**ep 84**

**New Track:** [00:00:00] Welcome to the endless knot podcast where the more we know,

**Mark:** [00:00:04] the more we want to find out

**New Track:** [00:00:05] tracing serendipitous connections through our lives

**Mark:** [00:00:08] and across disciplines.

**Aven:** [00:00:15] Hi, I'm Aven

and I'm Mark.

And today we're talking about linoleum. Wait, no, don't, don't turn it off. It's going to be exciting. I promise. Or at least interesting. But before we get started, we, first of all, it's just getting to be so common that I almost hesitate to do it, but I apologize for how long it's been since our last episode.

This year has been not easy.

**Mark:** [00:00:43] I mean, I think everyone knows that.

**Aven:** [00:00:45] I know, and I'm sure everybody understands, but just to say that, you know, with school, starting back and classes going and we're teaching remotely and everything else, it's just, it's been hard to keep on top of everything. And this is one of the things we haven't been as on top of, so apologies. I'm also not going to make any promises about what it's going to be like for the next couple of months, because we'll do our best.

That said, this is technically the beginning of season six, hooray. Which means we've done five years of this.

**Mark:** [00:01:15] Oh my God. People are still listening to us. Well,

**Aven:** [00:01:18] I mean, maybe not, this could be the time we find out

**Mark:** [00:01:22] this is the one they turn off

**Aven:** [00:01:24] when we find out that no, no one's listening anymore, but five years, I mean, like that's halfway to a decade, Mark.

**Mark:** [00:01:30] Yep.

**Aven:** [00:01:31] Think we can manage a decade?

**Mark:** [00:01:33] And that's a lot of episodes in that.

**Aven:** [00:01:35] This is episode number 84, 84.

**Mark:** [00:01:37] Yeah. It's not going to be long till we run up against that a hundred

**Aven:** [00:01:40] episode. Well, maybe we only managed nine last year. So like, don't get too ahead of yourself. That's true.

**Mark:** [00:01:49] You know, one a month. That's 12 at best.

So,

**Aven:** [00:01:52] At best. But you know, you never know. We also want to say thank you to some new patrons with a lovely name of EC1009. Thank you. And also Zeabeth and David B. You are amazing. And we are so grateful.

**Mark:** [00:02:08] Thanks gang. That's awesome.

**Aven:** [00:02:09] All right. So we are going to be talking about linoleum.

**Mark:** [00:02:12] Yes. And really it's fun.

**Aven:** [00:02:14] But before we get to that, the drink, we're going to be drinking. We tried to think of various complicated. That's turns out there's no linoleum cocktail.

**Mark:** [00:02:23] No, I mean, you know, we could have put linseed oil into our

**Aven:** [00:02:27] cocktails. I did look up flaxseed cocktails, but they were all about health. And none of them had alcohol in them.

So I gave up on that pretty fast. So instead we're going with dirty martinis.

**Mark:** [00:02:40] Hmm.

**Aven:** [00:02:42] And the reason for that is the olives. And that will become explicable, I guess,

fairly soon.

**Mark:** [00:02:49] I think most people have heard of olive oil.

**Aven:** [00:02:52] Yes. But they don't necessarily know it's connected to linoleum. No.

**Mark:** [00:02:55] Right. Yeah. So that will become clear

**Aven:** [00:02:57] a dirty martini, for those of you who have not had one is a martini, which is in this case, what you do a three to one,

**Mark:** [00:03:03] I prefer three to one, which is probably very high, in the vermouth department for many people, but I prefer my, my martinis more vermouth-y. So yeah, I do three to one ratio

**Aven:** [00:03:17] and we did vodka martinis tonight because that's, I'm actually not a big fan of martinis, but you know, I'll do anything for the podcast.

And in spite of the fact that I could totally lie to you all and say, I was drinking something that I'm not. That would just, it wouldn't sit right with me. So I am having a martini in spite of my, not really liking martinis, but I do like the vodka we're using. It's a local vodka cross-cut vodka and we're using dry vermouth and then, extra dry vermouth, okay.

And then, the dirty martini part of it is that you add a spoonful of the brine from cocktail olives, as well as garnishing with an olive.

**Mark:** [00:03:52] Yeah, these particular olives are infused with vermouth.

**Aven:** [00:03:56] Right. So, all right. So cheers. I mean, they look pretty as martinis always do. That's fine. I don't dislike it as much as I think I like, dislike it.

I think the vodka really matters. Like even though I love gin, I don't love it in a, in a martini, but, I do like the Crosscut vodka, so yeah. And the nice saltiness. Yeah. I mean, that's what the dirty martini gives you, is that saltiness yep.

Alright. So explain to us Mark, why we're drinking something with olives in it, or set up the linoleum video.

**Mark:** [00:04:31] So, you know, the, the jumping off point is the word linoleum and the thing itself. And we'll talk about its history, but it's in a way, really a video about trademark. Which I'm sure is even more exciting

**Aven:** [00:04:46] right now, everybody who stayed with us through linoleum, because they're thinking about how they're going to redo their kitchen, their kitchens has turned off, because,

**Mark:** [00:04:55] so it's actually part of a three part series about intellectual property and there are sort of three.

Sort of areas of intellectual property,

**Aven:** [00:05:05] in the videos, you mean the videos

**Mark:** [00:05:07] we've done? In the videos, well, and the podcast, we, this is our last of the three, so we've done the two others. So, this one, as I say is about trademark. In episode 42, Bugging Out, that one talked about patents. And episode 57 called Freebooting, Piracy and Copyright talked about copyright.

Right? So put those three together in a series and

**Aven:** [00:05:32] you're an intellectual property lawyer. Yeah. That's it. That's all you need to do. you're ready to pass the

**Mark:** [00:05:37] bar.

Yeah. My, my, my, advice is, is, you know, reliable, legal advice, even though no, it's

**Aven:** [00:05:46] before we get in really deep trouble. No, it's not nothing we say is.

Nothing we say is even up to date much less correct.

**Mark:** [00:05:54] I am not only not a lawyer. I don't play one on TV. And, all I really know about is etymology. So this is reliable, etymological information.

**Aven:** [00:06:05] Everything else is use at your own risk. Alright, so that's the topic. So we will take time to listen to the voiceover from that video and come back and pick up on some of the more interesting points.

**Mark:** [00:06:23] Linoleum, a type of durable yet flexible floor covering made from linseed oil and various other materials such as rosin, powdered cork, and pigments pressed onto a burlap or canvas backing, takes its name from Latin linum meaning “flax” and oleum meaning “oil” or “olive”, the main source of oil in the ancient world. Flax is the plant that produces linseed oil, and linum, which comes through Greek from a Proto-Indo-European root referring to the plant, also gives us the words linen, referring to the fabric made from the flax plant, and line, as rope was also made from flax fibres, as well as other such fabricy words as lint, crinoline, lingerie, and, metaphorically, lineage from line. The Latin oleum also comes from Greek and ultimately probably from a non-Indo-European word for the olive. That Greek word elaia also gives us the English word olive, and it’s the importance of olives in the Greek and Roman world that gives us a hint as to what line this story of linoleum is going to take. You see olives and olive oil were highly prized in the ancient world, and though oil could be locally produced, the highest quality oils from regions that were famous for their oil production became even more highly prized, like vintages of wine or, for our purposes, almost like product brands. Just as well-thought-of brands are sold under a particular trademark so the consumer knows the quality of the product, so too olive oil from particularly famous regions would be of known high quality. And olive oil was crucially and culturally important for many aspects of ancient Greek and Roman society, not just for culinary purposes, but also as fuel for lighting, for cosmetics and bathing, in medicine, and for religious ceremonies.

But getting back to linoleum, this floor covering was invented by one Frederick Walton, who in 1855 noticed that the linseed oil in an unsealed oil paint container formed a rubbery film and had the bright idea of using this substance as a replacement for India rubber as a waterproofing material for things like flooring and oilcloth [think tarpaulin]. After tinkering with the process [and having his factory burn down along the way], he patented his process for producing it in 1860. As it happens, Walton was originally going to market his product under a different name, Kampticon, which he initially picked because it was similar to a well-known rival floor covering made with India rubber called Kamptulicon, but he eventually decided on his own more original name, Linoleum. So though he never registered it, Linoleum was a brand trademark that he sold his product under. As it turns out, it was perhaps a mistake not to register his trademark because by 1887, the rival American company Nairn Linoleum started marketing their own version of linoleum under Walton’s coined named, and though Walton tried to challenge this he lost both because of his lack of registration and because by that point it was judged that the word linoleum was already commonly used as the product category, in other words it had become generic.

