

JEREZ-XÉRÈS-SHERRY DO

+ SANLÚCAR DE BARRAMEDA DO

- Cádiz + Seville provinces

- Communes of production: Jerez de la Frontera, Sanlúcar de Barrameda, El Puerto de Santa María, Chipiona, Rota, Trebujena, Puerto Real, Chiclana de la Frontera, Lebrija

→ aging for Jerez-Xérès-Sherry DO must be carried out in Sanlúcar de Barrameda, Jerez de la Frontera, or El Puerto de Santa María

→ aging for Manzanilla Sanlúcar de Barrameda DO must be carried out in Sanlúcar de Barrameda

- Styles produced

→ vino generoso: dry in style (max. 5 g/L RS)

- FINO: matured by biological aging

- AMONTILLADO: mature FINO, oxidative aging follows biological aging

- PAGO CORTADO: a FINO, redirected toward oxidative aging during the second classification

- OLOROSO: matured by oxidative aging

→ Manzanilla vino generoso

- FINA

- MANZANILLA-PASADA (FINO-AMONTILLADO style)

- OLOROSA

→ Vino Generoso de Licoz: Vino Generoso blended w/ Vino Dulce Natural or concentrated must

- DRY: 5-45 g/L RS

- MEDIUM: 5-115 g/L RS (usually produced from AMONTILLADO)

- PALE CREAM: 45-115 g/L RS (usually produced from FINO)

- CREAM: 115-140 g/L RS (usually produced from OLOROSO)

JEREZ-XÉRÈS-SHERRY DO + SANLÚCAR DE BARRAMEDA DO, CONT.

- Styles produced, cont.

→ Vino Dulce Natural: naturally sweet wine, fortified after partial fermentation of "sunred" (solero) grapes, often bottled varietally as Pedro Ximénez or Moscatel.

(min. 212 g/L RS) (min. 140 g/L RS)

- Authorized grapes: Palomino Fino, Palomino de Jerez, Pedro Ximénez, Moscatel (only allowed for varietal Moscatel wines)

- Min/max alcohol:

→ FINO: 15-17% (the process of biological aging may reduce alcohol content below 15%)

→ AMONTILLADO: 16-22%.

→ OLOROSO + PALE COFTADO: 17-22%.

→ MEDIUM / DRY: 15-22%.

→ PALO CORTADO / CREAM: 15.5-22%.

{ PX / MOSCATEL / DULCE : 15-22%.

- Aging requirements

→ All wines must be aged in solera for a min. 2 yrs. prior to release (prior to 2010, this req. was three years)

→ Sherry w/ Certified Age Designation: only Amontillado, Oloroso, Palo Cortado & PX vino Dulce Natural are authorized.

- VOS (Vinum Optimum Signatum / Very Old Sherry) -
- min 20 yrs. average age

- VORS (Vinum Optimum Rare Signatum / Very Old Rare Sherry)
- min 30 yrs. average age

- Max. yields

→ JEREZ SUPERIOR - 80 hl/ha

→ OTHER - 100 hl/ha

MONTILLA-MORILES DO

- Sub-Zone: Montilla-Moriles Superior
→ higher concentration of Albariza
- Styles produced:
 - Vino Generoso (not always fortified)
 - FINO
 - AMONTILLADO
 - OLOROSO
 - PAGO CORTADO
 - RAYA: similar to, but less quality than Oloroso
 - RUEDOS: Raya style w/o aging
 - Vino Dulce Natural (fortified)
 - PEDRO XIMENEZ: min. ~~212~~⁴⁵⁰ g/L must weight (min. 272 g/L RS)
 - MOSCATEL: min 212 g/L must weight (min. 160 g/L RS)
- Authorized grapes
 - Recommended: Pedro Ximenez (about 75% of DO)
 - Authorized: Layren (Airen), Paladí (Verdejo), moscatel, Torrontés
- min/max alcohol
 - Blanco (w/o aging): 10/12%
 - Blanco (w/ aging): 13%
 - Fino: 15-17.5%
 - Amontillado: 16-22%
 - Oloroso: 16-~~18%~~^(up to 20%) 22% (age)
 - Palo Cortado: 16-~~18%~~^{22%} 22%
 - Raya: 16-20%
 - Rueda: 14%
- max. yields:
 - Superior: 60hl/ha
 - Other: 80hl/ha
 - 70L/kg press
- Aging requirements
 - Aged blanco wines: min. 1 yr. in oak
 - Vino generoso: min. 2 yrs. in oak (solera)

HISTORY

- Colmella was born in Cádiz:
 - devoted 2 of his 12 books to viticulture
 - discussed the three different soil types as well as the stifling east wind
- When Columbus sailed from Andalucía to the New World in 1492, Sanlúcar de Barrameda became an important port for trade.
- By the 14th c., Sherry was being exported to England
 - the term "Sack" becomes common by the 16th century, referring mainly to sherry, but also other white wines from S. Spain - "Canarie Sack," "Málaga Sack" etc.
 - many believe that it was a bastardization of the word "sec" → indicating sherry styles popular at the time were dry.
 - more commonly accepted as a derivation of the Spanish "Sacar" → to take out.
 - still unclear if it was sweet or dry back in those days.
 - the term "Sherry" comes into use at the end of the 17th c.
 - 18th c - Solera system develops + many producers are established
 - intense growth in the mid to late 19th c.
 - Sherry's GOLDEN AGE: González Byass, Barbadillo, Pedro Domecq, Hidalgo-La Gitana
 - mainly sweet, dark wine
 - by the end of the 1870s, Sherry began falling out of favor
 - mass produced, lower quality sent British away
 - imitation vines from other regions
 - WASN'T until 1996 that sherry became a protected name w/ the EU
 - 1894: Phylloxera
 - Consejo Regulador est. 1934 ; 1936 - current delimited area was agreed upon

HISTORY, CONT.

