Episode Book

EPISODE #5605

From Dolium to Cup: Rome's Wine Supply Chain

PUBLISHED	27 September 2026 at 11:17 UTC
DURATION	20:03
LISTEN	myweirdprompts.com/episode/roman-wine-supply-chain/
HOSTS	Corn, Herman, Hilbert
SCRIPT MODEL	deepseek-flash
VOICES	chatterbox-regular (chatterbox-local)
PIPELINE	V5.2
BOOK GENERATED	19 October 2026 at 17:38 UTC

SYNOPSIS

How did wine actually get from the vineyard to a Roman cup? No bottles, no corks, no personal cellars — instead, a three-tier vessel system that treated wine as a poured commodity rather than a packaged product. We walk the chain from the dolia — six-foot ceramic tanks, some cemented into ship hulls — through the amphorae that carried it across the empire and never came back, to the thermopolia where ordinary Romans bought their daily cup. Along the way: a hill in Rome made of 53 million discarded containers, counterfeit workshop stamps in the first century, and the glassblowing revolution that put a drinking cup in every hand for a copper coin.

TRANSCRIPT



Corn

Last time we went through how wine was woven into daily life in Rome. Drunk diluted, even at breakfast, with servants at the banquet adjusting the ratio as the evening went. That raised a practical question for Daniel, and he wrote in about it.



Corn

His question: if wine was a daily staple across Rome and the ancient world, and unlike bread it kept, how did it actually get from the vineyard to the cup? Did everyone in Rome just have a wine cellar and cart up a few bottles whenever a banquet was going well? He checked with ChatGPT and got a much more interesting answer back. The supply chain was bulk-oriented. Enormous ceramic vessels called dolia. Amphorae for transport. And what sound like recognizable wine shops where ordinary people bought what they actually drank.



Corn

And then the question he actually wanted answered. What was the last step in that chain. What did they drink it out of.



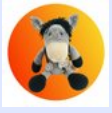
Corn

So let's walk the chain from the tank to the table.



Herman

The mental picture to throw out first is the one Daniel named. The personal cellar, the standardized bottle, the cork. That is a seventeenth and eighteenth century invention. Reliable corked glass only becomes practical then. What Rome had instead was a three-tier vessel system, and the tiers did completely different jobs.



Herman

Dolia at the bottom. Fixed bulk storage. Amphorae in the middle. Transport. And then jugs and cups at the top. Consumption. With thermopolia sitting in between as the retail layer. The archaeology backs the ChatGPT version almost exactly.



Corn

So the thing that moves through the system is not a product. It's a commodity. Wine is poured, not packaged.



Herman

Right. And that changes what every vessel is for. A dolium is not a bottle. It's a piece of real estate.



Corn

Start where the wine actually sat. The dolia.



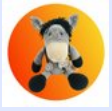
Herman

A dolium is a monster. Up to six feet tall, roughly one point eight meters. No neck, no handles, often a rounded bottom. Lined with pitch or wax so it holds liquid. Capacity commonly forty to fifty quadrantals, which is the equivalent of forty to fifty amphorae. Up to about thirteen hundred liters. Three hundred and forty-six gallons.



Corn

And no standard size.



Herman

None. That's the part people miss. You could not order a dolium in a size. You got the dolium somebody made. Which tells you something about how the economy thought about containers. They were not interchangeable units.



Corn

So if you're a wine merchant and you want to know how much you have, you're not counting. You're measuring.



Herman

You're measuring, and you're measuring in a vessel that is itself the variable. The dolium stays put. Half-buried in the ground, or set under a roof in a warehouse. Twenty, thirty years or more. It is never sold with the wine. It is never shipped. It is infrastructure.



Corn

Where do you find them.



Herman

Farmhouses. Taverns. Town warehouses. Embedded in the counters of thermopolia, which we'll get to. And at Ostia Antica there is a whole building known as the Caseggiato dei dolii. A storeroom of jars. That's the name it goes by. A room full of them, still in place.



Corn

A storeroom of jars as an archaeological category. That's a lot of jars.



Herman

And then the maritime version, which is where it gets strange. Some Roman merchant ships had dolia cemented into the hull. Along the keel. These are called cistern boats. Wine was poured in at one port and pumped out at the next. The jars never left the ship. The ship was the container.



Corn

So the dolium stops being a vessel and becomes part of the hull.



Herman

It becomes structure. At least seven dolia shipwrecks are known, first century BC through third century AD. And a recent find off Elba yielded nine intact dolia, two meters each, in a wreck that is essentially perfectly preserved.