Let’s backtrack for a moment and consider the history of trademarks. A trademark is any word or symbol that is not intrinsic to a product but is used to identify it as made by a specific company. The use of makers marks on pottery goes back to ancient times, and there are mentions of such marks in the bible. Roman sword makers are said to have used identifying marks as well. The first legislation having to do with trademarks was from the reign of Henry III in England in 1266, in which bakers were required to use distinctive marks for their bread. You see trademarks are not just for the protection of the maker of a product, but in fact perhaps more importantly for the protection of a consumer so that the source of a product is readily identified to assure quality. The lion logo of Löwenbräu beer, which originates from a 17th century fresco in the brewing house depicting the biblical story of Daniel in the lion’s den, is an example of an early trademark that is still in use today. And as a historical footnote it’s another beer trademark that has the earliest registration. Though the US was the first off the mark to enact a trademark registration law in 1870, it was struck down and only reinstituted in 1881, so the United Kingdom’s 1875 trademark act is now the oldest such legislation, and the first company to register its trademark was Bass Brewery, with its distinctive red triangle logo. In what might be lightheartedly described as the earliest product placement, therefore, the famous Bass logo appears in the iconic Manet painting “A Bar at the Folies-Bergère”. Presumably Manet didn’t get a kickback from the brewery. But in another movie related parallel, author Edgar Rice Burroughs was clever enough to trademark his Tarzan creation in 1923, so that even after the copyright on his stories had lapsed, his estate could still defend his creation much like a modern media franchise, because there’s no temporal limit on a trademark as there is with other intellectual properties like copyrights and patents. By the way, the first trademark registered under the US’s second attempt at trademark legislation was, once again following the ‘line’ of this story, for a rope manufacturer which used an image from another leonine Old Testament story, Sampson wrestling the lion. And the oldest German trademark is the three circle logo of the German steel company Krupp representing the seamless train wheels they manufactured, registered in 1875 under the German Trade Mark Protection Law. But we’ll return to Krupp in a minute.

Getting back to Linoleum, though Walton tried to retroactively defend his unregistered trademark, it was by then too late. It had fallen into the trap many such products do. While his invention was itself protected temporarily by its patent, he was the victim of his own success, as linoleum came to refer to the product category, not the commercial source of that product, so once the patent lapsed, the name became generic. It’s a fine line companies have to walk, associating their brand with their product, but not too much, and there are many other examples of this phenomenon, called genericide, such as aspirin, escalator, brassiere, and yo-yo, and in more recent years companies like Xerox and Google have had to fight against their trademarks being used too generically.

Now is one of those moments when we could follow a number of different lines of connections. Linoleum became quite popular to use on sailing ships due to the fact that it’s waterproof, and both the British Royal Navy and the US Navy adopted it, that is until the bombing of Pearl Harbour, when it was found that linoleum’s highly flammable nature was a downside, and soon after its use on ships was superseded by vinyl flooring, also known as PVC, a petroleum product. And it’s petroleum that we’re headed to next, but first let’s follow an alternate line of connections. You remember Kamptulicon, which initially Walton named his linoleum to sound similar to? Well, perhaps unsurprisingly it made a big splash at the World’s Fair in 1862 as a new and innovative floor covering. Of course many manufacturing innovations made a name for themselves at World’s Fairs — that was their point. Another name that hit it big at World’s Fairs is Krupp, for their record-breakingly large steel-cast cannons — you remember the Krupp company were also known for their railway wheels. Well they also turned their metal working expertise to building engines and were one of the first companies be licensed to manufacture diesel engines. And if I’m allowed one last tangent, the Krupp company, in its weapons manufacturing capacity, supported the Nazi regime in WWII, and as it happened Adolf Hitler’s earlier coup attempt before he came to power, the Beer Hall Putsch in 1923, was launched from the Bürgerbräukeller, an old beer hall which at the time was owned by none other than the Löwenbräu company.

But instead of beer, we’re now going to look at fuel, specifically petroleum, which can be a source both for diesel fuel and gasoline — and don’t forget, oil was important as a fuel dating all the way back to the Greeks with their olive oil lamps. In this case though, petroleum comes from the ground as the name indicates, from Greek petra meaning rock, literally “rock-oil”. Evidently the ancient Greeks knew of crude oil, which is mentioned by Herodotus. Though not literally from the rocks themselves, petroleum is produced by ancient organic matter from dead organisms buried beneath sedimentary rock and thereby subjected to immense heat and pressure, transforming it into highly flammable hydrocarbon molecules of various types. This can then be refined into the various petroleum products that are so important to our modern world, such as gasoline and plastics. And this may bring to mind the oil rigs and oil derricks necessary to extract the petroleum from beneath the rocks.

The word derrick, by the way has a surprising etymology. You see the word started out as the name of a person, what’s called an eponym, specifically the surname of Thomas Derrick, during the Elizabethan era, who was coerced into the job of executioner, since such a job would always earn you enemies, after having been convicted himself of rape and then spared the death sentence by the Earl of Essex in exchange for his cooperation. Derrick’s great innovation on the job was to invent a new type of gallows which allowed him to hang more people than ever before, more than 3000 over his career, including the same Earl of Essex who got him into the job in the first place. That’s gallows humour for you. His name first became synonymous with the job of executioner, and then with the hoisting system he invented. Similar rope and pulley systems for loading ships came to be called derricks as well, and from that the word was also applied to the framework that supports the drilling equipment used for extracting crude oil, adding a perhaps not inappropriately sinister element to the apparatus of the fossil fuel industry.

Even more surprisingly, the word gasoline may be an eponym as well. It all started with John Cassell, the 19th century English publisher who founded Cassell & Co. publishing house and had a number of other side businesses it seems. Cassell was also a well-known coffee and tea merchant and perhaps unsurprisingly an avowed teetotaller and supporter of the temperance movement — well, all the more tea and coffee to sell. The word teetotaller, by the way has nothing to do with tea the drink, but is short for the emphatic capital T of “total”. Cassell’s publishing focussed a lot on educational books, and one of his other causes was campaigning against what were called “Taxes on Knowledge”, in other words taxes on paper and publishing. He saw bringing culture and knowledge to the masses as a way to improve the lives of the working class. Another of Cassell’s sideline businesses was selling a new petroleum-derived lamp oil which he dubbed Cazeline, seemingly based on his name, hence an eponym. But in an instance of trademark infringement [yes we’re getting back to trademarks], Irishman Samuel Boyd began selling a counterfeit product under the same name. When challenged with this trademark infringement, Boyd simply added a stroke to the C on the labels rendering it Gazaline.

That this was the version of the name that stuck to become our modern gasoline, and not Cassell’s Cazeline, probably has something to do with the fact that the first part of the word sounds like gas, the state of matter, though gasoline is a liquid not a gas. It all goes back to when Jan Baptist van Helmont was writing about the state of matter that he compared to the Chaos before the world was formed in the ancient Greek creation myth as described by the poet Hesiod, and thus due to his Flemish pronunciation coined the word “gas” from the Greek word “chaos”. Though in modern English we think of the word chaos as meaning “disorder”, that sense didn’t arise until the 17th century, and the word originally meant “void or gap”, coming from a root that means “to yawn or gape” and also gives us the word gap, as well as the Old Norse word that describes the gap before creation in their version of the creation myth, Ginnungagap, which by the way Cassell’s Dictionary of Norse Myth & Legend, put out by that same publishing house, translates as “beguiling void”. So from the spark of creation to the spark plug, the history of the word gasoline.

But getting back to petroleum itself, gasoline is the North American term for British English petrol, obviously a shortening of petroleum. And this fact brings us to the end of the line, with the company known as BP, short for British Petroleum, which tried to shed its bad environmental reputation and the sinister associations of the fossil fuel industry in general by what’s called “greenwashing” its trademark, changing its old shield logo to the flowery green logo of today, and suggesting a new slogan associated with their initials, “Beyond Petroleum”, showing that while sometimes you need to promote your trademark, you don’t want it to become too well known, and sometimes you need back away from your trademark altogether.

Wasn't that a wild ride?! Linoleum!

**Aven:** [00:18:12] Filled with twists and turns and daring adventures.

**Mark:** [00:18:17] Bet you didn't realize the word linoleum was the most interesting word ever.

**Aven:** [00:18:22] Oh, don't don't oversell it, Mark. We still have yet to get to the words average. Okay. And related math terms that we're going to be doing. Everybody look forward to that it's coming.

