Smologies #39: ANCIENT ROME with Dr. Darius Arya Ologies Podcast March 2, 2024

Oh heeey, it's your old Dad Ward Von Podcast, just slipping into your life to chat with you about ancient toilets, buried treasure, and Roman rulers! Welcome to another episode of *Smologies*. What are *Smologies*? you may be asking yourself. They're smaller cuts of our classic episodes and we cut them down and we cut out all the swear words so that they are classroom-safe, they're kid-friendly, they're good for all ages and this is a great episode, people *love* this one. So, now you can listen to it as a curriculum or with my grandpa or whoever you like. If you want the full version, we're going to link it in the show notes, that's the longer version with all the swears left in but this one, it's safe. Okay, enjoy.

Okay, archaeology. Let's get into the etymology really quick. Archaeology comes from the Greek *arkhé* for 'beginning', and Classical archaeology deals specifically with Ancient Rome or Ancient Greece.

Boy howdy, hot dang, this ologist knows his business! He's an American who lives in Rome, so the dude is literally walking the talk, and he's the Executive Director of the American Institute for Roman Culture. And he's the host of the PBS series called *Ancient Invisible Cities*, as well as the Italian series called *Under Italy*, where he crawls into cool tunnels and tombs, it's very rad. A statement on his website just reads: "My passion is Rome," and it is not a lie and like a plague in ancient times, it's infectious. So, hang on to your togas and recline on your laurels to hear all kinds of dirt with Classical Archaeologist, Dr. Darius Arya.

Alie: Darius Arya sounds like a superhero name.

Darius: Yeah, it almost rhymes, I've gotten that a couple of times.

Alie: Darius Arya.

Darius: Hello.

- Alie: Also known as Dar. [*Darius laughs*] What does an archaeologist do? If someone says, "I'm an archaeologist." What does that mean? Because I feel like I think of dusty Chinos and worn boots, and definitely a hat.
- **Darius:** Yeah, most archaeology isn't spending your time in the field. I mean, I can qualify that and say that some people just do that all the time because they're contract archaeologists. So, there's always something going on in Italy where some house is being built, or some building is being restored, or some road is being put in, and so they're always out in the field doing the excavation and, in that sense, urban development or rescue operations.

But generally speaking, you're studying the past. So, you're an Egyptologist or I'm a Classical archaeologist, so I'm in the Mediterranean, I'm in central Europe, I'm where the Romans were. But generally speaking, the archaeologists will spend a lot of time in libraries. I'm here at the library using the resources of the Getty.

Alie: And so, it's some part in the field, but a lot of it is spent also piecing together a lot of different parts of history to form, kind of, a narrative or trying to piece together a narrative that has parts missing?

Darius: Exactly. You're getting a wealth of information when you're excavating or doing some sort of evaluative study, I mean, it could be noninvasive nowadays. But then you need to sift through the data. What you've now come up with has to make sense.

Aside: Oh man, I love this part! Archaeology is like a fascinating parfait of abandoned junk.

Darius: If you're excavating, you've unearthed different strata, different layers, that people have left behind, and you've gone through the chronology backwards, so you're trying to piece it together, understanding it from the beginning to the end. Of course, you're actually in the most recent stuff first. So, there's a bit of a puzzle there.

Alie: And what kind of tools are you using? Take me through a dig.

Darius: Okay. So, what I'm concentrating on professionally has been the Roman era, and because Rome is not a place that's abandoned and has continually been occupied there are various layers that can be quite late. So, the top layer of a site, it will be modern. There's going to be something... People deposit, people leave stuff behind, and it can be a Coke bottle, or a piece of barbed wire fencing, something like that. Then you're getting down into, actually in Rome and the vicinity, the environs, it can be very, very rapid. Sometimes it's even as shallow as, say, four or five inches. "Awesome. Boom! We're already hitting ancient material."

Alie: And where is this? Is this on a construction site? Is it a puddle?

Darius: My excavations have been in really historic places that are well known, like the Roman Forum, but then also, an archaeological site called Ostia Antica. Ostia Antica was the port city of Rome.Basically, Ostia was developed as the city at the mouth of the Tiber River. So, you imagine this river flowing from the north, through Rome, and then dumping out into the Mediterranean.

