-speaking world, represent a keystone not only of our agricultural heritage, but also of our agri-food industry and our culture as a whole.

This book disentangles the many facets that make the wines of Jerez so unique and inimitable, and approaches them from various angles: their geographical setting – a naturally privileged part of lower Andalusia; their historical roots, so deep as to be entwined

with those of our region itself; their authentic wine-making method, in which natural factors and traditional processes combine to create a wide range of different types of wine; and, of course, how to enjoy them at their best. Enjoyment, so much a part of the Andalusian approach to life, is intrinsic to our most deep-seated traditions, but encompasses innovation and experimentation, too. This is, after all, a sector of our agroindustry that of necessity has to take a modern approach to the future, respecting the great traditional heritage and cultural baggage that the name Jerez evokes, but also engaging

with new forms of expression and channels of communication in tune with the times and the demands of today's consumers.

Today, more than ever, the wines of Jerez are a symbol of Andalusia's capacity for making top quality products, and a symbol, too, of our agroindustry's international reach. This book pays homage to the many generations of men and women who have contributed their efforts and skills, in both vineyard and winery, to make Sherry what it is – a brand that represents Andalusian quality all over the world.

THE BIG BOOK OF SHERRY WINES



A

INTRODUCTION

JORGE PASCUAL HERNÁNDEZ

great deal has been written about sherry, from very varied viewpoints and often going deeply into very specific aspects of our wines: vine-growing, wine-making, history, vocabulary and so on... These many and diverse 'takes' demonstrate that, because of their complexity, richness and depth, each aspect of our wines merits reams in its own right. Yet we have to hark back to the 1970s, to books such as José de las Cuevas' *Vida y Milagros del Vino de Jerez* ('Life and Miracles of Sherry'), to find a portmanteau work that encompasses in one volume the many facets of a wine that could indeed be said to have a thousand faces. Strangely enough, it has sometimes been foreign writers – Julian Jeffs with his book *Sherry*, for example – who have attempted to present this overall view, surely a reflection of how international our wines (exported to more than fifty countries all over the globe) are. Other classic books, such as *Jerez-Xérès-Sherish* by Manuel González Gordon,

President of the Consejo Regulador for the 'Jerez-Xérès-Sherry', 'Manzanilla-Sanlúcar de Barrameda' and 'Vinagre de Jerez' Denominations of Origin.

take us back to around 1935, the period when the Consejo Regulador was founded. Since then, sherry has been modernised and cleverly situated on the cutting edge in terms of innovation and image while remaining firmly grounded in tradition.

As we all know, it can often be difficult to see the wood for the trees. Without wishing to detract in the slightest from the great importance and value of many specialised publications about specific aspects of sherry that have contributed to building up a sound technical, scientific and cultural heritage for our Denominations of Origin, it has to be said that readers have come up against something of a bibliographic gap on reaching for a present-day book that throws light on the wonderful, complex world of sherry as a whole.

That is precisely what this book sets out to do. To throw wide the doors and welcome in people who are not sherry specialists. To be a source of information that provides you, its readers, with a base on which to build a knowledge and love of sherry, as I have no doubt you will. This book looks at each and every facet of the unique gem made up of wines from the Jerez region; few others wines in the world are worthy of such varied angles of approach from different interests and disciplines: economic, social, historical, anthropological, oenological, gastronomic and even linguistic. At a time when specialist expertise tends to be so highly specific in its focus, it comes as a breath of fresh air to be able to find history alongside science, and gastronomy alongside grape-growing, between the same covers. And particularly so because sherry itself is just like that: a mingling of tradition and modernity, craft skills and the laboratory, scientific research and art.

The wines of the Marco de Jerez are, above all, an expression of culture or, as one of the writers of this book puts it, 'culture-makers'. The cultural and historical dimension of these wines, whose origins date back to the arrival of the Phoenicians on the Iberian Peninsula three thousand years ago, accounts for a significant part of this book. Its history, starting from the archaeological clue provided by Doña Blanca's Phoenician wine press (8th century BC) and extending up to the present day, is approachably explored. En route, we see Jerez 'discovering' America, circumnavigating the globe on board Magellan's ships, and being used as a remedy against the Plague in the Middle Ages; we learn about how the wine industry took shape in the eighteenth and nineteenth centuries, and how the sherry we know and drink today evolved; and about the setting up of Spain's first Denomination of Origin – Jerez-Xérès-Sherry – to provide consumers with the ultimate guarantee and to defend the sector against fraudulent use of names that should refer to our wines alone.

Sherry has been a protagonist and moving force in our history, and as such has shaped a social and cultural identity over the centuries. We visit the places that make up the area known as the Marco de Jerez, meet its people and learn about their customs. We explore the bodegas that, over hundreds of years, have developed a style of winery architecture unique in the world to cater for these very special wines: enormous, splendid and beautiful buildings in which architecture is moulded to the purposes of wine-making, often by world-famous figures, Eiffel among them. And sherry has also been a culture-maker in the anthropological area: occupations, activities, names, a special understanding of wine and its processes that finds expression in a vocabulary all its own, curiously akin to seafaring language.

Culture in the true sense of the word also embraces science. The book begins by taking a bird's eye view of the natural environment from which these wines derive: the inimitable landscape that lies between the rivers Guadalete and Guadalquivir, partially covered by water thousands of years ago rather like a surfacing Atlantis, whose soil, geology and climate have provided the singular conditions for generating a wine that is unique in the world.

The scientific part of this book necessarily explains the technical complexities intrinsic to sherry, and does so in an accessible way. It describes viticulture, pruning techniques, grape and vine characteristics, harvesting... tracing the whole process step by step from vineyard to bottle. It takes us beyond the scenes and reveals the secrets behind the magic of sherry, such as its special ageing system based on the inspiring principle of enriching young wines with characteristics obtained from the oldest soleras, and rejuvenating old soleras with young wines from the criaderas.

The various types of wine produced in the Jerez region are presented one by one, from palest to darkest, driest to sweetest, demonstrating the fact that there is a sherry for every occasion, every taste and every drinker. Denomination of Origin Manzanilla-Sanlúcar de Barrameda, also covered by this Consejo, gets a chapter of its own, as do our most outstanding wines: Rare Old Sherries, the oldest wines in the world that you can drink, and perhaps the quintessence of our Denominations of Origin's prestige; and Wines of Indicated Age, a new venture in the quest for the added value that top-flight ranges generate.

Like all wines, the wines of the Jerez region are made to be enjoyed. This book does not overlook their sybaritic aspects, nor indeed the practical ones: how to drink sherry, how to store it ... and how drinking it wisely and in moderation makes life that bit pleasanter. Sherry and gastronomy go hand in hand: we see how it can accompany an amazing variety of dishes from aperitif to dessert, not forgetting the main courses en route, and also its versatility and potential as a quality ingredient in cooking that can transform any dish into something special.

All in all, the singular, inimitable character of sherry is revealed from many different angles. Few other wines can match sherry for truly unique qualities: so original and inimitable is it that it has conquered markets and consumers of many different sorts all over the world.

We at the Consejo Regulador have given this book our backing, with the invaluable cooperation of the Andalusian Regional Government, because of our conviction that the whole culture that attaches to Jerez's wines deserves to be better known. Promotion is one of this Consejo Regulador's essential functions, and we recognise that showing the vast, rich universe that goes into every glass of sherry is one of our trump cards in fulfilling that function. Sherry is so much more than just wine: it is the inimitable product of a very specific geographical, natural and social triangle, of a history that stretches back many centuries, and of a tradition that has managed to strike a well-judged balance with embracing progress and rising to new challenges. That is the way that culture works, and it is a story well worth telling.



The Big Book of Sherry Wines would not have been possible but for the commitment and hard work of eighteen people, to whom I would like to take this opportunity to extend my warmest thanks. The eighteen authors of this book are all maestros, some of the top specialists in each of the cultural, technical, historical, oenological and other fields covered herein. The Consejo Regulador has capitalised on the opportunity to bring together a top team, an all star cast of sherry and manzanilla experts who share not only accumulated knowledge and experience but also a deep love for this wine – a strength of feeling that emanates from these pages and which I hope that all our readers will find contagious. Love is what it is all about, after all, and we love only that which we know well.

This book is for all those who make the Marco de Jerez's wine-making miracle happen with their day-to-day effort and dedication. All of them – growers, cooperatives, *bodega* owners and the rest – have in these pages a well-earned tribute to their daily work and to their efforts in providing consumers with one of the best wines in the world whilst safeguarding the singular characteristics that make it what it is. Cultivating the vines, harvesting, pressing, fermenting, ageing, bottling, marketing and selling are all stretches along the same road. Those who travel it believe that sherry, perceived for decades as Spain's quintessential wine, is destined to go on playing a significant role in the world's wine scene and acquiring new generations of devotees in the process.

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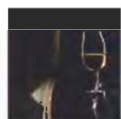
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LAND, NATURE AND SCENARY IN THE SHERRY DISTRICT

JOSÉ M^a FERNÁNDEZ-PALACIOS CARMONA



According to descriptions from classical Antiquity culled from Phoenician and Greek sources, beyond the Pillars of Hercules (the promontories flanking the entrance to the Strait of Gibraltar) the Mediterranean opened up onto the vastness of the Atlantic, on whose edge existed a land of fertile soils and benign climate, with a wealth of livestock and, above all, metals. At the heart of this land lay the Guadalquivir Valley, site of the legendary kingdom of Tartessos – mentioned in the Old Testament (Book of Kings 10:22) as Tharshish – with which King Solomon engaged in trade some three thousand years ago.

In the second half of the fourth century AD, Roman writer and geographer Rufus Festus Avienus wrote his *Ora Maritima* (Sea Coasts), a description in verse of the coastline as far as Marseille, based on the coasting records of a Greek vessel compiled in the sixth century BC. The poem is the oldest surviving source describing the area around the Guadalquivir estuary and the Jerez region. As he traces the coast from the west, heading towards Gibraltar, Avienus mentions various geographical features there: a great river with several tributaries, the Tartessos; a wide, enclosed bay preceding the river's final connection with the sea, Lake Ligustinus; an island girded by the Tartessos as it flowed out beyond the lake, the Island of Cartare; the city of Gadir (Cádiz); and Mount Cassius, or Mount Argentarius, whose peaks glowed in the rays of the sun. These features describe an area delimited in broad terms by the

sea, the estuary of the Guadalquivir and its various tributaries and, inland, a chain of mountains providing the backdrop to gently undulating terrain between coast, river and mountains. This description matches the countryside of western Cádiz and its north-western coast.

Lake Ligustinus was the predecessor of the Guadalquivir's extensive wetlands: at that period, before they silted up and were partially filled in by the dunes of the Doñana Reserve, they were still covered by sea water and looked much then as the Gulf of Cádiz does today. Professor J. Gavala, an expert on the historical geography of this area, is convinced that the Island of Cartare corresponds to the area of land that lies between the mouths of the rivers Guadalquivir and Guadalete, the Atlantic coastline from Sanlúcar de Barrameda to El Puerto de Santa María, extending inland to a less precisely defined point somewhere around Seville. Although the rivers were never actually connected back in history, their proximity to each other, in combination with their complex estuarine systems and their elaborate network of channels and drains, makes the confusion quite plausible, particularly at a period when detailed territorial knowledge was more difficult to obtain. Gavala also identifies Mount Cassius or Argentius with the Grazalema mountains, the only range visible from this point of the coast. At 1,654 metres high, the chalky bulk of El Torreón stands out white against the distant horizon, and serves as a landmark for sailors. Indeed, it was traditionally the first sighting of Spain for galleons returning from the Americas.

The vineyards, usually elevated on gentle slopes, stand out from the expanse of herbaceous crops and contribute contrasting texture to the landscape.





This, then, is the territorial background to the region. Its fertile soils and benevolent climate; the presence of springs and aquifers relatively close to the surface, and therefore easily tappable; its proximity to mining centres north of the Guadalquivir in the Sierra Morena; the ease of land, river and sea communications, all combined from very early on to make this an inhabited and coveted area. Successive cultures settled here, exploiting its many resources and carrying on significant trading activity that continues to this day. Situated as it is close to the Pillars of Hercules, where Africa and Europe almost touch, this was a frontier zone – a geographical junction between the Mediterranean Sea and the Atlantic Ocean, a natural corridor providing connection with the inland areas of the Guadalquivir Valley. It was an area where the Mediterranean triad of cereal, oil and wine flourished, and livestock too, as attested to by the myth of King Gerion's famous bulls that grazed on meadows and fields along the banks of its great river – where bulls can still be seen today.

THE LIFE OF THE LAND: A BIRD'S EYE VIEW

The false-colour image taken from the LANDSAT satellite 705 kilometres up shows the main macrostructural elements that make up this area of the Lower Guadalquivir: its coastal face giving onto the Atlantic Ocean; the estuarine complexes, with associated wetlands and dune systems, of the rivers Guadalquivir (1), in the north, and Guadalete (2), in the south; away from the coast, gently undulating farm-land (3),



extending into the mountain systems further inland (4).

At its mouth, the Guadalquivir forms a tidal estuary, the effects of which extend as far upriver as the

city of Seville and beyond, some 90 kilometres away from the sea. Along its banks lie wetlands, very recent sedimentary land resulting from the in-filling of Antiquity's Lake Ligustinus, where such processes are

Mosaic-like 'false colour' image of the Marco de Jerez area, taken from the LANDSAT satellite 750 kilometres up in summer 2003. (Source: Dept. of the Environment, Andalusian Regional Government).

still ongoing. To the north-west lie the conserved wetlands of Doñana (5), criss-crossed by the original network of drainage channels and by shallow lagoon-like off-shoots (known as *lucios*), which are virtually dry at low tide. Further inland, marshland has been transformed, either for the purposes of aquiculture (6), or for irrigated crops, mainly rice (7) and cotton (8).

West of the estuary, between the wetlands and the sea, lies the great system of coastal dunes of the Doñana Reserve (9), whose growth south-south-eastwards in earlier times caused the mouth of the Guadalquivir to shift eastwards, thereby gradually isolating Lake Ligustinus and accelerating its silting up. The system of pale-coloured dunes of loose sand which stretch from the beach to the wetlands is differentiated from the stabilised dunes colonised by vegetation.

Significant in the Cádiz stretch of the Guadalquivir are salt-works (10) and the La Algaída 'counter-system' of dunes (11) built up by the tidal river's coastal dynamic. It is populated by pines at its far end and by irrigated sand-grown crops at its base (La Colonia de La Algaída).

On the coastal fringe between Sanlúcar and the Bay of Cádiz, reddish or light coloured sandy materials (deposited from the Plioquaternary period, less than two million years old, up to the present day) predominate. Beneath this substratum lie shallow aquifers which have supported fruit and vegetable growing since ancient times and, more recently, green-houses dedicated to floriculture. These activities explain why the land is divided up into a mosaic of small holdings.

Away from the shore lies the *campiña* (3), with gently undulating land and chalky-clayey soil, whose trees have been ousted by agricultural activity. Outcrops of chalky loam, known as *albarizas* (12), stand out because of their whitish colour: the vineyards are mostly concentrated in these areas. Also noticeable are the dark soil areas, known as *tierras negras* (13), occupying flat and lower lying areas, of which large plots are given over to unirrigated cultivation. Irrigated areas (14) situated mainly on fluvial meadows and terraces alongside the Guadalete transformed by human activity in the course of the twentieth century are also discernible. Salt-water lagoons, at Medina (15) and El Puerto de Santa María (16) for example, occur in endorreic depressions with no drainage into the sea. These serve as wet, stepparic habitats: there are very few of them and they are used by exclusive species, so they are of special interest. Further inland, the countryside gradually gains height and slope, giving way to mountain areas where afforestation clearly dominates. The lower slopes begin at Gibalbín (17), and the Grazalema chain – site of Avienus' Mount Argentius and rim of the Guadalete basin – is the region's principal mountain range.

The Bay of Cádiz, in conjunction with the mouth of the River Guadalete, constitutes a system of various coastal estuarine formations similar to those of the Guadalquivir, albeit with less advanced sedimentary evolution and therefore more subject to tidal effects. It is made up of a zone known as the *saco exterior* (18), which is permanently flooded; the *saco interior* (19) zone, occupied by wetlands and salt-works; and an area

of land that was formerly part of the Bay (20), now very continentalised and anthropised. These three sectors represent three different evolutionary stages in the historical process of the Bay's filling up. The area is criss-crossed by the sizable waterways of San Pedro River and Sancti Petri and by lesser channels and estuaries which, along with the Guadalete, make up the sea and river water circulation network. Between the Bay and the open sea lie the islands of Cádiz (21) and León (San Fernando, 22), nowadays linked by a scimitar-shaped sandy spit which extends southwards into the Punta del Boquerón (23). Another major geomorphologic structure is the barrier island type of sandy deposits that makes up the beach at Valdelagrana (24).

This area's population pattern has to a large degree been determined by environmental factors, and today's main centres of population have been so since the Neolithic period. Because of the appeal of the coastal fringe and the availability of water resources, this strip has been liberally endowed with settlements since Antiquity. Their location reflects the earlier configuration of the coastline, so that towns such Trebujena, Lebrija and Las Cabezas, now situated beside wetlands many kilometres away from the sea, used to stand on the banks of navigable estuaries. The biggest concentration of settlements is around the Bay of Cádiz, which provides both shelter and easy access to the mainland (El Puerto, Cádiz, San Fernando, Chiclana), with another around Sanlúcar at the mouth of the Guadalquivir. On the most exposed part of the coast, the centres of population are at points sheltered from the ravages of the sea (Chipiona,



The mouth of the Guadalquivir, with the Doñana Reserve on the far bank, is the natural geographical boundary of Jerez's wine-producing area.



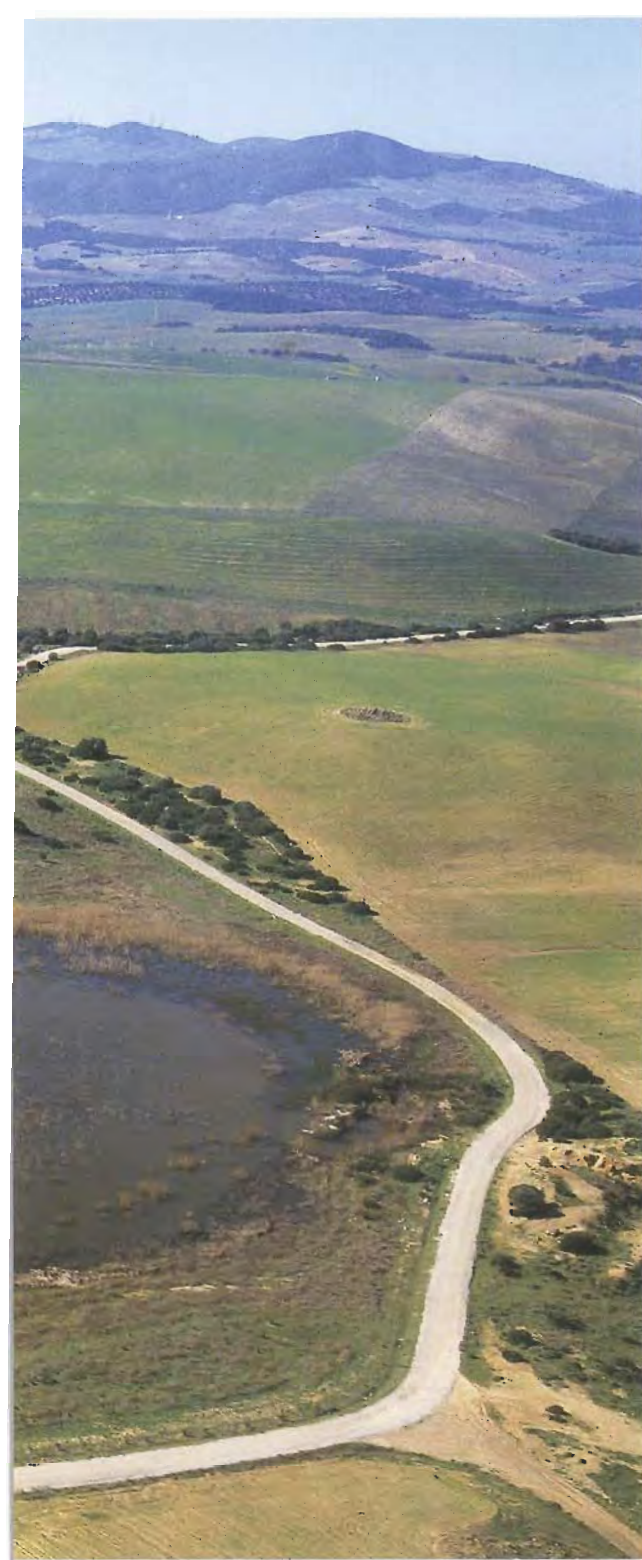
Rota). Population is lower in wetland areas given that these were covered by water in the past, and are prone to flooding even now.

In the *campiña*, population is concentrated in isolated nuclei, with

Jerez the undisputed protagonist. Jerez and its environs are extensive and well-endowed, situated strategically where roads connecting the coast and inland areas meet. An added advantage was its proximity

to the Guadalete, which used to be navigable up as far as El Portal, very close to Jerez.

This historical population pattern is changing. The biggest changes are



to be seen in areas near the coast, where towns are undergoing major transformations and land is being given over to modern 'under plastic' agriculture. In the interior, too, although to a lesser degree, irrigation

has made it possible for formerly insignificant agricultural units to expand, and for new ones to be established

VINEYARDS: NATURE AND LANDSCAPE

Soil which is coarse and substantial, yet loose and not heavy, is good for vines; and though it be very poor on the surface, if it be coarse and substantial beneath, then it is good; for what is beneath nourishes the plant, while what is on top protects it against severe cold and too much heat.

Gabriel Alonso de Herrera.
Treatise on Agriculture.

This area's reputation would no doubt have been very different had it not been for the fruitful interaction between specific climate and soil conditions and clever human intervention. Both environmental factors determine the quality of grapes and, therefore, that of wines made from them. The Mediterranean climate is characterised by mild, wet winters and hot, dry summers, though here proximity to the sea plays a vital role in tempering scorching summers and raising winter temperatures.

The apparently monotonous landscape of the coastal area and *campiña* takes on a different cast when one focuses on its many colours and tones: white *albariza* on the hills, dark *tierras negras* in flat areas and declivities, and many shades of ochre provided by *margas* with gypsum, brown soils in meadows and terraces, red soils on coastal *areniscas*, pale sandy dunes... The area's complex edaphology is certainly interesting in that it reflects aspects of its diverse underlying

geology, its topographical position and local soil and climate conditions. Not all the soils are equally suitable for vine growing, however, and in the area known as the Marco de Jerez, the white loamy *albarizas* are the unchallenged champions.

Writing in the late eighteenth century in his highly respected work entitled *Memoria sobre el Cultivo de la Vid en Sanlúcar de Barrameda y Xerez de la Frontera* (Report on Vine-Growing in Sanlúcar de Barrameda and Jerez de la Frontera), Esteban Boutelou explains:

Albariza soils are reputed to be the most excellent for cultivating vines. They are very fresh, cool, slow (to heat up), absorbent, porous and spongy; they attract moisture and retain it even in the hottest part of summer; they become spongy when it rains, increasing in volume and then being easily worked and managed; they heat up slowly, but in compensation the vine vegetates healthily in them during the scorching summer period, coming robustly into fruit at that time, while in less suitable soils vegetation stops and is interrupted for lack of moisture, and the bunches often dry out and spoil.

It is not easy to think of an equivalent that shares all the virtues of *albariza*. It functions in ways impossible to replicate.

These soils are generally to be found on the hills that rise out of the *campiña*. They form on *margas* – soft rocks composed of a mixture of chalk and clay – which were deposited in a marine environment at the start of the Miocene period and later brought to the surface by the convulsions of

The gentle undulations of the campiña become more marked further from the coast. In the foreground, the Espera lagoons; in the distance, the Sierra de Gíbalbin, first hills in the build-up to the Grazalema range.







the Alpine orogeny. This material is rich in silica derived from remains of the shells of microscopic algae of the diatom group. Erosion, accentuated by farming, removes topsoil and exposes the original *marga*, which is brilliantly white – hence the origin of the name *albariza* (from the Latin *albus* = white).

Most of the area's vineyards are planted in the north-west of the *campiña*, between Jerez and Sanlúcar, an area whose landscape has been radically transformed by human intervention. Despite occupying a smaller area than herbaceous crops, the vineyards stand out in the landscape in a particular way. Two factors explain this: one is that the elevated position of the vineyards in relation to the lower land around them gives them a visual magnetism

that attracts the gaze when we look at the landscape. The other is the contrast provided by their serried ranks of woody plants, in fullest leaf in summer when the other crops have either already been harvested, as in the case of cereal, or have reached full ripeness and are withering, as in the case of sunflowers. The contrast comes not only from the colour and structure of their vegetation, but is also contributed to by the density of plots and the buildings liberally dotted among the vineyards. These are modest workers' huts in most cases, but in others they are houses and wine-presses of considerable dimensions. Almost all cases sport a palm, cypress or other ornamental tree, adding interest and appeal to the landscape in comparison with the rather desolate appearance of the surrounding unirrigated areas.

The original Mediterranean scrubland has long since disappeared and been replaced by crops. Isolated remnants of vegetation indicate that this area used to be covered by bushes of wild olive and mata. Slightly further inland, where the cooling effect of the sea breeze is mitigated, holm oak – a frugal tree, highly resistant to both heat and cold – also grew. This original bushy vegetation, turned into pastureland to greater or lesser degree, can now only be glimpsed in a few places such as in the Sierra de Gíbalbín, where fragments of woodland still survive in tracts of land unsuitable for cultivation.

The *campiña*, with its distant horizons and predominantly herbaceous vegetation, is similar in appearance to the steppes. The similarities extend beyond the mere look of it because, like steppe environments, it also has

Raising fighting bulls is another of the traditional uses for the campiña around Jerez.



locally arid climatic conditions: the 600 litres average annual rainfall is not enough to satisfy potential evapo-transpiratory demand, which can reach twice that. All these factors explain why the *campiña's* fauna is composed of a mixture of characteristic Mediterranean species, such as rabbit, hare and partridge, and a whole range of steppe-land birds. These include stone curlew, calandra lark, short-toed lark, Montagu's harrier ... all species with cryptic – greyish coloured, unobtrusive – plumage, perfectly adapted to these environments' tough conditions. Bustards used to abound here; males can weigh over 14 kilos, and have great difficulty taking wing (their Spanish name, *avutardas*, is cunningly turned into *avetardas*, meaning slow birds). However, these extraordinary, open-country birds, so perfectly captured

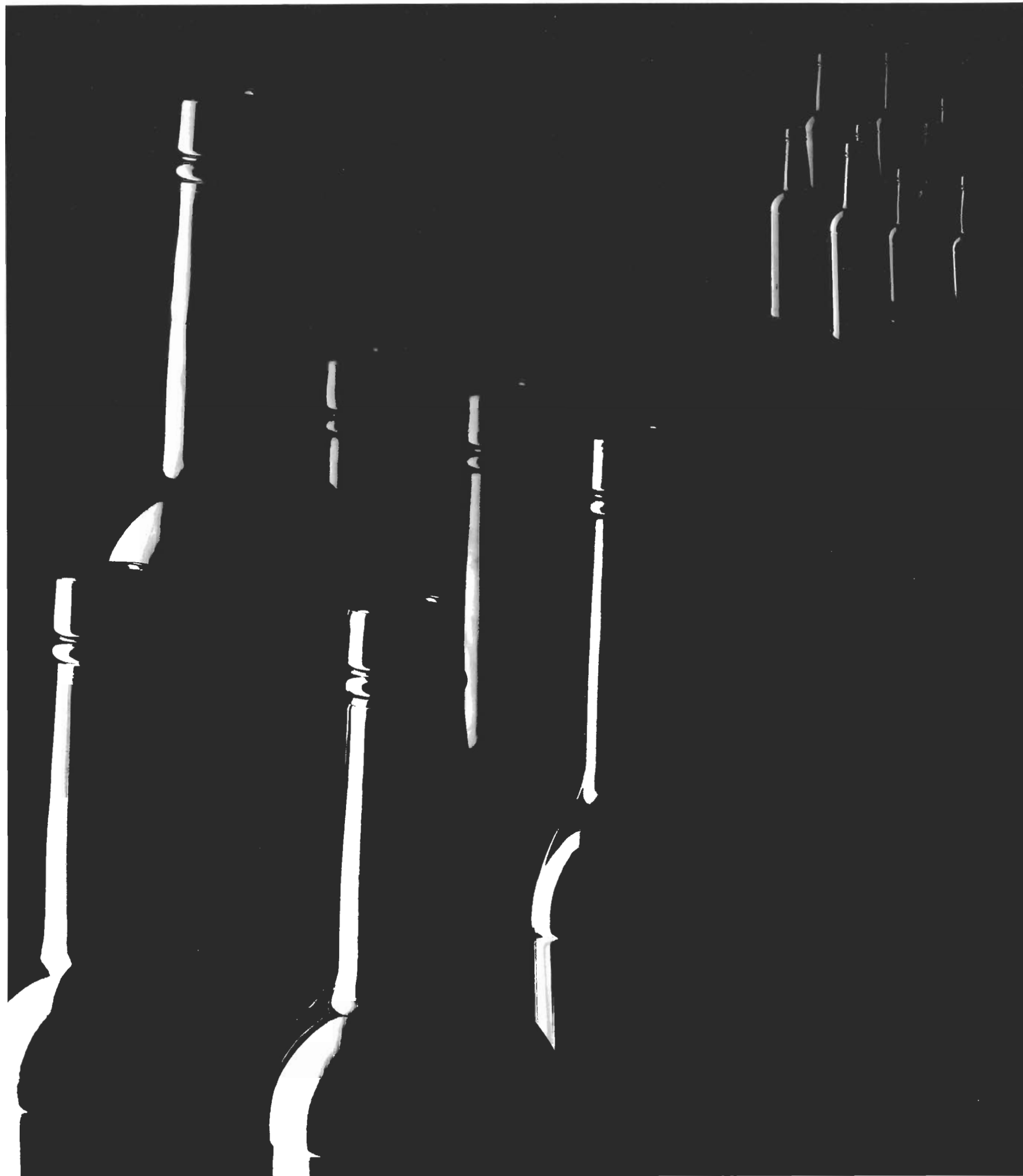
in the pictures of English painter William Hutton Ridell, are only to be seen very occasionally these days.

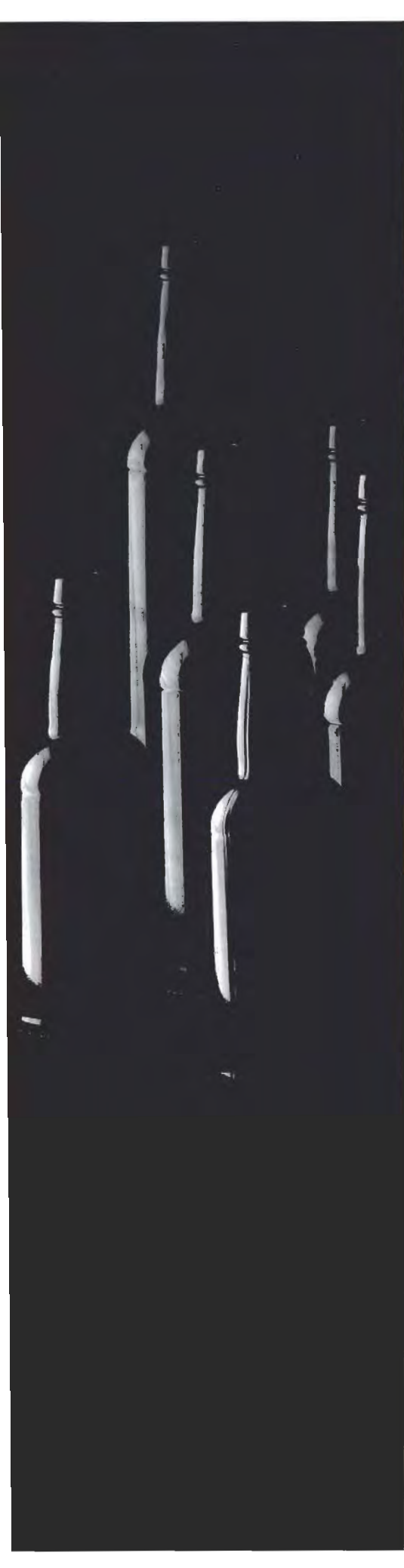
One unusual element of the *campiñas'* natural environment is a small number of endorreic lagoons in declivities in the landscape into which rainwater drains. These are relatively small wetland areas, sometimes a few hectares in area, so shallow that they dry up in years when rainfall is sparse, but which when flooded are veritable wildlife oases. This is particularly true in summertime when, as the neighbouring Doñana marshlands dry up, thousands of duck and coot fly off in all directions in desperate search of standing water. At such times the Terry lagoons in El Puerto de Santa María, immediately bordered by vineyards, and Medina lagoons are completely covered by

birds. These places represent the last breeding-grounds in Europe for two species: the crested coot and the white headed malvasia duck. This latter, an unusual type of duck with a big blue beak, paradoxically shares a name with a grape variety and a wine.

The presence of vines amid a vast expanse of herbaceous crops contributes to the wealth and variety of habitats, and is particularly significant for those species of fauna that require environments with woody vegetation. The vineyards provide the rufous-tailed shrub robin, an increasingly rare summer bird, with one of its main breeding grounds, and the small spectacled warbler, traditionally associated with the marshland plant glaucous glasswort, also takes refuge among the vines.

Dawn over Medina lagoon with the Grazalema mountains in the far distance





Título: Ciudades

THE TOWNS OF THE MARCO DE JEREZ

RAFAEL NAVAS RENEDO

T

he Marco de Jerez is a golden triangle that encompasses three towns, contained between two rivers that have a wine and a history in common. Jerez, El Puerto and Sanlúcar, and their inhabitants, all have marked personalities of their own. They are very different from each other, yet from their very foundation the connections between them have far outweighed any differences that might have kept them apart. The three have developed and evolved hand in hand, tackling progress and problems, so that the bonds formed between their inhabitants extend far beyond those generated by their involvement in making a wine that only this part of the world can produce.

Ceret, Asta, Puerto de Menestheo, Lucerni-Fani... The origins of the towns of the Marco de Jerez are shrouded in myth and legend, to the extent that, even today, the lost city of Atlantis is still sometimes claimed to have been situated off its coast. Myriads of civilisations ranging from the Tartessians to the Phoenicians, Greeks, Carthaginians, Romans, Visigoths, Moors and Christians have left behind them a rich cultural heritage that has shaped the personality and character of its inhabitants. It is hardly surprising, then, that excavations in any of the three towns, even close to the surface, unearth vestiges of this past, whose layers lie in places other than the memory of bygone generations or the work of historians and researchers. The strategic location of this part of the area known as Lower Andalusia,

flanked by two seas and looking out towards the African continent, has also had a bearing on the uninterrupted flow of cultures and, consequently, on the way that these have been absorbed by its inhabitants. It could not have been otherwise. The history of the people of Jerez, El Puerto and Sanlúcar is not only a chronicle of invasions and wars, of civilisations and religions that were superimposed on each other, but also a story of hospitality. Recognising this special distinguishing feature is essential to understanding the character of these three towns given over to producing a wine that, right from the start, has been used to signify celebration and toast friendship, not to mention other religious and therapeutic uses.

The provenance of the surnames of many of the Marco's inhabitants betrays the presence of Portuguese, Italian, French and English forebears who decided to put down roots in this part of the country, importing many of their customs and contributing a rather cosmopolitan air to its towns in the process. Aristocrats who chose this region for their business or leisure activities were often instrumental in involving the triangle in the cultural trends of different eras.

Each of the cultures that held sway in the area (some, like the Moorish, for almost six centuries) left their mark, more conspicuously in some cases than others, but they all provide necessary clues towards understanding the mosaic of approaches to life one encounters within the Marco, characterised by broad-mindedness and a sense of wide horizons, a feeling for world relevance that far exceeds the chauvinistic clichés so often

*"Men who live in a country
that is not their own, but one of
adoption,
tend to display its national
characteristics
more vigorously than the natives
themselves."*

THOMAS MANN.
'Joseph the Provider'
Joseph and His Brothers

*Wine is intrinsic to Jerez's cultural, human,
and even architectural and urban identity.*



attributed to its inhabitants by those unaware of its richly nuanced history.

THE SEA, THE SE

The sea has always mirrored this privileged position. The maritime tradition that still survives today is the product of centuries of influence from civilisations for whom seafaring was the *raison d'être*. Had it not been for this tradition, activities such as trade, which thrived from early times in this fertile, productive and prolific land, would never have developed. Sailing in this region does not necessarily imply taking to the Atlantic or the Mediterranean: the River Guadalquivir, used from ancient times right up to the prosperous era of trade with the New World, also served as a conduit for the powerful influence of the city of Seville over Jerez, El Puerto and Sanlúcar, extending beyond mere mercantile activity and taking root in their traditions and customs.

The same could be said of the River Guadalete (known by the Romans as the "River of Oblivion" and eulogised by El Puerto poet, José Luis Tejada) from La Corta and El Portal as far as its mouth in the Gulf of Cádiz. There, rich fishing grounds once provided work that was for centuries the only means of support for numerous families. They also attracted a new influx of people, fishermen from Alicante and Galicia who came to these coasts in search of fish and, like all the others, became enmeshed in a net of hospitality. The prominent role played by fishing in the economy of these towns is a thing of the past. The size of the fishing fleet in El Puerto and Sanlúcar has

shrunk in parallel with the dwindling of the fishing grounds, with a small part of the fleet, a few dozen boats, being adapted for deep-sea fishing, wood being replaced by polyester and sights being set on the transformation industry and second sales as possible ways forward for a sector in crisis.

Its key position in times of war resulted in its becoming one of the seats of the Order of Santa María de España, and in the Castilian fleet of King Alfonso X, The Wise, being based at El Puerto. This established a permanent long-standing naval tradition there which spread throughout the Bay and helped create employment for centuries. Alfonso's choice also led to the Royal Galleys being anchored off the Marco de Jerez coasts: as we shall see later, this fact played a prominent role in the origins of flamenco singing.

This region's close links with the sea generated not only commercial and industrial activity (exports and shipyards), but also contributed to the festivities that are a constant feature of life there. Churches and events dedicated to the Virgen del Carmen, patron saint of sailors, became an integral part of life in Jerez, El Puerto and Sanlúcar. In the latter two towns, sea-borne processions bearing the figure of the Virgin still take place every 16th July, either from the River Guadalete or from the fishermen's quarter of Bonanza.

BUILDING UP CHARACTER

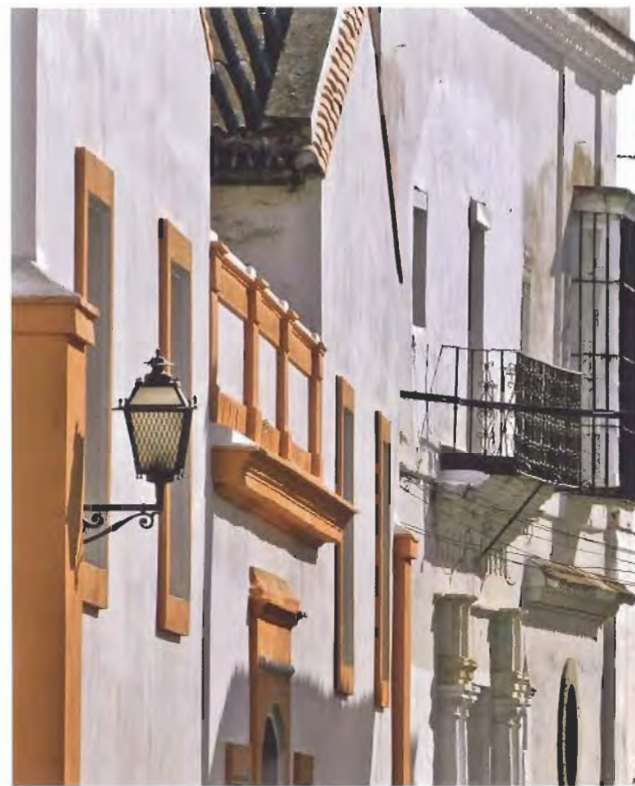
Much has been said and written about the architecture of these towns and

its influence on the character of their people. Architects, historians and city planners have studied the extent to which the layout of the streets and the organisation of buildings and open spaces have marked the personality of the inhabitants of the sherry triangle. This is, perhaps, the aspect in which most differences are discernible between the people of Jerez, El Puerto and Sanlúcar. The distinct frontier character of the former influenced the urban fabric of Jerez's town centre, whose narrow streets wind within walled neighbourhoods. The opposite is true of El Puerto, a city in the making where, after the distribution of land that took place under King Alfonso X, the streets were laid out linearly, creating what later came to be waggishly referred to as 'the six of cards' because of the way its buildings and streets were laid out. This approach to town planning was exported to the Americas.

The houses built by merchants trading with the Indies, few of which survive today, symbolise a golden age and also exemplify a style of architecture yet to be surpassed, both formally and functionally. With their coach houses, towers and verandas, these genuinely fine buildings met all their inhabitants' needs and were the precursors of the *palacios* that, from the eighteenth century onwards, housed the emerging bourgeoisie and exerted considerable influence on the way that the modern town evolved. Many of these houses and *palacios* were abandoned, and converted into flats in the twentieth century. Others were lost, thanks to the ignorance and complacency of local people and political representatives incapable of appreciating their importance.

The seafaring tradition that still survives today is the product of centuries of civilisations for whom the sea was a way of life.





The concepts of architecture and *fiesta* are inseparable in this part of the world. There is a unique style of architecture here, known as 'ephemeral' or 'temporary', about whose importance experts all agree. Engendered by the region's festivities and celebrations, and perhaps even by the local people's particular cast of imagination, examples of it are in evidence virtually all year round, as they have been for centuries. Trimming up streets and squares to celebrate events ranging from coronations and royal weddings to religious ceremonies, patron saints' days, competitions and commercial events still goes on to this day: the expertise, quality and money increasingly dedicated to doing so bear witness to how important a part of life this still is. And the urban

environment is also capitalised on for different celebrations: races and jousting matches in the Plaza del Arenal in Jerez, and bullfights in the Plaza de la Herrería next to the church in El Puerto and in La Calzada in Sanlúcar.

The celebration of Corpus Christi is a fine example of the importance accorded to decorating streets and squares: temporary altars and monuments are installed and the city's patronal Virgin is paraded through streets carpeted with flowers and salt.

POPULAR FAITH AND RELIGIOSITY

Of all the civilisations that focussed on this area, Christian culture is

unquestionably the one that has made the most enduring mark on both the customs and traditions of its people and the way that its towns have evolved. Today, religious buildings are one of the main cultural attractions in the towns of the Jerez region, although it must also be admitted that their state of conservation is generally not what it ought to be given their artistic and historical importance. The region's religious architecture represents a wealth of styles and nuances, bearing witness to the depth of religiosity that has also shaped – and continues to shape – the personality of most local people.

The main manifestation of popular faith and religiosity in the area is its celebration of Holy Week, an

El Marco de Jerez is the name given to the golden triangle that contains three cities (Jerez, El Puerto and Sanlúcar) between two rivers, with a wine and history in common.



event that transcends its specific religious significance. Holy Week finds expression not only in religious images lodged in the local churches and cathedrals, but is also relevant to relationships between neighbours. Having originated with artisan guilds, today's hermandades – brotherhoods or fraternities – constitute one of the most important and influential associative structures in the towns of the Jerez region. As well as functioning as custodians of an artistic heritage of inestimable value, they have successfully evolved into highly respected protagonists in these towns' social and cultural life. Jerez stands out from the rest when it comes to Holy Week in Lower Andalusia, not only because it has twice, or even three times, as many fraternities and

members as Sanlúcar and El Puerto, but because of the quality and quantity of its religious figures and the flamboyance of its processions.

WINE AND PEOPLE

Religious celebrations are not the only events to fill the calendar of a region that also harbours strong beliefs in much more material and tangible affairs. We come, at last, to wine, and its connections with other emblematic features for which this area is famous all over the world, such as horses and flamenco. There is little point in harking back to the ancient Roman *tabernae* and exploring a long history of untrammelled drinking and casting off inhibitions. Suffice it to say that

wine and celebration have gone hand in hand down the ages, and still do, in all kinds of events under different guises. In a part of the country that has been producing wine throughout its history, it is hardly surprising that drinking places should have been known by many names, sometimes different from area to area, and even within an area itself: a *taberna* for some was a *tabanco* for others, and what some called a *tasca* others called a *colmado* or a *cantina*, a *bodeguita*, a *bache* or a *bujío*.

Wine shops in this area have adopted so many and such varied incarnations, and gone through so many vicissitudes, that what we are left with today is, to the detriment of our cultural heritage and well-



being, a shadow of what there once was. Highlanders from Santander who settled in this area played an important role in establishing this kind of shop, with assistants known as *chicucos* and an approach to customer relations that have now sadly disappeared, as have stores selling *ultramarinos* – products from overseas. The highlanders rapidly appropriated strategic positions for their shops in the local towns and it is worth remembering that, during the seventeenth and eighteenth centuries, many of them were among the first growers of a wine that would later be traded in and exported by other families who were incomers from abroad.

The cyclic presence in the area of *montañeses*, as the people from the north were dubbed, predated commercial interests. From the thirteenth century on there was an influx of people from Cantabria, Galicia and Castile-Leon, who resettled the towns that had been under Moorish control. And, contrary to what happened in other non-frontier zones, they did not intermarry with the locals. Consequently, it was they who defined the demography of this triangle. *Jerezanos*, *portuenses*, *sanluqueños* and their neighbours were the first subjects of the Christian reconquest, so that, despite the rich Muslim presence and legacy in this area, it is recognised today that there is more to the *andalusí* character of the inhabitants of the Marco de Jerez region than legend would allow. The people who moved down here from the north stayed put, and within a short time their children had come to be regarded as fully-fledged locals.



WINE AND FESTIVITY

Today, the main wine-related cultural events are to be found in some of the festivals still held to celebrate the arrival of spring and which, curiously enough, are more closely related in origin to early livestock fairs than to vines coming into fruit. Even in Jerez, since the grape harvest festival known as *Fiesta de la Vendimia* died out at the end of the twentieth century, the biggest wine event has been the *Feria del Caballo* horse fair. However, this may soon be ousted by a new Autumn Fair, still on the drawing board. In El Puerto, where the *Feria de Primavera* and the *Fiesta del Vino Fino* are held in April and May, September celebrations including its famous *Velada de la Virgen de los Milagros* procession dedicated to the town's patron saint, have also been wiped from the calendar. And in Sanlúcar, a fair devoted to manzanilla wine is held in May, followed by the *Fiestas de Exaltación del Guadalquivir* celebrations shortly before the year's wine is ready.

But whereas up until a couple of centuries ago these festivities and public shows of celebration were class-conscious affairs – members of high society marked them in their *palacios* and mansions while ordinary folk did so in the streets and squares, with official permission (as noted by architect Fernando Aroca Vicenti) – the twentieth century saw such *fiestas* becoming totally popularised. Consequently, the private tents known as *casetas* that used to be a feature of the area's famous fairs have now disappeared, and people of all classes rub shoulders for a few days of common celebration.



Above: Holy Week, especially in Jerez, is a beautiful expression of popular religiosity in which the whole town takes part.

Below: Wine occupies a special place in the festivals and fairs with which the towns of the sherry region celebrate the arrival of spring.





The *feria*, with all that it entails, is the archetypal example of the sort of 'temporary town' that is so frequent a feature of life in the Jerez area. It showcases the joyous character of its inhabitants, for whom it provides an escape from everyday worries. People share the stage with the other stars of the fiesta: horses. The horse is more than just an animal in this triangle, where it is venerated as a symbol of beauty and power. Whereas they once had an important role in warfare, horses today are associated with festivity, sport and finance. It is no accident that the unique type of Andalusian cartujano horse, bred and raised according to age-old methods, originated in Jerez, nor that several of the horses and riders who have achieved Olympic success for Spain have come from this city.

The equestrian tradition, kept alive down the centuries in all its aspects, has engendered an industry with all its associated trades, and a special, almost legendary, communion between man and animal. The existence of many centres and institutions attest to this, as do world-renowned stables that export Spanish thoroughbreds. El Puerto and Sanlúcar also take pleasure in these majestic animals, and have special events of their own with horse-drawn carriages and stunningly beautiful displays such as horse races on the beach.

Together with fishing and farming, stockbreeding has always been one of the mainstays of the economy of this region. In addition to the best and most coveted specimens of horse, Spain's top thoroughbred bulls come

Horses, flamenco and wine are emblematic of Jerez.

from this area: the Gallardo ranch in El Puerto is the source of 'mihura' and 'pabloromero' bulls, both, legendary types. Bulls and horses have always been closely related, to the extent that the first bullfighting passes were made from horseback: *rejoneo*, or the art of bullfighting on horseback, is one of the oldest forms of tauromachy to have survived to the present day.

First performed in open squares, bullfighting began to gain popularity in the eighteenth century with the arrival of the first unmounted matadors as figures in the spectacle. And if further proof were needed of the Marco de Jerez's role in promoting bullfighting, the fact that the first known bullfight poster was printed in El Puerto speaks volumes. Though levels of enthusiasm are difficult to measure, El Puerto's bullring acquired precedence over its neighbours', emerging in its present role as the *plaza de toros* for the whole Bay area.

THE VOICE OF THE REGION

Flamenco – with one foot in either camp of festivity and culture – is an art form that is part of the heritage of mankind, and it finds its quintessential expression within this triangle. Experts disagree about its origins, as tends to be the case in interpreting history. Flamencologists such as Luis Suárez Ávila date it back to the fifteenth century and the arrival of gypsies in Spain and, more specifically, those who came to El Puerto condemned to service on the Royal Gallies. They also believe that they mixed with black slaves, hence the term *cantes de la negritud* (literally, black chants). It has been

demonstrated that the gypsies made use of the body of epic ballads and mediaeval verse of the time, and their songs have also been traced to America and back, having been taken there from the old continent and returned to Europe over the years in the mouths of anonymous artists and performers, thereby recreating the mysterious processes of the oral tradition.

There are differences between the type of flamenco sung in the port towns (San Fernando, Puerto Real, El Puerto, Cádiz) and that of Jerez – one being more intimate, the other more audience orientated – although stage performance of flamenco was not professionalized, if the term could be said to apply to this art form, until the mid-nineteenth century. García Lorca identified just ten families between Jerez and Cádiz to whom the roots of flamenco could be traced. This corner of Lower Andalusia has certainly produced the most venerated and famous flamenco artists. And it was in this part of the country, where they arrived as convicts and slaves, that gypsies became most thoroughly integrated into society.

Today, flamenco is an important part of the culture of the Marco de Jerez and has become an industry in its own right. Both aspects have been boosted by events such as the Festival del Cante de los Puertos, the Fiesta de la Bulería, the Seville Biennial and the Jerez Festival, all of which generate world-wide interest. It must be admitted, however, that flamenco has lost its original intimacy along the way, and only rarely now can one experience a genuine flamenco evening: these generally happen spontaneously, since, like good jazz, good flamenco

contains a lot of improvisation, which is to say inspiration

THE PEOPLE OF THE JEREZ REGION

Despite the proximity to each other of the towns of the sherry region, and despite the fact that their inhabitants share a history and their famous wine, competition between them has been inevitable. This is due, in part, to the fact that the three towns in question enjoyed singular importance for different cultures and, especially, for the Crown.

The presence of King Alfonso X, The Wise, in El Puerto de Santa María and in Jerez, and the decision of Prime Minister Godoy, many centuries later, to designate Sanlúcar the capital of the region until Javier de Burgos' instigated the current administrative division, invested these three towns with an importance that would later be reflected in the character and pride of their inhabitants. With two hundred thousand inhabitants, Jerez is today the first city in the province (the fifth in Andalusia) and it possesses an impressive infrastructure for a place of its size, including an airport and a large university campus.

The presence in these towns of an emerging bourgeoisie four hundred years ago left more than just a series of beautiful palatial houses (there were apparently over a hundred in El Puerto alone) as evidence of their prosperity. Many of the three towns' families were also patrons of the arts and culture in general. Their business needs brought technological progress, such as electricity and the telephone, here in advance of other parts of the country, and even a railway line that

Flamenco, part of the heritage of mankind, originated in this triangle and is at its most quintessential here.



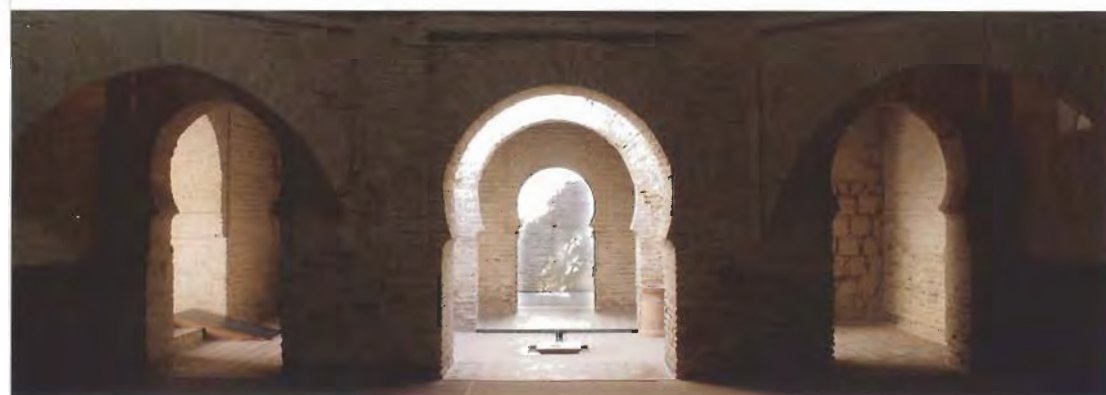


linked Jerez, El Puerto and Sanlúcar until just a few years ago. Even foreign fashions in dress reached this corner of the world thanks to their influence.

El Puerto is a tourist town *par excellence* and its beaches are the main asset of a province where the services sector continues to be the main source of employment. Sanlúcar, as well as exerting tourist appeal, is Cadiz's main link with the River Guadalquivir, and is also the province's most Seville and Huelva-orientated town, creating a cultural 'bridge' that extends beyond the Rocío or the fact that people drink manzanilla in Seville.

This pride in where one comes from, which some misguided mayors have been known to translate into an encouragement of chauvinistic localism, has not got in the way of all kinds of bonds being formed between the people of El Puerto, Sanlúcar and Jerez: many families of noble ancestry have become related down the centuries, not always for business reasons. Today, many *jerezanos* (an estimated ten thousand) have second homes in El Puerto and Sanlúcar so as to enjoy the benefits of the more temperate climate (three to four degrees cooler) on the coast in summer. There is also a daily coming and going between the towns for all sorts of reasons, not just connected with the wine industry, as would have been the case in the past.

Many El Puerto people are also involved in *bodegas* or other industries in Jerez, and many from Sanlúcar travel to Jerez because of its role as capital of the sherry region. In an era when distance is irrelevant, living in any one of these towns means enjoying practically the same



The history of the sherry region is not only a saga of successive civilisations and religions, but also a story of hospitality.

advantages and disadvantages. In this area of over 1,500 square kilometres (930 square miles), occupied by 350,000 inhabitants with more than 3,000 years of history behind them, there is something for everyone. This multicultural corner, a crossroads and resting place for travellers, has paradoxically provided the world with its most quintessential cliché images of Spanishness while at the same time being wide open to outside influences and possessing attractions and lore that appeal to people of all interests.

The climate – more than just a conversational gap-filler here – probably has a lot to do with it. Over 3,000 hours of sun a year and an average temperature of 25 degrees Centigrade (77 degrees Fahrenheit) are reason enough for anyone, anywhere, to spend much of their time out of doors. And this is despite the fact that the architecture in this part of the world is cleverly designed to stay cool in the summer and warm in the winter, with large windows to let in the light and, on the ground floor, courtyards that let the street into the house and vice versa. The fact that such a high proportion of life is lived outside the home has influenced the festive calendar, the way that squares and public spaces are laid out and furnished, and leisure venues ranging from bars to casinos to clubs for literary conversations or business transactions... not forgetting *ventas*, roadside restaurants designed to cater for people who just have to get out and about in the open air.


In this part of the world, time is not allowed to be a tyrant: dashing about and rush-hours are avoided, and patience rules supreme. This may be



because people are resigned to waiting for solutions that never come, or because of the cumulative effect of many centuries of history. Had it not been for this philosophy of life, or the special characteristics of what Professor María del Carmen Borrego Plá calls a “microclimatic enclave”, with its precise cycles of rain and sunshine, a wine with the characteristics of sherry – to which haste is inimical – would never have emerged.

Sherry and sherry-making, then, provide an excellent metaphorical definition of the inhabitants of the Marco de Jerez: noble, patient, unique, universal and with a long history. But these are just traits and impressions that many will find inadequate. As Jerez writer Francisco Bejarano declares: “we, ourselves, are the town, which means that there are as many different towns within one single one as there are people trying to capture it in writing.”





Título: Mosaico

THE HISTORY AND
LEGEND OF A WINE
OLD WORLD AND NEW

CARMEN BORREGO PLÁ

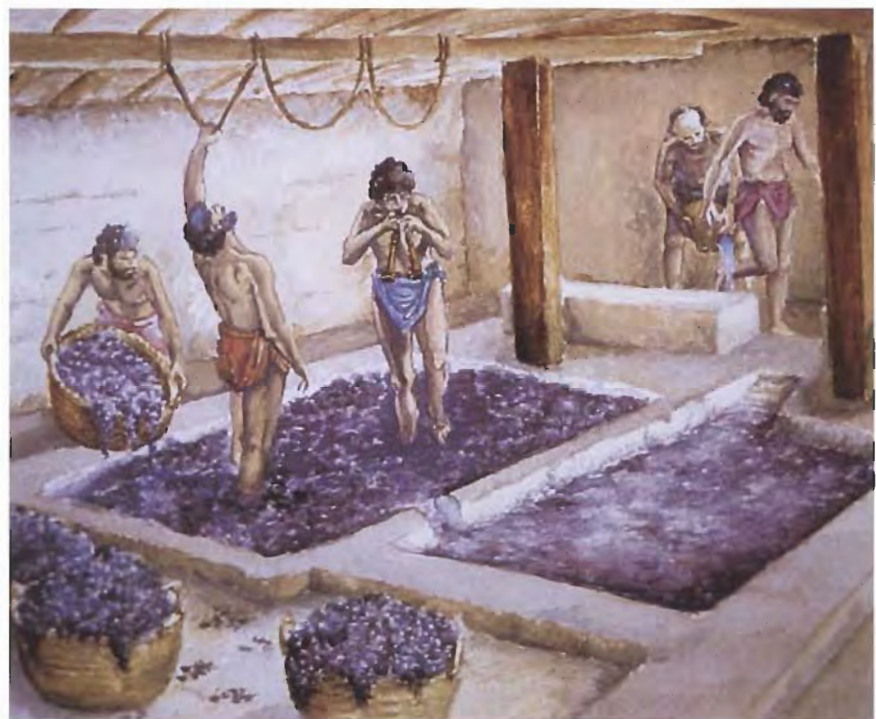
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Few wines can lay claim to a cultural history as lengthy as that of sherry – which dates back to the dawn of time – yet at the same time trace their origin without resorting to legend or conjecture. Guerrero

Ayuso maintains that the wild *vitis vinifera* vine, indigenous to the Mediterranean ecosystem, came from Asia Minor, probably from Anatolia or the area fed by the life-giving waters of the Euphrates and the Tigris known as the Fertile Crescent. From there vines and wine, their vital juice, would travel in different Phoenician vessels to the area that concerns us here, where the people responsible for their introduction into Spain taught us how to grow and make wine from them. Invaluable traces of

the Phoenician presence can still be found in the village of Doña Blanca, a settlement on the outskirts of El Puerto de Santa María, which dates back to the eighth century BC. There one can see the remains of a wine press – according to Professor Ruiz Mata, this one actually dates from the Turdetan period in the third century BC – composed of an upper trough in which the grapes were trodden and another below into which the must ran, both plastered in a mixture of sand, lime and fired clay. Nearby ovens, clearly not for baking cereals, may well have been used for heating the must. As in Pompeii, earth and ashes conceal a way of life which, in this case, seems no less extraordinary for being largely unknown.

But the Phoenicians were not the only visiting people; the strategic position of the Jerez region exerted a magnetic





pull over all the Mediterranean civilisations who set their sights on this part of the Iberian Peninsula, Antiquity's *finis terrae*, legendary site of the Pillars of Hercules. Greeks and Romans would later venture into this territory and colonise it, as the

Phoenicians had done before them. It was from them that we learned the convention of drinking wine: not only was it used in ritual and trade, but it also served as a bonding substance between old and new friends, livened up celebrations and,

all in all, symbolised joie de vivre. Wine represented wealth for the giver and happiness for the drinker, as exemplified by the Greeks' *symposium* and the Romans' *comisatio* – drinking parties at which Dionysius and Bacchus set the tone.

Phoenician wine press found during the archaeological excavation of Doña Blanca (El Puerto de Santa María, Cádiz) directed by Diego Ruiz Mavta.



Flaceliere describes the Greek *symposium* as a social gathering where friends first ate their fill and then moved on to wine, which subtly encouraged conversation on divine, human and political matters and even jokes and riddles. At that period, wine was mixed with water to a strength determined by the symposiarch, who presided over the *symposium*. In summer, a big vessel would be filled with very cold water in which a jar containing the pure wine – the *psykter* – was immersed. Wine from this would then be used as the basis of diluted mixtures, which it also chilled. During the Classical period – including the era under consideration – wine undoubtedly, and for obvious

reasons, would have been full of deposits and therefore needed to be passed through some sort of strainer to make it drinkable. This practice is fascinatingly depicted on a piece of pottery decorated by the Brygos painter with a *symposium* scene taken from the Iliad, showing a figure holding a sieve and a long-handled dipper similar to the *venencias* used in the sherry region today.

This particular cultural pattern continued during the Roman period, when it was known as *comisatio*. The *comisatio* was an extension of the *symposium* concept, including post-prandial enjoyment after dinner – a luxurious meal which became

increasingly refined: tablecloths, silver dishes, triclinium couches, footbaths for guests, spectacularly presented food with large quantities of meat and many different desserts. For the Romans, so pragmatic in other respects, in matters of food “ostentatious display was the host’s best letter of introduction.” And wine from Ceret – modern-day Jerez and its surrounding area – was perceived as a luxury product, despite the Italian peninsula’s own wealth of wines. As the Roman poet Martial wrote: “May Nepos serve you wine from Ceret; you will think it wine from Satia. But he does not serve it to everyone – he drinks it only with a trio of friends” (Book XIII, 124).

Phoenician amphora dating from the eighth century BC, found by Diego Ruiz Mata at the Doña Blanca site, probably used for storing wine for trade and transport.



As a general rule, all these cultures shared a common goal: to drink in moderation. According to the Greek poet Homer, “if (men) drank too much, they mistakenly believed themselves as strong as lions, and if they continued drinking, they took leave of their senses and became donkey-like in every respect.” It would be true to say, however, that these principles were not always carried through; hence Virgil’s observation that: “verses written by water drinkers will not prevail.”

As a counterpoint to this high life, the countryside came to be seen as an oasis of peace, serving both as a refuge for citizens getting away from

the town and a source of supply for the town itself. Both these aspects are contemplated by Roman writer from Cádiz, Lucius Junius Moderatus Columella (born during the first years of the Christian era), in his *De re rustica*, in which he lays down basic rules for vineyards in the Jerez area which have survived to the present day: soil and grape types, vineyard location, various vineyard tasks and at what time of year to carry them out, the quality of must obtained, and so on ...

ISLAM. THE VICTOR VANQUISHED

The Roman Empire gradually

declined into decadence, making way for a new turn of the historical screw: the arrival of the Barbarians, known in Spain as the Visigoths. The times that ensued were far from peaceful; rather, they were marked by outbreaks of civil war, Arrianism, bloodshed and lack of harmony. During this period, theologian St Isidore of Seville declared in his encyclopaedic treatise, the *Etymologies*, that grapes were full of humour, juice and density, going on to list 23 different grape varieties. Meanwhile, Visigoth King Recceswinth issued his *Forum Judicum*, a code that prescribed various punishments – monetary, social and even corporal – for those who stole from the vineyards or damaged vines with their livestock.

Mosaic fragment from the Asta Regia site (in the Jerez district) on display at the Archaeological Museum in Jerez.



This historical situation did not last long, however, as ships sailing under various colours crossed the Straits of Gibraltar, bringing new incomers from the East to Spain. This time it was the Moors, whose power was reaching a crescendo and who exercised close control over the Mediterranean. Their imprint on Andalusia was unrivalled by that of other incoming cultures: they were completely seduced by Andalusia, to the extent that the victors could be said to have been vanquished. Although Koranic law and religion – one and the same thing – forbade drinking wine, many commentators, Manuela Marín among them, maintain that

the rules were interpreted somewhat ambiguously, particularly from the Caliphate period onwards. Various loopholes were found – such as obtaining wine from a Mozarab grower – to make law-breaking as palatable as possible. From time to time, though, there were intermittent clamp-downs on this particular kind of permissiveness, such as the attempt by Caliph Alhaken II to uproot all the vineyards in his kingdom for religious reasons. However, his original intentions were soon undermined by the need to grow grapes for raisins.

Hellenistic cultural patterns again resurfaced in the form of the largely

unknown *mundanama*, rooted in the *symposium* philosophy but now centred on the characteristics of the dinner guests. These were all chosen not so much for their social level as for their wit, noble inclinations and refined appearance – clean, well-cut nails, impeccable turban, perfumed skin, trimmed beard – the object being to cast off all affectation. Behaviour was expected to involve treating others fairly, drinking moderately, promoting harmony, forgetting past grudges, concealing defects, refraining from reproach, enjoying oneself without making too much noise or shouting, and also abstaining from parading social

Latin version of Al-Idrisi's map (1154) by Konrad Miller and detail of the Iberian Peninsula showing the city of Šerīš (Jerez), the name from which the word 'sherry' derives.



superiority. Meanwhile, the level of luxury of these events was spectacular: invitations in verse, candle lighting, floral decorations, leather tablecloths, small tables laden with sweets and titbits... And an important figure at any banquet from Classical times on was the drinks master, without whose knowledge and skill wine would not be properly served. Interestingly, under Islam, wine was drunk without added water.

Jerez's grapes were regarded with particular respect by the newcomers, who also showed great appreciation of other local produce, including raisins. We know this from the many Arabic

agricultural treatises (those by Ibn Wafid and Ibn Bassal are examples) and agricultural calendars. They even planted experimental gardens, as in Seville's Aljarafe and Huerta del Rey (the King's Orchard, so called because it lay within royal property). This latter has given its name to an area of modern-day Seville. Jerez's grapes thus became famous, the Acebibe variety being considered the best for their fleshy fruit, and both they and the Alarijo variety were keenly traded. This happy, leisurely period reached its zenith in the taifal kingdom of the poet king Al-Mutamid, during whose reign, according to Jerez poet Ben Lubbacc, regattas were held on the River Guadalquivir and poetry about wine was freely written:

*The reflection of wine pierced by light,
tints with red the drink master's fingers,
as juniper stains the muzzle of the
antelope red.*

Successive Islamic invasions – the zealous Almoravids, the Almohades – adhered more closely to the Koran but, as Sánchez Albornoz observed, Koranic teaching could never quite pierce the acquired armour of 'Hispanic' customs.

While all this was taking place in Andalusia, far away at the court of the Great Count Roger II of Sicily, the Arab Geographer Royal Al-Idrisi (possibly born in Ceuta) was writing his great treatise, *Nuzhat al-Mushtaq fi Ikhtirāq al-Afaq* ('The Delight of One Who Wishes to Traverse The Regions of the World'), also known as *al-Kitab al-Rujari* (Roger's Book), which contains the following: "Şerîş is a strong town of moderate size

encircled by walls; the country around it is pleasant to the eye, consisting of vineyards, olive orchards and fig trees." A description from which one can deduce that _eri_ was the city later known as Jerez. This question was researched by González Gordon and was later used as evidence in the famous twentieth century court case over Denomination of Origin which resulted in a resounding legal victory against foreign producers. Roger's Book was backed up by a map of the world (c. 1154) – a copy of which was found recently – which provides graphic corroboration.