- 1960s - 1970s - huge shift in sherry industry
 - Industry of independent bodegas + families → ~~cooperative~~ corporate groups
 - RUMASA - Ruiz-Mateos Sociedad ~~Anónima~~ Anónima
 - major supplier of Harveys Bristol Cream, starting in 1958
 - became a huge conglomerate - hotels, banks etc.
 - purchased a dozen bodegas in the region + forced modernization
 - no more foot crushing
 - stainless steel over cask
 - Rumasa was disbanded by the Socialist government in 1983
- the 1980s - many problems that needed to be corrected
 - overproduction - yields, quantity
- UK - #1 export market
 - still a bulk in inexpensive, sweeter styles

MARCO DE JEREZ

- primary vineyard areas are w/in the "marco de jerez":
 - bounded by the Guadalquivir + Guadalete rivers
- average altitude - 325-500 ft. above sea level
 - rolling hillsides.
- poniente - wet, westerly wind from the Atlantic
 - moderating in vineyards & cellars
 - 95+ % humidity
- levante - from the Sahara, easterly wind
 - dry + hot
 - 30-90% humidity
- high rainfall b/t October - April, rest of the year is dry.
 - sponge like qualities of albariza soils prevent water excess
 - Limestone, calcium carbonate
 - reflects sunlight → enhances ripening of grapes
 - low in nutrients, reducing vine vigor
 - barras - clay - brown
 - SE of Jerez
 - valley floors
 - Arenas - sand + clay w/ iron oxide
 - reddish color
 - moscatel
- DO est. 1933
- Jerez Superior - albariza parcels in Jerez, Puerto de Santa María, Sanlúcar de Barrameda + Trebujena & small parts of Rota & Chipiona
- Manzanilla - Sanlúcar de Barrameda - est. 1933, but initially absorbed into the Jerez appellation. Restored in 1964.
(Three main communes) (all owners)
- Zona de crianza vs. Zona de producción
 - (aging vs. production → wineries in the Zona de producción may unify young wine to send to the Zona de crianza for aging.)
 - applies to sherry vinegar as well!

MARCO DE JEREZ, CONT.

TERRORE & VINEYARDS

- Pagos vary in size from .6 ha - 800 ha

• Trebujena - important & significant vineyard area

• Historically, 4 pagos NW of Jerez known for their wines:

- Balbaina: Closest to the sea → lowest alcohol, most delicate
- Añina
- Macharnudo: higher elevation, pure albariza soils
- Carrascal
- Los Teruelos (if we had to name a fifth)

• Chipiona, on the coast, arenas soils & moscatel

• pagos closer to the sea → more moderate climate, later harvest, lower alcohol content