Aside: So, this is a city located right about at the kneecap of Italy. It's right on the sea and it's been abandoned for about 1,000 years. It now kind of looks like grassland taking over a grid of crumbling brick structures. But in its heyday, it was this bustling port city and a seaside tourist town filled with government buildings, military fortifications, amphitheaters, and residences. Ships carrying grains and other supplies would offload tons of goods to be stored and cataloged in warehouses, and then tugged upriver by little boats, and then dragged into Rome itself. This was a place of a lot of comings and goings.

But once a newer port city nearby started getting more traffic, Ostia Antica became so five minutes ago. It was so over. But its abandoned ruins are a really, really, good place for archaeologists to piece together the past because that's what they do. I just stated the obvious. Anyway, Ostia Antica.

- **Darius:** So then, obviously, Ostia becomes a very, very, important place for the empire and it becomes a very multicultural city. It's great, it's like a mini-Rome. So, the fact that it gets abandoned and it's just there, that allows us to have really exciting and pretty immediate excavations as opposed to other sites that are continually occupied like Rome. Obviously, Rome is much more complex to excavate because there's a modern city on top of it.
 - Alie: Yeah. [laughs] And what kind of stuff do you typically find?
- **Darius:** You find a lot of pottery. A loooot of pottery.

Alie: I was going to say, I feel like it's got to be a lot of vases.

Darius: Yeah, yeah. Imagine you have your house and you're living in your house for decades and decades and decades and you're producing, over that time period, a lot of garbage. Now imagine your rubbish heap, your dump, was right outside in your backyard. Just imagine what people would find.

Aside: Personally? [*slowed speed*] Just a bunch of kombucha bottles and empty bags of Cool Ranch Doritos, let's be honest.

Alie: Oh god!

Darius: Of course, obviously, if we're talking about today, we're talking about a lot of plastic. So, for the Romans, almost everything... Sure, there are leather goods they're using, or baskets, or burlap bags, but really what's traditionally preserved and what was used for storage, for pretty much anything, was pottery. So, you're going to find that. That stuff is fired and it's basically indestructible, but it's kind of smashed up and those things can be pieced together. Then hopefully, if you're lucky, they write on them oftentimes what the material is and so forth, or who owns it and so on. There's a big dump actually, in Rome called Monte Testaccio. It's like a hill.

Aside: Oh my god! A Google search reveals just a huge grassy hill in an otherwise flat neighborhood, but then you get up close and it's like a ceramics graveyard. There are just piles and piles and piles of broken pottery, like if a giant just smashed all your jars.

Darius: It's literally something like about 150 feet high and it's got a circumference of like, a mile and a half, [*Alie laughs*] and they just dumped ceramics that are smashed. Primarily, the amphorae, these jars, were used for carrying olive oil. So, then you say, "Well, why don't they just reuse the jars?" Well because, if you have it filled with olive oil, have you ever tried to clean a bottle of olive oil? It's a pain! So, what they did was they just smashed it. So, it gives you an idea of the volume, the sheer volume that's coming in.

And then keep in mind too that we love the ancient guys because it was all so sustainable. So, even Rome was a big consumer city, and generally speaking, you'd take those jars, and you'd smash them, and you stick them in the rubble for the mortar of a wall. They're reusing *everything*. But to be able to create a massive hill like that means they had so much volume coming into this mega city that was the ultimate consumer city that, "Oh, we can't even use all this stuff. We'll just dump it over here." And it just becomes this hill.

Alie: My god. So, people have always been garbage people.

Darius: Oh yeah. Some of the greatest finds, I think, in recent times, really adding to our knowledge of the ancient world is, for example, the drainage channels in Herculaneum, one of the cities destroyed by the eruption of Vesuvius, they found something like six tons of human feces. So, you go, "Eww, that's not my kind of dig!" [*Alie laughs*] "Oh, we hit the mother lode!" But basically, what happens is, they sift through all this stuff, and they find out they had parasites, and this is what they're eating, and this is their diet, and so forth. It's really, really fascinating.

Aside: Since making this episode, side note, we've done Scatology all about zoo poo, and more recently, Environmental Microbiology, which is all about testing wastewater for diseases, you're welcome. Enjoy your lunch.

- **Darius:** Somebody's got to do it and you don't know what's going to happen when you dig. You will just not know until you excavate. That's part of the fun and the mystery and the puzzle work because you never find everything intact. You're always going to find half the puzzle pieces are missing. So, then you need to figure it out and you figure that out by talking to colleagues and seeing things that are similar, and so forth. But that's a lot of fun.
 - Alie: Now, when you've got, let's say, a crushed vase that you've unearthed and it's very exciting, whose job is it to physically put it back together?

