Lex Fridman Podcast #443 - Gregory Aldrete: The Roman Empire - Rise and Fall of Ancient Rome

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Lex Fridman
The following is a conversation with Gregory Aldrete, a historian specializing in ancient Rome and military history. This is the Lex Fridman Podcast. To support it, please check out our in the description. And now, dear friends, here's Gregory Aldrete. What do you think is the big difference between the ancient world and the modern world?

Gregory Aldrete
Well, the easy answer, the one you often get is technology, and obviously, there's huge differences in technology between the ancient world and today. But I think some of the more interesting stuff is a little bit more amorphous things, more structural things. I would say, first of all, childhood mortality. In the ancient world, and this is true, Greeks, Romans, Egyptians, really anybody up until about the industrial Revolution, about 30 to 40% of kids died before they hit puberty. I mean, put yourself in the place of average inhabitant of the ancient world. If you were an ancient person, three or four of your kids probably would've died. You would've buried your children. And nowadays, we think of that as an unusual thing, and just psychologically, that's a huge thing. You would've seen multiple of your siblings die. If you were a woman, for example, if you were lucky enough to make it to let's say age 13, you probably would have to give birth four or five times in order just to keep the population from dying out. Those kind of grim mortality statistics, I think, are a huge difference psychologically between the ancient world and the modern.

Lex Fridman
But fundamentally, do you think human nature changed much? Do you think the same elements of what we see today, fear, greed, love, hope, optimism and the cynicism, the underlying forces that result in war, all of that, permeates human history?

Gregory Aldrete
Crude answer, yes. I think human nature is roughly constant. And for me, as an ancient historian, the kind of documents that I really like dealing with are not the traditional literary sources, but they're the things that give us those little glimpse into everyday life. Stuff like tombstones or graffiti or just something that survives on a scrap of parchment that records a financial transaction. Whenever I read some of those, I'll have this moment of feeling, " Oh, I know exactly how that person felt." Here across 2000 years of time, completely different cultures, I have this spark of sympathy with someone from antiquity. I think, as a historian, the way you begin to understand an alien, a foreign culture, which is what these cultures are, is to look for those little moments of sympathy. But on the other hand, there's ways in which ancient cultures are wildly different from us. You also look for those moments where you just think, "How the hell could these people have done that? I just don't understand how they could have thought or acted in this way." It's lining up those moments of sympathy and kind of disconnection that I think is when you begin to start to understand a foreign culture or an ancient culture.

Lex Fridman
I love the idea of assembling the big picture from the details and the little pieces, because that is the thing that makes up life. The big picture is nothing without the details.

Gregory Aldrete
Yep, yep, and those details would bring it to life. I mean, it's not the grand sweep of things. It's seeing those little hopes and fears. Another thing that I think is a huge difference between the modern world and the ancient is just basically everybody's a farmer. Everybody's a small family farmer, and we forget this. I was just writing a lecture for my next Great Courses course, and I was writing about farming in the ancient world. I was really thinking if we were to write a realistic textbook of let's say the Roman Empire, nine out of 10 chapters should be details of what it was like to be a small-time family farmer, because that's what 90% of the people in the ancient world did. They weren't soldiers, they weren't priests, they weren't kings, they weren't authors, they weren't artists. They were small-town family farmers, and they lived in a little village. They never traveled 20 miles from that village. They were born there. They married somebody from there. They raised kids. They mucked around in the dirt for a couple decades and they died. They never saw a battle. They never saw a work of art. They never saw a philosopher. They never took part in any of the things we define as being history. So that's what life should be, and that's representative.

Lex Fridman
Nevertheless, it is the emperors and the philosophers and the artists and the warriors who carve history.

Gregory Aldrete
And it is the important stuff. I mean, that's true. There's a reason we focus on that.

Lex Fridman
That's a good reminder though. If we want to truly empathize and understand what life was like, we have to represent it fully.

Gregory Aldrete
And I would say let's not forget them. Let's not forget what life was like for 80, 90% of the people in the ancient world, the ones we don't talk about, because that's important too.

Lex Fridman
The Roman Empire is widely considered to be the most powerful, influential, and impactful empire in human history. What are some reasons for that?

Gregory Aldrete
Yeah. I mean, Rome has been hugely influential, I think, just because of the image. I mean, there's all these practical ways. I mean, the words I'm using to speak with you today, 30% are