THE GRADUAL AWAKENING TO NEW AIMS

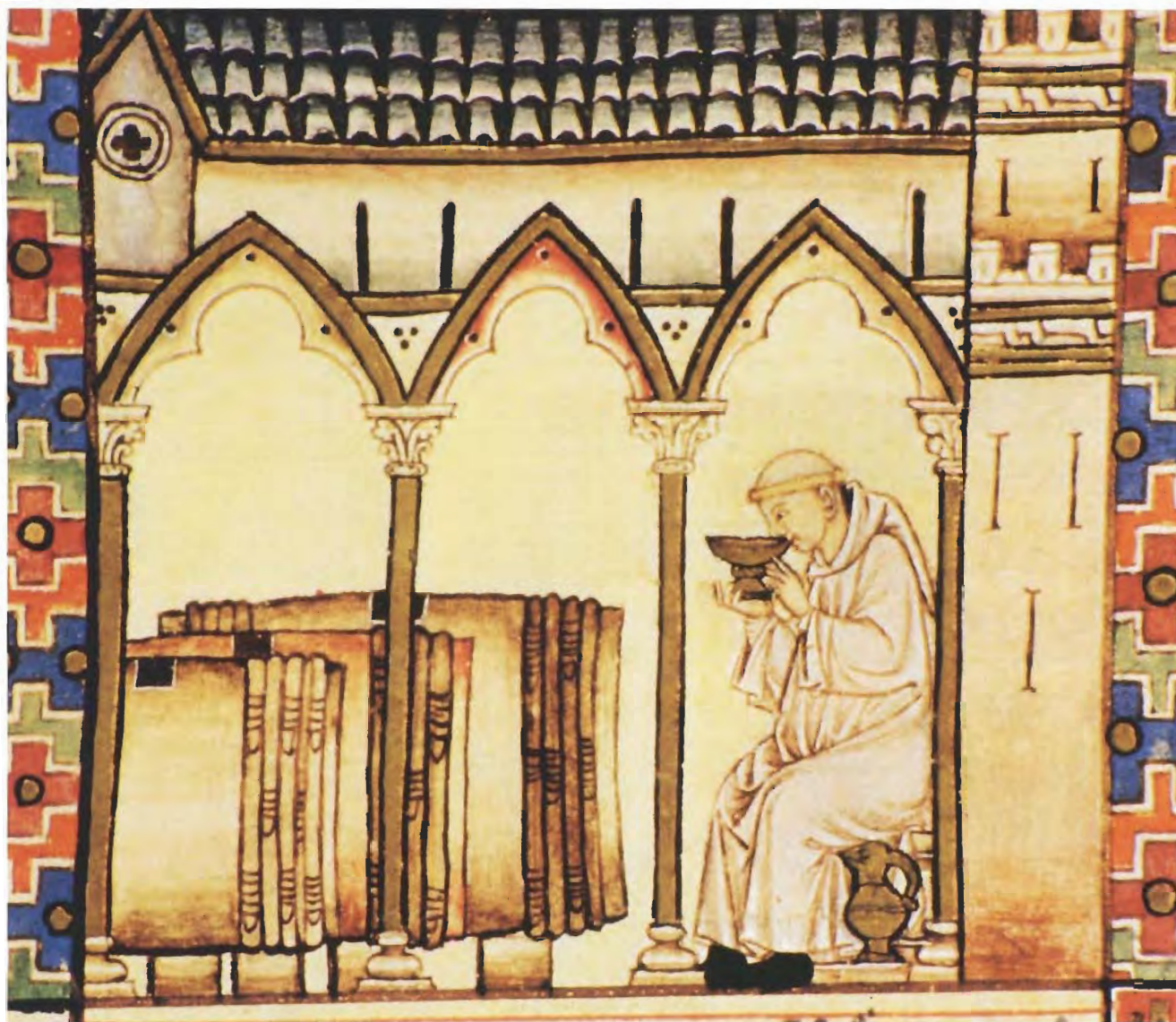
Shortly afterwards, in 1264, King Alfonso X of Castile reclaimed Jerez from the Moors, and life in the sherry region changed radically. Located at the frontier with the Nasrid kingdom of Granada – hence its full name, Jerez de la Frontera – the city underwent years of bitter struggle, violence and bloodshed, during which replenishment of both population and crops became essential. A reward system associated with the Conquest had been created, with the Crown distributing specific units of land on the basis of social prestige and merit – to noblemen, including the Villavicencio, Zurita, Valdespino and Carrizosa families; to royal relatives and henchmen; to religious and even military orders, such as the Order of Calatrava, which received eight *aranzadas*¹ of vineyards in the Balbaina area. Land was perceived as a means of support and a symbol of prestige, making the wealthy wealthier still and liberating the poor from extreme poverty. Vines and cereals, obligatory

1. Translator's note: In the Sherry region, unit of land equal to 4,475 square metres (about 1.1 acres)

ere e certa da agua dulçur nõ podian auer a



ade comẽcou a pregar e disse q rogasse todos a sã e auer



crops by law, became the economic and dietary lynchpins of a territory of which Alfonso was very fond. Tradition has it that one of his most important military officers, Fernán Ibáñez Palomino, gave his name – Palomino – to the variety of grape that later became a local classic. That Jerez wine very soon became an integral part of the

new order is revealed in examples such as ten *arrobas*² being sent to Jerez nobleman Alonso Núñez de Villavicencio to help fuel his battle against the Nasrid kingdom in 1410; and the *Haza de los Muertos* tradition, when riders from Jerez fed their horses a 'special beverage' of water and wine to give them the strength they needed to fight.

By then, the other two enclaves – the seafaring towns of El Puerto de Santa María and Sanlúcar de Barrameda which, together with Jerez, would make up the Marco de Jerez region several centuries later – had long been in existence. In both cases, there was a strong wine-related connection in that it was one of their main sources of subsistence.

Facsimile of the Cantigas de Santa María by King Alfonso X, held by the University of Seville General Library (canticle CXLIII), showing the walled town of Jerez in the thirteenth century.

2. Translator's note: In the Sherry region, unit of weight equivalent to 16.66 litres.

As a rule, the clergy had magnificent wine cellars, as illustrated in canticle XLVII (facsimile from the University of Seville General Library).



In El Puerto, the vineyards extended almost as far as Rota, while Sanlúcar's Duke of Medina Sidonia, admitted in 1469: "considering that this, my town, had no other legacy but its vines, they provide me with so much income and service..." Religious orders were also heavily involved in vine growing: Sanlúcar's Madre de Dios and Nuestra Señora de los Remedios convents had 77 and 17 *aranzadas* of vineyards respectively.

Wine growing was expanding rapidly, stimulated by the many regulations established to this end from the thirteenth century onwards. These included port charters and tax concessions enjoyed by foreign merchants trading in Sanlúcar or at the fairs in Jerez, within whose ambit no suspect person could be detained or have his assets seized, provided the crime had not been committed while they were in progress. This state of affairs culminated in each town determinedly protecting its local wine – it would be some time before they discovered the principle of 'united we stand...' – and doggedly searching for markets, both domestic and foreign. This resulted in a proliferation of bans preventing the entry of cheaper wines such as *bastardes* and *cuytes*, making it difficult to own vineyards elsewhere, and monitoring the manufacture of *botas* – 30 arroba butts – which had to display the cooper's brand. The quality and weight of raisins were checked, and the sale of wine in taverns controlled to prevent its being undersold in terms of either quantity or quality. As Fernando de Rojas says in *La Celestina*: "Wine has but one fault: that good wine is expensive and bad wine does you harm."

Taking all this into account, it is hardly surprising that the whole Atlantic fringe area should become a 'lucky horseshoe' for traders, first from northern Spain – who exchanged wood and iron for wine and salted fish and meat – and later from Europe. These latter were boosted by the fall of Constantinople in 1453: unable to establish direct links with the city, European merchants opted to establish themselves, either permanently or for the short term, on the coasts of the Strait of Gibraltar, carrying on a triangular trade between Africa (gold, slaves and wax), the Bay of Cádiz (wine and cereals) and their countries of origin (all kinds of manufactured products).

This was when strong links were forged with Brittany and England, the latter represented by merchants centred around the Sanlúcar-based church of St George – the name says it all – which served not only as a place of worship and burial, but also as a meeting point for foreigners. The Andalusia Company was set up during this period, though the enterprise did not last long, undermined by political and religious differences. Meanwhile, El Puerto saw the arrival of merchants from Portugal (Benavides, Manso, Méndez Siqueira) and Genoa (Cattaneo, Gentile, Grimaldi), many of whom also went to Jerez (Spinola, Adorno, Negrón, Zacarías), as did Felipe Zarzana from Bologna. Such was the wealth of this *finis terrae* that, between the sixteenth and seventeenth centuries, 159 foreign entrepreneurs are known to have been in the area, spread among the three sherry towns. This growing cosmopolitanism exerted cultural and social impact in the area where they settled: the Zacarías family,

for example, settled in El Puerto, then spread to Jerez, having intermarried with one of the old local families, the Villavicencios.

At that time sherry, also known as 'sack', was drunk both above and below stairs, was a convivial part of wedding celebrations, an invisible calming element during christenings, and an oiler of the social wheels at all sorts of get-togethers. It acquired its most important significance, however, during the celebration of mass, when it was used as communion wine. Never again would wine serve both as a digestive tonic and as a vehicle for taking various kinds of medicament as it did at that period. It was common knowledge from earliest times that wine, including sherry, had certain medicinal applications, among them – as well as those already mentioned – serving as a disinfectant, an invigorating tonic and even a nutrient, as suggested by the Spanish proverb: "with bread and wine one walks down the line." When the Cadiz area was ravaged by the Great Plague in 1473, sherry was used as a preventative, and it was also mixed with a plant known as serpent root (*Scorzonera hispanica*) – which at the time only grew on León Island – to make a herbal tea used as a remedy for those who had already succumbed to the plague. Pliny, Palladium, Ibn Rushd (better known as Averroës) and even Luis Lobero de Ávila – proto-doctor to King Charles V – all attested to these properties down the ages.

As times moved on, an exciting new fashion caught on at court and among the common folk: a taste for cold drinks – including wine – in both summer and winter. Snow became

Illustration from the medical treatise entitled Tacuinum Sanitatis dating from the fourteenth century, kept at the National Library in Vienna, showing two men preparing a concoction with the grapes from a vine.

an essential element for the highest lord and the humblest official. It was collected in the mountains and buried in wells to keep it frozen, then used to chill drinks placed inside a kind of copper demijohn with a very long, narrow neck, which were then served in tall, thin glasses known as *tazas penadas*, whose shape was specially designed to retain the cold.

It was at this period that the Spanish poet Quevedo described sherry as one of the best wines in the world, and Fernando de Zárata, Lope de Vega and Cervantes expressed similar opinions. By this time, wines from the Bay of Cádiz area – Sanlúcar, Jerez and El Puerto – were reaching all corners of the European continent like ships in full sail. And while Sanlúcar wines headed for Italy and, sometimes, Ireland (100 butts³) in 1560, El Puerto ones also set sail for Ireland (similar quantities at around the same time) and, particularly, for the Portuguese enclaves in Africa – Tanger, Asilah, Safi, Oran, Mazalquivir. Interestingly, many butts from Jerez – empty in this case – served as barricades during Portuguese-African skirmishes. Another classic market for sherry was provisioning the galley fleet, naval defence *par excellence*, that wintered at anchor off El Puerto.

The most important destinations for sherry, however, were the Flemish and the London markets. Sack had been introduced to the Netherlands many years earlier by Pedro de Estopiñán, conqueror of Melilla for the ducal house of Medina Sidonia and right-hand man to King Ferdinand the ‘Catholic Monarch’. From his post as ambassador to Flanders, Estopiñán

acted as commercial agent for his own wines from Parpalana. But it was the English who became the prime consumers from the time of King Henry VIII’s marriage to Princess Catherine of Aragon, youngest surviving child of the Catholic Monarchs. Sherry became so popular that, as a letter from James Howell to Lord Clifford explains: “when the wines of Jerez first appeared among us, they were drunk in aqua-vitae measures, but now they go down the throats of young and old alike like milk.” The British embassy also made a declaration to that effect, spreading the rumour that in 1561, exports to Britain had been worth 200,000 ducats. Even the English monarch hailed its virtues as a dessert wine, while in 1596 the Earl of Essex – who would later lead the attack on the Port of Cádiz – assured Queen Elizabeth I of England that sherry was good because it fired up his soldiers. In his *Palinodia* (1619), Pasquil declares that “all drinks stand hat-in-hand in the presence of sherry,” while Shakespeare eulogises it in many of his works – *Henry IV*, *The Merry Wives of Windsor* – and even makes his immortal *Falstaff* a butt of sack in human form.

THE DOMINION OF OCEANIC HORIZON

Europe was not the only continent with an appetite for sherry. Since 1492, the mysteries of the Atlantic had been unlocked, and from its waters a new continent – the Indies, also known as America – had emerged, triggering a geographic, demographic, nautical, mental, religious and, inevitably, an economic revolution. Right at the

heart of this immense shift were Spaniards, recently landed in this ‘unimaginable arcadia’ and trying to maintain, or at least adapt, their own native cultural traditions, with wine still an integral part of their diet. No-one really knows precisely when sherry was introduced to the Americas, and although some scholars date it back to 1493 and Columbus’s second voyage, cereal is so far the only product from Jerez for which there is documentary evidence of its having made the journey. Be that as it may, it must have been drunk from very early on, since secular priest Juan de Castellanos recounted that, once the conquest of Cumaná – now Venezuela – had been achieved in the early sixteenth century, peace was celebrated with sherry wine and aniseed liqueur. Likewise, sherry was present at a banquet given by Francisco Pizarro in Peru at which, according to the chronicler Francisco de Jerez, a total of fifty *botijas*, each costing 800 pesos, were consumed.

But the best harbinger of sherry’s future universality was the first voyage around the world undertaken by Fernando de Magallanes (Magellan) – killed towards the end of the voyage – and Juan Sebastián de Elcano between 1519 and 1522. Their entire wine supply came from Jerez: 508 butts – 30 *arrobas* each – costing 511,347 maravedis. Additionally, they paid 6,234 maravedis to Gonzalo Díaz in respect of brokerage plus 67,709 maravedis to cover the hoisting, carrying and supervision of the containers in which the wine travelled, plus an extra 4,790 maravedis paid to Juan Nicolás, who masterminded the

3. *Translator’s note: The size of a butt was equal to 30 arrobas - in Jerez, 500 litres.*



Detail of a map by Antonio Herrera y Tordesillas, held by the National Library in Madrid, depicting the return of the ship Victoria at the mouth of the River Guadalquivir.

whole operation. The quantity of wine calculated for each crew member was half an *azumbre*⁴ provided the trip lasted 756 days, although this amount would be reduced by a third if the voyage took longer.

Exploitation of this 'immense New World' was effected by the Crown through the port of Seville and the commercial exchange known as the Casa de Contratación (House of Trade), also in Seville, the government agency authorised to control Spanish exploration and colonisation of the new lands. In 1517, this institution ordered all ships sailing to the New World to carry two half butts filled with vine shoots of different grape varieties, with a view to finding out which stock was best adapted to American soil. It is reasonable to suppose that, from that year onwards, there must have been some from Jerez among the many varieties exported. However, none met with much luck in the region known at the time as New Spain (Mexico) for various reasons. One problem was the climate, so different from Spain's, with changing seasons that did much to thwart the efforts of aspiring farmers. Another was the territory's luxuriant vegetation, which would have complicated the main viticultural tasks, especially pruning. Additional factors were competition from local beverages, particularly *pulque*, the drink made from fermented agave juice; the discovery of mineral seams, which were far more profitable; and, above all, pressure from Andalusian growers belonging to the merchant guild known as the Consulado de Mercaderes, established in Seville in 1543. The synergistic effect of all these stumbling blocks soon put paid to Mexican vine stocks, the final blow being Felipe II's royal decree to all Viceroyalty on American soil prohibiting the planting of any more vineyards in the Americas or

the restoration of existing ones, with the sole exception of those in Peru.

This situation was beneficial to exports of Spanish wines, including sherry, which were shipped on the two fleets a year that set sail from Seville to the Viceroyalty of New Spain and Tierra Firme (now Panama). The most common shipping containers used were 30-*arroba* butts, 27-*arroba* pipes and the *arroba*-size jar known as *botija perulera*, which was reinforced on the outside with a plaited esparto grass girdle or weave, packed in cork and required to be sealed at the mouth with gypsum.

Sherry became increasingly expensive as a combined result of the high transport costs involved in these long and complicated journeys and, as García Fuentes points out, the high level of taxation to which it was subjected. The customs duty applicable to exports from Seville was 7.5 percent of the total value of the goods, a percentage that went up to 10.5 upon arrival at its American port of destination, in addition to local duties. This imposition was at odds with levies applied to wines from Seville which, from 1527 on, enjoyed tax exempt status when travelling to America, much as they did on the domestic market under the terms of a privilege granted by King Alfonso X. This explains why Seville bought a lot of wine from Jerez, not for local consumption but to be resold for export to the Indies, resulting in a 'double origin' phenomenon whereby these wines were treated as Sevillian. The big Seville merchants had large warehouses on Carretería, Cestería, Solana, Ancha, Larga, Nueva and Sumideros streets, where they stored these 'foreign' wines until the next fleet was ready to depart. According to Gil Bermejo, between 1592 and the end of the sixteenth century some 886,982

arrobas of wine theoretically earmarked to cross the Atlantic were stored in these warehouses.

But sherry also featured under its own name in the trade with the Indies, being one of the main beneficiaries of the *tercio de toneladas* provision which stipulated from the start that a third of the cargo space in each ship be reserved for goods from the Cádiz region. Unfortunately, little is known about the quantities of wine exported, although research carried out by Professor García Fuentes has discovered documentary evidence of 97 shipments, between 1583 and 1590, accounting for a total of 520,667 *arrobas*, of which 52 percent originated in Jerez, with the remaining quantity coming from Aljarafe, the northern mountain range of Seville and the County of Huelva, as well as from Sanlúcar de Barrameda, El Puerto and other villages currently included within the Marco de Jerez region. The destination of choice for these wines was the Viceroyalty of Mexico and the Caribbean Islands, although small amounts also arrived in the Philippines on board the Galeón de Manila, which sailed from the port of Acapulco in New Spain. As regards prices, García Bernal recorded that in 1597 the price of an *arroba* of young sherry bound for the Yucatán was 22 ducats, this going up to 27 ducats for mature sherry – a relatively high price in which the notion of aging as a value adding process is already discernible.

The century that followed was a difficult one owing to the economic crisis that befell Spain and, with it, the Bay of Cádiz: bad crops, wage demands, shady trade practices, such as the advance purchase of must by certain foreign merchants, guaranteeing that small growers sold their grapes but at appallingly low prices... All these matters

4. Translator's note: Derived from the arabic *atzumne*, meaning eighth part, an *azumbre* designated an eighth of an *arroba* or *cántara* of wine (approximately 2 litres).

Young Man Drinking Wine from a delicate glass. Murillo (c. 1660). National Gallery, London.





weakened the position of Andalusia's entrepreneurs, identified by Professor Iglesias Rodríguez as the budding bourgeoisie. Curiously, and despite expert opinions to the contrary,

extant documentation reflects constant levels of wine exports, especially to England. Indeed, it was during this period (1653) that one of Jerez's main trading companies

– the Cabeza de Aranda company – was founded. This would later merge with the firm of Zarco and create the famous CZ brand, which the Cuevas brothers believe to have



been the first sherry brand ever: it is mentioned in correspondence as early as 1728. This interpretation of the period is backed up by the (some say exaggerated) statistics

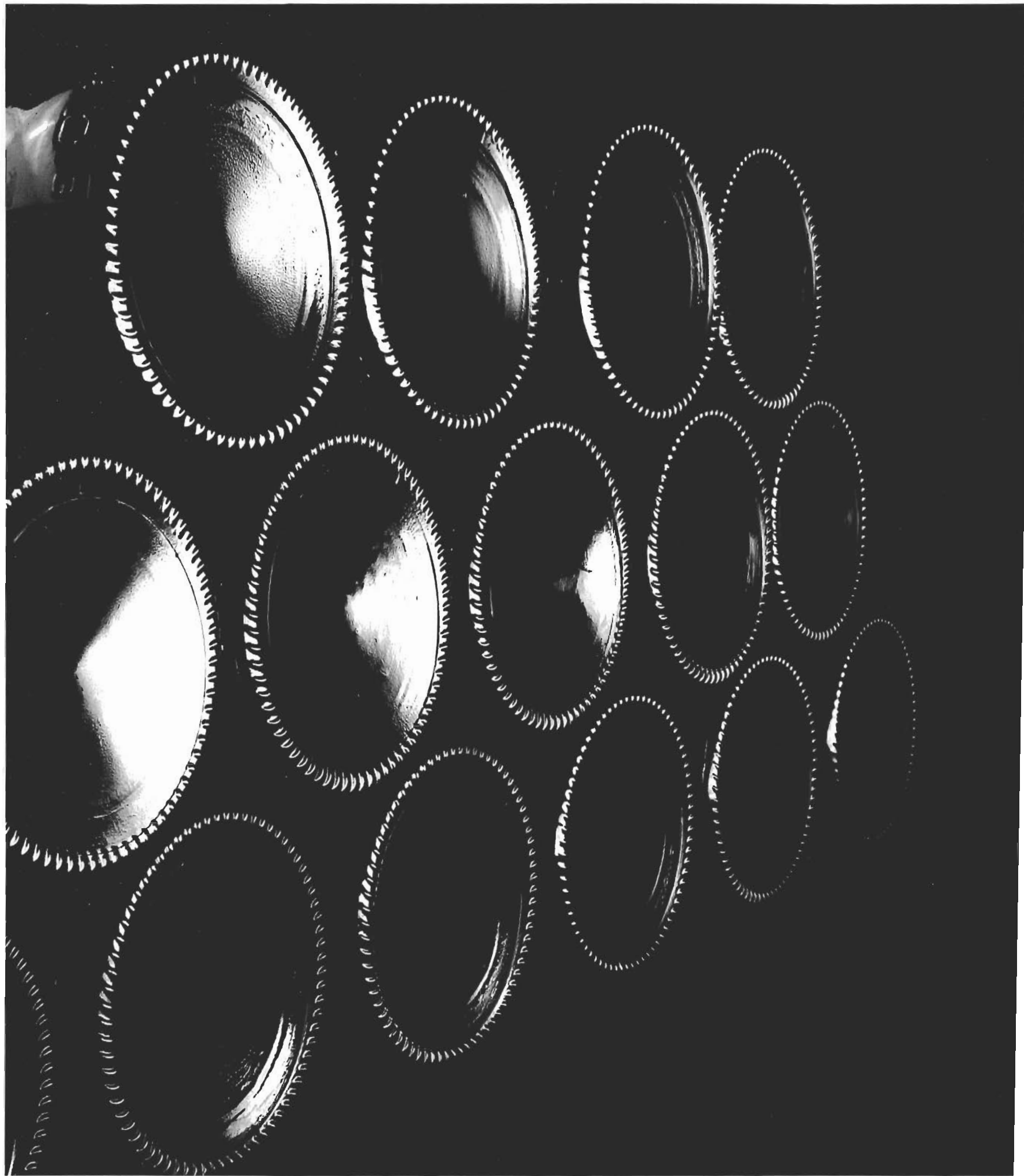
put forward by Velázquez Gaztelu based on records of the ducal house of Medina Sidonia: 801,190 *arrobas* shipped from Sanlúcar between 1639 and 1643, to which must be added 1,000 butts consumed in the town and the port of Bonanza. Calculating on the basis of new royal duties of half a ducat levied on each butt from Jerez, Sancho de Soprani suggests that 9,435 pipes of wine and vinegar were sold in 1643.

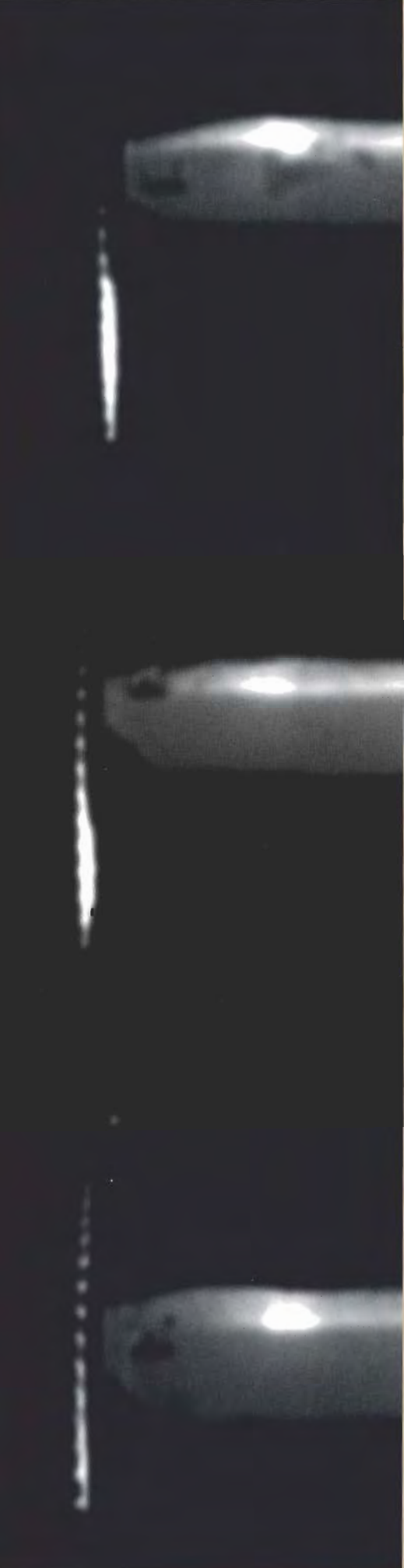
Be that as it may, until further research sheds new light on this thorny question, all that can be said with certainty is that sherry enjoyed a privileged position in transatlantic trade. Wine from Jerez had always been a favourite on warships, even more so after the discovery of the New World, since they had to sail to the Indies as escorts to the annual fleets, and sherry constituted part of their provisions. In the seventeenth century, sherry was the wine that sailors drank most of, for various important reasons: not only its quality (*sic*), but also the fact that it was cheap, since navy provisions were not subject to excise duties and were also exempt from the tonnage quota applied to commercial shipments to the Indies. This goes a long way to explaining why the troops were able to sell surpluses from their daily rations in American ports: an example of the complex microcosm of supply and demand.

That said, shipments sent from the Cádiz region were smaller than those from Seville at that period, since the former's *tercio de toneladas* quota was reduced by the latter's wines and manufactured goods. To cap this commercial situation, described

by contemporary commentators as 'insane', the Cádiz contingent refused to pose any obstacles to foreign trade because, despite royal prohibitions, they considered that it was better to foster it than to have it replaced by clandestine smuggling that it would be impossible to control. All this triggered a change in economic policy, as a result of which Seville's hitherto thriving position as Gateway to the Indies began to collapse, though not without stout resistance from all the institutions involved. Jerez chronicler Gaitán de Torres declared that: "...the remedy that the whole kingdom demands ... is that it be decreed that the Bay of Cádiz be used for Fleets and Galleons and that they sail from there to the Indies." This approach was backed up by Cádiz-born monk Fray Jerónimo de la Concepción, who claimed that: "foreign kingdoms and provinces love Cádiz on account of its open bay, its firmly established boundaries, its safe resting places and its honest dealings." Genuine public outcry, in combination with geographical convenience and the payment of 500,000 ducats to the Crown by the Cádiz consistory, made the apparently impossible happen. In 1717, the House of Trade was moved to Cádiz and Seville's die was cast. This marked the beginning of a new phase in this extraordinary and historic race, with the baton being passed to Cádiz, a much more open and liberal Atlantic port, and which now turned its sights towards a future with a new mind-set, new protagonists, even a different governmental regime under the brand-new Bourbon dynasty. Modernity was knocking at the door: Cádiz's time had come.

View of the town of Cádiz from the port, as depicted in an engraving by an artist of the French School. National Library, Madrid.





Titulo: Bodega

THE SHAPING OF THE SHERRY INDUSTRY

18TH AND 19TH CENTURIES

JAVIER MALDONADO ROSSO



n parallel to changes that occur in the course of certain natural processes – the slow and tumultuous phases of wine fermentation, for example – transformations in society can take place slowly or quickly. Such

transitions can also be peaceful or violent, qualitative or quantitative, and the alternatives offered by these examples can sometimes occur in combination, giving rise to a wide variety of possible permutations.

Vine growing and wine making within the Marco de Jerez – the term is used to refer to both the geographical region around Jerez and the sherry sector – has undergone many changes in the course of its history. The most important of these to date occurred over the last three decades of the eighteenth century and the first three of the nineteenth, and essentially transformed the kind of vitiviniculture that was traditional to the area into the modern wine growing agroindustry we know today. The wine types covered by the Jerez-Xérès-Sherry Denomination of Origin, the idiosyncratic criadera and solera system, the area's extraordinary bodega architecture, the vitivinicultural company model (the exporting *bodega*, or shipper) still in use today, and so on, all either originated or were expanded during the six or seven decades spanning the latter part of the eighteenth century and the early part of the nineteenth. This was a period of major transformation for vitiviniculture: the change was qualitative and happened slowly and peacefully, but it was not without its tensions.

This chapter looks at the various elements involved in this transformation, its defining characteristics, its socio-economic effects and the people who played leading roles in it.

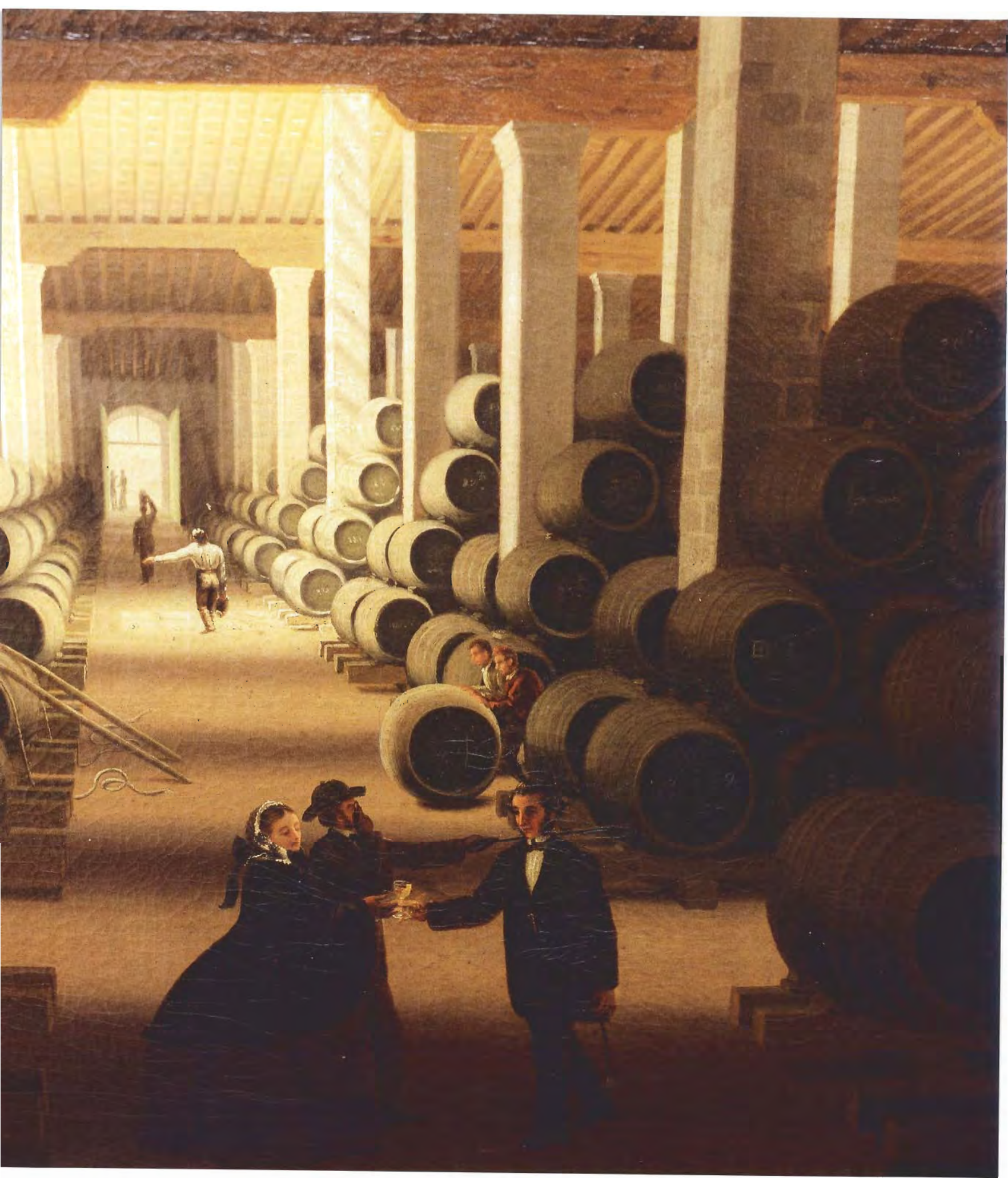
REORGANISATION OF THE EUROPEAN ATLANTIC WINE MARKET

The transformation of vitiviniculture in the Jerez-Xérès-Sherry area was not just a local phenomenon, but one whose impact was felt internationally: the development of Jerez's wine trade was part of a major process of change that affected the international wine market from the late seventeenth century onwards.

Demand for wines of all types grew from the late 1660s on, mainly in the countries of northern Europe, and particularly in Great Britain and Holland – the great maritime powers of the period – as a consequence of their improved standard of living. Consumption of new drinks such as brandy, gin, chocolate and coffee also increased, representing competition for dessert and 'afternoon' wines in particular. British taste began to change: hitherto predominantly inclined towards light, pale wines, it now began to show a preference for stronger ones with more colour and maturity – high quality wines, consumption of which lent social distinction. From the wine trade's point of view, this made them a product capable of competing with the new drinks mentioned above, and of delivering bigger profit margins.

Producing these new, high quality wines called for major technical and

The solera and criadera system, bodega architecture and Jerez wines as we know them today began to take on their distinct characteristics in the late eighteenth century.





commercial changes. Significant among the former were selection of the most suitable grape varieties; careful harvesting; a precise approach to vinification according to wine type; the addition of wine-derived spirit; systematic and regular racking (decanting wine from lees); ageing wines; combining different natural wine types to obtain the various

types of wine for export, and so on. Noteworthy commercial changes included replacing fairs and seasonal sales with wholesale trading and wine sales throughout the year; the consequent need for winery premises and equipment to cater for ageing and storing wines; the deregulation of wine prices; the emergence of new types of wine growing-related

Winegrowing underwent a major transformation during this period. Though slow and peaceful, the process was fraught with tension.



agricultural, industrial and commercial businesses...

These innovations were introduced in various wine growing areas of Atlantic Europe, albeit at varying rates. Madeira, the Canary Islands, Oporto, Jerez and Marsala began producing these types of wine, and their respective vitivinicultures were

transformed as a result. During the period under consideration – the late seventeenth and the eighteenth centuries – the British market was the main consumer of wines of this kind (strong, slightly sweet, richly coloured, highly alcoholic), and the leading merchants who specialised in the wine trade were also British, competing closely with the Dutch for control of the wine trade in Atlantic Europe.

THE TRADITIONAL VITIVINICULTURE OF JEREZ

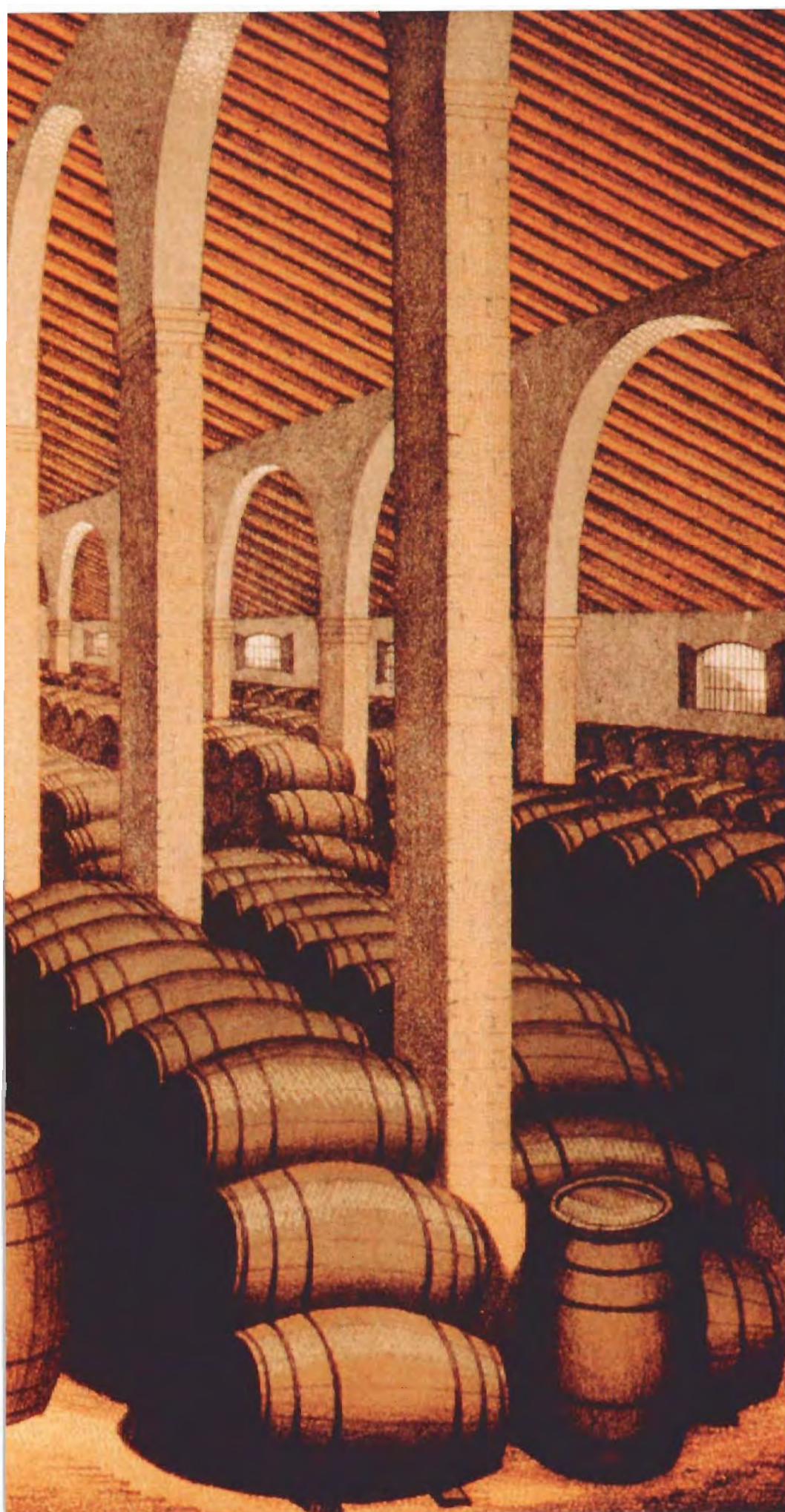
Vitiviniculture in Jerez became part of this process of change relatively late. Until the 1760s and 1770s, the primary wine products produced within the Marco de Jerez region were musts and clarified wines from the current vintage. At that time, matured wines accounted for only a very small part of production because growers within the sherry triangle preferred their business to entail the least possible risk and to be conducted within the shortest possible time-frame. This preference stemmed from the fact that, except at times of crisis, growers in the Marco de Jerez were unconcerned about selling their wines, given that between the orders they received through general trading companies established in Cádiz, Puerto de Santa María and Sanlúcar, purchases made by factors acting for foreign (mainly British) businesses with bases in the Cádiz-Jerez area, and shipments to Latin America, a high proportion of their harvest was sold without needing to bother to seek out other customers.

In the case of less well-off growers (both land-owning and tenant), their

crops were sold ahead of the harvest by means of advance payments on account made to them by locally-based merchants and bigger growers against the coming harvest's musts and clarified wines. In the absence of other credit mechanisms, the system of advance payments (known as *anticipaciones*) gave smaller growers access to money to cover their production costs and family expenses in exchange for pledging to sell their harvest to the lender at prices below those officially fixed for each type of grape, must and clarified wine. As a general rule, the price difference that the merchants imposed represented an interest rate of around 18 per cent on the advance. Some years, when the cost of money was officially set at 3 per cent and could reach 6 per cent in real terms, the rates of interest that lenders charged growers were tantamount to usury.

However, this passive trading method, with producers waiting for their crops to be bought rather than proactively selling their products, pitted vineyard owning growers against merchants, as is so often the case between buyers and sellers, because of the different profit margins that each of these financial agents expected from the harvest's musts and clarified wines. The vineyard owners' backs were also put up by advance payments being made by foreign (and, to a lesser degree, Spanish) merchants to small growers which, the big vineyard owners alleged, allowed the merchants to acquire stocks of wine at low prices and thereby exert pressure on all vineyard proprietors to reduce theirs. Accusations of sharp practice regarding wine butt capacity and the fact that some merchants were keeping wines in store aggravated the





conflict between vineyard owners and merchants still further.

In the early decades of the eighteenth century, wine growing, which had traditionally been protected by commercial privileges, became radically guild-led and statute-ridden. The Wine Growers' Guilds in the principal towns of the Marco de Jerez drew up sets of statutes – Jerez in 1733, Sanlúcar in 1735 and El Puerto de Santa María in 1745. The three towns' big growers were hoping thereby to reinforce the old protectionist privileges that they had hitherto enjoyed, extending and updating them and, above all, equipping themselves with corporate institutions empowered to enforce rules that it was in their interests to impose.

As indicated above, understandable differences existed between the vineyard owners and merchants of the Marco de Jerez area. However, relations with British merchants were much more fraught since not only were they the principal intermediaries but they also enjoyed better trading conditions than other nationals by virtue of the terms of several international treaties signed by the Spanish Crown. The earliest of these were the royal decrees granted by Charles II in 1645; then came the Treaty of Peace, Alliance and Trade between Spain and England dated 23rd May, 1667, re-established in 1713 by the Treaty of Utrecht; and finally the Treaty of Peace, Union and Mutual Defence between the Crowns of Great Britain, France and Spain, known as the Treaty of Seville, and the Declarations of 6th June, 1731 and

This period saw the construction of the Marco de Jerez's first great bodega buildings - vivid symbols of Jerez's modern wine-making agroindustry.



8th February, 1732 signed by Spain and Great Britain.

Protected by these advantageous treaties, British and Spanish merchants boosted sherry exports to the United Kingdom and put into practice the system of storing wines to which the area's growers were so opposed. The aim of the statutes of the Wine Growers' Guilds of Jerez, El Puerto de Santa María and Sanlúcar de Barrameda was to institute a system based on the following elements:

- The production of basic wine products: current year musts and clarified wines.
- Setting minimum selling prices for such products annually.
- Seasonal trading in such products: musts in October and November and clarified wines in March and April.
- Prohibiting outsiders, foreigners and even Spanish or nationalised neighbours who were not land-owning growers from keeping wines in store.

In short, recourse to guild-led attitudes on the part of wine growers in the Marco de Jerez represented a response to various combined factors. Firstly, the technical and commercial changes that were taking place in the Atlantic European wine market; secondly, head-on opposition to these from an influential section of Jerez's growers, who resorted to absolute protectionism. Meanwhile, the self-contradictory trade policy applied during the reign of Philip V, which made concessions to British trade while simultaneously permitting the



granting of privileges opposing them in the growers' favour, contributed to aggravating the conflict between the parties while both tried to make the most of their prerogatives. A final element was the influence of a mercantilist mind-set that was unproductive in practice and doctrinally resistant to the changes being effected by the socio-economic dynamic. This, then, is the national and international context within which the guild-led stance of the Marco de Jerez's wine growers should be considered.

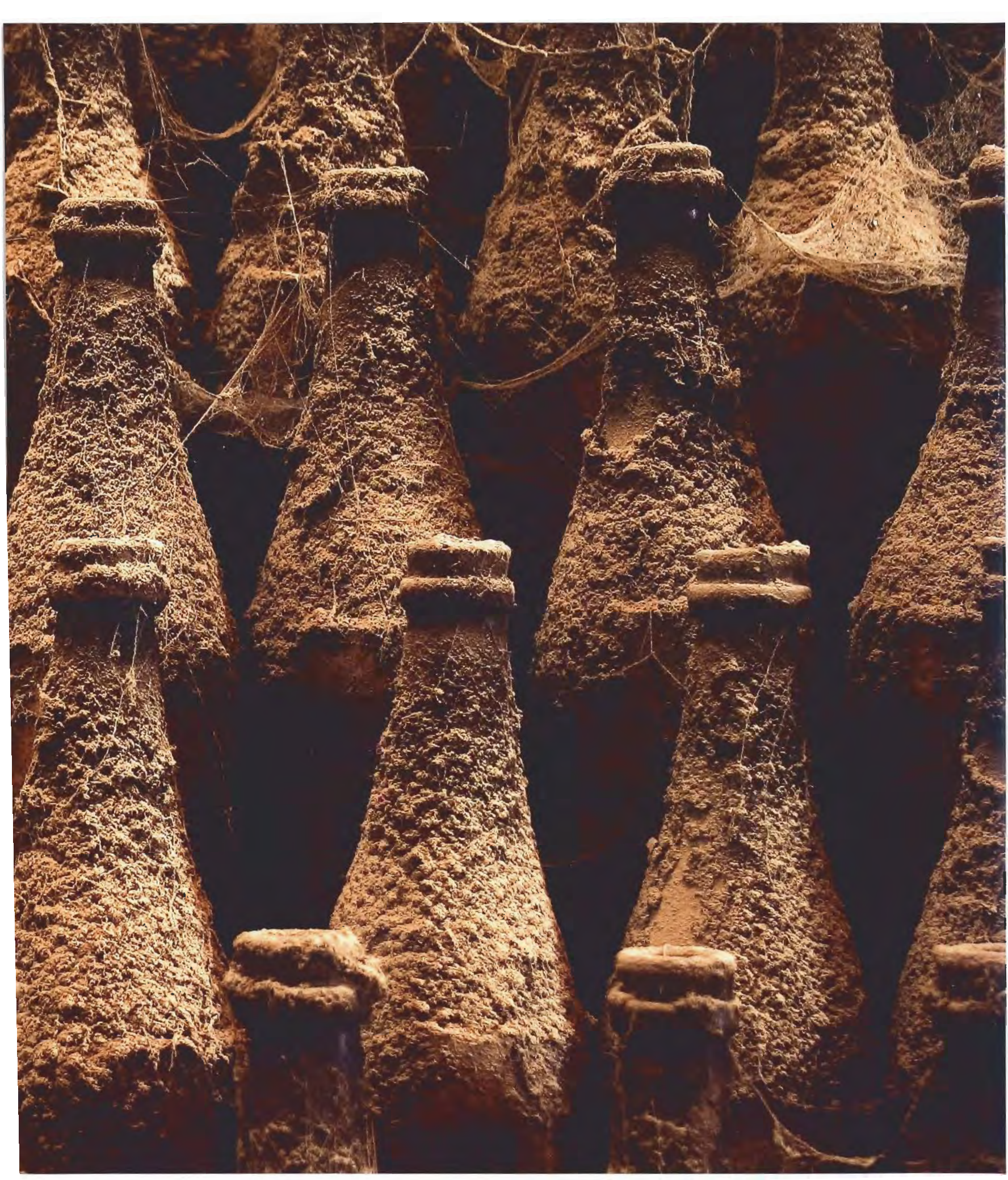
THE STRAINED TRANSITION FROM OLD WINE GROWING TO NEW

Despite their having resorted to protectionism and the statute book, the major changes that the growers had hoped to prevent were eventually carried through. Fining offenders, issuing threats and even having some merchants arrested for infringing the statutes proved useless. During the 1770s, the statutes were so consistently contradicted and flouted that they became worth less than the

paper they were written on. The main issue with which the statutes were concerned was the storing of wine, yet the fact is that big merchants, both foreign and Spanish, just went ahead and set up storing wineries or warehouses.

Juan Haurie expanded the warehouses that he had inherited from Patrick Murphy and built big, new *bodegas*. Gordon, Beigbeder, Lacoste, Harkon and Rivero (heir to the famous CZ brand) did much the same, all in Jerez. Large storing wineries were





built in El Puerto de Santa María by, among others, López Martínez, Juan Mousley, Biñalet and Casaux. The same sort of thing also took place in Sanlúcar de Barrameda and, to a lesser degree, in other places within the Marco de Jerez. This flouting of the statutes was not only *de facto* but also *de jure*. In May 1773, a group of merchants led by Juan Haurie petitioned the Consejo of Castile to dissolve the Wine Growers' Guild of Jerez. The petition, which became known as '*el pleito de Haurie*' (the Haurie case), lasted a decade. It was hugely complicated. In the course of the case, the numerous and sometimes tedious proceedings inherent to the main issue before the Consejo of Castile were added to by other incidents which the parties wanted incorporated into the lawsuit. The interested parties agreed to the case being divided up into four issues: a) the dissolution or survival of the Wine Growers' Guild; b) extravagance and mismanagement on the part of the Guild's Consejo and board; c) approval or rejection of four new chapters of the wine growing statutes; and d) the regulation of wine butts and measurements. The second point was in turn divided into four sub-points relating to the advisability or otherwise of using certain chapters of the statutes, the decline of the Guild as a result of wine exports, the accusation of lack of rigour in account-keeping, and the scale of abuse and maladministration of the Guild's funds on the part of its officers. As the case progressed, two further points were added to these issues: e) edicts issued by the Mayor of Jerez concerning the capacity measurements to be used

and the regulation of vessels; and f) the involvement in the Guild of representatives of the Commoners' Consejo. These points could hardly be said to boil down to the first point of all, namely the issue of the dissolution or survival of the Wine Growers' Guild: Haurie and his supporters presented them in this way with a view to winning at least some partial victories in the case of not achieving outright victory.

And so it turned out. The Guild was not, in fact, dissolved, nor were the statutes cancelled, though they did end up worth less than the paper they were written on, while the Guild itself lost all its power as a result of various legal stipulations which liberalised both wine production and trade. The most important of these stipulations was the Royal Decree dated 26th January, 1778 which, among other matters, permitted foreign wines, either in transit or for consumption, to be brought in to places where they were not expressly prohibited. Small quantities of non-local and foreign wines were also allowed into privileged towns known as *pueblos de privilegio* for consumption by private individuals. More important was the freedom granted to native and foreign merchants to bring into all the towns in the land, subject to paying the specified dues, "the small quantities of wine that would serve to tint or give colour to those of the Country, and thereby make their export more advantageous, as the Trade shall see fit." This decision expressly and definitively brought an end to the basic problem faced by growers and merchants in the Marco de Jerez regarding storing stocks of wine.

In effect, then, the Royal Decree of 26th January, 1778 turned out to be the most liberalising measure as regarded the accumulation of stocks within the wine trade. Within the Marco de Jerez, the freedom granted to native and foreign merchants to bring in small quantities of wines from outside the area for colouring local ones represented tacit recognition of wine warehousing, forbidden by the Wine Growers' Guilds' statutes, since it was precisely in those bodegas that did store them that the specified combinations were carried out to produce the types of wine demanded by the various foreign consumer markets.

This liberalisation of wine production and trade should be considered in the context of an enlightened reformist policy in application in Spain at that time. As regarded the Marco de Jerez, the government passed measures that liberalised production and trade, as we have seen, with enormous tact and, on occasion, finely tuned ambiguity, carefully managing to favour the exporters' demands without annoying the growers too badly. It was a delaying tactic designed to prevent radical reactions from those adversely affected, who were kept guessing for years about final decisions on issues that continued to arise. It was a way of getting them used to the idea that they might end up the losers.

JEREZ'S MODERN WINE GROWING AGROINDUSTRY

By the two routes described – *de facto* and *de jure* – wine growing within the Marco de Jerez was transformed

from the 1760s on. Jerez's modern wine growing agroindustry was, from the start, primarily characterised by its industrial nature. From exporting basic wine products (current year musts and clarified wines) which were treated and blended to match consumer tastes, it moved into producing and exporting matured wines of different types as demanded by British consumers, the area's main customers. This meant that the added value that accrued to wines during the industrial phase was also generated in the places where they were produced.

Furthermore, the new agroindustry was also characterised by freedom of production and trade. From that time on, wine could be bought and sold throughout the year and prices were not fixed.

In more concrete terms, however, Jerez's wine growing agroindustry has been characterised for over two centuries by its new wine types, by its idiosyncratic criadera and solera system for ageing wines, by the architecture of its new *bodegas*, and by the new types of company established from the 1760s on. These aspects are considered briefly below.

New types of sherry wines

The new types of sherry wines were characteristically aged, strong, dark, highly alcoholic and either dry, slightly sweet or sweet. The range of wines was very wide: a numerical classification system, ranging from 1 to 8, that stood for the duration of the crianza (aging) process (though the numbers did not correspond to the actual age), allowed various

permutations to be produced on the basis of the colour and flavour that each numbered wine could contribute. For example, a number 4, which might be 6 years old, could be made dry, smooth or creamy, and dark, golden or pale; and graduations in those colours could also be achieved, expressed by the qualifiers 'very' and 'light'. Wines were made to the taste of customers in specific areas and places.

• The criadera and solera system

This is the name given to an ageing method in which wines of the same type but of different vintages are combined amongst themselves in an ongoing process of indefinite duration during which the older wines accelerate the rate at which the new ones age. This is a dynamic ageing method, as opposed to the static method of ageing by vintages, the ins and outs of which need not detain us here since they are covered by another chapter in this book. Suffice it to say that it is a method whereby wines take on an average age rather than an absolute one. This system emerged, and was extensively applied, in the eighteenth and nineteenth centuries respectively, and has gone on evolving throughout the twentieth century and up to the present day.

In the case of physico-chemically aged wines, this system is only intended to achieve speedier ageing and homogeneity. In the case of wines that are biologically aged under a layer of yeast (known as *velo de flor*), such as fino and manzanilla, the criadera and solera system is essential to maintaining the layer of *flor* on the surface of the wine

inside the casks, thereby ensuring that these types age biologically. Loss of the protective layer of *flor* would result in the ageing process becoming oxidative.

New bodega architecture

As this subject is dealt with specifically in another chapter of this book, I will do no more here than point out the correlation between Jerez's new *bodegas* – those that characterise its wine industry today – and the new wine warehouses that merchants started using from around the 1730s on. It was not, in fact, until the 1770s, when a combination of circumstances made it possible, that new bodegas began to be built. In the latter part of the eighteenth century, the sherry trade saw exports increase notably and initiated the viticultural and vinicultural transformations described above. The working relationship between growers and shippers became weighted in favour of the latter after their victory in the lawsuit that had pitted one faction against the other. In these new circumstances, the shippers were able to give the business the decisive push that caused it to change. The first wave of new bodega building occurred at that time: commissioning buildings that provided optimal conditions for ageing the area's wines and embracing the neo-classical aesthetic that was then so fashionable, Gordon, Lacoste, Haurie and other exporters created the great *bodegas* that so impressed Esteban Bourelou. Indeed, those buildings that have survived are still impressive today.

However, it is important to relativise

the importance of these *bodegas*, for although they are an excellent representative example of the changes described, old-style *bodegas* – which would continue in service for a long time – were also still being built, and there was an active market in buying and selling, and leasing, old *bodegas*. The arrival of the great *bodegas* should be considered in the context of the Marco de Jerez's dynamic wine growing market in the late eighteenth century, though it was during the first half of the following century that their style and type would become established and extended in a consolidated way. This latter period, rather than the earlier one, was when capital derived from Latin America played a significant role in *bodega* building.

• New types of vitivinicultural companies

Towards the end of the eighteenth century, vitiviniculture in the Marco de Jerez was structured around three basic economic sectors: vineyard-owning growers, warehousemen and exporters or shippers. These exporting companies, which had come into being during the process of change under consideration, were a new type of business within the wine trade, characterised by their productive and trading function, their sophisticated organisational structure, the relative importance of fixed shares in the composition of their capital, their egalitarian relationship with foreign importers, and the vertical concentration of their activities within the vitivinicultural sector. Other, purely speculative, companies coexisted in the lee of these, particularly from the 1820s on, and these would prove to be a destabilising factor in the new productive-commercial system of the Marco de Jerez's wine trade.

Companies in the business of storing and ageing wines, known as *almacenistas*, were a type of company new to the sector. They served a productive function between growers and exporters, consisting in ageing wines, for the most part to be sold on to the exporting companies. They did not export their own wines, though some of them occasionally tried their luck in that area. The specialist nature of companies of this type is not to be confused with the activities of their owners, a certain proportion of whom were also growers.

THE PROTAGONISTS OF CHANGE

One of the most frequently repeated myths about the Marco de Jerez's wine industry today attributes all the credit for its growth and success to the English merchants who arrived in the area in the late eighteenth century. Like all clichés, there is some truth in this, but it by no means represents the full picture.

The leading figures in the generation that led the transition from traditional to modern wine trade were growers who were also involved in the ageing and trading phases of the business (among them Cabeza, Menchaca, Francisco de Paula Romano, Rivero, López Martínez); long established merchants already settled in the area (Brickdale, Juan Haurie, O'Neale, Lacoste, Juan Domecq, Juan Casaux, and so on), some of whom became involved in some phase of wine growing during that period; and other merchants attracted to the area more recently by the enormous potential for profit offered by sherry wines in the new international wine market (James Gordon, Duff Gordon, Beigbeder, Moreno de Mora,



The Jerez-El Puerto-Trocadero railway was the most significant feature of the infrastructure and transport development achieved in Andalusia in the nineteenth century. Goods trains also drew up to the very doors of the *bodegas*.





Benigno Barbadillo y Hortigüela



Robert Blake Byass



Pedro Domecq Lembeye



William Garvey



Manuel María González Ángel



Thomas Osborne Mann



Julián Pemartín



Juan Sánchez de la Torre



George Sandeman

Juan Sánchez, Garvey, and so on). Right from the start it is obvious that the facts are more complex than the mythological version suggests. There certainly were British merchants, and they did play a major role, though not a decisive one: they were not the only leading figures, nor even the most important ones. The British merchants in question – and the ones to whom the myth generally attaches – settled in the Jerez area from the 1770s and 1780s on. They were, among lesser-known others, James Gordon, Patrick Garvey and Duff Gordon. By that time, the process of change in the sherry trade was already underway, headed socially – and also commercially, it seems – by Frenchman Juan Haurie, by then a naturalised Spaniard, who had been a resident in Jerez since the 1740s. It must be conceded that he was the heir of Patrick Murphy, an Irish (rather than English) exporter based in Jerez in the first half of the century.

Alongside Juan Haurie, others were establishing exporting firms, before the arrival of the British contingent mentioned above, in response to new business patterns. Examples of these included José Rivero, Cabeza, Romano Mendoza, Herederos de Rizo, Menchaca, Brickdale, O'Neale, López Martínez and others. As well as British merchants came others of French (such as Beigbeder) and of Spanish nationality (such as Moreno de Mora and Juan Sánchez). The British did undeniably play an important role, investing capital in building *bodegas*, acquiring vineyards and buying wines. With their contacts in Britain, they certainly extended the market for sherry in the British Isles. But by the time they arrived on the scene, great wineries had already been built in Jerez by Haurie

and other wine traders who already enjoyed a sizable market in Great Britain. The role played by the French and Spanish traders established before the British, or contemporaneously with them, was equally important, to say the least. Haurie is the most paradigmatic example, but by no means the only one: Bernard Louis Lacoste, Pierre Beigbeder and Pierre Lagarde also built big *bodegas* and increased the volume of exports to Great Britain, though not British themselves. The same is true of the Moreno de Mora brothers and José María López Martínez, who had set up places of business in London.

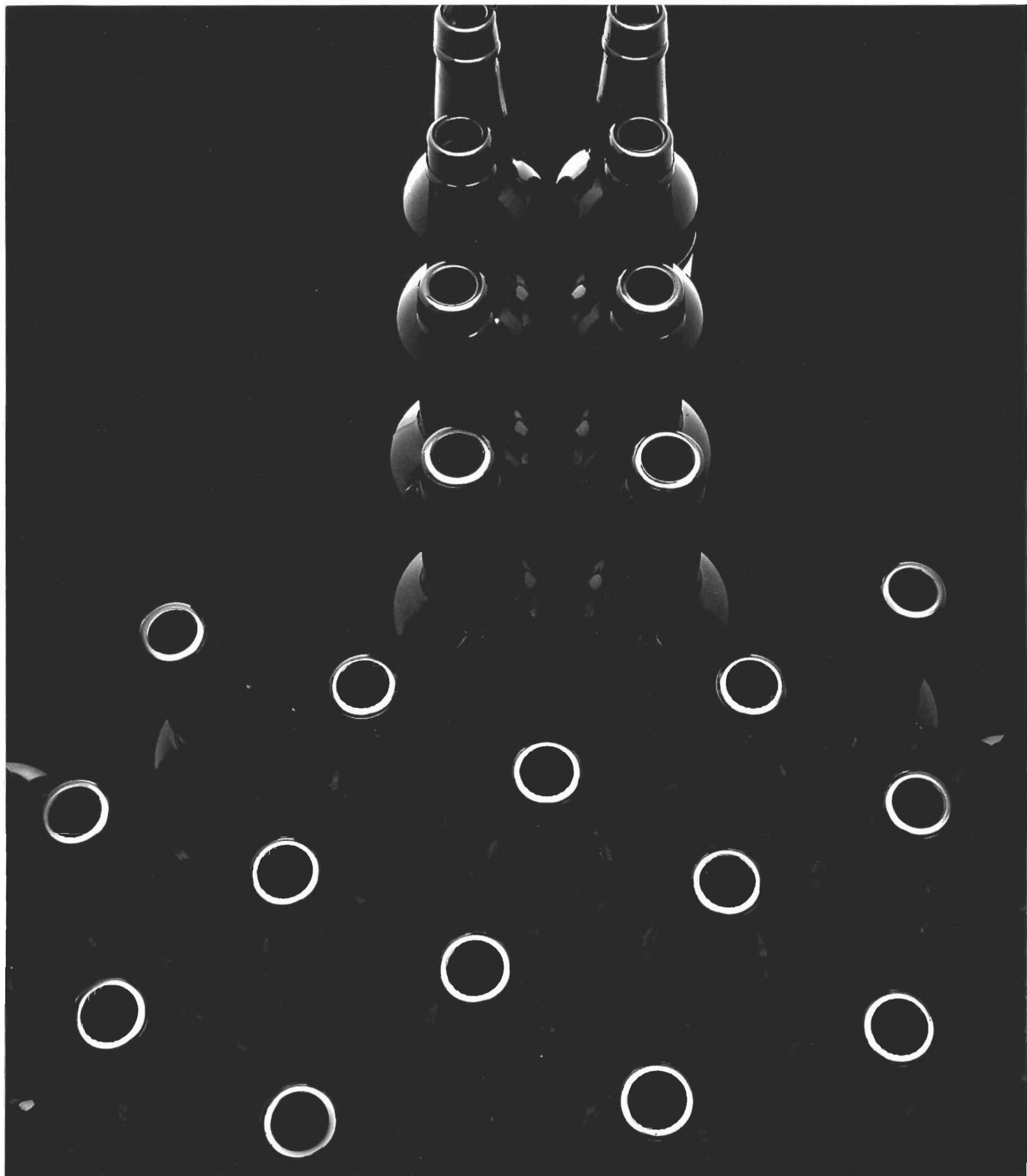
The activities of that generation spanned the period from the mid-eighteenth century through to the early nineteenth. The early nineteenth century was something of a watershed because of the change in international relations occasioned by the end-of-century wars against England and the Peninsular War, and because of the death of some of the leading figures of the pioneering generation (Juan Haurie in 1793; Jean Pierre Lacoste in 1803; Bernard Louis Lacoste in 1805; Francisco Romano Mendoza, Cabeza and Beigbeder all between the end of the eighteenth century and 1820), and the retirement from the wine trade of others (James Gordon in 1798).

Among the representatives of the two succeeding generations who took the modern wine-making industry forward were Julián Pemartín, Tomás Osborne, Benigno Barbadillo, Pedro Domecq, León Argüeso, Manuel María González Ángel, José Jiménez...

To sum up, the bourgeoisie that played such a prominent role in this major transformation of Jerez's wine trade

was made up of Spanish, naturalised and foreign farmers and merchants who chose to involve themselves in the productive phase of viniculture so as to benefit from the added value generated by ageing wines. Though important, the role of the British and Irish should not be exaggerated, given that French, Spanish and naturalised entrepreneurs were also highly influential in the process. It would be still less justifiable to overstate the role of foreign capital in transforming the sherry trade: in the most notable cases, some – when not all – of the supposedly foreign capital had in fact been created and enhanced within the area itself. In shaping the Marco de Jerez's modern wine growing agroindustry, naturalised and foreign entrepreneurs were much more important than the capital brought in from abroad.

Jerez's modern wine-making agroindustry had important positive consequences for the Cádiz-Jerez area. It generated a steadily growing increase in demand for goods and services in very diverse areas of the economy, such as cooperage (for manufacturing containers), wood (stairs and various *bodega* utensils), metal (vineyard and *bodega* tools), construction (winery building and maintenance), transport (carting musts from vineyard to *bodega*, and from *bodega* to quayside). It contributed to raising the rates of both employment and pay (between 1750 and 1850, the number of coopers in Jerez and El Puerto de Santa María went up from 60 to 461, and that of *bodega* workmen from 25 to 400). It also caused a significant increase in the area given over to vineyards; per capita wealth, capital and income went up; road and port infrastructures and modes of transport were developed...



Título: Caudes

SHERRY IN THE
20TH CENTURY
REGULATION
AND TRADE

ALBERTO RAMOS SANTANA

T

he year 1882 saw the publication in Madrid of the second edition of a curious book entitled *Diamante del viticultor* (The Vine Grower's Diamond) whose author, José López y Camuñas, wrote as follows:

"In the municipalities of Jerez, El Puerto and Sanlúcar de Barrameda are extensive vineyards which, from the month of May until September, present the most charming scene of all the vine growing regions of Spain. Great plains and flat areas, starting at the walls of the town, are planted with lush vineyards, their respective boundaries marked by green fig trees, pita and the occasional blackberry bush. The countryside appears clad in a mantle of green satin, speckled with white dots interspersed with others of yellow and red. It is a green meadow, on fertile land, with no stones, pebbles or gravel, and much subsoil, that resembles a lovely rose tree of white roses, grafted with yellow and red. The rose tree is composed of all the vineyards, and its white roses are the scattered wine presses-summer houses, as beautiful as any in Cádiz, that stand out in almost all the holdings planted with vines, and their yellow and red calices are the doors, windows, balconies and roof edges of these luxurious buildings, painted in those colours. The countryside of Jerez is a veritable bright fruit garden, planted in soils of albariza clay and sand ..."

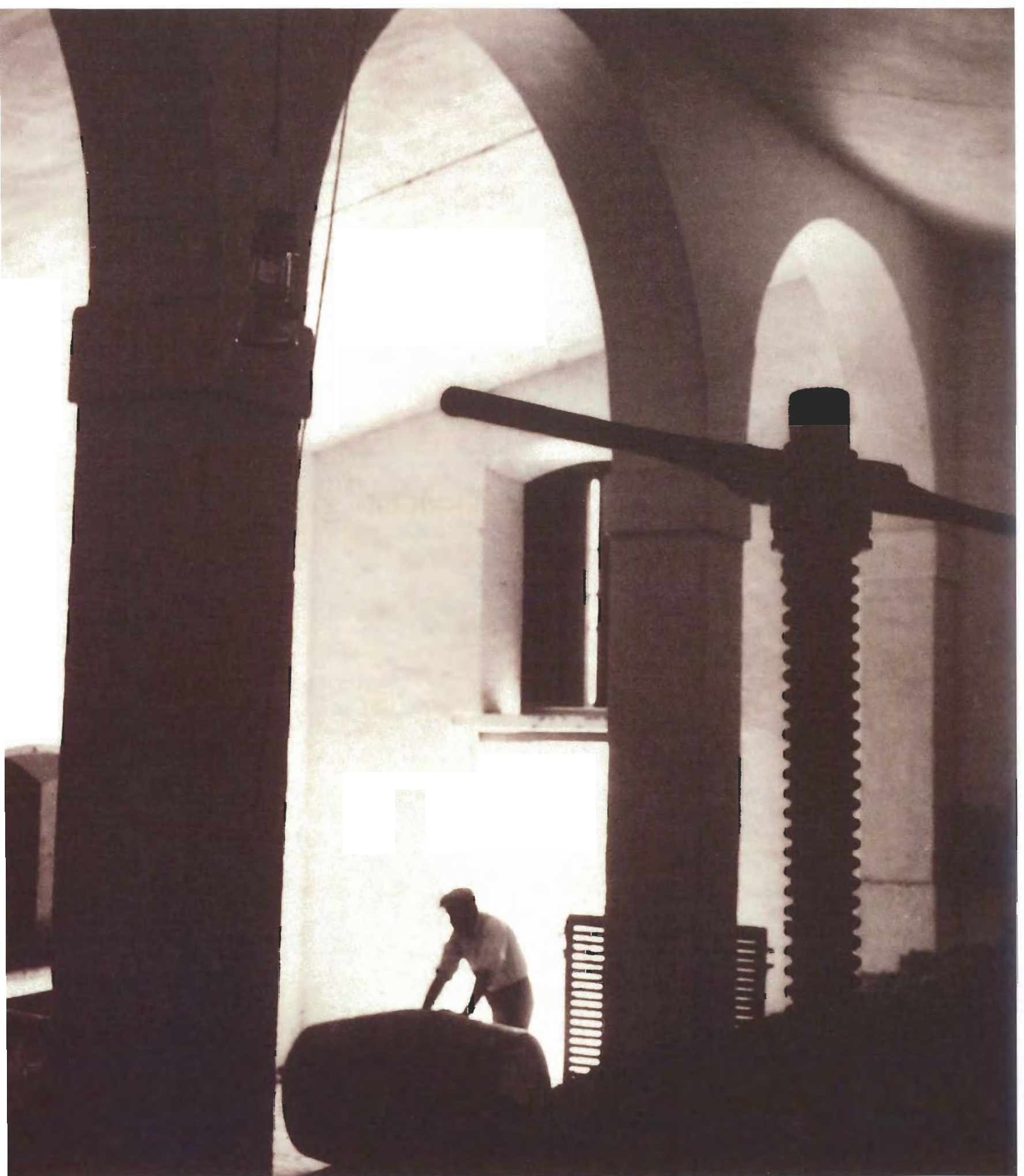
At the end of the nineteenth century, the bucolic scene described in the book was completely shattered when phylloxera invaded Spain's

vineyards. This insect of American origin, which attacks vine roots and kills the plant, spread through Spain from three major focuses. The first outbreak was in 1878 in the vineyards of Málaga, which were virtually destroyed within just a few years. From there it spread to the rest of Andalusia, reaching Montilla in 1888 and Jerez in 1894, moving on from Andalusia to reach Alicante in 1903. Originating in Roussillon, the second focus was discovered in the Ampurdán area of Catalonia in 1879, from where it advanced southwards, reaching the province of Barcelona in 1882, Tarragona in 1888, Benicarló in 1902 and Utiel in 1912. The third focus affected north-western Spain, apparently having entered from Portugal.