**Mark:** [00:18:36] So yes, I have a bit more to say about linoleum, in spite of

**Aven:** [00:18:41] thinking that it might be as much as you could possibly ever say. Yeah, no. Tell us about linoleum. I do think what you had to say was interesting. It's just really hard not to mock linoleum.

**Mark:** [00:18:54] So, some other words related to linoleum, include Lino cut.

So that's one of the other major uses of linoleum other than a floor covering, it is this sort of artistic purpose. It's a kind of modern version of woodcut painting, essentially, in which an image is carved into a sheet of linoleum, which can then be inked and pressed on to paper to reproduce the image.

And it's obviously easier to cut into linoleum than wood. And it's more durable, so you can get more prints out of it than you could with a block of wood. So it works really well for that. Linocut became popular with artists in the early 20th century. but it has also been used to produce wallpaper.

So that's another, not just for, fine arts, but also for decorative home decoration and speaking of wall coverings, Frederick Walton, who is the inventor of linoleum, as we said, also invented a product called, Lincrusta. Which is a wall covering.

**Aven:** [00:19:59] I can't believe we don't still use that.

I mean, it's such a good name.

**Mark:** [00:20:03] It's, it's a wall covering, also based on linseed oil. but instead it's sort of embossed to produce a kind of decorative effect,

**Aven:** [00:20:12] right.

**Mark:** [00:20:13] It has a sort of raised,

**Aven:** [00:20:14] Yeah.

**Mark:** [00:20:14] Right.

and in addition to being very popular in many Victorian era buildings, it was famously used in the white house.

**Aven:** [00:20:23] Okay.

**Mark:** [00:20:24] For those of you following American politics at the moment.

**Aven:** [00:20:27] So we should just say we are recording on the night of the first? I don't even know how many debates there are, but, September 29th, the first debate between Biden and Trump. And we are resolutely not following it, but yes, it's all on our mind.

**Mark:** [00:20:44] In addition to the white house, there's also a nautical connection, as with linoleum on those ships, it was used in the state rooms on the Titanic, in that case, not the cause of the,

**Aven:** [00:20:58] no, I don't think you can.

I don't think you can blame the Titanic on the linoleum, on the walls.

**Mark:** [00:21:04] as for the name Lincrusta, Walton initially called his new invention linoleum muralis. In Latin, which means wall linoleum,

**Aven:** [00:21:15] Oh, muralis, with a u, oh, ok

**Mark:** [00:21:18] Yeah, wall linoleum, not a, not necessarily a catchy name, linoleum muralis so he changed it to Lincrusta Walton, which still reflects the, the crucial Linseed ingredient.

With the Lin part and the crusta reflected the embossed nature of the product, I guess, sign it kind of crusty. I don't know.

**Aven:** [00:21:40] I can, I'm just thinking of the cocktail, the Crusta, which a Crusta is something with, I think orange or lemon juice in it and sugar around the edge. Not really sure.

**Mark:** [00:21:48] and it's also notable there that he attached his own name to the product this time, so Lincrusta Walton. Right. having, I guess, learned from his previous problems with the genericide. So he was in this

**Aven:** [00:21:59] case trying to make it not become generic.

**Mark:** [00:22:02] Yeah. Right. You may also be wondering about the word Linotype and whether it's related to linoleum.

In fact, it has nothing to do with linoleum or linseed oil, but is instead a type setting technique produces full lines of type at a time instead of letter by letter. And so it's literally a contraction of line O type or line of type,

**Aven:** [00:22:27] that suddenly made it seem like some sort of Irish name

Paddy Lin O'Type, Line O'Type, son of Type. Yes. Okay. That makes sense.

**Mark:** [00:22:42] Now, as for that Manet painting, a bar at the Folies Bergere, it was painted as it turns out with linseed oil based paint. so that's another nice little connection that I didn't mention in the video. Obviously, there are many paintings painted with linseed oil based paint.

**Aven:** [00:23:01] Yeah. It's like a very common important paint. Yeah.

**Mark:** [00:23:04] Now, according to the art historian, Kenneth, Bendiner or "Bendeener", I'm not quite sure how his name is pronounced, the inclusion of the English Bass ale instead of a German beer, was a nationalist in jingoistic reaction against Germany.

as the French had recently lost Alsace to the Germans after the Franco-Prussian war. So not only is it product placement, but it's also a propaganda kind of thing. And by the way, another interesting outcome of the Franco Prussian war is that it led to the invention of Bovril, which you can hear more about in episode 19 "Beef", just in case you're keeping score.

Right. Also a little bit more about the Krupp company, which you may remember because we talked about this in a recent episode. in episode 80 runes and early writing systems, we mentioned them there because of their logo and, the manufacturing of the gun, big Bertha.

And so in addition to that, the modern incarnation of that company, which is now slightly renamed as Doosan

**Aven:** [00:24:08] group,

**Mark:** [00:24:09] is a major escalator manufacturer, which again, ties it back to one of those genericized trademarks escalator, originally being a trademark. But all of this led me to wonder, Is there anything interesting to say about floor coverings in the ancient world?

**Aven:** [00:24:27] how convenient that you asked me that Mark,

it's almost like we prepared this ahead of time. Sorry. I'm really bad at like pretending. Yes. So I don't have anything to say about, well, There's lots to say about floor coverings in the agent world in a larger sense. But I thought I would pick one particular thing that I have always found really like, just super cool and surprising.

So, many people may know that in Greece and Rome, but it's particularly famous from Rome because that's where we tend to have the most examples from, one of the decorative floorings that you could have if you were rich, was a mosaic. And we've

**Mark:** [00:25:10] seen some nice mosaics in our time.

**Aven:** [00:25:12] We have, when we were in England in particular two years ago, what was it? Yeah. Yeah. Back in the, before times,

**Mark:** [00:25:18] Cirencester

**Aven:** [00:25:20] we saw some beautiful mosaics mosaic and they did tend to be on the floor. So I think one has a tendency, perhaps if you haven't thought about it, very hard to think that they might be wall coverings, but in fact, most of the time they were floor covering,

**Mark:** [00:25:33] I guess frescoes were more.

**Aven:** [00:25:35] Yeah. So frescoes and paintings are what you put on walls. I'm not going to say that there were never any mosaics on walls, but in general mosaics with the flood. So a mosaic just to sort of do the basic definition is, a.

There are different styles of them, but basically a bunch of little tiny stones, usually little squared off stones that are put together to form an image, right? And so they laid to form a flat surface in these various different ways and, decorative mosaics were an important feature. And so usually what it is is you get stones of different colors, so you can produce images, you don't paint the floor. The stones themselves are colors and you use that to produce patterns. And there are lots and lots of different mosaics and some of them are just geometric. Many of them have in the Roman world in particular, many of them had, images of some sort or another lots of mythological figures.

They're always fairly, you know, they're in places that are wealthy. This is not the linoleum of the ancient world, because it is not a, sort of middle class kind of thing. It's, you know,

they're in

**Mark:** [00:26:43] rich

**Aven:** [00:26:43] people's houses, they're not mass produced, it is not mass produced it, Though, that said, there were sort of low end and high end.

Right? Right. So there were definitely mosaics that were not as hard to make, you know, bigger stones, less fancy. And then there's like really high the quality ones. But in general, they're all pretty fancy. But the one I want to talk about is a particular genre that we have, known as the unswept floor mosaics.

Term that's used in sort of talking about it in a scholarship is asarotos oikos, which is Greek, means unswept house or unswept floor. And, what I'm going to talk about now is mainly I knew about them before, but I put a call out on Twitter about the details of it, because I, I, you know, I'm, I'm a literature person.

I don't know my, Archeology and art as well as I could. And so this is courtesy of an article, which I will link in the show notes, that was given to me by or pointed to me by Dr. Jayne Knight on Twitter. So thank you, Jayne, for your help, because this was really useful. So this particular kind of mosaic, what it is, is, you know, a mosaic made up of little square stones that depict a floor covered by trash, specifically with bits of food, the kinds of bits of food that if you lived in a house that was served by enslaved people , and were not a very good person, you would throw on the floor. Right. Right. I, I don't want to just say it's a dirty floor.

Like we would have a dirty floor. Cause we wouldn't throw the shells from our shrimp and the bones from our chicken and the

**Mark:** [00:28:17] yet somehow they seem to end up

**Aven:** [00:28:19] there, but we don't do it on purpose. Yeah. And we do not have, believe me, these things are covered with it. Right. So the covered with the detritus of a meal.