direct from Latin. Another 30% are from Latin descended languages. Our law codes, I mean, our habits, our holidays, everything comes fairly directly from the ancient world. But the image of Rome, at least again in Western civilization, has really been the dominant image of a successful empire. I think that's what gives it a lot of its fascination, this idea that, "Oh, it was this great, powerful, culturally influential empire," and there's a lot of other empires. I mean, we could talk about ancient China, which arguably was just as big as Rome, just as culturally sophisticated, lasted about the same amount of time. But at least in Western civilization, Rome is the paradigm. But Rome is a little schizophrenic in that it's both the empire when it was ruled by emperors, which is one kind of model, and it's the Roman Republic when it was a pseudo-democracy, which is a different model. It's interesting how some later civilizations tend to either focus on one or the other of those. The United States, Revolutionary France, they were very obsessed with the Roman Republic as a model. But other people, Mussolini, Hitler, Napoleon, they were very obsessed with the Empire. Victorian Britain as a model. Rome itself has different aspects. But what I think is actually another big difference between the modern world and the ancient is our relationship with the past. One of the keys to understanding all of Roman history is to understand that this was a people who were obsessed with the past and for whom the past had power, not just as something inspirational, but it actually dictated what you would do in your daily life. Today, especially in the United States, we don't have much of a relationship with the past. We see ourselves as free agents just floating along, not tethered to what came before. The classical story that I sometimes tell in my classes to illustrate this is Rome started out as a monarchy. They had kings. They were kind of unhappy with their kings. Around 500 BC, they held a revolution and they kicked out the kings, and one of the guys who played a key role in this was a man named Lucius Junius Brutus. 500 years later, 500 years down the road, a guy comes along, Julius Caesar, who starts to act like a king. If you have trouble with kings in Roman society, who are you going to call? Somebody named Brutus. Now as it happens, there is a guy named Brutus in Roman society at this time, who is one of Julius Caesar's best friends, Marcus Junius Brutus. Now, before I go further with the story, and I think you probably know where it ends, I talk about how important your ancestors are in Roman culture. I mean, if you went to an aristocratic Roman's house and opened the front door and walked in, the first thing you would see would be a big wooden cabinet. If you open that up, what you would see would be row after row of wax death masks. When a Roman aristocrat died, they literally put hot wax on his face and made an impression of his face at that moment. They hung these in a big cabinet right inside the front door. Every time you entered your house, you were literally staring at the faces of your ancestors. Every child in that family would have obsessively memorized every accomplishment of every one of those ancestors. He would've known their career, what offices they held, what battles they fought in, what they did. When somebody new in the family died, there would be a big funeral and they would talk about all the things their ancestors had did. The kids in the family would literally take out those masks, tie them onto their own faces, and wear them in the funeral procession. You were wearing the face of your ancestors. So you as an individual weren't important, you were just the latest iteration of that family, and there was enormous weight,

huge weight to live up to the deeds of your ancestors. The Romans were absolutely obsessed with the past, especially with your own family. Every Roman kid who is let's say an aristocratic family could tell you every one of his ancestors back centuries. I can't go beyond my grandparents, I don't even know, but that's maybe 100 years. It's a completely different attitude towards the past.

Lex Fridman
And the level of celebration that we have now of the ancestors, even the ones we can name, is not as intense as it was in Roman times.

Gregory Aldrete
No, no. I mean, it was obsessive and oppressive. It determined what you did.

Lex Fridman
Oppressive, oh.

Gregory Aldrete
Yes. Because there's that weight for you to act like your ancestors did.

Lex Fridman
Not to speak sort of philosophically, but do you think it was limiting to the way that society develops to be deeply constrained by the-

Gregory Aldrete
Yes. Absolutely.

Lex Fridman
Limiting in a good way or a bad way, you think?

Gregory Aldrete
Well, like everything, it's a little of both. But the bad, on the one hand, it gives them enormous strength and it gives them this enormous connection. It gives them guidance. But the negative is what's interesting, is it makes the Romans extremely traditional minded and extremely conservative, and I mean conservative in the sense of resistant to change. In the late Republic, which we'll probably talk about later, Rome desperately needed to change certain things, but it was a society that did things the way the ancestors did it, and they didn't make some obvious changes, which might have saved their Republic. That's the downside is that it locks you into something and you can't change. But to get us back to the Brutus's, 500 years after that first Brutus got rid of kings, Julius Caesar starts to act like a king, one of his best friends is Marcus Junius Brutus. And literally, in the middle of the night, people go to Brutus's house and write graffiti on it that says, "Remember your ancestor?" And another one is, I think, "You're no real Brutus." And at that point, he really has no choice.

He forms a conspiracy. On the Ides of March 44 BC, he and 23 other senators take daggers, stick them in Julius Caesar, and kill him for acting like a king. The way I always pose this to my students is, "How many of you would stick a knife in your best friend because of what your great, great, great, great, great, great, great, great, great, great, great grandfather did?"

Lex Fridman
That's commitment.

Gregory Aldrete
That's the power of the past. That's a society where the past isn't just influential, but it dictates what you do. And that concept, I think, is very alien to us today. We can't imagine murdering our best friend because of what some incredibly distant ancestor did 500 years ago. But to Brutus, there is no choice. You have to do that. A lot of societies have this power of the past. Today, not so much, but some still do. About a decade ago, I was in Serbia and I was talking to some of the people there about the breakup of Yugoslavia and some of the wars that had taken place where people turned against their neighbors, basically murdered people they had lived next to for decades. When I was talking to them, some of them actually brought up things like, "Oh, well, it was justified because in this battle in 12 whatever, they did this." And I was thinking, "Wow, you're citing something from 800 years ago to justify your actions today." That's a modern person who still understands the power of the past, or maybe is crippled by it, is another way to view it.

Lex Fridman
This is an interesting point and an interesting perspective to remember about the way the Romans thought, especially in the context of how power is transferred, whether it's hereditary or not, which changes throughout Roman history. It's interesting. It's interesting to remember that, the value of the ancestors

Gregory Aldrete
Yep, and just the weight of tradition.