Despite attempts at defensive measures, the effect on Jerez's vineyards was devastating and spelled ruin for many vine growers. However, thanks to their idiosyncratic solera system, *bodega* owners in the sherry triangle were equipped with ample stocks that enabled them to ride out the crisis and recover relatively easily. Some even extended their properties at the expense of the smaller vineyard owners, many of whom were unable to surmount the phylloxera crisis.

So intense and far-reaching were the effects of the crisis that on 12th October, 1903, the Mayor of Jerez, Juan F. Lassaletta, addressed a statement to the municipal corporation pointing out that as the wine industry was "our town's main source of wealth," the problems by which so many were so badly affected were in effect causing a crisis affecting Jerez as a whole. He

Thanks to the solera system, Jerez's bodega owners were better able to survive the phylloxera crisis that afflicted the vineyards of Europe.

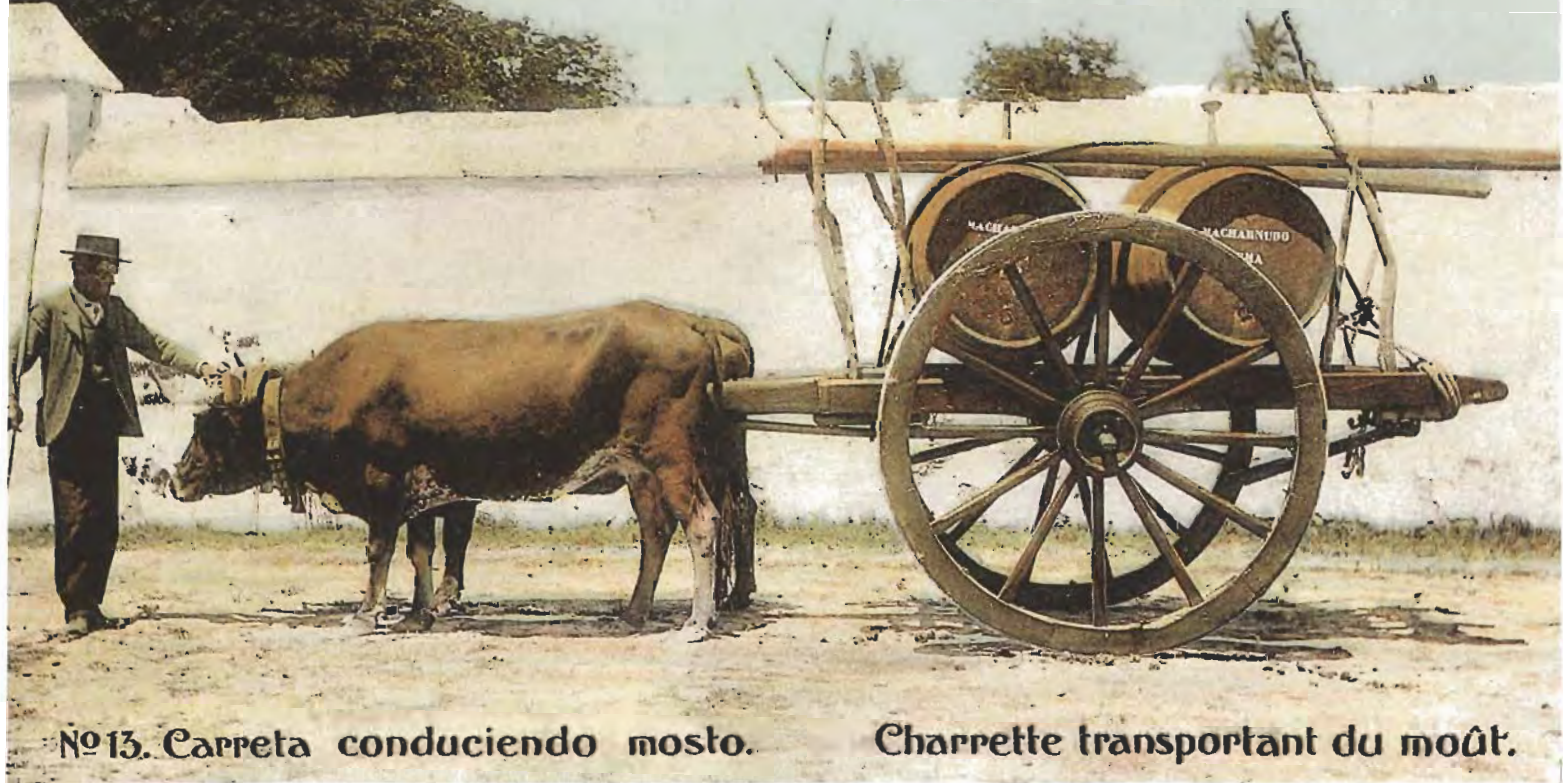




At the turn of the century, after a decline in exports and the phylloxera crisis, the sector proactively set about redressing the situation.



A.R. VALDESPINO Y H^{NO} Jerez de la Frontera.



therefore proposed that solutions be sought to restore the wine growing industry with a view to returning prosperity to the city and well-being to its inhabitants. Since the decline of the wine trade was attributable to the loss of vineyards through phylloxera, vines were to be replaced so that the region's wines could continue to be produced and export figures be recovered.

Repopulating the vineyards was difficult because of the high cost

involved which meant that, as Lassaletta observed, "only wealthy people can carry it out," and many holdings remained in disuse for lack of resources. The Mayor suggested as a solution that impecunious local farmers be paid subsidies to plant old vines, on condition that they used vineyards suitable for the purpose, subject to direction and inspection by a specially appointed board. A considerable sum of money (at least 50,000 pesetas) was allocated from the 1904 budget to finance



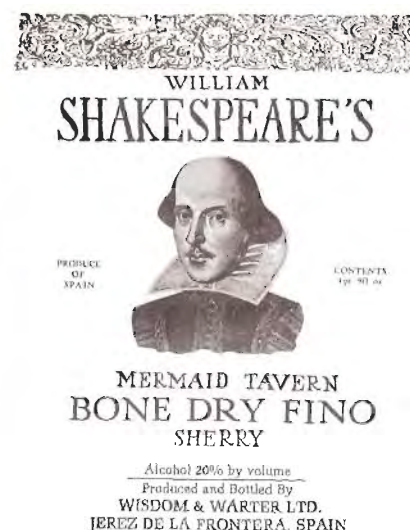
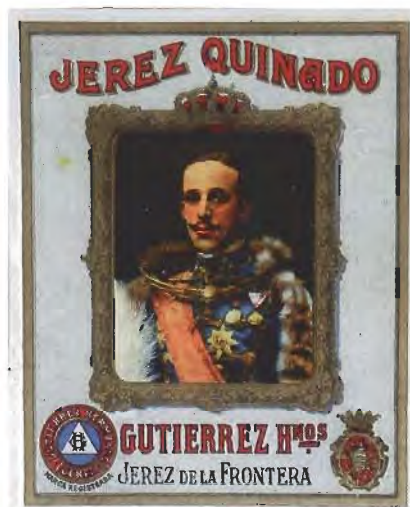
the first plantations, and the central government was asked for financial support for the scheme to be carried on the following year. A commission made up of the Marqués de Bonanza, Pedro Domecq Villavicencio, Luis López de Carrizosa, Francisco Ivison O'Neale, José Soto Ruiz and Antonio Gallegos Sánchez was formed to work with the Mayor in carrying through the proposed scheme.

Despite this impressive municipal plan, phylloxera in fact put paid to

traditional viticulture in Jerez, and this was capitalised on as a chance to set about renovating the wine trade so as to curb the decline in exports that had set in towards the end of the nineteenth century.

In 1902, a year before the municipal scheme was proposed, Pedro Domecq, who had already replanted with American vines, published a report on the state of the wine trade in Jerez de la Frontera and the means to improve it, analysing the current

situation of the wine industry and suggesting means by which Jerez's wine trade could be restored. His report decried the fact that a high percentage of exported wines were poor in quality and low in price. Meanwhile, there was less demand for better quality wines, a demand that could be met in the current situation from stored superior quality sherry. Export figures seemed to suggest that genuine sherries were barely known in the British market and that, to keep their customers



happy and not lose business, *bodegas* felt obliged to produce blends to the detriment of the traditional wines of the area.

Furthermore, there were potential dangers in this situation: any other wine producing area could produce wines similar to sherry – imitations – and compete in international markets with lower prices. That this was already happening was reported by individuals and newspapers at the time. The proposed solution was very specific: to promote and spread the word about the quality of natural wines; and, meanwhile, to provide consumers with every possible guarantee that what they were buying was genuine Jerez wine; and to reinforce that guarantee by selling the wine already bottled. This did not necessarily mean that 'mixtures', for which there was a steady clientele, should immediately be banned, but that one should rely on the quality of natural wines to speak for itself and eventually win the day.

In speaking up for the quality of natural wines from the Jerez area while not rejecting the 'lower' wine industry out of hand, the Marqués de Domecq's proposal largely summed up the conflict of interests that existed. Growers were opposed to the designation 'jerez' being applied to wines from other places and provinces, and accused exporters of bringing wines from other sources into Jerez so as to bring down the price of genuine sherries. On these grounds, they demanded that the vine growing production area to which the 'Jerez' Denomination of Origin could apply be delimited by law. The exporters, meanwhile, were in favour of creating a collective brand for the wine industries based in Jerez, but not of the idea of geographical delimitation, which would interfere with their trade in inferior wines and the bringing in of musts from other wine growing areas.

The debate continued unresolved for many years, and it was only from

1914 on that moves were made towards reaching an agreement. The initiative to identify the issues and resolve the conflict came from Jerez's *Centro de Unión Mercantil e Industrial* (Centre of the Mercantile and Industrial Union), which sent a proposal to the Minister for Development on 22nd April, 1914, requesting that a law be drawn up and passed by the Spanish Parliament creating a designated wine growing area to include the municipalities of Jerez, Sanlúcar de Barrameda, Trebujena, Chipiona, Rota, El Puerto de Santa María and Chiclana, so that only wines from those municipalities would be permitted to use the '*Vinos de Jerez*' Denomination of Origin.

Once the proposal was known about, it quickly gained the support of the municipal *Consejos* involved, and on 4th May the mayors of those towns met in Jerez, joined, at the invitation of the Mayor of Jerez, by those of Cádiz, Lebrija and Arcos, and the president of the provincial



Consejo. The purpose of the meeting was to request the government again to establish the limits of the wine growing area to be known by the denomination ‘Jerez’ so as to prevent the potentially ruinous consequences of the fraudulent trade in false sherries, both in Spain and abroad. Because of who had been invited, the proposed area included those municipalities suggested in the *Centro de Unión Mercantil e Industrial* proposal, namely: Jerez, Sanlúcar de Barrameda, Trebujena, Chipiona, Rota, El Puerto de Santa María and Chiclana, plus Arcos de la Frontera, Lebrija and the wine companies already in existence in Cádiz.

Reaching agreement in principle about what Jerez’s wine producing area ought to consist of was an important step forward, but the attitudes adopted by the Exporters’ Guild, the Vine Growers’ Union and producers and small owners in the municipalities involved prevented the scheme from being implemented.

The positions taken rehearsed old arguments. Although the creation of a ‘wine growing area’ benefited and protected vineyards and enhanced the value of local vines, the exporters adamantly refused to allow their purchasing catchment to be limited to a specific area. They went so far as to adopt the extreme position of insisting that if the area had to be delimited, then it should be reduced to the municipalities of Jerez and El Puerto, arguing that Sanlúcar, for example, should remain outside the limits on the grounds that it had a wine type all its own.

The debate was not confined to the province of Cádiz, but reached the national parliament. Outstanding among speeches on the subject was one made by the Marqués de Mochales, who brought the Jerez proposal into the debate in the following manner:

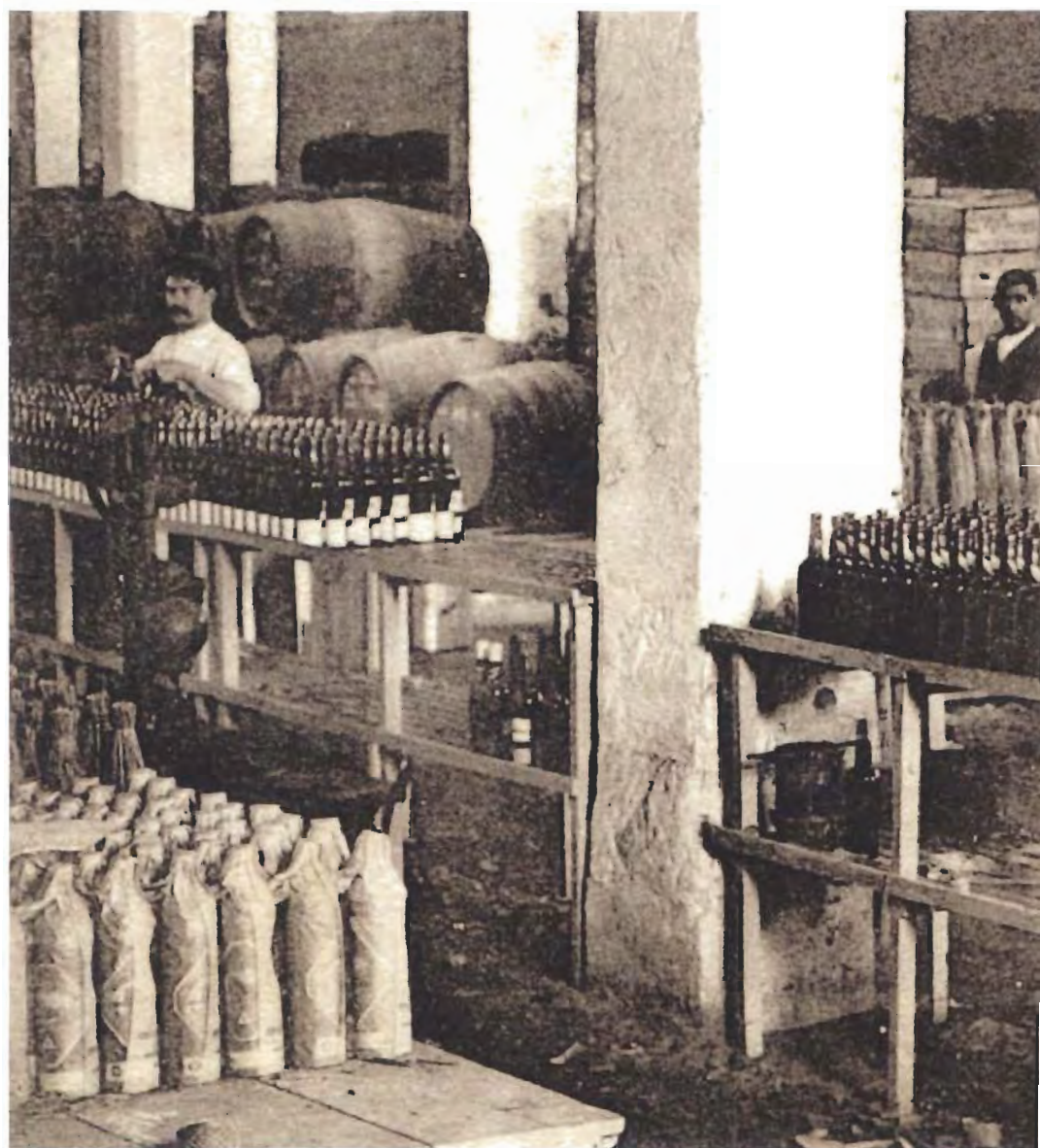
“A few days ago I had the honour of presenting to your honour at the

ministry ... a petition formulated and signed by the Círculo de la Unión Mercantil e Industrial of Jerez de la Frontera, veritable embodiment of the leading figures of that locality, requesting that, for the reasons expressed therein, you would be so kind as to present to parliament a bill establishing the demarcation of the viticultural-vinicultural area of the region that bears the name Vinos de Jerez.”

Mochales went on to explain how Jerez wines benefited the wealth of the nation as well as generating prosperity within the immediate area, supporting this assertion with references to export and consumption figures. He then proceeded to denounce imitations of Jerez wines made within Spain itself, pointing out that, “protected by the legislation of our own Exchequer” there were, for example, factories in Barcelona that made “wines licensed as Jerez, with the corresponding fees and industrial tax.” As examples

overseas, he cited Marseilles, Cette, Bordeaux and Hamburg, which also used the title of “Producers of Jerez wines”. After a speech by the Minister for Development asking for time to look into the matter, the Marqués de Mochales made the direct suggestion of constituting ‘jerez’ as the designation, explaining that the city of Jerez belonged to the province of Cádiz but that there were “towns adjacent to Jerez, such as El Puerto de Santa María, Sanlúcar de Barrameda and others” whose municipalities were so closely connected with Jerez by virtue of their trade and wine production that “they are all mixed up together, and there is nothing for it but to accept the word ‘jerez’ for such similar products,” so that the area to be recognised should encompass the interests and convenience of all. It was therefore up to the government to make a resolution that met with the approval of all parliamentarians, which was none other than delimiting the wine growing area of Jerez.

But the controversial issue was not successfully resolved, one reason for this being that the Spanish government put off making a decision rather than adopt a position against either growers or exporters. Its stance was not unlike that advocated by the Marqués de Domecq, who continued to advocate allowing the wine trade to carry on as it was, trusting that Jerez’s natural wines would eventually win over the market. In fact, all it was doing was putting the issue on the back burner for the time being. After Spain’s Second Republic was constituted, the Republican government decided to tackle Spain’s wine problem: on 8th



September, 1932, it passed a Wine Statute decree, the Estatuto del Vino, intended finally to regulate wine production and trade. The decree became law on 26th May, 1933.

Chapter 4 of the Wine Statute established and regulated the issue of Denominations of Origin so that, at

last, on 4th August, 1934, the Consejo Regulador of the Denomination of Origin Jerez-Xérès-Sherry – the first in the whole of Spain – was constituted. Presided over by Enrique Carballo, head technologist and director of Jerez’s Viticulture and Oenology Station, with Antonio Muñoz García as his secretary, the Consejo was made up of

When imitation sherries started to appear, a guarantee of origin for the genuine product was suggested, as was the even better guarantee of selling sherry already bottled.



representatives of the sector's various constituent guilds: for the Official Union of Wine Agers and Shippers, Enrique Fernández de Bobadilla and Juan José Palomino; for the growers, Alfonso Sánchez Mateos and José de Soto Abad; for the Provincial Vitivinicultural *Consejo*, Manuel María González Gordon and José L.

Florida, and representing 'general interests', as advisory spokesmen, - Pedro Gutiérrez de Quijano y Medina, designated by the National Federation of Wine Agers and Shippers, and Ramón García Llano, designated by the National Confederation of Vine Growers.

The new Consejo set to work with alacrity, and in November presented the Ministry of Agriculture with a plan for delimiting the area and for its working rules, which were approved with some modifications on 19th January, 1935, and published three days later in the Madrid Gazette. Once it became known that the Consejo's



scheme had been approved, debate resurfaced about the configuration of the production area because Jerez's exporters were resistant to extending it beyond the municipalities of Jerez and El Puerto de Santa María. Article 2 of the Regulations protected the general interests of small and

medium sized producers within the area known as the Marco de Jerez, insofar as it recognised a production area composed of the municipalities of Jerez, El Puerto de Santa María, Chipiona, Rota, Puerto Real, Sanlúcar and Chiclana. However, Article 14 also established the possibility of wines from the whole of Cádiz province, as well as from Huelva, Seville and Córdoba, being permitted to enter in the event of three exceptional circumstances: if the harvest were small, if wines were of poor quality or if the price of musts in the pre-eminent production area (as established in Article 2) were higher than those fixed by the Consejo.

The debate that reawakened conflict between growers and exporters took on a political complexion when the government minister with responsibility for agriculture, Manuel Jiménez Fernández, was replaced by Nicasio Velayos, an advocate of counter-reform in agriculture. Led by traditionalist member of the parliament Juan José Palomino (the Official Union of Wine Agers and Shippers' representative on the Consejo), the exporters capitalised on this, and on the fact that problems over establishing limits for wine growing districts had emerged in other wine growing areas of Spain, to get the recently approved Jerez Regulations suspended. This was a strategic move to unsettle the delicate structure of compensation of interests between the small producers, growers and exporters, and tip the balance exclusively to their own benefit, even at the expense of destroying the other sectors in the Marco de Jerez.

As the Exporters' Association launched the first 'generic' campaigns, wineries also started to create enduring brand images.

The manoeuvre culminated in the publication of a new set of Regulations for Jerez's Consejo Regulador on 26th July, 1935, annulling the production area established by the first Regulations and extending it to include all the vine growing towns of the provinces of Cádiz, Córdoba, Seville and Huelva. Meanwhile, it limited the ageing area exclusively to bodegas established in Jerez and El Puerto. What these measures were doing, in effect, was legalising the possibility of adulteration and fraud in the production of, and trading in, Jerez wines. They permitted the entry into Jerez Denomination of Origin territory of wines from other provinces without any checks or conditions: such wines were generally of poorer quality and, more importantly for the interests of those promoting these new Regulations, much cheaper than wines produced within the area. Once in the ageing wineries of Jerez and El Puerto, the musts and wines could be prepared and sold by the exporters as if they were genuine *Vinos de Jerez*.

The area's adversely affected sectors did not just sit back and let it happen. They called a meeting in Cádiz on 9th and 10th August which was attended by the members of parliament for the province and various local and provincial authorities, as well as by *bodega* owners and growers from Sanlúcar, Chipiona, Chiclana, Rota and Trebujena – namely, representatives of the province's winegrowing sector whose interests were worst affected by the shift in government attitude. The meeting advocated a return to the first set of Regulations on the grounds that it "more perfectly and justly" established



and delimited the production and ageing areas. To win support for this move, it was also decided to issue a manifesto, aimed at influencing public opinion, making known the advantages for everyone that the meeting believed the cancelled set of Regulations to represent.



There were fruitless attempts to reconcile the interests of the opposing parties, with institutional representatives from the affected places trying to help, but because of the exporters' intransigence, all negotiations broke down. Consequently, a document was submitted to the Minister for Agriculture and an appeal brought against the State was lodged against the July Regulations. Despite intensive efforts, some of them with the Minister for Agriculture and other ministry officials in Madrid, and others with the Members of Parliament for the province, 1935 came to an end with the conflict still unresolved.

Political events were again to trigger a change in the Consejo. Parliament was dissolved as the result of a black market scandal, and the problem of Jerez's wine growing area became a leading issue in the electoral campaign to choose

a new parliament. The elections of 16th February, 1936, turned into what amounted to a motion of no-confidence in Juan José Palomino, who did not manage to win his seat, being rejected by even right-wing sectors which had been adversely affected by his manoeuvres in favour of the new Regulations.

A win for the *Frente Popular* political group paved the way for settling the problem of Jerez's Consejo Regulador: one of the new government's first measures was to annul the July 1935 Regulations and to publish another set in the Madrid Gazette on 21st April, 1936, which encompassed the aspirations of most of the wine growing sectors in the region of Jerez. Under the new Regulations, the demarcated production area was restored to localities within Cádiz province plus those parts of Lebrija whose vineyards had traditionally supplied wines to the Marco de Jerez. These Regulations respected

the rights of small producers and growers without adversely affecting the exporters' business interests.

From that time on, with occasional fine-tuning and updating of the law and Regulations in subsequent years, Jerez's Consejo Regulador set about its task of defending the wines of the Marco de Jerez. Among the most important functions it performed from the mid-1950s on was successfully preventing imitations and fraudulent sales of false 'sherries' produced in various countries, primarily those within Britain's sphere of influence.

The practice of imitating Marco de Jerez wines dates back to the nineteenth century, and stems from the prestige attached to genuine sherries. While the Wine Statute and the constitution of the Consejo Regulador put paid to the problem in Spain, Spanish legislation was powerless in other countries. A legal

Over the years, sherry trade-marks went on to become icons and symbols of Spain recognised all over the world.



campaign was therefore launched, with lawsuits being filed with the legal authorities of countries where imitations were being produced.

The most important judicial victory came in August 1967, when an English judge declared that the term 'sherry' should be reserved exclusively for wines produced within the Marco de Jerez, though it was permissible for so-called 'British sherry' and 'South African sherry' to continue to be sold as such, with the proviso that those qualifiers should appear in the same sized print and be clearly visible on the label. This made patently obvious which wines were genuinely from Jerez and which were imitations.

The protection against imitation that such judicial decisions afforded was reinforced by the European Union's regulations for Denominations of Origin. In areas outside Europe, however, even at the start of the

twenty first century, adulterations and imitations of the wines of Jerez (and of other quality wine producing regions) are still being produced. Among recent examples is the case of the United States where, since 1997, Congress protection is granted to imitation products made by American producers and designated 'semigeneric': these include wines sold under the name of 'sherry'. Unfortunately, the protection that Denominations of Origin enjoy within the European Union does not extend to foreign markets. This is something that has to be addressed by means of bilateral agreements, generally of fixed duration and periodically renewable.

Once appropriate steps had been taken and the situation had been brought under control, the phylloxera crisis actually played a significant role in the recovery of the wine trade. At the end of the nineteenth century, sales of sherry

in foreign markets – particularly Britain, which primarily concerns us here – were in serious decline. The reasons for this were various, but unfair competition from imitation 'sherries' was a major one, as was 'medical' propaganda against Jerez wines, the most classic example of which was the campaign led by the infamous Dr. Thudichum. Nor was trade done any favours by certain exporters from within the Marco de Jerez itself who, in pursuit of easy money, shipped wines of poor or abysmal quality to destinations abroad, as denounced at the time by Dr. Federico Rubio of El Puerto de Santa María. The combined effects of fraudulent imitations, the poor quality of many wines from other parts of Andalusia exported from Jerez or El Puerto de Santa María as 'sherry', and medical campaigns against sherry, resulted in a slump in sales, losses in the trade and, perhaps worse still, the loss of hard-won prestige.

Many sherry drinkers in England leapt to its defence: one notable example was Ruskin, who wrote about its fine quality and beneficial effects. The work of Henry Vizetelly in spreading the word about the natural properties of Jerez wine was also important. Among many other defenders, it was the medical profession itself that set the record straight: reports compiled by Spanish doctors, such as one issued by the Medico-Surgical Academy of Jerez, were backed up by analyses carried out by British doctors at the behest of patients concerned about the alarming rumours. The end result was that accusations of health-endangering adulterations and procedures were disproved, and a full report about wine-making practice in Jerez published in a British medical journal, *The Lancet*, confirmed this.

When vines started giving good yields again after the phylloxera crisis, the exporters took a determined approach to recovering market share and prestige for their wines. This was no mean feat, but they were determined in achieving their objectives. Fundamental to their success was the fact that the quality of the wines they released onto the market was significantly superior to that of the majority they had been selling hitherto, and this won back the good opinion of experts and discerning customers. An intensive advertising campaign, in which the Spanish royal family diplomatically played a part, also enhanced recovery of the British market.

In 1910 the Association of Sherry Exporters was set up to foster the

foreign market, and a communal fund was created to finance advertising campaigns promoting sherry as a whole, depicting it as a prestigious type of wine while not singling out any specific brand. The generic campaign was a success and did much to help restore the reputation of wine produced within the Marco de Jerez.

Whereas between 1891 and 1901 the number of butts exported had dropped by more than a half (from 65,000 butts to just over 31,000), the situation now gradually stabilised and even took a slight upturn. Though this was interrupted during the First World War, exports began a new phase of growth after the armistice so that, by around 1930, the number of butts exported was around 33,000. Business continued to improve and the figure was well over 54,000 by 1936.

The Spanish Civil War (1936–1939) did not affect the wine trade, which continued to develop favourably despite the conflict, reaching the record export figure of nearly 76,000 butts in 1940. World War II did take its toll, however, with the export trade being hindered by international hostilities. But recovery was rapid: whereas in 1945 exports were down to 42,000 butts, things were back to normal by 1950, with exports at over 52,000 butts. Exports continued to grow from then on, passing the 86,000 mark in 1960, and reaching over 126,000 in 1965. Figures continued to rise, reaching a peak in the early 1970s.

A first peak occurred around 1972, though exports reduced considerably

over the following years – probably attributable, at least in part, to the world-wide economic problems triggered by the oil crisis. Things began to improve from 1976 on, with exports stabilising during the 1980s, apart from slight fluctuations, before plummeting in the late 1980s.

One of the main culprits for these ups-and-downs and the eventual drop was excess production. New vines had been planted to meet increased demand, and during critical periods more wine was made than was sold. As a result, wines were sold at unrealistically low prices, thereby flooding the market.

In an attempt to stave off the crisis created by excess production, a four-year plan was drawn up in 1983 that prohibited the planting of new vines. Indeed, some new plantations were even uprooted. Meanwhile, export quotas were instituted, and surplus musts were distilled. These measures were helpful, but inadequate. In 1989, when exports dropped by almost 30% against recent years – not forgetting that the price of the wine had also been dropping – it was therefore deemed necessary to adopt new measures. Among those put forward, the first aim was obvious: to strike a balance between supply and demand. To achieve this, it was again agreed that vineyards had to be whittled down: vines were to be reclassified so that some would be allocated for use in producing new table wines, and others were to be uprooted and their land given over to alternative crops such as sunflowers or cereals, for which EEC subsidies were available. Production per hectare was also



limited temporarily, and sales quotas that reflected demand rather than production were imposed with a view to ensuring production adjustments to match demand.

The situation in the mid-1980s and the way that the wine trade was conducted up until the end of the twentieth century were influenced by Spain's entry into the EEC. The regulation and harmonisation of taxes on alcoholic beverages had market repercussions in that the tax

modules applicable to alcohol made the end product more expensive, though it would be true to say that, overall, EEC entry was beneficial for Spain.

At the start of the twenty first century the sector's future looks promising, as long as care is taken to ensure product quality. Sherry is back in fashion, and its traditional markets are being extended by new, prosperous consumers. The United Kingdom, the Netherlands, Germany

and the United States – important, traditional markets all – are being joined by Asian countries such as Japan in demanding quality wines. The success of the well-judged *Vinos de Jerez con Vejez Calificada* (Very Old and Very Old Rare Sherries) initiative, reflected in steadily growing annual sales, is symptomatic of the current climate. ■



Título: Garantía

THE CONSEJO REGULADOR

JOSÉ LUIS GARCÍA RUIZ

Independently of those great wines of antiquity that were identified by their provenance, the concept of Denomination of Origin emerged at the start of the Modern Age in relation to developments in the wine trade. The big maritime powers – great drinkers, though not producers, of wine – obtained their supplies from wine producing regions near the sea. These wines were mainly identified by where they came from and, in each case, this characteristic tended to be reinforced by essential typological differences: one has only to think of the great classics – Bordeaux, Sherry, Port, Malaga, Madeira...

Many of these wines were governed by codes of practice that were either self-generated (the Regulations of the Jerez Vintners' Guild in the sixteenth century, and boundary definition of the classic Chianti area in 1716, for example), or state-imposed (as in the famous case of the delimitation and regulation of

Port by the Marqués de Pombal in the eighteenth century). However, legal protection at an international level for Denominations of Origin came much later, as an aspect of the putting in place of protection for industrial property in the nineteenth century. Right from the start, this process revealed the existence of not only individual industrial property, but of another – collective – type as well. In other words, along with trade names and other marks that identified the products of a specific trader, additional identifying factors had simultaneously been established and consolidated over time, by virtue of which the provenance of products – where they came from – was, in certain cases, recognised and valued in the market place. That attribution of value was associated not only with a specific brand or trade name but also with a particular place – a fact contemplated by the first text on the subject, the Paris Industrial Property Convention of 1878. This was first recognised in relation to wine, extending to other products in the course of the twentieth century.

JEREZ
SHERRY XERES
MANZANILLA
DENOMINACIONES
DE ORIGEN





Why it should endow a product with added value is easy to see: the notion of designation is one term in a binomial whose other term is quality. Quality, that is, associated with origin in the strict sense of an authentic production method in a specific place, or a combination of both factors. Wines of particular provenance are therefore perceived by the market as possessing added value: this is sometimes hard to quantify but has an unquestionably economic content, which is why it is referred to as property, albeit collective.

All this has taken place against the backdrop of certain confusion between concepts – brand and Denomination of Origin (a collective brand) – which it has taken a long time to clarify and, indeed, is still with us today to some degree.

THE FIRST TEXTS

As a defence against counterfeit products, the leading industrial manufacturers of the old Continent organised an International Trademark Congress in 1878, in which a sizeable group of Jerez *bodega* owners took part. One of the addresses delivered at the congress triggered the setting up of the International Association for the Mutual Protection of Industrial Property. The Association's first mission was to promote a debate which resulted in a series of proposals and recommendations to the participating states which protected their brands from third countries within their national

territories. A few years later, in 1883, the Association's first meeting was held in Paris, with several European countries reaching specific agreements affording protection to specific geographical names under the terms of the Paris Convention of 2nd March, 1883, which declared: "The protection of industrial property has as its object patents, utility models, industrial

designs, trademarks, service marks, trade names, indications of source or appellations of origin and the repression of unfair competition." (Article 1).

However, it was not until several years later, on 14th April 1891, that the Paris meeting's agreements and statements of intent were translated, by means of the Madrid Agreement,



Set up in 1935, the Consejo Regulador for Jerez-Xérès-Sherry was the first to be created in Spain, under the terms of the 1933 Wine Statute



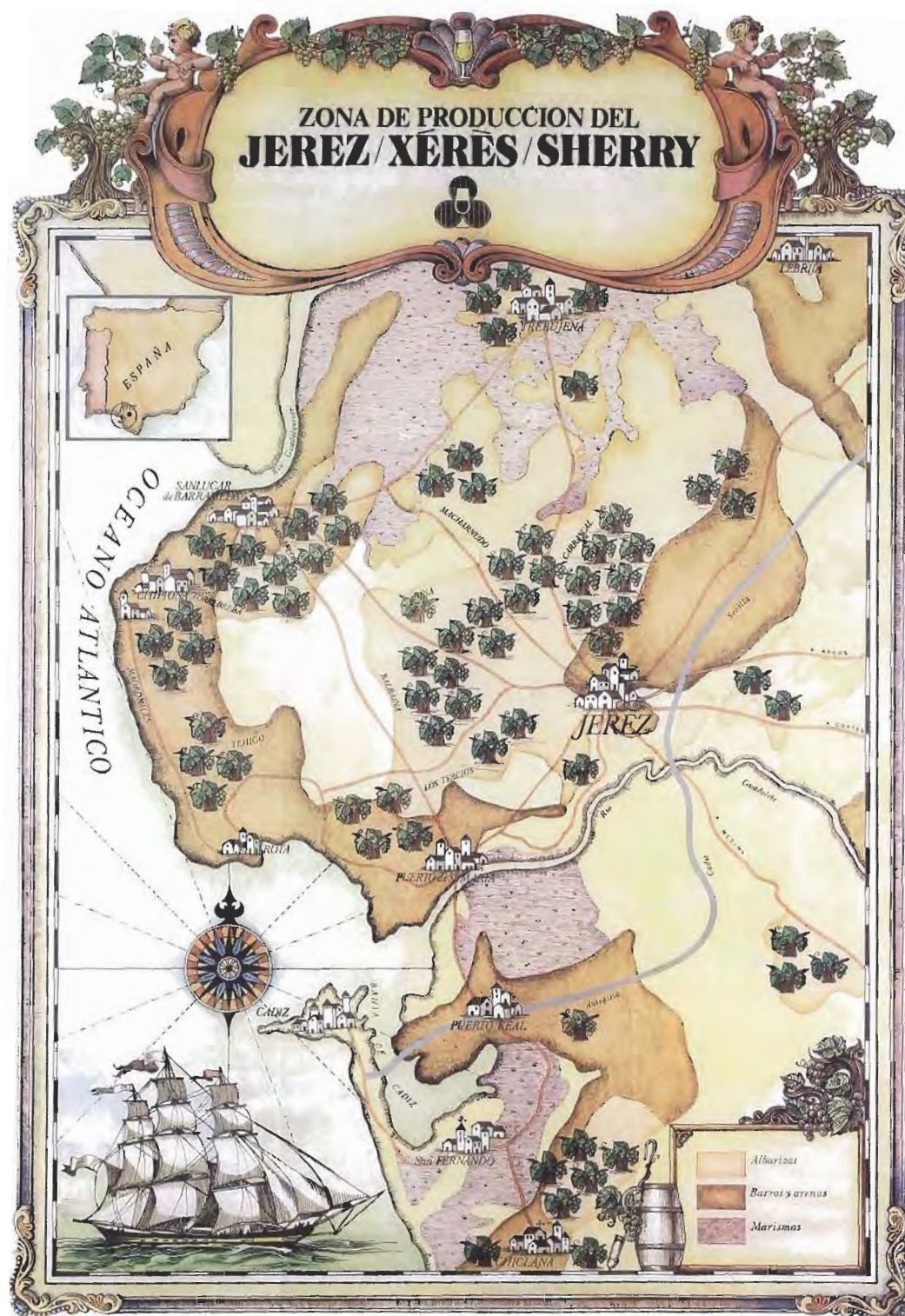
into international regulations of a protective nature. Under the terms of this agreement, signatory countries committed themselves to controlling false and misleading certificates of origin for goods, and the concept of regional Denominations of Origin for wine products came into being.

Denomination of Origin (DO) was still very much an incipient

concept in international law so that its efficacy and application left much to be desired. This explains why protective measures were taken at national level under the wing of legislation against fraud: France's law of 1st August, 1905, Germany's Wine Code of 1909 (Article 6: "In the wine trade, geographical designations should serve no other purpose than to indicate the source of the wine") and, most importantly, France's law of 6th July, 1919, which instituted both legal definition and protection for the DO.

The Law on Trademarks was also brought into service to put measures in place: in Spain, on 28th March, 1924, the Government headed by General Primo de Rivera awarded ownership of the collective mark 'Jerez' to the municipality of Jerez, to the benefit of resident growers and producers of, and traders in, fortified wines. Other Spanish designations – Rioja, for example – benefited from similar measures.

At around that time, as a consequence of the First World War and the new world order that emerged in its wake, international law acquired unaccustomed force which found expression in new conventions, treaties and accords. This internationalist tendency, which applied 'distribution' and 'protectionism' to the world's territories and markets, reopened the issue of geographical Denomination of Origin for products, resulting in ratification of the Madrid Agreement in The Hague in November 1925. Earlier that same year, the International Wine Office (IWO) had been set up. Under the terms of



The concept of Denomination of Origin is suggestive of quality in conjunction with a source - an authentic production method in a very specific place.



its constitution, one of its functions was to play a part in protecting Denominations of Origin. The work of the OIV has been fundamental to the whole issue of DOs: in 1947, it adopted a first international definition of Denomination of Origin, a concept that would be definitively described in 1992.

In parallel, national legislatures were formulating regulations to govern Denominations of Origin. In Spain, the decree promulgated by the Second Republic under the heading of Wine Statute became law on 26th May, 1933. Article 34 gave legal status and judicial protection to Spain's Denominations of Origin, 28 of which it recognised (though only

21 were actually implemented), and also established that they were to be governed by a body called a 'Consejo Regulador'. Similar measures were being taken in other wine producing countries: particularly noteworthy were France's Decree-Law of 30th July, 1935 establishing the INAO (National Institute for Appellations of Origin) and introducing the 'control' factor (as in 'wines with controlled Denomination of Origin'), and Portugal's Decrees of 1932 and 10th April 1933 organising the Port Wine Institute. A characteristic of these texts is that, in addition to recognition and protection for DOs, they address the setting up of specific institutional bodies to run them.

The 1933 Wine Statute galvanised the growers and producers of the Marco de Jerez into immediate action: the Consejo Regulador of the Jerez-Xérès-Sherry Denomination of Origin was constituted by an Order issued on 15th September, 1933, making it – as the Madrid Gazette for 29th April, 1935, explicitly states – “the first to be constituted under the terms of the Wine Statute.” The first set of Regulations for this Denomination of Origin, published on 19th January, 1935, served as a basis and model for Spain's other Denominations of Origin.

The Consejo's functions involve close monitoring of the sherry production process in all its phases, from grape to end product.



Nowadays, the Consejo Regulador embraces three different Denominations of Origin with a lot in common: 'Jerez-Xérès-Sherry', 'Manzanilla-Sanlúcar de Barrameda' and 'Vinagre de Jerez'.



THE LEGAL STATUS OF CONSEJOS REGULADORES

Spain's *Consejos Reguladores* are privately based public law professional corporations that represent the economic interests of a sector. In exercising specific public faculties, they act as decentralised bodies of the Administration. This function was confirmed by the Judgment of the Supreme Court of 14th January, 2003, issued on appeal No. 1162/1997.

Part of the Second Republic's famous Wine Statute, they are a genuine creation of Spanish law, retained by the legislation in force throughout the Franco regime and happily still in application during the present period of restored democracy. There are even specific references to Consejo Reguladores in stipulations intrinsic to the constitutional body of law: a mention in Article 13 of Andalusia's Statute of Autonomy is an example of this. The fact that they have endured under such different political regimes and circumstances is explained by their having served as valid, effective instruments, despite occasional specific problems. This success is due to the fact that the Consejo Regulador embodies a formula which combines the sectorial principle of self-organisation with the formality demanded by administrative function, with the additional guarantee that its public functions are subject to guidance and inspection by the Public Administration.

That said, however, it should be noted that Law 24/2003 of 10th April on Vines and Wine made the public

law corporation function a voluntary one. This means that it is now up to the professional sectors themselves in each Denomination of Origin either to constitute themselves as that type of corporation or simply to become private associations.

THE CONSEJO REGULADOR FOR DENOMINATIONS 'JEREZ-XÉRÈS-SHERRY', 'MANZANILLA-SANLÚCAR DE BARRAMEDA' AND 'VINAGRE DE JEREZ'

The Consejo Regulador established in 1934 was initially Consejo for the DO Jerez-Xérès-Sherry (this tripartite name for one single Denomination of Origin is explained by sherry's long international history). Although Manzanilla-Sanlúcar de Barrameda appeared as a Denomination of Origin in the first Wine Statute, the manzanilla *bodega* owners decided to amalgamate with the Consejo for sherry, with manzanilla then becoming one of its wine types. Subsequently, by virtue of the Regulation of 15th December, 1964, and with a view to protecting it from possible imitations or claims to the name from other areas, manzanilla was reinstated as a Denomination of Origin in its own right, albeit controlled and governed by the same Consejo Regulador, which then assumed the name of both designations. Later, in the mid-1990s, the vinegar designation DO Vinagre de Jerez was created, and this also became integrated into, and governed by, the same Consejo Regulador, by then the Consejo for Denominations of Origin 'Jerez-Xérès-Sherry', 'Manzanilla-Sanlúcar de Barrameda' and 'Vinagre de Jerez'.



This three-part name reflects the fact that the whole area known as the Marco de Jerez is a common production zone whose area under vine, predominantly of the Palomino variety, is currently set at around 10,500 hectares, yielding around 150,000 butts of must a year with which to replenish the traditional criadera and solera system also common to the products of the three designations. What makes manzanilla a special case is the fact that, while the other types can be aged in either Jerez, El Puerto or Sanlúcar, manzanilla can only be aged in Sanlúcar.

THE CONSEJO REGULADOR'S FUNCTIONS

a) Quality Control

According to the traditional Spanish pattern, the most important function of a Consejo Regulador is controlling the quality of protected products. The Regulations of the Consejo Regulador for sherry therefore set out a series of obligatory standards governing everything to do with the production chain, starting in the vineyard and ending when the

protected product reaches the point of sale. Furthermore, to guarantee both product origin and quality, the institution deploys a system of graded controls over:

Vineyards and cultivation practice

The production chain starts with the soil, the vineyard and the cultivation methods applied therein. The Marco de Jerez area currently has around 10,500 hectares of registered vineyards and around 3,000 registered growers, most of them grouped into seven cooperatives.

It is essential for growers to be registered in the vineyard register that goes by the name of *Registro de Viñas* for grapes from their vineyards to have their origin certified for use in products protected by one of the three Denominations of Origin. This register subdivides the Marco de Jerez into two zones – Jerez Superior and the remainder. The Consejo's Regulations deem the Jerez Superior zone to possess ideal conditions for producing quality must, the zone being defined as that which is "made up of vineyards planted in *albariza*

land in the municipalities of Jerez, El Puerto, Sanlúcar, Trebujena and those of Rota and Chipiona bordering on those of Sanlúcar which, because of the physico-chemical composition of their soil, situation and climatological conditions are ideal for producing superior quality wines." This point about quality is so important that more than 8,000 hectares currently belong to Jerez Superior.

The specified grape varieties are Palomino de Jerez, Palomino Fino and Pedro Ximénez, with Moscatel grapes also being permitted, albeit only for use in making the wine of that name. As regards cultivation practices, the Regulations specify that "they should be the traditional ones conducive to achieving the best qualities." The fact that they stipulate that pruning must be of the traditional Jerez type known as *vara y pulgar* (stick and thumb) gives them a particularly idiosyncratic cast.

Furthermore, the harvest is specifically contemplated and regulated as the most important stage in this production phase, to which a series of 'vintage standards'



apply. They range in scope from the chemical parameters that grapes must match before being harvested, to how they should be picked, transported and pressed, and also specify maximum production per hectare. These standards guarantee both grape and must quality and

also that all the grapes and musts obtained from the harvest are of certified origin. To achieve this, the Consejo supervises presses constantly during harvest time, checking the provenance of the grapes delivered to them, the volume of must produced and the quality of that must.



Apart from obligatory practices, the Consejo also fosters research conducive to obtaining top quality and prestige for the protected products, recognising that ecological practices contribute to these objectives. Significant among these is the 'dispersion', or 'sexual confusion', method of combating vineyard pests based on the use of pheromone capsules. The Consejo also backs and promotes the concept of 'integrated production', expressed as a set of obligatory, prohibited and recommended practices to ensure production of healthy grapes and high quality wine products, keeping residue levels to a minimum, protecting growers' health, sustaining the biodiversity of the ecosystem, enhancing and preserving soil balance in the long

term, minimising water and soil pollution and making harvests as profitable as possible.

Protected *bodegas* and products

As with its vineyards, two zones within the Denomination of Origin are differentiated for the aging of wines and vinegars, with the following specifications:

The *crianza* zone is restricted to the towns of Jerez de la Frontera, El Puerto de Santa María and Sanlúcar de Barrameda for the DO "Jerez-Xérès-Sherry," and to the latter town only for the DO "Manzanilla-Sanlúcar de Barrameda". The *bodegas* registered with the Maturing and Shipping

Wineries Register, the *Registro de Bodegas de Crianza y Expedición*, are in this zone: these are *bodegas* where wines and vinegars are aged and matured and which, by virtue of volume of stocks and special characteristics, are authorised to sell and export protected wines for human consumption directly. Also in this zone are other wineries registered with the Aging and Maturing Wineries Register, the *Registro de Bodegas de Crianza y Almacenado*: commonly known as *almacenistas*, their function is to age and mature wines for subsequent sale to a shipping *bodega*. Only wines and vinegars made within the *crianza* zone have the right to use the respective Denominations of Origin.

Control and certification are among the Consejo's essential functions, along with promoting the protected products and defending the Denominations of Origin.



The rest of the Marco de Jerez territory – that part not included in the *crianza* zone – is known officially as the *zona de producción* or production zone: within it are located the wineries whose function is to produce musts, wines and vinegars which are then transferred to *bodegas* in the *crianza* zone for topping up their solera systems. These wineries, which are registered in the Production Zone Wineries Register, the *Registro de Bodegas de Zona de Producción*, are also permitted to sell their wines and vinegars for direct human consumption, though in this case they are not entitled to use the Denominations of Origin but are allowed to specify the place of provenance of the product in question.

Both *crianza* and *producción* wineries are subject to periodic checks by the Consejo Regulador to ensure that registered data reflect each winery's situation accurately. Movements of musts, wines and vinegars among the registered bodegas are also monitored, as well as any other movement of musts, wines, vinegars and distilled liquor taking place within the DO's territory. Random samples are taken too, either directly in the bodega or from already bottled products, for daily analytical or organoleptic testing. Finally, protected products are released onto the market with marks of guarantee attached in the form of numbered stamps or back labels: the issue of these is controlled by the Consejo, and holdings of them

are inventoried periodically.

b) Protecting Denominations of Origin

Another of the Consejo's tasks is to protect its Denominations of Origin in both the national and international arenas. Remarkably, the Marco de Jerez has experienced attempts by imitators to usurp all three of its designations in the hope of capitalising on the sherry sector's fine reputation and many years of hard work and reaping easy benefits.

As far as sherry is concerned, suffice it to say that its status as a classic wine, and the fact that it has existed for centuries (long before legal mechanisms to protect industrial

property were put in place), have contributed to its being perceived in worldwide trade terms as a wine type rather than as an outright Denomination of Origin. As a result, genuine sherry has had to coexist with other 'sherries' of spurious origin and fabrication. There have been British, Australian, South African, Californian, Canadian, Argentinian and other 'sherries', obliging the Consejo from its very inception to engage in tough legal battles and carry out major public relations campaigns to achieve recognition for the designation at international level. By today, this has famously been achieved in the most important markets, though there are still some exceptions that keep the Consejo busy in that area, as well as having to keep a permanent watching brief over attempts all over the world to register brands that incorporate the word 'sherry'.

Manzanilla, meanwhile, has had to be safeguarded against attempts by other Spanish wine growing areas to use its name, again as an indication of wine type rather than origin, despite the fact that the European Union's legal regulations make it abundantly clear that the name 'manzanilla' identifies exclusively the characteristic wines that come from Sanlúcar de Barrameda and are protected by the Consejo Regulador.

Vinagre de Jerez (Sherry Vinegar) has also needed, and still needs, protection against the many other wine vinegars that have tried, and continue to try, to take advantage of the genuine article's reputation.

c) Promoting the Denominations of Origin

In patrimonial terms, a Denomination of Origin is a collective property whose present value is the consequence of an historic past and whose future value depends on preserving its code of practice in the present day and maintaining the impetus of trade in its products. Within its internal functioning there is constant intertwining of the specific and the generic, namely of particular brands and the type of product to which they are applied.

This is why promotional activity on the part of Denominations of Origin is always two-pronged: one prong is the promotion that each *bodega* owner carries out on behalf of his own brands, while the other is concerned with the common commercial activity represented by the collective property that is the Denomination of Origin. In each case there is a promotional doubling-up: direct spending on advertising on the one hand, and on the other, the promotional effect generated by various other factors which are difficult to define but extremely important: creating a perception of high quality, exercising rigorous standards in business dealings, spreading specialised information, liaising with opinion makers, and so on...

The role played by a prestigious Consejo Regulador in this second regard is unquestionably vital, and it is equally important that its controlling and monitoring role be made known and brought

to the attention of the consuming public as a key element in the added value that Denomination of Origin contributes. This important aspect of promotion is something that sherry's Consejo Regulador has been working at since it was first founded, and it has succeeded in creating a clearly perceived reputation for high standards and reliability in those countries where products from the sherry region are consumed.

But the Consejo Regulador also needs to be involved in direct promotional activity through the medium of 'generic' campaigns: working in conjunction with campaigns for specific brands, these capitalise on synergistic potential and produce an end effect that is greater than the sum of its parts. In certain low-volume but strategically important markets, they can also provide visibility for protected designations that they would not enjoy were it not for generic promotion. The Consejo for sherry has been a pioneer among Spain's Consejos Reguladores in this regard: for many years now, it has been devoting a very high proportion of its budget to generic promotional campaigns aimed at the various markets where its protected products are sold. Its status as a public law corporation gives it a significant advantage here in that it renders it obligatory for the companies registered with it to contribute a quota to generic campaigns. This solves the problem of uneven contributions towards generic promotion of this type that tends to afflict other kinds of association.



Gonzalo Fernández de Bobadilla
29 Enero 1935 al 30 Abril 1935
10 Julio 1963 al 8 Agosto 1963



José Ramón García-Angulo
1935 - 1963



Salvador Ruiz-Bermejo Siloniz
1963 - 1968



Juan Camacho García de Ledesma
12 Abril 1968 al 6 Junio 1968



Antonio Barbadillo García de Velasco
1968 - 1991



José Antonio Vázquez Rosso
1991 - 1992

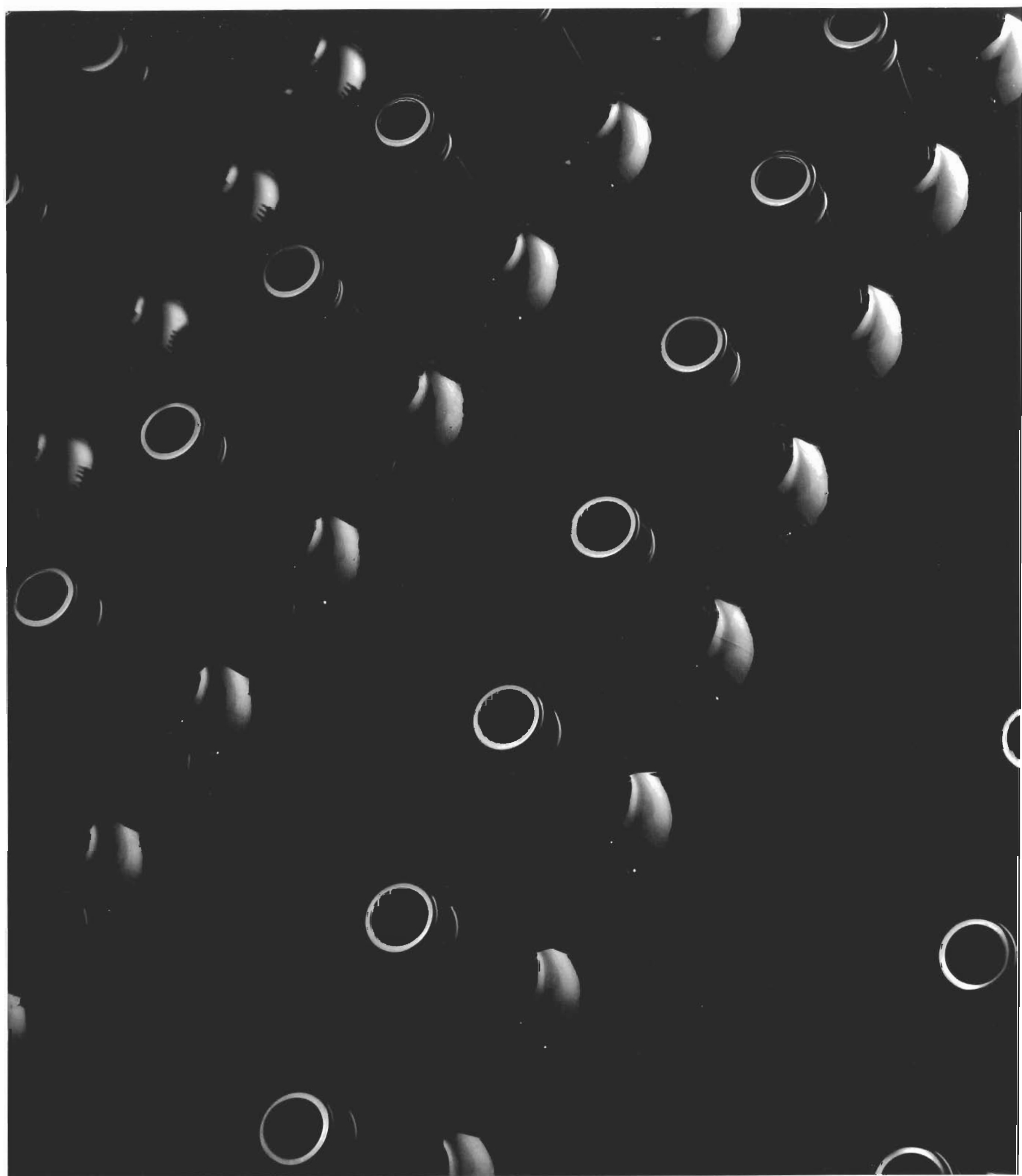



Rafael Coloma Aramburu
1992 - 1997



José Luis García Ruiz
1997-2003

In its more than seventy year history, the Consejo has forged ahead despite various vicissitudes, and has nimbly moved with the times while keeping its essential function of safeguarding the Denomination of Origin firmly in its sights.





Título: Líños

THE VITICULTURE OF THE SHERRY REGION

ALBERTO GARCÍA DE LUJÁN

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viticultural practise in any given region is largely responsible for the characteristics of its wines. Many of the components of wine are present in the grape, hence the importance of this first phase in the wine-making chain. The great wines of the world, which include sherry, have one thing in common: they all come from areas with a specific approach to viticulture, with very individual connotations. These vine-growing traits are passed on to wines made from those grapes, in which their influence is perceptible. Noble, historic wines eloquently express an original approach to viticulture, with a personality of its own and a firm commitment to quality.

Viticulture in Jerez dates back thousands of years, throughout which the area's natural attributes (soil and climate) have played a leading role. Equally important has been the human factor – successive generations of wine-growers who, down the centuries, have selected and established concepts and doctrines of grape-growing that have survived to this day. Skilful, hands-on vineyard practice evolved into a viticulture defined by the renowned agronomist, Esteban Boutelou, in 1807 as “one of the most precious monuments of our ancient Agriculture.” Indeed, the viticulture of Jerez, which developed through the ages, adapting to each era's advances and technologies, is a genuine international agricultural paradigm. It provides the fruit for making one of the most original, top-quality wines in the world. This is achieved by a combination of very specific natural factors and the human factor

– people who look after the vineyards in a particular, painstaking and highly skilled way.

THE NATURAL ENVIRONMENT

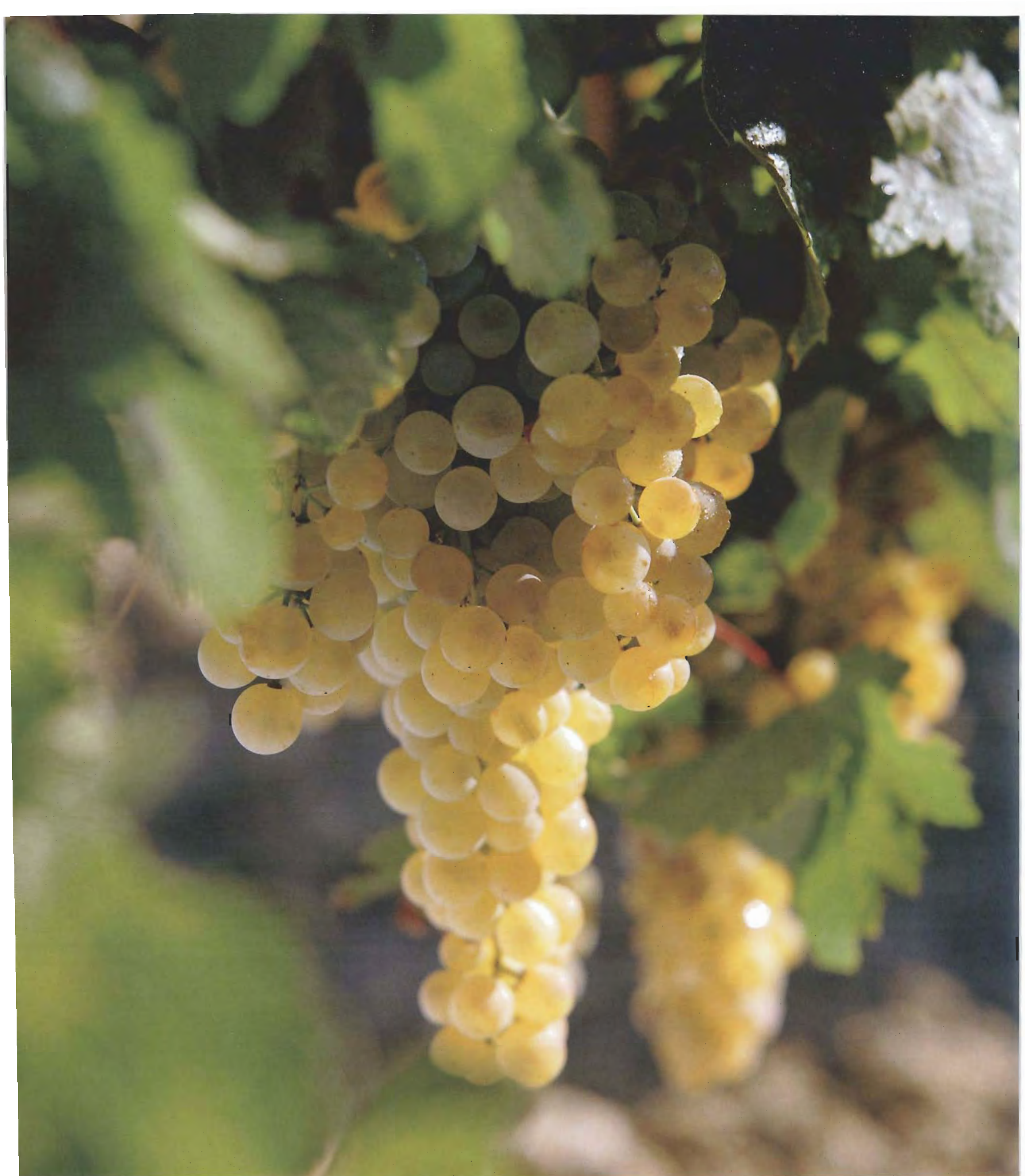
Climate and soil are the two primary factors to be considered when describing a vine-growing environment, though the biological component of that environment, i.e. the indigenous plants and organisms that live and multiply in it, must also be taken into account.

Climate

The climate (temperature, sunlight, wind, rain, humidity...) has a bearing on how vines grow and contributes to defining their grapes' characteristics and what kind of wine a given wine-growing area is naturally predisposed to produce.

The climate in the sherry area is warm as a result of its low latitude. Lying at latitude 36° N, the city of Jerez has dry summers with high temperatures that lead to equally high levels of evapotranspiration, although the proximity of the Atlantic Ocean plays a role in maintaining humidity and moderating the temperatures in the area – something that is more evident at night. Spring and summer, the seasons during which the vine's growing cycle occurs, including the ripening of the grape, are affected by the two prevailing winds: the *Poniente* (from the west) and the *Levante* (from the south-east). The former is cool and humid (humidity can be as high as ninety-five percent) while the latter is hot and dry (humidity can drop to thirty percent). The nocturnal cooling degree index is 16.87; the Winkler coefficient is 2,705; the Branas

The Palomino Fino white grape variety is the undisputed queen of the sherry region. Its rapport with the soil, the climate and the cultivation techniques used in the area make it a key element in sherry-making.







heliothermal value is 11.9, and the Huglin index is 2,705, with an average temperature of 17.3 degrees Centigrade (63.1 degrees Fahrenheit) and an annual rainfall of approximately 600 mm, most of which falls in autumn and winter. Mean monthly temperatures do not fall below 10 degrees Centigrade (50 degrees Fahrenheit) and those in July and August approach 25 degrees Centigrade (77 degrees Fahrenheit), with an average maximum in the vicinity of 33 degrees Centigrade (91 degrees Fahrenheit).

The area enjoys 173 days of clear blue skies and from 63 to 75 days of rain. The average number of hours of effective sunlight per year is high: between 3,000 and 3,200 hours. There are occasional spring frosts, but these tend not to be a problem except in very specific cases (low-lying areas) and then only in certain years.

Further inland, away from the Atlantic in a NE direction, the differences between night and day temperatures increase progressively, an effect of continentality. As this continentality increases, it affects the development of vines and their maturation as well as the biological environment (weeds, parasites, microorganisms).

Barring exceptional years, the area's rainfall is adequate for proper vine development. It is also supplemented by the humidity provided by the Atlantic, although in dry years the high summer temperatures can lead to a severe lack of water in the soil, which then prevents the grape from ripening properly. In general, however, the area's warm climate and sunlight foster the accumulation of sugar in the grape, and low acidity.

Together, these climatic factors act on the plant and are responsible for grape development and maturation features peculiar to sherry wine. It should be noted, however, that the climate is not the same throughout the region's vineyards. There are obvious variations between the different sub-zones, districts and pagos that make up the sherry-growing area known as the Marco de Jerez. In particular, the influence of the Atlantic and the prevailing winds create slightly different mesoclimates which, taken together, shape the common or general climatology of the Marco de Jerez.

Soil

Together with the climate, the nature of the soil in which the vine grows and from which it absorbs its nourishment is a primordial factor in viticulture. The geology, physical properties, depth, composition, moisture content, pH, etc. of the soil determine grape characteristics to a large extent, discernibly affecting the finesse, originality and quality of the wine. All other factors being equal, wines derived from different kinds of terrain are distinguishable from each other. Very fertile soils produce vigorous, high yielding vines, which do grape quality no favours.

Although sherry vines can be grown in different types of soil, the area's *albariza* type is the key to these wines' special quality. The way that vines respond to this soil, in particular climatic conditions, is essential to achieving the specific type of grape that will provide the attributes specific to sherry during the wine-making process.

The sherry region's vine-growing

topography typically consists of gentle rolling hills of varying, 10 to 15 percent gradient, slopes on which the *albariza* soil or bed-rock, formed by soft, white *marga* (a mixture of chalk and clay) is exposed, creating Jerez's characteristic vineyard landscape. In the lower, greyer or darker areas, *albariza* lies further below the surface.

Albariza soil is easy to work. Its flaky, lamellar structure is very moisture retentive and allows the root system to spread well. Roots up to 12 metres (40 feet) long have been found 6 metres (20 feet) deep in *albariza* soils. White *albariza* soils date back to the Tertiary period and have high levels of calcium carbonate (up to forty percent active limestone) in their composition, together with clay and silica derived from diatomite and radiolite shells present in the Oligocene Sea that once covered this area. The finest *albariza* soil, with the highest proportion of limestone and silica elements, produces the most select and sought-after wines in the Marco de Jerez.

Plots of land with muddy soils with a preponderance of sand and clay, and sandy soils, are less significant and are not much used today.

The Marco de Jerez is famed for its *pagos*, delimited areas of land (from a few hectares to over 500) with characteristics of their own that differ from those of adjoining *pagos*. Each *pago's* distinguishing features are the result of its very specific climate, geographical situation, land relief, exposure, soil composition, etc. Each *pago* gives wines of accordingly different character. This explains why certain *pagos* have a special reputation for the characteristics of their grapes. Famous

pagos include Balbaína, Macharnudo, Carrascal, Añina, Miraflores, Tizón, Atalaya, Burugena, Paquiro, Campix, Charruado, Munive, Los Tercios, El Benito, Hato, Torre Breva, Ledesma, Alcántara, Punta del Aguila, Rosalejo and El Marquesado, to name but a few. Up to 300 *pagos* have been differentiated in the sherry region.

THE VINE

The variety planted in the vineyard is one of the key factors in the quality and individuality of the resulting wine. Together with soil, climate and farming methods, the plant determines the characteristics of the grape.