**Mark:** [00:28:26] I'm just saying, you know, based on our, our poor housekeeping regime, you know, shrimp shells, that this would be a good strategy for us.

**Aven:** [00:28:37] Well, so the question is why do these fancy villas have floors in their dining rooms--and as far as we can tell, mostly they're found in dining rooms, that can be sometimes surprisingly hard to figure out in villas when you excavate them, is what the purpose of any given room was, that isn't always obvious, but from the ones we do know, they do seem to have always been in dining rooms, triclinia is the term in Roman, in Latin.

So, you know, why would you and people have joked about it being like the institutional carpets that are, you know, multicolored so that you can never notice how dirty they are. Right. But this article I read very persuasively argues that that's not the reason and it doesn't really make any sense at all.

For us, these are found in the highest and houses, which are going to employ massive staffs.

**Mark:** [00:29:21] Yeah. Presumably you could have

**Aven:** [00:29:23] "employ" that was used wrong, I used the wrong word there. They're going to have a whole bunch of enslaved people who are cleaning up after them.

**Mark:** [00:29:29] Yeah. So presumably you could have one person whose job it was entirely just to sweep the floors

**Aven:** [00:29:34] Yeah, there's no reason at all that they'd be trying to sort of, you know, have a floor that wouldn't show the dirt.

So that doesn't make sense. So why do they have these? So let me tell you a little bit about the background of them, and then the argument that this article was making, which I think is a, like, I'm completely persuaded by this article. I've seen elements of it before. So they were apparently invented in the Hellenistic period.

So we have Pliny the Elder mentions that in this particular person, started making them as art. about the second century BC in Pergamum. And they fell out of fashion and then they kind of got reinvigorated in the Roman empire. we've got literary, this one literary source that mentions the Greek version, but all the ones we have that survive are from the Roman period and they're all from domestic, like villas, not from or houses.

They're not from anything institutional. The most well known example is from Rome, from the city of Rome. That is about the beginning of the second century CE. And it's signed by an artist like it has the artist's name on it. and it's the best example. I'm going to link the, article in the show notes and it has a bunch of pictures.

So if you'd like to see what these look like, go and look at the article. Cause they're really cool.

then there's a couple of other examples from other places in Italy and then a number of example from Tunisia, and they range from the first century CE middle of the first century CE to the beginning of the third century CE. So we see a kind of 200 year period in which the examples we have come.

And, they're very, they're quite high end versions of mosaics. They use quite small from one millimeter to four millimeter tesserae, which is the word for the little squares, like really small little squares to make very detailed, very fine. art, right. Essentially.

**Mark:** [00:31:17] Yeah. I can see that, that it's fine enough to show the individual Fishbones, which are very thin.

**Aven:** [00:31:23] yeah, yeah, exactly.

This is not sort of generally sketching out there and they're very realistic. So one of the things about it is it's very trompe l'oeuil, right? Like it's it's you could be confused as to what, especially if you've been drinking a little bit as to whether a bone was really there or not. So one imagines these floors and then one imagines them also being covered by actual detritus as, as well.

So, you know, that's another sort of interesting element of them as a, as a piece of art, I suppose

**Mark:** [00:31:54] you failed to mention that, included in the detritus is fish heads,

**Aven:** [00:31:58] fish heads.

**Mark:** [00:32:00] Roly poly fish heads.

**Aven:** [00:32:02] Okay. So why do they have them? Well, it represents the detritus from a meal. It has also been argued that it may have funerary significance as an element because during a funeral feast, you would throw offerings to the dead onto the ground.

Now, this article says that I didn't actually know that I'm taking the article's word for it. but that's an interesting feature that I didn't know particularly, but that that may therefore be something that people seeing the image would think of. Right. Now the period that these images are found, and these floor coverings are found is in what is a period known as the Second Sophistic-- that doesn't really matter. But yeah, it's a period of revival of Philhellenism. That is, an appreciation of the Greek world and Greek culture, in literature and in art, that starts with the beginning of the Roman Imperial period, but really sort of gains a lot of steam towards the end of the first century, CE.

and it's promoted for example, by Trajan and Hadrian, very sort of philhellene emperors. And so it's, in that sense, it's not surprising that something that came to be in the Greek world and the Hellenistic world would be reinvented or picked up again. Right. Like it's just a fashion trend, but the author of this article argues that the rich patron who commissioned the work sought to present himself as an erudite individual of sophisticated tastes belonging to the Roman elite; but what, Ehud Fathy, the article author is suggesting is that what we have going on here is part of a, of something that's happening also in literature, which is the elite in Rome working on distinguishing themselves from other rich people, essentially. Right? So what you have happening is a culture of art appreciation and what can even be considered like art history that starts in the Hellenistic period, but really gets picked up in the Roman period in which the, what does he call it?

The, an elitist culture of viewing where art is about knowing. particular styles, particular artists, particular versions of artists conventions and the intertextuality of one. Style quoting another style. the, very formalized vocabulary of aesthetics grows up within the Hellenistic period and is then picked up in the Second Sophistic.

**Mark:** [00:34:17] So it's not just expensive, but it's expensive and erudite,

**Aven:** [00:34:20] it's expensive and erudite and it's, and it's, opaque to those who don't have the training and that's really key. And of course that fits completely. And one of the reasons it's so persuasive, it fits so well with what's happening in the literary, you know, the sphere I do know which is the literary sphere. That's absolutely something that's happening even in the Augustan period and Republican period, but super, super happening in this same period in literature, So, these floors are legible to anyone as being kind of funny cause they have, you know, ha ha, a floor that has, you know, detritus on it.

Okay. So try to find it. It's a joke. That's fine. Anybody can read that, but, there are other levels that you can read it as, which I will go on to talk about, which only somebody trained in the, the language of art and the history of art could understand, maybe

**Mark:** [00:35:09] has gone to Greece and seen

**Aven:** [00:35:11] has gone to Greece, has read the literature, has done the educational, has that educational attainment that marks them out as truly elite, as opposed to just rich, because of course in this period, lots of people, freedmen and others were getting rich, right.

and the, the old way of distinguishing the truly elite from the non, which was political activity has been subsumed by the empire. So you don't have that. I mean, there is some of that still, but you can no longer make yourself. Cons like consul doesn't matter in some, you know, the political career stops being this place that really delineates who's truly elite from not who's truly noble, who's truly important.

And so we see a lot of different ways in which, educational attainment and sort of training and cultural understanding becomes the big marker.

**Mark:** [00:35:57] So, the nouveau riche would not have grown up with an expensive education. They would have got that money later.

**Aven:** [00:36:03] Yeah. even if they had, you know, this is the sort of thing that you need generations to truly understand.

I mean, whether you do or not, but that would be the argument that would be made by the people involved. though, of course we don't know that people didn't just copy these things without knowing the full understanding, but like, Oh, a neighbor down the road has this, unswept floor. I'm going to have an unswept floor, even if they don't understand it.

Right. But when you had the dinner parties, which were a major feature of how you socialized, the intellectual discussion would focus on the art on your floor, on your walls, around you, and to be able to discuss it on the right level would then mark you out. Right. So if you just said, ha ha. It's funny because there are shrimp shells, right?

You would be showing yourself up as gauche. So it becomes also kind of a Shibboleth right. In that sense. That's what this person's arguing. so, you know, aesthetic knowledge is a new cultural capital that distinguishes the elite from the merely rich. That's the idea. And so what are those levels of knowledge?

Well, I won't go too, too deep into it cause I've already talked a long time, but, one, you know, a still life, as opposed to, so mythological figures are a very common thing i n mosaics as well, but everybody knows the myths to some level. So almost anybody can kind of look at a myth and sort of figure it out, basics about it, but a still life is complicated.

Like why choose those things? it's sort of like, there's a bunch of keys or things you don't have. I have the key to, it takes more interpretation. Yeah. It takes a lot more interpretation that the narrative, so one, in particular would be a Carpe diem or momento mori.

So there's this whole,

**Mark:** [00:37:37] which mean seize the day. And,

**Aven:** [00:37:40] remember death Remember that death will come. So there's this whole discourse philosophical discourse towards the end of the Republican period and through the empire about the idea that life is short, enjoy it while you can. And it's not just Epicureans, there's a bunch of different, but that's a big part of it.

And that's often figured as don't store up food and drink against the future because the future may not come enjoy it while you can. So the feasting image is actually really important to that carpe diem idea. And in fact, to the point that it becomes this idea of leave life as a guest from a feast full, right, right.