Corn

Two meters. In a ship.



Herman

And here's the risk that comes with it. A full dolium of wine weighs on the order of two tons. If one ruptures at sea, you dump two tons of liquid into the hold. That is a free surface effect, and it can capsize the vessel. Which is likely why the design was abandoned after the second century. It worked until it didn't, and when it didn't, it killed everybody.



Corn

Two tons of wine as a structural hazard. There's a sentence.



Herman

And notice what that means about the economics. You put your storage inside your ship because the storage was cheaper than the packaging. You accepted a capsizing risk to avoid buying amphorae. That's the trade.



Corn

So the wine is sitting. Now it has to move. Amphorae.



Herman

Amphorae are the shipping containers. Wheel-thrown terracotta, two handles, pointed base. The point matters. It lets you stack them in tiers in a ship, and it lets you stand them upright in sand at the destination. Most are about forty-five centimeters tall. The largest get to a meter and a half. A standard wine amphora holds about thirty-nine liters.



Corn

Resin on the inside.



Herman

Resin lining to stop the wine permeating the clay. Sealed with stoppers, which were perishable materials, or refashioned potsherds. Somebody broke a pot and used the piece as a lid. Which is the whole economy in miniature.



Corn

And these come in types.



Herman

About sixty-six distinct types, classified on what's called the Dressel table. Heinrich Dressel, late eighteen hundreds. He sat down and sorted them. And the types track origin and contents. Dressel one, and two through four, Italian wine. Pascual one, Spanish wine. Dressel twenty, olive oil. Dressel seven through thirteen, garum.



Corn

So the shape of the pot is the label.



Herman

The shape of the pot is the label, and then there's an actual label on top of it. Stamped with workshop marks, the figlina, and painted with tituli picti recording weight and contents. That's how we know Pompeian wine was exported to Bordeaux, Narbonne, Toulouse, and Spain. We know it because the pots say so.



Corn

And counterfeit stamps existed.



Herman

Counterfeit stamps existed. Early wine fraud. Somebody in the first century was stamping his amphorae with somebody else's workshop mark, because the mark sold the wine.



Corn

Which means the consumer couldn't tell. Which means the mark was doing the work the taste should have been doing.



Herman

Which is exactly what a brand is. That's not a Roman problem. That's a permanent problem.



Corn

Here's the part I want to sit on. The amphorae don't come back.



Herman

They don't come back. They were too cheap and too plentiful to return. When they were empty they were smashed at the destination. And in Rome, the shards piled up at Testaccio. That's Monte Testaccio. A hill, forty-five meters high, over a kilometer in circumference, made of an estimated fifty-three million discarded amphorae.



Corn

Fifty-three million.



Herman

It is a hill made of the packaging of Roman wine. You can walk on it. It's still there.



Corn

So the ancient world's answer to the recycling problem was a mountain.



Herman

The ancient world's answer to the recycling problem was a mountain, and the mountain is the physical monument to the bulk wine habit. Every amphora on that hill is a decision somebody made. Not worth returning. Smash it.



Corn

And then the amphora itself gets replaced.



Herman

Largely superseded by wooden barrels from around the third through seventh centuries AD. Barrels are lighter, they don't shatter, and you can roll them. Once you have barrels, the pointed base is pointless.



Corn

So the whole ceramic transport system, sixty-six types, Dressel table, all of it, gets retired by a barrel.



Herman

By a barrel. Which is a much less interesting object and a much better one.



Corn

So the wine is stored and it's shipped. Now, where does an ordinary Roman actually go to buy it?



Herman

A thermopolium. Greek for a place where something hot is sold. Latin names vary. Popinae, cauponae, hospitia, stabula. Commercial establishments selling ready-to-eat food and drink. And the clientele tells you what they were. They were used mainly by people who had no kitchen of their own. Residents of insulae, the apartment blocks.



Corn

So the ancient equivalent of the corner bar, the fast-food counter, and the liquor store, all in one room.



Herman

And scorned by the upper class for exactly that reason. If you ate at a thermopolium, it was because you had nowhere to eat. The contempt is baked into the Latin.



Corn

The design gives it away.



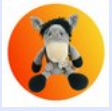
Herman

A small room with a masonry counter facing the street. And dolia embedded in the counter, holding wine and dry goods. The counter is the inventory. Fancier ones had frescoes, which functioned as advertising. Pictures of fish, poultry, baked goods. The menu painted on the wall.



Corn

The Thermopolium of Asellina at Pompeii.