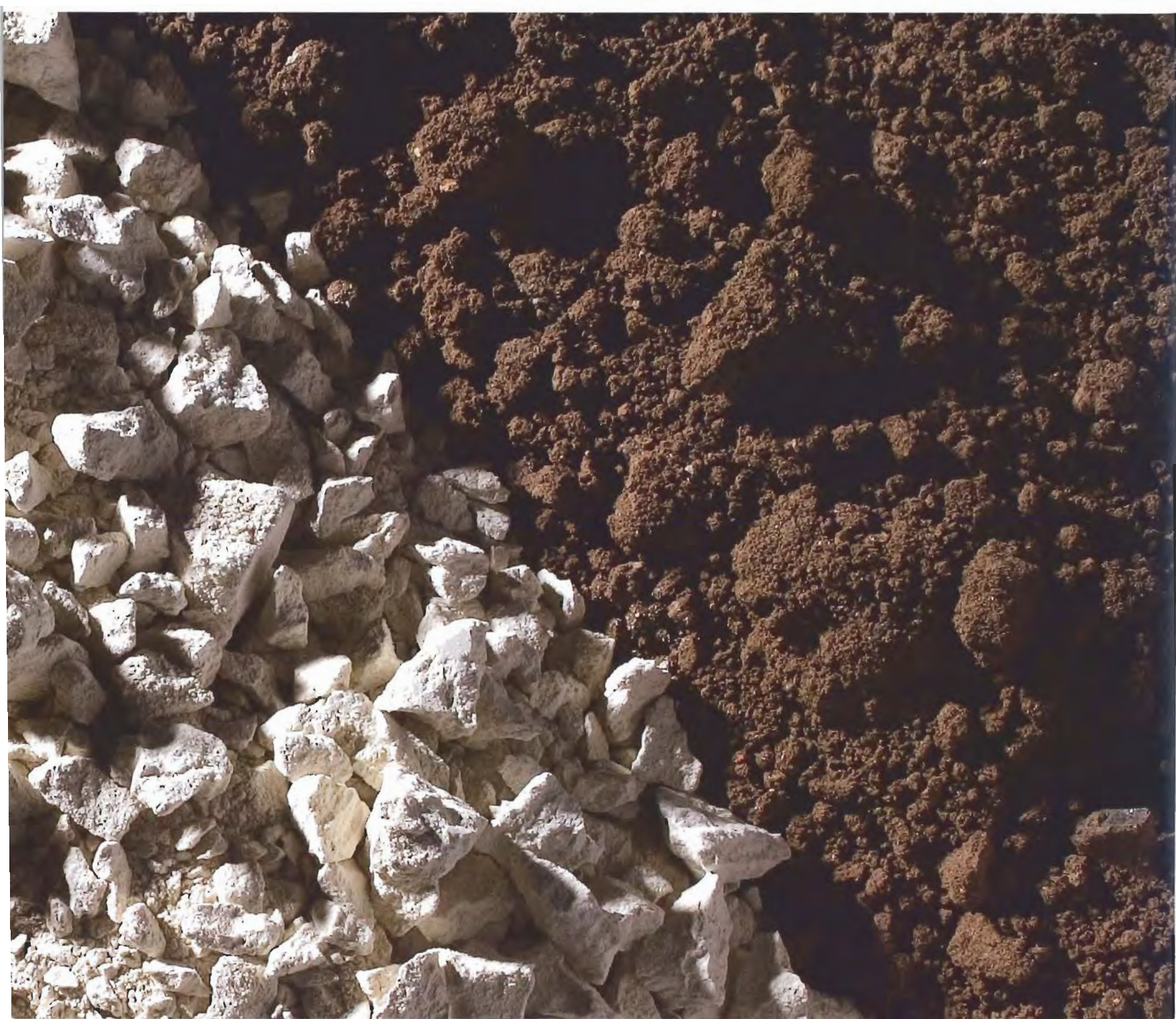
The traditional varieties in the Jerez region belong to the *Vitis vinifera* species, which gives grapes of the quality needed to make sherry. The Palomino variety has always been the area's acknowledged leader, together with others such as Pedro Ximénez, Mantuo, Albillo, Cañocazo, Perruno and Moscatel, all of which used to be grown on their own rootstock. However, in 1894, like many other wine-growing parts of the world, the Marco de Jerez was attacked by a destructive insect called phylloxera (*Daktulosphaira vitifoliae*), the worst scourge in the history of viticulture, which destroyed all the sherry vineyards by attacking the roots of its vines. The only solution was to first plant American rootstocks, with phylloxera-resistant roots, and then to graft onto them the traditional vines grown in the area (Palomino, Pedro Ximénez...). From that time on, therefore, the area's vines have consisted of a subterranean part (American rootstock), that puts down phylloxera-resistant roots, and an aerial part, the European scion or

Albariza (from Latin alba, meaning white) is the best type of soil for producing grapes suitable for making sherry wine.





In addition to albariza (centre), other types of soil present in the Marco de Jerez area, albeit less prominently, include clays (right) and sands (left).





vine stock, that produces fruit of the required quality, as in pre-phylloxera times. The two parts are joined at the graft union point. The rootstocks used in Jerez are, furthermore, impervious to chalk, a necessary attribute given the high percentage of it in albariza soils. The most common stocks used are 161-49, 333 EM, 41-B, 110 R, 140 Ru, Bri. x Colombard, 13-5 EVEX, etc.

These rootstocks are almost always grafted with the white variety of *Vitis vinifera* known as Palomino Fino, for centuries one of the traditional varieties and today undisputed queen of the sherry world. The way it responds to albariza soil, the climate of the region and its growers' techniques make it particularly important in sherry production. It is known by various other names outside the area, most

Vine-growers in the sherry area take painstaking care of their vineyards; their approach beautifully exemplifies the symbiotic relationship between man, plant and soil.



commonly Listán. It has an open apex and large, orbicular, dark green leaves with a closed V-shaped petiolar sinus. The underside of the leaves is downy. The shoots are semi-trailing. Grape bunches are generally long and cylindroconical in shape, with a medium to high density of spherical, medium-sized berries with thin skin and a yellowish green colour. The grapes are juicy, fragile, have colourless

juice, and are sweet and flavourful. With Palomino Fino, bud-break occurs in the second half of March and ripening in early September. Yields, which are in the order of 80 hectolitres per hectare, register 12 degrees Baumé and low acidity. The Palomino Fino clone is well-adapted to the area, being highly resistant to a wide array of parasites when cultivated correctly. The excellent quality of its grapes and



its responsiveness in the vineyard make it the favourite variety among wine-makers and vine-growers.

Much less important are Palomino de Jerez, Pedro Ximénez and Moscatel de Chipiona, varieties which are also accepted by the Denomination of Origin's Consejo Regulador.

CULTIVATION

The way in which a vine is cultivated affects the yield and characteristics of the grapes it produces. Farming techniques steer production: high yields do nothing to enhance fruit quality, and they coarsen its individual characteristics. Independently of the influence of the soil and how fertile it is, a grower's approach and cultivation techniques can obtain moderate yields that provide the basis for high quality wines with plenty of the required character.

Viticulture in and around Jerez is one of the most finely-tuned in the world, and it has traditionally been distinguished by its commitment to quality in a very specific kind of wine, developing idiosyncratic practices that have adapted to advancing technology over time. The local growers take painstaking care of their vineyards and their approach beautifully exemplifies the symbiotic relationship between man, plant and soil.

Vine Density

Vine density patterns stipulate the distance between one vine and the next. In modern vineyards, which cover large areas and require mechanical cultivation, 2.30 x 1.15 metre grid tends to be the norm. The gaps between the vines in a

row and between rows should not be much greater, since that would increase vigour and yield per vine, and adversely affect grape ripening and resistance to pests. A minimum number of vines per hectare is required, compatible with mechanised vineyard farming.

The traditional planting pattern, called marco real, was based on a 1.57 x 1.57 metre grid. It is still used in small vineyards with low levels of mechanisation, with excellent results.

Planting and Grafting

Preparatory work for planting is carried out in summer, when the soil is subjected to intensive manuring and weeding (known as *agostado*). The phylloxera-resistant rootstock is planted in winter in the form of a rooted vine shoot. Once it has developed, the Palomino Fino varietal is grafted onto it in August or September.

The bud grafting method is used, specifically the type commonly known as T-budding (*escudete*). A single Palomino bud with part of the vine shoot from which it comes is inserted in the side of the rootstock at ground level. The place where the bud is grafted is called a *cajuela*. The scion is then bound with raffia, leaving the bud free, and the whole area is then covered with soil (a technique known as *aporcar*) until the following winter-spring season, when it is uncovered. The grafted bud that will grow into a vine then sprouts leaves. Plants not grafted in this way can be grafted using the *espiga* or *púa* modality at the end of that winter.

The practice of planting ready-grafted rooted vines is catching on in the area.

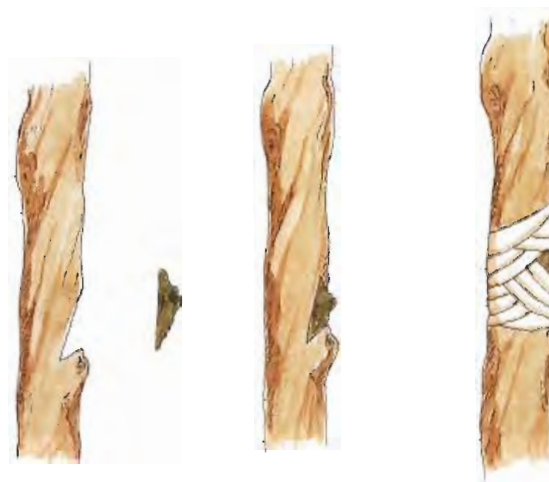
Back of a Palomino Fino leaf, the traditional variety that is indispensable for making sherry.

Pruning and Training the Vines

Pruning, which is carried out each year while the vine is at rest during the winter, consists in making certain cuts in the vine shoots and woody parts of the plant, ensuring that a number of buds, shoots and branches remain with a view to giving the vine the particular shape required by regulations, and with the purpose of regulating its production.

Pruning has a major bearing on the annual and vital development of the vine, which lives for approximately thirty years in this area. What each plant produces will vary according to the number of buds left on the vine after pruning, which determines both quantity of fruit and characteristics. Pruning is therefore instrumental in determining the composition of the grape and, consequently, of wine made from it. The type of pruning applied is, then, a relevant factor in wine-growing practice.

In Jerez, the predominant method is the one locally known as *vara y pulgar* (stick and thumb), or *jerezana*: this traditional method of pruning, specifically required by the Denomination of Origin's Regulations, has been much researched and written about. It consists of training each vine's trunk into two branches. On each of these, on alternate years, a single 'stick' with eight or more buds, or knots, from which the year's grapes develop, and a 'thumb', or small shoot, with only one or two buds, are left. The buds on the thumb sprout into the following year's stick, while this year's stick is cut back to a thumb after having been picked. Thus, each branch serves as a stick one year and a thumb the next, successively

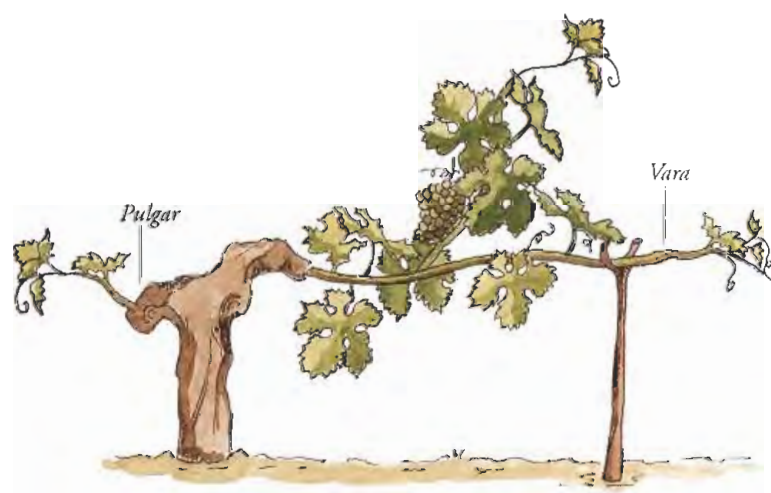


alternating between these two functions. The pruning cuts are carried out in a pre-established order, making cuts in both green and dry wood, known as *carreras de verdes y de secos*, to facilitate sap circulation and encourage vine development and longevity. The *carrera de secos* corresponds to the series of cuts made each year during pruning, while the *carrera de verdes* corresponds to unscarred parts.

To give the vine a better shape and avoid later cutting that might

cause scarring or the formation of unnecessary wood, complementary light pruning operations, locally called *castras*, are carried out in spring to eliminate unnecessary branches that might compete with the productive branches of the plant.

Modern practice in Jerez is generally for the trunk to be kept around 60 centimetres (23.5 inches) tall, to facilitate mechanisation and the carrying out of everyday vineyard tasks. This also maintains bunches of grapes



Above: The Palomino variety is grafted, using a bud, onto a phylloxera-resistant rootstock.vv

Below: The most widespread method of pruning is the traditional 'stick and thumb' method. The stick is the part of the vine that will bear fruit, while the thumb contains the shoot that will become the stick the following year.



off the ground and helps keep them healthy.

Vines, lined up in rows called *líños*, are today trained along espaliers made of two or more wires, to which the fruiting branches are tied and which support the vegetation. The vegetation must be well exposed to the sun to allow the leaves to absorb the necessary light for the plant to carry out the physiological processes required to produce quality grapes. There are still a few vineyards – usually small ones – where the trunk is kept lower and the vines are propped up on wooden stakes.

Cordon pruning systems more convenient for mechanisation are currently being tested.

Soil Management

The ancient practice of working the land is as traditional as pruning and harvesting. In the sherry region, vineyards have always been tended assiduously, removing all kinds of weeds that would compete with the vines. Vine-growers' strategies are aimed at achieving two objectives: in winter, helping the soil absorb and retain as much rainwater as possible; and in

spring and summer, helping it retain its moisture, ensuring that the soil does not become parched in blazing summer temperatures.

To store water in winter, one of the tasks on the *albariza* hillside vineyards is a procedure called *aserpia* or *alumbra*, which is specific to this region. It is done after the harvest and involves building up ridges of earth between the vine rows to create a series of rectangular pits that serve to catch and store rain water during the autumn and winter, preventing it from running off down the hill. In spring, the *aserpia* is demolished and the topsoil is broken up and levelled out. Maintenance tasks from then on are geared to eliminating weeds, preserving the moisture of the soil and preventing evaporation, which is considerable in high summer temperatures.

In the past, when working the land was all done by hand, different jobs were known by ancient names like *cavabién*, *golpe llano*, *golpe rajo*, *bina*, *rebina*, *achatado*, etc. Today, there are generally far fewer manual tasks, judiciously aided by suitable herbicides and mechanisation.

A vineyard calls for many different tasks all year round. One of these is the aserpia, which consists in forming small pits to catch water from the autumn and winter rains.







The ground is fertilised using organic matter and mineral supplements: here, too, the general trend today is to moderate the amount of fertiliser used.

Protecting the Vine

In the Marco de Jerez, vine parasites are influenced by the warm climate, rain and humidity specific to the region. Grapes tend to reach the press in a healthy state, bearing in mind that the Palomino variety is well adapted to the area's natural conditions and the way that parasites take hold there. Additionally, as a general rule the vine-grower applies efficient plant protection programmes to combat the area's most common parasites, such as the grape berry moth (*Lobesia botrana*), the green mosquito (*Empoasca vitis*) and the citrus mealybug (*Planococcus citri*), as well as fungal diseases such as oidium (*Uncinula necator*), mildew (*Plasmopara viticola*) and grey rot (*Botrytis cinerea*). Vine-growers in the sherry area are very aware of the need to apply methods in keeping with durable, sustainable and integrated environmental protection

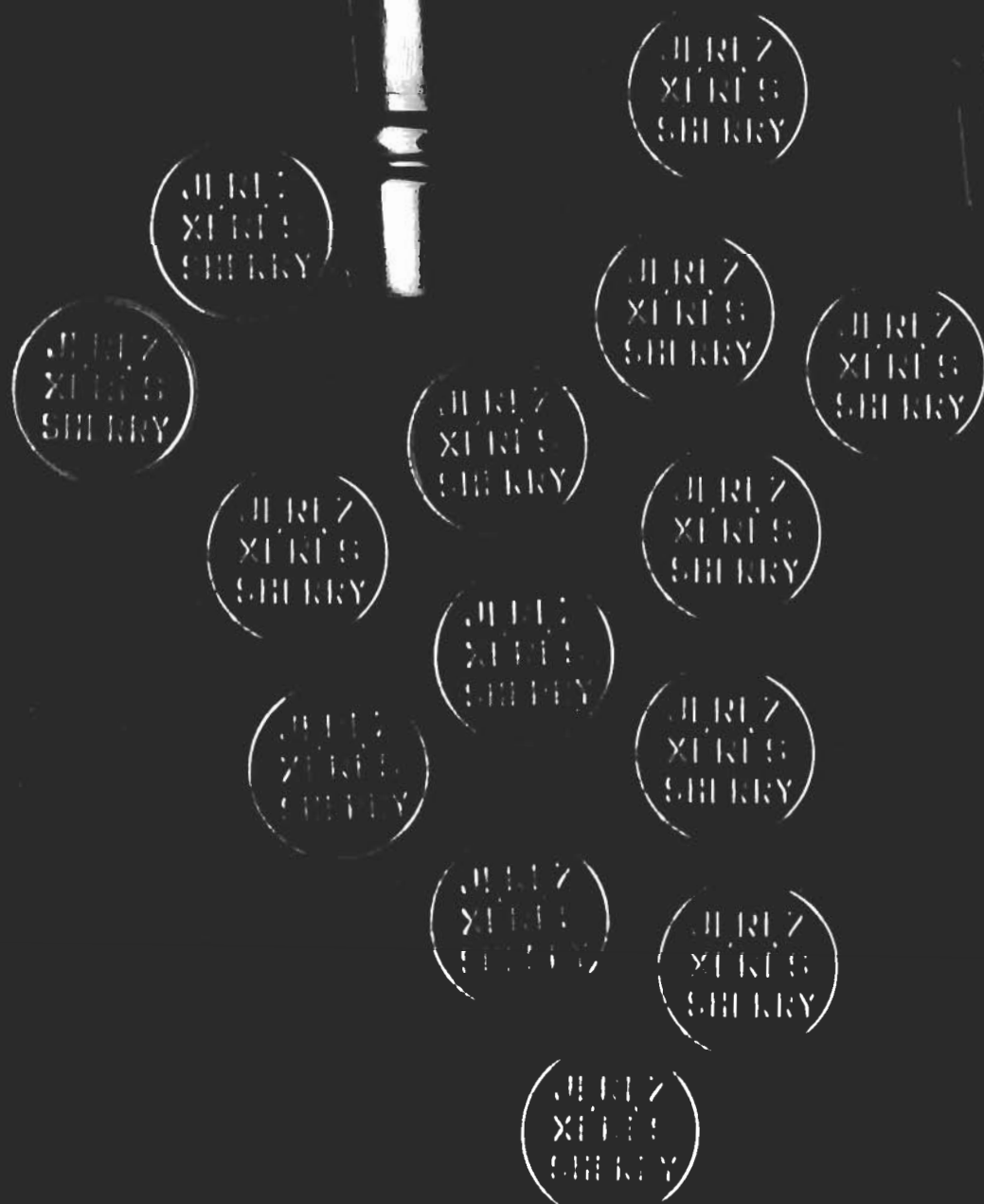
practices. They therefore try to grow vines that are not excessively vigorous and are well exposed to sun and air, using treatments in carefully controlled doses, choosing products that are not aggressive and have no undesirable side effects, applying new biological techniques (sexual confusion, auxiliary organisms...) and so on. The limy character of albariza soils can produce symptoms of chlorosis: in all but exceptional cases, this can be avoided by using rootstocks resistant to it.


With a view to combating viral infections and obtaining guaranteed disease-free plant specimens, the Centro de Investigación y Formación Agraria de Jerez de la Frontera, the Andalusian Regional Government's agricultural training and research centre, has developed a selection programme that supplies clones of Palomino and other Andalusian varieties with genetic and health certification. This material is being increasingly used in new plantations and constitutes a vital element in modern viticulture.

Harvesting

In early September, vine-growers gather in the fruits of a year's hard work. Harvesting is the jolliest, and most emblematic, of all vineyard tasks. When the grape reaches the right degree of ripeness, the bunches are cut off and sent to the press. Normally, harvesting is done by hand: grapes are deposited in small hods which are then taken to the trucks or other means of transport that will take them to the press. All this is done with extreme care to ensure that the fruit, which is usually healthy, arrives at its destination in the best possible condition.

Mechanical harvesting trials have now started in the area. Grape-harvesting machinery is already used in various wine-growing regions of the world with good results. Results in Jerez have been satisfactory and in the fullness of time, once certain technological wrinkles have been ironed out, it is expected to be adopted, at least in part, by modern sherry viticulture. ■





Título: Racimo

THE GRAPE HARVEST

JOSÉ MARÍA MATEOS ROMERO



In most important wine-producing regions, like the Marco de Jerez, the grape harvest plays an important role in balancing the converging interests of the vine-growing and wine-making sectors. Vine growers tend to harvest as early as possible to avoid the possibility of untimely rain spoiling the grapes or even causing them to drop off the vine. Wine-makers, meanwhile, try to time the harvest to suit a series of requirements directly related to sherry wine. The first of these has to do with needing grape musts with enough sugar content to satisfy the regulations applicable to liquor wines. The second is the need to reach a suitable level of acidity (so as to minimise subsequent corrective additions of tartaric acid) compatible with a sufficiently low level of malic acid to preclude the risk of malolactic fermentation taking place. The wine-maker's last, but not least, requirement is concerned with grape health and the implications of that in the process of making and ageing wine. The sherry-makers are obviously interested in setting a date for the grape harvest as much in tune with these concerns as possible, rather than with other aspects of production.

To complicate things further, like most hand-picked harvests, the sherry vintage requires a large-scale socioeconomic structure to coordinate all the aspects involved: foremen, harvester-carriers, drivers, *bodega* workers, and so on. This is why it is so important, for

organisational purposes, to know the ideal date for starting the harvest well in advance.

GRAPE RIPENING

Grape ripening can be briefly defined as the series of transformations that the berry undergoes on the vine before fulfilling a specific function. The phenomena associated with the ripening of most fruits, including grapes, are the following:

- Changes in colour, brought about by the loss of chlorophyllic pigments and the consequent exposing and synthesis of new pigments.
- Alterations in flavour, including changes in acidity, astringency and sweetness.
- A change of texture, as a result of the activity of hydrolytic enzymes that cause the fruit to soften.

But despite being aware of all of these aspects, in grapes, as in certain other fruits, there is no definite physiological state at which the fruit can categorically be said to be ripe. Ripeness is a random concept dependent upon many factors which converge at a particular time every year and mark this period. Indeed, the concept of ripeness varies from year to year, since each grape ripening cycle is different from all its predecessors. However, except for varietal aspects, and growing and climatic conditions, certain basic criteria have to be established so that ripeness and harvest time can be declared at the most convenient time.

In late August or early September, the grape reaches the optimal degree of ripeness for picking. Harvest-time has arrived.





Grape ripeness can be defined in biological terms (physiological maturity) as the moment when the seeds acquire germination capacity so as to perpetuate the species, given the right moisture and temperature conditions.

In industrial terms (industrial maturity), it can be defined as the moment when the bunch has reached the ideal stage for harvesting in accordance with certain oenological specifications. These two concepts do not necessarily coincide, and in most cases, the second criterion is

the true indicator of the end of the ripening process. The main physical-chemical phenomena associated with ripeness are:

1. Increase in the size and weight of the berry

Throughout the process of developing and ripening, grapes continue to increase in size and weight, albeit at an irregular rate. This growth is accentuated during the ripening period owing to the cellular expansion caused by an uninterrupted supply of water to

the fruit. This is a purely physical phenomenon, largely contingent on that year's rainfall and, above all, the supply of water available when the fruit begins to develop.

2. Accumulation of hexose

A tangible and extremely important event during the grape's ripening period is the accumulation of hexose (sugars), fundamentally glucose and fructose. There is no definitive explanation for this phenomenon, though many experts believe that at the moment when the grape



begins to acquire colour (veraison or *envero*), and the plant's vegetative growth has stopped, the berry ceases to function as a synthesiser and becomes, instead, an accumulator of all the glucidic migrations. These sugars derive mainly from reserves accumulated by the vine, from the daily photosynthesis that takes place in the leaves and from the mechanism that transforms malic acid into glucose in the grape itself. When the grape is green, its sugar content is only 1 to 1.5 percent; when it is ripe, this rises to approximately 20 percent. The maximum content of

sugars coincides with the maximum weight of the berries and with the industrial maturity of the grape. At harvest time, sugar content can stop rising and can sometimes even drop slightly.

As regards the evolution of the principal sugars in the berry, it should be noted that when the grape is green, glucose is the dominant sugar (85 percent of the total reducing sugars), whereas when the berry begins to acquire colour, i.e. when the flow of sugars begins, fructose content rises in a higher

proportion, so that the glucose/fructose ratio decreases rapidly throughout ripening, reaching a ratio of 0.93 by the end of this period. This means that grapes are harvested with a slight surplus of fructose.

Because of the significant increase in concentrated sugars produced during ripening in the Palomino Fino variety in the Jerez region, this variable is frequently used to determine the optimal time for starting the harvest. Although a must's sugar content is not the only determining factor

In ninety percent of the vineyards in the sherry area, grapes are hand-picked by the traditional corta method.





in producing quality wines, below certain minimum levels the grapes can be deemed to be unripe and therefore not suitable for vinification, especially if – as in the case of sherry – the intention is to produce high strength wines. However, researchers have been unable to establish a clear link between a must's sugar content and final wine quality. Weather conditions permitting, musts in Jerez reach an approximate density of 12 degrees Baumé by the end of ripening.

3. Evolution of mineral matter

It has been established that mineral cations are continually absorbed from the soil by the roots and distributed throughout the plant and fruit, with the process intensifying during ripening. In a period of about a month, mineral matter in the skin triples; in the stalk its level rises by 1.5 to 2.5 and in the pulp by 1.2 to 1.9. This migration slows down when the fruit is ripe.

Salified or partially salified organic acids present in the roots – principally tartrates, bitartrates, and potassium citrates found in large proportions in this organ of the plant – are also involved in these migrations.

Climatic conditions determine the concentration of potassium in the grape. In hot and dry climates, such as Jerez's, potassium concentrations are higher than in cold, wet climates because of water loss through transpiration.

4. Evolution of organic acids and pH

Like sugar content, acidity is an important parameter that helps define or explain the phenomenon of grape ripening. Total acidity is the term used to express the sum total of all the hydrogen ions present in a fruit. Consequently, total acidity gives us an idea of the free acid content of a must. It is a proven fact, confirmed by various trials, that the acidity of grape juice, once it has reached its maximum level as the grape develops, decreases throughout the ripening process, and that this reduction is much more marked in hot climates, like that of Jerez.

5. Evolution of nitrogenous substances

Nitrogenous compounds are another of the parameters that undergo significant modifications as ripening

progresses. The nitrogen content of grape flesh at that stage is estimated to be between two and five times higher than when the grape is green. However, although the total value of nitrogen increases during this period, the different forms of nitrogenous substance in the fruit develop differently over time.

As regards aminoacids, it has been observed that their content increases constantly in the grape until it is nearly ripe, from which time onwards their concentration starts to decrease because of their involvement in synthesising proteins.

FACTORS THAT AFFECT THE GRAPE RIPENING

A number of factors have a bearing on the grape's ripening and final composition:

a) Some of these are permanent: their action is constant and does not vary from one year to the next. These include the vine itself, the rootstock, the climate (in general terms) and the age of the vine.

b) Others are variable: weather conditions – temperature, hours of



sunshine, humidity, wind, etc. – change from year to year and lend a different character to each vintage.

c) Additionally, there are factors modified by man depending on cultural traditions: pruning, working the land, fertilising, etc.

d) Finally, there are accidental factors: cryptogamic diseases – mildew, oidium or grey rot, for instance – and major meteorological occurrences, such as frosts, hail storms, etc.

The overall effect of all these factors determines the approach that a region will take to vine-growing. In the specific case of the Marco de Jerez, the principal conditioning factors are:

Temperature

Temperature plays an important role in the physico-chemical development of grapes during ripening – and, consequently, in the final composition of the must – functioning as an activator or inhibitor of certain

metabolic processes that are essential for the fruit to develop and ripen well, such as photosynthesis, transpiration, respiration, migration phenomena and polyphenol (antocian) synthesis.

In warm regions, like Jerez, the processes involved in lowering acidity and, particularly, reducing respiratory phenomena, are much more highly activated so that ripening is accelerated and musts are very sweet with relatively low acidity.

Sunshine and light intensity

Light in its two variables, sunshine and light intensity, is one of the factors that affect the development of the vine and the ripening and composition of its fruit, principally influencing the photosynthetic process and synthesis of antocians (colouring matter). As one might expect, the rate of photosynthesis increases logarithmically with rising levels of light intensity, as does the rate of transpiration (via stomatic aperture) until saturation level is reached. When light is less intense,

this rate diminishes; however, in cases where light conditions are extreme (above saturation point), photosynthesis can be inhibited. In the Jerez region, sunshine and light intensity parameters are not extreme: light incidence during the active period is estimated at 4,455 hours, which is more than adequate for healthy development and ripening of the fruit.

Moisture

Water levels in the soil, dependent upon the rainfall pattern, geographical situation and type of soil involved, play a predominant role in vine growth and exert a decisive influence on the characteristics of the year's harvest. A surplus or a deficit of water can each have an adverse effect on proper ripening of the fruit and normal development of the plant.

The effects of drought differ depending on the region and how long it lasts. In general terms, however, if conditions of hydric stress last throughout the period





The Marco de Jerez region has unusually heavy morning dews, locally called blanduras, which alleviate the dryness of summer.





between flowering and the start of ripening, losses in yield and low sugar and acid contents tend to result. If drought occurs between veraison and maturation, however, accumulation of sugars and combustion of acids are beneficially affected. The quality wines of the Jerez region benefit from the dryness of its summers, which coincide with the ripening-harvesting period. Autumn-winter and spring rains play a decisive role in creating reserves of water that is retained in the earth by the characteristics of the area's albariza soils.

Atmospheric moisture is another factor that affects the plant's physiological processes: stomatic aperture, transpiration, photosynthetic activity, etc. The effects of genuine drought can often be partly compensated for by relatively high humidity. Heavy early morning dews are a characteristic of the Jerez area, and these alleviate the dryness of its summers to some degree. Also to be taken into account is the influence of the region's prevailing winds on the relative humidity of the atmosphere. The Poniente, the westerly wind that

blows in from the Atlantic Ocean, is moist, while the Levante, the south-easterly wind that blows in from Africa, is extremely hot and dry. Both affect the ripening of the fruit. Generally, the westerly winds help mitigate the lack of water that vines might suffer during the summer. Meanwhile, the easterly winds, which are very hot and blow with a vengeance during the summer, help reduce humidity levels in years of average rainfall, improving and accelerating the ripening of the grapes.

Theoretically, the best climatic conditions for proper grape ripening in the sherry region require a good relative moisture level in the soil and sunny weather, though not too hot.

THE HARVEST

In Jerez, grapes have traditionally been harvested by hand. This is done when the fruit has reached the right degree of ripeness for it to be transported and vinified. The method most frequently used involves cutting the stalk between the bunch and the supporting branch. This is done with the aid

The harvest in Jerez involves a well organised working structure: foremen, harvesters-carriers, drivers, winery workers...



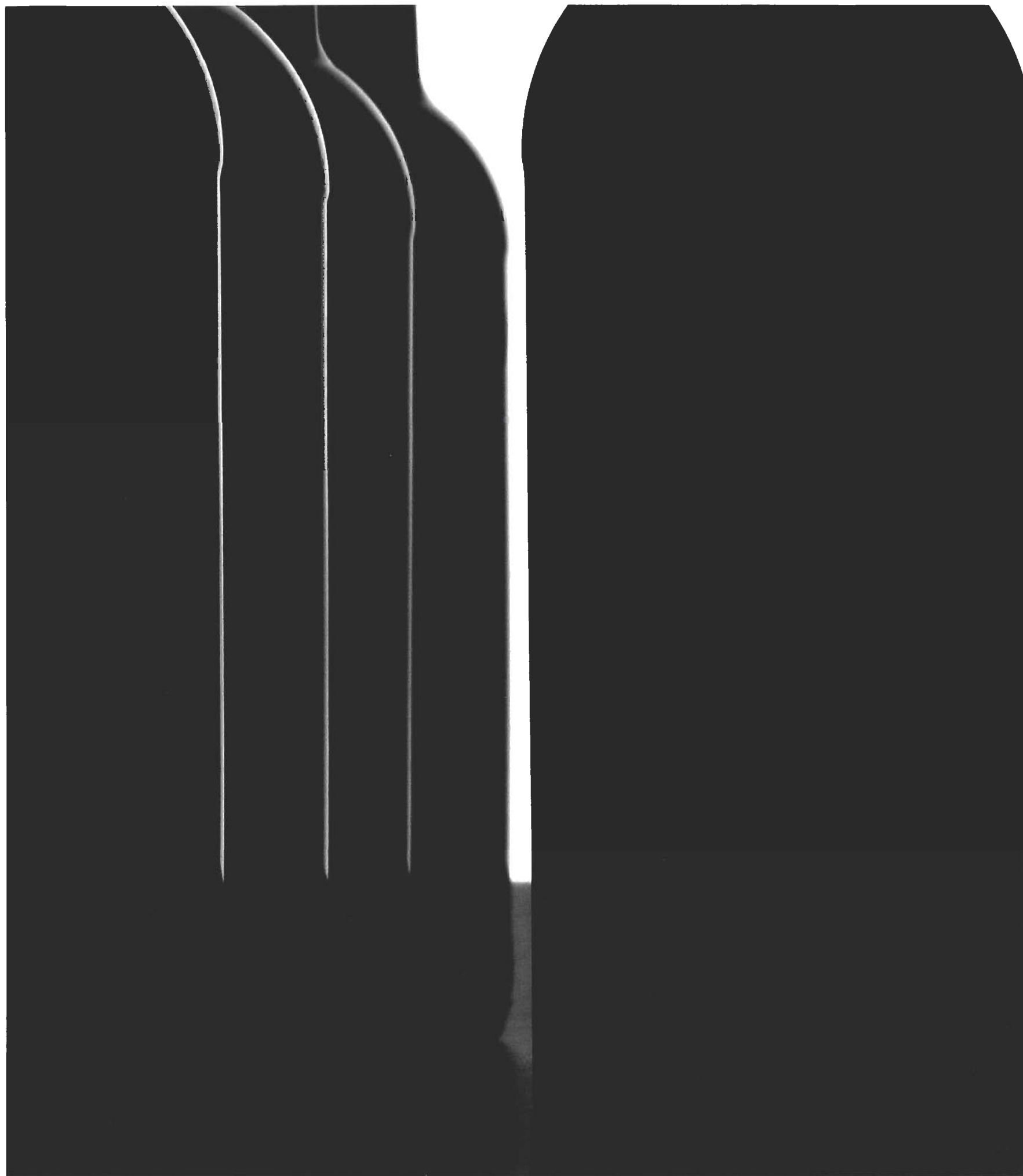
of thin-bladed pruning scissors or clasp knives with curved blades. Once cut, the bunches are placed in plastic holding bins with an average capacity of 20 to 25 kilos (44 to 55 pounds) that can be stacked without damaging the fruit.

In the last few years, mechanical grape harvesting methods have also been introduced in the area. Harvesting machines shake part or the whole of the vine, using an accelerating centrifugal swinging action strong enough to sever either the stalk that joins bunch to branch or the joint between grape and bunch. There are two main systems: lateral shaking, which moves the entire vine horizontally back and forth, perpendicular to the row, and vertical shaking, which generates an up and down movement under the row's supporting wire.

All these elements use a shaking tunnel that passes over the row of vines. Once the fruit has been separated from the vine, it falls into receptacles placed at the bottom of the tunnel. The fruit is then carried forward by gravity, and then mechanically propelled, towards a

sequence of elevators and conveyors which then deposit it in a holding bin.

These systems have been fully adapted to the area, where the method of choice is the one that separates the grape from the bunch. Harvest quality is still optimal, provided it does not have to travel too far to the wine press or wait too long before being crushed.



Título: Depósitos

THE VINIFICATION OF SHERRY

VÍCTOR MANUEL PALACIOS MACÍAS

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he vinification of sherry is traditionally an event of considerable social significance, both economically and culturally, because it begins with the handing over of responsibility from the growers, who have devoted care and attention to their crop, to the wine makers, whose mission is to make good wine out of it.

Vinification is the term used to describe the operations and processes involved in transforming grape juice into young wine. In the case of sherry, this young wine is called 'mosto' (must), since it has yet to acquire the organoleptic peculiarities specific to 'sherry wine', whose full attributes are acquired later, during the ageing and maturing phases. Nevertheless, this transmutation process is extremely important since it determines how the wine will turn out, what its distinguishing traits are likely to be. A series of visual and organoleptic clues will tell the wine maker what use to make of the must, i.e. whether it is suitable for biological ageing with a view to becoming a fino, manzanilla or amontillado or, alternatively, whether it should be earmarked for the physico-chemical (oxidative) ageing required to obtain an oloroso. In both cases, the main objective of vinification is to create the best possible raw material for subsequent ageing and maturing.

The vinification of sherry in its two modalities, depending on whether the end product is dry or sweet, is essentially done as for white

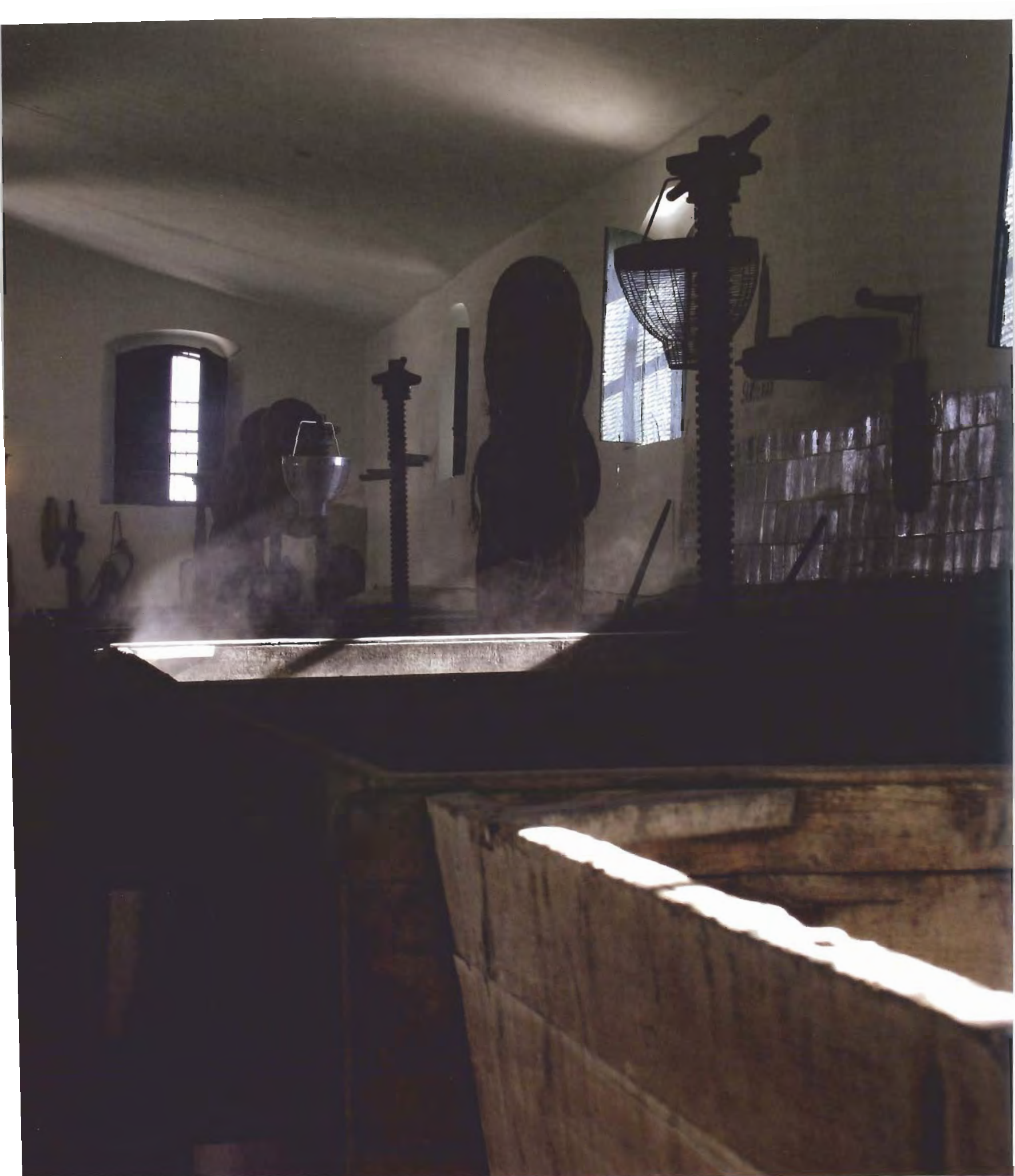
wines (*vinificación en blanco*) and is distinguished by the following technical characteristics:

- 1). Owing to the tendency of must and wine to oxidise, the extraction phase has to be carried out with extreme care, averting the possibility of over-extracting polyphenolic matter and minimising contact with air.
2. The relatively high (between 3.7 and 4) pH values of must, especially in years when grapes are very ripe, require correction if healthy, balanced fermented musts suitable for ageing are to be obtained .
3. During the alcoholic fermentation stage, the low temperatures needed to obtain very fruity aromas are not needed since these are less important for sherry than for other white wines.
4. Given the effect that grape health has on the process of biological ageing, the state of the grapes has to be monitored during the harvest so as to detect infections such as the *Botrytis cinerea* fungus, which causes grey rot.

The two basic stages in the vinification of sherry are the extraction of must and its alcoholic or vinous fermentation.

EXTRACTING THE MUST

After the grapes have been picked, manually or mechanically, they are taken as quickly as possible to the winery presses, either in the vineyards themselves or on the outskirts of town. In the sherry region, grapes have



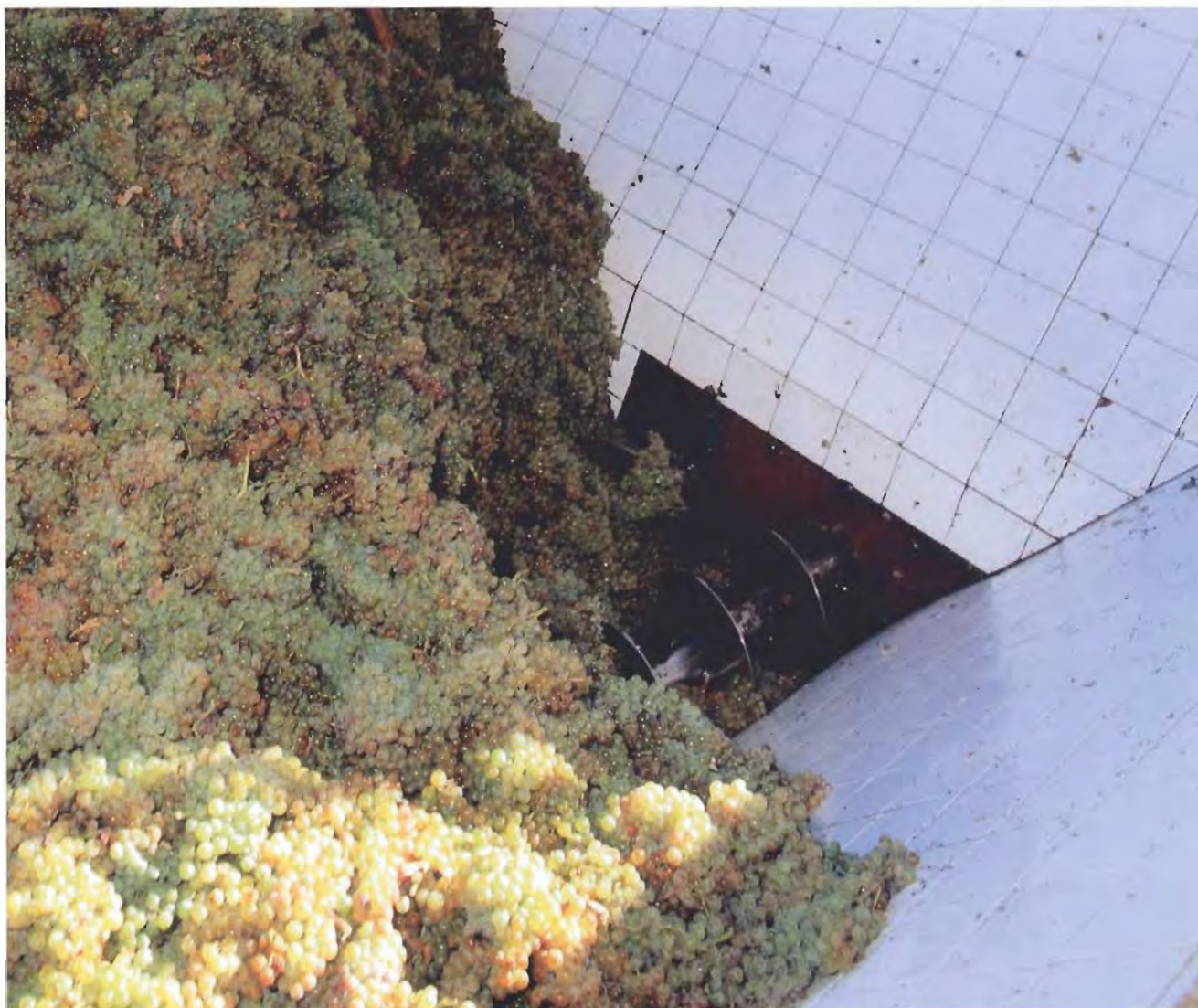


traditionally been transported in small-capacity (18-20 kilogram/40-44 pound) baskets or boxes to protect them from being damaged: one of the distinguishing traits of the Palomino Fino variety is that it has a very thin skin, which splits easily when the grapes are piled up or transported. Nowadays, however, most wineries have replaced boxes with bulk transport methods, containers or

dumper trucks with a capacity of 7,000 to 15,000 kilograms (15,500 to 33,000 pounds), whose height-width ratio is very similar to that of the original boxes. The idea is to facilitate the processing of the fruit, keep the costs of operation down and prevent must forming at the bottom of the container (a phenomenon called *mosteo*), which can trigger contamination and oxidation.

Once the grapes reach the press house, before they are unloaded from the lorry they are weighed, usually on platform scales, to monitor the yield per hectare of each parcel: this aspect is strictly controlled by the Consejo Regulador in all Marco de Jerez wineries to guarantee the quality of the harvest at the point of origin. Under current regulations, the Consejo Regulador only passes

The traditional treading of the grapes has been replaced by complex mechanical pressing systems that guarantee the quality of the extracted must.



for sherry the must resulting from vineyards with a maximum yield of 10,500 kilograms (23,000 pounds) of grapes per hectare. In addition to weighing the harvest, a representative sample of the load is taken so that certain quality parameters can be evaluated, either to satisfy Consejo Regulador requirements or for their relevance to the oenological processes. The analyses carried out provide

information about the degree of ripeness (density, total acidity and pH) and health (gluconic acid, laccase activity, etc.) of the grape. For the wine maker, ascertaining the density of the must (measured in degrees Baumé) is essential, since it indicates the alcoholic strength that will be reached after fermentation. The Consejo Regulador requires fermented musts to have an alcoholic strength

of at least 10.5 percent by volume in order to qualify for Denomination of Origin status.

When the harvested grapes are transported in bulk, they are unloaded into a reception hopper fitted with a continuous screw system that carries the grapes to the first operating unit, usually a crusher or a destemmer-crusher. When they arrive in holding



bins, they are carried on conveyor belts to the first operating unit, which is usually located immediately above the loading mouth of the press to keep to-ing and fro-ing to a minimum. The aim of crushing is to facilitate the extraction of must by pressure. In the crushing process, the skin of the grape bursts open, releasing a quantity of juice mainly derived from the fruit pulp. In the case of sherry, this operation has to be carried out with utmost care to prevent too many solids forming, and to prevent stalks and pips being broken up and some of the components in the skins – especially polyphenols – being extracted.

Destemming, or removing the grape stalks, is an optional operation that



can be done partially or totally before crushing so as to prevent their being broken up and releasing their juice, which is rich in herbaceous compounds and tannins detrimental to wine quality. However, the presence of unbroken stalks can be advantageous from a technical point of view, since it facilitates the circulation of must through the solids during the pressing and draining phases, thereby enhancing extraction. Destemming is therefore included in the process if it is likely to improve the quality and performance of the extraction process.

After crushing and, when appropriate, destemming, the 'paste' of solids, is transferred, together with the released must, to the extraction system, where

pressure is applied to release must, in the first instance, and then to push it through the pomace towards the exit point. The amount of pressure applied affects the composition of the must; different proportions of must can be obtained during the extraction process depending on the pressure applied: the must called *primera yema* (approximately 65 percent of the total volume of must), obtained with pressures of up to 2 kilograms (4.4 pounds) per square centimetre; the *segunda yema* must (approximately 23 percent of the total), obtained with a pressure of up to 4 kilograms (8.8 pounds) per square centimetre and, lastly, *mosto prensa*, which is produced by pressures of over 6 kilograms (13.2 pounds) per square centimetre.

Grapes are turned into must through a crushing and extraction process that in the case of sherry has to be carried out with extreme care to prevent the formations of too many solids.



The analytical characteristics of primera yema must (high sugar and low polyphenol, iron, potassium and solid matter content) make it suitable for biological ageing, while segunda yema musts, whose structure derives to a greater extent from solids, produce wines better suited to physico-chemical ageing.

As regards extraction methods, the wineries of the Marco de Jerez use continuous, discontinuous and mixed systems. Continuous systems consist of no more than three dejuicers or dynamic drainers connected to a continuous draining press. Discontinuous systems, meanwhile, generally use horizontal presses with perforated plates or membranes, which are also

connected to a continuous draining press for pomace. Many wineries are now using combination systems whose main unit for extracting *primera yema* must is a self-emptying or static draining tank (for free run) which can be connected to either a continuous or discontinuous system to extract the remaining quantities of must.

PREPARING THE MUST

Newly extracted must is prepared or cleaned before fermentation to prevent oxidation and bacterial contamination, and to improve the aromatic finesse of the fermented must. Firstly, the *mosto a piquera* (extracted by means of a wine press) is roughly filtered through a coarse-

mesh to separate the juice from larger pieces of solid matter (pips, remains of skin, etc.) that occur in musts in varying quantities depending on the extraction system used. Clear musts are collected in reception tanks where they are then subjected to a process of pH correction. Technically speaking, pH is very important in wine making, since at specific levels (between 3.1 and 3.4 pH) it protects the must against bacterial contamination during fermentation. During ripening, the pH of Palomino Fino increases significantly, and by the end of the ripening phase the musts these grapes produce have a pH of between 3.7 and 4. Correction is therefore essential to obtain healthy and balanced fermented musts fit for biological or physico-chemical

Recently extracted musts are thoroughly prepared and primed before fermentation.



Wineries in the sherry region have adopted the latest vinification technology in a sector that has always been in the vanguard of innovation.





ageing. In the case of sherry, pH is corrected by the addition of tartaric acid and, occasionally, following an age-old tradition, *yesso* (gypsum).

Once the pH has been corrected, the must is treated with a controlled dose of sulphur dioxide that can vary from 60 to 100 milligrams per litre, depending on the condition of the harvested grapes, to prevent enzymatic darkening and bacterial contamination, and to prevent the development of yeasts that contribute little to fermentation, are of little oenological relevance and are highly sensitive to this compound. The antiseptic power of sulphur, which increases significantly with lower pH values, temporarily inhibits the development of fermenting agents, thereby delaying the onset of fermentation by approximately 24 hours: this period is used to clean the must. After cleaning, musts treated with low or moderate doses of sulphur dioxide usually have rapid bursts of fermentation owing to this sulphurous compound, which destroys some of the substances that are toxic to yeasts. Generally, this sulphurous substance is administered continuously in the form of a gas injected directly into the must's circulation pipes, thereby facilitating its homogenization.

Sulfited musts are then subjected

to a process designed to separate off the solids suspended in the liquid, normally by decanting or racking (a process known in Spanish as *desfangado* – demudding). The aim of this operation is to eliminate most of the fine solids or 'mud' produced by the micronization of the solid parts during the mechanical extraction operations. In the vinification of sherry, racking is an important operation since it appreciably improves wine quality. The presence of sediment in musts generally hampers temperature control during fermentation, giving wines that lack subtlety or present aromatic deviations (reduction smells) and are more unstable from the point of view of oxidation owing to the higher presence of polyphenols and iron in them. The racking process gets rid of many of the indigenous yeasts present in the harvested fruit, reducing the incidence of spontaneous fermentation. It does, however, pave the way for the introduction of selected cultured yeasts into the must. The greatest disadvantage of racking is that, if overdone, it can produce wines with high levels of volatile acidity. This is because lees contain powerful fermentation activators, the absence of which produces metabolic deviations in the yeasts that lead to higher synthesis of acetic acid. The racking operation, usually carried out by a natural decanting process,

allowing the must to rest in stainless steel tanks for 12 to 24 hours, can be complicated by the high temperature of musts at harvest time and, just occasionally, by the presence of polysaccharides produced by the *botrytis* fungus in grapes.

Clarified, solid-free musts are then transferred to fermentation deposits, where they are subjected to the last of the preparation operations: the addition of *pie de cuba*. This is the name given to a must in full fermentation that is added to clear must in a proportion that varies between 2 and 10 percent of the total volume of liquid. This produces a series of interesting effects: it speeds up the start of fermentation, thereby minimising the chance of other opportunist microorganisms developing, and also provides the opportunity to introduce a previously selected strain of yeast as a fermenting agent. In the sherry region, both options are used: *pies de cuba* with spontaneous yeasts and *pies de cuba* with selected yeasts that make for a more controlled fermentation and one that can be more easily replicated regardless of the vintage.

The traditional method of sherry vinification used to employ 500-litre oak butts as fermentation vessels, which made controlled fermentation

In the vinification of sherry, desfangado, or clarification, is an important operation that considerably improves the quality of wines.



Clarified musts are transferred to fermentation tanks, where the complex process whereby sugars are turned into alcohol takes place.

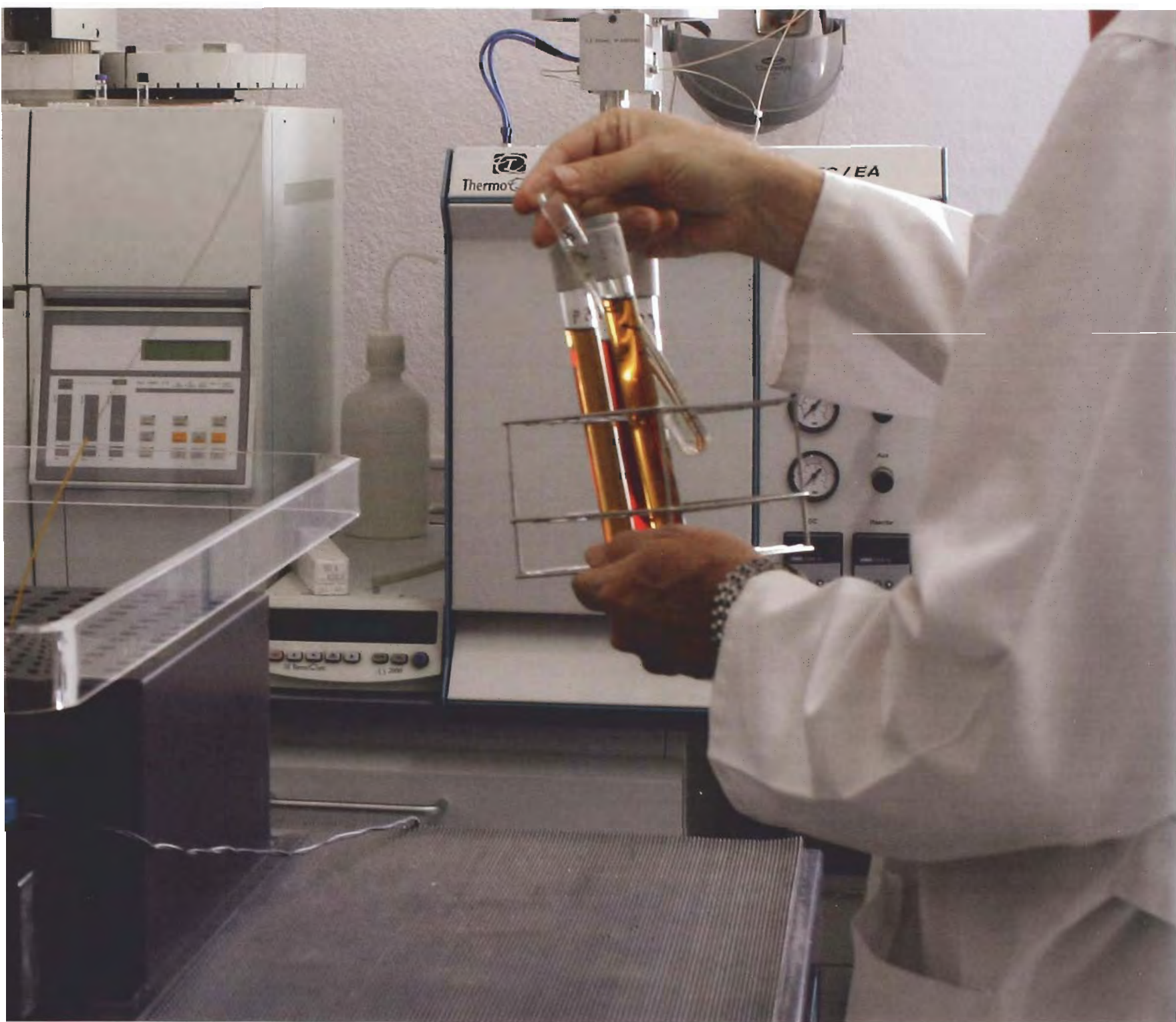
with specific yeasts difficult. Given the important role played by the fermenting agent in the final composition of fermented must, the sherry DO *bodegas* have opted, in most cases, for selecting from among the native yeast families those strains that give the best oenological and sensory characteristics. Significant among the properties that oenologists require of yeasts are: fermentative strength, high alcoholic yield, low production of volatile acidity, resistance to sulphur and high production of acetaldehyde, the latter being particularly relevant to sherry.

ALCOHOLIC FERMENTATION

Alcoholic fermentation is the complex biochemical process by means of which fermenting agents – i.e. yeasts – transform sugars into alcohol, during which large quantities of carbon dioxide are released into the atmosphere and heat is generated, increasing the temperature of the fermenting must. Alcohol is not the only substance produced by fermented sugars; many other organic compounds are formed during fermentation which, though present in smaller quantities, nonetheless have a bearing on the sensory characteristics of the wine in the making. Important among these are glycerol, acetaldehyde, certain acids (lactic, succinic...), aromatic compounds, and others.

Generally speaking, the process of fermentation can be divided into two stages: a first phase known as tumultuous fermentation and a second period known as slow fermentation. The duration of tumultuous fermentation varies





depending on the composition of the must and the temperature at which it is carried out. At this stage, the temperature has to be controlled to get the best out of the fermentation process since, in the case of sherry and given the nature of Palomino Fino grapes, obtaining fruity aromas is not as important as it generally is in white wine making. Recommended temperatures range between 23 and 25 degrees Centigrade (73 and 77 degrees Fahrenheit), within which range yeasts develop comfortably, thereby ensuring that sugars are completely transformed into alcohol.

After about six days, only small quantities of sugar that has not been transformed or metabolised remain, and the second, slow fermentation begins, transforming the remaining grams of sugar into alcohol, without the need for refrigeration. Once this second stage is complete, the must is left to settle until the yeasts and solids in suspension, mainly tartaric acid salts and insoluble proteins, fall to the bottom. This cleansing phenomenon is enhanced in newly fermented musts by the fall in temperature triggered by the arrival of the cold weather in late autumn.

Although the traditional fermentation vessel was the 500-litre oak butt, today huge stainless steel fermentation tanks are used; these come in various sizes, the most common being 50,000 litres. The tanks are fitted with a series of accessories that facilitate monitoring the fermentation process (thermometer, sample taking equipment, exit valves for fermentation gases, etc.) and incorporate cooling systems. The

inert nature of these easy-to-clean tanks promotes the transformation of must into wine without risk of infection.

Once the alcoholic fermentation process has come to an end and the wine has been left to settle, the solids made up of yeasts and other matter are removed. These are the dregs, or lees. During the decanting process, a film of yeast cells called *velo de flor* starts to develop, covering the surface of the must. This film is generally made up of a highly specific, spontaneous flora of yeast cells that remain active even after the fermentable sugars have been exhausted, feeding on the alcohol created by this process to stay alive.

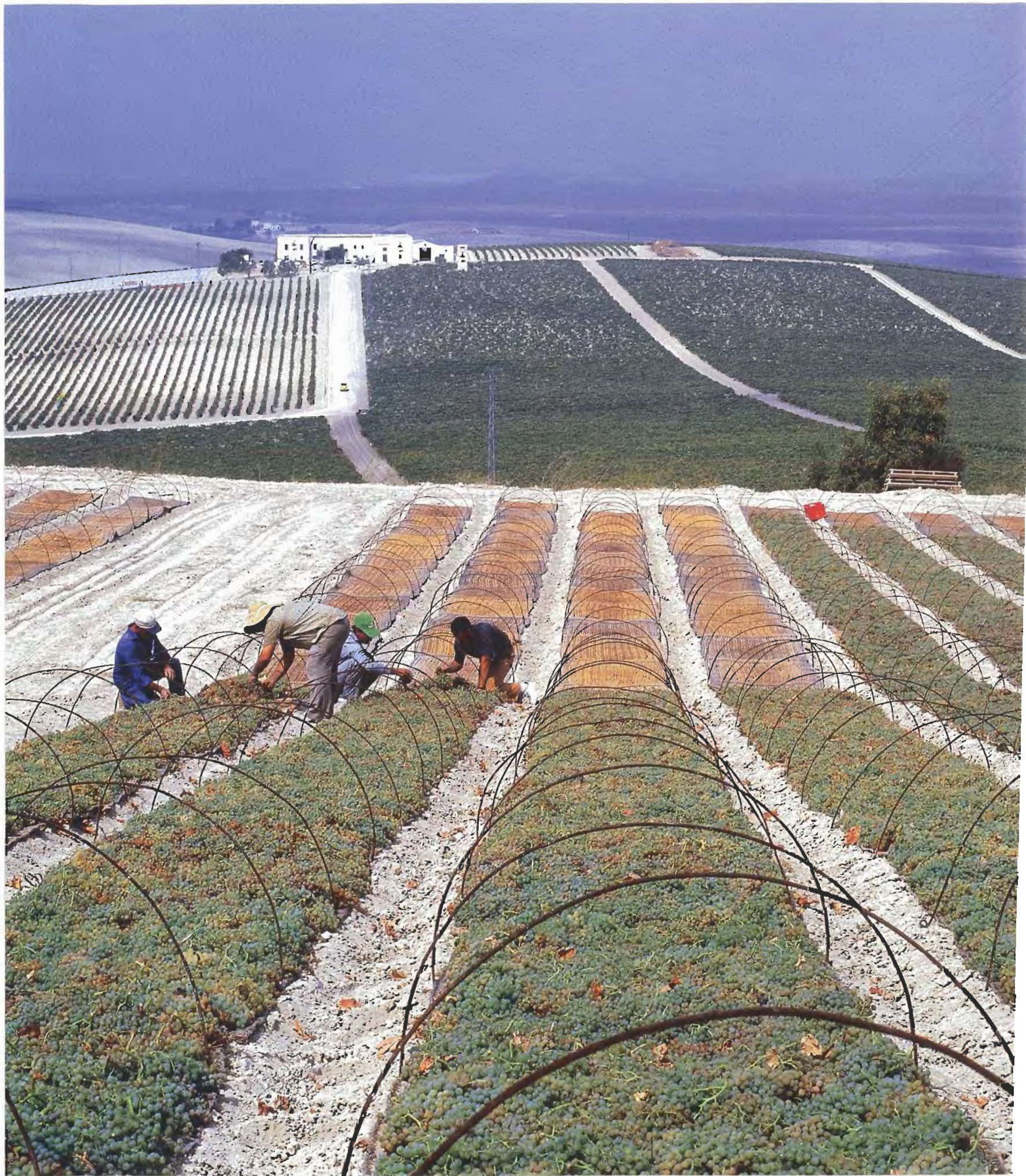
Once the musts have clarified by spontaneous settling, they are analysed. Depending on their traits and sensory properties, musts are classified into two large groups: those that appear suitable for the period of biological *crianza* or ageing that will turn them into finos or manzanillas; and those that, because of their particular *gordura* (body), and other properties, are earmarked for the physico-chemical ageing process that will turn them into olorosos. Oenologists and cellar-masters use specific marks to identify the different types of must: *una raya* (I), *raya y punto* (I.) and *dos rayas* (II), according to style, from finest to most robust.

Fermented musts which have been racked off lees, in an operation called *deslío*, are fortified with grape alcohol to 15.5 degrees by volume in the case of wines selected for biological ageing (finos and

manzanillas) and to 17 or 18 degrees in wines routed for physico-chemical ageing (olorosos). Fortification, or *encabezado*, creates a certain degree of instability: raising the alcoholic strength renders some components of the young wine insoluble, and produces a precipitate. Consequently, after the fortification process, the wine is usually clarified and even deironed to obtain stable wines in the best possible state to start the ageing process. Once cleaned, the fermented must or young wine is transferred into oak casks for storage. At this preliminary stage, the young wine is known as *sobretabla* when it is destined for biological ageing in the solera system, and *añada* when it is to undergo the physico-chemical ageing process.

Musts are classified using a series of marks that distinguish those which seem to be suited for biological ageing (future finos and manzanillas) from those that are earmarked for oxidative ageing (olorosos).





THE VINIFICATION OF SWEET SHERRY WINES



Sweet sherry wines are obtained from two grape varieties from which they take their names: Pedro Ximénez and Moscatel.

Pedro Ximénez wines are made with overripe grapes of the Pedro Ximénez variety picked after they have attained a high concentration of sugar on the vine, in excess of 16 degrees Baumé (around 300 grams/10.5

ounces of sugar per litre of must).

Once harvested, the grapes are spread out on paseras, sites specifically set aside for drying the fruit in the sun, a practice known as *soleo*. During this drying process, also known as *pasificación* (from the Spanish word *pasa*, raisin), the grapes lose a great deal of water, thereby

raising their sugar content considerably (450-500 grams/16-17.5 ounces per litre of must).

In parallel to this increase in sugar, other changes take place in the chemical, physical and sensory features of the dried grape: heightened colour, density, viscosity, stickiness and the emergence of aromas and flavours characteristic of Pedro Ximénez grapes and wines.

In soleo, or sunning, bunches of Pedro Ximénez grapes are carefully spread out on esparto grass mats for 'raisining'.



The practice of *soleo* consists in exposing the harvested bunches of grapes to the sun on mats of various shapes and materials, the most traditional being round *redores*, esparto grass mats. The grapes are carefully spread out by hand and turned over once a day to ensure that all the berries receive an equal amount of sunlight. During this operation, workers also remove unhealthy bunches – a practice known as *espurgado* (literally, purging or sanitising). In areas relatively close to the sea, the grapes are covered at night to prevent their being dampened by the typically heavy September dews. After several days, normally 7 to 15 depending on weather conditions (temperature and relative humidity), once the grapes are judged to have reached

the optimal condition, they are collected and transported to the wine press for the next stage in the process, the extraction of must.

Given that the grapes are now dehydrated, pressing is rather more difficult than for newly picked grapes. As a rule, vertical presses are used and, to help in extracting the must – which is very dense and viscous owing to the high content of sugars and other substances in it – the grapes tend to be piled up in layers separated by the *redores* on which they were sunned. The texture of the esparto grass matting facilitates the drainage of must from the presses.

Musts collected in tanks undergo a series of processes depending on

their particular characteristics. Their high concentration of sugar affects spontaneous fermentation, which only gets underway slowly. Also, to stabilise fermentative microbiological activity in the musts, wine spirit is added to levels not far short of 10 degrees of alcohol. Wines thus stabilised are left to settle during the autumn and winter months, after which the new wine is racked off the lees and fortified further up to 15 to 17 degrees of alcohol. Wines are then aged, using the traditional *añada* and *solera* systems, in American oak casks.

Moscatel wines are made exclusively from grapes of the Moscatel de Alejandría variety, which are harvested when very ripe. Moscatel grapes can also be sunned to obtain *moscateles*



pasas. This is done in much the same way as for Pedro Ximénez though, mainly because Moscatel de Alejandría grapes are bigger, sunning dries them out less. Furthermore, since most Moscatel vines are found in sandy soil near the sea, the sunning process often takes place on *paseras* of sand.

MAKING COLOR WINES

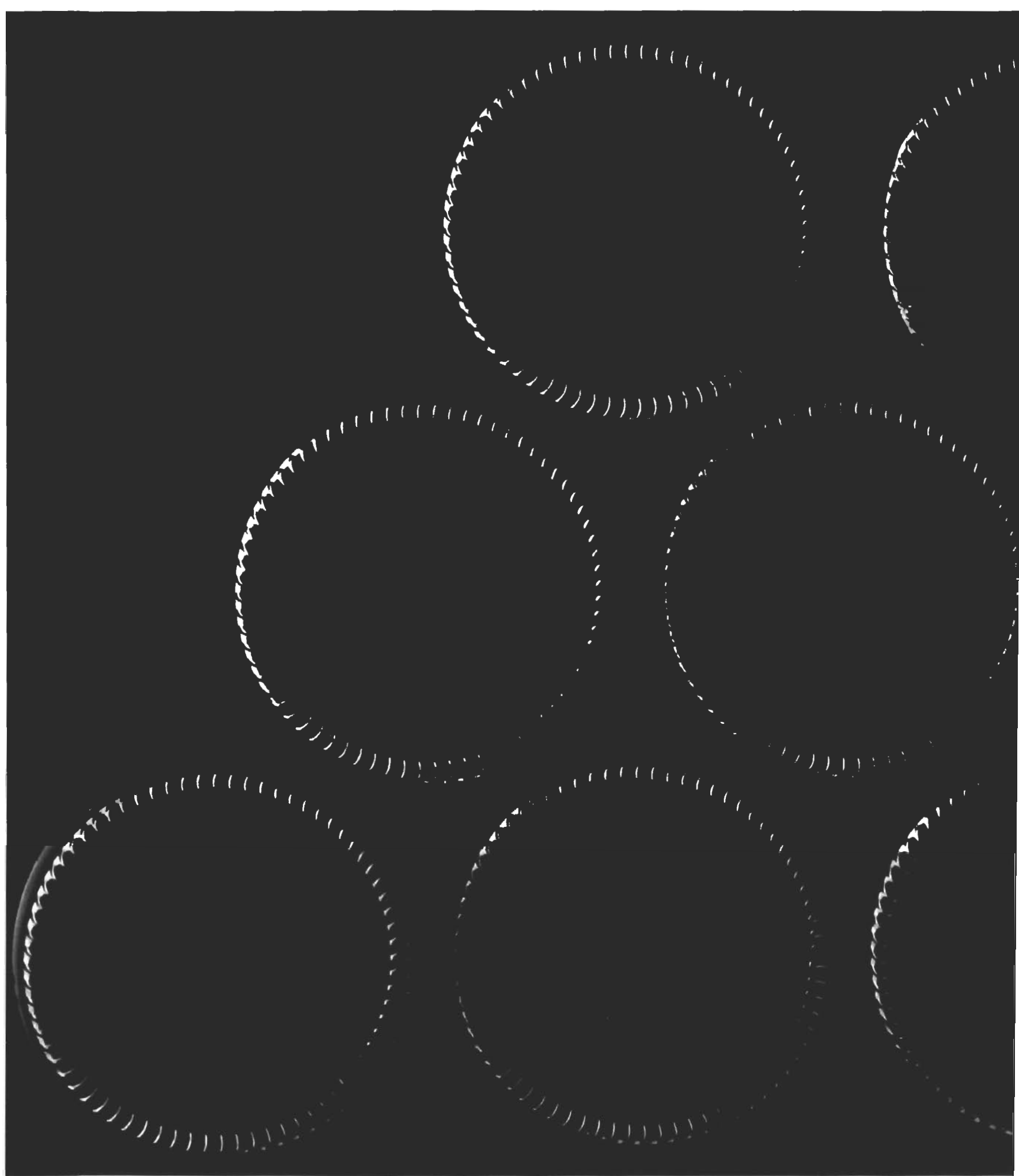
The wines known in the sherry region as *vinos de color* are not used as sweet wines, despite their very high sugar content. Rather, small quantities of *color* wine are used to achieve the standard intensity of colour that characterises the different types of blended wines (cream, medium, and so on). The first step in making *color* wines is to produce *arrope de mosto*, a

dark syrup obtained by heating Palomino Fino grape must over a slow fire until it reduces to one-fifth of its volume (38 degrees Baumé) and, especially, its sugars caramelise. This process, which is still carried out in the traditional manner in metal cauldrons, requires lots of manipulation and know-how to avoid burning the syrup and spoiling its sensory properties. The resulting caramelised concentrate is the *arrope*.