Lex Fridman
The weight of tradition.

Gregory Aldrete
For the Romans, the mos maiorum is this Latin term, which means the way the ancestors did it, and it's kind of their word for tradition. For them, tradition is what your forefathers and mothers did, and you have to follow that example, and you have to live up to that.

Lex Fridman
Does that mean that class mobility was difficult? If your ancestors were farmers, there was a major constraint on remaining a farmer, essentially.

Gregory Aldrete
I mean, the Romans all like to think of themselves as farmers, even filthy rich Romans. It was just their national identity is the citizen soldier farmer thing. But it did, among the aristocrats, the people who kind of ran things, yeah, it was hard to break into that if you didn't have famous ancestors. It was such a big deal that there was a specific term called a novus homo, a new man, for someone who was the first person in their family to get elected to a major office in the Roman government because that was a weird and different and new thing. You actually designated them by this special term. Yeah, you're absolutely right.

Lex Fridman
If we may, let us zoom out, it would help me, maybe it'll help the audience to look at the different periods that we've been talking about. You mentioned the Republic. You mentioned maybe when it took a form of empire and maybe there was the age of kings. What are the different periods of this Roman, let's call it, what? The big-

Gregory Aldrete
Roman history.

Lex Fridman
Roman history. And a lot of people just call that whole period Roman Empire loosely, right?

Gregory Aldrete
Yeah.

Lex Fridman
Maybe can you speak to the different periods?

Gregory Aldrete
Yes, absolutely. Conventionally, Roman history is divided into three chronological periods. The first of those is from 773 BC to 509 BC, which is called the monarchy. All the periods get their names from the form of government. This is the earliest phase of Roman history. It's when Rome is mostly just a fairly undistinguished little collection of mud huts, honestly, just like dozens of other cities of little mud huts in Italy. That early phase, about 750 to around 500 BC is the monarchy. They're ruled by kings. Then there's this revolution, they kick out the kings, they become a Republic. That lasts from 500 BC roughly to about either 31 or 27 BC, depending what date you pick as most important, but about 500 years. The Republic is when they have a Republican form of government. Some people idealize this as Rome's greatest period, and the big thing in that period is Rome first expands to conquer all of Italy

in the first 250 years of that 500 year stretch. And then, the second 250 years, they conquer all the Mediterranean basin roughly. This is this time of enormous successful Roman conquest and expansion. And then, you have another switch up and they become ruled by emperors. Back to the idea of one guy in charge, though the Romans try to pretend it's not like a king, it's something else. Anyway, we can get into that. But they're very touchy about kings, so they have emperors. Roman Empire, the first emperor is Augustus. Starts off as Octavian, switches his name to Augustus when he becomes emperor. He kind of sets the model for what happens. And then, how long does the Roman Empire last? That's one of those great questions. The conventional answer is usually sometime in the fifth century, so the 400s AD, so about another 500 years, let's say. So nice kind of even division, 500 years of Republic, 500 years of empire. But you can make very good cases for lots of other dates for the end of the Roman Empire. I actually think it goes all the way through the end of the Byzantine Empire in 1453, so another 1500 years, but that's a whole other discussion. But so that's your three phases of Roman history,

Lex Fridman
And in some fundamental way, it still persists today, given how much of its ideas define our modern life, especially in the western world.

Gregory Aldrete
Yeah.

Lex Fridman
Can you speak to the relationship between ancient Greece and Roman Empire, both in the chronological sense and in the influence sense?

Gregory Aldrete
Well, I mean, ancient Greece comes... The classical era of Greek civilization is around the 500s BC. That's when you have the great achievements of Athens. It becomes the first sort of true democracy. They defeat the Persian invasions. A lot of famous stuff happens in the 400s, let's say. So that is contemporaneous with Rome, but the Greek civilization, in a sense, is peaking earlier. And one of the things that happens is that Greece ends up being conquered by Rome in that second half of the Roman Republic between 250 and about 30 BC. And so, Greece falls under the control of Rome and Rome is very heavily influenced by Greek culture. They themselves see the Greeks as a superior civilization, culturally more sophisticated, great art, great philosophy, all this. Another thing about the Romans is they're super competitive. One of the engines that drives Romans is this public competitiveness, especially among the upper classes. They care more about their status and standing among their peers than they do about money or even their own life, so there's this intense competition. When they conquer Greece, Greek culture just becomes one more arena of competition. Romans will start to learn Greek. They'll start to memorize Homer. They'll start to see who can quote more passages of Homer in Greek in their letters to one

another because that increases their status. Rome absorbs Greek civilization, and then the two get fused together. The other thing I should mention in terms of influences that's really huge on Rome is the Etruscans, and this is one that comes along before the Greeks. The Etruscans were this kind of mysterious culture that flourished in northern Italy before the Romans, so way back 800 BC. They were much more powerful than the Romans. They were a loose confederation of states. For awhile, the Romans even seemed to have been under Etruscan control. The last of the Roman kings was really an Etruscan guy pretty clearly. But the Etruscans end up giving to Rome, or you could say Rome ends up stealing perhaps, a lot of elements of Etruscan culture. Many of the things that we today think of as distinctively Roman, our cliches of what a Roman is, actually aren't truly Roman, they're stuff they stole from the Etruscans. Just a couple examples, the toga. What do you think of a Roman? It's a guy wearing a toga, and the toga is the mark of a Roman citizen. Well, that's what Etruscan kings wore, probably. Gladiator games. We associate those very intensely with the Romans. Well, they probably stole that from the Etruscans. A lot of Roman religion. Jupiter is a thunder God, all sorts of divination. The Romans love to chop open animals and look at their livers and predict the future, that comes from the Etruscans. Watching the flight of birds to predict the future, that comes from the Etruscans. There's a lot of central elements of what we think of as Roman civilization, which actually are borrowings, let's say, from these older, slightly mysterious Etruscans.