It becomes this metaphor at any point, if you die tomorrow, will you die like a guest departing full from his feast, right? Or will you still have things you wish you could have done.

**Mark:** [00:38:27] So that's the other thing I was thinking is that it may operate just on the level of. the satisfaction of a good meal and a table left, with the

**Aven:** [00:38:35] food all

**Mark:** [00:38:36] torn up.

**Aven:** [00:38:37] Right. So what, well, so what, so definitely one element of it would be the idea that it is a demonstration of luxury, right? You have so much food. Even though it's not actually food on the floor. It's that idea that we are, you know, when we eat, eat our feast, we don't have to it's it's extravagance.

So that's another element. And in fact, so we've got this carpe diem mode, the momento mori, quite a few of these. If you look at those pictures, quite a few of them have also have a skull or a skeleton, which becomes the big memento Mori of the period, right in it as well. Like that's another image on the floor.

So there is this idea, like. eat, drink and be Merry for tomorrow we die. Like that is so this idea. So that would be talking point. You could make about the the thing would be to bring up this intellectual and philosophical idea. It's the

**Mark:** [00:39:24] mortals who need to eat and drink.

If you're immortal, you don't need sustenance. Right? Yeah.

**Aven:** [00:39:29] And it doesn't matter to you.

**Mark:** [00:39:31] So it's a reminder of your mortality. If you eat food.

**Aven:** [00:39:34] Exactly. On the other hand or as well as that, another element is that if you look at what food is actually represented, that also brings you into this other discourse that's going on in Rome.

So there's this sort of split between old fashioned morality, which is, you know, you only eat things that are local to you, that you can grow on your own farm, the self, sustaining, farm of the Roman in early times, right? So you would only eat the food. You could grow yourself, but if you look at the food on the floor, in these, unswept floors, they are not local hardy Roman food.

They are seafood, which was always considered a very, very fancy thing because seafood, to get seafood when you don't live right on the coast means complications because without ice sea food does not travel.

**Mark:** [00:40:15] So

**Aven:** [00:40:16] you have to be very, very rich to like get seafood. If you live in Rome, you've got, fruits and vegetables from the ends of the world if you, pick through them. You can see that the food that is being discarded is the opposite of that kind of frugal fare of the early Romans.

**Mark:** [00:40:33] Yeah. I was going to ask if anyone had sort of identified the species of.

**Aven:** [00:40:38] I mean, there is discussion of that in this article, not in maybe every single piece of it.

I don't know that there's been a statistical, this person doesn't seem to have done that kind of thing, but they do talk about it. They say "the types of food displayed do not correspond with the sumptuary laws". And the mos maiorum ideas, the ideas of like, we should be like our ancestors and sumptuary laws.

There were laws about what foods you could and couldn't eat that were sort of based on how luxurious they were versus how virtuous they were. Right. "rather the opposite, they display the farthest depiction of abundant living, hedonism, connoisseurship and luxuria". So that's, what's shown, it's like another way of showing how fancy you are and what we see in this Roman elite is a celebration of these non--

going the other direction, not saying we're going to be like our ancestors and frugal, but instead look what I can find. Right. And it's parallel

We're not

**Mark:** [00:41:28] just eating acorns.

**Aven:** [00:41:29] No. Oh no, exactly. And they weren't just eating, you know, local. Yeah, vegetables.

**Mark:** [00:41:33] I was thinking of that, that sort of idea, that, that they were just eating, you know, the

**Aven:** [00:41:38] The Golden Age kind of idea, Yeah, exactly. No, very much not. And in fact, you even see like, so there are various feasts and discussions of food and the Roman world in particular contexts that are very much, the food of empire, because if you eat the food from every corner of the empire, what does that prove?

It proves your mastery over the known world, right? You could sit in Rome and eat things from every corner of the empire and what is the empire, but the known world. So in fact, there are these meals as a particular, a 12 part meal that like touches on every part of the geographic range that Rome.

And that every bit has to be brought in by ships from everywhere, you know, and it's very much a demonstration of Imperial power and in a way, these floors also do that. They demonstrate the power and literally the Imperial reach of an elite Roman who can draw on everything can exploit every part of the empire.

So these floors they're funny and interesting to look at, and we can look at them now without any of that knowledge and still find them really cool. But the argument is that they, they participate in this really important sort of class defining, effort by a class of Roman elite, to differentiate themselves from others and that they have therefore very deliberately a number of significations, not all of which are obvious so that they become a place for construction of meaning and group identity and all of those things.

And I mean, obviously that's in many ways very opposite to linoleum, but I actually, I think it kind of is, you know, one can maybe I'm stretching a point, but one can, can make the comparison by saying, these elements of home decoration and like linoleum marked both yes. A mass produced, but also a whole step up.

Right. I mean, for people to have not earth floors or wood floors or all of those things was that was actually raising, you know, raising that people out of what, one sort of class marker, which was to have a bare wood floor. Yeah. Or earth floor even, to a whole new step.

**Mark:** [00:43:46] Yeah. it's sort of kind of middle class,

**Aven:** [00:43:49] as the middle class was essentially appearing, you know, becoming a thing

**Mark:** [00:43:53] thing, and they want it to show that they were a little fancier

**Aven:** [00:43:57] and they could, they could sort of go for the tile, you couldn't really actually manage the tile and the marble and the, hardwood of your betters of the upper classes, but this was a way, and it's one of many types of things that were happening in the 19th century that became, these markers of the new middle class.

**Mark:** [00:44:15] Of course the Lincrusta was, was used in actual kind of upper

**Aven:** [00:44:18] class

class,

**Mark:** [00:44:19] the white house and the Titanic stateroooms

**Aven:** [00:44:22] yes. So what, I guess what I'm saying is that it's not that they're exactly equivalent cause they're not, but what they both demonstrate is that, These home decorations that might seem just a matter of fashion or fairly trivial are in fact deeply embedded in issues of class and, many others social concerns that are, you know, people don't make these choices in a vacuum and they don't make these choices just because that's pretty, these are all meaningful choices and you can actually read a lot about a society by these kinds of choices and these kinds of decorative techniques.

And whether that's because of a new technological development as with linoleum or a particular stylistic development, nonetheless, it's still, you know, it still is a meaningful thing that one should not just notice and move on, but think about what it means. So that's all I'm going to say about floor mosaics in the ancient world.

However, I do have more to say about something to do with one of the other points in the video. And I won't take too long about it, but you mentioned the importance of olive oil; so important that it gives the word to oil as a substance itself. So linoleum is literally linseed olive oil. Yeah, but it doesn't mean that it's just the word.

Olive oil becomes the word for oil even though there were other sources of oil in the ancient world, it was so ubiquitous and so important in the Greco-Roman world.

**Mark:** [00:45:40] and one of the things that I found. I mean, I, I guess I sort of knew, but I found a little bit surprising is. How much, probably more important it was in its non-culinary usage.

Right. You think today you think of Greece and Italy and their, you know, fancy olive oils and olives in the antipasto. And you know, you think of that as the culinary part, as the really sort of fancy part of it.

**Aven:** [00:46:04] Marks people out as different. Yeah. Yeah. And I mean, that's not completely. it's not NOT true in the sense that the culinary uses of olive oil were very important.

Olive oil was central to food. it was probably for a lot of people, one of their main fat sources, you know, because most people didn't eat meat on a regular basis. So if you're eating, pulses and grains, Olive oil is like nutritionally is actually hugely important. And so it's not that it isn't important.

and the Romans for instance, distinguished themselves from the barbarians, by the fact that they used olive oil and the barbarians use butter. So like fat source was meaningful. So in that sense, it certainly was important, but yeah, it was so much more than just food and its economic importance and it was one of the most most economically important substances in the ancient world, olive oil, wine, and grain. Those are your three things. That's what drives the economies of most places. And then maybe third in line is pottery. But the reason pottery is so important is because it holds olive oil, wine, and grain.

**Mark:** [00:47:15] So eventually they were getting most of their grain from Egypt, but the olives them, presumably were largely from, in Italy, I would guess

**Aven:** [00:47:23] Italy and Greece. Yeah. And to certain amounts, Spain and France as well. There are olive trees there, but yeah. Yeah, it was, wherever the, so the olive originally comes from the near East and is moved into the Greek world.

You know, fairly early on by let me just, we've got here "it was first cultivated around 5,000 BCE" by about the third millennium, we see olive oil exports to Greece in Egypt, from there. And by the middle of the bronze age, we see Greece producing its own olives and olive oil. Right? So that's about 1500.