Darius: Ah, yes. So, that's the job of the conservator, which is very, very important. So, you can carefully document an excavate... We actually had a number of tombs at our last dig so then we had a specific expert.

Aside: This expert he's talking about is the very, very, European-sounding Pier Paolo Petrone of the Laboratory of Human Osteobiology and Forensic Anthropology, this is near Pompeii.

Darius: He's looking at some pelvic bone and he's telling you man or woman, and age, and dah, dah, dah, dah. So, it was a lot of fun to have him on the site. You have to depend upon a good team of people from different backgrounds depending on what you're doing. Do you need a structural engineer because you're going deep? Do you need this forensic anthropologist? Do you need the numismatist for the coins?

But it really is exciting because what you're doing is recovering the remains of ancient cultures, that's what archaeology really is, and you're doing that through the examination of the material remains. You know, it's not just the things, but it's the things that then indicate human activity, human lives. I mean, it really is the way to connect to those people of the past. Oftentimes, it's not the big, high and mighty, the emperors– I've done a lot of TV shows that are like, "Do one more episode on [*emphatic, dramatic voice*] Caligula [*Alie laughs*] or Nero burning Rome," but it's also just that average person, those communities. Who were *those* people? They oftentimes remain anonymous because they don't have the funds to leave behind something great and massive and impressive. So, it's really the archaeological remains that can help unearth their story.

Alie: How did ancient Romans live?

Darius: There are different ways of looking at it because, on the one hand, I'm still in awe of the aqueducts that were constructed to bring all that water into a city. How do you maintain a million people? I mean, that's a megacity! Cities didn't get that large until after the 1700s. You've got to get the industrial revolution to have the sophistication to have those cities. The Romans had incredible, different ways of benefiting from... yeah, conquest but also just a life standard that nobody else had. So, then people were... What are people doing today? We're going to the cities because cities give you more opportunities. What were they doing under the Romans? People were flocking to the cities.

There were jobs, there were opportunities, and there was a whole different lifestyle. All these specializations, all these careers. Like, this person makes the shoes, in times there was a guy down the street who was making your shoes. Unless you get the import, you get more refined leather or whatever and it can be much more expensive. But just think about the clothes being made, everything is made by hand, and in a certain sense, things did get industrialized. You could go to the dry cleaners that could accommodate thousands and thousands of people. You drop off your toga and your toga would be cleaned, oftentimes being soaked in ammonium to get those stains out. [*"No thank you."*] Afterward, you'd rinse it out and obviously, there are different ways in which you can have it clean and smelling well.

So, life got really complicated but then also sophisticated because you had the water, let's say, from the aqueducts coming in, and you had the bath complexes you could go to. You, who don't even have flushing or running water in your house or a toilet, could go to these public spaces where you could have a Jacuzzi.

Aside: I looked up the amenities in Roman baths and they had heated floors, and dry saunas, and wet saunas, and furnace-warmed bathing water, and cold plunges, and these soaring beautiful ceilings, and intricate mosaic floors, and they were public! So, they were pretty cheap to get into and on some holidays, they were just totally free.

And while we're talking aquatic... So, the water systems in Rome were legendary. They were channels of water that went under the city or above it in these bridge-like structures and they were fed by springs and the flow was transported only via gravity. So, all these aqueducts were built to be on some gradient, even if it wasn't too steep, it didn't even look steep, it still was enough to keep the water flowing just slightly downhill. The first aqueduct began operating in 312 BCE and it fed a cattle market in Rome. As the centuries passed, hundreds of these human-built rivers existed all over the Roman Empire and a lot of the water was used for the bathhouses. I mean, I'm mostly Italian and it's so weird to think of my ancestors just scrubby-dubby, nude jacuzzi chillin'.

- Alie: If you had to describe to like, a second grader, the rise and fall of the Roman Empire in like a couple of sentences... How did the Roman Empire get so powerful and what happened?
- **Darius:** Yeah, okay. That's... whew, that's a great one. So, they started off as a little village like everybody else. but they had a sense of themselves and what they could accomplish, and they did it against all odds. So, they end up having a better military. Basically, they had something... a good idea, a good mindset that ends up over time allowing them not only to defeat people but to have relationships with those people and those communities. And they did it rather quickly. They end up having a great network, to the point that all these communities in Italy are now on their side and they're all becoming Romans. They actually get the citizenship.