Lex Fridman
I mean, that's a really powerful thing. It's a powerful aspect of a civilization to be able to, we can call it stealing which is a negative connotation, but you can also see its integration basically. Yes, steal the best stuff from the peoples you conquer or the peoples that you interact with. Not every empire does that. There's a lot of nations and empires that when they conquer, they annihilate versus integrate. And so, it's an interesting thing to be able to culturally... The form that the competitiveness takes is that you want to compete in the realm of ideas in culture versus compete strictly in the realm of military conquest.

Gregory Aldrete
Yeah, and I think you've exactly put your finger on one of the, let's say, secrets of Rome's success, which is that they're very good at integrating non-Romans or non-Roman ideas and kind of absorbing them. One of the things that's absolutely crucial early in Roman history, when they're just one of these tiny little mud hut villages fighting dozens of other mud hut villages in Italy, why does Rome emerge as the dominant one? Well, one of the things they do is when they do finally succeed in conquering somebody else, let's say another Italianate people, they do something very unusual because the normal procedure in the ancient world is let's say you conquer another city, you often kill most of the men, enslave the women and children, steal all the stuff, right? The Romans, at least with the Italians, conquer the other city, and sometimes they'll do that, but sometimes they'll also then say, "All right, we're going to now leave you alone and we're going to share with you a degree of Roman citizenship." Sometimes they'd make them full citizens, more often they'd

make them something we call half citizens, which is kind of what sounds like you get some of the privileges of citizenship, but not all of them. Sometimes they would just make them allies, but they would sort of incorporate them into the Roman project. They wouldn't necessarily ask for money or taxes, which is weird too. But instead, the one thing they would always, always demand from the conquered cities in Italy is that they provide troops to the Roman army. The army becomes this mechanism of Romanization where you pull in foreigners, you make them like you, and then they end up fighting for you. Early on, the secret to Rome's military success is not that they have better generals. It's not that they have better equipment. It's not that they have better strategy or tactics. It's that they have limitless manpower, relatively speaking. They lose a war and they just come back and fight again, and they lose again, and they come back and they fight again, and eventually they just wear down their enemies because their key thing of their policy is we incorporate the conquered people. The great moment that just exemplifies this is pretty late in this process. They've been doing this for 250 years just about, and they've gotten down to the toe of Italy, they're conquering the very last cities down there. One of the last cities is actually a Greek city. It's a Greek colony. It's a wealthy city, and so when the Romans show up on the doorstep and are about to attack them, they do what any rich Greek colony or city does, they go out and hire the best mercenaries they can. They hire this guy who thinks of himself as the new Alexander the Great, a man named Pyrrhus of Epirus. He's a mercenary. He is actually related to Alexander distantly. He has a terrific army, top-notch army. He's got elephants. He's got all the latest military technology. The Romans come and fight a battle against him, and Pyrrhus knows what he's doing. He wipes out the Romans. He thinks, "Okay, now we'll have a peace treaty. We'll negotiate something. I can go home." But the Romans won't even talk. They go to their Italian allies and half-citizens, they raise a second army, they send it against Pyrrhus. Pyrrhus says, 'Okay, these guys are slow learners. Fine." He fights them again, wipes them out, thinks, "Now we'll have a peace treaty." But the Romans go back to the allies, raise a third army and send it after Pyrrhus. When he sees that third army coming, he says, "I can't afford to win another battle. I win these battles, but each time I lose some of my troops and I can't replace them, and the Romans just keep sprouting new armies." So he gives up and goes home. Rome kind of loses every battle, but wins the war. Pyrrhus one of, actually, his officers has a great line as they're going back to Greece. He says, "Fighting the Romans is like fighting a hydra," and a hydra is this mythological monster that when you cut off one head, two more grow in its place, so you can just never win.

Lex Fridman
That's fascinating.

Gregory Aldrete
So that's the secret to Rome's early success.

Lex Fridman
It's not the military strategy. It's not some technological asymmetry of power. It's literally just manpower.

Gregory Aldrete
Mm-hm. Early on.

Lex Fridman
Early on.

Gregory Aldrete
And later, the Romans get very good... We're into the empire phase now. Once they have emperors into the AD era of kind of doing the same thing by drawing in the best and the brightest and the most ambitious and the most talented local leaders of the people they conquer. When they go someplace, let's say they conquer tribe of what to them as barbarians, they'll often take the sons of the barbarian chiefs, bring them to Rome and raise them as Romans.

Lex Fridman
Damn.