**Mark:** [00:47:58] And I talked about certain sources, certain regions.

**Aven:** [00:48:02] So some places were fancier than others.

**Mark:** [00:48:04] Greek olive oil considered, particularly

**Aven:** [00:48:07] to be honest, I don't know exactly. I think it was more fine grained than that. I mean, yes. Greek was probably good, but like, it was more about cities,

**Mark:** [00:48:14] more fine grain. Okay.

**Aven:** [00:48:16] And much like today.

You know, the first pressing was better and the less you had to press them the better and the Greeks and the Romans considered, if you did it, when all of the olives were still green, that was better oil. But if you waited until some of them had ripened to black, then you got more oil out of it, but it wasn't as good.

And, you know, so there were definitely lots of, different kinds of qualities that could be held. And as you say, that was why they were labeled and why this became a big thing, because you wanted to know what quality you were paying for, because it was different. And it was so expensive. Solon, who was one of the first lawmakers, very celebrated lawmaker in Athens, in the Seventh and sixth century. it was the only thing you were allowed to export from Athens, for instance, and, you know, Athens, the foundation story of Athens says that Athena and Poseidon fought over who was going to be the patron patron, deity of Athens and Poseidon offered them a saltwater spring and.

Athena offered them an olive tree, the first olive tree. And they chose the olive tree. 'Cause obviously a saltwater, spring is dumb and nobody wants that, so,

**Mark:** [00:49:18] bad move, Poseidon,

**Aven:** [00:49:19] he really, he really did not do himself any favors there. so like that's how central the olive is to Athens, and elsewhere in Greece too.

But we have the story from Athens that it is literally the thing Athena gave to them so that she would be their patron goddess. So it's really, really central. So what else did they use it for? Well, a hugely important thing they used it for was the main fuel. Yeah. Yeah. In many ways like, obviously wood is your fuel.

Yes. But if you look at how people actually heated homes and how they lit homes that you know, what light they got. How did you get light? You got light through lamps. What were lamps? Lamps were a pool of olive oil with a wick of wool or cotton that. You put in and burned. That's what you had. They didn't have candles, or they had very, very few candles.

Candles are not an ancient thing, really. You have lamps. And so all of that is olive oil.

**Mark:** [00:50:12] And I remember you telling me about the huge collection of oil lamps at the university of Ottawa when you were, was it?

**Aven:** [00:50:20] I was, it was a co op, when I was in high school, I did a co op placement at the university of Ottawa's museum in the classics department.

And I cataloged, cataloged items, and wrote the catalogs for them. And, a lot, they had a bunch of lamps and about half of them were erotic because a lot of ancient lamps have erotic scenes on them, but yeah, they have decorated lamps

**Mark:** [00:50:45] And I remember seeing, was it in the, when we were in Oxford and the museum, there was one case that was just like a million oil lamps.

**Aven:** [00:50:54] Oh yeah, no, I mean a

**Mark:** [00:50:56] ton of these things, they're obviously really important

**Aven:** [00:50:57] they were like, you know, like, think about your house and how many lamps you have, right. And you have fewer lamps, really? Because they're very bright. So think about how many more lamps you'd have to have if they weren't really bad. Right. so those oil lamps provide the light.

They also provide heat because they are a fire. So they do actually warm you. And for a lot of, so if you think about Rome and most people lived in these little insulae, which were these apartment buildings, four to six floors where you had one or two rooms and you did everything in that, and you didn't have an oven or a stove because you couldn't, it was too hard to do that, you can't have a chimney.

So what do you cook on? You cook on an oil lamp, essentially you cook on what is essentially a large oil lamp, which is, you know, a little puddle of oil, olive oil with a wick. Or several wicks, and then you put something over top of that. What did you cook on? So it was cooking fuel.

It was the heating fuel. It was in for many people. and then, so that's very important and obviously a huge economic driver, but also it was very important for cleanliness. So for the Greeks, they would use olive oil as they would rub olive oil on before athletics. And also as a way of cleaning themselves, it was a skincare product.

It was also what you put in your hair. So if you think of like Brill cream or something else like that, like, or, you know, this is before shampoo and such, it was not like people didn't want to be clean, but one thing you would put in to make your hair gleaming and lovely was olive oil. Again, the Romans, you know, thought that barbarians were barbaric because they put butter in their hair; sensible, Roman people put olive oil in their hair.

and then in the Roman world, when you think about the baths and stuff, what you did is you rubbed yourself down with olive oil and then you scraped that off and with the strigils, yeah. You scraped it off with these sort of sticks basically. Right. but that, you know, the olive oil picks up the dirt and the sweat and the.

Dead skin and everything. And you scrape that off and it cleans you off. olive oil was also the perfume base and perfumes were very important in the ancient world. So when you made a perfume, you used as a base olive oil, and then you added the flowers and all the rest of it to that. And perfume was hugely important, both for personal hygiene and care and, and grooming, but also as a religious offering, right? So perfumed oil was very important in various religious rituals. and anointing, right? When we talk about annointing the dead or anointing the gods what are you anointing them with? You're anointing, them with olive oil, scented, olive oil, but olive oil, none the less.

So it's, it's in every part of your daily life. You, clean yourself with it. You anoint yourself with it, you eat with it, you heat with it. You read by it, you know, so it really, was the thing without which you could not function to a very large extent, certainly, you know, maybe subsistence level, you could kind of get by without it or with not very much, but the minute you wanted to do anything complicated or class, you certainly needed it.

So yeah, it was, it was the. Basic thing you needed. And in many ways it makes complete sense that it becomes the word gives us the word oil, because if you think about, you know, the economy of the modern world, what do we run on? And I would love for that not to be true soon, but right now, what does the world run on?

It runs on oil . So I think it is not inappropriate that that is the word that ended up being, slightly by accident, being the word that gave us that term.

And now I'm done talking about oil.

**Mark:** [00:54:27] Well, staying with the fuel theme, I have a few more things to say about the petroleum end of things. As well as, I mentioned the creation myths and how that's related to the word gas. So I have a few more things to add to that, but starting with gasoline, it had previously been assumed that the word gasoline simply came from gas as in the state of matter.

Right. but. it is a kind of odd thing, given that gasoline is not a gas, it's a liquid. Right. And so why would

**Aven:** [00:55:01] yeah, yeah, yeah.

**Mark:** [00:55:02] So that had been the standard sort of etymology until researchers at the Oxford English dictionary uncovered the evidence about John Casssell and his Cazoline.

and you can read more about that, work, in, an Oxford dictionaries blog. So we'll put the link to that in the, in the show

**Aven:** [00:55:23] notes.

**Mark:** [00:55:24] Cause there's, you know, they, they sort of piece by piece uncover this information and it's really quite a fascinating read. Still, it seems likely that the word gas had some influence on the form of the word gasoline.

not to mention the North American abbreviation gas, as you know, we

**Aven:** [00:55:43] put,

**Mark:** [00:55:44] we rarely say gasoline now normally just

**Aven:** [00:55:47] We know that's what the word means, but we never say it. Yeah.

**Mark:** [00:55:50] and as per the video, you know, we have, that guy Jean Baptist van Helmont, and his Flemish pronunciation of Greek, the Greek word, chaos to thank for the word.

And I'm not even going to try and speculate about 17th century Flemish pronunciations. that's entirely outside of my wheelhouse. but I do have van Helmont's actual quotation on the subject, which the OED quotes and it's in Latin. so I'll read it first in Latin and then a translation. So "halitum illum Gas vocavi, non longe a Khao, or Chao, veterum secretum "

**Aven:** [00:56:35] Okay.

**Mark:** [00:56:36] So I just said gas. I didn't try to do some kind of weird Flemish lat, not only a Flemish pronunciation,

**Aven:** [00:56:42] but a Flemish pronunciation of Latin.

**Mark:** [00:56:44] So yeah, I'm not even gonna tread there. but that means, "I have called this vapor gas, not far removed from the chaos of the and of course that brings up what he was kind of riffing on here, what he's basing this idea on here is the ancient Greek creation myth, as related by Hesiod.

**Aven:** [00:57:05] Yup. I feel like that was a cue,

**Mark:** [00:57:08] it was.

**Aven:** [00:57:10] Yeah. So, I mean, in a sense, it's not all that much to say about it because it, you, you know, you say the basics and there, there wasn't a whole lot more in Hesiod, but Hesiod is a writer.