Arrope is added to Palomino Fino must in a proportion of 1/3, creating a mixture with a density of around 20 degrees Baumé that ferments very slowly until it reaches an alcoholic strength of 8 degrees, and 12 degrees Baumé of sweetness, at which point it is separated from the lees and

fortified with alcohol up to 15 to 17 degrees. The resulting *color* wine, called *color macetilla*, is matured in American oak butts using the traditional *añada*, *solera* and *criadera* systems, acquiring the appropriate sensory characteristics for the specific type and category of wine in the process. Using this same aging process, but mixing *arrope* in the same proportions with young wine instead of must, a version of *color* wine known as *color remendado* (literally, patched colour) is obtained.

Apart from its role in wine-making, *arrope* is also frequently used as a fruit preservative in delicious conserves known as *dulce de vendimia* (literally, grape-harvest sweet), a traditional dessert in the Jerez region. ■



Título: Andana

SHERRY AGEING

LUIS PÉREZ RODRÍGUEZ



In the course of its long wine-growing history, the Jerez region has developed an oenological approach that is highly sophisticated and rather different from what might be termed the determinist approach (namely, making wine so that its nature closely reflects that of the grape from which it is made). This is not to say that the quality of the wines of this region is unrelated to that of the grape, but rather that creating a good sherry also involves a series of complex processes, for the most part driven by biological phenomena, that take place gradually over years of *crianza*, or ageing, in its *bodegas*. These phenomena have been responsible for influencing and determining the selection of grape varieties and the adoption of specific growing methods throughout the history of sherry.

From the start, sherry accepted the principles of what constitutes a quality wine: good wines are ones that can be kept – an attribute transferred by analogy with the advantages for man of durability in foodstuffs. Consequently, ageing, maturation and laying down have for centuries been attributes associated with quality wines. This principle still applies in the sherry world, with quality being defined not only by a wine's intrinsic qualities but also by how long, and how intensively, it has been aged and matured.

CRIANZA

Crianza, or ageing, of wine begins while it is in storage waiting to

be consumed. The vine's seasonal productive cycle makes it necessary for wine to be stored; this used to be done in the same vessel in which it had been fermented. After the solid matter generated in the process of must's becoming young wine has been spontaneously deposited, and once the wine has been suitably fortified and decanted, the wine clarifies naturally, taking on a clean appearance that accentuates as the storage period goes on.

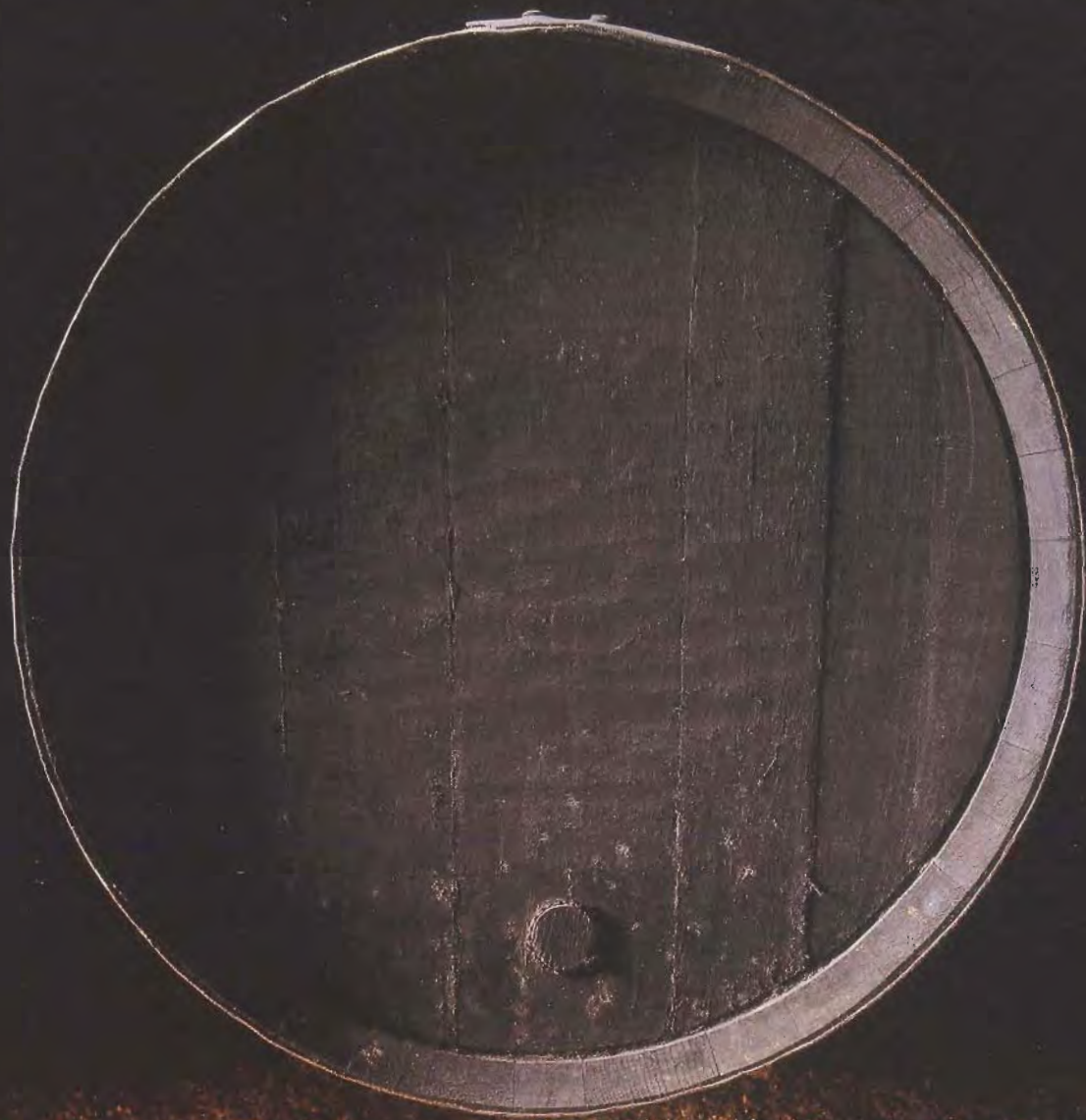
Types of ageing for sherry

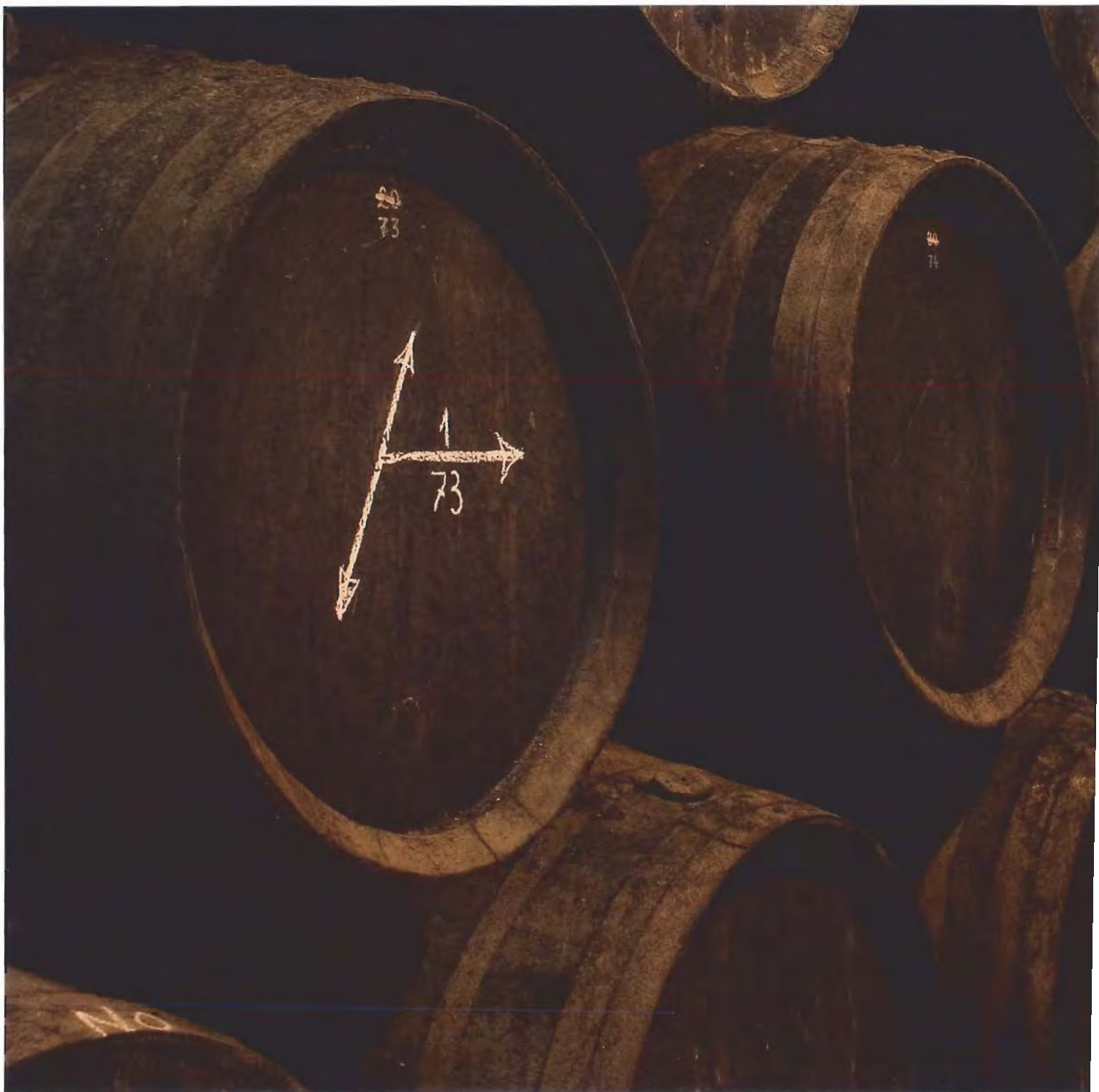
Two types of *crianza* are carried out in the Jerez region: one that consists of storing and developing wine in wooden butts, where it undergoes slow, physico-chemical development influenced by surrounding conditions, known as *envejecimiento* (maturing); and another known as *crianza biológica* (biological ageing), a process that takes place under a film of yeasts known as *velo de flor*, during which the wine develops in a more dynamic way, driven by what goes on within the biological layer formed on its surface by specific indigenous ambient yeasts. These different types of *crianza* use the *añada* (vintage) and the *criaderas y solera* systems respectively, this latter being more widespread in the region and characteristic of it.

Containers for ageing: oak butts

The nature and capacity of the containers used in sherry-making have evolved over the course of its long history. The earliest vessels were earthenware amphorae and jars, and these continued to be used for over two thousand years. From the Middle Ages on, when

American oak butts are the most widely-used containers in the sherry region; this wood is preferred because of the particular contribution it makes to sherry during ageing.





Ageing under a film of flor and the criadera and solera system – processes peculiar to sherry – are genuinely exceptional in wine-making world-wide.



the significant advantages of using wooden casks for transporting sherry became apparent, these also came to be used as storage or ageing containers. Changing the nature of the receptacle was to prove a milestone in the career of the region's wines in that it was instrumental in effecting major changes in their composition and sensory properties, effectively creating the prototype of the sherry we know today.

The wooden casks used for the *crianza* have varied widely in size, capacity and type depending on *bodega* conditions and storage space. *Toneles*, *toneletes*, *bocoyes*, *botas gordas*, *botas largas*, *botas cortas*, *medias botas*, *cuarterones* and *barriles*, ranging in capacity from the 900 litre *tonel* to the 16.66 litre one-*arroba barril*, have all been used for ageing wine and their presence has configured *bodega* spaces. Various woods – chestnut, local oak, American oak, and so on – have likewise been used. Nowadays, although casks of various types are still in use in many *bodegas*, the preferred and most widely employed type is the American oak 600 litre (equivalent to 36 *arroba*) butt. This type of wood is preferred to any other because of the specific contribution it makes to sherry, and it is furthermore traditional: it has been used since the first trading exchanges with the Americas, from which Spain imported wood and to which it exported wine. The storage of sherry and the containers used are matters covered by the regulations of the Denomination of Origin's Consejo Regulador.

The typical oak butt is neither a completely air-tight nor an

inert receptacle, since the wood is permeable to oxygen and also absorbs water from the wine it contains and then releases it into the *bodega's* atmosphere. This transpiration causes the volume of wine in the butt to drop, the rate of loss increasing the drier the *bodega* atmosphere becomes. This evaporation effect is known as *merma* and accounts for losses of 3 percent to 5 percent per year of the total wine stored. However, as the loss is essentially accounted for by water in the wine, this means that its other components are continually being concentrated. After long years of *crianza*, this is discernible in the increased alcoholic strength of wines aged without the protection afforded by a film of *flor*. This concentrating effect is not the only modification that will take place in the wine: it will also be enriched by subtle, specific contributions from the wood of the butt, which will have been thoroughly wine-seasoned before being put into service as an ageing receptacle. Meanwhile, the wine will have been developing gradually in this special environment by virtue either of the gradual but continuous impetus provided by the dose of oxygen that the wood allows to penetrate into its interior, or, in a different – more dynamic and substantial – way, of biological ageing beneath a film of *flor*.

BIOLOGICAL AGEING UNDER A FILM OF FLOR

Biological ageing under a film of *flor* yeast is one of the most fascinating processes in oenology. Its emergence in the wineries of the Jerez region more than two centuries ago was

responsible for the creation of genuinely iconic wines – the range of mazarillas, finos and amontillados – and also enriched the other sherry types to a greater or lesser degree. This extraordinary process occurs in wines being aged in butts within which, under specific conditions, their surface becomes covered by a film-like culture of yeasts indigenous to the area. The *velo de flor* thus formed protects and transforms the wine during its years of *crianza*. This type of ageing is referred to as 'biological' because the layer of *flor* that governs it is a living substance.

Film-forming yeasts

The climate and soils of the Jerez area have served man well as trusty allies, working in conjunction with his techniques to produce wines that not only can be kept without spoiling but actually improve with age.

Alcohol – the principal component that allows wine to be kept – derives from the sugars in must. Our wine-making ancestors relied upon grapes having reached the right degree of ripeness, sunning them after harvesting, and using arrope syrups as their main resources for achieving the necessary sugar content in their musts. Over the millennia, the high sugar content of these musts before fermentation served as an evolutionary trigger for native yeast flora, with the most fermentation-efficient and alcohol-tolerant ones self-selecting (nowadays, as for the last two centuries, topping-up or fortifying with wine-spirit is what gives the wines their high alcoholic content). From among the species selected and evolved during this process the film-forming yeasts

emerged – micro-organisms which, once sugar has been consumed by fermentation, and despite high alcohol levels in the wine, have the capacity to adjust to another metabolic phase and capitalise on that alcohol.





For this phenomenon to occur, the wine must match certain parameters:

- It must not contain an appreciable residue of sugars, since the sugar content inhibits the yeasts' respiratory metabolism.
- Its alcoholic content must not exceed 16 percent by volume.
- Climatic conditions where the *velo de flor* forms must be very moderate, as close to 18-20 degrees Centigrade (64.4-68.0 degrees Fahrenheit) as possible.
- The surface of the wine must be in contact with the interior atmosphere of the butt (in other words, butts or other vessels must not be completely full) so as to create a surface that will become covered by yeasts during the

The secret of biological ageing (which produces fino, manzanilla and amontillado sherries) is the velo de flor – a layer of yeasts that covers the wine's surface and endows it with unique, characteristic qualities.



film-forming phase and will have access to enough oxygen to allow them to breathe. On this point, it should be noted that the empty space left in a butt used for ageing under *flor* usually accounts for between 1/6th and 1/8th of the butt's contents.

Four species of film-forming yeast have been isolated. Although not recognised as such under the criteria currently applied by taxonomic manuals, these continue to be known in the sherry region as *Saccharomyces beticus*, *Saccharomyces cheresiensis*, *Saccharomyces montuliensis* and *Saccharomyces rouxi*.

Saccharomyces beticus is the species of film-forming yeast that occurs most abundantly in biologically ageing wines in the sherry region, being found in 75 percent of cases. Of the film-forming species, this is the one that most quickly transcribes its fermentative metabolism phase, during which it stays submerged (or precipitated at the end of the wine's fermentation process), into the respiratory, or *velo de flor*, phase during which it covers the wine's surface. As a result, this yeast species is found in practically all the first biological ageing tiers or scales of a solera system (explained below). As it progresses to the older tiers or *criaderas* (nurseries), other species such as *Saccharomyces montuliensis* appear, becoming more abundant in the older *soleras*, although *Saccharomyces beticus* is present in all the scales in some systems.

The population distribution of the different yeasts, or the proportion in which they occur, in the various

tiers of the solera system depends to a large degree on *bodega* conditions and on what operations are carried out during the biological ageing process. Each species of film-forming yeast behaves in a slightly different way from the others and imprints its wine with sensory and analytical nuances that are discernible on the palate. These differences account to a large degree for the subtle sensory variations that occur within fino or manzanilla wines of the same type but from different *bodegas*. They are even observable between different butts of the same *solera* system in a *bodega*. The oenologist's awareness of these idiosyncrasies enables him to direct the biological ageing process towards a type of wine with specific sensory nuances.

Wine aged under *velo de flor*

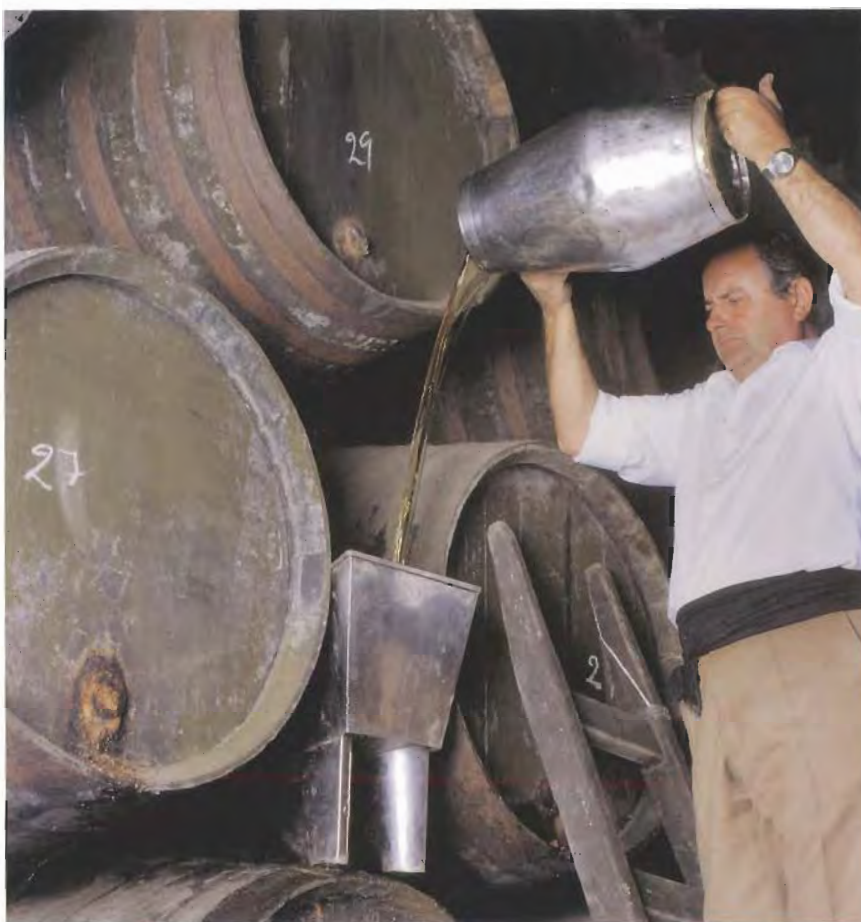
The technological process of biological ageing gives wine a very specific character, modifying it considerably while this is taking shape. No other oenological process changes the way that wine develops during ageing as profoundly as does biological ageing. The process stamps sherry with its specific character, and is a decisive factor in its method of production insofar as it governs many of the techniques applied.

The effects on wine of biological ageing under a film of *flor* are many and complex. For one thing, despite the fact that the wooden butts are neither completely full nor firmly bunged, as is usual in the wine ageing process, the amount of oxygen inside the butt is very small. This is due to the fact that the yeasts in the film of *flor* consume what oxygen there is through respiration,

and also prevent any more from getting in and combining with the wine. The yeasts require so much oxygen to breathe during this phase that the wine remains pale for many years of biological ageing. This effect is responsible for the pale yellow colour that is a classic characteristic of wine aged in this way.

Many other profound changes also take place in wine aged under a film of *flor*. The yeasts' metabolism is very dynamic during this phase, as in all cases of biological activity working on the inert. Because the ethanol in the wine is the main source of the carbon that the yeast breathes during the film-forming phase, the content of this component diminishes, despite the effect of alcoholic concentration caused by transpiration through the wood and corresponding water loss. This consumption causes the alcoholic strength to decrease in the course of the *crianza* process, making it necessary to replace the consumed alcohol to prevent its dropping drastically. When that does occur in a particular butt, it is described in *bodega* jargon as a *bota desmayada* – a butt that has 'fainted'.

The yeasts also consume glycerine, to the extent that only a minimal amount remains by the end of the *crianza* process. This has a notable effect on the flavour of the wine, for it accentuates its dryness, already considerable since it contains no sugars. Glycerine has a marked sweetening effect, and its elimination from wine as a result of biological ageing underlines its dry quality to an extraordinary degree. This explains why no other type of



wine in the world is as dry as wines aged biologically under *velo de flor*. This extreme dryness highlights the wine's saline quality and balances up the sensation of acidity in the mouth which is never pronounced in sherry because of the low acidity of the Palomino Fino grape and because of the biological ageing process itself, which consumes volatile acidity practically to the point of disappearance, leaving faint, elegant bitter notes that strengthen and prolong the flavour of the wine.

The *flor* yeasts metabolise many other components of the wine, transforming its bodily extract into ethereal aromas. This endows the wine with a lively lightness in the mouth while also structuring a powerful, penetrating aroma with a singular personality in which yeasty notes mingle with other, more complex ones derived from aldehydes, acetals and other compounds formed by the yeast and released by the wood, suggestive of almondy fruits. The *flor* yeasts' effect on the wine is not limited to metabolic activity but is also a product of those yeast cells which, exhausted by such a richly productive existence on the surface, die and fall away from the living layer and drop to the bottom of the butt. There, they dissolve slowly and their content – vitamins, amino acids, proteins, enzymes, and so on – is reintegrated into the wine. All this enriches it not only in sensory terms but also by increasing the health-enhancing properties of the wine when consumed in moderation.

Biological ageing under a film of *flor* both produces a unique and unparalleled wine and endows it



Movements of wine within the solera system, known as trasiegos, have to be carried out with the utmost care using special utensils and a painstaking, traditional approach.



with properties that are good for us. During the film-forming phase, the yeasts affect the wine in such a way that it is readily metabolised by the consumer, as if equipping it not only to cheer up the moderate drinker but to deliver a dose of health-giving components at the same time. Of all the wines in existence, sherry can lay claim to the greatest biological input and character on the grounds of its intense, prolonged relationship with living organisms during the process of biological ageing under velo de flor.

Ageing conditions in the *bodega*
 For biological ageing to run its course, climatic conditions have to be right. The film yeasts, already seriously challenged by the wine's alcoholic strength, need a very

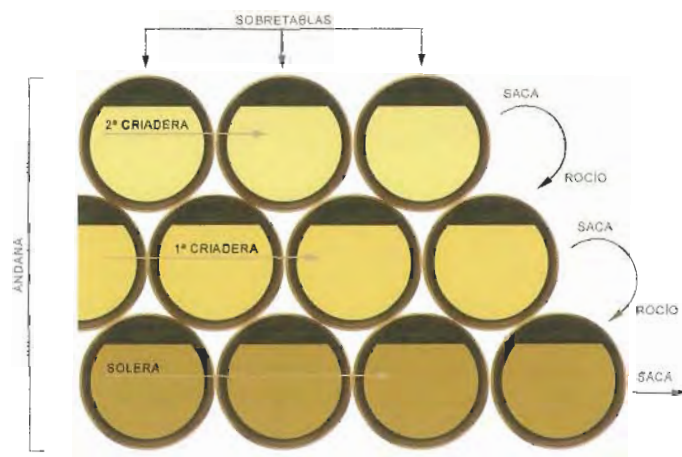
mild temperature – around 18 degrees Centigrade (64.4 degrees Fahrenheit) – to grow. It is also important for the atmosphere in the *bodega* to be moist, since this prevents water evaporating from the wine: if excessive evaporation occurs, and if the biological ageing process is not particularly intense, it can result in the alcoholic strength of the wine rising to levels not tolerated by the *velo de flor*. Sherry ageing *bodegas* therefore have to function as ecosystems which sustain the microclimate necessary for this biological phenomenon to occur. Their architecture, dealt with elsewhere in this book, serves as yet another weapon in the wine-maker's armoury to achieve the optimal environment for biological ageing all year round.

Spraying the *bodegas'* hard-packed earth floors with water during the summer or driest part of the year not only helps keep their atmosphere moist but also keeps the temperature down as the water evaporates. Their windows are hung with blinds and orientated in such a way as to prevent the Andalusian midday light getting in and heating up the atmosphere. The cool, shaded sanctuary effect that this creates lends a special tone and sense of occasion to man's dealings with sherry. The whole concept of biological ageing requires the wine-maker to approach it not in the usual role of the custodian of wine in storage but rather that of the micro-farmer responsible for the health and well-being of the *velo de flor* culture, since that is what protects and develops the wine

Biological ageing under a layer of flor not only produces superb wine but also endows it with qualities beneficial to our health.



constitutes the distinctive ageing stage for sherry. Each *solera* is made up of various 'scales' or tiers, each composed of a particular number of butts. The tier that contains the oldest wine is at floor level (the term 'solera' derives from the Spanish word for floor – *suelo*). The tiers layered on top of this, containing progressively younger wine the further away from the floor they are, are called *criaderas* (nurseries) and numbered according to their closeness in age to the *solera* tier (the closest being the 1st *criadera*; the next one, the 2nd *criadera*, and so on).



so that it attains its full aromatic potential.

Ageing methods

In the Jerez region, the ageing method consists of two phases: a first or *añada* (vintage) phase, the method used in wine-making in general and also known in this area as the 'static phase'; and a second one specific to this Denomination of Origin, known as the *criaderas* and

solera system, or 'dynamic phase'. During the *añada* phase, the wine acquires the characteristics necessary for its type to be defined and then moves on to the appropriate *soleras*. How long this phase lasts depends on the category and type of wine: it is shorter for wines destined for *soleras* in which biological ageing takes place.

The *solera*, or *criaderas y solera*, system

Each type and class of wine has its own *solera* system. The *solera* proper (in the sense of the oldest scale) supplies wine ready for drinking. Periodically, a specific proportion of the wine in each of the butts making up the *solera* system is extracted, creating a partial void in it. This operation is known as *saca* (taking out). The void created in the *solera* (floor-level) scale is topped up with wine taken from the next oldest scale, namely the *saca* from the 1st *criadera*. The space thus created in the 1st *criadera* is topped up with *saca* wine from the 2nd *criadera*, and so on up to the youngest scale, which is then topped up with wine obtained from the *añada* system. The operation of topping up, or refreshing, the space created in a scale is known as *rocío* (sprinkling), and the whole process of effecting the *sacas* and *rocíos* in a *solera* is called *correr escalas* (running the scales). Many vintages are involved in a *solera* system, so that its contents are a complex mixture.

Diagram: The way that the *criadera* and *solera* system works means that the oldest wines benefit both from being refreshed with young wines and from characteristics acquired over years of *crianza*.

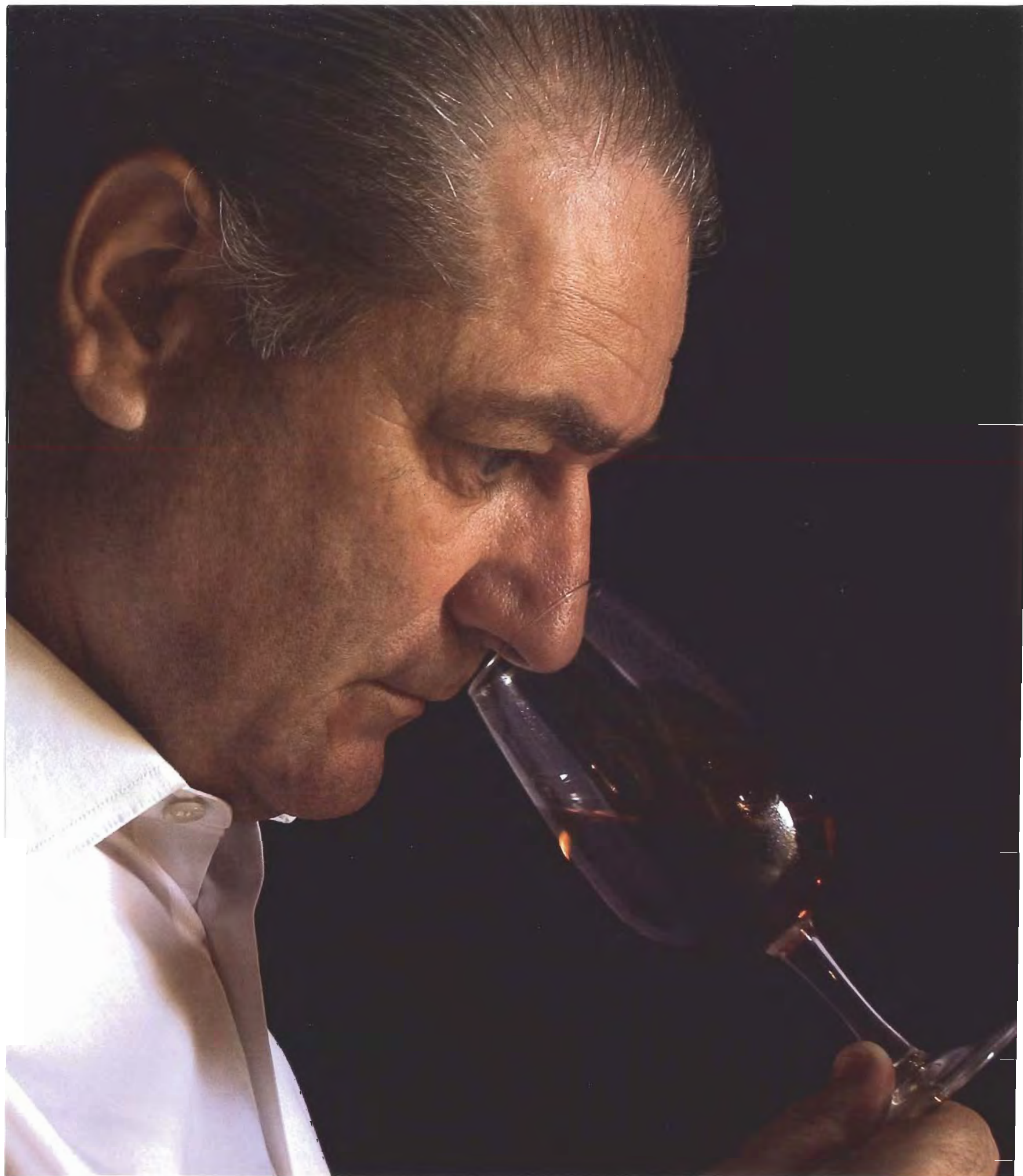


These movements of wine within the *solera* are known as *trasegos*, and the *bodega* staff who specialise in the tasks involved are called *trasegadores*. They have to work with extreme care using special equipment and painstaking, traditional methods. Their skill resides in managing to

homogenise all the wine contained in a butt after the *rocto* without disturbing the film of *flor* covering the surface of the biologically ageing wine or churning up the *cabezuelas*, or fine lees that accumulate gradually at the bottom of the butt over the years. How often these operations

take place and what proportion of wine is extracted are rigidly dictated by the wine's characteristics, since these factors influence the duration of the ageing process. The average ageing period in the *solera* system assigned to a wine is calculated by dividing the total volume of wine

Amontillado wine is a singular type of sherry that starts to develop as a fino, under a layer of flor, and is then treated like an oloroso.



contained in the system by the volume of wine extracted from the *solera* annually. The total *crianza* time is calculated by adding the time spent in the *añadas* to the average time spent in the *solera* system.

The *solera* system imprints a very special dynamic on the ageing process, and influences the nature of the wine in a singular way. It maintains the characteristics of the wine in the *solera* while eliminating the variations that occur between one vintage and another.

Furthermore, the *solera* system provides significant benefits for biological ageing under *velo de flor* since, during this type of ageing, wines are subjected to continuous, intense metabolic action from the film-forming yeast. Maintaining this culture requires essential micro-nutrients, and these are provided by adding small quantities of wines from young *añadas*; in the course of successive 'refreshments', small quantities of young wines reach the oldest scales. This tops up the contents with the compounds necessary to support vigorous biological ageing under a film of *flor* yeast which might decline but for this nutritional input.

The continuous transferring of wines in the *solera* system also has the effect of dissolving a certain amount of oxygen in it, thereby stimulating regeneration and growth in the film of *flor* which will have deteriorated slightly in the process. This input of oxygen is rapidly consumed by the yeasts' breathing, however, and the wine remains protected beneath the inert atmosphere that the *velo de flor*

provides for it. In *solera* wines aged non-biologically, or simply aged, the oxygen introduced during decanting operations accelerates the oxidative processes of wine maturation.

By its very nature, sherry requires long periods of ageing. To produce the types of wine for which the Jerez region is known today, the quantity of wines in storage, or being aged in oak butts, is over three times the quantity of wine issued by a *bodega* in a year.

Ageing and sherry types

A film of *flor* develops spontaneously once the sugars in the must have completely fermented. Having ascertained the characteristics of a young wine on the evidence of its sensory attributes, the wine-maker decides which type of ageing – biological or physico-chemical – it is suitable for. Biological ageing under a film of *flor* yeast will give wines of the manzanilla or fino type, depending on where in the Marco de Jerez area the ageing process takes place. Wine aged without the biological activity provided by film-forming yeasts will develop physico-chemically and give wines of the oloroso type. The oenologist decides which of these ageing methods to apply on the basis of the new wine's alcoholic strength: it needs to be 15.5 percent by volume, just below the maximum at which the yeasts can form a film, for manzanillas and finos; and over 17 percent by volume, which is above the yeasts' tolerance level and will therefore prevent the *flor* from forming, for olorosos. An understanding of each of these ageing processes explains the marked differences between the

various wine types: manzanillas and finos are protected by the *flor*, and their body, or extract, is consumed by it, so that they are light, ethereal, pale wines; olorosos, on the other hand, are fuller-bodied wines, maderised and more richly coloured as a result of the oxidative process and the concentration caused by water evaporation.

The sherry type known as *amontillado* has a foot in either camp. This wine starts off developing like a fino and is then given a slight secondary fortification up to 17 percent alcohol by volume, after which it is aged like an oloroso, giving this singular type as the end result. Because of their sugar content, sweet wines – moscatels and Pedro Ximénez – cannot be aged biologically and they mature physico-chemically. Each type has distinctive nuances, and blends between them make the range of sherry wines still wider.



Título: Diversidad

TYPES OF SHERRY WINE

JUAN GÓMEZ BENÍTEZ

183

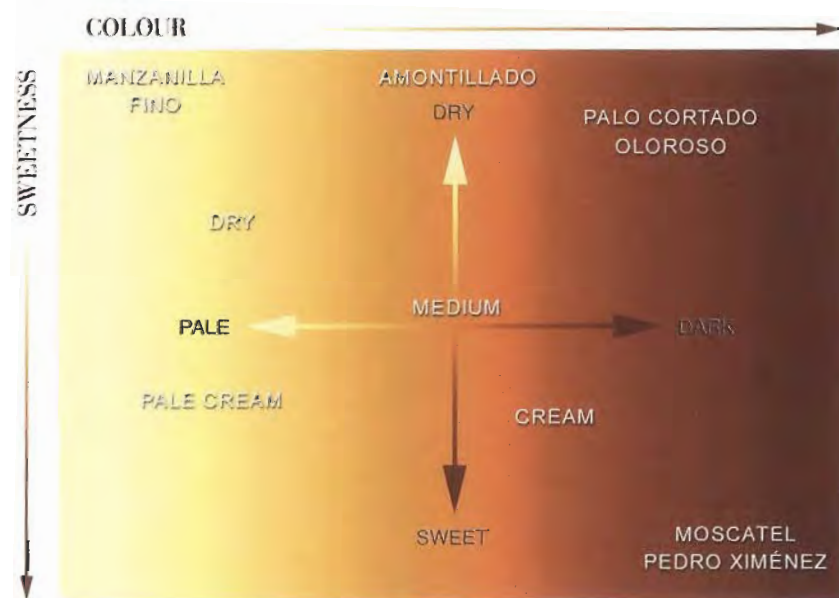
V

ariations in the ways that wines are produced, aged and matured in the Jerez region – examined in earlier chapters of this book – account for the fact that it produces wines of very diverse characteristics.

The location of the *pago* where the grapes are grown and vineyard cultivation practices affect a wine's body and structure and, to a certain extent, determine the type of ageing or *crianza* – the phase during which wine acquires its finest features – to which it will be subjected. Similarly, certain harvesting practices, such as over-ripening or sunning, increase the grapes' sugar content, making them suitable for natural sweet wines. The type of *crianza* selected – biological (under a film of *flor*), oxidative (without this film of yeast) or a combination of the two (with a phase of the one being succeeded by a phase of the other) – marks the nature and character of a wine in a definitive

way. Finally, *coupage*, known in the sherry region as *cabeceo*, enables wine-makers to create an immense range of intermediate styles by blending different base wines.

The wide and varied range of Jerez wines could be seen as a faithful reflection of the long history and friendly, welcoming character of the Andalusian people, who pride themselves on pleasing, and adapting to, their customers and visitors. Hence the frequent claim that there is a sherry to suit every taste and every occasion. This fact unquestionably gives Jerez wines an important competitive advantage over other denominations of origin whose products are based on one single, or just a few, wine types. However, this enormous diversity also means that uninitiated consumers are confronted with a wide range of wine types with very different characteristics – not only the basic types but 'in-between' ones, too – making it difficult for them to choose and for producers to provide adequate customer guidance.



Sherry wines come in a wide range of types, from very pale to very dark and from very dry to very sweet.







THE RANGE OF SHERRY WINES

Sherry wines have sensory characteristics whose variations and nuances are rarely matched elsewhere in the wine world. They range in colour from the palest, clearest greenish yellow of the biologically aged wines to the darker, more opaque mahogany of the natural sweet wines, with various shades of gold, amber and chestnut brown in between. Aromatically, they range from the ethereal, penetrating bouquet of the biologically matured wines to the powerful dried and glacé fruit aromas of the natural sweet wines; then there is the nutty, balsamic, dark roast aroma of the wines aged physico-chemically, without *flor*. On the palate, they range from bone dry (the biologically matured wines) to extremely sweet (the natural sweet wines).

Often, character differences between the various sherry types are not cut-and-dried: *amontillados*, *olorosos* and *palos cortados*, for example, represent a gradual variation of specific features so that one type leads on from another without a clear division. In fact, sherries can be depicted schematically by a two-axis diagram, as on page 184, on the basis of degree of sweetness and colour. At one end of the scale are the very pale, dry types, such as *fino* and *manzanilla*; and at the other, the very dark, sweet types, such as *Pedro Ximénez* and *Moscatel*, with the intermediate medium, cream and pale cream types in between. Within the area representing dry wines one finds the palest of these,

the finos and manzanillas, and the darkest, such as the olorosos and palos cortados, with the intermediate amontillados in between. Each of these wine types would occupy a different-sized area of the diagram because of variability as to colour and sugar content, and some areas might even overlap.

REGULATION

This section looks at some of the basic characteristics of the different types of sherry wine covered by current regulations, with a view to explaining their nature and the way that they are produced. European, Spanish and Andalusian regulations on this issue are extensive and complex, and it is beyond the remit of this book to go into them in detail. What follows is a summary of the most relevant provisions.

Among them those relating to the 1999 EC Council definitions of *Vino Generoso* and *Vino Generoso de Licor* for dry and non-dry types of sherry respectively.

Under European Community (EC) legislation, all sweet, liqueur and fortified wines are grouped into the 'liqueur wine' category. Liqueur wines produced in, and regulated by, denominations of origin are called *Vinos de Licor de Calidad Producidos en Regiones Determinadas* (VLCPRD) or Quality Liqueur Wines Produced in Specific Regions. This denomination encompasses the 'Vino Generoso', 'Vino Generoso de Licor' and 'Vino Dulce Natural' categories into which the wines of Jerez fall. The VLCPRD category also embraces some of the legendary wines of the international wine world – Oporto

wines from Portugal, Sauternes and Muscats from France, Tokaj from Hungary, and so on. Other Spanish wines in this category include those of Andalusian denominations of origin Málaga and Montilla-Moriles.

Briefly described, *vinos de licor* (liqueur wines) are characterised by an alcoholic strength of between 15 and 22 percent by volume and by the possible presence of residual sugars. Their alcoholic strength derives in part from fortification of the base wine, and the residual sugars from the use of incompletely fermented wines or from other grape-derived products, such as concentrated grape must.

Vinos generosos (dry liqueur wines) are characterised by the presence of a film of yeast cells on their surface (*velo de flor*) for a variable period of time during the wine-making and ageing processes. All dry wines produced in the Jerez region, including finos, amontillados, olorosos and palos cortados, as well as manzanillas, fall within this category. *Vinos dulces naturales* (natural sweet wines) are obtained by enriching their original sugar content by over-ripening or sunning the grapes used, and subsequently partially fermenting and fortifying the wines. Pedro Ximénez and Moscatel wines fall within this category. Lastly, *vinos generosos de licor* (non-dry liqueur wines) are made from *generoso* (dry) wine to which natural sweet wine or concentrated grape must has been added. Dry, medium, cream and pale cream sherries fall within this category.



The current regulations for the Denomination of Origin Jerez-Xérès-Sherry and Manzanilla-Sanlúcar de Barrameda date from 1977, though they have been modified several times since then. They are presently being revised and updated to comply with Spanish Law 24/2003 of the Vines and Wines decree, making it more than likely that detailed regulations will soon be issued which might modify some of the characteristics of the wines described here. The brief descriptions of sherry wines featured in the current regulations are as follows:

Vino Generoso: A dry quality liqueur wine produced in a specified region and aged during all or part of its *crianza* period under *flor*, a biological process involving the spontaneous development of a film of typical yeasts over the surface of the wine after total alcoholic fermentation of the must, which endows the product with specific analytical and organoleptic characteristics, with a minimum acquired alcoholic strength by volume¹ of at least 15 per cent, a maximum acquired alcoholic strength of no more than 22 per cent and a sugar content of less than five grams per litre.

Fino: A pale straw-coloured wine with yellow, sometimes greenish, hues and a characteristic pungent, delicate almondy aroma. It is light on the palate and completely dry, its special characteristics resulting from its specific *crianza* process which takes place exclusively under a film of *flor*, with an acquired alcoholic strength of between 15 and 18 per cent by volume.

Manzanilla: A straw to gold coloured wine, with a distinctive pungent aroma; light on the palate, dry and with little acidity, fortified to an acquired alcoholic strength of between 15 and 19 per cent. This wine's special characteristics derive from its singular ageing process under a film of *flor* in the microclimate of the *bodegas* located in Sanlúcar de Barrameda. Depending on the ageing and maturation the wine undergoes, it becomes one of the specialities traditionally known as manzanilla fina, manzanilla pasada and manzanilla olorosa.

Oloroso: A dry wine, amber to mahogany in colour, with a very distinct walnut bouquet, full bodied, with an acquired alcoholic strength of 17 to 22 per cent. After an initial phase under *flor*, it goes on to a phase of oxidative ageing.

Amontillado: An amber coloured wine with delicately pungent hazelnut aromas, smooth and full in the mouth, and with an acquired alcoholic strength of 16 to 22 per cent. Its particular ageing process involves an initial phase under *flor*, equivalent in time to that of a fino, followed by a period of physico-chemical (oxidative) ageing.

Palo cortado: A wine whose organoleptic characteristics are a combination of the previous two, with the aroma of an amontillado and palate and colour similar to those of an oloroso, and with an acquired alcoholic strength between 17 and 22 per cent. It is aged in two phases: the first biological, under a film of *flor*, and the second oxidative.

Vino Generoso de Licor: A wine obtained from a *vino generoso* or from a wine suitable to become

1. **Acquired alcoholic strength (by volume):** the number of volumes of pure alcohol contained in 100 volumes of the product considered, determined at a temperature of 20 degrees Centigrade, i.e. the alcoholic strength of a wine. **Potential alcoholic strength (by volume):** the number of volumes of pure alcohol that can be achieved by the total fermentation of the sugar contained in 100 volumes of the product considered, determined at a temperature of 20 degrees Centigrade, i.e. the increase in alcoholic strength that could be obtained if the sugars present in a wine were fermented.

2. **Total alcoholic strength (by volume):** the sum of the acquired and potential alcoholic strength.



vino generoso, with a minimum total alcoholic strength by volume² of 17.5 per cent, a maximum acquired alcoholic strength by volume of 22 per cent and a sugar content no lower than five grams per litre. The *vinos generosos de licor* covered by the Jerez-Xérès-Sherry Denomination of Origin, depending on sugar content (between 5 and 140 grams per litre), colour and other characteristics, are:

Dry: A pale yellow or golden coloured wine with an acquired alcoholic strength no lower than 15 per cent by volume and with a sugar content no higher than 45 grams per litre. To meet the requirements of specific markets, the use of the traditional terms "Pale" or "Pale Dry" may be authorised.

Medium: A wine whose colour can range from amber to mahogany, with an acquired alcoholic strength no lower than 15 per cent and with sugar content below 115 grams per litre. To meet the requirements of specific markets, the use of the traditional terms "Golden", "Abocado", "Amoroso", "Brown", "Milk" and/or "Rich" may be authorised.

Pale Cream: A pale yellow coloured wine, with a pungent, delicate aroma, an acquired alcoholic strength content of at least 15.5 per cent and a sugar content no higher than 115 grams per litre.

Cream: A full-bodied wine, amber to dark mahogany in colour, with a refined pungent bouquet, an acquired alcoholic strength of at least 15.5 per cent and sugar content between 115 and 140 grams per litre.

Vinos Dulces Naturales: Natural sweet wines are made from over-ripened or sunned grapes, whose fermentation is halted before completion by the addition of alcohol. When the grapes used are Pedro Ximénez or Moscatel, the resulting wines are known by the varietal name, i.e. Pedro Ximénez and Moscatel, respectively.

HOW SHERRY WINES ARE MADE: A BRIEF ACCOUNT

Having taken a look at the regulation and some of the basic characteristics of sherry wines, this section deals briefly with the processes involved in producing sherry, as schematically depicted in the diagram on page 192. These are separated into those involved in making *vinos generosos* (fino, manzanilla, amontillado, oloroso and palo cortado), which make up the dry wine column on the left of the diagram; natural sweet wines (Pedro Ximénez and Moscatel), represented in the sweet wine column on the right; and *vinos generosos de licor* (medium, cream and pale cream) occupying the centre of the diagram. These last are linked with the wines in the left and right hand columns to represent the fact that they are obtained from blends of these.

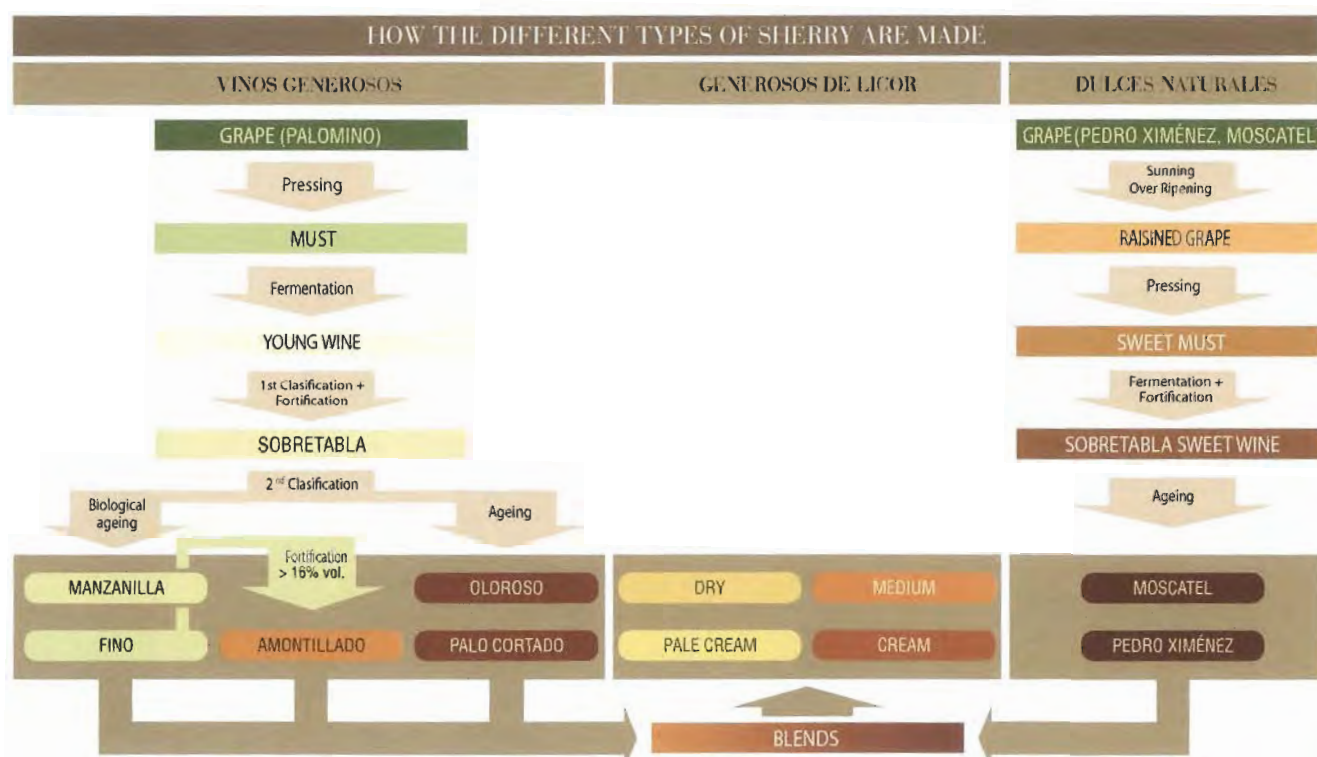
Dry (*generoso*) wines are always obtained from Palomino grapes. In the sherry region, the young wine produced after they have been pressed and fermented continues to be referred to as *mosto* (must). After preliminary selection, this is racked off the lees and fortified to an alcoholic strength of 15-15,5 or 17-18 per cent by volume, producing a wine known as



sobretabla that is left to age in a static or añada (vintage) process for a period that varies from one type of wine to another. During this time, the wine gradually develops and acquires the distinguishing features that will earmark it as suitable for a specific sherry type. At the end of this period, therefore, there is another selection process which may result in changes to the wine's originally assigned category: a wine initially designated for biological ageing may at this stage be declared more suitable for physico-chemical (oxidative) *crianza*. The subtle differences that emerge during the sobretabla period therefore influence the fine-tuning of the further development of different types of wine.

Finos and manzanillas are characterised by their biological development under *velo de flor* during the time they remain in the bodega. Oloroso and palo cortado types undergo oxidative development during the greater part of their ageing process, though this is usually preceded by a phase of biological ageing of variable duration. Amontillados share some of the characteristics of both these types, since they enjoy the benefits of biological ageing for a period similar to that undergone by finos, in the process acquiring marked organoleptic characteristics that survive a subsequent period of physico-chemical (oxidative) ageing. This begins with fortification by the addition of alcohol, raising its

alcoholic strength to over 16 per cent by volume and thereby inhibiting the development of the *flor* yeasts. In amontillado wines, oxidative ageing





sometimes occurs spontaneously when the period of biological ageing has been so prolonged that all the nutrients in the wine that the yeast cells need to survive are exhausted. In such cases, traditional ageing sets in without the need for fortification, and the wines thus obtained are called *amontillados finos*.

Sweet wines are made from grapes that have been over-ripened and sunned, which increases their sugar content considerably. These 'raisined' grapes are processed in special presses and produce an extremely sweet must which, once fermentation has begun, is fortified and aged physico-chemically. The varieties of grape most widely used for wines of this type are Pedro Ximénez and Moscatel, in which case the wines are known by these varietal names.

The blended wine category of *vinos generosos de licor* is made up of medium, cream and pale cream wines. Medium sherries are made by blending *vinos generosos* (mostly *amontillados*) and natural sweet wines

up to a maximum concentration of sugars of 115 grams per litre. Creams are a blend of dry wines (mostly *olorosos*) and natural sweet wines with sugar content between 115 and 140 grams per litre. Pale creams are obtained by blending dry wines (*finos* or *manzanillas*) and natural sweet wines with no more than 115 grams of sugar per litre. In cases when it is preferred that the blended sherry should not acquire the dark colour or marked aroma contributed by sweet wine, this can be totally or partially substituted by concentrated must.

SENSORY CHARACTERISTICS OF SHERRY WINES

Sherry wines provide one of the clearest examples in world-wide oenology of tertiary aromas, the term applied to the aromas engendered during the ageing or maturation phases. This is the reason for their very idiosyncratic and characteristic aroma, flavour and colour, which are significantly different from those of table wines. Table wines exhibit primary aromas (derived

from the grape) and secondary ones (derived from fermentation) far more obviously. These aromas are easier to appreciate and describe because they are closer to our everyday experience: floral or fruity aromas are a good example. In combination with the fact that they are much more widely consumed, this accounts for the emergence of a universally recognised and deployed tasting vocabulary applicable to table wines. Because the organoleptic properties of sherry are so singular, this vocabulary has not been directly applicable to them, nor has a sherry-specific vocabulary been developed that is used outside the sherry region. This explains why most descriptions of sherry wines are rather brief and lacking in detail.

This section describes the sensory characteristics of sherry wines using terms similar to those applied to table wines. Given the impossibility of describing the nose or palate of a wine at all accurately, the descriptions that follow are inevitably subjective and may differ from those of other wine tasters.



MANZANILLA



FINO



AMONTILLADO



DRY



PALE CREAM



MEDIUM





PALO CORTADO



OLOROSO



CREAM



MOSCATEL



PEDRO XIMÉNEZ





Dry wines (Vinos Generosos)

Fino: Greenish or golden yellow in colour, pale, bright and translucent, with an ethereal bouquet suggestive of nuts (particularly almonds), fresh bread dough and wild herbs. Dry and delicate on the palate, with mild acidity creating a pleasant sensation of freshness, and a long, bitter aftertaste.

Manzanilla: Similar to fino in

character, this comes in different styles, such as manzanilla fina, pasada and olorosa. Manzanilla fina is more lightly and delicately structured, paler in colour and has a bouquet in which certain primary aromas, such as mature fruits and wild flowers, are discernible. Manzanilla pasada is fuller bodied, tends to be more golden in colour, and has a pronounced ethereal aroma with a hint of the sea about it, a slightly salty tang on the palate, and a characteristic distinctly

bitter aftertaste. Manzanilla olorosa's characteristics are midway between those of manzanilla fina and manzanilla pasada.

Oloroso: Amber or mahogany in colour, this has a strong nutty (hazelnut, walnut) bouquet with toasted, vegetable, balsamic notes evocative of noble wood, Virginia tobacco and dry fallen leaves, and spicy, animal notes suggestive of truffles and leather. It is full of flavour and very structured in the mouth, the noble wood notes creating an elegant dry finish.

Amontillado: A unique wine that combines the characteristics of a fino or manzanilla with those of an oloroso. Amontillados range in colour from topaz to amber, and have subtle, delicate aromas whose ethereal essence is softened by notes of nuts (roasted almonds) and plants (aromatic herbs and dark tobacco). It starts pleasantly in the mouth, with nicely balanced acidity, developing into something more complex and evocative, with marked retronasal contributions adding sophistication to the palate.

Palo cortado: A highly complex wine that combines the aromatic delicacy of an amontillado with the vinous palate of an oloroso. Chestnut to mahogany in colour, its wide-ranging bouquet harmonises notes characteristic of an amontillado and an oloroso with others specific to this wine, including citrus notes reminiscent of bitter orange and lactic ones suggestive of fermented butter. Its deep, ample palate gives smooth, delicate expression to all its aromatic notes, with a delicious, very long finish.

Natural sweet wines

Pedro Ximénez: This dark, ebony coloured wine, with its pronounced tearing, looks sticky and dense. It has very rich, sensual bouquet in which sweet dried fruit notes (raisins, figs and dates) predominate, accompanied by aromas of honey, grape syrup, jam and candied fruits, with toasted (coffee, dark chocolate and cocoa) and liquorice notes accentuating as it gets older. Velvety and sticky on the palate, with enough acidity to mitigate its alcoholic glow, it has a very long finish that encourages the drinker to take another sip.

Moscatel: Chestnut or mahogany in colour with pronounced tearing, and a bouquet in which characteristic varietal notes stand out, accompanied by floral (jasmine, orange blossom and honeysuckle) and citrus (lemon and grapefruit) aromas and sweet notes similar to those of Pedro Ximénez. It has a restrainedly sweet palate, with predominant varietal and floral notes, and a dryish, bitter finish.

Blended wines (*Vinos Generosos de Licor*)

Medium: Amber to dark chestnut in colour, with a liquorous bouquet incorporating amontillado-like notes and slightly sweet dessert ones (quince jelly, baked apple). It starts slightly dry in the mouth, gradually becoming sweeter and finishing with a smooth, vaporous aftertaste.

Cream: Chestnut to dark mahogany in colour, with an oloroso-based bouquet that releases sweet notes suggestive of dried fruits and toasted ones of nougat and caramel. It starts richly – though not overly – sweet in the mouth, developing deliciously and elegantly towards a long, mild finish.

Pale cream: Though similar in colour and aroma to a fino or manzanilla, this type is denser in appearance. Its delicately sweet taste makes it pleasant to the palate and reduces the bitter aftertaste that is a feature of those wines.

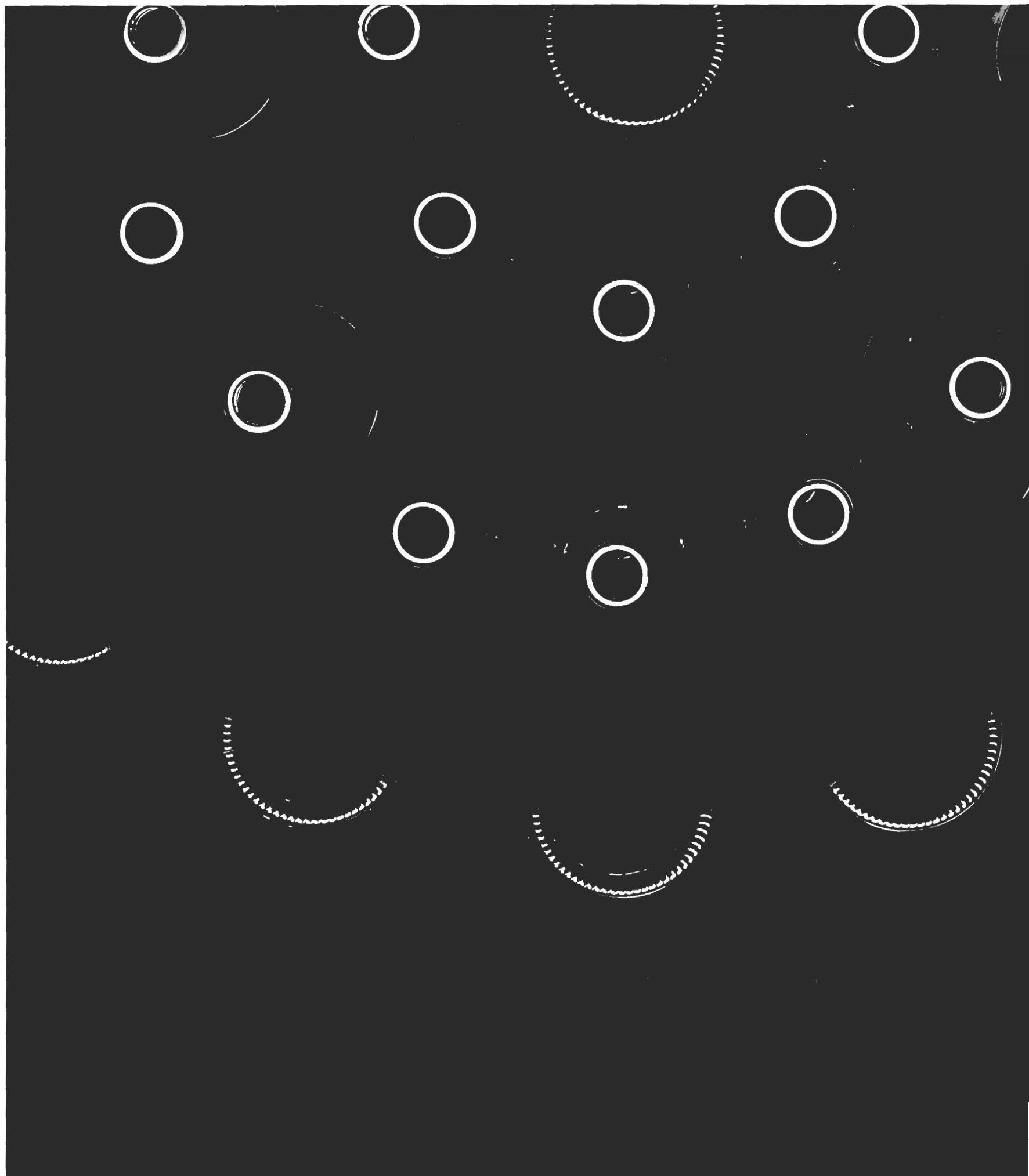
ANALYTICAL CHARACTERISTICS

The only parameters relating to the composition of sherry wines specified in the DO Regulations apply to alcoholic strength and sugar content. Other basic parameters, such as total acidity and volatile acidity, are governed only by general regulations; this means that they can vary enormously, depending on such factors as the duration of the ageing or maturation process and the composition of the blend used in their elaboration.

The data regarding analytical characteristics of the different types of sherry wine presented in the table below are therefore only strictly applicable as regards alcoholic strength and sugar content; all other parameters are given merely as guidelines. These parameters can vary considerably in Wines of Certified Age (VOS and VORS) as a result of their prolonged ageing, so they are not applicable to wines in this category.

Wine	Alcoholic Strength (% vol.)	Sugars (g/L)	Colour (1) (Abs 420 nm)	pH (1)	Total Acidity (1) (g/L tartaric acid)	Volatile acidity (1) (g/L Acetic acid)	Glycerine (1) (g/L)
Fino	15-18	<5	<0,250	3,0-3,5	3,0-5,0	<0,4	<2
Manzanilla	15-19	<5	<0,250	3,0-3,5	3,0-5,0	<0,4	<2
Amontillado	16-22	<5	0,250-1,000	3,0-3,5	4,0-6,0	<0,8	<5
Oloroso	17-22	<5	>0,800	3,0-3,5	4,0-6,0	<0,8	<10
Palo cortado	17-22	<5	>0,800	3,0-3,5	4,0-6,0	<0,8	<10
Dry	15-22	5-45	<0,250	3,1-3,6	3,0-5,0	<0,4	<2
Pale Cream	15,5-22	45-115	<0,250	3,1-3,6	3,0-5,0	<0,4	<2
Medium	15-22	45-115	>0,800	3,1-3,6	3,0-5,0	<0,8	<10
Cream	15,5-22	115-140	>0,800	3,2-3,7	3,0-5,0	<0,8	<10
Pedro Ximénez	15-22	180-500 ⁽¹⁾	—	4,0-5,0	3,0-5,0	<0,8	—
Moscatel	15-22	180-500 ⁽¹⁾	—	4,0-5,0	3,0-5,0	<0,8	—

(1) Usual values



Título: Cañero

MANZANILLA
SPECIAL ASPECTS
OF THE D.O. MANZANILLA

JAVIER HIDALGO DE ARGÜESO

J

ust as in spring, the streets of old Seville are flooded with the scent of azahar, the blossom of the bitter orange trees that line the city's avenues and plazas. Similarly, in late spring and early summer the streets and squares of

Sanlúcar de Barrameda are redolent of the distinctive smell of another kind of *flor* that comes wafting out of the windows of the town's centuries-old bodegas. At that time of year, when milder temperatures prevail, the film of yeast cells and microorganisms, known as *flor*, that covers the surface of the wine maturing inside the butts reaches the peak of its vegetative phase. This is the source of the explosion of scent summed up by locals in the phrase "Sanlúcar huele a manzanilla" (Sanlúcar smells of manzanilla).

This is perhaps the only wine in the world with a denomination of origin of its own, associated with a specific, well-defined geographical region, whose name is not the same as that of the locality where it is produced. It is equally unique in that it does not have its own production area, sharing vineyards and Consejo Regulador with its sister Denomination of Origin, Jerez. In the case of manzanilla, the link between wine and location is forged by specific conditions governing the ageing process subsequent to vinification.

Before going any further, a look at how manzanilla is defined in the Denomination of Origin's Regulations might be useful: *A 'generoso' wine, pale straw or light gold in colour, with*

a distinctively sharp bouquet, light on the palate, dry and with low acidity, fortified to an alcoholic strength of between 15 and 19 per cent by volume. The special characteristics of this wine derive from a particular ageing process, under a film of flor yeast, and the microclimate of the bodegas located in the town of Sanlúcar de Barrameda.

So manzanilla comes exclusively from Sanlúcar, where special microclimatic conditions allow it to be aged under the extraordinary layer of living organisms known in Spanish as *flor*. It is probably the most exclusive wine in the world, deriving its character more from the place where it is aged than from the region where it is produced.

It is generally acknowledged that wines were already being produced in Sanlúcar, as in the rest of the Marco de Jerez, several centuries before the birth of Christ, and that all the ancient Mediterranean cultures traded in them. The exact date when the British started shipping sherry and manzanilla from this region, however, is not recorded, though it is known that by the end of the fifteenth century there was a sizeable colony of British merchants in Sanlúcar, engaged in shipping wine from its port to Great Britain.

As the seat of the Duchy of Medina Sidonia – the dukes having established their residence there – and later as capital of the province, Sanlúcar de Barrameda had always held a certain commercial sway over the neighbouring towns and villages. This was due to the fact of having a port which, from the time of the Discovery of America in the late

Manzanilla is matured exclusively in Sanlúcar de Barrameda, which is why it has its own Denomination of Origin.





fifteenth century onwards, played an important role in trade with the colonies. Columbus himself set sail from Sanlúcar on his third colonising trip to the Americas, as did Magellan at the start of the epic voyage that culminated, after his death, in the completion by his second in command, Juan Sebastián Elcano, of the first circumnavigation of the globe. The continuous presence of foreign merchants in Sanlúcar is

still eloquently attested to by the existence of the *iglesia de San Jorge* (St George's church), an Anglican place of worship for many years.