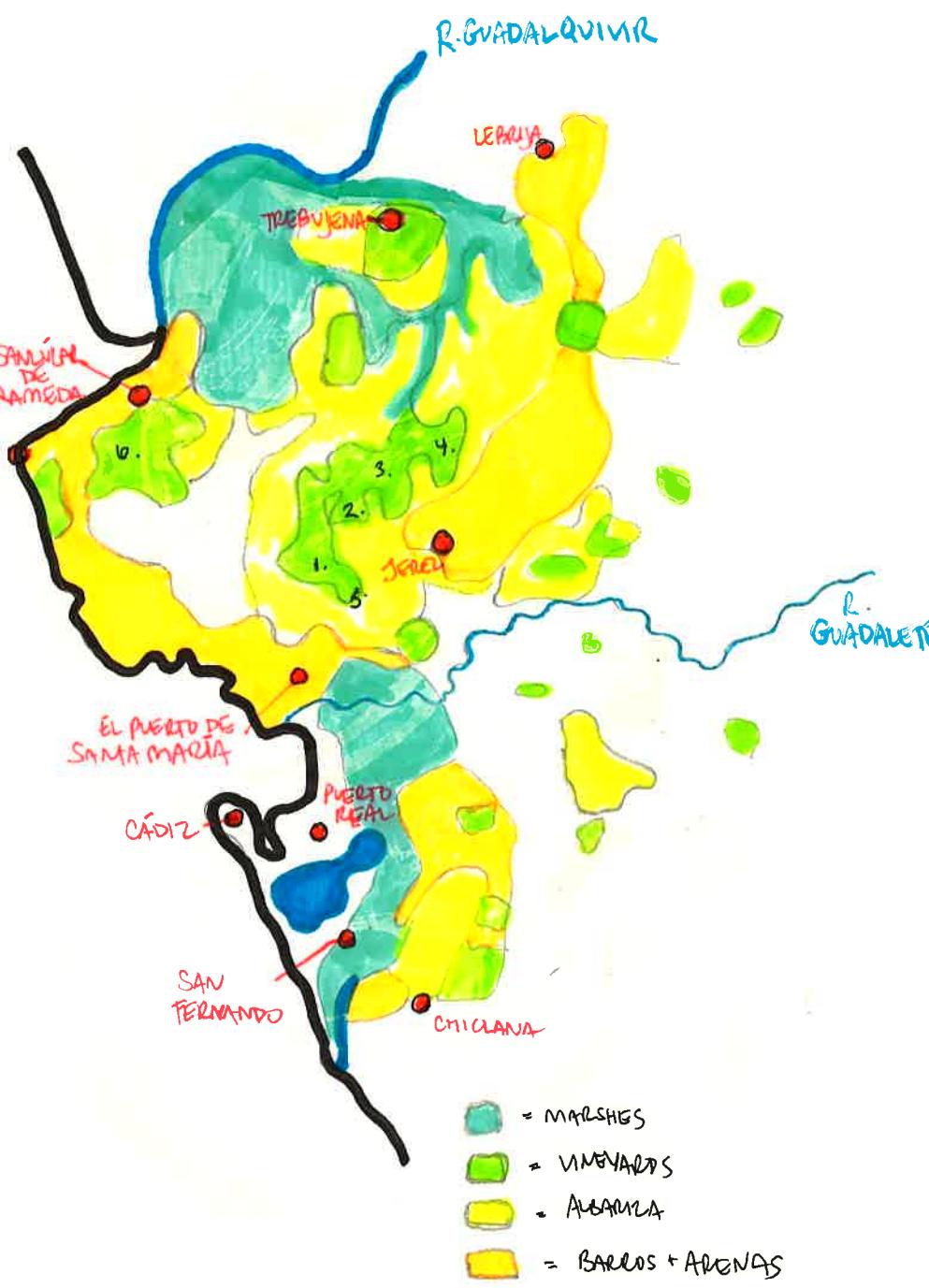
GRAPE VARIETIES

• palomino - 98% of plantings
- known locally as listán

• 1894 → phylloxera arrives in Jerez
→ replantings cemented palomino as the dominant grape in the region.

PAGOS:

1. BALBAINA
2. AÑINA
3. MACHARNUDO
4. CARRASCAL
5. LOS TERUELOS
6. miraflores



MARCO DE JEREZ, CONT.

GRAPE VARIETIES, CONT.

- Palomino - 2 varieties
 - palomino de Jerez also Palomino basto - historical version
 - palomino fino has almost entirely replaced palomino de Jerez. higher quality.
 - in El Puerto de Santa María, it is known as bagazuela
 - other synonyms include palomilla, albán, tempranilla, ojo de verde + Jerez
 - known for its low acidity, particularly malic acid.
- Pedro Ximénez - 65% of plantings!
 - most PX is purchased from Montilla-Moriles
 - better conditions for growing & dehydrating the grape.
 - originated in the Canary Islands
 - identical to verdejito?
 - prone to disease & mildew
 - not ideal in the humid climate of Jerez
 - high must weights, low yields
 - favors on albariza
- Moscatel
 - partial drying before pressing for sweet wine
 - prefers sandy soils to chalky ones
 - Chipiona
 - early ripening, high yielding
 - both muscat blanc à petit grains (Moscatel menudo / Moscatel de grano pequeño) + Moscatel de Alejandría are present, but Alexandria accounts for the Chipiona plantings (and therefore, most the plantings)

BARREL AGING

- Basic unit of liquid volume - amoba - 16.67 Liters
 - typical cask is 36 amobas, or 600 L
- Typically American oak is used (*Quercus Alba*)
 - tight grain
 - spend several years being seasoned w/ lesser wines before going into a solera. → 20 yrs min w/ SO seen as ideal.
 - painted black:
 - aesthetic
 - leaks can be seen easier

SOLERA SYSTEM OF FRACTIONAL BLENDING

- Solera - derived from Latin "solum" - "floor"



- third criadera
- second criadera
- first criadera
- solera

- soleras still in use dating back to the mid 19th century
- "añadas" or vintage dated wines have also been prominent throughout history.
- Generally, the soleras for biologically-aged wines will have more criaderas (scales) than oxidatively-aged ones.
 - b/c the wines are younger & more variable
 - typically, a fino solera in Jerez might have 3-7 criaderas.
 - greater activity of flor in Sherry = more scales, sometimes up to 15
- Criaderas are not normally stacked on top of each other!
 - too many
 - often different rooms or buildings
 - often 3-4 rows of barrels will be stacked on top of each other, but from different soleras.
 - finos + manzanillas do well on the bottom where the temperature is coolest, olorosos gain more richness on top.
- sacar - to take out - removing $\frac{1}{2}$ to $\frac{1}{3}$ from each of the barrels in the solera
- ruedo - "sprinkling" - process of refreshment
- "running the scales" and replace
- care is taken to remove wine w/o disturbing the flor on top or the yeast sitting on the bottom of the barrels.
 - only a few (Bodegas Tradición, El Maestro Sierra) still do this by hand

SOLERA, CONT.