Herman

Asellina is the complete one. Jugs and dishes still on the counter. A kettle of water. Shrines to the Lares, to Mercury, who is commerce, and to Bacchus, who is wine. The three gods of the trade, all in one shop. Wooden racks behind the bar holding stacked amphorae. And upstairs, guest rooms. Possibly an inn. Possibly a brothel. That debate is live and I'm not going to settle it.



Corn

Water on the counter, though. That's the dilution, right there in the fixtures.



Herman

That's the dilution in the fixtures. The kettle is not decoration. You buy wine, you buy water, and the shop mixes it, or you do. And then a Regio V thermopolium was fully unearthed in 2020. Eight dolia, food residues, wine flasks, amphorae, and a bronze drinking bowl, a patera.



Corn

Eight dolia in one shop.



Herman

Which is a lot of wine for a place that also sells hot food to people who live in apartments.



Corn

So the retail layer is real. Now the question Daniel actually asked. What do they drink it out of.



Herman

Not the storage vessel. Wine is decanted into serving jugs and poured into individual cups. In the Greek world the centerpiece is the krater, the mixing bowl. Wine goes into the krater, gets mixed with water there, and then it's ladled with an oinochoe, a jug, into the drinker's cup.



Corn

And the cups have names.



Herman

They have names. The kylix, a shallow footed bowl. The skyphos, which is the everyday cup, wood or terracotta or metal. The kantharos, a deep handled cup for banquets. And the rhyton, the drinking horn, often molded as an animal or a human head. If you want to drink out of a bull's head, the ancient world will accommodate you.



Corn

And the Roman version.



Herman

The Roman version is glass, and glass is the story. Glassblowing is invented in the first century AD. And that invention collapses the cost of glass vessels. By the mid-first century, Strabo writes in the Geographica that a glass drinking cup could be bought for a copper coin.



Corn

A copper coin.



Herman

Within a generation, glass goes from elite luxury competing with silver and gold to everyday commodity. The Romano-Germanic Museum in Cologne alone holds over four thousand complete Roman glass vessels. Four thousand, in one museum, from one region.



Corn

So the cheap cup is a solved problem.



Herman

The cheap cup is a solved problem. And the cheap storage vessel is not. That's the asymmetry, and it's the whole episode. Everyday Romans also drank from terracotta and bronze. The wealthy used silver, gold, luxury glass. Cage cups, cameo glass, the Lycurgus Cup. But the floor of the market was a glass cup for a copper coin.



Corn

And the dilution detail ties back to what we talked about before.



Herman

Wine was almost always diluted before drinking. By as much as an equal volume of water. The exceptions are the elderly, libations to the gods, and, per the sources, alcoholics. And the strength of the mix was a deliberate social variable. In the Greek symposium, a king of the banquet was chosen by lot, and his job was to direct the slaves on how strong to mix the wine.



Corn

A king of the banquet. Elected by lottery to set the dilution.



Herman

Which is the same job the Roman banquet servants were doing. Announcing the ratio, adjusting it as the evening went. Undiluted wine, akraton or merum, was considered barbaric. Thought likely to lead to madness and death. Dilution was a marker of civilization.



Corn

The water is not stretching the wine. The water is the civilization.



Herman

The scale of the habit is worth holding onto. About half a liter of undiluted wine per person per day across Rome's urban population. Men, women, and children averaged together.



Corn

Children included.



Herman

There were quality tiers. Temetum, the strong first pressing, reserved for elite men and the gods. Everyday mixed wine in the middle. Posca, water plus sour wine, the soldier's ration, about a liter a day. And lora, made from re-pressing the pomace, which went to



Herman (continued)

slaves.



Corn

The same plant produces a god's drink, a soldier's drink, and a slave's drink, and the difference is which pressing and how much water.



Herman

Which pressing and how much water. The tiers are the whole social structure, poured into a cup.



Corn

In ancient Israel, same technology.



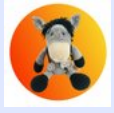
Herman

Same technology. Wine was a daily staple in Jewish life under Roman rule, accepted as part of ordinary living, though Jews regarded negatively the excesses they associated with Roman impurities. Wine was central to ritual. Libations, festivals, the Sabbath kiddush tradition. And to the Eucharist in the emerging Christian sect. Jesus's first miracle was turning water into wine at Cana.



Corn

The Romans noticed the parallel.