The first written reference to manzanilla appears in 1807, on the occasion of the publication of a book entitled *Memoria sobre el cultivo de la vid en Sanlúcar de Barrameda y Xerez de la Frontera* (Madrid, Imprenta Villalpando), whose author, Professor

of Agriculture and Rural Economy Esteban Boutelou, writes: "... from white grapes such as the *Listán*, trodden in good condition and gently crushed, white wines without the slightest colour can be obtained, reliably distinguished by their aroma of camomile...". He goes on to declare that "... *Montañeses* [immigrants from the north] know the art of preparing and making manzanilla wines, so that they acquire the fragrance that the



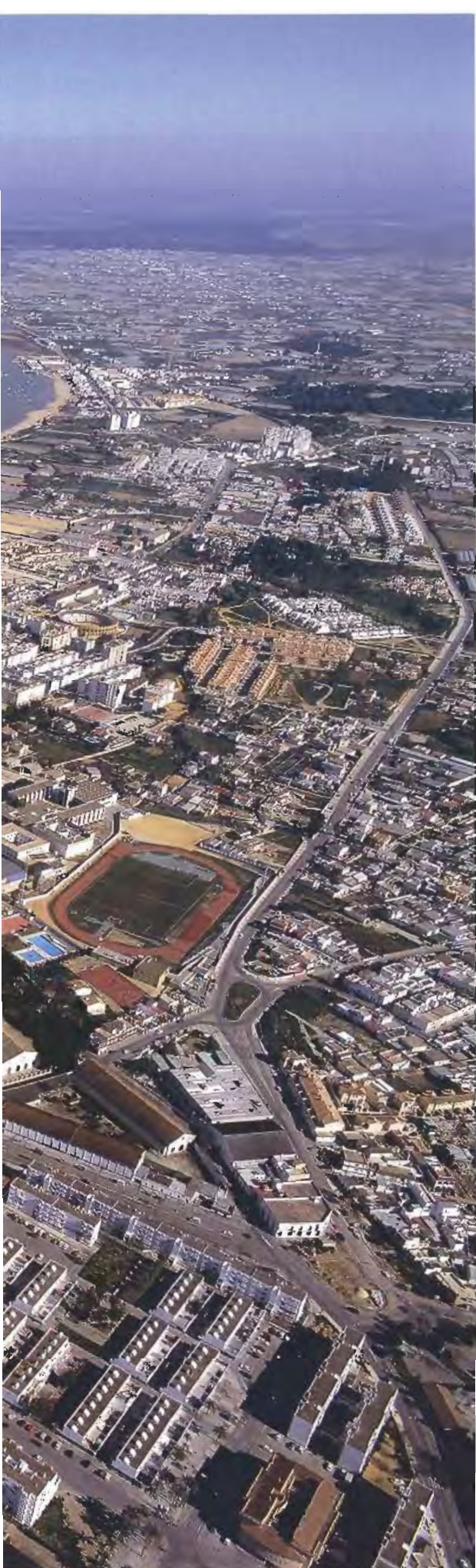
people of Cádiz like so much... and that *"... Manzanilla wines must be very light, white, without the slightest colour, transparent, crystalline, highly aromatic, smooth, soft on the palate; they should not be too strong but should warm the stomach..."*

Slightly later in the nineteenth century, British traveller and writer Richard Ford (1796-1858) – who travelled around Spain on horseback

between 1830 and 1833 and is best known for his works about this country – again mentions manzanilla in both his works, *The Handbook for Travellers in Spain* (1845) and *Gatherings from Spain* (1846):

"... Manzanilla wine is excellent and cheap; its name alludes to its slight, peculiar taste of camomile, which is the real etymology of the name ... The wine has a delicate pale straw colour and is





extremely wholesome; it strengthens the stomach without heating or inebriating like sherry... Andalusians are Manzanilla enthusiasts. Its low alcoholic content enables them to drink more of it than of the stronger sherries, while its dry flavour acts as a tonic during periods of relaxing heat... Drink it, ye dyspeptics!...

... Hence the natives of Xerez infinitely prefer a light wine called Manzanilla, which is made near San Lucar, and is at once much weaker and cheaper than sherry ..."

From these references one can safely deduce that the name of the wine derives from the analogy between its flavour and that of camomile, a plant locally known as manzanilla, used for making a soothing aromatic tea.

However, there is a lack of precise information regarding the transition from those early wines made a thousand and more years ago using various grape varieties and the wine that we know today as manzanilla. Occasional light is thrown on this mysterious process of evolution down the ages by isolated facts, such as the introduction by the Moors of the technique of fortifying wines with alcohol to settle them and guarantee their stability during transport, and the spontaneous emergence of the criadera and solera system, used for maturing manzanilla, from the custom of mixing the wines of one vintage with those that had remained unsold from the previous year.

It used to be said of late nineteenth century and early twentieth century Seville that in the early morning hours the whole town smelled of

manzanilla: this was the time of day when wine from Sanlúcar was delivered to the local taverns and grocer's shops. Wine loaded onto boats in Sanlúcar was transported along the River Guadalquivir on the evening tide. On arrival at the port of Seville, the large barrels known as bocoyes would be loaded onto carts drawn by horses or mules for distribution around the city.

But the saying about Seville also reflects one of manzanilla's most salient characteristics: its penetrating aroma, which makes its presence felt in any environment within seconds of having been poured. Along with its pronounced flowery aroma, another trait that differentiates manzanilla from any other wine is its fragrance: its bouquet is at once fresh and natural in its evocations. Another noteworthy distinguishing feature among those mentioned in the bibliographical references is its low acidity: indeed, manzanilla is perhaps the least acidic wine on the market. This is due to the insulation provided by the *velo de flor*, which not only forms a natural barrier between wine and air in a natural way, but also absorbs and consumes any vestiges of oxygen dissolved in the liquid.

Three major features influence Sanlúcar's special climate, in addition to the very way the town is structured on two 'terraces' at different heights – one at sea level (the Barrio Bajo, or low quarter) and the other a few metres higher (the Barrio Alto, or high quarter). The three geographical features are the River Guadalquivir, whose wide mouth marks the natural boundary to the north of Sanlúcar; the Atlantic Ocean into which the

Manzanilla is indissolubly linked with Sanlúcar de Barrameda, the town located at the mouth of the River Guadalquivir, near the Doñana Reserve.

river flows, bordering the town to the west, and the Marisma, the extensive stretch of wetland on the former delta that is completely flat. These three can be credited with generating milder temperatures and higher relative humidity than those prevailing in the rest of the sherry producing region. This humidity is carried by the breeze off the sea, the westerly wind that is detained when it strikes the barrier of the Barrio Alto, depositing its moist air over the built-up area of Sanlúcar.

The combination of all these circumstances fosters the growth of the *flor* yeast that is peculiar to Sanlúcar, an association of bacteria and fungi that lives on the surface of the wine in the casks where it is stored, catalyzing the processes involved in ageing. Ordinarily in Sanlúcar, the film of *flor* grows more profusely than in the rest of the Jerez-Xérès-Sherry ageing area and lasts throughout the year. It seems that the moister, milder climate encourages the microorganisms to develop more intensely and with

greater stability throughout the annual cycle, including periods of extreme temperatures. This association of microorganisms feeds on nutrients present in the wine and metabolically produces organic compounds that endow it with its special organoleptic and chemical characteristics. *Flor* spores occur naturally in the environment, so there is no need to implant them, stored wines being contaminated by them naturally and spontaneously.

It is a recognised biological principle that a specific geographical location determines a particular microclimate, giving rise to a high degree of speciation among the living organisms found there to the extent of inducing subspecies, breeds or varieties exclusive to that place. This seems to be the case in Sanlúcar, with its special climate and its unique *flor*. As well as transforming the last residues of sugar from the fruit into alcohol, *flor* encourages the transition of acetic acid into acetaldehyde, reducing the wine's volatile acidity

and sugar content. This contributes to manzanilla's markedly dry character and low or nonexistent level of acidity.

Sanlúcar's *flor* makes it necessary for the wine in its solera systems to be transferred more frequently, so they need to have more scales or clases, as *criaderas* (nurseries) are known in Sanlúcar. Because of this, the *crianza* process for certain well-known manzanilla brands involves the wine going through as many as 14 to 16 different scales. The result is a light, smooth quaffable wine, whose nose should reveal the effects of the sea breeze in the form of iodine aromas characteristic of seaweed, and a palate that combines a salty tang with bitterness to stimulate the taste buds along the sides of the tongue. These are the same scents and tastes that one gets from strolling along Sanlúcar beach at dawn, or sipping a few drops of sea water.

Manzanilla's smooth character persists in all the wines which emanate

Sanlúcar's bodegas are usually oriented towards the sea so that they get the full benefit of the sea breezes that help maintain the right temperature and humidity levels.





from it, including certain types of sherry such as *amontillado* or *palo cortado*: traces of the fragrance of the *manzanilla* from which they derive seem to survive in them.

The names of Sanlúcar and *manzanilla* are indissolubly linked. The town's other claims to fame are its *langostinos* (king prawns) and its horse races on the beach. It is a well-known fact that vast quantities of *manzanilla* are drunk both during and after these races, and it is generally acknowledged that nothing goes better with a glass of Sanlúcar's own special wine than king prawns from the sandbanks of the River Guadalquivir. Consumed on the beach at sunset while the races are on, this supreme wine/food match reaches the height of perfection.

For all these reasons and more, *manzanilla* stands out among all the wines produced in the Jerez region to the extent that it has its own denomination of origin – the Denomination of Origin *Manzanilla-Sanlúcar de Barrameda* – another example of a DO in which the wine and the place where it ages and matures are linked.

Manzanilla is so unique and distinctive that it is served in a special glass, known as a *caña*. As Antoine Latour declared in the nineteenth century: "A wine that has its own glass cannot be vulgar." The *caña* is a cylindrical glass for which there is also a special tray, known as a *cañero*, consisting of two tiers with holes into which the glasses fit. This was designed with horsemen in mind, to provide a carrier that would be more stable than an ordinary tray to serve

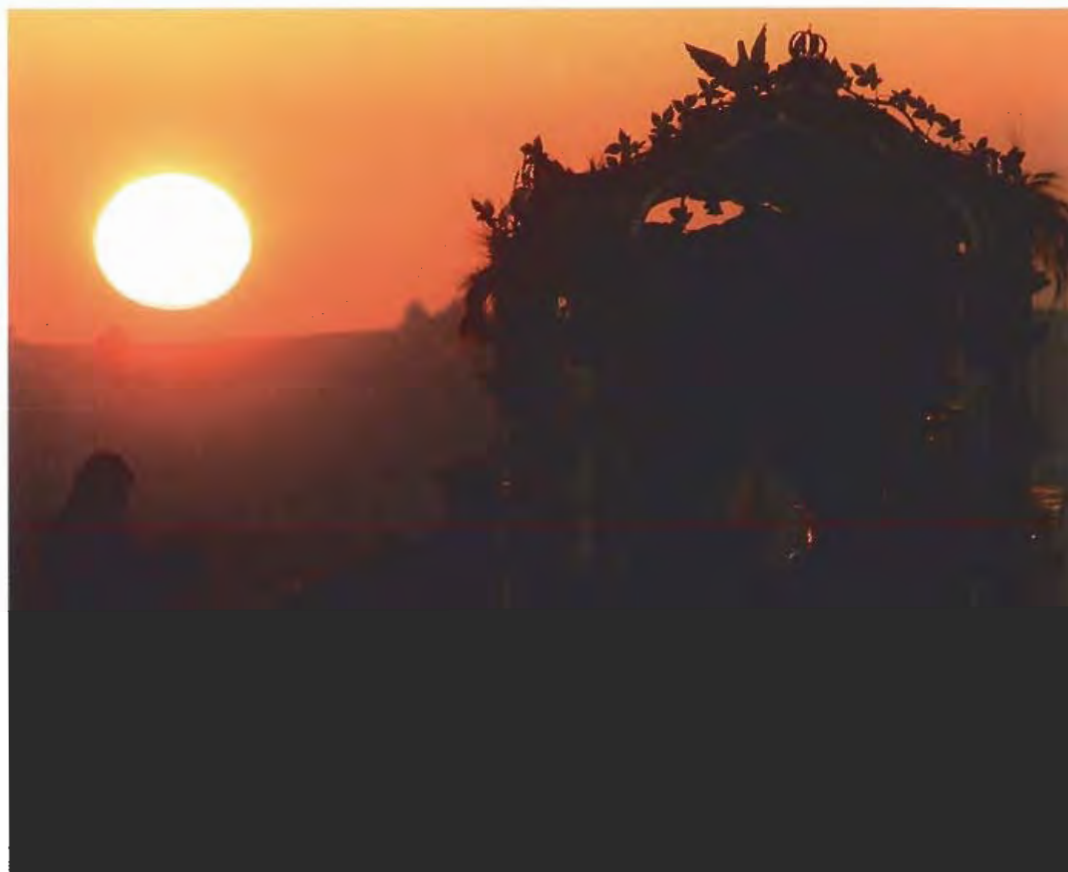


riders during fairs and processions. There is also a special manzanilla-specific version of the venencia, the cellar instrument consisting of a small metal cup at the end of a long glass fibre handle used for extracting samples of wine from casks for tasting. The version used in the manzanilla *bodegas* is called a caña, like the glass, and is made of carved reed or bamboo.

Sailing downstream along the River Guadalquivir, the first thing one sees

on approaching the town of Sanlúcar are its white houses standing out against the hills of Miraflores, while to the east, the marshland extends from the banks of the river to the hills of Martín Miguel and Mahina. To the right lies the Doñana Reserve, with its reed beds, pine forests and sand dunes. The municipality of Sanlúcar encompasses an extension of wetland, part of the Guadalquivir estuary and a succession of gentle undulations that form a natural boundary to the east and south.

The different microclimatic conditions in Sanlúcar's bodegas and ageing under a film of flor are what make manzanilla possible.



Although manzanilla can be made from grapes grown in the vineyards located anywhere within the DO's area of production, it was on these hills bordering and overlooking the estuary that the vineyards that traditionally supplied the Sanlúcar *bodegas* were located. Geologically, this terrain was originally sea bed – the bottom of a coastal lake that in the course of time became cut off from the sea by a chain of sand dunes. It later gradually filled up with sedimentary deposits from the river, thus forming the estuary.

It is generally accepted that the best manzanilla comes from must

produced in the vineyards closest to the sea and those located on the watershed that slopes towards it. The Miraflores vineyard, situated on the south-eastern edge of town and overlooking the estuary, is one of the most highly regarded *pagos* for producing manzanilla. That area's pure white *albariza* soils form rolling hills with fine views over the river and its mouth. Owing to their situation and proximity to the sea, Miraflores vines begin each day steeped in dew, which contributes to the nitrification of the soil.

Other *pagos* in Sanlúcar traditionally given over to the production of

the local wine are Mahina and Martín Miguel, Cabeza Gorda, Rematacaudales, La Callejuela, Charruado, Atalaya and Amarguillo, among others. All occupy high ground looking down over the river mouth, and therefore enjoy the benefits of natural watering in the form of dew on summer nights. Some of them are in places so remote that even in the twenty first century strings of donkeys have to be used to transport the grapes they produce. There are also certain *pagos* – Balbafna being one of them – which, though not part of the municipality of Sanlúcar, lie close to its borders and at the same height above sea

level as the other manzanilla pagos, overlooking the coastline, and have a fine reputation for manzanilla production.

A certain number of small press houses still survive in the Sanlúcar area, both out in the countryside and in town, owned by wholesalers, where they make what they need to replenish their cellars. Large commercial firms and cooperatives have their own presses in the vineyards or on the outskirts of town.

As described earlier, the ageing and maturation phase is the true cornerstone of manzanilla making. This is the longest and most complicated phase of all, and has to take place in a particular setting: the bodega, or winery. There is evidence from the Middle Ages on of *bodegas* being built contiguous with houses in Sanlúcar; however, the big manzanilla *bodegas* we know today date from the nineteenth century, when Spain's trade relations with the New World made it necessary for large wine warehouses to be built. The increase in exports at that time saw the emergence of the 'cathedral' *bodegas* described as early as 1807 by Esteban Boutelou.

The environmental conditions necessary for the growth of the *velo de flor* film needed to produce manzanilla require the *bodegas* to be oriented towards the sea, with a north-south longitudinal axis whenever possible so as to benefit fully from the sea breezes that help keep humidity consistently high and the temperature between 10 and 25 degrees Centigrade. The hot, dry

easterly wind, known as the *levante*, that blows in from North Africa and the Lower Mediterranean is held to be harmful to wine.

As in the rest of the *Marco de Jerez*, the best container in which to age manzanilla is an American oak butt, the older and more used the better. In Sanlúcar, many butts in current use are over a hundred years old, having stayed in place since the *bodegas* were founded. Interestingly, the wineries's roof timbers provide a haven for some wildlife species, attracted by their isolation and quiet: they are inhabited by colonies of bats and swifts which, in their turn, are preyed upon by the many barn owl still to be found in the built-up area of Sanlúcar.

Current statistics show that manzanilla is the type of sherry most consumed in Spain today. The situation is different abroad: manzanilla has always been the great unknown in the traditional markets, which have invariably inclined more towards sweet or slightly sweet styles of sherry. Even so, manzanilla is the fourth biggest seller of all the wines from the sherry region. Its popularity in the domestic market derives, in part, from the fact that it is an especially light wine, in keeping with today's prevailing tastes.

Advances in vinification techniques over the last two decades, together with new filtering and stabilising procedures, have contributed to ensuring the quality of manzanilla after bottling. Nowadays, there is no difference between a bottle uncorked in Oslo and another opened in Sanlúcar's Plaza del



Cabildo. Moreover, the current level of alcohol in wine – 15 percent by volume – finally accepted by the fiscal authorities of the different importing countries has not only enhanced its reception among consumers because of the duty reduction that this has entailed, but has also meant that it can be drunk at the same alcoholic strength as when in its natural state inside the *crianza* butt.

Manzanilla has finally come into its own, and is being presented to consumers as a modern, intellectually stimulating wine. Owing to its production and ageing methods, it is also perceived as organic. A

In Sanlúcar de Barrameda, the venencia, the instrument used to draw tasting samples out of a cask, is known as a caña and is made of carved reed or bamboo.

manzanilla bodega could be said to function as a great natural reserve made up of other, smaller reserves represented by the butts. The film of *flor* that develops spontaneously over the surface of the liquid inside the butts triggers a series of biochemical reactions that allow the wine to develop naturally.

The manzanilla consumed in Spain today is largely associated with long-established traditional customs, such as Andalusia's fairs and processions. In a region with so much coastline contact, manzanilla is presented as the ideal wine to drink with seafood and the enormous range of tapas for which the Andalusians are so justly famous. As a result, current promotion is focusing on presenting manzanilla as a table wine, changing the outdated perception of this region's wines – generally associated with dark, sweet, more alcoholic types – for one of a light, pungent white table wine with just enough body to match the strong flavours of the food we eat.

This perhaps explains the trend towards a change in product image and presentation in a bid to give it a new look that better reflects these qualities, using slender bottles that are lighter in colour and bear labels that provide the necessary information more straightforwardly. These tools are being used to spread the message that manzanilla is a light, dry white wine which should be served cold and drunk with food. It holds its own splendidly when presented alongside top flight white table wines.

In his book *A caballo entre dos*

milénios, Fernando Sabater writes that "since the last century [manzanilla] has occupied a place among the 'generoso' wines of Lower Andalusia equal to that of Beaujolais among the wines of France." However, until recently it has remained largely unknown outside Spain. The lack of adequate promotion on the part of its producers, and a dearth of information about how and when to drink it, would seem to account for this.

Manzanilla is the driest, most delicate and exclusive of all the fortified wines, and also has two exceptional additional characteristics: its fragrance and its profuse bouquet. Moreover, it is a highly ecological wine, produced by natural methods in which a singular natural process is a key feature: the grouping of natural microorganisms that make up a film of *flor*. Given these attributes, it seems reasonable to anticipate a bright future for it. To that end, consumers must be educated about how and when manzanilla is drunk in its home patch. Apparently insignificant information, such as the need to serve it cold and in the right glass, needs to be made known. This will be neither easy nor cheap, but it is the only way.

Manzanilla will probably never become a wine for the masses, but it will certainly find a place in the cellars of discerning drinkers. In Spain it will continue to be the wine of choice for certain celebrations, whilst abroad, suitably promoted brands will enjoy the allure of singularity, exclusivity and quality that distinguishes manzanilla.

Together with manzanilla and king prawns, Sanlúcar's other claim to fame are the horse races held on the beach, an event in which manzanilla plays a major role.







Título: Sacristía

SPECIAL WINES

WINES WITH AGE CERTIFICATION

CÉSAR SALDAÑA SÁNCHEZ

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Nearly every *bodega* in the Marco de Jerez has a special, secret place set apart from all the rest. In some cases these are simply designated corners of the great cathedral-like buildings, tucked away among the

tiers of butts; in others, they are separate rooms in their own right, generally quite small, and with lowish coffered ceilings covered in the sort of patina only acquired over many, many years. Not everyone is allowed into these places; those that are find themselves plunged into an atmosphere of seclusion and mystery. Not for nothing are they known as *las sacristías* – the Sacristies.

Crepuscular light, silence and distinct aromas of old wood, earth floor and mouldering stone reinforce the visitor's impression of being somewhere extraordinary, where something equally extraordinary is going on – something that under normal circumstances, living life at the frantic pace we do, escapes our awareness. Yet in the stillness and intense silence of the Sacristies' secluded atmosphere, it is absolutely palpable: we are witnessing the passage of time and its miraculous transforming effect on wine as it develops and matures. These are magical places, and their tone is cleverly encapsulated in the name by which they are traditionally known in Jerez.

Here in the Sacristies, year after year, prudent *capataces* (cellar masters) have been stowing away treasure in the form of their *bodegas'* best products,

creating in the process soleras that by today are part of the worldwide oenological heritage. In some cases, they date back in origin to when the *bodega* was founded – generally the nineteenth century, but some even as far back as the eighteenth. So how does a wine qualify for inclusion in this sort of elite selection?

The solera system –the slow process of ageing wine by mixing the past with the present, carried out in the vast cathedral-like *bodegas*– imposes a particular pace on their solemnity. Only *catadores* (tasters) have the temerity to interrupt their hallowed tranquillity, sliding their *venencias* (long-handled cups) into each butt to check whether the wine is ready to move on to the next *criadera* (nursery). This continuous monitoring often identifies batches with characteristics special enough to merit inclusion in the *criaderas* dedicated to ageing extra special wines.

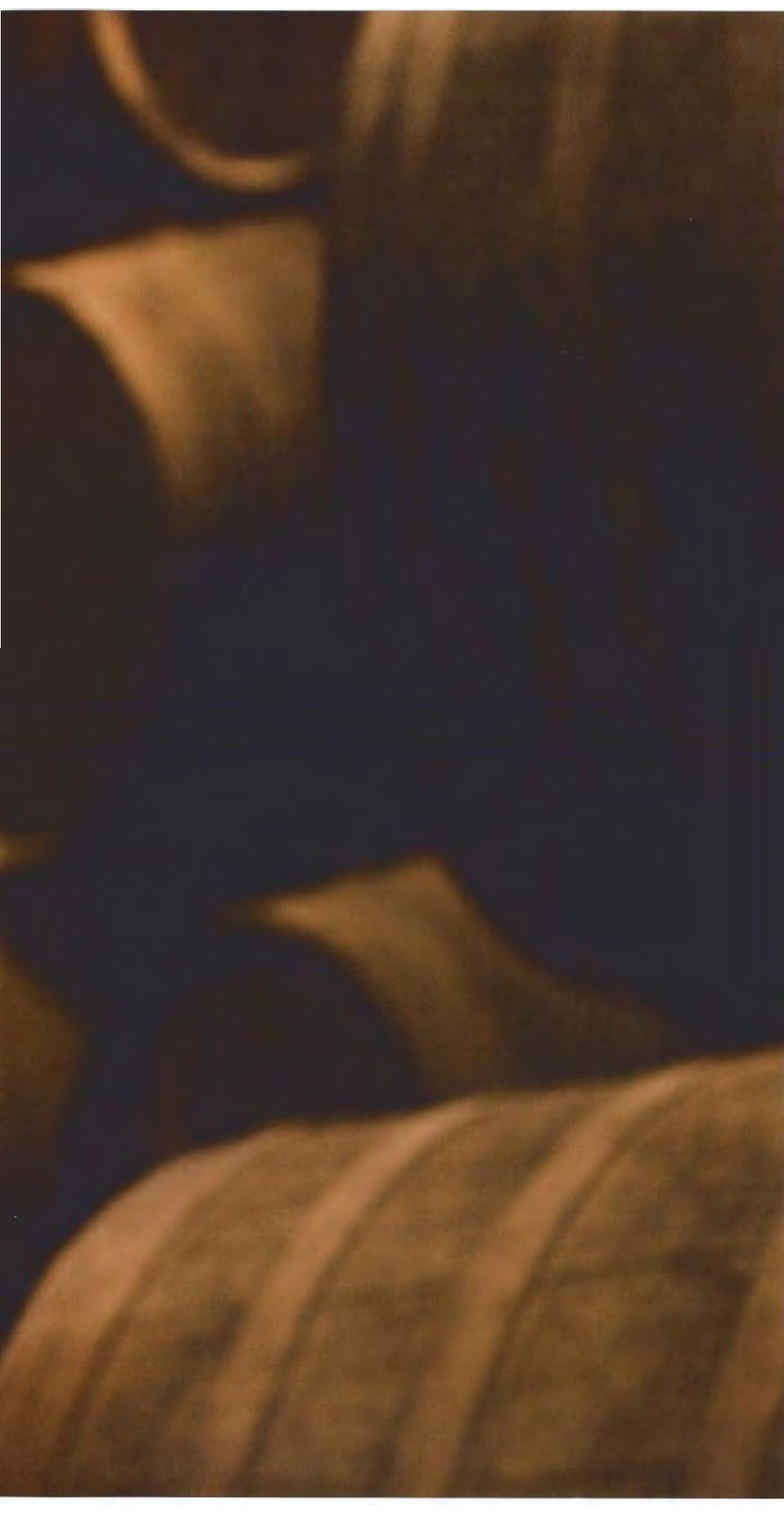
Not all wines, then, are privileged to form part of those soleras; and nor does everyone get the chance to taste them. For centuries, *sacristía* wine was reserved for the *bodega*-owner and his family, close friends and perhaps the occasional dignitary and prestigious visitor.

Fortunately for wine-lovers, the centuries-old soleras in the Marco de Jerez's wineries are nowadays no longer absolutely beyond the reach of the rest of us. Nearly all the Denomination of Origin's firms carry out periodic *sacas* (drawings-off of wine) from their most prized soleras and market them under names that in some cases qualify as legendary.

Over and above the differentiating factors that create the wide range of wines, time plays a vital role in the way that sherry is produced.

1880





This new positioning of 'vinos de sacristía' is something in which the Consejo Regulador's backing has played a decisive role: in recent years, it has established a series of special categories in which interested *bodegas* can register wines as long as they satisfy certain conditions and undergo the tests required by the institution.

WINES OF CERTIFIED AGE

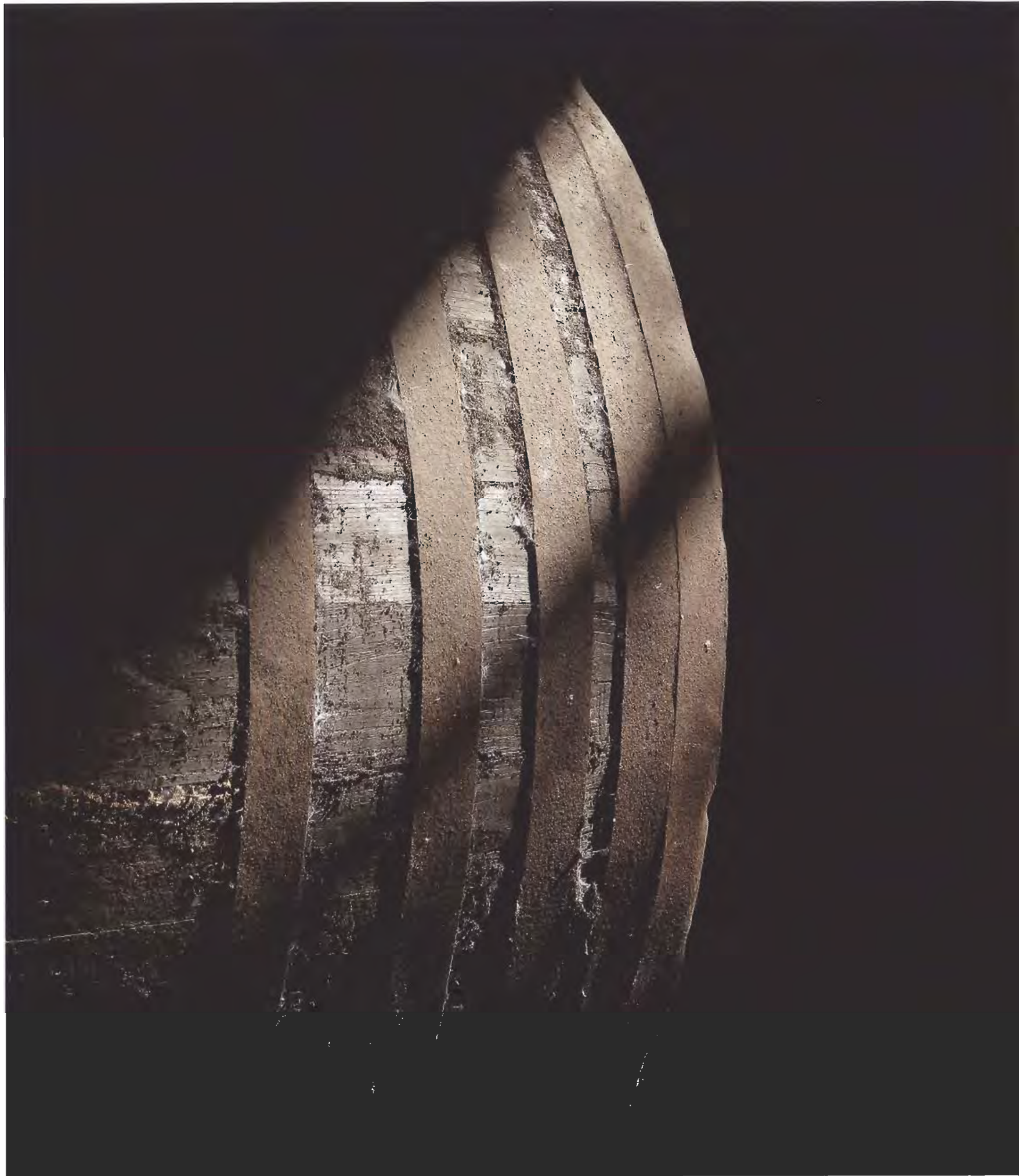
More and more *bodegas* are selling wine of exceptional age and quality. The quantities involved are, by definition, relatively small: only by keeping sales of wines engaged in the ageing process to a minimum can the very old average age (sometimes well over 30 years) these wines be maintained and guaranteed.

In 2000, the Denomination of Origin's Consejo Regulador created the category of Sherry Wines of Certified Age to provide an official certification attesting to their outstanding age and quality. The category embraces two sub-divisions: wines over 20 years old, known as V.O.S., and wines over 30 years old, known as V.O.R.S.

Certified *sacas*

One of sherry's key identifying factors is the *criaderas* and *solera* method of *crianza*. This wonderful, unbeatable, dynamic ageing procedure works on the principle of systematically mixing young wines in with wines from older vintages. Throughout the sequence of *criaderas*, or ageing scales, a slow, progressive mixing process is effected. As a result, the *saca* (the wine drawn off) from the *solera* butts is the end product of a

Specially selected wines are nurtured in the Sacristies over many years, with only minimal quantities being extracted from the soleras.



fractional blending sequence of each and every one of the vintages represented in the system. It is tantamount to a *bodega's* complete history embodied in its own wines.

Perfect though this system is conceptually, it does have the disadvantage of making it impossible to put an exact age to a sherry, other than in terms of average or *solera* years of age.

The age certification system developed by the Consejo Regulador is therefore based on ascertaining the average age of the wine in the *solera* – the last, floor-level tier of the ageing system – and, by implication, the average age of the wine being extracted. It should be noted that the Consejo's certification is granted not to specific commercial brands or types of wine from a particular *bodega*, but rather to each different lot of these wines (or, in cellar man's language, to each individual *saca*) that the *bodega* issues.

The Tasting Committee and analytical parameters

To obtain this certificate of quality and age, *bodegas* have to submit a specific request to the Consejo Regulador, specifying the type and quantity of wine that they want certified. The Consejo's inspectors then take a series of samples of the wine in question, after which the entire *saca* is immobilised by sealing the deposit in which it is being kept.

The samples are first judged by an independent Tasting Committee. This is made up of specialists of recognised integrity and expertise who have no connection of any sort with the wineries of the Marco de Jerez. As well as members of the Consejo Regulador itself, Committee members include academics and other experts considered genuinely authoritative sherry tasters.

The Tasting Committee analyses the wines from each *saca* with two aims in view – not just to verify a specific average age, but also to ascertain that they live up to the exceptional quality standards expected of wines with such special characteristics.

The Committee's assessments are carried out with the full technical backing of Jerez's Viticultural and Oenological Station, one of the best-equipped laboratories in Spain, which analyses, among other things, parameters specifically related to the age of submitted samples such as Carbon 14, ester content, ash and dry extract.

Even so, however satisfactory analytical results may be, the Consejo will not certify a wine unless it also satisfies the tasting team's demanding qualitative standards.

Quota system

Selling wines of Certified Age also affects each *bodega's* sales quota.

One of the Jerez-Xérès-Sherry Denomination of Origin's quality-guaranteeing procedures is that each *bodega* is only permitted to sell a certain quota or percentage of its stored wine per campaign. This system enables the Consejo Regulador to guarantee the minimum age of sherries. As a general rule, the quota system demands that for each litre of a given wine that a DO *bodega* sells, it must have three litres of it stored in its *crianza* bodegas. This guarantees that the wine sold is at least three years old.

In the case of Wines of Certified Age, therefore, the quota take-up of these lots of wine is, by definition, proportional to the age guaranteed by the Consejo. In other words, for each litre of 'over 20 years old' wine that a *bodega* sells, it must have at least 20 litres in its corresponding *crianza* system. By the same token, for a wine certified as being 'over 30 years old', the *bodega* must have at least 30 still in the *crianza* process for each litre of the wine it sells.

Terminology and special seals

The regulations governing Wines of Certified Age also cover the application of specific terminology. Accordingly, wines over 20 years old use the initials V.O.S., standing for the Latin phrase *Vinum Optimum Signatum* (Wine Selected as Optimal) and also, conveniently, for Very Old Sherry – the English term so often used on labelling for wines of this type.



The equivalent for wines over 30 years old is V.O.R.S., standing for *Vinum Optimum Rare Signatum* (Wine Selected as Optimal and Exceptional), which again works nicely for Very Old Rare Sherry.

There is a certain symbolism in the Consejo Regulador's reversion to the language in which the wines of Jerez were first described and praised in the pre-Christian era.

Both the initials V.O.S. and V.O.R.S. and the Latin description for which they stand appear on the special seal with which the Consejo Regulador distinguishes certified wines and

which is required to be incorporated into their labelling.

Types of sherry with Certified Age

The Consejo Regulador issues certification only to wines of supreme quality that have been aged for very long periods of time. To satisfy Certified Age requirements, they must also be of one of the following types: amontillado, oloroso, palo cortado or Pedro Ximénez.

There is the slight proviso that the very old generoso wines are occasionally slightly 'enhanced' by their parent *bodegas* with small quantities of sweet

wine. The aim in some cases is to take the edge off the astringency that wines acquire during such long periods of aging, and in others simply to give them a decidedly sweet cast. In any case, the sweet wine – generally of the Pedro Ximénez variety – must never be added in such quantity as significantly to conceal or diminish the character of the original dry wine, be it oloroso, amontillado or palo cortado, in the judgment of the Tasting Committee.

The wines in question represent a small but significant percentage of the wide range of sherry wines. Nevertheless, by virtue of their exclusive, minority

The oldest soleras are usually located in separate rooms of the bodega, and sacas and rocíos are conducted at a much slower pace.



nature they serve as standard bearers for the quintessential craftsmanship, quality, selectivity and respect for time that sherry wines encapsulate.

WINES WITH INDICATION OF AGE

The slow rotation system means that, as well as sherry wines of Certified Age over 20 years old (V.O.S.) and over 30 years old (V.O.R.S.), *bodegas* usually have holdings of wines which, while not as old as these, are still of an average age well beyond that required by the Regulations. As it did for Wines of Certified Age, the Consejo Regulador has introduced

a procedure that recognises this state of affairs, creating a specific category designated *Vinos de Jerez con Indicación de Edad* – Sherries with Indication of Age, with two different age levels – 12 years and 15 years – being distinguished within it.

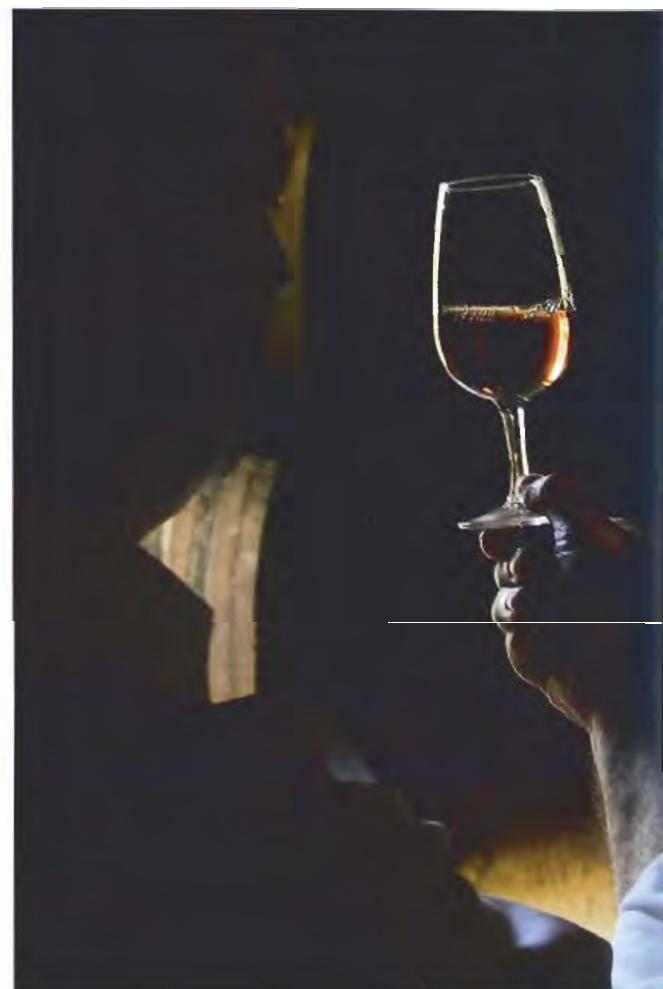
Unlike 20 and 30-year old wines, the certification issued by the Consejo Regulador applies to the soleras associated with the brand in question rather than exclusively to the *sacas* submitted for qualification. To obtain it, *bodegas* must submit the appropriate application accompanied by a

detailed declaration of the stocks of wine that constitute the solera system associated with the type of wine and brand that is to be sold 'with indication of age'. This declaration is made initially at the time of applying for the qualification, and has to be renewed annually, at the start of each campaign.

The initial declaration to the Consejo Regulador must also be accompanied by samples of the wines intended for sale, which are put before the Consejo's Tasting Committee for an opinion. As in the case of Wines of Certified

The Consejo Regulador issues a Certified Age qualification only to the specific quantity of wine extracted during a saca and not to the entire solera from which it is taken.





Age (V.O.S. or V.O.R.S.), the Committee's assessment is complemented by laboratory analyses to check a series of parameters directly related to the wines' age. If approved, the samples are deposited with the Consejo as references. Before any *sacas* of these wines are drawn off for sale, Consejo officials take samples which are then checked against the corresponding reference samples.

Both at the time of the original application and in the subsequent

declarations that have to be made at the start of each campaign, the Consejo checks the *bodega's* current holdings of wine related to the type or brand in question, which must be clearly identified in the *bodega*.

As for Wines of Certified Age, maintaining the required average age is guaranteed not only by approving samples and periodic monitoring of the different *sacas*, but also by the sales quota mechanism. For 12-year old wines, this equates to one-twelfth of the

stocks held related to the type of wine or brand in question and, similarly, for 15-year old ones, to one-fifteenth of the related stocks. Once the relevant quota has been used up, no more Wines with an Indication of Age can be issued during the same campaign.

Another stipulation for Wines with Indication of Age is that the 12 and 15 year certification can only be specified in relation to wines of the *amontillado*, *palo cortado*, *oloroso* and *Pedro Ximénez* types.

The tasters' judgment is the basic criterion in deciding for how long a wine should be aged.



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VINTAGE WINES

Although the dynamic criadera and solera system is unquestionably one of the most genuine and exceptional facets of sherry-making, *bodega* owners sometimes select certain lots for 'static' aging, thereby constituting *añadas* (vintages). Various criteria are involved in selecting the wines that will form an *añada*, but it would be true to say that they are all concerned with quality factors. In many cases, these factors are extremely subjective, and are not even necessarily consistent from one sherry house to another, but they are clearly recognisable to the *bodeguero*.

Since the *añada*, or static, ageing method does not generate the same nutritional input as the dynamic solera system, it cannot sustain the process of biological ageing under a film of *flor*, or at least for no longer than a few years. To quote Julian Jeffs: "Sherry takes as long as a person to reach full maturity." Whether this assertion is valid or not – and 'maturity' is a notoriously vague concept – it is a fact that sherry *bodegas* that produce *añada* sherries generally wait at least twenty to thirty years before bottling it. This means that vintages sold by the Denomination of Origin's *bodegas* can only belong to the oloroso, palo cortado and amontillado types.

As explained in another chapter of this book, microclimatic conditions in the sherry *bodegas* are such that they do not prevent liquid being lost through evaporation, which accounts for losses of between 3

and 4 percent of the total volume stored in the butts. Most of this corresponds to water contained in the wine, so its evaporation causes aromas and flavours to concentrate significantly. The gradual reduction in volume also makes it necessary to rehouse wines of the same vintage in fewer butts or even in smaller capacity containers.

In quantitative terms, the importance of vintage sherries in the Denomination as a whole is currently no more than token: quantities held in stock and issued for sale are both tiny. However, this in no way detracts from the importance of vintage sherry as another representative of 'the wine with a thousand faces': it has considerable potential as a contributor to developing the most exclusive and prestigious segment of the sherry market.

THE FUTURE

The years since the introduction of the special Wines of Certified Age and Wines with Indication of Age categories have produced positive results for the Denomination of Origin. Establishing a series of grades, or quality levels, associated with how old wines are has unquestionably provided consumers with a very useful gauge. This is especially true in the case of a wine such as sherry, which is not usually vintage-referenced.

But age is not the only – nor always the most valid – indicator of quality in wine, including sherry. This is particularly evident in biologically aged wines: there is an age limit

beyond which the nutrients become so depleted that the *flor* disappears and this extraordinary type of ageing process ceases. In short, it makes no sense to talk of 15 or 30-year old finos or manzanillas.

Nevertheless, there are certainly wines of both these types that can lay claim to high quality, as a result of having been produced, developed and aged in a highly specialised way, that justify the creation of a superior category for finos and manzanillas, too. Recognising this gap, the professional organisations represented on the Consejo Regulador are currently looking into creating Fino Superior and Manzanilla Superior categories and including them in future Denomination of Origin Regulations.

Clearly, this certification will need to take elements of undisputed qualitative importance – such as vineyard of provenance, vinification methods, and the nature and intensity of the ageing process – into account. However, the differentiating parameters that qualify a fino or a manzanilla for inclusion in this superior category will also need to satisfy the condition of being objectively definable so that the Consejo Regulador's certification can be categorically upheld. :



Título: Hombres

THE ANTHROPOLOGY OF SHERRY

FERNANDO LÓPEZ ROMASANTA

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Man has always left his mark on his surroundings, and continues to do so. We have applied our intelligence to attempting to master Nature so that we can shape our environment, protect our interests and create the tools we need. This is the case with sherry – an example of symbiosis between man and his habitat to produce desired results that dates back at least as far as the period when Jerez was a Phoenician colony known as Xera. To achieve mastery over the land, crop-growing and wine-making, man has had to select the most appropriate grape vines and build the most suitable vineyard dwellings, wineries and containers; he has put names to everything involved in the process, evolved specific methods of working and devised the best ways of performing the operations intrinsic to the development of sherry.

Over the last fifty years, advances in the technology applied to vine-growing and wine-making in the Jerez region have wrought changes in operations and processes firmly established over centuries, but these have affected how they are carried out far more than the essential nature of the operations themselves.

What follows is a survey of the activities that people have carried out in the Jerez area with a view to creating the best possible product, and that have given the local viticulture and viniculture their distinctive character. Five areas in which this distinctiveness is

particularly notable are considered – the vineyard, cooperage, *bodega* operations, tools and vocabulary – all with reference to the classical tradition of essentially manual work.

THE VINEYARD

The vineyard could be said to be the source from which sherry wine flows. Vineyard cultivation gave rise to agricultural tasks that are specific to this area, and to a way of life dependent upon the environment and closely attuned to it so that it could be capitalised on to provide some of the immediate necessities of life.

Unlike other wine-growing regions of Spain, the vineyards of Jerez have always been inhabited. Many people, even several generations of the same families, have been born and lived their lives permanently in the vineyards, a custom that produced an idiosyncratic type of dwelling known as the *casa de viña*, *caserío* or *casa de labor*. These are typically situated on top of the hills that characterise Jerez's vineyard landscape and, whenever possible, are orientated cornerwise to the prevailing west and east winds, with a south-facing entranceway, usually with a bench where the workers can take a rest. The atrium-like entranceway leads in to the *casa del capataz* (foreman's house) and the *casa de la gente* (vineyard workers' quarters) which contains the *fogarín* (hearth where communal cooking is done). The *espensilla*, a little room set aside as the capataz's office, is located within the house itself. The *casa de lagares* (wine-press house), store-rooms and stables are sometimes part of the same building or otherwise stand adjacent.

Though now an integral part of the sherry-making process, there was a time when the vineyards were a separate world, with a way of life all their own.





In some vineyards, the press house and the workers' quarters are one and the same thing; the press house can also serve as a warehouse except at harvest-time. When machinery to help with harvesting was introduced, this was also stored in the press house. Some vineyards have recently built small cellars for storing must during fermentation, though these are the exception rather than the rule.

Caseríos used to be inhabited by one family or, very occasionally, two. The

same person carried out the functions of foreman and head of household. He was entrusted by the vineyard owner with managing the farming of the vineyard, accommodating and supervising the vineyard workers and other employees, keeping the farm in good order and maintaining all the equipment and buildings.

Because of their isolated position in the countryside, the *caseríos'* occupants and equipment had to be protected. One protective device was the *ratonera*, a

sort of loophole window with angled reveals just big enough to take the barrel of a shotgun, positioned alongside the *caserío* door at just the right height to blast everything within range. Another, for crop protection, was the *bienteveo* ("I-can-see-you-well"), a hut raised on four posts and strategically positioned, in which the *viñadero* (vineyard watchman) could lie in wait and keep an eye on the crop. There was also a ground-level version of the *bienteveo*, known as a *bohío*.

Work in the vineyard leading up to the harvest, and all the tasks involved therein, led to the emergence of a huge variety of occupations and responsibilities, some of them highly specialised.

The foreman's house was usually composed of four rooms – a kitchen, with a wood or coal-burning stove, a living room and two bedrooms – which were adequate for all the necessities of life in the countryside. Clothes washing was done outside the house, in an earthenware bowl using a wooden scrubbing board. The water supply was essentially derived from rain water collected as it fell from the roof and directed into an underground *aljibe* (cistern), generally situated beneath the *almijar* (the open space immediately surrounding the *caserío*). Lighting devices gradually improved over the years, starting with *periquillos* (olive oil lamps) and graduating later to *quinqués* or *reverberos* (paraffin lanterns); later still came carbide, then petromax and finally butane gas lighting.

The foreman was entitled to keep a kitchen garden, fruit trees and farmyard animals. As a rule, he was usually also provided with a beast of burden (horse, mule or donkey) for his own use and that of the *costero* (procurer and carrier of provisions for the *caserío*).

The social life of the *caseríos'* inhabitants was limited to paying calls amongst themselves, visits from the vineyard owner, and outings to the nearest villages if the need arose or on feast-days. Pedlars, tinsmiths and knife-grinders would also make the occasional appearance as, sometimes, would people of no fixed abode who lived by going from vineyard to vineyard. The *costero* served as a go-between linking the vineyards with the centres of population: it was his job to perform errands for the foreman and the worker responsible for organising communal food rations, and to deal with correspondence and other essentials.



Life for the householders and vineyard workers was very tough, however much in harmony with the natural environment. By today, the vineyards of the sherry region have lost much of their population; present-day foremen, heads of household or guards who still occupy *caseríos* perform those functions for several vineyards owned by one company or large estate at a time. Most families still living in the vineyards – where conditions are happily very different from those described above – are generally *mayetos*,

owners of small-scale exploitations.

As well as those people who lived actually in the vineyards, there were also *viticultores* – workers who specialised in tending vines – who had their homes in the region's towns and villages. This type of work was traditionally highly thought of, to such an extent that on returning to the village after work, the *capataz de cuadrilla* (head of a team of nine to eleven workers) would smear the knees of his trousers with mud – weather permitting – to draw attention

Their distance from centres of population required caseríos to be largely self-sufficient, while also having to provide lodging for large numbers of temporary vineyard workers.



to his social position. These were well-to-do people, who the vineyard foreman would hire in nearby villages to carry out seasonal jobs. They walked to work – a round trip of some 14 kilometres / 8.7 miles – setting off at cock-crow from the clerk of the market's office at the edge of town, the starting point for the working day, and returning as the sun set. Workers who lived further away generally slept in the *casa de la gente* of the *caserío* for the duration of the job for which they had been hired.

The pattern of life was similar for both groups in that they formed into parties known as *ranchos* for the two communal meals of the day. Each *rancho* was made

up of ten to twelve men, one of whom would be elected *encargado de costa*. He was responsible for organising the *rancho*'s meals, usually coming to an arrangement with the woman of the house so that she did the cooking, and instructing the *costero* as to what foodstuffs, including bread, to buy and bring back from the nearby town. The *costa* (rations), also known as the *yantar*, consisted of two meals: an early lunch, in the form of *ajo de la viña* (literally, 'vineyard garlic') was eaten at ten in the morning, and the main meal of the day, usually a chick-pea stew, at two in the afternoon. When the weather was very hot, there would be *gazpacho* (cold soup), with or without *catana* (a chunk

of bread dipped into the soup and then dressed with olive oil). Cabbage and *pescado en sobreusa* (an economical fish dish, typical of the region) made the occasional appearance.

The cost of the workers' food was deducted from their pay. The morning and evening meal were not communal, each worker having to fend for himself. What they usually ate for breakfast and dinner was sardines or herrings with toasted bread and black coffee, or *cabero* (the heel of a loaf of bread filled with oil or dripping), all of which each man had to bring from home. Each *rancho* ate from a single earthenware dish according to the 'spoonful and step back' system,

Harvest-time was – and still is – the high point of life in the vineyard caseríos. It used to be the season when the separate worlds of vineyard and winery came into contact.

closely enforced to prevent the nimbler eaters from taking unfair advantage.

Workers who slept in the *casa de la gente* did so on camp beds composed of planks resting on two iron feet and spread with a palliase or rush mat. When the press house doubled as workers' quarters, they slept on rush mats on the wine press itself. Contiguous to the *casa de la gente*, or separated from it by a door, archway or beam, was the *fogarín*, a fireplace with a broad, open flue, stone or brick floor, and sometimes a bench, within which all the workers could sit around the fire to get warm, dry off when it had been raining, dry their clothes and cook their food.

Growers who returned home to sleep carried with them only the tools called for by the particular tasks in hand. These were their own property, and they themselves were responsible for maintaining and, where appropriate, sharpening them. The most common tools were (and still are): the *zoleta* (small mattock), the *azada* (hoe), the *azucla* (adze), *tijeras de podar* (pruning scissors) and the *navaja de injertar* (grafting knife). In addition to these, everyone carried a clasp-knife and spoon for eating. Workers who slept in the *casa de la gente* carried their belongings and food in an *alforja* (knapsack) or a *petate* (bedroll).

The various tasks involved in vineyard work also gave rise to garments suitable for them, notably the *ceñiera* (canvas over-trousers, open behind, rather like chaps), *andorras* (shoe or espadrille protectors, made of canvas), the *faja* (sash) and the *pelliza* (coat). When sleeping out in the open, a thin blanket or coverlet known as a *follapepe* was used.

Although vineyard workers nowadays still wear some of these garments and own and maintain their own tools, the fact is that the vineyard way of life described above, which remained largely unchanged until the 1950s, is barely recognisable today. However, the job of viticultor has always been an honourable and respected one: the professional groups of viticultores created in Jerez and Sanlúcar were highly prestigious bodies because their members were trained to such high standards. It is still specialised work, and skills are passed on from father to son or acquired from the foreman while working as a member of a *cuadrilla*.

BODEGA OPERATIONS

The operations carried out in sherry *bodegas* equally represent the quintessence of centuries of experience, and as such also possess features which are absolutely genuine and unlike those of other winegrowing regions. That said, however, winery operations that were once completely manual and the preserve of specialised craftsmen have inevitably been changed by increasing mechanisation.

Up until the mid-1960s, the vintage (in the sense of vinification processes) took place generally in the vineyards, where the grapes were pressed either by treading or by machine. The musts from different presses were blended together to give the most uniform must, one that was representative of the vineyard. The blends involved required the *arrumbadores* (*bodega* workers) to be highly skilled at working with butts and dealing with fermenting musts and distributing and blending them proportionally. The butts of must would be transported immediately

to the *bodegas* by cart or lorry for fermentation.

On arrival at the *bodega*, the butts from the vineyard would be built into *cachones* (pyramids of butts of different heights), *piernas* or *andanas* (rows of stacked butts). A first, bottom, tier of butts would be placed on *palos de escalera* (wooden beams) which themselves rested on *espolines* (sleepers) placed exactly under the centre of each butt. The butts were wedged to ensure that they were stable. A second tier was built on top of the first, each of its butts being positioned between two in the first tier, all this being accomplished by moving full butts manually, without spillage. For higher – third and fourth – storage tiers, empty butts would first be put in place and then filled with must decanted by hand. The must would then remain in storage until fermentation was complete, when it would be classified and racked off the lees.

Classifying fermented musts was a task generally performed by the *bodega* owner or, in his absence, the *catador* (taster), accompanied by a *venenciador* who used his *venencia* (long-handled cup) to extract and pour into glasses wine from each butt requiring classification. A taster who also served as *venenciador* was known as the *capataz de venencia*. This operation is still performed in the same way, but it now tends to be the oenologist who does it, with the assistance of the *venenciador*. The taster gives his opinion on the basis of the aroma and appearance of the must in the glass provided by the *venenciador*, tasting it only very rarely, and marking the head of the butt with his opinion on its contents.



Another operation vital to sherry-making consists in taking *sacas* (drawings-off) of wine from the butts located in a specific *criadera* (nursery) and replacing it with *rocíos* (refreshments) of wine from the *criadera* above. Of all the tools used for transferring wine, the most original are the *canoas* and the *rociador*. In essence, the *canoas* is a wedge-shaped funnel designed to fit in between the stacked butts and whose spout goes in through the bung-hole and engages with the previously inserted *rociador*. This latter is a curved tube some 90 cm / 35 inches long with a closed bottom end and open, collared top by which it can be hung from the bung-hole of the

butt. Its lower third is perforated with small holes through which wine seeps slowly: when dealing with finos, this prevents the layer of *flor* that covers the whole surface of the wine from being broken by a direct jet. The *rociador* is always used for *sacas* and *rocíos* effected in fino soleras: for other types of wine, its use varies from *bodega* to *bodega*.

In addition to operations directly involved with wine, there are other equally important ones concerned with constructing wine storage or ageing systems and repairing butts. All these are manual tasks requiring strength and a good eye, and produce end results that are aesthetically very satisfying.

One can only imagine the effort required to move full butts that weigh around 720 kilograms / 1,584 pounds, and the ingenuity involved in making the task as quickly and easily achieved as possible – particularly bearing in mind that the only available equipment in the past consisted of *tranquillas* (wooden levers), *palos de cargar* (a pair of square-sectioned poles deployed as a ramp) and *cinteros* (esparto ropes).

When you go into a *bodega*, the first thing you notice is the smell; the next is how perfectly the butts are positioned – all arranged with millimetric precision and apparently without the slightest difficulty. Nothing could be further

Specific operations and associated occupations – some of them unique to the Jerez region – have also emerged in the bodegas.

from the truth: when constructing a solera, the *bodega* foreman – unaided by tape-measure, ruler, plumb line or any sort of mechanical device – has to gauge how many butts can be accommodated, whether the ground is compact enough to bear their weight, select the *palos de escalera* and *espolines*, pick suitably sized *llanos* and *bocachas* (wooden chocks for keeping the butts firmly in place), organise the butts so that their different dimensions are accommodated (they look identical but are not), and choose the team of workers to build the structure. There is more to it than just putting the *solera* (floor-level) and *criadera* (nursery) tiers of butts in place: the sets of butts that constitute the *piernas* and *andanas* (tiers that configure the aisles within the *bodega*) have to be made absolutely firm with *contras* and *bocachas* (oak blocks and wedges), with all butts perfectly positioned between their supports and wedged in place, all in perfect alignment and with their bung-holes in the right position, before the next tier is added, and so on up to the third or fourth tier. If the *bodega* is a regular shape, the gaps between the butts in all the *piernas* and *andanas* must be perfectly aligned. All in all, there is significant aesthetic content to the work of the foreman and his *arrumbadores* as well as its unquestionable practical aspects.

No less aesthetically pleasing and complex, and calling for considerable skill, is the operation of extracting one butt from an *andana* for repair without having to dismantle the whole structure. The gaps between butts are capitalised on to do this. Supposing that the butt to be extracted is in the third tier, the operation starts in the fourth tier: the two butts resting on,

and to the right and left of the one to be removed, are swivelled using levers and wedged in place with wooden chocks. With the fourth-tier butts fixed in their new position, and now forming a bridge that creates enough space for it to be manoeuvred, the butt in the third tier can be removed. Nowadays, there is machinery for performing this sort of operation, with full or empty butts, much more conveniently. Even so, traditional working methods still have to be resorted to quite often.

The *arrumbadores* are still the core workforce in the sherry *bodegas* as they always have been, and theirs continues to be a much-loved occupation. Broadly speaking, there are only two job categories in a *bodega*: *arrumbador* (general *bodega* worker) and *tonelero de viejo* (cooper). As a general rule, employees with special duties such as the *encargado de cuadrilla* (leader of a team of four *arrumbadores*), the *marcador a bajo* (whose job it was to mark the base of each butt destined for export with information about its contents), the *venenciador* (wielder of the *venencia* for tasting purposes), *capataz* (*bodega* foreman) and *catador* (taster) were selected from among the *arrumbadores*. Of all these métiers, only that of *marcador a bajo* has been lost: this is because exports of sherry in butts have now practically died out. The *venenciador's* job, meanwhile, has acquired new prominence.

The *venenciador*, whose job consists essentially in extracting a *venencia*-full of wine from each butt and pouring it into a glass so that the taster can classify it and ascertain its quality, has nowadays become something of a promotional figure for sherry and its attendant traditions at all kinds of

public and private events, in addition to continuing to play his part in *bodega* operations. The classic image of the *venenciador*, wielding his *venencia* with inimitable skill, is an elegant one, but the action also serves a practical purpose: as it travels through the air and strikes the glass of the tasting vessel, the wine is aerated and all its aromas are released. The *venencia* takes its name from the term *avenencia* (agreement) – a reference to the fact that samples were being tasted before deals were struck – and a depiction of one has been found on a painted crater (vessel for mixing and serving wine and water) dating from 490 BC. It consists basically of a cup whose diameter allows it to fit through the bung-hole of a butt, attached to a long, thin, flexible handle so that it can be eased between butts to reach the desired target. In the old days, *venencias* (which hold between 50 and 60 cubic centimetres / 3 and 3.6 cubic inches) were made of silver or silver plated metal, but today they are made of stainless steel.

COOPERAGE

Constructing containers out of wood for multifarious uses dates back to the most distant past: this is attested to by references in the works of such historic figures as Herodotus (900-800 BC), Homer (900 BC) and Charlemagne (742-814). The first mentions of wooden butts in the Jerez region occur in the fifteenth century. Historically, they were not just used for holding wine, but also for many other transport and provisioning purposes. Barrels were the most versatile receptacles, both on land and at sea: they were used for holding liquids and solids, including gun-powder, and indeed are still widely used despite the availability



VENDIMIA



PISA



BOTA AL RUEDO



ANDANA



TONELERÍA



TRASIEGO



VENENCIA



of so many modern-day materials for making containers of all shapes and sizes.

Various types of wood have been used for barrel-making, depending on the receptacle's intended purpose, but only mahogany, chestnut, cherry and oak have been used for wine. Of these, the best results in ageing and maturing wines have generally been obtained with oak, and this remains the case. Oak is a unique wood, and although its characteristic attributes are durability and strength, it is also elastic and malleable and can be cut and worked with ease.

The wine makers of the sherry region have always preferred American oak (*Quercus alba*) for their wines because of the lower levels of tannins and other compounds it contains – a characteristic capitalised on for the oenological concept of sherry. Casks are generically known in the sherry region as *botas* (butts), and those most

commonly used in the region in the past or present, in the *bodega* or for transport, include the following:

- The *bota gorda* (large butt): the cask most widely used for ageing, maturing and storing wines. Average dimensions: height 136 cm / 53.5 inches, girth 102 cm / 40.2 inches, capacity 600 litres / 158 gallons.
- The *bota de exportación, embarque* or *extracción* (shipping butt): formerly the type most widely used for export, though since the decline in exports of bulk sherry this is no longer the case. Average dimensions: height 130 cm / 51.2 inches, girth 95 cm / 37.4 inches, capacity 500 litres / 132 gallons.
- The *bota de recibo* (receiving butt): the measure in which buying and selling has always been conducted. Average dimensions: height 128 cm / 50.4 inches, girth 90 cm / 35.4 inches, capacity 516 litres / 136 gallons.
- The *bota bodeguera* (*bodega* butt): the type used for operations inside the *bodega*. Average dimensions: height

135 cm / 53.2 inches, girth 95 cm / 37.4 inches, capacity 566 litres / 150 gallons.

- The *media bota* (half butt): Average dimensions: height 100 cm / 39.4 inches, girth 74 cm / 29.1 inches, capacity 250 litres / 66 gallons

Other casks, some of which are still in use, include the 700 litre / 185 gallon *boco*y, the 125 litre / 33 gallon *cuarta de bota* and the 62.5 litre / 16.5 gallon *octavo*.

All these types of cask are constructed in the same way, regardless of capacity. Since cask-making has always been, and sometimes still is, practically a manual craft, it is appropriate to record here the most important operations carried out by the various cooperage workers when making butts. The tasks involved in manual cask-making relate to its three phases: preparing the wood, raising the cask and finishing. Preparing the wood starts with its reception at the coopers' yard in

Cooperage operations still call for a great deal of craftsmanship. Fire, water, and ~~secretly~~ ^{secretly} bearing by the coopers' hammers continue to be the only way to bow the staves and give the cask its final shape.



batches of 1,200 staves, each batch being known as a *millar de duelas*. The first operation is to grade the wood according to what type of cask it is most suitable for, cut it to the right length, then leave it to dry for a while. The second operation consists of splitting the staves, unless they have arrived flat, for rough staves are approximately triangular in section; splitting is essential to create impermeability since the stave is structured longitudinally along the pith radius. This operation is carried out by the *dolador* (rack cooper), or sometimes the *aviador* or *escalavetero* (sawyer). Next comes the process of *apareado* (trimming and shaping), carried out by the *dolador*: this involves making the staves the right thickness, smoothing them off, trimming the edges of the outside surface to give them external curvature, hollowing the inside surface to produce the same curve, chiving (tapering the stave towards both ends to give the cask its shape) and smoothing and bevelling the edges so

that the staves will fit tightly together. The prepared staves are then stacked up for further drying. The *dolador de fondos* (headpiece cleaver) prepares two headpieces for each cask.

When the staves are ready for use, the cooper, assisted by one or more apprentices, raises the cask. He starts off by selecting the appropriate number of staves, then places them inside the (provisional) head-hoop until the circle is complete. The (also provisional) bulge-hoop is then placed over the centre of the staves so that they are now joined in the upper part encircled by the head-hoop and held together by the bulge-hoop, while the lower ends of the staves splay out into a truncated cone-shape. Five truss hoops are now placed on the upper half of the cask, and the two provisional ones are removed. The cask is then moved to the *batidero* (driving-slab) for knocking into shape: heat is provided by burning wood offcuts and shavings in a small brazier put inside the cask,

and the wood is dampened periodically to prevent scorching. The staves are bent into position and a shaping hoop is hammered into position so that it bows them, gradually shaping the open end of the cask inwards. The five truss hoops for this end of the cask are then put on and driven home, and the shaping hoop is removed. It is then 'boxed' (checked for shape, with uneven staves being corrected by beating with a mallet from the inside), and removed from the *batidero* to cool before being finished.

The finishing process begins with 'hooping' the cask, namely removing the truss hoops and fitting the definitive ones, and the outside joints are shaved. The next operation is known as *arruñado* (topping): the inside edges of the staves are bevelled and the stave-ends are levelled; the inside surface of the staves is then smoothed, and the *jable* (croze or groove) into which the head will fit is cut. The stave-ends are made completely smooth, and the cask

is ready for the heads to be fitted. It is then laid on its side and the bunghole and false (opening in the head or front) are made, after which it is filled with water so that it can be checked for leakage. All the operations described are performed manually by the cooper with the help of an apprentice or apprentices.

The cooper's craft – using the term to embrace all its specialisations (*aviador or escaleretero, dolador and casquero*) – has a very long history in this area. Apart from its toughness, it calls for certain personal talents and skills which were traditionally handed down within the family: the relationship that has existed between some cooperages and specific families of coopers (known as *hijos de la cuchilla* – sons of the blade) would seem to support this assertion.

Some of the tools used in this craft are completely original and exclusive to it: they include the *galafate de punta* (hooked implement for securing head-pieces while they are being put in place), the *coqueteador* (iron bar with double hook at one end and wedge at the other) and the *jabladera* (croze).

VOCABULARY

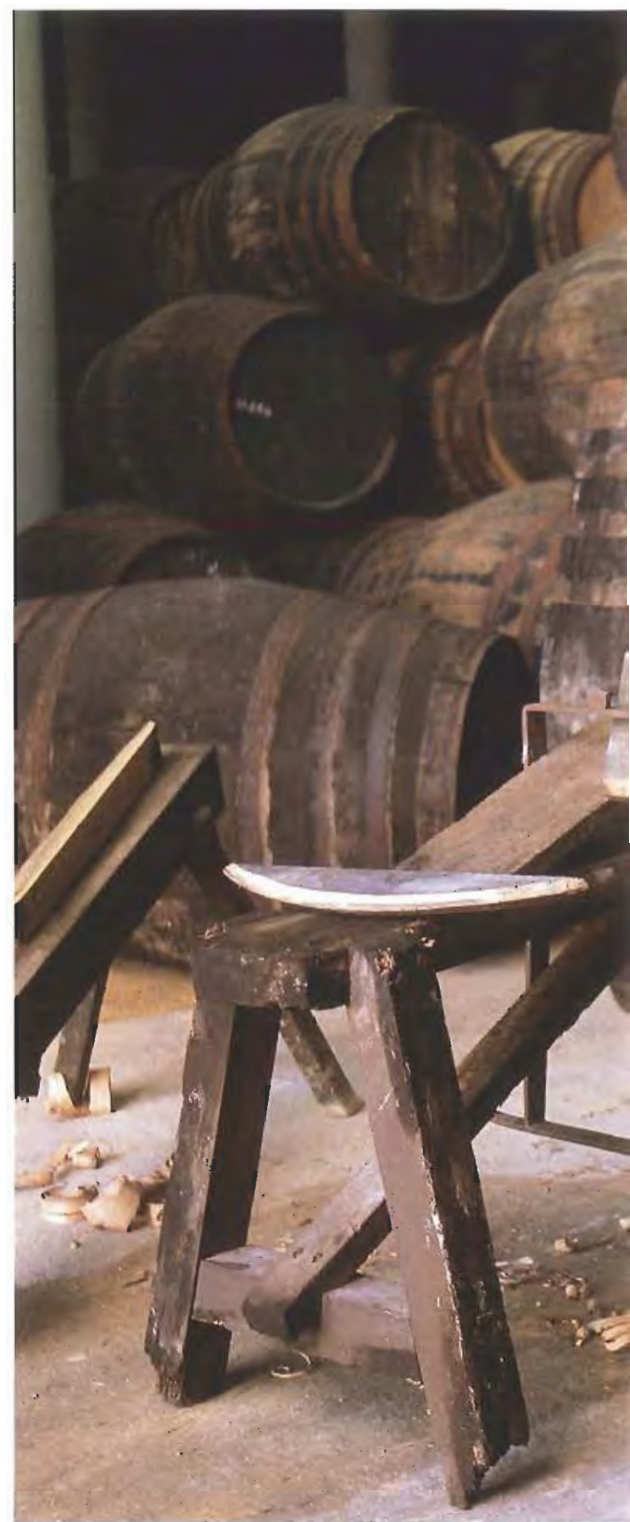
Man begins to be master of his subject when he has succeeded in putting a name to all its various parts and elements. Many years of wine-growing tradition have generated a vocabulary specific to sherry, the working of the land and other vineyard operations, its *bodegas* and cooperage. It is not, however, completely uniform throughout

the Denomination of Origin area – slight variants may occur from one place to another. The vocabulary has emerged on the basis of commonly used terms, with modifications of them resulting from at least three causes: shift of meaning, metaphor and metonymy. Differences also result from local pronunciations and enunciation differences between one person and another, so that it can be difficult to identify accurately the word that one is attempting to record.