- Roles of the solera:

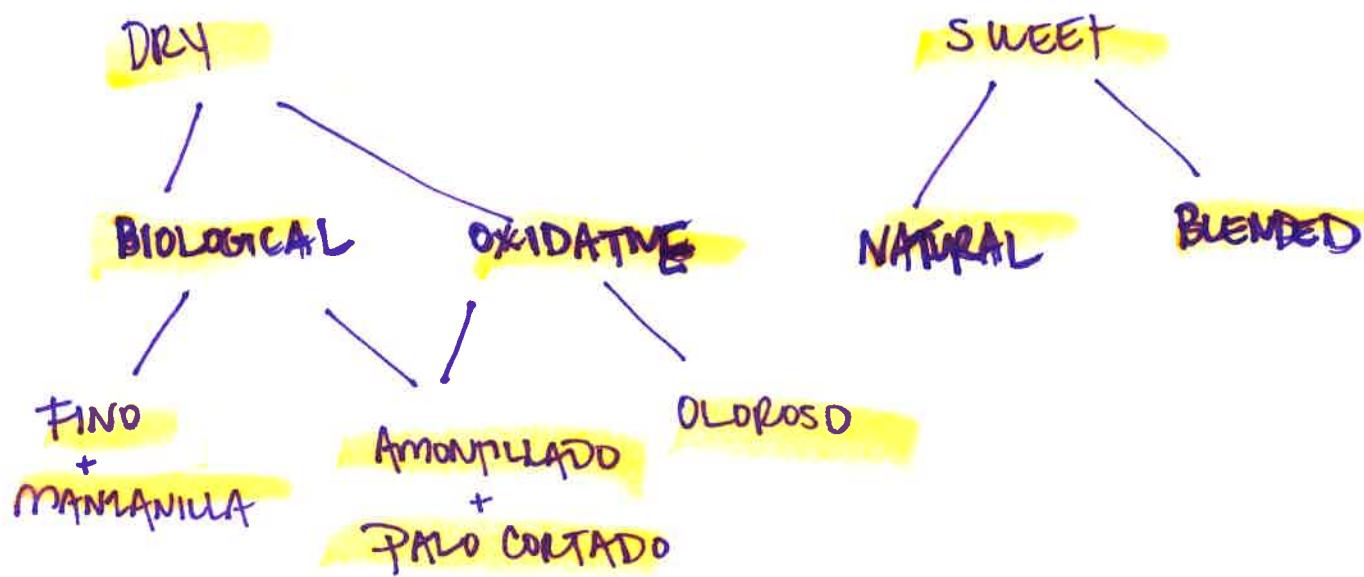
- replenish nutrients necessary to maintain flor (+ oxygen)
 - ↳ In Jerez, a fino solera might be replenished 2-4x/year, in Sanlúcar, due to the vigorous activity of the flor, it can be up to 8-9x.

- ensure consistency + continuity of style

- "Bota ND" - do not blend w/ others - special

- "Bota Punta" - barrel on ground flor + end of row - greater exposure to air flow, sampled more, more oxygen. often refreshed w/in own criadera.

TYPES OF SHERRY



• FINO

- legal min. is 2 yrs. but most finos age b/w 4-7 yrs.
→ older examples: Valdespino Inocente
Hidalgo's La Panesa

• MANZANILLA

= "chamomile" in Spanish

- more constant temp. than Jerez → more vigorous flor activity → more refreshment (sacas) → more criaderas in a solera.
- typically released slightly younger than fino.
- most are filtered heavily - Barbadillo's Solar
- Hidalgo's La Gitana
- some are not filtered! - Barbadillo's Manzanilla en Rama
- Arqués's San Léon Reserva de Familia
- Pedro Romero's Aurora Tinto Fino

• AMONTILLADO

- as the average age of a sherry cask becomes greater, the harder it is for flor to survive.
 - flor refreshment rate becomes a big deal for nose style
 - as flor begins to fade, it imparts a specific character → fino Amontillado + manzanilla Pasada!