I guess. Okay. I'm not going to get into that. an author. Supposed author from about the sixth century. probably in Greece,

**Mark:** [00:57:29] one of the earliest

**Aven:** [00:57:30] run, one of the earliest writers, right at the same time, around the same time as Homer and similarly sort of hazy in terms of who this actual human being was, but what we have brother?

Well, he says he has

**Mark:** [00:57:42] he says he has a brother and his brothers.

**Aven:** [00:57:45] Yeah. Anyway, we have two works, by Hesiod that are ascribed to Hesiod. One is called the Works And Days, which is the one with the brother. But the one we care about right now is the Theogony, which is about the birth of the gods and the creation of the universe.

So the poem starts with the muses and then it goes on to here's how the world started and it starts, this is the translation by Gregory Nagy I will link to in the show notes, " first, it was chaos. And next broad bosomed earth ever secure seat of the models who inhabit the peaks of snow-capped Olympus and dark, dim Tartarus and a recess of earth having broad ways and the Eros who is most beautiful among immortal God or else that relaxes the limbs that did that, did it, did it do that from chaos were born Airbus and black night and from night again, sprang forth ether and day whom she bore after having conceived by union with Airbus in love And earth bore first, like to herself, in size starry sky, that he might shelter her around on all sides, et cetera, et cetera. And that's it. That's all we got of chaos is chaos is the first primordial thing. The first thing there was, was chaos and then earth. And then we have air OSS, the force of love or sexual attraction, which causes everything else to happen because.

Right. Yeah.

**Mark:** [00:58:59] Sexual reproduction that

**Aven:** [00:59:00] causes the generation of all things. So chaos does bear Erebus and night, Erebos meaning sort of well, ending up being sort of deep hell, but another kind of darkness. and then night has Aether and Day, brightness and day. And, then we have earth and sky and on that, and from then on, and we never hear about chaos again.

So chaos, unlike other features is not like a personified God who becomes a person, but he does, it does, bear a couple of children.

**Mark:** [00:59:27] It's just a, an initiating, thing

**Aven:** [00:59:29] it's almost the initiating condition. It's not even really the, a force like, you know, Eros is a force and we have earth who goes on to be very productive.

So, yeah, so I mean, you know, it is, it's the gap, it's the emptiness from which everything else comes and then that's it. It's not that Chaoes is never mentioned again. I'm not actually sure if it is, but it is not unlike the, even the Titans, but certainly unlike the Olympians, it's not a personified figure that, I don't think Chaos was ever worshiped for instance.

Right, right. It was an abstraction and that was all it really was. And that is the creation myth of, the Greeks. They don't have a particularly developed creation myth. Hmm, you know, it starts like that. And then it goes on from there. I mean, then you get, you know, earth and has gives birth the sky and then earth and sky together become the generation for most other things.

**Mark:** [01:00:25] And then it's just about the lineage of the gods.

**Aven:** [01:00:27] Yeah. So then you get Pontos, which is the sea and then ocean, and then you get all of the, Titans. So Koios and Kreos, Hyperion, and Iapetus, Thea and Rhea, Themis, Mnemosyne

mother of the muses and Phoebe and Tethys, and then you get Kronos "after this was born youngest, wily Kronoss, and most Savage of their children. And he hated his vigour-giving father. And then you get the thing where Kronus castrates the sky to separate the sky, the earth and

**Mark:** [01:00:53] And that replays itself in the

**Aven:** [01:00:54] generation

And then you get Kronos has this whole generation of Titans gods who then give birth to.

The Olympians and they overthrow the, you know, so then it goes on like that. And so, you know, as a creation story, it's really not very developed. It's a Theogony. I mean, that's what we call it. It's about the birth of the gods, not really the birth of the earth, right. And the world. and that's, as far as it goes and you only, and somewhere way down the line, you get sort of as a side story.

Oh, also we created humans. the humans are this really minor story in the Greek creation story, which is an oddity, the gods don't create humans, which is bizarre compared to many other creation stories. And that's really all I have to say about it.

**Mark:** [01:01:36] Well, for sake of comparison, then, I want to say a few words about the Norse creation story, which I mentioned, you know, we get the, the word Ginnungagap, which is the void, the chaos related to the word chaos. That is part of the Norse creation, though again, there's sort of various different parts to the Norse creation stories as we'll see. So first here is the, first bit about what, Snorri Sturlusen, who is writing quite late.

So he's writing in Iceland. So this is not an early, Norwegian, Danish, Swedish texts, this is, you know, late, Snorri himself is Christian. So he's kind of writing about, you know, the old ways, the old ideas. So, you know, take everything a healthy, pinch of salt. But, what he says is, "Ginnungagap, the yawning void, which faced towards the Northern quarter became filled with heaviness and masses of ice and rime, and from within drizzling rain and gusts.

But the Southern part of the yawning void was lighted by those sparks and glowing masses, which flew out of Múspellheim." So basically the idea is that the universe springs from this void called Ginnungagap, and just to sort of round out the picture of what Norse cosmology is, there is this great tree called Yggdrasil, which literally means Odin's Steed.

**Aven:** [01:03:09] the tree means,

**Mark:** [01:03:09] Yeah. and, the word Yggr, the first part of that, which actually literally means "terrible" is an epithet for Odin. So it means the terrible one's steed.

and, it's sort of also known as the world Ash. and this of course highlights the importance of trees in Germanic belief.

They were, you know, kind of tree worshipers, and they believed in, you know, special powers of different types of wood and so forth. and this is the center of the universe that supports everything, that the great tree, which is a common myth in other mythologies. So this is not a unique thing to norse myth.

**Aven:** [01:03:47] Right, right. Especially in, we have that in Indo-European mythology in general. Yeah.

**Mark:** [01:03:52] So there are two pools at the foot of Yggdrasil, there's Mimir’s well and Urd’s well. and they're both sources of wisdom and prophecy. Asgard, which is the home of the Aesir, the Norse Pantheon, is located in Yggdrasil, and it's sort of connected by this thing called the Bifrost bridge, and so for those of you who've seen the Thor movies.

**Aven:** [01:04:16] Yeah. I was gonna say, which is noticeable from the Marvel

**Mark:** [01:04:20] and that connects it to the rest of the world. Also within Asgard is Valhalla, which literally means the hall of the slain.

And that's where those who died heroically, in battle go after they die. And then Midgard is the sort of human world, basically

**Aven:** [01:04:38] middle earth,

**Mark:** [01:04:39] middle earth.

**Aven:** [01:04:41] And that's not a coincidence. Yeah.

**Mark:** [01:04:43] So for those Tolkien fans, yeah. That's where he got it from. and then on the outer periphery of all of this is Utgard, which is inhabited by, you know, demons and bad things basically.

and so the giants live to the East in Jotunheim. And there was also an underworld called Hel or sometimes Niflhel, which means dark hell or Niflheim, which means dark home. and that lies to the North,

**Aven:** [01:05:08] the dark world.

**Mark:** [01:05:08] The dark world. Yes.

If you're still on the Marvel...

**Aven:** [01:05:10] yeah. Sorry.

**Mark:** [01:05:13] And then the known world is surrounded by the sea in which the Midgard serpent, Jormundgang, -gand, coils itself around the world.

Right? So this, this great sea snake. So in Snorri's account, there are six different. Creation stories basically. And these probably derive from different sources and, you know, they're only partially connected. So, you know, Snorri this later guy who, a Christian, he sort of heard all these stories and he's trying to put them together in some kind of coherent way, but he doesn't put a lot of effort into making them fully coherent.

**Aven:** [01:05:51] I, you know, I feel for him though, because myth doesn't cohere. That's a really important thing. We always try to make it make sense. And, it doesn't, it doesn't make sense.

**Mark:** [01:06:00] The thing is he's not, he's not retelling this for the sake of belief. No, in any case, he's, he's recounting all of this so that you can still read the old poetry and understand what's going on

**Aven:** [01:06:12] with all the references.

Yeah. So he just wants each of the individual stories. That's all you need really so that you can, yeah, they don't have to make it a coherent worldview. And any way they didn't to start off with, so

**Mark:** [01:06:23] So account one, is, you know, creation begins from Ginnungagap. You know, the passage that I read before, which is the bit that's most comparable to the Greek chaos story.

**Aven:** [01:06:35] Yeah.

**Mark:** [01:06:35] Account two, there's a being called Ymir who is created as hot and cold meet in Ginnungagap. And there's a bit of an element of those opposites, I guess, in the, in the Greek thing. Right. Light and dark. And

**Aven:** [01:06:50] yeah. Like, the sort of combining of opposites will produce a new thing is definitely a pattern that you get, you get that in the Mesopotamian creation story too.