Gregory Aldrete
And so, it's that whole way of turning your enemies into your own strength. The Romans start giving citizenship to areas they conquer. Once they move out of Italy, they aren't as free with the citizenship, but eventually they do. They make Spain, lots of cities in Spain, they make all citizens and other places. And soon enough, the Roman emperors and the Roman senators are not Italians, they're coming from Spain or North Africa or Germany or wherever. As early as the second century AD of the Roman Empire, so the first set of emperors, the first 100 years were all Italians, but right away at the beginning of the second century AD you have Trajan, who's from Spain. The next guy, Hadrian's from Spain, and then a century later, you have Septimius Severus, who's from North Africa. You would later get guys from Syria. I mean, the actual leaders of the Roman Empire are coming from the provinces.

Lex Fridman
That's brilliant.

Gregory Aldrete
And it's that openness to incorporating foreigners, making them work for you, making them want to be part of your empire, that I think is one of Rome's strengths.

Lex Fridman
Taking the sons is a brilliant idea and bringing them to Rome, because a kind of generational integration.

Gregory Aldrete
The Roman military, later in the empire, is this giant machine of half a million people that takes in foreigners and churns out Romans. The army is composed of two groups. You have the Roman Legionaries who are all citizens, but then you have another group that's just as large, about 250,000 of each, 250,000 Legionaries, 250,000 of the second group called Auxiliaries. Auxiliaries tend to be newly conquered warlike people that the Romans enlist as Auxiliaries to fight with them. They serve side by side with the Roman legions for 25 years. At the end of that time, when they're discharged, what do they get? They get Roman citizenship, and their kids then tend to become Roman Legionaries. Again, you're taking the most warlike and potentially dangerous of your enemies, kind of absorbing them, putting through this thing for 25 years where they learn Latin, they learn Roman customs, they maybe marry someone who's already a Roman or a Latin woman. They have kids within the system, their kids become Roman Legionaries, and you've thoroughly integrated what could have been your biggest enemies, right? Your greatest threat.

Lex Fridman
That's just brilliant, brilliant process of integration. Is that what explains the rapid expansion during the late Republic?

Gregory Aldrete
No. There it's more the indigenous Italians who are in the army at that point. They haven't really expanded the Auxiliaries yet. That's more something that happens in the Empire. Yeah, so back it up. We have that first 250 years of the Roman Republic, from about 500 to let's say 250 BC. And in that period, they gradually expand throughout Italy, conquer the other Italian cities, who are pretty much like them. They're people who already speak similar languages or the same language, have the same gods. It's easy to integrate them. That's the ones they make the half citizens and allies. Then in the second half of that period, from about 250 to let's say 30 BC, Rome goes outside of Italy, and this is a new world because now they're encountering people who are really fundamentally different. So, true others. They do not have the same gods. They don't speak the same language. They have fundamentally different systems of economy, everything. Rome first expands in the Western Mediterranean, and there their big rival is the city state of Carthage, which is another city founded almost the same time as Rome that has also been a young, vigorously expanding aggressive empire. In the Western Empire at this time, you have two sort of rival groups, and they're very different because the Romans are these citizen soldier farmers... Because the Romans are these citizen soldier farmers, so the Romans are all these small farmers, that's the basis of their economy, and it's the Romans who serve in the army. So the person who is a citizen, is also really by main profession, a farmer, and then in times of

war, becomes a soldier. Carthage is an oligarchy of merchants, so it's a very small citizen body. They make their money through maritime trade, so they have ships that go all over the Mediterranean. They don't have a large army of Carthaginians. Instead, they hire mercenaries mostly to fight for them, so it's almost these two rival systems. It's different philosophies, different economies, everything. Rome is strong on land. Carthage is strong at sea. So there's this dichotomy, but they're both looking to expand and they repeatedly come into conflict as they expand. So Carthage is on the coast of North Africa, Rome's in Central Italy. What's right between them? The island of Sicily. So the first big war is fought purely dictated by geography. Who gets Sicily, Rome or Carthage? And Rome wins in the end, they get it, but Carthage is still strong. They're not weakened. So Carthage is now looking to expand. The next place to go is Spain. So they go and take Spain. Rome, meanwhile, is moving along the coast of what today's France. Where are they going to meet up? On the border of Spain and France. And there's a city, at this point in time called Saguntum. The second big war between Rome and Carthage is over. Who gets Saguntum? So, I mean, you can just look at a map and see this stuff coming. Sometimes geography is inevitability, and I think in the course of the wars between Rome and Carthage called the Punic Wars, there is this geographic inevitability to them.

Lex Fridman
Can you speak to the Punic Wars? There's so many levels on which we can talk about this, but why was Rome victorious?