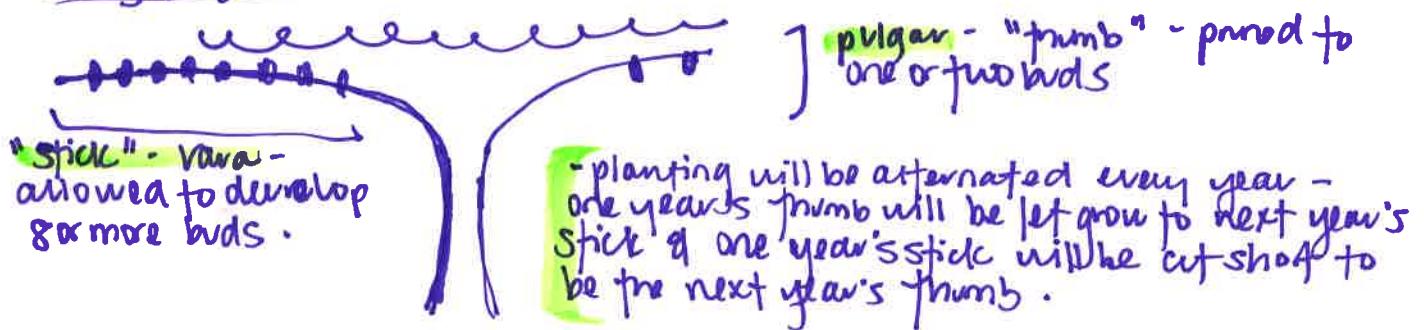
IN THE CELLARS

- common for producers to not have ~~their~~ their own vineyards and buy base wines or even finished wines from almacenistas.
 - González Byass, Barbadillo, Tridago - La Oritana & Valdespino have some of their own vineyards.
- palomino is typically harvested at a potential ABV of 12°
 - DO requires harvesting at at least 10.5° and yields must not exceed 10,000 kg/ha.
 - thin skinned grape - needs to be pressed quickly
- Changes in practices over time:
 - soleo used to be used for palomino + dry wine
 - grapes used to be pressed by foot
 - pisaderos in lagars
- Today:
 - modern presses - either horizontal screw press or pneumatic bladder press
 - continuous screw press developed for Haweys
 - 72.5L/kg extraction (w/ about 0.5 liters accounting for lees, yeast cells, etc. - actual yield is about 70L/kg)
 - divided into
 - primera yema: first 2/3. freedom of gentle pressing
 - segunda yema
 - presa
 - acidification - has always been used
 - yeso, traditionally (aca gypsum, calcium sulfate)
 - today, tartaric acid is added
 - palomino typically has a pH of 3.7-4 at harvest, pH usually corrected to a pH of b/t 3.1-3.4
 - higher pH = larger risk of bacterial contamination.
 - fermentation in cask is virtually non-existent today
 - Valdespino's Fino Inocente & Jerez Diego being the exceptions
 - now 50,000 L stainless casks
 - cultured yeasts are more common

MARQUES DE JEREZ, CONT.

VINE GROWING

- challenges: chalky soil + humidity
- American rootstocks must be selected to help combat chlorosis, which results from the high level of calcium carbonate in the soils.
- vara y pulgar



- "manto rectangular" became the pattern of planting common post-modernization → allows for easy mechanization.
- water manipulation
 - aserría / alberca - carried out in October
 - alberca is built in a series of ridges b/t each row
 - collects rainwater + retains it for the hot, dry summers
 - alomado - in years w/ excessive rainfall, troughs are created to channel out excess water.
- Downy mildew + oidium are both problems
- mechanical harvesting is quite common
- harvests tend to be in August

IN THE CELLARS, CONT.

- pie de cuba - pied de cuve - often used → already fermenting must, starter.
 - starts fermentation rapidly, doesn't allow bacteria a chance to dominate.
- 2 phases of fermentation
 1. tumultuous fermentation - 3-7 days to complete
 2. slower fermentation - most of the sugar is gone
- after fermentation, flor develops almost immediately
- First classification:
 - (I) una raya - clean wine w/ finesse + delicacy
 - (II) raya y punto - slightly less fine
 - (III) das rayas - coarser wine that is not entirely clean.
 - (IV) tres rayas - unsuitable for winemaking
 - (V^e) vinegar - contains overly high amps. of acetic acid.

• Fortification

- biologically aged Sherry - 14.6-15.4 is the ideal ABV
 - helps kill off bacteria
- Oloroso - 17-18%, killing flor
- false place after the wine's been racked off its lees.
- neutral grape spirit - 95% ABV
 - mixed w/ older wine in equal parts → mitad y mitad
- Post fortification, the young wines are known as sobrefinos, prior to entering solera (usually up to a year or two)
- Reclassified:
 - pto palmas (finos)
 - Olorosos
 - rayas - oloroso-type wines of less finesse + distinction

Flor

- *Saccharomyces* yeasts
 - 4 specific strains of *S. cerevisiae*
 - *S. beticus* is most commonly identified
- Roles in the development of wine
 - protects wine from oxygen / ~~permeates~~ oxygenation
 - consumes oxygen to live
 - can be reductive at first
 - consumes alcohol, acetic acid, and glycerin + VA
 - up to 1°/year, which is replaced through the refreshment of new tanks
 - "fainting cask" rapidly decreasing alcohol → down to 8 or 14 → can be dangerous in terms of bacterial exposure.
 - || → not much sulfur usage b/c it inhibits the action of yeasts.
 - flavor development
 - acetaldehyde
 - high levels produced by flor.
 - "yeasty"
 - increases from 50 mg/L → 500 mg/L w/ biological aging.
 - autolysis - yeast cells die & fall to bottom of barrel
- ~~Fior~~ Flor is generally more active in bodegas closer to the sea.
- Conditions necessary for flor development:
 - 59-70°F in the bodega
 - high humidity - daily water sprinkling of the dirt floors
 - tannins can restrict flor's growth - why old casks are preferred to new ones.
 - oxygen → a sherry cask w/ 600L capacity is typically filled to 500L.
 - bodegas built to maximize air exposure
- Venencia - tool to sample wine w/o disturbing flor.

TYPES OF SHERRY, CONT.

• AMONTILLADO, CONT.

- "fino amontillado" - not a term that is used anymore, except for Osborne's Coquinero
 - Valdespino's Inocente + Hidalgo's La Panesa would qualify though more fino in character
 - Navazos La Pota de Fino No. 24 - "true fino amontillado" from Manzanilla-Moriles
 - req'd to be labeled fino
 - Tres Palmas from Gonzalez Byass is also a (unlabeled) fino amontillado.
- distinction b/t an old fino & a young amontillado is not well defined → up to the cellar master.
- to create an amontillado, fino can be killed by fortifying to 17-18° or allowed to die naturally over a long period of time.
 - 3-8 yrs. is the norm
 - "elegance of texture" that oloroso does not have
 - very fino influenced - Vina AB by Gonzalez Byass
Tio Diego by Valdespino
 - pronounced oxidative aging - Almacenista Miguel Fontáder Florido
 - alcoholic strength increases w/ age
 - Classic Jerez amontillado - Antique by Rey Fernando de Castilla
1830 Amontillado by El Maestro Sierra
El Tresillo by Hidalgo (Emilio)
- Classic Sanlúcar amontillado - Hidalgo-La Gitana's Vors
 - w/ used to be called manzanilla amontillado
 - Pedro Romero's Prestige SB
 - Barbadillo's Reliquia
- Valdespino's Coliseo - Old Amontillado matured in Jerez but refreshed w/ manzanilla.