Herman

The Romans noticed the parallel. Bacchus and Christ, both figures with life-after-death symbolism tied to the vine's yearly cycle. And the storage technology is the same Mediterranean ceramic system. Pithoi, dolia, amphorae. The ancient Israelite winepress plus storage jar setup is archaeologically well attested. Large pithoi at sites like Gibeon, and in Judean hill-country installations.



Corn

The same jars, the same presses, the same problem, on both sides of the same sea.



Herman

Same problem, same solution, and the same failure to standardize. The pithos has no standard size either.



Corn

Which brings us back to the cup.



Herman

The ancient wine supply chain ended not in a bottle but in a cup. And by the first century AD that cup might have cost about as much as a copper coin, because the Romans had already solved cheap standardized drinking vessels with blown glass. Even though they never solved cheap standardized storage vessels. Which is why they kept smashing amphorae into a hill.



Hilbert

They were right about that part.



Corn

About which part.



Hilbert

That the tank is not storage. I spent a stretch at a small urban winery that did custom crush for home winemakers. My job was cleaning out the stainless steel tanks between batches. They were bolted to the floor. Fixed in place. You crawled inside with a hose. There is no good way to describe what that is like, so I won't.



Herman

You're saying the dolium wasn't a warehouse.



Hilbert

I'm saying the tank is where the wine is alive and doing things. The storage is what happens after. You keep calling dolia storage. Some of them were. But a dolium half-buried in the ground is a fermentation vessel first, and the reason you bury it is temperature stability. Not convenience. The ground holds the temperature steady while the wine works.



Corn

Which means the burial is engineering, not housekeeping.



Hilbert

It's engineering. And there was a rule at our place you never filled a tank past about eighty percent. The fermentation needs headspace. You leave room for it to climb. And I've wondered since whether the Romans had the same rule, and whether a dolium that ruptured on a ship was a structural failure or somebody filled it too full and walked away.



Herman

That reframes the shipwreck problem entirely. If the dolium was working, it was generating gas and pressure, and a full one has nowhere for that to go.



Hilbert

A full one has nowhere to go. And the man who filled it is not the man who sails with it. That's usually how these things work. Somebody upstream makes a decision about a fill line and somebody downstream finds out about it in bad weather.



Corn

The invisible labor is the actual story. Somebody cleaned those jars. Somebody decided how full to fill them. None of that shows up in a supply chain diagram.



Hilbert

None of it shows up. You can draw the dolium on the diagram. You can't draw the man with the hose.



Herman

That labor is why the fixed vessel stays fixed. You don't move a dolium because moving it means emptying it, and emptying it means cleaning it, and cleaning it is the worst job in the building.



Hilbert

That's the whole reason the thing is infrastructure. It's not that it can't move. It's that nobody wants to be the one who moves it.



Corn

Hold on. That's a better answer than the one we had.



Hilbert

It's a practical answer. It's not a better one.



Corn

It's the reason the system looked the way it did, and we spent an hour on the shape of the system without asking who maintained it.



Hilbert

Now you know. And the eighty percent rule, I'd want to check that against the archaeology before I said it out loud.



Herman

Which is fair, and I'll take the correction. The fermentation vessel framing actually explains something the storage framing doesn't. If the dolium is where the wine is alive, then the thing the Romans never standardized wasn't a container. It was a piece of equipment.



Corn

A piece of equipment that stayed in one place for thirty years and had to be cleaned by somebody.



Herman

That's the cost the bulk system was hiding. The labor. Fifty-three million amphorae on a hill, and every one of them was filled, sealed, shipped, opened, and smashed by a person.



Corn

Which brings us back to the cup.



Herman

The ancient world solved the cheap standardized drinking vessel and never solved the cheap standardized storage vessel. That's the inverse of us. We solved the bottle and we solved the packaging, and we still can't agree on what a cup is.



Corn

The cup is the part that was disposable. The cheap, mass-produced, replaceable part was the thing you put to your mouth. The expensive, permanent, fixed part was the thing the wine sat in. We've flipped it completely.



Herman

We've flipped it. Next time you pull a cork, you're participating in a supply chain the Romans would find bizarre. And they'd find our wine cellars stranger still. A room in your house, full of standardized glass, sitting at a temperature you control, holding wine that isn't alive anymore.



Corn

The dolium was alive and the cup was cheap. We made the bottle precious and the wine inert.



Herman

That's the trade. We bought convenience and we sold the tank.



Corn

If you're enjoying the show, leave us a review wherever you're listening. It helps other people find it.



Herman

This has been My Weird Prompts. Our producer is Hilbert Flumingtop.



Corn

Email us at show at my weird prompts dot com. We'll be back soon.