Gregory Aldrete
Well, the Punic Wars really almost always comes down to the second Punic War. There's three. There's three Punic Wars. The first is over Sicily, Rome wins. The second is the big one, and it's the big one because Carthage at this point in time, just by sheer luck, coughs up one of the greatest military geniuses in all of history. This guy, Hannibal Barca, he was actually the son of the Carthaginian general who fought Rome for Sicily. Hamilcar was his father, but Hannibal is this just genius, just absolute military genius. He goes to Spain. He's the one who kind of organizes stuff there, and now he knows the second war with Rome is inevitable. And so, the question is how do you take down Rome? He's smart. He's seen Rome's strength. He knows it's the Italian allies. So Rome always wins because even if they lose battles, they go to the Italian allies and half citizens and raise new armies. So how do you beat them? He can never raise that many troops himself. And Hannibal, I think correctly figures out the one way to maybe defeat Rome is to cut them away from their allies. Well, how do you do this? Hannibal's plan is, I'm not going to wait and fight the Romans in Spain or North Africa. I'm going to invade Italy. So I'm going to strike at the heart of this growing Roman Empire, and my hope is that if I can win a couple big battles against Rome in Italy, the Italians will want their freedom back and they'll rebel from Rome and maybe even join me, because most people who have been conquered want their freedom back, so this is a reasonable plan. So Hannibal famously crosses the Alps with elephants, dramatic stuff. Nobody expects him to do this. Nobody thinks you can do this. Shows up in Northern Italy.

Romans send an army. Hannibal massacres them. He is a military genius. Rome takes a year, raises a second army. We know this story, sends it against Hannibal. Hannibal wipes them out. Rome gets clever this time. They say, okay, Hannibal's different. We're going to take two years, raise two armies and send them both out at the same time against Hannibal. So they do this, and this is the Battle of Cannae, which is one of the most famous battles in history, Hannibal's facing this army of 80,000 Romans about, and he comes up with a strategy called double envelopment. I mean, we can go into it later if you want, but it's this famous strategy where he basically sucks the Romans in, surrounds them on all sides, and in one afternoon at the Battle of Cannae, Hannibal kills about 60,000 Romans. Now, just to put that in perspective, that's more Romans hacked to death in one afternoon with swords than Americans died in 20 years in Vietnam. I mean, the Battle of Gettysburg, which lasted three days and was one of the bloodiest battles of civil war, I think the actual deaths at that were maybe like 15,000. So this is a bloodshed of an almost unimaginable scale.

Lex Fridman
It's also brutal...

Gregory Aldrete
Yes.

Lex Fridman
... just to slaughter.

Gregory Aldrete
I mean, it's just mind boggling to think of that. So now, this is Rome's darkest hour. This is why the second Punic War is important, because there's that Nietzsche phrase, "What doesn't kill you makes you stronger," this is the closest Rome comes to death in the history of the Republic. Hannibal almost kills Rome, but no, it's not much of a spoiler. Rome's going to survive, and from this point on, they're going to be unbeatable, but this is the crisis. This is the crucible. This is the furnace that Rome passes through, that is the dividing point between when they're one more up and coming empire and when they're clearly the dominant power in the Mediterranean. So what do they do about Hannibal? Well, they're smart. We're not going to fight Hannibal. We're not going to give Hannibal the chance to kill more Romans. So they adopt a strategy that they'll follow Hannibal, when they raise a couple more armies, follow Hannibal round, but whenever Hannibal turns and tries to attack them, the Romans just back off. No, thank you. We're not going to let you give you a chance. Meanwhile though, they're not scared of other Carthaginians, so they raise a couple more armies and they send these to Spain, for example, and start attacking the Carthaginian holdings there. And by luck or necessity, Rome comes up with its own brilliant commander at this point, a guy named Scipio, and he wins victories in Spain, conquers Spain. Then, he crosses into North Africa and starts to conquer that and ends up threatening Carthage directly. And poor Hannibal, undefeated in Italy, has now been walking up and down Italy or

marching up and down Italy for 12 years looking for another fight, and the Romans won't give it to them. They've been attacking all these other areas and chipping away at Carthaginian power. So finally, after more than a decade in Italy, Hannibal is called back to defend the homeland, defend Carthage from Scipio. The two meet in a big battle. This should be one of the great battles of all times the Battle of Zama, but Hannibal's guys are kind of old by this point. Scipio has all the advantages. He wins. Carthage is defeated. So that's pretty much the end of Carthage. The city survives, and then 50 years later, the Romans wipe it out, but that's not much of a war. But from this moment on, from the second Punic War, which ends in 201 BC, Rome is undisputably the most powerful force nation in the Mediterranean world, and having conquered the West, they're now going to turn to the East, which is the Greek world, and the Greek world is older. It's richer, it's the rich part, half of the Mediterranean, it's culturally more sophisticated. It's the world left by Alexander the Great, that's ruled by the descendants of his generals. And the Greeks kind of view themselves as superior to the Romans. I mean, to the Greeks, the Romans are these uncouth sort of savage barbarians, but they're going to get a real shock because the Roman army now has gotten really good to beat Hannibal. And when they go East, they're going to just defeat the Greeks relatively easily, one after the other. And there's a famous historian named Polybius who is a Greek whose city was captured by the Romans. He later becomes a friend to the Scipio family. He actually teaches some of the Scipio children about Greek culture. And he writes a history of Rome and his motivation for writing this is he says, at the beginning of this book, he says, "Surely there can be no one so incurious as to not want to understand how the Romans could have conquered the entire Greek world in 53 years," because that seems unimaginable to him. So he's writing this entire history as a way to try and understand how did the Romans do it? We were these wonderful superior people, and they came around in 50 years, bang, that's the end of us. So that's his motivation.