It's very much a feature of that, right.

**Mark:** [01:07:00] So Ymir is a frost ogre, and therefore quote, he and his family were evil. Nice. That's enough of an explanation, I

**Aven:** [01:07:07] guess.

**Mark:** [01:07:08] but he has the likeness of a man ,Snorri tells us. Then in account three, according to Snorri a man, a woman and children grow from EMA.

they grow from his,

**Aven:** [01:07:19] I love this part, this part, this part, and the person licked out of ice by the cow are my favorite parts. Sorry, not to give away like spoiler alert.

**Mark:** [01:07:31] We have these sweat people, which is the first creation of humans. There's multiple. Ways humans seem to get into the world.

**Aven:** [01:07:38] Well, and that's very much like the Greek as well, who have actually multiple.

It's not that there are no creation stories for humans. There are multiple, not very important creation stories for humans that don't even match like that are contradictory. Yeah.

**Mark:** [01:07:50] Then account four gives us, another way that humans come into the world and that's the, that's the cow bit. So a cow licks, a man from ice, the cow, herself is formed from the frost.

but the cows, In a sense. Well, I don't know this, this sort of presupposes the existence of previous beings.

**Aven:** [01:08:11] I know why it doesn't make any sense, right? Yeah, no, this happens all the time in myth. Yeah.

**Mark:** [01:08:16] Anyways, this cow licks a man from the ice, who is, we are told called Buri and Buri has a son Bor.

Who's not really explained. I mean, presumably there's a woman involved, but she's never mentioned, but he has a family from somewhere, and, and children. So that's, as far as it goes and then account five, we hear about, Bor's sons, one of whom is Odin. So then we get into the, the gods that we know

**Aven:** [01:08:43] and love.

Yeah.

**Mark:** [01:08:44] and they make the world from bits of Ymir's body. Right.

**Aven:** [01:08:50] So Bo'rs son, That is very Mesopotamian by the way. That is how it works in messa, mesopotamian myth. Yes.

**Mark:** [01:08:56] and various other mythologies around the world have this, this notion it's quite a common one.

**Aven:** [01:09:01] Yeah.

**Mark:** [01:09:01] So Bor's sons are Odin, Vili, and Ve.

and, They kill Ymir and form the world from the various body bits that are appropriate. So, you know, this is kind of like an aetiological story, you know, how things come to be, yeah. Sort of thing. so, you know, clouds sort of look like brains, so they make the clouds from brains. you know, the

**Aven:** [01:09:25] I mean I don't know what brains you've seen, but okay.

That's

**Mark:** [01:09:29] all kind of, you know, lumpy and stuff, I guess, from the blood, they make the seas from the body, they make the earth from the bones. They make the mountains from the skull. They make the sky cause it's nice and round, So that's, that's kind of the way that goes. And then in the sixth creation story, Bor's sons then make men and women from trees.

So nevermind the men and women from before. These are the real men and women, I guess. And they're made from trees. Which I guess makes sense when you think about Yggdrasil, because in a world where the center, you know, in the universe where the center of everything is, is a tree being made from trees would then give you a connection, a deep spiritual connection to the universe.

So the story includes human beings, but it doesn't focus on them again, the world was not made for humans, as you say, in the, in the Greek, as opposed to many other mythologies. Yeah. But again, here they're sort of

**Aven:** [01:10:24] accidentally part of the world. Yeah. Not accidentally, but they just happened to be part of the world.

Yeah.

**Mark:** [01:10:29] And I I've seen this sort of hot and cold thing being compared to, geysirs.

**Aven:** [01:10:37] Geysers

**Mark:** [01:10:38] in Iceland. Though, I wonder about that. I mean, it's hard to know because this is, Snorri telling us this and he is an Icelander, so it is

**Aven:** [01:10:48] right. But those things weren't like, if this is a really old story, why would it

**Mark:** [01:10:51] be there are no geysers in, in Norway or Denmark or anything like that.

That's, that's a specifically Icelandic thing. So maybe this version of it is sort of inspired

**Aven:** [01:11:03] in some way

**Mark:** [01:11:04] by yeah. the Icelandic experience, but, but it, I mean, it's also comparable to like, you know, if you think about the big bang theory right. Of, of modern science, right. Where you have the universe created in great heat,

**Aven:** [01:11:17] right.

**Mark:** [01:11:17] Intense pressure or whatever. I mean, it's this idea of, you know, extreme. Creation coming from an extreme

**Aven:** [01:11:24] yeah. Yeah. For sure.

**Mark:** [01:11:25] And so finally, I have a, just an interesting little bit of info about petroleum itself.

**Aven:** [01:11:35] Okay.

**Mark:** [01:11:35] So I mentioned that the British term petrol is short for petroleum .Specifically, it came into the British idiom from another trademark name, from, the, product of a company called Petrochem Carless Ltd.

**Aven:** [01:11:54] Rolls right off the tongue.

**Mark:** [01:11:56] Which was one of the first oil companies, and, The company tried to register the name petrol as a trademark, but this attempt failed. Presumably because by that point it had already, you know, it was already in use. it was actually even before, its use in cars, it had already been used to refer to lamp oil in French.

**Aven:** [01:12:18] Oh, okay. Interesting.

**Mark:** [01:12:19] now it's appropriately named Petrochem Carless Ltd

**Aven:** [01:12:25] as I said it rolls off, the tongue,

**Mark:** [01:12:29] because petrol was initially invented as a solvent for removing nits. That is. Eggs of

**Aven:** [01:12:37] lice. Okay.

**Mark:** [01:12:39] Not as a fuel for cars. In fact, the car had not been invented

**Aven:** [01:12:44] right. When they first came up with, when they

**Mark:** [01:12:45] first came up with this.

Right.

**Aven:** [01:12:47] So

**Mark:** [01:12:48] Carless is actually not at all a reference to cars because there were no cars when they came up with that company name, it was only later after the advent of the internal combustion engine that they discovered that petrol was actually also a really ideal fuel, but that's not why it was invented.

**Aven:** [01:13:05] Right.

**Mark:** [01:13:05] the company was actually called Petrochem Carless because it was founded by a person named Eugene, Carless, who, as it turns out, didn't have a car because they hadn't been invented yet.

**Aven:** [01:13:20] Yeah, yeah, yeah, yeah.

**Mark:** [01:13:23] and he, I founded this company in 1859, which is apparently an important year for

petroleum because it is also 1859, the same year that the first oil well was drilled.

**Aven:** [01:13:38] Right.

**Mark:** [01:13:38] as it happens in, Titusville, Pennsylvania, kicking off the first oil boom in the United States.

**Aven:** [01:13:46] Right.

**Mark:** [01:13:47] And, if you, I think I mentioned in the, the video that the first oil derrick, it's called Drake, the Drake.

Well, and so we can maybe include a picture of that in the show notes. So there is, there's that weird little, Carless funny story.

**Aven:** [01:14:05] Yes. And basically amusing because of the name. Yes.

Fair enough. I'm happy to be amused by names.

All right. Well, I think that brings us to the end of our discussion of linoleum.

I mean, I know you could talk forever about linoleum. We could discuss the horrifying linoleum on the floor of our kitchen, for

**Mark:** [01:14:26] instance. It doesn't last forever. It turns out.

**Aven:** [01:14:28] No, no, it does not. Nor does it always hide dirt. Sometimes it just becomes dirt in a way that is unscrubbable but no, we will not discuss that.

So, I think that does bring us to a conclusion. And if you have any thoughts about any of what we've discussed, we always love hearing from you. You can reach us on Twitter or through our website or through email to illiterate. What is it? Alliterative endless, not@gmail.com.

we like to make it easy for you, but we would love to hear from you always. And again, thank you to all of our Patreon sponsors and people who help us and are interested in what we're doing. If you're interested in, just fun etymologies you should also follow Mark at All Endless Knot on Twitter because you put up weekly pairs of etymologies. Yep. And those are generally pretty entertaining and sometimes relevant to ongoing things.

**Mark:** [01:15:26] And you can also find those on Instagram and our Facebook page, which are all, some variation of

**Aven:** [01:15:33] alliterative. And endless knot, yeah, just look those things up. I'm sorry. We're bad at branding. You're just going to have to live with it.

And with that, we will say goodbye and thank you for listening.

**Mark:** [01:15:44] Bye bye.

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**Mark:** [01:15:56] And please check

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Thanks for listening.

**Mark:** [01:16:30] Bye.