TYPES OF SHERRY, CONT.

PALO CORTADO

- what is the "real thing":
 - historians say that true palo cortado was more common in pre-phylloxera times, where there was more diversity in genetic vine material
 - according to the Consejo Regulador, a palo cortado is defined as a wine combining the delicacy + aromatic refinement of an amontillado, w/ the structure & body of an oloroso.
 - no mention of production method
 - if a barrel expressed finesse on the nose w/ an unusually full body, it would be removed from the fino solera - it's initial (stick-palo)
 - (cortado) ↗ would be crossed
 - typically spends less time under flor than an amontillado
 - 6 mos. - 3 yrs.
 - "cheating":
 - blending an amontillado or an oloroso
 - marketing an old amontillado as a palo cortado
 - an oloroso that does not develop well.

OLOROSO

- oxidative aging = physico-chemical aging
- concentration through years of evaporation in the barrel.
 - aka "mossa" - 3.5% / year
- historically, fino vs. oloroso mts would be determined by the vineyards
 - closer to sea = fino
 - inland = oloroso
- now, it's press
 - free run = fino
 - more skin contact = oloroso
- fortified to 17.5-18° (111% alc) and put 5% in barrel

Types of Sherry, cont.

• Oloroso, cont.

- gains alcoholic strength in cask → water loss
→ can reach 20-24°
- means "fragrant" or "perfumed"
- unlike fino, which loses glycerol from the flor, oloroso retains its glycerol.
- "pasta de gallina" - oloroso has high glycerol content.
- sometimes a small amount of PX is added → smooth the edges, but rarely.

• Sweet Sherries

- NATURAL - drying process is harder in Jerez than ~~Montilla~~ Montilla
PX → more humid + cooler → more susceptible to rot
- today, hardly any PX grown in Jerez → wines are purchased from Montilla.
 - after drying, sugar levels in must are usually between 300-500 g/L
 - it can hardly ferment at all
 - fortified right ~~away~~ away to 15-18°
 - PX decreases in alcoholic strength over time
 - the density + high level of sweetness prevent it from being soaked into the wood → the loss of ethanol through evaporation is greater than the loss of water through osmosis.
 - if decreases a lot, must be fortified to 15° before shipping.
 - benefits from aging in barrel → bottle
 - ~~Montilla~~ Montilla examples tend to be less oxidative → barrels are filled completely.
 - Pérez Barquero, Alvear, Toro Albalá
- NATURAL MOSCATEL
- muscat d'Aixanadria
 - dried partially → musts ferment v. little (often no more than 1°) before being ~~fortified~~ fortified to 15-17°
 - aged in solera, though most wines are released young

TYPES OF SHERRY, CONT.

SWEET SHERRIES, CONT.

- Some examples of Moscatel include arropé - reduced grape must
- "moscatel de pasas" - made from grapes dried in the sun.
- good examples:
 - Cesar Florida "Dorado" & "moscatel pasa"
 - Lustau's Emilín
 - Gutiérrez Colosía's "Soledado"
 - Valdespino's "Torneles" - averages 80 yrs. of age
 - single barrel of 900L
- John Harvey & Sons founded Bristol in 1796
 - ↳ Bristol Cream has been trademarked since 1865
- Cream Sherry
 - typically 115-140 g/L
 - Oloroso & PX
- Pale Cream
 - Fino base
 - often sweetened w/ RCM rather than PX to maintain pale color
 - originated in 1970 w/craft (now owned by Gonzalez Byass)
- East India Sherry
 - somewhat obsolete
 - so named b/c of casks stored on ships to East Indies
 - ↳ sulf. oxidized

Sweetening agents:

- dulce pasa: mistela produced from sunned palomino
- mistela from sunned PX / Moscatel
- dulce de almíbar - a blend of invert sugar + fino (rare)

Vino de Color (to adjust color): boiled, reduced syrup + fresh must

- if reduced to $\frac{1}{3}$ its original volume = Sancocho
- if reduced to $\frac{1}{5}$ its original volume = arropé

TYPES OF SHERRY, CONT.