Lex Fridman
Could you maybe speak to any interesting details of the military genius of Hannibal or Scipio? At that time, what are some interesting aspects this double envelopment idea?

Gregory Aldrete
I mean, Hannibal is good because he understood how to use different troop types and to play to their strengths and how to use terrain. So I mean, this is basic military stuff, but he did it really well. So one is his victories against the Romans, for example, is when the Romans are marching along the edge of a lake and their army is strung out in marching formations. They're not kind of in combat formation, but they're strung out along the edge of this lake. It's misty. There's not good visibility, and he ambushes them along this lakeside, so Lake Trasimene, and it's just using the terrain, understanding this. Again, Hannibal is very much outnumbered, but he's able to use the terrain and to take the enemy by surprise. At Cannae, he's working against the expectations. So the traditional thing you do in the ancient world is the two armies would line up on opposite sides of a field, you'd put your best troops in the middle, you'd put your cavalry on the sides, you'd put your lightly armed skirmishers

beyond those, and then the two sides kind of smack together, and the good troops fight the good, and you see who wins. Now, Hannibal is hugely outnumbered by this giant phalanx of heavy infantry, which is what the Romans specialized in. They're very good at sort of heavily armed foot soldiers. So he knows I don't want to go up against that. I don't have that many of that troop type. My guys aren't as good as the Romans anyway. So he lines up some of his less good troops in the center against the big menacing Roman phalanx, and he tells them, "Okay, when the Romans come, you're not really trying to win, just hold them up. Just delay them," and even tells them you can give ground, so you can retreat and sort of let the line form a big kind of C-shaped crescents, let the Romans sort of advance into you, but just hold that line. And meanwhile, he puts his cavalry and his good troops on the side, and so on the sides, those good troops defeat the Romans, and then they kind of circle in behind the Romans and attack that big menacing Roman phalanx from the rear where it's very vulnerable. And so, Hannibal catches the Romans in this sort of giant cauldron just with people closing in from both sides, and they get pressed together. They can't fight properly, they panic, and they're all slaughtered. And that strategy of double envelopment, of sort of going around both sides becomes the model for all kinds of military strategies throughout the rest of history. I mean, the Germans use this in their Blitzkrieg in World War II, a lot of it was kind of that go around the sides and envelop the enemy. On the eastern front, they had a bunch of these cauldron battles where they would go around and try to encircle huge chunks of the Soviet, the Russian army, and do the same thing. Supposedly even in the Gulf War, it was part of the US strategy for the invasion of Iraq to do this kind double envelopment maneuver. So it's something that for the rest of military history, has been an inspiration to other armies.

Lex Fridman
Can you speak to maybe, the difference between heavy infantry and cavalry, the usefulness of it in the ancient world?

Gregory Aldrete
The ancient world, sort of from the Greeks through the Romans, there's this consistent line of focusing on heavy infantry. So going back to Greece when they're fighting, let's say Persia, which at the time, was the superpower of the ancient world and vastly richer, vastly larger than Ancient Greece, tons more men, but the Persians tended to be archers, tended to be light horsemen tended to be light infantry. Whereas the Greeks specialized in what are called hop lights, which is a kind of infantrymen with very heavy body armor, a helmet, a spear, and a really big heavy shield. And they would get in that formation where you kind of make the shields overlap and just form this solid mass bristling with spear points and just slowly kind of march forward and grind up your enemy in front of you. And so, that's that sort of block of heavy infantry. The advantage is head on against other things, they tend to win. The disadvantage is it's slow moving. It's vulnerable from the sides and the rear, so you got to protect those, but if you can keep frontally faced, it's pretty much invincible. And that's taken even further by Alexander the Great who comes up with the idea, well, what if we even

give them a longer spear? So Greek spears were six to eight feet long. Alexander the Great, arms his armies with the sarissa, which is this 15 foot, almost a pike, this extra long spear. And so, when the spear is that long, you don't even hardly need the shields anymore. So it's just this incredibly powerful thing in frontal attack, and that's what he uses to make himself ruler of the known world. He goes and conquers the Persian Empire and makes himself the Persian king of kings with this phalanx of troops armed with the sarissa. So that's very powerful. The Romans go a little bit different route. They have heavy infantry, but they focus more on fighting with short swords, so it's get up close and kind of stab. And the other thing the Romans do is they focus on flexibility and subdividing their army. So Alexander's phalanx was a mass of let's say, 5,000 guys and it was one unit. The Roman army is organized in an ever decreasing number of subunits. So you have a group of eight guys who are a contubernia, the men who share a tent, you take 10 of those and they form a century of 80 men. You take a bunch of those and you form a cohort. If you forget a bunch of those, you form a legion. So the Romans are able to subdivide their army, and the big sticking point comes at 197 BC at the Battle of Cynoscephalae, when the Roman Legion goes up against one of the descendants of Alexander the Great, who's using his military system. So this is the new Roman system with flexibility versus the old invincible Alexander system with the heavily armed sarissa with those long 15-foot poles. And the key moment in the battle is where they lock together And in a head-on clash, the Macedonians are going to win, but the Romans have the flexibility to break off a little section of their army, run around to the side, and attack that formation from the side, and they win the battle. So they prove tactically superior because of their flexibility. So it's always development and counter development in military history.