Many terms are clearly derived from words of maritime origin: this is hardly surprising given how close the *bodegas* and coopers' yards were to sea ports, shipyards and arsenals, and the wine trade's connection with containers for transport. There must have been constant interchange between the trades and crafts on land and sea, with vocabulary – with and without modifications – being absorbed in the process.

The vocabulary in use is very extensive but under threat from technical advances, with words falling into disuse as the tools or operations which generated them in the first place disappear. As is always the case, some will be consigned to oblivion while others will survive the onslaught of technology and fashion intact. Part of the lexicon may even be reinforced in its daily use, and there will inevitably be new additions and specific applications of existing words.

The glossary gives the meanings of the words used in this chapter, plus a few others in everyday use by *arrumbadores, tonejeros and viticultores* as they go about their work.







Título: Catedral

THE ARCHITECTURE OF SHERRY WINES

MARÍA JOSÉ YRAVEDRA SORIANO

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The architecture of the *bodegas* within the area covered by DO Jerez-Xérès-Sherry and Manzanilla-Sanlúcar de Barrameda, and the way that they fit into their urban setting and the wider landscape, constitute a unique heritage that is an essential part of the culture surrounding sherry and manzanilla.

That this architecture actually contributes to the art of sherry wine vinification and ageing is a generally acknowledged fact. Not only does it fulfil the technical and functional brief of accommodating all the trade-specific tools, equipment and infrastructure, but it also enhances the creation of a bioclimatic habitat whose constant temperature and humidity levels foster the development of the delicate film of *flor* yeast inside the butts during the ageing process. The *bodega* serves the function of translating natural external factors that are subject to changing weather conditions into the consistent microclimate of the space occupied by the butts of wine.

VINIFICATION WINERIES

Unlike other vitivinicultural regions, where the vinification and ageing wineries stand alongside each other in the vineyard itself, sherry wine making requires two distinct architectural units: one a wine-making facility for producing the base wine, located in the vineyard out in the countryside, and the other an ageing bodega, situated in town, that provides the

hygrothermal conditions that the wine needs for this process.

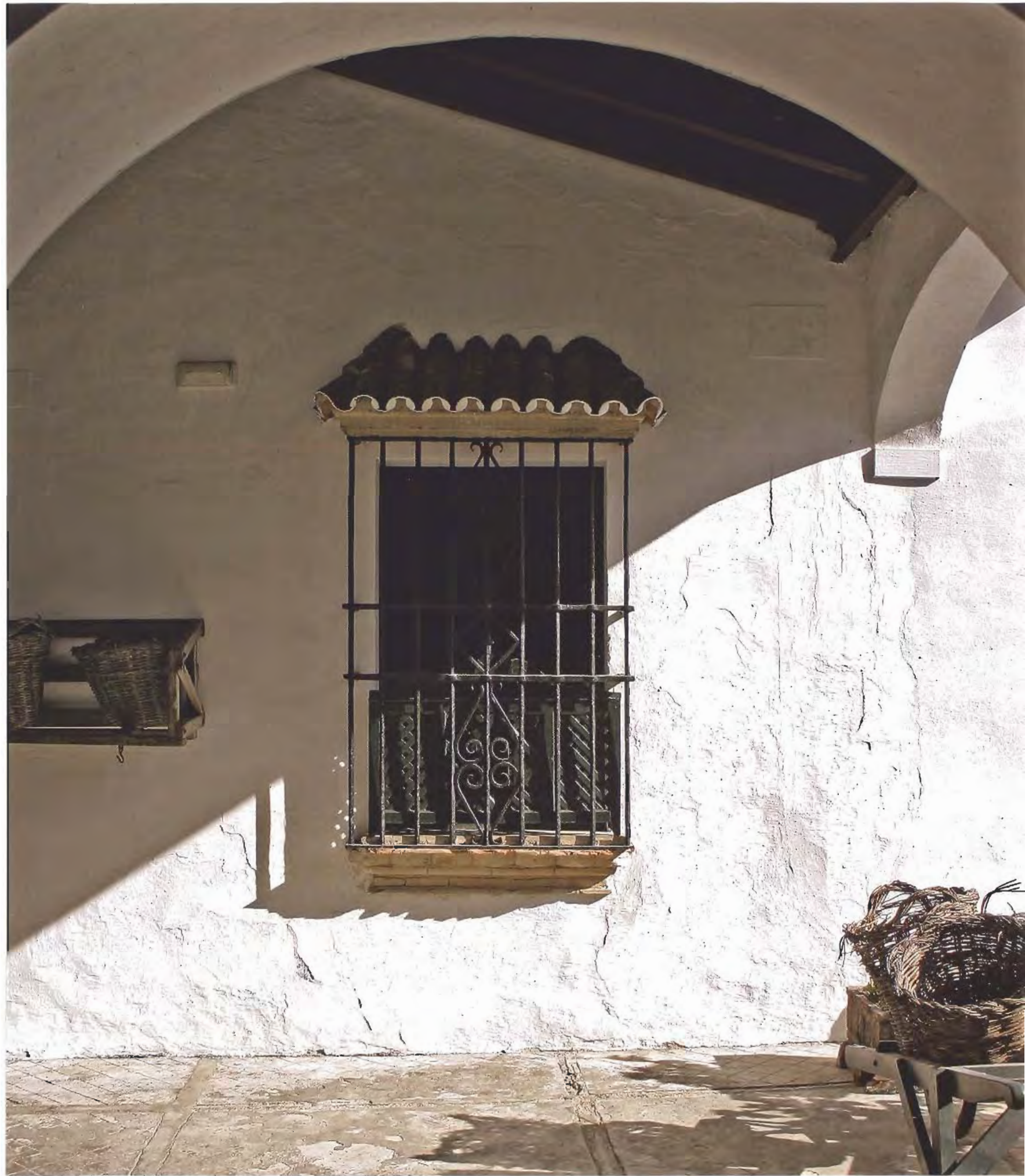
The vinification wineries generally stand on slopes, most of them in the Guadalquivir Valley, and deal with taking delivery of the grapes, pressing them and fermenting the must. Nowadays, the big sherry companies are investing in building new vinification facilities, designed to incorporate the latest oenological technology and seeking to reconcile innovation, technology and production.

Until quite recently, however, vinification was carried out in what are known locally as *viñas* – small, isolated buildings dating from the nineteenth and the early twentieth centuries, whose design reflected the traditional vinification process inherited from the Romans and the three-part spatial division typical of the Mediterranean: the vineyard, the wine-press and the amphora warehouse, all situated close to major rivers and roads.

These ancient press-houses, most of which are still in use today, stand out from the otherwise uniform flatness of Jerez's vine-covered landscape because they are surrounded by little oasis-like gardens with fruit and palm trees, and have a tower emphasising the vertical note. Part of the building housing the bodega is given over to living quarters, usually big enough for one family. The building's two different functional areas are organised around an *almijar*, a rectangular walled courtyard usually facing south or south-east, where grapes are taken in and 'sunned' (sun-dried) and which is also the way in to the living quarters. The *almijar* therefore provides access

The archaic character of sherry wine architecture is already apparent in the vineyard press-house.







to the water-cistern and the *bodega* as well as to the stables, sitting room, kitchen and chapel.

In the past, the grapes were delivered through an outside window, known as a *piquera*, which gave directly into the *lagar*, a square, slightly tilted trough where the grapes were trodden. For pressing, they were heaped up with their skins inside a cylinder wound from plaited esparto grass, and pieces of wood were placed on top. The whole thing was then positioned

under a thick elm beam running the length of the building. The thicker end of this beam was transversed by a horizontal iron bar called the *lobo*, or wolf, whose ends were set between two posts or *merinas*, which supported a thick wall that counterbalanced the beam's great force, and that was designed to resist its pull. The counterweight was located in the tallest section of the entire building, extending up into a tower topped by a Serlian (triple-arched) arcade outlined in brick. One end of the

beam was raised over the press's screw, and the other was lowered until the counterweight was left hanging. The fermentation cellar was located in the next bay alongside the press, set lower down than the *lagar*, where the clay *tinas*, or vats, were filled by gravity with the recently-pressed must¹.

Whether produced in an old press-house or a modern vinification facility, fermented must is transported to the big maturing *bodegas* located in Sanlúcar de Barrameda, Jerez de

These press-houses with living quarters attached, often surrounded by fruit and palm trees, look like little oases amid the vast expanse of sherry vineyards.

*1. This description appears in detail in the book entitled *Semanario de Agricultura y Artes* for parish priests, volume IX, 1801, pages 59-112.*

la Frontera and El Puerto de Santa María, to develop the extraordinary organoleptic characteristics typical of sherry wines.

AGEING BODEGAS: SINGULAR BUILDINGS, KNOWN WORLD-WIDE

A study of the history of *bodega* buildings reveals that their typology is influenced by geographical location and by degree of technological sophistication. Each period and culture develops a specific model or type characteristic of that time and place to meet the environmental and functional requirements of the wines it makes. It is unsurprising, therefore, that each region and Denomination of Origin has its own specific style of wine-related architecture.

We are all familiar with eloquent examples of wine-related architecture – the most outstanding include the monumental parabolic arches designed by Spain's Modernist architects for Catalonia's cellars, and Bordeaux's iconic châteaux. Then there are the castle wine-presses of the Loire Valley; modern, twenty-first century wineries in the Napa Valley; the *arquitectura de tierra* ('earth architecture') of the underground cellars known as *calaos* in Spain's regions of La Rioja and Castile-León (the presence of these anonymous traditional constructions is betrayed in the landscape only by circular ventilation shaft known as *tuferas*). And, of course, the "wine cathedrals" of Jerez, the real protagonists of this chapter, which provide the special microclimate needed for a film of *flor* to develop inside the butt.

These emblematic buildings have

considerable social impact: they are perceived as "classics" – a universally recognised image with an exclusive identity that is theirs and theirs alone. Not for nothing do companies capitalise on the architecture of their bodegas as international symbols to transmit a message about the wines they produce.

But architectural typology is never random; it reflects a whole set of functional and climatic factors and indigenous socio-cultural traditions that make their mark on the way that buildings are designed. The logic behind all architectural design decisions is driven by experience and extensive research. In wine-related architecture, this produces original models that respect tradition and the need to provide hygrothermal conditions conducive to the 'well-being' of the specific wines of each denomination of origin and region.

In the case of DO Cava, the architecture of choice is subterranean, a typology that has little contact with the outside world and that can of itself maintain the hygrothermal conditions that this type of wine needs. In DO Jerez-Xérès-Sherry and Manzanilla-Sanlúcar de Barrameda, the bodega typology – i.e. its architectural forms and building materials – has always been adapted to the local climate. The exceptional climatic conditions of Jerez de la Frontera, Sanlúcar de Barrameda and El Puerto de Santa María have shaped their architecture in a way that is unique in the world and that transmits the favourable aspects of the mild, humid climate to the habitat inside the oak butt. Meanwhile, its constructional elements provide protection for the wine in

the making against forces that might affect its vinification and development adversely.

THE LAYOUT OF THE CRIANZA BODEGAS

The *bodegas* where sherry wines are aged are situated right in the heart of Sanlúcar de Barrameda, El Puerto de Santa María and Jerez de la Frontera, where the big sherry houses have grouped their various buildings into walled enclaves that are almost little towns within those towns.

Visitors are invariably astonished when they pass through the gates into these bodega complexes. Time stands still and the distinction between public and private blurs: the buildings for ageing and shipping wines, and movements among them, are articulated by a labyrinthine network of streets and squares lined with orange trees and rose bushes. These complexes create a unique experience, seeming to encapsulate another dimension of space and time. But protecting *bodegas* within walled precincts is far from being exclusive to Andalusia: it is a pattern common to other eras and other cultures. Clear precedents for enclosed wine production units are found in Tell el-Amarna in Egypt, the Phoenician bodega-fortress of L'Alt Benimaquia in Alicante, the monastic wine-presses of Cistercian abbeys, Renaissance bodegas and some New World *bodegas*. An outstanding Cádiz example, dating from the Phoenician period, is the walled precinct excavated at the Castillo de Doña Blanca site.

As one strolls around the streets of the *crianza bodegas*, it is interesting to note that their layout has evolved gradually as buildings have been added, thereby

The cathedral-bodegas are unchallenged as the Jerez region's most impressive contribution to wine architecture.





echoing the traditional Andalusian urban pattern of narrow winding streets. Shaded by vine arbours, these streets serve not only to articulate the space, but are also walkways that accommodate and channel the flow of visitors, places where one can take shelter from the sun or rain, and conduits for the gentle breezes blowing in off the Atlantic. By functionally integrating the working areas of the *bodegas* with restaurants, shops and leisure areas, these pedestrian walkways serve as recreational-educational spaces for the

culture that surrounds sherry. There is an added dimension to the wineries' remit these days in the form of tourism, so that they are now cultural complexes as well as sources of wine and have to be organised accordingly.

BIOClimATIC AND SUSTAINABLE ARCHITECTURE

The form of an architectural design reflects its function. The physical elements of the environment, such

as its natural morphology, setting and the effects of its topography (orientation, urban structure, lie of the land, vegetation, level of noise and vibration, pollution) and the climate (microclimate, sunshine, prevailing winds, ventilation, light), all have a direct bearing on the choice of location, orientation and ideal shape for a bodega, and of materials that provide protection from the sun and transmit the beneficial features of climate outside into the winery building.

This section aims to examine the

The walkways between the different bodega buildings articulate the winery complexes.



underlying principles governing the architectural resources – basically evaporation, radiation and the use of underground spaces – deployed when creating an ideal habitat in which sherry and manzanilla wines can be aged in a natural way.

Climograph of architectural conditions for sherry confort

Just as the environmental dynamic of changes in the weather fosters the development of the grape on the vine,

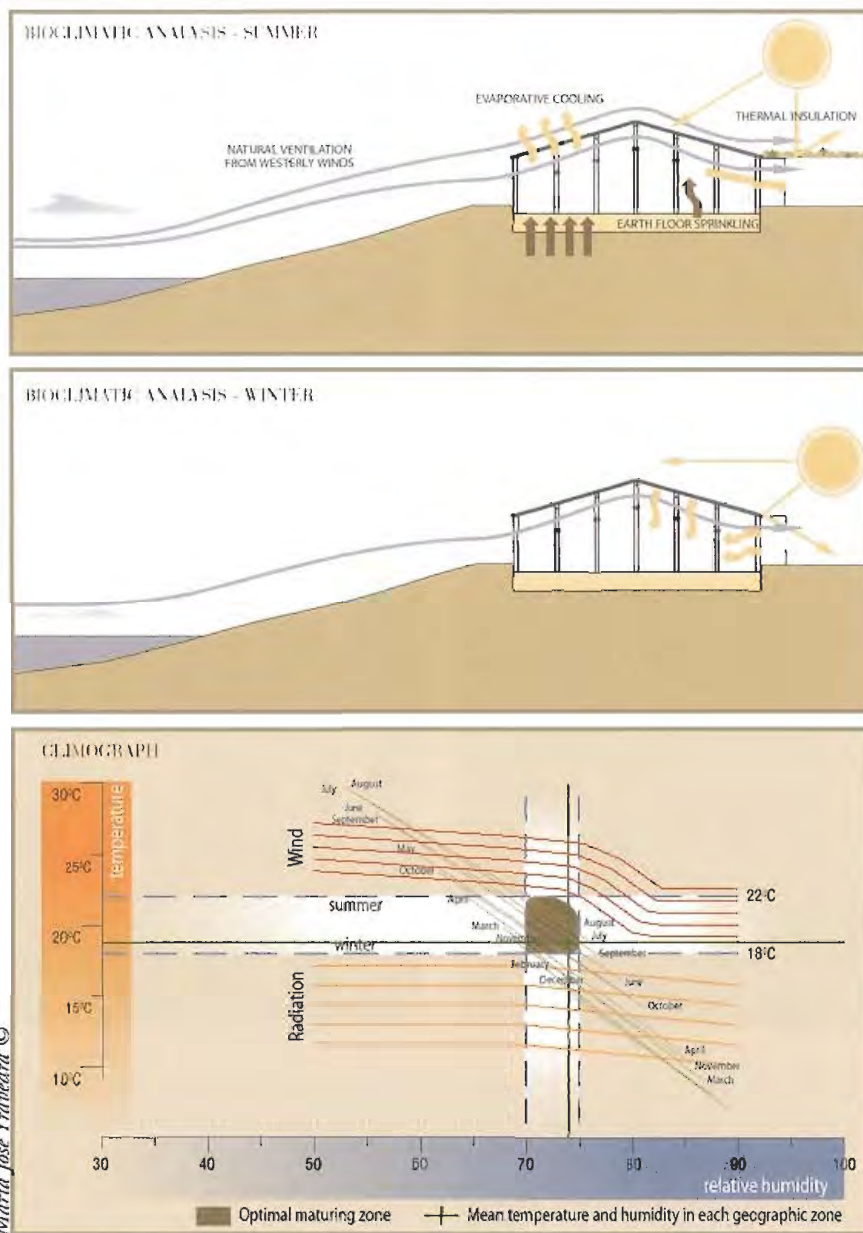
the habitat that sherry wines require during their long process of ageing calls for hygrothermal conditions to be as stable as possible. The climograph depicting conditions for well-being during the ageing period that appears on page 254 shows that the ideal architectural spaces are those that gradually enhance the wines' sensory characteristics.

Sherry wine bodegas are situated between latitudes $36^{\circ} 54'$ and $36^{\circ} 20'N$ and longitudes $6^{\circ} 20'$ and $6^{\circ} 09'W$, where

the hygrothermal values required for the maturation of fino and manzanilla wines create true microclimates. These are achieved naturally, without the aid of any sort of mechanical air conditioning, simply by clever architecture that keeps harmful external agents out while allowing beneficial climatic effects in, and maintains the hygrothermal levels needed for *flor* yeasts to grow.

Architectural design therefore dictates a building's orientation, shape and the choice of materials that respond

Each of the architectural elements of a bodega – location, materials and design – contributes to creating an ideal habitat for ageing sherry wines.



appropriately to environmental conditions outside the bodega.

In a bodega, both the orientation of the ground plan and the structural characteristics of the façade and roof behave as filters that slough off those elements of the weather that are

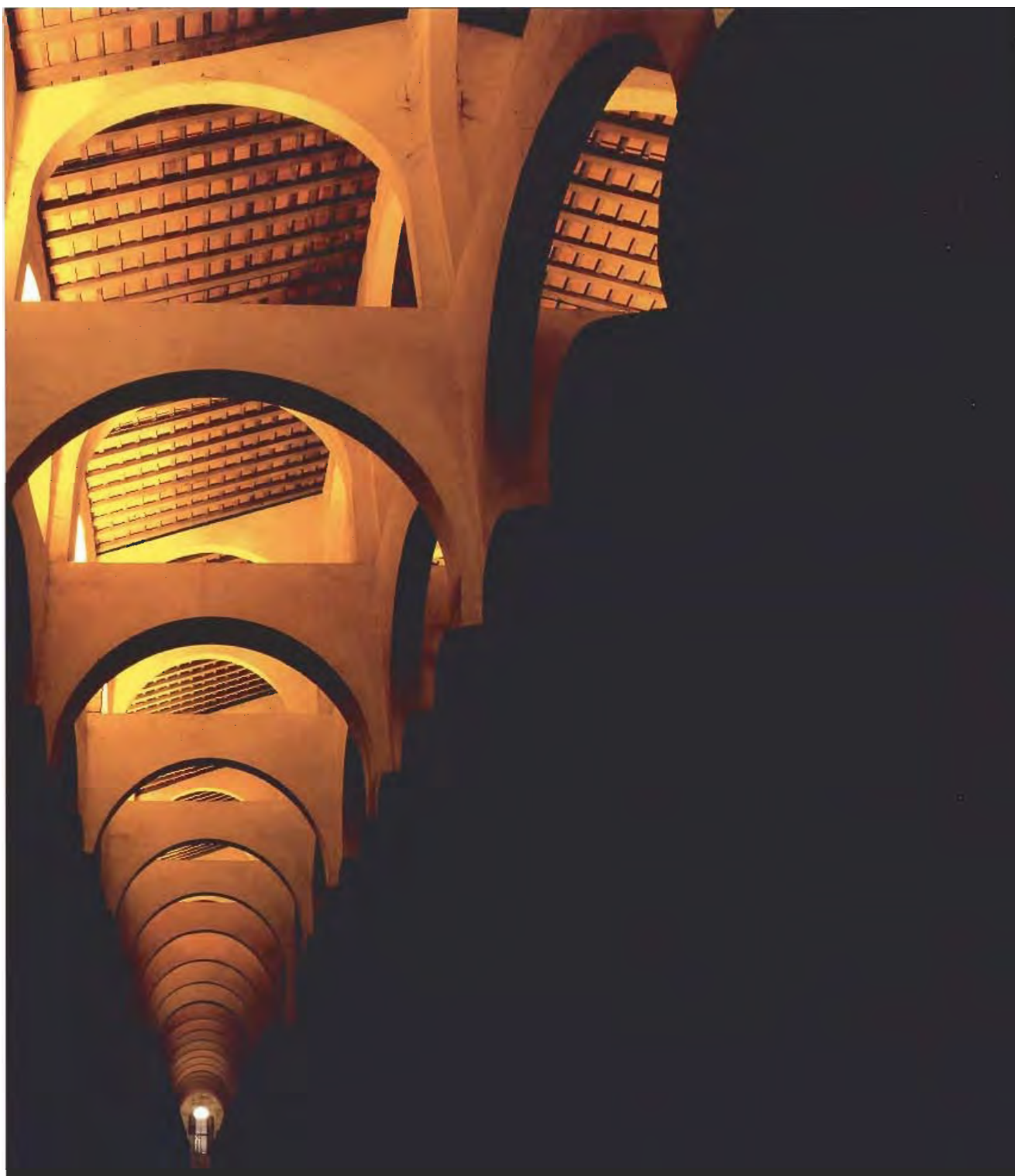
harmful to the ageing wine and allow in the beneficial ones. Fluctuations in temperature inside the building are prevented by the walls' thermal inertia and permeability to moisture, so that day and night hygrothermal conditions are kept constant. In addition to all of these bioclimatic considerations, the

exothermic process generated while the film of yeasts is forming inside the butts releases a certain amount of heat, which also has an effect, albeit slight, on the temperature in the bodega.

The graph on the left presents a "confort" diagram for the maturation of wine in a bodega located in Sanlúcar de Barrameda, where manzanilla is aged all year round. The mean temperature (18 degrees Centigrade / 64 degrees Fahrenheit) and average external humidity (74.25 percent) coincide with the ideal values for ageing manzanilla inside a bodega (18-22 degrees Centigrade/ 64-72 degrees Fahrenheit, 70-75 percent relative humidity).

As the graph shows, December and January are the only months whose temperatures do not match the required "wine wellbeing" threshold: this hiccup is solved by the façade's being heated up by the sun. During the period when nights are colder (the temperature never falls below 0 degrees Centigrade/32 degrees Fahrenheit), the walls' thermal inertia transmits accumulated heat into the interior of the bodega, thereby maintaining the temperature levels needed for the wine to develop under a film of *flor*. In July and August, overheating of the façade only affects the interior of the bodega at the end of the day owing to the thickness of the outer walls; this effect is counteracted by sprinkling the bodega's compressed *albero* (earth) floor with water. The oxygen conditions thus created in the winery space are transmitted through the fine pores of the wood to the empty space inside the butt (the wine occupies only five sixths of its capacity) and enable the sensitive *flor* yeast to develop.

The orientation and design of a bodega, together with the structural characteristics of its façade and roof, optimise energy use while keeping adverse climatic factors out.



The enormous volume of air inside a bodega and its well-managed ventilation make it possible to maintain the temperature and amount of oxygen required by flor.



Ground plan orientation

Bodegas are built in strategic places where the gentle southerly and westerly winds blowing in from the Atlantic can circulate easily. These breezes, locally called *vagíos de mar*, are laden with the moisture needed for the development of *flor*.

This is why the positioning of the *bodega's* rectangular plan relates to the prevailing winds rather than to the geometry of a site: as a rule, the building's longer axis runs northeast-southeast so that moisture can get into the interior of the *bodega* unimpeded. The other side of this coin is that the building blocks out the harmful *levante* winds from the east and north-east: these strong, dry winds blow in from the Gulf of León and the Sahara. The way that the *bodega* is oriented also minimises the effects on its walls of the hours of strongest sunshine.

Air volume and ventilation

In 1936, the *Centro de Investigaciones Vinícolas* (the Wine Research Centre) conducted an interesting series of

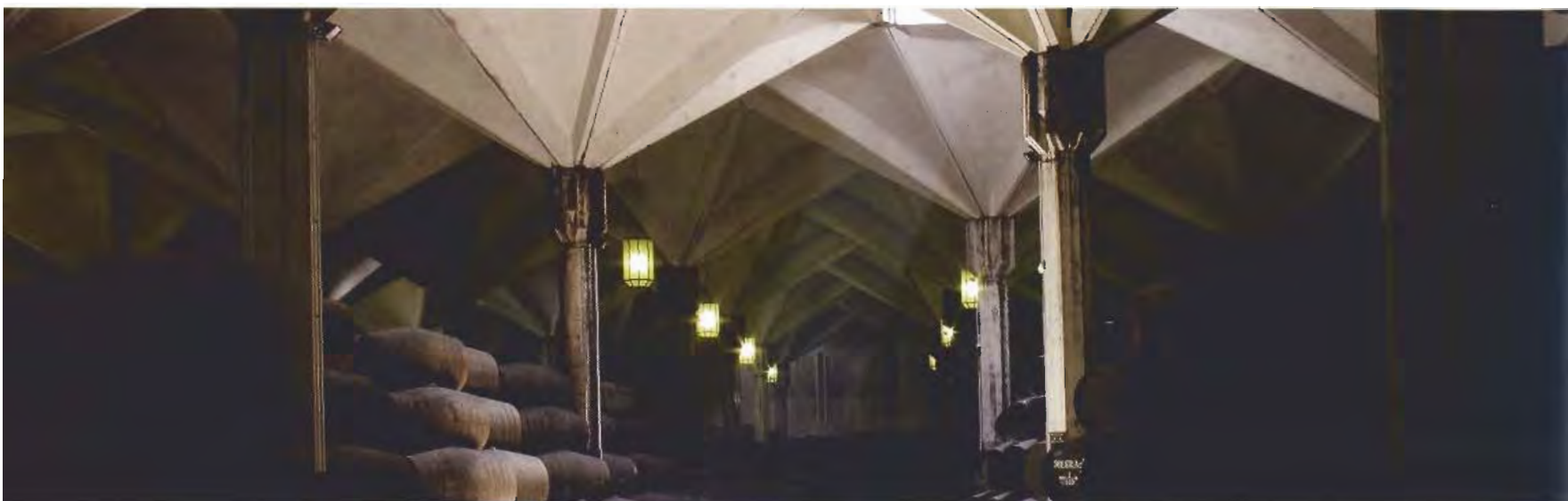
experiments designed to study the behaviour of pure culture yeast in semi-industrial conditions and compare it with spontaneous *crianza* in the best *bodegas* in the region. From these studies it was deduced that aerobiosis is proportional to the ease with which the confined atmosphere is renewed. The study evaluated the percentage of substances that evaporated during the process of ageing in soleras, and showed that ethyl alcohol diminishes during the course of maturation as a result of evaporation, and above all, oxidative reaction.

The interior space of a *bodega* consists of a large volume of air whose function it is to provide *flor* yeast with the oxygen it needs to develop inside a butt. Additionally, this huge space acts as an insulating chamber that regulates temperature and humidity. Its height is conducive to induced ventilation – a stack effect caused by the difference in temperature when the wind is not blowing from the Atlantic. The heat tends to rise and accumulate in the

bodega's upper spaces; by means of vents placed high up in the east and west walls, a dynamic vertical and horizontal draught is created that pushes the accumulated hot air out.

On average, the estimated volume of air inside an ageing *bodega* is 8.8-9.8 cubic metres/310-346 cubic feet per butt. Given that a sherry butt contains 490.7 litres of wine, this means that 0.018-0.020 cubic metres/6.35-7.0 cubic feet of air are needed per litre of wine to meet the hygrothermal conditions required for it to age well.

Engineers, technicians and architects who have turned their attentions to the wines of Jerez have triggered major oenological advances. In 1963, Spanish engineer José Antonio Torroja designed a ventilation system for the Tío Pepe *bodega* that controlled the entry of the breeze off the Atlantic by means of a continuous horizontal lattice along the top of the whole length of the façade and an air chamber in the enclosure wall. A few years later, in 1967, Spanish



architect Miguel Fisac designed Garvey's San Patricio bodega, creating an innovative structural system that simulated the self-ventilating effect of the curved *teja árabe* (known in English as 'Spanish tile') used in the "wine cathedrals" of old. The flat roof made of hollow post-tensioned concrete beams called *huesos* (literally bones) allows air to circulate freely.

Temperature and humidity

The temperature inside an ageing bodega should be within the range of 18-22 degrees Centigrade/64-72 degrees Fahrenheit, and humidity 70-75 percent. The complete absence of underground cellars in the region is explained by the fact that the ideal temperature and humidity conditions for ageing wine in the sherry region match the mean annual conditions outside, namely 18 degrees Centigrade/64 degrees Fahrenheit and 74.25 percent relative humidity.

As discussed, the great height of these lofty bodegas allows temperature and moisture conditions to be kept stable

throughout the year. Variations in the level of relative humidity in the air are produced by the physical phenomenon of evaporation, which requires the presence of transferred or absorbed heat.

Façade and wall behaviour

External walls both separate and connect an unstable outside climate and a stable indoor habitat. Temperature transmission occurs via three phenomena: conduction, convection and radiation.

The façade walls of *crianza bodegas* are generally built of sandstone or rough brick with a sand-lime mortar aggregate. Occasionally, though much less frequently, they are stone-built.

Bodega walls are usually single-skin and at least 60 centimetres thick, so that the wall mass, which is thermally very inert, compensates for the absence of any specific thermal insulation. At the same time, because they are made of very porous materials, these walls contain numerous interlinked





microchambers of air formed by a host of natural capillary ducts. This network of ducts draws water up by capillary action and directs it to where it can evaporate, generally the hottest part of the wall, thereby creating a cooling flow through the part where the temperature is highest.

In summer, the south façade of a bodega is shielded from the sun by screens of vegetation in the form of trees or pergolas in the streets that run alongside it. These serve as natural sunshades, absorbing the sun's radiation and providing perforated canopies that let through the gentle breezes that make their way into the *bodega* and keep hygrometric conditions at the proper levels. In winter, when the leaves of these deciduous canopies fall and leave the walls exposed, the big expanses of whitewashed façade attract the sun's rays, storing the heat and transmitting it to the bodega's interior during the night.

As a general rule, the interior face of these walls is clad in plaster, a building material that acts as a moisture regulator which can readily dissipate



humidity up to 100 per cent, and can absorb up to 40 percent, leaving the surface completely dry. Even so, because the relative humidity inside a *bodega* is higher than 70 percent, and owing to the thermal bridge effect, condensation forms on the cold surface of the wall and inhibits the appearance of mould and damp patches.

Structure and construction

A *bodega's* structural design is always based on its functional aspects, such as the distance between rows of pillars and the loads that the structure has to support. The aisles tend to run parallel to the longitudinal axis of the nave, and a system of porticos runs perpendicular to the dominant direction of the building.

The distance between the rows of pillars is usually around 5 metres. The width of the working aisles between the rows of butts is described in *bodega* language as *ruedo y bretona*, meaning that a butt can be rolled along while still leaving room for another to be placed parallel to the axis of the aisle – a very precise measurement that takes the butt as its basic module.



The windows are generally set high in the upper third of the walls. They are small, rectangular or square in shape, and arranged in symmetrical, repeated rhythms. The arches that support the roof structure are designed to let the breezes in and allow the air that comes in perpendicular to the nave's longitudinal axis to circulate. Windows in the pediment and triangular areas of the gabled façades are sometimes replaced by little circular ones, or oculi.

The La Palma bodega, built in 1810 by Bodegas Osborne – a slender, cathedral-like building with pointed arches – is a fine example of this type of architecture. Equally notable is La Arboledilla, owned by Bodegas Barbadillo, whose six naves are configured by pilasters of rough brick supporting rounded arches, and whose roof beams are made of Flanders or Riga pine.

One of Jerez's most famous buildings is González-Byass' La Rotonda, better known as La Concha (The Shell) because of its arcuate segment structure. Dating from 1870, this is one of the first examples in Spain

The half-light that reigns inside a bodega, created by sparto-grass blinds, acts as a temperature regulating mechanism.

Certain building elements – such as the little circular windows in the pediment – are decorative motifs as well being functional.





of building with riveted metal pillars and trusses. These are placed perimetrically so that there is no need for central supports, thereby freeing up the space inside so that butts can be manoeuvred more easily.

Occasionally, the typical square or rectangular ground-plan on a single level and the slender pillars structuring a “wine cathedral” can be suggestive of a Moslem mosque: both are open-plan spaces that make rhythmic use of a double system of arches or Cartesian porticos and gable roofed naves.

In 1971, civil engineer J. Soto produced a design for Domecq

based on the image of a mosque. “La Mezquita” has a rectangular ground-plan with a double system of parallel and perpendicular arcades, with horseshoe arches below and rounded ones above, constructed using three orders of single hollow brick and a version of the Arabic roll modillion in the geometric shapes linking the pillars to the horseshoe arches.

Flooring

The *bodega* floor is covered with *albero* earth that, depending on the season, can be sprinkled with water to regulate the temperature and humidity inside the building. *Albero* is a very porous material that, when saturated, lowers

the temperature and keeps it cool by gradually releasing water into the atmosphere.

Light

The height at which the windows are placed, and the esparto-grass blinds with which they are covered during the day, create a diffuse, diagonal light that remains consistent despite the changing position of the sun in relation to the walls of the building. In addition to controlling the quality of light, the blinds and lattices sometimes placed in the vent openings filter the air, preventing dust or undesirable insects from getting in.

The size of a butt is the module on which the overall dimensions of a bodega are based, dictating the specific width of the working aisles between the tiers.



The uniformly subdued light inside the bodega also serves as a temperature regulating instrument, and is essential to preventing any disturbance in the butts.

Roofing

The roof is one of the most important elements in the design of a crianza bodega, since the amount of sunlight that strikes the roof and façades must be kept to a minimum. The gable roofs of the “wine cathedrals” produce

their own shade: sun exposure is minimised by the microshade shed by the ridge tiles over the regula ones, and subtle draughts of air are created among the tiles of the roof.

All these technical facets exemplify the ways in which a bodega represents what might be called “bioclimatic architecture for wine”, within whose spaces its organoleptic characteristics are shaped over time.

Today, the new variable represented by tourism needs to be taken into

account when designing circulation routes within a bodega. *Bodega* buildings are increasingly functioning as museum spaces that exhibit the culture attached to their product as well as standing iconically for their company and for quality, tradition and innovation. Their role in shaping the way that sherry is perceived is an important aspect of their function.

Bird's eye view of the wineries' layout and roof shapes.

Architectural spaces lend bodegas a museum-like dimension in keeping with their role as disseminators of sherry quality and culture.





Título: Fiesta

THE ART OF DRINKING, THE ART OF LIVING

CARLOS DELGADO GONZÁLEZ

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Wine is one of the primal and eternal forces of the world and of life". Declares Spanish philosopher José Ortega y Gasset. For King Solomon, famously wise, "Wine hath the faculty of uplifting the mind", while Louis Pasteur considered it the healthiest and most hygienic of drinks. In short, wine has always been central and essential to the art of living. In Mediterranean cultures, wine has historically been a major source of enjoyment and one of the finer pleasures: Seneca, the great moralist from Cádiz, recognised that "wine washes away troubles"; Apicius, the first writer of gastronomic treatises in Antiquity, taught the art of drinking large quantities of wine without dulling the senses; the Greek heroes praised by Homer attained the highest level of refinement in the art of living with a drink made from wine, honey and grated goat's cheese.

For as long as anyone can remember, we Spaniards have used wine to mark important and festive occasions, for the most part pairing it with food, an inseparable part of the enjoyment. For us, knowing how to drink is part and parcel of knowing how to live, no matter what some may say to the contrary. This harmonious relationship is expressed in the build-up to any gastronomic treat, when *savoir vivre* takes the shape of the aperitif, that first drink that leads into a meal. This is a crucial moment, when the true art of living is put to the test. Choosing the right drink to start with is essential to the enjoyment of the event to come. Picture the scene: you are in a restaurant – that stage of the

proceedings while you wait for your fellow-diners to turn up, or while you are all choosing what you are going to eat and then sitting back until the first course arrives, calls for a drink. Choosing this well involves the art of *savoir faire*, of *savoir être*. It needs to be a drink that prepares the stomach without generating heat or filling it up with liquid or gas; it should be mildly tonifying; it should quench thirst during the hotter months without having to ingest too much liquid; it should be subtle in flavour, not too fruity or too sweet on the palate, and preferably with a slightly bitter aftertaste. It takes a minor miracle like a fino sherry or a manzanilla to meet all these requirements. Both these wines have the effect of a morning shower, waking up the senses and preparing them for business. Owing to the singular process by which it is made, with "biological ageing" as a key feature, and the resultant smoothness and immensely elegant, complex aroma, there is a freshness and sharpness to fino that boosts the spirit and improves mood, both mentally and physically. Its character and pedigree give it a natural superiority over other drinks of varying degrees of sophistication that fizz in the glass or overflow with foam. There is nothing to beat it in combination with pata negra ibérico ham, nuts, or mouth-watering olives as an appetite stimulator. Its fresh, smooth flavour is not overpowering on the palate and does not obstruct the enjoyment of other wines as the meal progresses. Savouring a fino or a manzanilla as a preamble to the meal is more than just a pleasure for the senses: it really is an example of the art of living. It primes one's senses for further enjoyment to come.

Sherry is associated with special occasions, enjoyment and the art of living; but the fact that it has enormous gastronomic potential is also gradually being recognised.





And thus launched, one can continue the meal with certain other members of the noble family of 'vinos generosos' from Jerez. The fuller bodied amontillados and olorosos are not just for drinking alone, or over leisurely conversation with close friends, but are also a marvellous accompaniment to many dishes, from consommés and cold soups to fish and seafood, also revealing a surprisingly exciting compatibility

with strong-flavoured meats, such as ox tail and young wild boar. The weight of these wines, their aromatic complexity and dry, smooth palate mean that they can hold their own alongside most foods. This includes the whole range of cheeses, with which they combine beautifully, their generoso nature adapting selflessly to lactic flavours. Rounding off a meal could not be sweeter: this is when Pedro Ximénez, a

A glass of sherry stimulates the senses and raises the spirits. The wide variety of styles means that there is a type of sherry for every occasion and every palate.



rich quintessence of nectar, honey and dried fruits comes into its own.

It has taken evidence from medical, nutritional and other physical and mental health experts for the life-enhancing benefits of wine to be acknowledged at long last. This is something that sherry lovers have known about since time immemorial, and that the repertoire of Spanish

proverbs encapsulates with the usual wit, as in: "Drinking within reason prolongs life's season." Drunk in moderation, wine is an inexhaustible source of satisfaction and health. Nobel Prize winner Alexander Fleming, a committed fino enthusiast, jokingly compared it to his providential discovery, penicillin. Today, the art of living healthily and the art of drinking good sherry go hand in hand.

This is so because, owing to its nature and composition, sherry in all its manifestations is a natural drink in whose making only nature is involved, albeit under the supervision of an expert *bodeguero*. Unlike other types of wine, it contains only the slightest traces of sulphurous anhydride, one of the preservatives most used in alcoholic drinks. In the process of their idiosyncratic "biological" ageing

Centuries of experience, and vigorous research, prove that sherry wine drunk in moderation is good for our health.

under a film of yeast and bacteria (*velo de flor*), fino, manzanilla and amontillado acquire unique healthful properties. For instance, the chemical composition and balance of elements in fino, particularly as regards vitamins and amino acids, are similar to those of the human body. And its moderate alcoholic content – around 15 per cent – accentuates the beneficial properties associated with ethanol. Remember, because of its antiseptic properties wine was the first water purifier, and much valued both as a safeguarder of health and as a restorative in the wake of many illnesses.

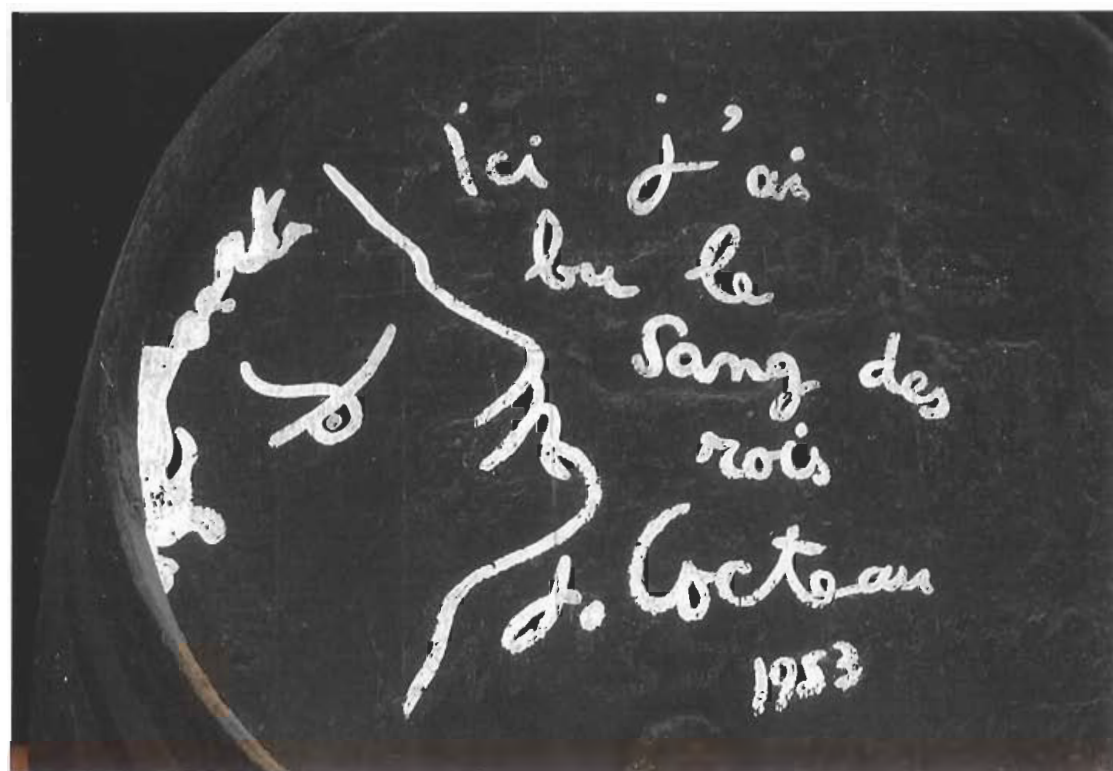
But sherry's primary claim to fame is that, drunk in moderate quantities, it is conducive to wellbeing: it is invigorating, calming, relaxes one after a day's work; it oils the wheels

of conversation and humour; it helps combat stress. And that's not all: current research into ethyl alcohol is discovering that it may act on blood platelets, inhibiting the formation of blood clots and, consequently, keeping cardiovascular diseases, angina pectoris and heart attacks at bay. Scientists are so interested in the beneficial effects of wine that attempts are now being made to develop anti-carcinogenic and antiviral medicines based on grape extracts. As Hippocrates stated, *"Wine is an admirably suitable thing for man, both in sickness and in health, if it is consumed at the proper time and in a moderate amount, depending on each person's constitution."*

If we were more aware of the symbolism embodied in the act of drinking a glass of sherry – cold or

chilled as appropriate – we would take more care about how we serve it, the ritual attached to such a noble drink, so as to reveal more of its wealth of cultural associations; and we would make sure that the act of having a drink has an element of fun attached, without which there can be no real pleasure, essential to the art of living.

The ancients understood this perfectly: Homer – who called men "wine-drinkers" – describes in *The Odyssey* how, to fete Telemachus, "a crater of sweet wine that had been in deposit for eleven years was mixed." During that period, wines were very pure and highly alcoholic, and had to be watered down for drinking. This was a process, and a ritual, that called for experienced handling and hostly skills: the person entrusted



Served chilled in the typical catavinos glass – or any other suitable glass – finos and manzanillas go perfectly with tapas.

with mixing the wine with water in correct proportions was known by the Romans as *magister bibendi*, and was the key figure at any banquet worthy of the name. The art of living came into play in cleverly getting the balance between wine and water just right. Significantly, Zeus's best-loved and most trusted servant was Ganymede, the beautiful Trojan boy who became cup bearer to the gods.

Not for nothing did the poet proclaim that wine "makes great the celebration, awakens tenderness, favours amorous darts, triggers passions and secures easy sleep."

Taking the comparison only so far, at a time when watering the wine is something we associate only with niggardly or incompetent landlords, the modern-day equivalent of the role of the skilled *magister bibendi* is played by the sommelier in a restaurant and the host who invites people to his home. It is now no longer a question of toning down what must have been the rather coarse alcoholic kick of a wine as in the heroic days of old, but rather of serving it at the right temperature, in the right glass, at the right time. This is particularly true for wines of outstanding elegance, delicate bouquet, smooth palate and just the right amount of alcohol, such as Jerez's generoso wines. Temperature, for instance, plays a vital role if we are to enjoy their full splendour. Since they are very dry wines with plenty of alcohol, they need to be served at a temperature of 7-10 degrees Centigrade (44-50 degrees Fahrenheit). If the temperature is any higher, the alcohol and certain secondary aromas are accentuated; any lower, and we



Inside the bottle and out, the venenciador is the human face of sherry: pouring the wine from a height helps it to "break" in the glass, so that its characteristics can be better appreciated.



start to lose fine aromas, first those derived from biological ageing, and then those from the soleras and criaderas – those characteristic fruity and nutty notes of fruits and dried fruits. To drink them at the wrong temperature is to deprive everyone of the great personality that is precisely what makes them unique.

A dry sherry wine served at the right temperature, on the other hand, is incomparable: all its sensory facets are in perfect harmony and balance, so that one enjoys drinking it calmly and with a certain element of ritual appropriate to one of the few Spanish wines of Olympian status today.

The glass in which it is served is as important as the temperature.



Happily, there is a generally recognised standard glass for serving sherry, and it is rare to see it served in anything other than the popular catavinos. That said, however, it is not enough for the glass to be that

unmistakable shape, tapering in gently towards the top: it must also be made of good quality glass that is not too thick and is absolutely transparent and colourless. And it is also important that the wine be properly served. Sherry wines have a deep, complex and subtle aromatic range, generated over years of silent ageing, and this bouquet merits being appreciated in all its splendour: it is important not to fill the glass beyond a third of its capacity, leaving the rest free so that the aromas can accumulate there. This is the only way to appreciate the full olfactory and gustatory magic of this marvellous wine which has earned itself membership of the exclusive club of great wines of the world.

Because of its traditional background, sherry is an integral part of Andalusia's cultural calendar, of which the feria is the most vivid expression.



STORING SHERRY



The first thing to bear in mind is the simple fact that sherry is a wine. As such, it is a natural product that develops over time and should be drunk within a reasonable time of being bottled. That said, how long that time is varies depending on the type of sherry. In general, "dark" wines, i.e. those that have undergone mostly oxidative processes during their maturation in the bodega, will keep their organoleptic characteristics and remain in perfect condition for drinking longer. Finos and manzanillas, on the other hand, need to be considerably "fresher", since some of the subtler, more delicate aspects of their extraordinary organoleptic nuances gradually disappear over time.

Today, advances in bottling techniques have extended the "life span" over which sherry's original characteristics remain intact.

Even so, a bottle of fino or manzanilla should be drunk no later than 18 months after bottling, and even then provided it has been stored in suitable conditions. The other types of gerososo wines, such as amontillados and olorosos, retain their original characteristics for longer. This is especially true of wines which have undergone prolonged ageing: they can be stored for several years.

However, for this type of wine, which is sometimes bottled without any kind of special treatment, and

for sweet sherries, being stored in the bottle for a long time can sometimes cause a certain "dustiness" or clouding, which in no way affects the aroma or flavour of the wine.

In any case, to store them properly, unopened bottles of sherry need a dark, quiet place with no temperature fluctuations or vibrations. Unlike other wines, sherry bottles should be stored upright: this reduces the area of wine surface exposed to oxidation.

Wine obviously loses its original characteristics, or "freshness", more quickly once the bottle has been opened and the wine has come into contact with the oxygen in the air. It is therefore important, particularly in the case of a fino or a manzanilla, to drink it within a few days of opening the bottle – a week at most, provided it has been kept tightly corked in the refrigerator. Once again, the "dark" types can be kept for longer in an opened bottle, since these wines have undergone considerable oxidation during the ageing process.

SHERRY AT THE TABLE



As well as the outstanding role that sherry can play as a cooking ingredient (as featured in the following chapter), there has been a boom in the last few years in 'matching' sherries with dishes from various cuisines from all over the world. Although fino and manzanilla are aperitif wines par excellence, their possibilities extend well beyond this limited role. The following suggestions are just that: there are no restrictions on imaginative combinations of sherry and food.

Fino and manzanilla, always served well-chilled, are the quintessential aperitif wines; their delicate, dry, pungent flavour cleans the palate and stimulates the senses before a meal. But they are also particularly good with tapas, seafood, white fish and soft cheeses; and they even go well with such notoriously difficult things as artichokes and asparagus.

Amontillado is an ideal wine with soups and consommés, white meat, oily fish and semi-cured cheeses. Medium, served slightly chilled, is the perfect accompaniment for pâté and quiche. Naturally, it is also an excellent aperitif wine for people who do not like their wine too dry.

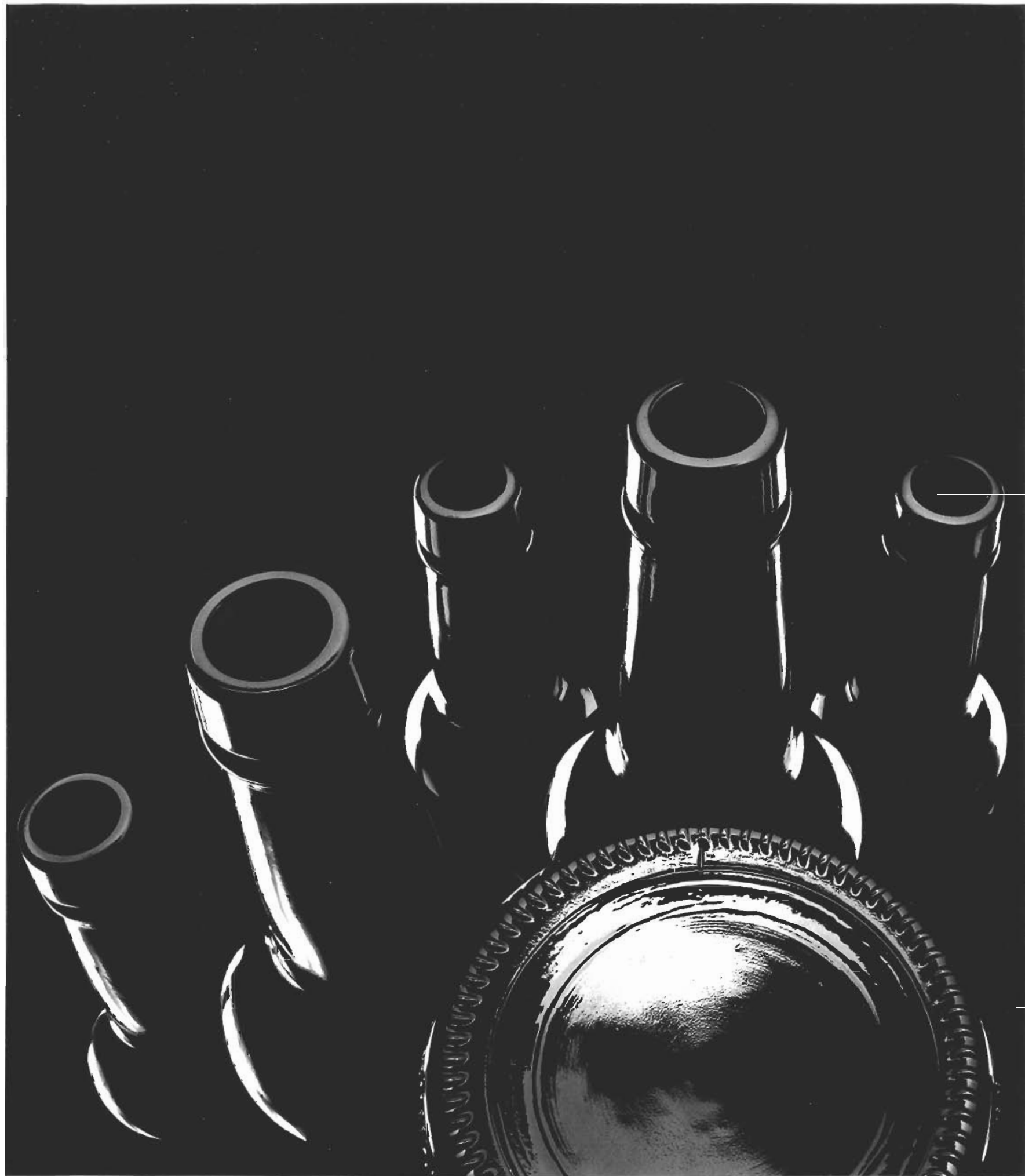
Oloroso is the right wine for game and red meat, as well as for very mature cheeses. Pale cream, served slightly cold, is excellent with foie gras and fresh fruit. Cream is the best sherry type for pastries and ice creams, as well as for certain fresh fruit desserts, such as melon.

Pedro Ximénez, because of its rounded, vigorous, balanced character, is the only wine that can be served successfully with chocolate-based desserts. And ice-creams acquire a whole new dimension with a glass of Pedro Ximénez on the side. It is also

excellent with blue cheese.

Enjoying sherry at the table means placing it on a par with other wines that one would never think of drinking without food. That being the case, do not hesitate to use the same glasses you would normally use for table wine. While the traditional catavinos will never be usurped, all one needs to enjoy sherry at the table is a goblet of fine, completely colourless, glass or crystal, with a large tulip-shaped bowl in which the wine can "breathe" and show off all its qualities to best advantage, and a stem sufficiently long so that the glass can be held without touching the bowl.





Título: Fogón

COOKING WITH SHERRY

LALO GROSSO DE MARCPHERSON

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or many cooks, no matter where they come from, discovering sherry and how it can be used in cooking comes as a revelation. It is one of those magic moments when a whole panorama of possibilities – aromas, textures, flavours... – suddenly opens up before one. Sherry, in its many varieties, contributes that extra zing, character and edge that can turn a perfectly respectable dish into a gastronomic achievement.

So it can be an important discovery for chefs – unless, of course, they are from the Jerez region, in which case they know all about it already. In our area of Lower Andalusia, every kitchen has a bottle (or

more) of sherry alongside the salt, olive oil and sherry vinegar. All our restaurants use sherry as an ingredient in their cooking, and even after various different elements have been alchemically transformed into 'a dish', it makes its presence felt in the subtlest of aromas.

No-one has explored the potential of sherry in cooking as thoroughly as Lalo Grosso de Macpherson. The following pages feature recipes taken from her book *Cocinando con Jerez* (Cooking with Sherry) – just a few examples of what can be done gastronomically with this incomparably versatile wine.



Lalo Grosso de Macpherson has been Jerez's culinary ambassador for many years, demonstrating sherry's huge potential in the kitchen all over the world.



PATRICIA'S GREEN SALAD

Ingredients

4 ripe avocados
1.5 kg broccoli
2 leeks
200 gr brussels sprouts
250 gr serrano cured ham
1 cup olive oil
1 glass fino sherry
3 cloves garlic
Salt and freshly ground black pepper

Method

Cook the broccoli in boiling salted water, without a lid, until just tender (test it with a fork). Remove from the heat and drain.

Cook the brussels sprouts and leeks until tender in the same way; drain and set aside.

Peel and slice the avocados and sprinkle with lemon juice to prevent discolouration, then set aside (this ingredient is added last).

Cut the cured ham into small dice.

Chop the garlic finely.

Heat the olive oil in a pan, add the diced ham and cook for a while. Cut the cooked vegetables into bite-sized pieces and add to the pan.

Add the chopped garlic, season with salt and pepper, then pour in the fino sherry and allow to cook gently for a few minutes.

Serve just warm in an earthenware dish, folding in the avocados just before serving.

RICE SALAD WITH SHERRY

Ingredients

2 cups long grain rice
2 large onions
2 large golden delicious apples
1 small jar stoneless green olives
1 small jar black olives
100 gr skinned raw almonds
100 gr fresh mushrooms
80 gr seedless raisins
1 glass fino sherry
1 cup olive oil
Salt and freshly ground black pepper

Method

Boil the rice until *al dente*, drain in a sieve and rinse under the cold tap, then set aside.

Peel the onions and chop finely.

Peel the apples and dice finely.

Prepare the mushrooms and slice finely.

Wash the raisins thoroughly under the tap and leave to drain.

Heat the oil gently in a large pan and add the onions, cooking them slowly over a low heat and stirring frequently so that they soften without browning. This should take about 5 minutes.

Add the diced apple and cook for 3 minutes longer.

Now add the olives and almonds (keeping back a few of both for garnish), mushrooms, raisins and fino sherry, and season lightly with salt and pepper.

Allow the mixture to cook over a low heat for 10 to 15 minutes, stirring occasionally. Remove from the heat and set aside.

Place the cooked rice in a large bowl and gradually add the mixture to it, folding it in thoroughly with a wooden spoon.

Transfer to a serving dish and decorate the top with black olives and almonds.

JUAN CARLOS OLOROSO CREAM SOUP

Ingredients

1.5 l rich consommé
2 x 90gr tins truffles
80 gr plain flour
1 large glass oloroso sherry
300 gr single cream
80 gr Gruyere cheese, grated
100 gr butter
Salt and white pepper

Method

Make a rich consommé.

Melt the butter in a pan and add the flour, stirring constantly with a wooden spoon or whisk.

Season with salt and pepper then, still stirring constantly, begin adding the hot consommé little by little, the juice from the truffles and the grated cheese.

Allow to cook over a low heat for 30 minutes.

Add the oloroso sherry and the cream and cook for 10 minutes more.

Check the seasoning and adjust the salt, wine and pepper if necessary, then pass the soup through a sieve before serving.

This cream soup should be slightly thick but very smooth and light, and taste distinctly of oloroso.

Serve in a soup cup garnished with truffle and a little very finely chopped poultry meat (from the consommé).

*Dedicated to
H M King Juan Carlos of Spain,
with the greatest respect,
admiration and affection.
Lalo.*

EL CONDE STYLE CREAM OF CLAM SOUP



Ingredients

1.5 kg clams (or 500gr striped venus)
2 carrots
2 leeks
1 onion
2 floury potatoes
2 egg yolks
2 large glasses fino sherry
1.5 l water
100 gr butter
300 gr single cream
Salt and freshly ground black pepper

Method

Wash the clams well in several changes of water and boil in a pan containing half a litre of water and the sherry.
When cooked, drain the liquid off the clams, strain it through a muslin cloth to remove any sand, and reserve. Set the clams aside.
Dice the vegetables into a mirepoix, rinse under the tap and drain well.
Melt 70 gr of butter in a deep pan and cook the vegetables in it for about 5 minutes or until golden, stirring constantly. Season with salt and pepper.
Add the strained clam liquor and the rest of the (hot) water.
Cover, and leave to cook for 20 minutes over a low heat.
Meanwhile, remove the clams from their

shells.

Whizz the soup in the blender, then sieve it to obtain an even consistency like thin cream.

Check the seasoning, and adjust the sherry, salt and pepper if necessary.

Mix the two egg yolks into the single cream and stir into the soup, allowing it to cook for a few minutes but keeping it below the boil.

Share out the clams among the soup cups, fill up with soup, and serve either hot or cold, to suit the occasion.

TUNA LOAF

Ingredients

1 kg tuna
0.5 kg cured ham, cut into strips
0.5 kg salt pork, cut into strips
2 eggs
2 tablespoons fresh bread crumbs
1 glass fino sherry
100 gr stoneless olives
0.5 l mayonnaise
Salt and pepper
Home-made vegetable stock
1 glass white wine

Method

If using fresh tuna, poach it for 10 minutes in water seasoned with salt and pepper, then drain well. (You can use the same quantity of canned tuna, again draining well).
Pass the fish through the mincer and place in a shallow bowl.
Pour in the sherry and break in the eggs, add salt and pepper and half the olives, and work everything together thoroughly to give a compact mixture.
Spread out a cloth, place about a third of the mixture in the middle of it and spread it out into a rectangle.
Criss-cross strips of ham and salt pork on top and dot some olives over it, then spread another layer of the mixture on top and repeat the operation twice or three times until all the ingredients are used up.
Roll up the cloth and secure the ends.
Add a glass of wine to the vegetable stock, bring to the boil, then gently poach the roll in it for 1 hour. Allow to cool, then drain well.
Compress the roll by placing a 3 kg weight on top of it for 6 to 8 hours in the fridge.
Serve in slices, garnished with strips of red pepper, lettuce and sliced tomato.

CADIZ STYLE GILT-HEAD BREAM

Ingredients

1 gilt-head bream weighing 1.5 kg
200 gr serrano cured ham
1 kg onions
4 cloves garlic
1 large glass fino sherry
1/2 cup olive oil
Salt and freshly ground black pepper

Method

Scale, clean and rinse the fish and pat it dry with a cloth.
Peel and chop the garlic and peel and slice the onions into rings.
Dice the ham.
In a large frying pan, place the onions and garlic in the oil, season with salt and pepper and cook gently for about 10 minutes, not letting them brown.
Spread the onions and garlic, with their oil, so that they form a bed in the bottom of an oven-proof dish.
Season the fish with salt and pepper inside and out, and place on top of the onions.
Add the ham dice and the fino sherry.
Grind black pepper over the dish and cook in a medium oven for 20 to 25 minutes. Serve hot.
This recipe can also be used for all sorts of rod-caught fish and hake.

CREAMED MUSSELS

Ingredients

1 kg mussels
3 shallots
2 cloves garlic
1 teaspoon plain flour
2 teaspoons butter
1 glass amontillado sherry
1 small cup single cream
Salt and pepper

Method

Scrape and wash the mussels.
Peel the shallots and place in a saucepan with the well-rinsed mussels, salt and pepper and a cup of water.
Place on the heat, and when the liquid is about to boil, add the amontillado.
Cook for 5 minutes, shaking the pan vigorously.
When the mussels open, remove them from the pan and set aside (any unopened ones should be discarded, since this is a sign that they are bad and should not be eaten).
Make *beurre manié* by working the flour into the butter and add this bit by bit to the pan. Stir and allow to cook for a few minutes, then add the cream and check the seasoning.
Having removed their upper shells, place the mussels in a serving dish, sieve the sauce and pour it over them.
Serve hot.

SEA BREAM WITH AMONTILLADO



Ingredients

1 sea bream weighing around 1.5 kg
1 kg onions
50 gr plain flour
1 bottle amontillado sherry
1 cup single cream
100 gr butter
Stock
Salt and pepper

Method

Clean, gut and rinse the fish, leaving the head on, and dry it thoroughly. Peel the onions and cut into rings. Place the sliced onions in an ovenproof tin or dish and put the fish on top, seasoning it with salt and pepper, inside and out. Dot half the butter over the top, and pour over a generous amount of amontillado. Add a cup of water, then cook in a pre-heated hot oven for at least 20 to 25 minutes. Remove the fish, place on a serving dish and allow to cool slightly, then remove the skin before it gets cold. Pass the onions and cooking juices

through a fine sieve, pressing well.

Use the remaining butter and the flour to make a roux, then gradually stir in the hot, strained fish liquor.

Cook gently over a low heat for about 20 minutes, then add the cream and check the seasoning, adjusting salt, wine and pepper if necessary.

The sauce should be thin in consistency, with rich fish and wine flavours.

Optionally, you can add a small teaspoon of mustard at this point, taking care to mix it in well.

Pour some of the sauce over the fish and the rest into a jug for serving at the table. This dish may be served hot or cold. Endive salad and steamed new potatoes go well with it.

OXTAIL, ANDALUSIAN STYLE

Ingredients

2 oxtails
100 gr cured ham
0.5 kg onions
3 carrots
4 cloves garlic
Flour
2 glasses fino sherry
1 cup olive oil
Salt and pepper
Parsley, bay leaves and thyme

Method

Cut up the oxtails (or get your butcher to do it) and wash them thoroughly.
Peel the onions and carrots and cut into rings and rounds respectively.
Place the oxtails in a deep pan, cover with cold water, and add half the carrots, onions and herbs.
Bring to the boil, then skim the surface, cover the pan and allow to cook over a low heat for 4 to 5 hours until the meat is tender.
In a frying pan, gently fry the finely chopped garlic, the diced ham, the remaining onions and a bay leaf.
Sprinkle 2 to 3 tablespoons of flour over the contents of the frying pan and mix in.
When it starts to colour, pour in the wine and a large cupful of the oxtail cooking liquor.
Place the oxtails in a deep pan and cover them with this mixture. Check for seasoning, adding more salt, wine and herbs if necessary, and allow to cook gently in this sauce over a low heat for an hour.
Optionally, you can add more wine to the recipe, or make it with oloroso sherry. You can also add hot *pimentón* (Spanish paprika), though I personally would not advise it.
Serve the oxtail in its sauce in an earthenware dish, with fried or sauté potatoes on the side.

ROAST BEEF WITH SHERRY

Ingredients

3 kg fore-rib of beef
5 cloves garlic, peeled
1 glass brandy de Jerez
1 glass oloroso sherry
Olive oil
Salt and pepper

Method

Clean, trim and truss the meat. Rub it thoroughly with garlic, season with salt and pepper, and add the garlic cloves. Heat a cupful of oil in a large frying pan or roasting tin on top of the stove, then brown the meat well on all sides until it has formed a crust to keep in its juices, colour and other qualities.
Pour the brandy de Jerez over the meat, then sprinkle with the sherry and place the pan in a pre-heated oven.
Roast for 15 minutes per kg, turning the meat over half way through. Baste frequently during cooking, being careful not to let the meat dry out, burn or overcook. Beef cooked in this way should still be bright pink inside, but if you prefer it rarer or well done adjust the timing accordingly.
Allow the joint to stand after removing from the oven. Serve it warm, carving into slices at the last minute so that it remains juicy. Fresh vegetables tossed in a little butter are a good accompaniment.

MATT'S MARINATED CORNISH GAME HEN

Ingredients (serves 4)

6 cornish game hens or poussins
6 cloves garlic
8 carrots
5 onions
1 large glass fino sherry
1 large glass sherry vinegar
1 large cup olive oil
Bay leaf
Salt

Method

Wash, prepare and truss the birds, then brown them all over in hot oil in a large pan on top of the stove.
Peel the vegetables; slice the onions and cut the carrots into rounds. Peel and chop the garlic.
Cook them all for few minutes in a little oil in a frying pan, taking care not to let them brown, then add them to the birds, along with the wine, vinegar and oil.
Season with salt, pepper corns and add the bay leaf.
Cover the pan and cook over a gentle heat until the meat is tender.
My advice is to use small birds, or to cut up larger ones (in which case use slightly more wine, vinegar and oil).
This is a dish that is better eaten the following day.

PARTRIDGE IN THE ALCANTARA STYLE



Ingredients

2 partridge
1 tin truffles (95 gr)
1 bottle oloroso sherry
200 gr butter
Mint, parsley, chervil and thyme
Salt

Method

..... Poach the truffles in a pan with a glass of
oloroso. Prepare the partridge, stuffing
them with the truffles and butter, and
seasoning inside and out. Sew them up so
that they keep their shape.
..... Place them in a container that can be
sealed hermetically, then pour the rest
of the oloroso over them and sprinkle
the chopped herbs so that the birds are
thoroughly covered. Put on the lid and
allow to marinate in the fridge for 3 days.

Remove the birds from the marinade,
drain them and pat dry with a cloth.
Brown them in butter in a frying pan over
a high heat.
When nicely brown, season with salt,
place in a casserole and add the marinade,
including herbs, and cook gently on top
of the stove until the birds are tender.



Titulo: Mundo



SHERRY: THE UNIVERSAL WINE

JUAN LUIS BRETÓN ABRISQUETA

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his final chapter of *The Big Book of Sherry Wines* considers some aspects of the universal nature of the wines of Jerez – the most international of all Spanish wines and those with a longer-established presence in more foreign markets than any other. It looks, too, at how they are perceived by consumers and what the future holds for them in that regard, and at the complex problem of the illicit use of the term “sherry”.

As the preceding chapters of this book reveal, the whole sherry story from vine to bottle is a fascinating one, quite apart from its fine intrinsic qualities. It is interesting to note here, therefore, how strong an impact it has on consumers worldwide when it is presented to them in this way, highlighting not only the superb quality for which it is famous, but also how many different types there are – a feature genuinely exclusive to the wines of DO Jerez and Manzanilla-Sanlúcar de Barrameda – compared with the other world famous wines.