AGE DESIGNATED SHERRIES

- very difficult to establish the average age of a solera
- 2000 - Consejo Regulador initiates a certified system of age designation.
 - VOS
 - VOVS
- In order to qualify:
 - wine must be submitted to the Consejo Regulador at each "saca"
 - only amontillado, Palo cortado, Oloroso, & PX are eligible
 - requirement of maintaining stocks proportional to certified age
 - for a VOS, a bodega must have 20L of wine in the Solera system for every 1L it plans to sell. For VOVS, must maintain 30L for every 1L if plans to sell.
 - analytic tests to determine age
- 2003 - ~~addition~~ additional category: * Vinos de Jerez con Indicación de Edad *
 - two levels: 12 & 15 yr.
 - same req. for maintaining stocks

ANADA SHERRIES

- very rare - single vintage, non-solera
- two firms specialize in añada sherrries:
 - Williams & Humbert
 - Gonzalez Byass
- blended solera sherrries CAN be labeled w/ a vintage date, too.
 - refers to the year the solera was founded

BOTTLING SHERRY

- Clarification - fining, filtering, or both
- Cold stabilization - typical, to precipitate tartrate crystals
 - filtering is especially important for biologically aged sherry → prevent flor from growing again in bottle.
 - oxidatively-aged sherries may require less filtering.
 - carbon filtration has become common → sometimes too harsh → fino + manzanilla shouldn't be totally pale!
- "En rama" - a sherry that has been bottled directly from cask
 - very rare, if exists at all
 - wines labeled "en rama" typically undergo a light fining/filtration
 - Barbadillo a pioneer in "en rama"
- Autorol IN BIOLOGICALLY-AGED SHERRIES
 - often finos will hover slightly below + have to be fortified → not ideal, according to Liam.
- CLOSURES - t-stop closure → advantage of reclosure
 - sherry isn't intended to develop in bottle
 - screw cap??
- BOTTLING DATES
 - mainly important for manzanilla + fino → begins aging differently when taken off flor (≈ disgorgement date)
 - De Maision requires bottling dates on its sherries

Montilla Moriles

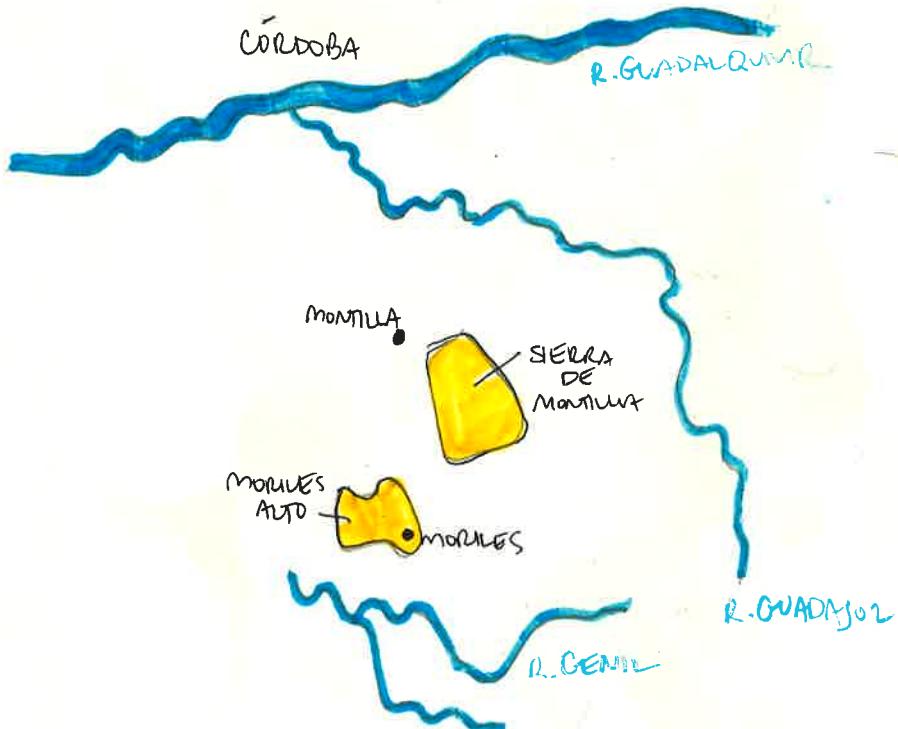
- 100 miles from Jerez to Montilla
- Same albariza soils
- for the Jerez DO, the only wine allowed to be bought from outside the region is PX from Montilla.
- region bounded by Guadalete river to the N & E, Genil river to the SW.
- hot + dry summers w/ significant rainfall in the winters.
- besides PX, other authorized grapes include: airén, bastard-verdejo (aka jaén), moscatel + montepilosa
- two highest quality regions:
 - Sierra de Montilla
 - Moriles Alto

both lie on albariza soils 1300-2000 ft. above sea level.

↓
anything outside these two areas is called "medos" and considered inferior. Grapes oxidize quickly.

STYLES OF WINE

- historically vinified in large, earthenware vessels called tinajas
 - 6000-8000 L
 - now stainless steel is mostly used for fermentation before rfer to solera.
- flor does not grow as thick here → fuller bodied finos.



MONTILLA MOPLES, CONT.

STYLES OF WINE, CONT.

A fundamental difference w/ Jerez: montilla finds do not need to be fortified.

→ M.M. is warmer

→ PX is prone to higher levels of ripeness than Palomino → natural potential alcohol of 15%.

- Amontillado is the preferred style of vino generoso in M.M.

- Palo cortados are extremely rare.