Aside: Okay, let's buckle up your butts for a whiz through space and time to get some highlights and a very, very, brief history of the Roman Empire situation. So, the history of Rome all starts around 753 BCE Rome was ruled by a bunch of kings, a lot of whom... [*"A bunch of old meanies."*] And then it became a republic in 509 BCE, *allll* the way to 45 BCE when it becomes an empire. So, weird rulers start to take over, starting with Julius Caesar, who crosses the Rubicon into Italy and ends the era of this people-led republic by becoming a dictator. So, that empire lasts about 500 years until its fall, which happened about 476 AD.

Darius: Rome ends up still having this voice. I mean, Rome today still has a voice as well. It's the capital of a country. The country's only been around since 1870, 1860, thereabouts as modern Italy. There was no modern Italy before; it was all city-states.

Aside: So, Italy is a brand-new country? I did not know this. And again, I am Italian.

Alie: Can I ask you Patreon questions?

Darius: Yeah!

Aside: But before that, let's send off some money to a good cause and this week we're going to toss some chunks of gold at the nonprofit AncientRomeLive.org, which is a free educational learning platform for students and teachers and travelers and history lovers. You can find out more at AncientRomeLive.org and Darius is the director. So, score. Boom. Money. Thank you, sponsors.

[Ad Break]

Okay, let's ask this nerd your questions.

- **Alie:** Jake wants to know: Is Rome a big archeological minefield with ancient stuff below the ground everywhere? How does anyone build anything without ruining some of the sweet mosaic under the ground?
- Darius: You're absolutely correct. Rome was the megacity, the greatest city of the ancient world, a million people living there. So, everywhere you dig, you find something ancient, that's exactly correct. Now, in different time periods, people cared less. So, when Italy was unified, the Savoy family wanted boulevards and new buildings and they uncovered tons of stuff, and then, "Oh look, we'll

keep the statues or whatnot. We'll document this, but we'll knock everything down." So, there are those issues where you lost a lot of material but also made a lot of discoveries.

Today, of course, the process is very meticulous, very refined, and very time-consuming. So, "I'm going to put an elevator in this building, or I want to gut this building and put in a department store," which happened with Rinascente. They literally found a whole slice of a neighborhood.

Alie: Lloyd Parlee has a bathroom question.

Darius: All right! Sponge on a stick.

Alie: Yep! The whole wiping their butts with a public shared sponge on a stick.

Darius: Yes, yes.

Aside: So, a recent mosaic of this item which is known as a xylospongium was recently uncovered in modern Turkey, and let's just say it was humorous in nature and it confirmed that for millennia, people have enjoyed toilet humor and comic strips while in the john.

- **Darius:** They find a mosaic with a guy with a little stick and a sponge on it. What's with that? So, the idea is... Do you have any idea how much paper cost back then? Oh my god, it was made by hand, it was made from papyrus! My god! You can't waste that! It's just not going to happen. So, you do what... Let's talk about diapers. Seriously, all the modern things we have today and we're a throwaway society and it's convenient. I mean, go back, my parents, you know, they washed our diapers. But I mean, the things we take for granted today... So, you know, it's the same thing with the sponge on a stick. What do you expect them to do? These are big issues so sponge on a stick, thank you very much.
 - Alie: [*laughs*] Didn't know about that until this moment. Oh god. Okay, let's see. Christopher Barley and Lloyd Parlee both wanted to know: Was Roman concrete indeed stronger than ours now?

Darius: It is. Yes, it is.

Alie: It is. Good, okay. Boom!

Darius: Why is the dome of the Pantheon still standing after, let's say, 1,800 years? How is this possible? We can't build anything that lasts 1800 years. But, I mean, how do you have anything last that long? How come we're excavating stuff and we're finding these really well-preserved structures? It's because they built them in a different way. For us to do it today, it's not efficient, it's not costefficient. So, we cook the lye; the processing is different, so the material is weaker.

Alie: Oh, I didn't know that!

Darius: So, it doesn't last as long!

Aside: Okay, so much like a coveted recipe for BBQ sauce, Roman concrete recipes are exciting to people, including myself. So, the secret ingredients? Volcanic ash and seawater. The seawater broke down the ash and then this other mineral, phillipsite, crystallized in its place, and that hardened the concrete over time. So, instead of breaking down, it just kind of got better and better. Still, you know what? I would take our shitty concrete over their xylospongia, really any day.

So, this next question floored me.