As we all know, quality is one of the essential and satisfying characteristics of the natural foodstuff we know as wine¹. This is particularly true of wines with indications identifying their geographical origin, whether they be *Vinos de Calidad Producidos en Regiones Determinadas* (VCPRD) – Quality Wines Produced in Specific Regions within the European Union – or wines designated by the name of a region, valley, etc., in other producing countries such as Australia, Chile, the United States and South Africa. This noble quality is one of the main

reasons why wine has enjoyed such prominence in the history and culture of different civilisations since earliest Antiquity, and why it continues to do so today. In terms of quality, one of the amazing properties of sherry wines is the unequalled complexity of the vast repertoire of organoleptic sensations provided by sherry in its countless guises: fino, manzanilla, amontillado, cream, medium, oloroso, pale cream, palo cortado, Pedro Ximénez...

Incomparable quality and enjoyment have been a constant feature of the wines of Jerez from Roman times to this day, even in the most exquisite reaches of the wine world – a universe that is both limited and comprehensive. Limited in the sense that the high quality wines available on the market tend not to be mass-produced: this is reflected in their price, which in turn has resulted in wine being consumed selectively down the ages. But comprehensive, too, in that all wine-drinking countries – and there are many – have a well-defined nucleus of specialised professionals and wine lovers (“connoisseurs” in international jargon) who promote and demand these sophisticated, quality wines. In the first years of the twenty-first century, for example, nearly 70% of the volume of the world’s wine imports was shared among Germany, Belgium, Denmark, France, The Netherlands, the United Kingdom, Sweden, Canada, the United States, Japan and Switzerland. All these countries, and many others, are sherry importers, and it is an interesting fact that, in each case, most of them restrict their consumption to just a few specific types: medium and fino in Germany; fino and medium in Belgium; cream, medium, fino and

1. The Spanish Wine Law (Ley 24/2003 of 10th July 2003) defines wine as a natural food product exclusively obtained by total or partial alcoholic fermentation of fresh, pressed or unpressed grapes, or grape must.

From their earliest beginnings, the wines of Jerez have travelled far and been appreciated beyond our borders. Today, nearly 80 per cent of the wines covered by this Denomination of Origin are consumed outside Spain.





amontillado in Denmark; medium and fino in The Netherlands; cream, pale cream, amontillado and fino in Great Britain; cream, amontillado, fino and medium in the United States, and so on.

Along with the wines of Burgundy, Champagne and Oporto, Jerez wines have been present for centuries in nearly all countries where a certain amount of wine is drunk. They are internationally known as "sherry": this is an English transliteration of the Arabic *Scheris*, or *Sêrîs*, and not, as some claim, a version of the word Jerez, which did not appear as such until the latter part of the nineteenth

century and was therefore preceded by the English term by several hundred years. It is unquestionably the most quintessential of all Spanish products, and the one with the highest profile in export markets. Up until the 1980s, it was the standard-bearer for all Spanish exports, and remained the top exported wine in terms of volume until 1997. The ubiquity of sherry (and of the famous European wines mentioned earlier) was consolidated in the second half of the nineteenth century by advances in international trade and also, in part, by diligence and clever management on the part of British merchants. The downside of this was that it led to the appearance

of imitation, not emulation, products: imitations that could be produced and sold more cheaply than the original. The unfair competition this represented was made even worse by the illegal appropriation of the identity – the very name – of the genuine product.

It was in the latter half of the nineteenth century that imitations of the wines not only of Jerez, but also of Burgundy, Champagne and Oporto, started to appear in countries such as Australia, Canada, the United States, the United Kingdom and South Africa. Furthermore, imitations of sherry were produced in Cyprus and

Sherry's genuine character has made it one of the classical archetypes of world vitiviniculture: this has exposed it to frequent imitation and falsification.



Ireland, and of “jerez” as such in Mexico, Russia and other countries. These spurious beverages, almost always dark-coloured and sweet-tasting, were designated with the appropriate de-locating qualifier – Australian sherry, British sherry, Californian sherry, Canadian sherry, Cyprus sherry, Irish sherry and South African sherry – and sold, for the most part, almost exclusively in their country of manufacture.

The case of “British sherry” in the United Kingdom is especially sad, Britain having been the first country to consume ‘sherris sack’ back in Shakespearian times and largely

responsible for spreading the habit to other parts of the world. Despite this fact, and despite unanimous and enduring respect for the quality of genuine sherry on the part of British traders and consumers, it was not until January 1996 – ten years after Spain joined the EC – that “British sherry”, “Irish sherry” and “Cyprus sherry” imitations were legally banned in the United Kingdom and Ireland² by virtue of the terms established in the bilateral agreement between the United Kingdom and the Kingdom of Spain on 19th October 1992. Consequently, the problem no longer exists in the United Kingdom, though it continues to be a critical issue in

Australia, Canada, the United States and South Africa.

The fact is that, of all the imitation-associated problems that sherry has faced in the course of its history, the “British sherry” issue has unquestionably been the most significant one for Jerez because of its adverse repercussions on several fronts. As early as 31st July, 1967, the matter was the subject of a ruling³ by Judge Cross of the Chancery Division of the High Court in London; this stated that although “sherry” is a name specific to wines from the region of Jerez, in Spain, and not a generic name, for historical reasons

2. Consejo Regulation (EC) No 3011/95 of 19th December 1995 puts an end, as of 1st January 1996, to the provisional regime established by Article 129 of the Treaty concerning the accession of the Kingdom of Spain and Portugal to the European Communities authorising the use of the compound denominations “British sherry”, “Irish sherry” and “Cyprus sherry” in the territory of the United Kingdom and Ireland until 31st December 1995.

3. Decision by Justice Cross (1969) in the case brought by Vine Products Ltd. and others vs. Mackenzie & Co and others (the other shipping bodegas) who had requested British operators to stop the illicit use of the name ‘sherry’ in the presentation and promotion of their drinks.



— decades-worth of acquiescence and lack of action — it was not possible to object to the use of the compound terms “British sherry”, “Empire sherry”, “Cyprus sherry”, “Australian sherry” and “South African sherry” in the United Kingdom. In the British market itself, misuse of the name

“sherry” was exacerbated by important negative fiscal discrimination, of a technical nature, which was only adjusted to relative normality on 31st December 1995. In other markets such as Australia, South Africa, the United States and Canada, the fact that a product called “British sherry”

had existed peaceably in the United Kingdom from the mid-nineteenth century on must have been influential in their developing the concept of their own imitations of internationally famous European wines, especially sherry and their philosophy nowadays on the significance of geographical indications as brands, contrary to that of Europe based on the Paris Convention for the Protection of Industrial Property of 1883⁴. The whole question of imitations is a global problem that it is up to the European Union to solve on behalf of the wine-producing Member States affected by it through bilateral agreements, primarily with Australia, Canada, the United States and South Africa — taking account of provisions made by the Geneva-based World Trade Organisation (WTO) with regard to Intellectual Property in the field of Geographic Indications. It is also one of the issues of relevance *vis-à-vis* potential new markets.

Exports have always been the driving force behind the *bodega* sector of the sherry region, which has adapted nimbly to the demands of external markets down the ages: thousands of terracotta amphorae were shipped to Rome, filled with good wine from Ceret, a prime example of trade in an expensive and prestigious product, and which was even then part of the Roman diet, (no doubt a forerunner of the famous Mediterranean diet); from the early Middle Ages on, thousands and thousands of hectolitres of select sherry were despatched in oak casks to England, the countries of northern Europe and the American territories, and later, to Canada and the United States; in the nineteenth

4. The text of the Paris Convention for the Protection of Industrial Property of 20th March 1883 was subject to subsequent revisions in Brussels (14th December 1900), Washington (2nd June 1911), The Hague (6th November 1925), London (31st October 1934), Lisbon (1st October 1958) and Stockholm (14th July 1967), confirming the concept of protection of geographical indications. The Federal Pure Food and Drug Act of 30th June 1906 legally establishes *inter alia* that the term “sherry” is a semi-generic in the United States, i.e. that used alone the term can only apply to the wines of Jerez, but that it may be used in conjunction with a geographic locator to refer to other wines, such as “Californian sherry”.



and twentieth centuries, English merchants were supplied with Jerez wines for re-export to other parts of the world, thereby opening up new markets for sherry; and in the last forty years of the twentieth century, exporting *bodegas* started to supply the bottled product directly to

buyers/distributors/retailers in the main export markets, with little additional intervention between the bottle-issuing *bodega* and its product's final destination: the consumer.

Adaptability to changing

circumstances in world markets is an inherited constant of the sherry sector's exporting firms, adept at cutting-edge techniques in many areas relevant to keeping their exports lively and competitive and their product prestigiously placed and presented. Information

The world of sherry combines the most traditional features of Spanish culture with undeniable British influences; it is also constantly expanding to reach new cultures and consumers.



SHERRY

Gönnen Sie sich außergewöhnliche Vielfalt!

Sherry ist nicht gleich Sherry. Von hell bis dunkel und von trocken bis süß reichen die Varianten. Generell kann man sagen: Je heller, desto trockener; je dunkler, desto süßer.

Fino
Hellgoldene Farbe und feines Mandelaroma

Manzanilla
Leichter und trockener Wein von strohgelber Farbe

Amontillado
Bernsteinfarben und halbtrocken – einer der vielseitigsten Sherrys

Palo Cortado
Das Aroma von Amontillado gepaart mit dem Geschmack von Oloroso

Oloroso
Mahagonifarbener Wein mit kräftigem, nussigem Aroma

Medium
Halbtrocken mit würziger Note – ein Wein für jede Gelegenheit

Golden
Aromareich und mild sind die Charakteristika dieses Sherrys

Cream
Samtweicher und vollmundiger Geschmack

Pedro Ximénez
Intensiv süßer Wein – eine Spezialität für Kenner

Vinos de JEREZ

sherry

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WEIN AUS SPANIEN



Best chefs in the world support Sherry

SHERRY VINEGAR IS ENJOYING A SPECTACULAR BOOM

Aged-dated wines at their peak



technology has been in use by sherry houses from first generation computers on; other events in the business communication field that almost qualify as historic landmarks include the adoption of telex,

then fax, for communicating with international clientele the moment these channels became available, and the internet was similarly embraced as soon as it became commercially relevant.

Another area of direct action over the last forty years has been the promotion of sherry abroad. The main objective has been to raise awareness of the product among professionals in the specialist media, food and

Sherry's universality owes much to the Jerez bodegueros' legendary calling as exporters, and also to major advertising and public relations campaigns.

SHERRY JEREZ
MANZANILLA
DENOMINACIONES
DE ORIGEN

PON A PRUEBA TUS SENTIDOS

DENOMINACIONES DE ORIGEN "JEREZ" & "MANZANILLA DE SANLÚCAR"



wine experts, buyers for big stores, and in some cases specific consumer segments. As well as investing heavily in advertising in different markets (in addition to the United Kingdom and

the United States) to promote world-famous sherry brands, primarily of fino and sweet oloroso, the export sector, via professional institutions in the sherry region and the Consejo

Regulador, has been helping to finance and coordinate major advertising campaigns to promote the product in Germany, Belgium, Denmark, France, The Netherlands, Ireland and

Italy since 1974, and more recently in China, the United States, Japan, Sweden and other markets.

Generic marketing campaigns, undertaken by the industry as a whole, are backed by the services of the Andalusian Regional Government, the EU Commission and, particularly, the Madrid-based Spanish Institute for Foreign Trade (ICEX); they also receive operational support from associations of importers in certain countries. Planned from three to five years in advance, these promotional campaigns aim to give equal prominence to the main types of sherry. They encompass initiatives that are sometimes informative and educational, aimed at opinion leaders, consumer motivators and professionals in the field, and sometimes involve advertising and point-of-sale promotions, aimed at consumers, depending on the state and potential of the target market at that particular time. They are all backed up by top-flight public relations support in the country in question and a programme of visits to the Jerez region. There, the setting and practicalities of life in the sherry *bodegas*, the intrinsic appeal of the region, its gastronomy and so on, invariably create an unforgettable positive impression on visitors – regardless of whether they are wine professionals or from the media – and this is reflected in glowing reports in the press, radio and television. All this benefits not only the sherry trade but also the way that the Jerez region, Andalusia and Spain as a whole are perceived.

Because these promotional activities take place in such diverse settings from one country to another, their

intrinsic message or advertising slogan cannot always be the same. The initial “Real Sherry comes only from Spain” slogan used for the British and American markets from pre-1960 until 1996 became “Sherry time is any time” for use in Germany from 1985 on, and “*Sherry, por favor*” for the Dutch market from 2000. One of the most pioneering and mould-breaking was “Sherry, the good taste of Spain,” the slogan that did so well for the British market from 1981 to 1983 at a time when Spanish wine was often described as ‘plonk’ and the whole notion of Spanish good taste, universally acknowledged today, seemed unthinkable.

Of course, the ultimate target of all these efforts is the consumer. Every product needs a consumer, or it is not a product. In other words, every product on offer has to satisfy the wishes, the demand of the consumer, and this has to be identified in areas where there is a certain level of buying power, because it is there where product consumption can be developed. Identifying potential consumers and giving them what they ask for is something that the Jerez region has been doing since time immemorial. The classic profile of the typical sherry consumer, in Spain and abroad, is that of a socially established person with what advertisers call medium to medium-high buying power, who knows how to enjoy drinking wine in moderation as an aperitif, in the early evening or at the table. The social status and age group that this suggests make it generally advisable to focus promotional activity so that the message directly or indirectly reaches a male or female consumer in the 25-65 age range

who likes modern cuisine in which wine is a basic element. These traits coincide largely with those of the typical consumer of the other famous wines, who tends to include sherry in his range of tastes and makes up a specific segment of the demand for select products in countries all over the world where sherry has a presence.

All in all, great strides have been made in conquering export markets. There is no denying that a great deal has been achieved, but there is still a long way to go. It is important that the sherry sector should be able to tackle this challenge unencumbered by euroinvented⁵ obstacles to future world markets. These include, first, the other European Union Member States, sherry’s principal destination, which must be maintained; next, the many third countries where a food and wine culture is already in place at some level, and where there are sherry enthusiasts and occasional drinkers whose consumption must be increased; and finally, the rest of the world, where China, India and Japan are important targets because of their enormous consumer potential, and where some exporting firms are already making progress in the essential job of implanting “sherry wines” as a concept in the mind of the consumer.

The sherry trade abroad has a double remit for the future. On the one hand it must maintain its position in key markets, such as Germany, The Netherlands and the United Kingdom, and improve its ranking in the remaining European Union Member States and other countries that have already adopted, as it were, European

5. *EU Consejo recommendations on Community strategy to reduce alcohol-related harm adopted on 5th June 2001, and reiterated in June 2004, require that the Commission, via the Health and Consumer Protection Directorate General, draw up a document outlining global strategy in this regard to complement national policies on the consumption of alcoholic beverages, including wine. It is highly likely that, at the request of the World Health Organisation (WHO) and the anti-alcohol governmental lobby of the Member state Sweden – which insists on imposing the Swedish system on hundreds of millions of fellow Community citizens – the practical development of such a global strategy will include measures that are disproportionately negative for the wine trade within the European Union, with equally negative repercussions in third countries.*



food and wine culture and, except for some Spanish-speaking countries, know the product as “sherry”. Great advances have already been made there, and it would seem advisable to leave the traditional received perceptions in place: sherry and its famous brands, as well as “house” brands. On the other hand, it needs to focus future export marketing activity on countries newly emergent on the international trade scene, with non-European gastronomic cultures of their own, and where grape wine is seen as an exotic product that an elite few are just starting to drink: these qualify as “new” markets for sherry and many other products. In theory at least, this future approach to sherry exports

could be said also to have a double remit, always acknowledging sherry leading brands perennial function as locomotives of the sector as a whole: on the one hand, to work on the basis of traditional perceptions, extending to these new markets the sales and promotional clout that adhere to the product sherry, its many different types and many brands; and on the other, to consider in depth the possibility of presenting innovative ways of enjoying sherry-drinking to these new markets, in terms of denomination, category, range of different types, when to drink it, and so on.

All in all, the aim is to make sherry more and more universal each day. ■

Sherry is unquestionably one of the Spanish products with the widest presence in foreign markets, often represented by brands with high customer recognition.



WILLIAM SHAKESPEARE

"I had a thousand sons, the first human principle I would teach them should be, to forswear thin potations and to addict themselves to sack".



PABLO NERUDA

"Sherry casks, cathedrals in whose Gongoresque hearts topaz burns with a pale fire".



FRANKLIN D. ROOSEVELT

"Here's to the President of the United States!"
(Louis Howe, on the night of 8 November 1932, proposing a toast in sherry from a bottle that had been stored for 20 years awaiting the election of Franklin D. Roosevelt as President of the United States)



WASHINGTON IRVING

"God grant that I may live long enough to drink all this wine and be as happy as it always makes me".



VÍCTOR HUGO

*"Long live the wines of Jerez!
Jerez is a city that should be in Paradise."*



SOMERSET MAUGHAM

"Sherry, a civilised drink."



MANUEL M. GONZÁLEZ GORDO

"A meal eaten without a glass of sherry before it is like a day dawning without the sun."



JOSÉ MARÍA PEMÁN

"Drinking is all about measure: gladdening the heart, and without losing sense, giving sense to life".



GREGORIO MARAÑÓN

"Sherry wine: a masterpiece of creation".



ALEXANDER FLEMING

"If penicillin can cure those that are ill, sherry can bring the dead back to life".



ALEJANDRO DUMAS

"Sherry, symbol of Spain's spirit and joie de vivre."



BENITO PÉREZ GALDÓS

"If God had not made sherry, how imperfect his work would have been!"



PEDRO ANTONIO DE ALARCÓN

"If the problems of the world trouble you, taste it, oh pilgrim! and you will swear that heaven is on earth".



LORD BYRON

"'Twas there, in Jerez, that I drank the famous wine at its very source".

FAMOUS SHERRY QUOTATIONS

Over the centuries, leading figures from the worlds of literature, the arts and sciences have fallen under the spell of sherry. From William Shakespeare in the sixteenth century to Pablo Neruda in the twentieth – people who have shaped world history – they express their appreciation of its qualities in the most glowing terms.

GLOSSARY

Most of the terms in the alphabetical list that follows feature in the chapter of this book entitled *The Anthropology of Sherry* by Fernando López Romasanta, and have been assembled by its author. Certain other words in common use in the traditional viticultural and vinicultural environments of the sherry region have also been included.

The abbreviations used in the glossary are the following: Acad. signifies the standard definition (translated here into English) closest in meaning to this entry provided by the *Diccionario de la Real Academia de la Lengua Española*. Mar. indicates the definition of the term given in the *Diccionario Marítimo*. Others abbreviations used are: And. Andalusia; Arch. archaic; Bldg. building; Cádiz. Cádiz; Fig. figurative; v. see.

This section is supplemented by a glossary of tools and equipment, compiled by the same author, and a glossary of historical terms relevant to the chapter entitled *The History and Legend of a Wine*, contributed by its author, Carmen Borrego Plá.

Abra. In a row of butts, the space between two contiguous butts in the same layer.// Mar. Any opening, space, linear distance between two points, etc.// Acad. (And.) In a row of butts, the space between two in the same sequence.

Acomodar. Contratar. To employ.// Acad. (Fig.) To put in a convenient place or job; to suit.

Acuartelar. To group butts so that the operation of 'running the scales' can be carried out.// Mar. To haul the sheet aft so as to present more sail to the wind.// Acad. To divide land up into quarters.

Aire (dar). To open butts of must during fermentation, when they are moved, to expel carbon dioxide.

Albariza. White soil with high chalk content (up to 80%), whose characteristics make it the best type for growing grapes for use in sherry-making.// Acad. (And.) Albar (unirrigated land).

Almacenista. According to the Regulations, a firm registered as an Ageing and Storing *Bodega* with the Consejo Regulador of the DO; a winery that keeps inventories of wine undergoing the ageing process, but whose *sacas* (extractions of wine) are used exclusively for supplementing

stocks of ageing wines in other *bodegas* and not destined directly for consumption.// Acad. Vintner that keeps wine stocks.

Almijar. Open ground or esplanade surrounding a caserio. Place where esparto grass mats are spread for sunning grapes.// Acad. (And.) Place where grapes and olives are aired before being pressed.



Almijar

Almijarero. Person in charge of helping the carriers unload the grapes, spreading them on esparto mats and supervising the sunning process.

Almotacén (alamin). Person officially appointed to verify the weights and measures used in grape and must transactions and all the jobs in the press-house.// Acad. (almotacén) Person officially responsible for checking weights and measures.// Acad. (alamin) Official in olden times who checked weights and measures and assessed provisions.

Amadrinar. To place a butt alongside another in parallel to its long axis.// Mar. To join or pair things up so as to reinforce one of them.// Acad. To yoke two horses together with a strap called *madrina*.

Amallar. To smooth the inside surface of the staves once a cask has been raised.

Amontillado. Type of sherry wine in the generoso category which, having undergone a phase of biological ageing followed by an oxidative phase, develops complex characteristics: amber to mahogany colour, slightly pungent hazelnut aromas and typically full flavour.

Amoroso. Name used, particularly in the United Kingdom, for a slightly sweet oloroso.// Acad. Soft, easy to work or cultivate.

Amorterar. To tip a butt containing developing wine by slightly raising the head containing the opening through which wine is extracted so that the deposits accumulate against the opposite head, allowing clear wine to be extracted more easily.

Ampelografía. Ampelography. The science of description and identification of vine varieties.

Andana. Arrangement of a row of butts placed contiguously, one-deep, and with their long axis horizontal, with other superimposed rows whose butts rest in the angles between the butts in the layer below.// Mar. Casting creels or nets in parallel lines. (Poner en andana un buque) To load, rig and organise a boat overall to make it as stable as possible.// Acad. Arrangement of certain things placed in line.



Andana

Añada. Vintage. Wine derived entirely from grapes from one single harvest.// Acad. One year time lapse.

Apareado (aparear). Trimming (to trim). The operation of shaping barrel staves to the correct thickness, working away from the ends towards the middle.// Acad. Adjusting one thing so that it matches another.

Aprendizón (aprendiz). Apprentice in a team of winery workmen.// Acad. Person learning a craft or trade.

Aranzada. Measurement of area commonly used in the Jerez region, equivalent to 0.475 hectares.

Arena. Type of sandy soil with low lime content, in which vines are planted, common to coastal parts of the Jerez region.

Arranchar. To form a group of several vineyard workers who organise their meals together.// Mar. To organise things.

Arroba. Measure of wine volume, in Jerez equivalent to 16.66 litres.// Mar. 31 or 32 pound weight.

Arrope. Syrup produced by boiling down must until it has reduced to a fifth of its original volume.

Arrumar. Process of grading and classifying staves by thickness.

Arrumbador. *Bodega* workman who carries out the operations of moving and storing butts, as well as drawing off wine and other procedures involved in *crianza*.// Mar. (arrumar) To stow casks and barrels.// Acad. Worker in the winery who positions the butts and draws off, tops up and clarifies wines.



Arrumbador

Arruñado. Topping. The sequence of operations preparatory to putting the heads of a cask into position.

Aspillar. To measure the volume of wine in a butt by means of a dipstick.// Acad. (And.) To ascertain, using a dipstick, the quantity of wine contained in barrels.

Barro. Type of soil in which vines are planted, with a lower chalk content than albariza (maximum 30%), generally alluvial and therefore containing more organic material, darker-coloured and more fertile.

Batidero. Driving-slab, where the cask is beaten into shape.// Acad. A place for striking and beating.

Batir (la vasiya). To use the thin end of a cooper's hammer to drive home the hoops that shape the butt.// Acad. To strike.

Beber. The transfer of wine from the canoa into the butt.// Mar. To ship water (of a boat).// Acad. To cause a liquid to pass from the mouth to the stomach.

Bienteveo (candelecho, bohío). Hut raised on legs used as a lookout post in the vineyard. Built

at ground level, it is known as a *bohío*.// Acad. A hut raised on stakes, from which the vine-worker keeps an eye on, and guards, the whole vineyard.

Bina (binar). Tilling (to till). An operation that takes place in July consisting of cutting the soil and then flattening it until semi-compact. In Sanlúcar, this is done superficially at the end of the winter.// Acad. To carry out the second tilling in the vineyards.

Bizca. Adjective applied to a butt slightly out of line with its wooden supports or the butts alongside.// Acad. Describes a person with a squint.

Boca (abajo). Face down. Position of a butt with the bunghole against the ground.

Boca (arriba). Face up. Position of a butt when the bunghole is vertical to the floor.

Boca (atrás, afuera). Facing backwards. Position of a butt when the bunghole is facing out from the loading-ramp timbers horizontal to the floor.

Boca (de bojo). Bunghole. Circular opening in the bulge of the butt.// Mar. Circular hole in the deck and mast-head, etc.// Acad. Entrance or exit.

Boca (palo). Position of a butt when the bunghole is facing towards the loading-ramp timbers, horizontal to the floor.

Bocoy. Cask larger than the *bodega* butt, of varying shape and generally with a capacity of 40 arrobas.// Acad. Large storage barrel.

Bojo. Bulge or girth. Perimeter of the outside diameter of the butt at its widest point.// Mar. Extent of the circuit of an island or headland.



Boca de Bojo

Bota. Butt. Wooden container in which sherry wine is aged, of various capacities and known by different names according to use.// Acad. Barrel for keeping wine and other liquids.

Bota (gorda). Large butt. The type generally used

in the *bodega* for ageing wine, with a capacity of 36 arrobas or 600 litres.



Bota

Bota (de exportación o de embarque). Shipping butt with a capacity of 30 arrobas or 500 litres.

Bota (bodeguera). *Bodega* butt. The type used for operations inside the *bodega*. Generally the *bota gorda*, though the term is often applied to very old butts that have lost their shape over time and whose capacity is not precisely known.

Bota (de cañón). A butt positioned on the ground ready for moving, with its long axis perpendicular to the row.

Bota (a la bretona). A butt positioned on the ground ready for moving, with its long axis parallel to the row.// Mar. Way of stowing barrels in the hold; anything placed parallel from stem to stern.

Bota (de gasto). Butt of wine for consumption at any time by the *bodega* workmen.

Cabecear (cabeceo). To blend (blending). The operation of blending musts or wines, or of blending these with vinous alcohol.// Mar. Movement of a boat in a vertical gyratory action on an imaginary axis, perpendicular to the keel, with stem and stern rising and falling alternately.// Acad. In sherry viticulture, to make a single wine out of different types.

Cabero. Heel of a loaf of dark bread, usually filled with olive oil or dripping.

Cabezuelas. Lees in musts.// Acad. Dregs formed two to three months after having racked the must off lees.

Cachón. Short tier, composed of few butts.

Calzar. Operation of putting wooden chocks in position to keep the butts in place.// Acad. To fit a wedge between the ground and a wheel of a vehicle or machine to immobilise it.

Calle. Aisle between two rows of butts in a *bodega*.

Cama. Wedge-shape cut at one end of the loading poles.// Mar. Indentation left in the sand or mud by a boat that has run aground.



Calle

Capataz. *Bodega* or vineyard foreman, in charge of other workers. Known by different names according to his duties.// Acad. The person who directs or supervises other workers.

Capataz (de corvillo). Person in charge of a team of harvesters.

Capataz (de cuadrilla). Person in charge of a team of *bodega* workmen who supervises operations.

Capataz (de lagares). Person in charge of all the operations in the press-house.

Capataz (de podadores). Person in charge of training apprentice pruners.

Capataz (de viña). The person entrusted by the vineyard proprietor with managing the farming of the vineyard, keeping the holding, equipment and buildings in good order, and hiring and directing the workers.

Casa (de la gente). Workers' living and sleeping quarters within the *caserío*.

Casa (de lagares). Part of the *caserío* housing the wine-presses.

Caserío (casa de la viña). Vineyard homestead, generally encompassing the foreman's house, workers' quarters, press-house, store-houses, stables and workshops.

Casquero. Skilled cooper responsible for making the barrel or container.

Castra (castrar). Pruning (to prune) green growth to get rid of superfluous knobs and rectify previous pruning if necessary.// Acad. To prune.

Catador (capataz de venencia). Taster. Person responsible for the organoleptic quality of musts and wines.

Catana. Slice of bread moistened in gazpacho and then dressed with olive oil.

Cavabien. Deep tilling done with an *azada* to bury weeds and protect the vines.

Cavadores. Tillers. Men who dig the vineyard.

Cejo (echar las botas al). Action of lifting butts laterally onto the *palos de escalera*. This involves positioning the butt obliquely to the wooden beams, with the head resting on one of them, then rolling it until it engages with the beam and can be manoeuvred into position on both of them.

Chanflete. Chamfer. Bevelled surface given to the edges of cask staves so that they fit together.

Chiquichanca. Vine-grower's apprentice.

Chivir. To chive; to joint. Cooperage operation of planing the edges of the staves and pieces used for the heads.

Claros. Clean, transparent young wine (must, in Jerez usage) obtained by racking off the lees.// Acad. Clean, pure, unencumbered.

Clarejones. Must that retains lees during the racking off process.

Clasificación. Operation carried out when fermentation has finished, to categorise wine according to qualities.// Acad. The act and effect of classifying.

Color (vino de). Wine of intense colour and colouring capacity, used in blends.

Color (de Macetilla). A quality *vino de color* obtained by fermenting a mixture of *arrope* and unfermented must.

Color (remendado). A *vino de color* in which



Caserío

arrope is mixed with already fermented must.

Comegen (comején). Termite. An insect that attacks wood.// Mar. Woodworm.// Acad. A white insect, five to six millimetres long, that lives by forming colonies in damp places in hot climates, and makes its nests in trees. It makes its way into all kinds of materials, mainly wood and the like, and eats away at them.

Contrear. To place flat buffers between contiguous butts so that they are in contact via them rather than directly.

Cordón. Edge of the staves used for the ends of casks.

Corredor. Dealer who specialises in buying and selling wines.// Mar. Name given to a speaker of languages who acts as interpreter to the captains of foreign merchant ships in declarations and complaints, and assists them in buying and selling transactions.// Acad. A person whose job it is to assist in auctions, contracts and buying and selling of any type of goods.



Catador

Corrida (de escalas). Running the scales. Operation of decanting wine from each sequence of butts containing similar wine of the same age to another, older one. (v. *Rocío*).// Acad. (Arch.) Flow or movement of a liquid.

Corte (al). Extracting wine from butts, starting with the butt in the top tier, proceeding to the one immediately beneath it, and so on down to the *solera* (ground level) layer, i.e. across the horizontal lines that represent the different scales.// Mar. Moving from one side of a particular line to the other, crossing it.

Cortinilla. Piece of brown paper stuck by wine to the edge of the butt below the *falsete* to conduct any wine that escapes through the join between the *canuto* and the *falsete* into the *tineta*.

Costa. Vineyard workers' daily meals, communally organised by the *encargado de la costa*.

Costa (*encargado de la*). Person elected from among those making up a *ranchito* to take charge of organising communal eating.

Costero. Person responsible for buying the provisions for the workers, and other goods, and transporting them to the vineyard.

Cream. One of the Liqueur Generoso Wines defined by the Denomination of Origin's Regulations, mahogany in colour to differing degrees of intensity, and with residual matter content over 115 gr per litre.

Criadera. Nursery. Each of the scales in a *criadera* and *solera* system, made up of a collection of butts containing wine of a homogeneous level of maturation.// Acad. Prolifically reproductive.

Crujía. Central aisle, generally wider than the rest, running transversally across the *bodega*.// Mar. Section of the deck extending from stem to stern between the ropes; also used for the area between the ropes and the artillery.// Acad. Long passage in some buildings giving access to rooms.



Crujía

Cuadrilla. In the vineyard: a hierarchically organised group of nine to eleven vine-workers. In the *bodega*: a group of four *arrumbadores*.// Acad. Assemblage of people to carry out some activity or for specific purposes.

Cuartear. Act of raising a butt to the second tier by four pulls on the *cintero*. Each pull turns the butt a quarter way round.// Mar. Referring to the nautical compass, to announce the course, specifying headings.// Acad. To split up or divide something into four parts.

Cuartillo. Measure of wine volume, equivalent to 1/32 arrobas.

Desbragar. To dig a trench some twenty centimetres deep around a vine to get rid of superficial roots or expose grafts.// Acad. (And.) To dig a trench some twenty centimetres deep around a vine to get rid of superficial roots and gather shoots for grafting.

Descachonar. To dismantle a *cachón*.

Descantonar. Cooperage operation of splitting and trimming the staves.// Acad. To break the edges of something.

Descapirotar. Cooperage operation of levelling the stave ends.// Acad. To remove a hood or hat.

Desfangado. Removal of the thickest solids in must before it is fermented.

Deslío. Racking. Operation of separating must from lees.// Acad. Operation of separating must from the lees that have been deposited at the bottom of the container during fermentation.

Dolador. Rack cooper; headpiece cleaver. Skilled cooper who prepares the staves and headpieces for making a cask.// Acad. A person who smooths or brushes a plank or stone.

Dormida. Sleeping. Term applied to a stored butt when the bunghole is out of line, to right or left, with the vertical.// Mar. Overnight mooring sheltered from wind and sea conditions.

Dry. One of the Liqueur Generoso Wines defined by the Denomination of Origin's Regulations, straw to golden yellow in colour, with a pungent nose and a residual matter content below 45 gr per litre.

Duela. Stave. Each of the pieces of wood that make up the curved wall of a cask. The term is applied by extension to the pieces of wood from which the staves are obtained.// Acad. Each of the planks that form the curved walls of casks, vats, barrels, etc.

Dulce (*apagado*). Sweet wine obtained by arresting fermentation by adding alcohol.

Dulce (*pasa*). Sweet wine obtained by arresting fermentation by adding alcohol in must made from raisined grapes.

Embojada. Epithet applied to a butt positioned so that the bulge hoops are located in the centre of the *palos de escalera* and *chocks* are placed under the hoops.

Empernacar. To straddle, referring to a man standing in the top tier of a row of butts, with a leg on either side of the space between two butts and resting on one in the tier below.

Encabezado. Fortification, or addition of wine alcohol, to young wine (up to this point still referred to as 'must' in the sherry region) with the aim of modifying its alcoholic content.// Mar. To join two things by their heads.

Encargado (*de cuadrilla*). Foreman in a *bodega* team of four, composed of himself, two other skilled men and an apprentice.// Acad. A person entrusted with doing something.

Encornada. Epithet applied in the *bodega* to a butt whose long axis is not perpendicular to the *palos de escalera* or parallel to other butts in the row.

Entallar. To cut staves to length.// Acad. To make cuts in a piece of wood so that it can be put together with another.

Escala. Scale. Each sequence of butts, containing similar wine of the same age, that forms part of a *criadera* and *solera* system.// Acad. An organised sequence of things that differ from each other but are of the same sort.

Escaleretero (*aviador*). Sawyer. Skilled cooper who splits, selects and shapes the staves.

Especificado. Vineyard worker chosen to carry out delicate operations.

Espensilla. Little room used as the vineyard foreman's office. Larder-like cupboard used for storing the vineyard foreman's office materials.



Duela

Espirriague. Poor-quality must obtained from the third pressing, or pressing the residue of the pressed grapes.

Faena. Operation. Each of the various processes carried out by *arrumbadores* in the *bodega*, or in the vineyard.// Acad. Physical work.

Falsete. Tightly-bunged hole, centrally placed near the bottom of the front of the cask// Acad. Cork for closing a cask when the tap is removed.

Fino. Sherry wine of the *generoso* category aged under a layer of *flor* yeasts.

Fleteado. Chiming. Cooperage operation consisting of bevelling the inside edges of the staves. Part of the topping process.

Flor. A biological film formed on the surface of certain wines by specific yeasts indigenous to the *Jerez area*.

Fogarín. Hearth area within a vineyard homestead's *casa de la gente* with an open fire-place where the cooking is done.// Acad. Common hearth used by farm workers in a vineyard, estate-farm, and so on. Usually at floor level.

Golpe (lleno). Tilling. Vineyard task of digging and levelling the ground without compacting it.

Gorróna. A butt ready to receive wine or must left over from other operations.// Acad. A person who makes a habit of eating, living, treating himself or amusing himself at others' expense.

Hendido (hender). Splitting (to split). The operation of splitting the rough stave, approximately triangular in section, along the grain of the wood to obtain pieces usable as staves in a cask.// Acad. Making or causing a split.

Hilado. Literally 'threading'. A disease of wines which causes a perceptible change in their density.

Hueco. Space between two butts above which another can be placed.// Mar. The hollow in a wave as it starts to curl.// Acad. Interval in time or space.

Hueso (a). A butt in a row is said to be a *bueso*

in relation to a supporting one when it rests on it without the aid of chocks or wedges. Also used when the bulges of two butts are in contact, even when wedges are in place.// Acad. (Bldg.) Applied to stones, slabs or bricks which fit together perfectly without mortar.

Jable. Groze or groove cut into the inside end of the cask into which the head fits.// Acad. Groove into which the heads of casks and butts fit.

Jalar (halar). To pull on the *cintero*.// Mar. To haul a rope.// Acad. (And.) To pull something towards one.

Juntos. Joints. The joint line between the staves of a butt.// Acad. Together, close.

Lagar. Trough in which grapes are trodden, with a quadrangular base, shaped like a truncated inverted pyramid in section, measuring about three metres along the sides and about 60 cm high, raised on 80cm-high supports.// Acad. Receptacle in which grapes are trodden to obtain must.

Lías. Lees. Dregs produced during fermentation and deposited at the bottom of the butt.// Acad. Dregs.



Lagar

Linco. Row of vines, generally planted and attached to several lines of wire.

Listán. One of various synonyms for the grape variety Palomino.

Macear. To hammer.// Acad. To hit with a hammer or mallet.

Madre (del vino). Sediment which forms in the bottom of butts containing wine undergoing biological ageing, made up mostly of dead yeasts given off by the film of *flor*.



Lincos

Majuelo. Wine made from musts obtained from grapes grown on young vines.// Acad. A new vine that begins to bear fruit.

Manijero (hombre de mano). Man who sets the working pace in a *cuadrilla* or *rancho*.// Acad. (And.) Employee in charge of hiring workers for certain farming operations.

Manzanilla. Generoso wine obtained through biological ageing in wineries located in Sanlúcar de Barrameda.

Marco Real. Pattern of vineyard planting in which the vines are planted equidistant from each other in squares measuring about 1.57m x 1.57m.// Acad. Measure of surface equivalent to 400 square estadales.

Mayeto (mayeta). Grape-grower who owns a small vineyard.// Acad. (Cád.) Small-scale vineyard owner.

Media (bota). Butt with a capacity of about 15 arrobas or 250 litres.

Medium. One of the Liqueur Generoso Wines defined by the Denomination of Origin's Regulations, amber to mahogany in colour and with residual matter content over 45 gr per litre and under 115 gr per litre.

Metedores (de uva). Workmen engaged in loading the grapes from each delivery into the lagar.// Acad. Person who puts or incorporates one thing into another.

Miteado (or mitad y mitad). Half-and-half blend of sherry wine and vinous alcohol used for fortifying.

Moños. Hooked ends, as opposed to the wedge-shaped ends, of the palos de lagar.

Moscatel. One of the varieties permitted by the Denomination of Origin's Regulations, commonly used for making the sweet wine of the same name.



Pisadores

Mosto. Must. In the sherry region, the juice pressed from grapes continues to be referred to as 'must' after fermentation up until the point when it is fortified.// Acad. Juice pressed from grapes before it is fermented and becomes wine.

Oloroso. Powerfully aromatic, mahogany coloured sherry wine in the generoso category, aged to an alcoholic strength that arrests the development of *flor*.// Acad. Emanating fragrance.

Orujos. Grape skins, stalks and pips after all the must has been extracted.// Acad. Grape skins after all the substance has been pressed and extracted.

Pago. A generally large area of cultivated ground encompassing a number of vines which share the same soil and microclimatic characteristics.// Acad. Specific area of land, particularly in vineyards and olive groves.

Pale Cream. One of the Liqueur Generoso Wines defined by the Denomination of Origin's Regulations, pale straw yellow in colour, with pungent aroma and residual matter content over 45 gr per litre and below 115 gr per litre.

Palo Cortado. One of the generoso group of sherry wines, aged by a physico-chemical process, without a film of *flor*, but which along with characteristics typical of olorosos (deep palate and intense colour) develops a typical aroma so that it resembles an amontillado.

Palomino. The main grape variety of those authorised for making sherry.

Pata de Gallina. A type of oloroso, especially smooth and glyceric on the palate.

Paxarete. Very sweet wine produced by blending;

dark mahogany in colour and very intensely aromatic, often used to enrich the flavour of spirits such as rum and whisky in drinks.

Pedro Ximénez. One of the grape varieties permitted by the Denomination of Origin's Regulations, commonly used for making the sweet wine of the same name.

Peinar. Literally, to comb. To ensure that the dipstick readings for the wine in all the butts in a scale are equal. To draw a rush mat over the earth floor after sweeping.

Peso. Unit of value used in buying and selling wine, and for calculating the value of stocks held.// Acad. Imaginary coin, supposed to be worth 15 reales (about 0.02254 €).

Picar. To rip a butt, lying with its long axis horizontal, during decanting and racking operations so that the wine or must below the level of the filsete can continue to flow out.// Mar. To chop something with an axe. // Mar. To set a pump working.

Pie. The mass of trodden grapes packed into a cylindrical shape around the screw of the lagar and wound about with esparto-grass tape for first pressing.// Acad. Cylindrical mass of grapes already trodden in the lagar, tightly bound in a plaited strip and placed beneath the press for expressing the must.



Rocío

Picón (cisco). Very small pieces of charcoal made with vine canes.// Acad. Charcoal in very small pieces, made with holm-oak, cistus or pine branches, useful only for burning in domestic braziers.

Pierna. A long tier of butts that can not be extended any further on the edge of a nave.

Piquera. An opening halfway down the side of the lagar, with a wooden groove alongside.// Mar. Proximity to something, but more specifically to the mouth of a port or mooring-place; or the

mouth itself.// Acad. Hole in one of the two ends of a barrel or still which can be opened to let the liquid out.

Pisadores. Treaders. People who tread the grapes in the lagar.// Acad. Treaders of grapes.

Puya. (limpia). Releasing must or wine into a butt through a tube, without using a rociador.

Rancheo. To live from *rancho* to *rancho*, vineyard to vineyard, on the charity of the people there.// Acad. To form ranchos somewhere, or fit in with them.



Serpia

Rancho. Group of ten to twelve vineyard workers formed to organise communal eating.// Mar. Each of the divisions of sailors formed to ensure good order and discipline on war-ships; tasks and services are organised by rancho, and the members of each rancho eat together.// Acad. Meal made to be eaten communally by a large group, generally in the form of one big stew or the like.// Acad. Group of people who eat that meal.

Raspado (raspar). The operation of giving the slightly convex shape to the outer face of the staves.// Acad. To scrape something lightly to remove some part of its surface.

Raya. Coarse oloroso, used for blends, generally derived from butts placed outside the *bodega* to accelerate the wine's physico-chemical development.

Rebina. Re-tilling.

Rebotar. Cooperage operation of bevelling the edges of the head after the stave-ends have been trimmed. Part of the heading process.

Recastra. Re-pruning.

Remontado. Description of a fino or manzanilla which has spent a long time in the bottle and has oxidised slightly so that its pungent aroma has faded perceptibly and its original organoleptic characteristics have changed.

Retundir. Cooperage operation of planing the stave joints so that they are perfectly even.// Mar. To give a final coat of caulking to joints.// Mar. To prepare the joints of planks, etc.// Acad. To use suitable tools to even off the face of a stone-built wall after completion.



Solera

Rocío. Refreshing. An essential operation of the *crianza* process: a portion of wine of the same type, but younger than that which they contain, is added to a criadera or solera. // Acad. A brief shower of rain.

Ruedo (al). A butt on the ground ready to be moved by rolling.

Sacas. Quantities of wine extracted from the solera and destined for consumption.

Sancocho. Boiled must, similar to arropo, but in which the volume has been reduced by only a third of the original quantity of liquid.

Serpia (alumbra, pileta). Digging holes and/or banking up soil between the rows of vines to form 'reservoirs' to catch and retain rainwater.// Acad. Slender, sterile shoot put out by vines low down and close to the trunk.// Acad. Digging out.

Sobretablas. Term applied to must that has just been fortified for various purposes, and which from then on is referred to as wine.

Soleo. Sunning. Exposing grapes to the sun so that they become raisined.// Acad. (And.) Gathering up the olives that have fallen naturally from the tree or been blown off by the wind.

Solera. First, floor-level, scale in a criadera and solera system, from which wine ready for consumption is extracted.// Mar. Flat surface or level area made up of planks or one single sheet of wood to serve as a base for something.// Acad. Piece of timber placed flat on stonework so that

others can rest or be stacked on it, etc.// Acad. (And.) Madre or lees of wine.

Tanganillo. Structure of four criss-crossed wooden poles to serve as a base for a butt.// Acad. Stick, stone or similar object used for holding or propping something in position temporarily.

Tierra (de Lebrija). 'Spanish earth'. Type of clay used for clarifying wine.

Tiesta. Edge of the staves, from rim to groove, that make up the two heads of the butt.// Mar. A cord that is joined or sewn for reinforcing sail edges.// Acad. Edge of the pieces of wood that serve as barrel ends or covers.

Tirador. Wine-press workman whose job it is to shape the load and press the grape *orujos*.// Acad. A thrower, drawer or shooter.

Trabajadero. Cooper's yard, where butts are constructed.

Trasegar. To decant or transfer wine from one butt to another, by siphoning it into jars.// Acad. To move things from one place to another, especially liquids from one container to another.



Trasegar

Tresbolillo. Diagonal planting pattern in the vineyard.// Acad. Term used to describe a pattern of planting in parallel lines so that the plants in one line are positioned between two in the next.

Tronera. Opening between three butts, one on top of the other two. An opening between butts in an andana.// Mar. Each of the openings made in the parapets and other parts of a corsair or merchant ship for firing through at the enemy as they try to board.// Acad. Opening in the side of a ship, the parapet of a wall, or an artillery entrenchment, from which guns can be fired safely and accurately.

Vaciado. Operation of giving the inner face of the staves a slightly concave shape.

Vena (de lias). Vein or thread of *lias* or *turbios* (the lees of must and wine, respectively) that emerges with the clear must or wine when it is drawn off using a *canuto* or *bomba*.

Vendimiador. Person who gathers grapes; grape-harvester.// Acad. Harvester.

Venenciador. *Bodega* worker who wields the *venencia*.



Venenciador

Viñadero. Person who guards a vineyard.// Acad. Vineyard guard.

Viticultor. Viticulturalist. A person who practices the occupation and is an expert at viticulture.// Acad. Person who is expert at viticulture.

V.O.R.S. "Vinum Optimum Rare Signatum" (also, Very Old Rare Sherry). A qualification issued by the Consejo Regulador for specific *sacas* of wine of exceptional quality and an average age of over 30 years. Covered by the Sherry Wines of Certified Age category.

V.O.S. "Vinum Optimum Signatum" (also, Very Old Sherry). A qualification issued by the Consejo Regulador for specific *sacas* of wine of exceptional quality and an average age of over 20 years. Covered by the Sherry Wines of Certified Age category.

Yema. Must of the best quality, obtained by treading.// Acad. The best part of something.

GLOSSARY OF TOOLS AND UTENSILS

This is an alphabetical word list of the tools and utensils mentioned in The Anthropology of Sherry chapter, expanded to include a few more terms in common use or of particular interest.

Andorras. Pieces of canvas used to protect the fronts of shoes or espadrilles.

Apalcador. Mixing rod used for stirring up wine during clarification, v. *Vara* (de apalcar).

Aperadores. Wedge-shaped chocks, about 6 cm high and 25 cm long, used for holding the butt firm on the escalera de trasiego.

Aro corregidor. Bulge hoop put in place after the head hoop, at bulge level, which serves to hold the staves together, close up the joints and make the cask symmetrical.

Aro (de mole). Head hoop used for raising the cask, within and against which the staves rest until the circle is completed.

Aros (de mole). Set of five truss hoops driven onto the top-head once the cask has been raised, to replace the provisional head hoop and bulge hoop.



Aro de Mole

Aro (recogedor). Shaping hoop used on the driving-slab to draw the dinting-head tight.

Aspilla. Narrow strip of wood used as a dipstick to measure the quantity of must or wine in a butt, or for calculating the head space or ullage space. In the first case it is known as *aspilla de afaro* and in the second as *aspilla de fallo*.// Acad. (And.) Thin strip of

wood marked along its length with a scale for measuring the volume of the liquid contained in receptacles of known capacity and shape.

Azada. Combination of a spade and a hoe: a steel blade about 26 cm square reinforced in the centre with a ring into which the wooden handle fits and indented sides to make it less heavy.// Acad. Instrument consisting of a rectangular iron blade or spade usually measuring 20 by 25 cm, with one cutting edge and the opposite edge fitted with a ring to hold the shaft.



Cámara Oscura

Azucla. Adze. A tool rather smaller than the *azada*, similar in shape but not indented at the sides.

Azucla (de tonelero). Howel, or Carthaginian adze. A cooper's tool made of steel, of different sizes and shapes ranging from flat to curved depending on use, and with a short handle.// Mar. The Marqués de la Victoria gives the name *azucla de ribera* to the long-handled adze used by quayside carpenters.// Acad. Carpenter's tool, composed of a steeled iron blade with a cutting edge, measuring about 10 by 12 cm.

Babero. Rectangular board, narrowing at one end, placed on the butt to collect must spilled while being decanted from the *tina*.// Acad. Piece of cloth put on a child's chest to keep it clean. A bib.

Banquillo (de trasiego). Decanting bench. A wooden bench consisting of an elongated, slightly tilted seat narrowing towards one end and supported by four slightly splayed legs reinforced with struts and cross-pieces.// Acad. Bench; the seat on which the accused sits before the court.

Bocachas. Small wooden wedge for holding butts in position in the tiers.// Acad. Wide-mouthed blunderbuss.

Bomba. Siphon, nowadays made of stainless steel, with arms measuring 2 m and 1 m respectively. The longer arm ends in a sharp bend, and the end of the shorter one is fitted with an inner valve consisting of a hinged cap.

Bomba (de 2ª / 3ª): Designation of siphons according to their length and use for extracting wine from the 2nd or 3rd scale.// Mar. Pump; machine for extracting water from the well (which encloses the ship's pumps), or water taken on by the ship, or water required to be removed from other places.// Acad. Machine for raising water or another liquid.

Bomba (de goma): Siphon incorporating a rubber tube.

Bomba (de llave): Siphon similar to the *bomba* described above but bigger, and with a tap fitted before the bend in the longer arm.

Calceta. Strong cloth sleeve or sock, about 80 cm long, open at one end and closed at the other, the open end being sewn around a wooden ring 8cm in diameter. Serves the same function as the *rociador*.

Calzo. Small wooden wedge.// Mar. Wooden bar for wedging casks in stowage.// Acad. Wedge inserted to widen the space between two bodies.

Cámara (oscura). Wooden box on a platform standing on a 1.5m tall leg, painted matt black inside and containing a light (usually a candle). A window with a little sill in one side of the box allows a catavinos to be placed against the light to ascertain the brightness and cleanness of a wine.



Canoa

Canoa. Type of funnel composed of a flat-bottomed, boat-shaped, stainless steel receptacle with a domed top and a horizontal tube or

spout projecting from the front and tipping downwards at the end. The body has two legs to angle it slightly forward.// Mar. Canoe. Small craft made of one piece or a tree-trunk.// Acad. Very narrow rowing boat, etc.

Canuto. Olive-wood or mahogany tube, 14 to 16 cm long, slightly oval in shape, one end of which is corked with the *duque* while the other is inserted into the bunghole in the head of the cask. There are various types of *canuto*: *canuto corvo* (curved), *canuto de vendimia* (harvest), *canuto de recibo* (receiving), *canuto para clavo* (for clarified must or wine) and *canuto para alto* (for working at a height).// Acad. Short, slender tube made of wood, metal or other materials.

Catavino. Fine crystal glass for examining, smelling and tasting musts and wines.// Acad. Little jug or cup used for giving a tasting sample of wine from a cask or earthenware jar.



Catavino

Cañiera. Chap-like canvas over-trousers, open behind, used for protecting the workman's clothing.

Chislata (chirlata). Small, flat piece of oak used to level up the *palos de escalera*.// Mar. Piece of wood used to compensate for a lack in something else. Small piece used to fill the join between things that do not quite fit together.// Acad. Piece of wood used to complete another that is too small, or defective.

Cintero. Esparto-grass rope about 32 m long, used by the *arrumbadores* for manoeuvring butts.// Acad. Rope or cord used for tying round something.

Clavo. Steel rod about 15 cm long, widening slightly into a handle at one end and elongated

into a point at the other, at an angle to the handle. Used for uncorking butts stoppered with a cork.// Acad. Long, thin metal tool with a handle and a point.



Corecha

Colador. Sieve composed of a cylindrical wooden frame with a dense fabric mesh attached to its lower part.// Mar. Type of jar with a perforated bottom.// Acad. Small barrel with several holes in the bottom.

Compás (de marcar). Tool like a pair of compasses made of iron and steel except for the handle, which is a piece of wood attached perpendicular to the fixed arm. The fixed arm is about 20 cm long, and the moving arm ends in a blade with a cutting edge.// Mar. Measurement, distance, stretch.// Acad. Instrument composed of two sharp arms, joined at the top by a pin so that they can be opened and closed.

Contras (retallos, contrate). Small, flat pieces of oak, used with *bocachas* to keep tiered butts firmly in position.// Mar. General term for any sort of horizontal prop for something.

Coqueteador. Iron bar with two hooks positioned like horns at one end and a chisel-shape at the other.

Corcha. Slightly tapering solid cork used for stoppering the bunghole of a butt.// Mar. Wooden or cork bung for covering the mouth of a gun to prevent water getting in.

Cortinilla. Piece of brown paper stuck by wine to the edge of the butt below the *falsete* to conduct any wine that escapes through the join between the *canuto* and the *falsete* into the *tineta*.

Cuchillo de escalera. Rack knife. Cooper's tool used for splitting the staves, composed

of a rectangular blade with a long handle perpendicular to it to provide leverage when splitting the stave held firm by the *escalereta*.

Duque. Cork bung used for stoppering the canuto.

Embudo. Funnel. An open receptacle, nowadays made of stainless steel, cylindrical in shape and with an off-centre hole in the bottom leading into a tube.// Acad. Hollow conical instrument, wide at the top and narrow below and ending in a tube, used for decanting liquids.

Envasador. Funnel, nowadays made of stainless steel, with a cylindrical part and a conical part to which an indented frame is attached so that it fits around the convex shape of the butt.// Acad. Large funnel used for pouring liquids into skins and barrels.



Envasador

Escalera (de trasiego). Racking steps. A wooden platform composed of two parallel squared poles fitted with platens and connected by two transverse pieces 40 cm long. The poles rest on a 15cm-thick cross-piece at one end, and extend into a ramp at the other.

Escalcrilla (de carga). Loading steps, consisting of two square poles with one surface concavely shaped at either end and linked by two wooden or iron rungs.

Escalereta. Cooper's rack. Piece of equipment consisting of two squared poles 150 cm long, joined at either end by 65cm cross-pieces and traversed half-way along by two other cross-pieces, one on either face of the two long poles and quite close together. Used for supporting the staves so that they can be split.

Escobilla (de tomillo). (Thyme) broom. Bunch of thyme twigs attached to a wooden handle.

Also, a bunch of twigs tied together with string or wire// Acad. Little brush made of bristles, wires, etc.

Espolín. Wooden sleeper, about 15 cm thick and 65 cm long, on which the *palos de escalera* rest and also used as supports, bases and brakes in various *bodega* operations.

Estera. Rectangular piece of woven esparto fabric, measuring about 1.5 m by 1 m.// Acad. Thick fabric made of esparto, rush, palm, etc.



Estera

Estrebilla. Piece of equipment composed of two U-shaped metal strips about 3 cm across, with the arms of each U bent over into a 3 cm hook; the strips are joined, one on top of the other, by a rivet in the base of the Us and swivelled to form a kind of basket 17 cm high with a rim formed by the four hooked sections.

Estrella. Cylindrical cork with perpendicular grooves fitted into the bottom end of the *canoas* through which the rate of flow of wine can be estimated.// Acad. Star-shaped object.

Estreve. Cylindrical iron brazier in which wood shavings and sticks are burned to heat the raised cask during the driving process.

Galafate. Small iron tool, 9 to 10 cm long, with a pointed blade at one end used as a hook for holding the head pieces in position while they are being fitted.// Mar. Caulk.// Acad. Clever thief who steals with skill or deception.

Galga. Cooper's plane, used for shaving the staves and finishing the butts.// Mar. Stream-anchor and cable or buoy-rope used to increase

the anchor's holding power.

Jabladera. Croze. A cooperage tool, similar to a joiner's marking gauge, adapted to incorporate a set of two blades. Used for cutting the groove (also known as the croze) into which the bevelled edges of the head will fit.

Jarra. Wide-necked, convex-bodied, one-handed vessel, nowadays made of stainless steel (formerly made of wooden staves held together by metal hoops). Its capacity of 12.5 litres is one of the standard measurements in *bodega* work.// Acad. In Jerez, a tin receptacle that holds twelve and a half litres and is used for decanting wines in the *bodega*.



Jarra

Jarrón. Wide-mouthed oak tub, bound horizontally by three hoops and with two metal handles, usually about 27 cm high and 34 cm in diameter.

Ladroncillo (de claros). Metal (nowadays stainless steel) pipe, curved at one end, 2 cm in diameter and around 50 cm long, with a *corcha* around the point where the curve begins. Used for transferring wine from cask to cask.

Llano (retallo). Small, flat piece of oak, used in conjunction with *bocachas* to keep tiered butts firmly in position.

Mallo. Wooden mallet with a short cylindrical head and long handle inserted through its central axis.// Mar. The mallet used by caulkers for striking the implements used for inserting and cutting oakum into the seams of a ship.// Acad. Mallet, wooden hammer.

Marcador (de vaciar). Marking tool consisting of a wooden handle about 15 cm long fitted with a steel pin, rectangular in section, that provides a sharp, rectilinear edge.

Mazo. Wooden hammer with a handle 25 cm long and cylindrical head about 8 cm long on either side and 8 cm in diameter.// Acad. Big wooden hammer.

Palomilla. Wooden pole with two concave sides which fits into the space between butts and supports the *potros*.// Acad. Frame shaped like a right-angled triangle used to support planks.

Palos (de cargar). Pair of squared poles, tapering towards one end and finishing in a wedge shape; at the other end they are fitted with iron hooks for attaching to a cart or truck. There are long and short versions, measuring 3.5 m and 2.5 m respectively.

Palos (de almacenar). Pair of squared wooden poles, tapering towards one end and finishing in a wedge shape; at the other end, the same face is cut away into a concave shape known as a *cama* (bed).



Palos de escalera

Palos (de escalera). Pair of squared beams which sit on *sleepers* known as *espolines*, and on which the butts in a solera (or ground level) tier rest.

Palos (de trasiego). Short, slim poles placed beneath the *jarra* to tilt it and hold it firm.

Papel (de canuto). Strip of brown paper attached to the narrow end of the *canuto* so that when it is inserted into the *falsete* there are no gaps through which wine can escape.

Petate. Bedroll in which the vineyard workers used to carry their bedding and belongings when lodging in the workers' quarters of the *caserío*.// Mar. Sailor's bundle of bedding and clothing.

Picador. Squared wooden pole about 1.5 m in length with five oblique steps cut into one of its long sides.

Potros (caballos). Horses. The supports on which the scaffolding platform rests.

Raspa. Hollowing knife. Cooperage tool consisting of a curved blade set between two handles. Used for hollowing out the inside face of the staves.



Redor

Redor. Circular esparto grass mat, about 65 cm in diameter used during the harvest time to sun-dry the grapes.// Acad. Round mat.

Rociador. Utensil consisting of a curved tube, nowadays made of stainless steel, about 90 cm long, inserted into the cask through the bunghole, from which it remains suspended. The *cano* fits into the bunghole end of the tube, while the opposite end, inside the butt, is narrower and perforated so that wine poured into it is gently and evenly distributed. There are various types of *rociador* for different purposes: special ones for finos, for olorosos, and a type known as *pata de cabra* (goat's foot).

Sufridera. A type of *canuto* with a sprinkler head attached to the end opposite that which fits into the bunghole.

Tiento. Piece of cane of a height equivalent to the volume of the lees, used for keeping the siphon's rubber tube away from the bottom of a butt lying on its side.// Acad. Stick used by the blind to test the way forward.

Tina. Wooden receptacle with a capacity of about 20 litres.// Acad. Wooden vessel shaped like a half-barrel.

Tinaquito. Open, cylindrical, oak-wood receptacle about 25 cm high with two metal handles.

Tineta. Oak-wood receptacle about 30 cm in diameter and 15 cm high.

Tranquilla. Stout wooden bar 1 m long, the lower end of which widens into a rectangular prism, one of whose faces is bevelled to give a sharp edge.// Acad. Thick, strong stick.

Tranquillón (burra). Squared wooden pole 10 cm thick and 90 cm long, with concavities in the ends to fit over the butts on which it is placed. The other side is gently concave almost throughout its length.

Trapos. Cloths. *Triapo de arranque:* piece of rough cloth used around the bunghole *corcha* as a temporary stopper for a full butt that has to be rolled. *Triapo de tapar:* square of canvas wrapped around the bung when a butt is to be firmly stoppered.// Mar. The sails of a ship.// Acad. Rags; scraps of cloth discarded because they are old, torn or of no use.

Vara (de apalcar). Clarifying rod. Cylindrical metal rod, nowadays made of stainless steel, with a ring at one end and perforations into which palm shreds are inserted at the other. Used for stirring up the wine in a butt during the clarification process.// Acad. Long, thin stick.



Venencia

Venencia. Utensil used for extracting small quantities of wine or must from a butt. It consists of a flexible handle about 75 cm long, made of whale-bone or plastic, with a metal hook at one end and at the other a cylindrical cup 3 cm in diameter, 8 or 9 cm long, round-bottomed and made of stainless steel or silver. A *venencia* can also be made of cane, cut so that handle and cup are all one piece, with a knot in the cane providing the base of the cup.// Acad.

Utensil consisting of a cylindrical receptacle made of silver, tin or some other material, of small capacity, with a handle, usually made of whale-bone, 80 centimetres long and ending in a hook. It is used in Jerez de la Frontera for extracting small quantities of the wine or must contained in a butt.



Potros

Vertedor. Brass scoop used to facilitate the transfer of must from the *tina* into the butt during treading.// Mar. Type of spade or scoop used in small craft that have no deck for bailing out water.// Acad. A pourer.

Zoleta. Digging tool similar to the *azada* but smaller.

GLOSSARY OF HISTORICAL TERMS

Alfoz. Term derived from the Arabic meaning town or city limits.

Almohades. Arab dynasty founded on the religious teaching of Ibn Tumart who proclaimed himself the *mahdi* (the Islamic equivalent of the Messiah) and established an empire which was to bring down the Almoravids, regarded as corrupt and spiritually lax. The Almohads arrived in Spain in the mid-twelfth century, but a shattering defeat at the battle of Las Navas de Tolosa (1212) marked the start of their decline.

Almoravides. Berber dynasty which, under the leadership of Yusuf Ibn Tashfin, created a huge empire and dominated Muslim Spain from the end of the eleventh century to middle of the twelfth.

Andalusíes. Belonging to or originating from Muslim Andalusia (Al-Andalus).

Arcadia. Central region of the Peloponnese of Ancient Greece – the name is derived from the mythological figure of Arcadius – the life of whose pastoral inhabitants was said to be “a paradise of simplicity and happiness.” Arcadia was a frequent point of reference in the pastoral poetry of the Renaissance

Azumbre. Old measurement of capacity, equivalent to an eighth of a *cántara*, or one litre.

Bacchus. The name given in the Roman pantheon to the Greek god Dionysus.

Barbarians: Those who made up the various hordes which invaded the Roman Empire in the fifth century, occupied its western part and created various kingdoms, such as the Visigothic one in Spain.

Burgundian. Pertaining to the Duchy of Burgundy (west of present-day Switzerland) which in 1515 became part of the possessions of Charles V, inherited from his paternal grandmother, Mary of Burgundy, daughter of Charles the Bold, Duke of Burgundy, and mother of Philip the Fair.

Caliphate. The period (929–1031) when Muslim Spain was ruled over from Cordoba by the Umayyad caliphs, and one of the most brilliant periods in Andalusí history. The title of caliph acquired the meaning of sovereign and successor to Mohammed, and his domain was completely independent of any other authority or Muslim kingdom.

Cargadores. Merchants who had trading agreements with the Americas. *Cargadores* who dealt in produce of the land, including wine, were known as *cosecheros*.

Carta Puebla. Document issued by the king detailing the privileges and exemptions granted to the future inhabitants of a place.

Casa de Contratación. ‘House of Trade’ set up in Seville by the Crown in 1503. It would later function as what Prof. Haring describes as a Ministry of Commerce, plus a school of navigation, plus a customs house.

Dionysus. Greek god, son of Zeus and the mortal Semele. The new-born Dionysus was saved from being burned to death by being put in his father’s thigh for further gestation (hence he is sometimes described as ‘twice-born’) before being carried to Nysa where he was entrusted to the care of nymphs.

During his travels about the world he came upon a plant on the point of expiring from the sun’s heat; remembering his own infancy he kept it in an animal bone where it grew and grew until he reached Naxos. There he had to plant it, and it bore beautiful bunches of fruit. This is the mythological origin of the grape-vine, of grapes as its children, and of Dionysus as their protecting god.

Fairs. The Middle Ages were the golden age for fairs, when they became meeting places for merchants of diverse provenance at specific places on specific dates. Among the most significant in Spain were the fairs of Jeréz, Sanlúcar and Medina del Campo.

Fertile Crescent. The name applied in the Sumerian period to the vast basin of the Rivers Tigris and Euphrates, a highly fertile area despite its dry climate, thanks to the benefits derived from the rivers’ flooding.

Finis Terrae. From the earliest Antiquity until 1492, the Atlantic Ocean had remained unexplored, triggering a wealth of myths, monsters and legends in the popular imagination. One legend was that its waters marked the beginning of the void, so that the south-western extreme of the Iberian Peninsula was believed to be the end of the earth.

Fuero Juzgo. Codex of Spanish laws, essentially a translation into Romance (the precursor of modern Spanish) of the *Liber Iudiciorum* formulated by the Visigoths and published as the *Forum Iudicum* by King Recceswinth in 654. For many centuries it remained the only legal text considered valid by the courts.

Graces (The). Three mythological goddesses of beauty and grace named Aglaia (brilliance), Euphrosyne (gladness of heart) and Thalia (fertility of plants and the earth).

Guindaje. Raising or hoisting of an object to be placed up high.

Hellenistic. Adjective indicating the influence of Greek culture on another, different, later culture.

Hueste. Host, or army in campaign, though also used to mean the group of partisans of a person or cause.

Iliad (The). Greek epic poem attributed to Homer and dating from around the eighth century BC. It describes the ten year war between the Greeks and the inhabitants of Troy, ancient city of Asia Minor. Current scholarship suggests that the Iliad

was a compilation by Homer of stories collected from the oral tradition.

Moriscos. Moors who remained in Spain after the Reconquest and were baptised into the Christian faith though clandestinely continuing to practise their former religion. Mainly farmers, their social assimilation was impeded by the edict issued by Philip II in 1567 prohibiting certain features of their way of life, which culminated in the famous War of the Alpujarras. From 1609 on, under Philip III, they were gradually expelled, motivated by fear of a highly probable alliance between the Moriscos and the Berbers of North Africa.

Mozarabs. Members of a minority of Christians who lived among the Moors in Spain, paying taxes to them and, with their permission, continuing to practise their own religion and even (according to many authorities) their own legal system.

Muses (The). Mythological goddesses, born at the foot of Mount Olympus, who presided over the various branches of the arts and sciences. There were nine of them: Clio, Euterpe, Thalia, Melpomene, Terpsichore, Erato, Polyhymnia, Urania and Calliope, respectively the goddesses of history, lyric poetry, comedy and pastoral poetry, tragedy, dance, love poetry, sacred song, astronomy and epic poetry.

Nasrid: Dynasty founded by Yusuf Ben Nasr in 1231 which occupied the throne of Granada and remained there until the end of the fifteenth century. Its last king, Boabdil, surrendered to the Catholic Monarchs in 1492.

Pillars of Hercules. Hercules, the most famous of all the mythological heroes of Ancient Greece, was the son of the god Zeus and his lover Alcmena. Later in life, driven mad by Zeus’ vengeful wife, Hera, he killed his own children, then undertook the twelve famously challenging labours to expiate his crime. Among many other feats, he parted the two mountains that stand opposite one another at the entrance of the Mediterranean, known as the Pillars of Hercules, thereby creating the Straits of Gibraltar between Europe and Africa.

Sentido premial. Political-economic policy practised by the Castilian monarchs of rewarding soldiers distinguished in the Christian Reconquest of Spain with gifts of urban or agricultural land in the areas reclaimed from the Moors.

Varas. Old agrarian land measurement, variable depending on historical period and geographical location. As a rough guide, a Castilian *vara* was the equivalent of four *palmas* (handbreadths).

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