SWEET PX

- grapes are typically harvested in August, then dried on grass mats for 4-10 days → "soleo" or "asoleado"
 - grapes double their level of potential alcohol, ending w/ 26-29° (must be harvested earlier than grapes destined for vino generoso!)
 - crucial that weather remains dry
- min. 272 g/L RS (of up to 500) must weight (~~100~~²¹² g/L for moscatel)
- grapes only ferment to 12° alcohol → virtually all alcohol content is achieved through fortification
 - either neutral spirit or a combination of neutral spirit & oloroso or amontillado
 - typically to 14-15° (≈ 18° in Jerez)
- casks are fully topped up, unlike in Jerez (5% full) → freshness of flavor.
- no aging min - lots released from stainless steel → Vino Generoso - min. 2 yrs in oak
- best producers: Arias, Jero Albalá, Pérez Barquero

The TERROR OF THE BODEGA

- In terms of Sherry, terroir must be understood in two senses

→ the vineyard + the bodega

→ biologically aged sherry is the most influenced by the terroir of the bodega

Three Towns for Aging Sherry

1. JEREZ DE LA FRONTERA

- 6 miles inland from the Bay of Cadiz
- center of commerce in the area
- farthest from the sea → milder, fuller bodied wines from Sanlúcar + El Puerto

Lustau, Ferando de Castillo, Gonzalez Byass, Valdaspino, Pedro Domecq (Brambolar, Tradición, etc.)

2. SANLÚCAR DE BARRAMEDA

- coastal
- @ the mouth of the Guadalquivir river, 3 mi. NW of Jerez
- Columbus set sail from Sanlúcar in 1492!
- heavily affected by the poniente → moist western wind from the Atlantic
- more humidity → better for flor = in the barrio bajo → lower portion of Sanlúcar vs. barrio alto, w/ better aeration

Barbadillo, Hidalgo - La Gitana, La Cigarrera, Pedro Romero

3. EL PUERTO DE SANTA MARÍA

- mouth of the Guadalete river, across the bay from Cadiz
- Columbus's "Santa María" was named after the town
- bullfighting!
- closer to sea than Jerez - lighter + more delicate
- "peppery" aroma distinct to the region

INFLUENCE OF ARCHITECTURE

- for biological aging, the ideal environment provides the following: a volume of oxygen, humidity, and a constant temperature of 60° - 68° F.

→ above ground

→ inedible height & volume

→ axis positioned from NE + SW → keeps the interior cool by minimizing sun exposure during the hottest period of the day.

The TERRA COTTA BODEGA, CONT.

INFLUENCE OF ARCHITECTURE, CONT.

- walls made of sandstone or brick > 24 in. wide
 - insulates the interior but porosity helps cool
 - painted white: reflect heat in the summer, store it in winter
- many modern facilities are in place today.

OTHER PRODUCTS

- unfortified wine is also made in Jerez
 - Barbadillo's "Castillo de San Diego" - one of the best selling white wines in Spain.
 - "moscado" - white wine intended for early consumption - "novean"
 - no flor
 - Navazos - Niepoort → unfortified, under fire.

TINTILLA DE ROTA

- town of Rota on the Atlantic coast
- historic specialty: sweet red wine called tintilla de Rota
- tintilla
 - type of gracián
 - dried out on mats
 - an orange may be added in moderate quantities

XEPEZ-QUINA!!

- quina! aromatized sherry!
- Valdespino is the only to still make it.

SHERRY VINEGAR

- historically produced b/c barrels of sherry had high acetic acid & were removed from the solera.
- 1995 - own DO, vinagre de Jerez
 - Reserva - 2-10 yrs
 - Gran Reserva - 10+ yrs

BRANDY DE JEREZ

- virtually none made from sherry! Not cost effective
 - airén purchased from La Mancha
- two traditional stills
 - alembic (steam heated) → aquardiente - 70-94.8°
 - alquitara (wood burning) → higher quality, called "holandas" - 60-70°
 - brandy de Jerez can blend the two, but has to be at least 50% holandas

OTHER PRODUCTS, CONT.

BRANDY DE JEREZ, CONT.

- 500-600 L. American oak casks repurposed after sherry-aging.
- traditionally aged in a solera system.
- Categories:
 - SOLERA - min. 10 mos. age average 1 yr.
 - SOLERA RSV - min. 1 yr. average 3 yrs.
 - SOLERA GRAN RSV - min. 3 yrs. average 10 yrs.
- great producers: Fernando de Castilla, Gutiérrez Colosía & Bodegas Tradición.

ENJOYING SHERRY

- fino + manzanilla - last 2-3 days open
- amontillado - last several weeks open
- oloroso + palo cortado - last weeks - months open
- PX - can last for years open
- storage - same as wine
- common belief that fino + manzanilla should be drunk soon after bottling, but Liam maintains that it develops in bottle.
- oxidative styles show less development in bottle
- fino + manzanilla - 45°F
oloroso, amontillados - palo cortados - 55-60°
blended sweet - 50°
moscatel - 55-60°
PX - 50-55°
- white wine glass preferable to small-bowled copita

BODEGAS

- Uncommon for sherry to be grown, vinified + aged by the same house.
 - exceptions: Gonzalez Byass, Valdespino + Sanbadillo
- Three tiers:
 - growers/vineyard owners
 - almacénistas - maintain stocks of wine that are sold to shippers
 - for aging
 - vinify young wine (^{do} can growers too?)
- Shippers
- In 1994, a law was enacted allowing shippers to gain a licence if they have a min. stock of 300 hectolitres (reduced from 12,500!)
 - allowed a number of almacénistas to begin bottling + shipping their own wine