- Alie: Jamie Peterson wants to know: Is it true that marble statues were originally painted brilliant colors and the paint disappeared over time to reveal the natural stone color that we see today?
- **Darius:** Yes, absolutely! [*DJ airhorns play X-Files theme*] Because the materials were biodegradable. If you bury something, it's going to come off. They use tempera or they use encaustic. They actually use a

hot wax kind of paint that was translucent. So, the whole dynamic of what it actually really looked like? We're not exactly sure. When you see a reconstruction, always take those reconstructions with a grain of salt, because they're usually not very good. To recreate what must have been there has not really been done.

Alie: When did they stop painting them, do you think?

Darius: That's a good question. I mean, all throughout antiquity they were painting them.

Alie: That's so bananas!

Darius: It wouldn't necessarily be the whole body, it could be like the clothing, the drapery, the hair, paint the pupils, maybe the ring on your finger, et cetera. Even inserting a metal necklace or a crown or earrings. So, they got to be quite dynamic and lavish.

Alie: Last questions I always ask, the best thing about being an archaeologist.

Darius: I think there's everything that's great. You meet people, diverse cultures, get to travel, always have a little bit of a tan. My work is outdoors, my work is outside. My younger daughter used to say, when she was really little, "Daddy's office is the Colosseum," which is a nice thing to say. And it's kind of like, yeah. I want to be in contact with this as much as possible. The other beautiful thing again to underline is there are collections around the world in museums which do a phenomenal job to promote all this history and stuff like that. But remember, they're pretty much all collections you've acquired, you bought, you purchased. And nowadays we're really scrutinizing where this stuff is coming from because a lot of stuff is looted.

Aside: Darius says that preservation is really important as is knowing where the objects came from.

Darius: Right now, I'm at the Getty and the Getty has a beautiful, fantastic relationship – wasn't always the case – but right now, with the Italian government and they're sharing, and they're working, and they're preserving monuments and so forth. So, it's great to see when those things can really work and it doesn't just benefit the monuments themselves, it benefits the local community, the local governments, and so forth. That's the kind of things I'm involved in, and I want to be more involved in.

Alie: Thank you so much for doing this.

Darius: This was great!

Alie: This was amazing. I've got to go to Rome.

Darius: Just let me know when you're coming to Rome! We'll plan some stuff.

Alie: We'll get an Aperol spritz... [voices fade out as mandolin music plays]

Go check out some Roman ruins, eat some pizza while you're there. You can find Darius Arya all over: he has tons of beautiful photos and links up at his website, that's DariusAryaDigs.com, and his Twitter and Instagram are also @DariusAryaDigs. You can check out his show, *Ancient Invisible Cities* on PBS and his Italian show, *Under Italy*, and that's at RaiPlay.it. His American Institute for Roman Culture is at RomanCulture.org,

You can find me @Ologies on Twitter and Instagram, @AlieWard on both, and AlieWard.com has more links. Also linked is AlieWard.com/Smologies, which has dozens more kid-safe and shorter episodes that you can blaze through. Thank you, Mercedes Maitland of Maitland Audio for editing those. And since we like to keep things small around here, the rest of the credits are in the show notes.

And if you stick around until the end of the episode, I give you a piece of advice and this is some life advice I have sworn by for decades and that is, wear very brightly colored and patterned socks because not only do they make any outfit more exciting, you can wear them mismatched if you'd like. But when you're matching socks, it's much easier if you have a bunch of weird wacky socks than if you got a bunch that are kind of the same color but bland. So, start wearing weird socks because laundry day is way more fun that way. All right, berbye.

Transcribed by Aveline Malek at TheWordary.com

Links to things we discussed:

Dr. Darius Arya's <u>website</u>, <u>Twitter</u> and <u>Instagram</u> A donation was made to <u>AncientRomeLive.org</u> Full-length (*not* G-rated) Classical Archaeology episode + tons of science links More kid-friendly Smologies episodes! Sponsors of Ologies Transcripts and bleeped episodes Become a patron of Ologies for as little as a buck a month OlogiesMerch.com has hats, shirts, hoodies, totes! Follow @Ologies on <u>Twitter</u> and <u>Instagram</u> Follow @AlieWard on <u>Twitter</u> and <u>Instagram</u> Sound editing by <u>Steven Ray Morris</u> and <u>Mercedes Maitland</u> of <u>Maitland Audio</u> Smologies theme song by Harold Malcolm