Lex Fridman
A fascinating, brutal testing, ground of tactics and technology

Gregory Aldrete
Adaptation, you have to keep adapting.

Lex Fridman
That's, I think, the key thing. One of the fascinating things about your work, you study Roman life life in the ancient world, but also the details, like we mentioned, you are an expert in armor. So what kind of, maybe you could speak to weapons and most importantly, armor that were used by the Romans or by people in the ancient world.

Gregory Aldrete
I do military history. So I mean, the Romans specialized in, I mean, early on they have pretty random armor, and it's not standardized. I mean, remember, there's no factories in the ancient world, so nobody's cranking out 10,000 units of exactly the same armor. Each one is handmade. Now, there can be a degree of standardization, even as early as Alexander, there was a certain amount of standardization, but each one is still handmade, and that's

important to keep in mind, each weapon, each piece of armor. Armor develops over time to fit the tactics. So the Greek hoplites, are very heavy armor. The Roman infantrymen early in the public is lighter. Eventually they get this typical sort of chain mail shirt, helmet shield, the classic sort of Roman legionary, I would say, is the one of the first and second centuries AD, so the early Roman Empire, and this is the guy who wore bands of steel arranged in sort of bands around their body. So it looks almost like a lobster's shell, right? And this is a thing called the lorica segmentata. So it's solid steel, which is very good protection, but it's flexible because it has these individual bands that provide a lot of movement. And then, you have a helmet, you have a square shield that's kind of curved, and you have the short sword, the Roman gladius and that's the classic Roman legionary. Later, more things develop. My personal relationship with armor is I got, really by accident, involved in this project to try to reconstruct this mysterious type of armor that was used, especially by the Greeks and Alexander the Great called the linothorax, which apparently was made only out of linen and glue. So this seems a little odd that that's not the sort of material once you want metal or something, but we had clear literary references that people, including Alexander, and the most famous image of Alexander is this Alexander mosaic found at Pompeii that shows him wearing one of these funny types of armor. The catch is none survived. It's organic materials. So we don't have any of them and archaeologists like to study things that survive. So we have nice typologies of Greek armor made of bronze, Roman armor made of steel or sort of proto steel, but this thing, this linothorax was a mystery. And one of my undergraduate students, a guy named Scott Bartel, had a real, well, an Alexander obsession. He really loved Alexander.

Lex Fridman
As one should.

Gregory Aldrete
He had Alexandros tattooed on his arm in Greek, and he was a smart student. He was really smart. And so, he, one summer, made himself an imitation of this thing of Alexander just for fun. And he said, "Can you give me some articles so I could do a better job?" So he used some scholarly articles about this armor, and with typical academic arrogance, I said, "Why, Scott, of course I will. I'll give you some references," and I went and looked and there weren't any. So at that point, I was like, "Huh, tell you what, why don't you and I look into this and try to do a reconstruction using only the materials they would've had in the ancient world?" And little did I know at the time, I thought, maybe I'll get an article out of this, I mean, it ended up being a tenure project involving 150 students, a couple dozen other faculty members, and having three documentaries made out of it. And Scott and I ended up writing a scholarly book on this. So this is how, you never know where your next project's going to come from. So it started with this undergraduate turned into this huge thing, but it's what we did. We first said, "All right, what are all the sources for this armor?" And in the end, we found 65 accounts of it in ancient literature by 40 different authors. So we have literary descriptions, and then we looked at ancient art, and we were able to identify about a thousand images in

ancient art, in vase paintings, pottery, bronze sculpture, tomb paintings, all these different things showing this armor. And then, using those two things, we tried to backwards engineer a pattern to say, "Well, if this is what the end product look like, what does it have to look like when you make it?" And then we tried to reconstruct one of these things using only the glue and materials. So we had to use animal glues, rabbit glue. We had to end up sort of making our own linen, which comes from the flax plant. So we had to grow flax, harvest it, using only techniques in the ancient world, so modern flax goes through chemical processes. No, we had to do this the old-fashioned way, spin it into thread, so the thread into fabric, glue it all together. And then, the fun part was once we made these things, we subjected them to ballistics testing. So we shot them with arrows, which again were wooden reconstruction arrows, using bronze arrowheads that were based on arrowheads found on ancient battlefields to determine how good protection would this thing have been. And of course, the kind of fun one that everyone always likes and that the documentaries always want is at one point they're like, "Well, can you put Scott in one of these and shoot him?" And we're like, "Okay." I mean, at that point, we've done about a thousand test shots. I grew up shooting bows and arrows. I knew exactly how far that was going to go. So it's one of these, don't do this at home kids.

Lex Fridman
So there's a million questions to ask here, but in general, how well, in terms of ballistics, does it work? Can it withstand arrows or direct strikes from swords and axes and stuff like that?

Gregory Aldrete
Bottom line is a one centimeter thick linothorax, laminated, or even sewn. It doesn't have to be laminated. Layer of linen is about as good protection as two millimeters of bronze, which was the thickest, comparable, body armor of bronze at the time. And we're talking fourth century, fifth century BC here, so classical and Hellenistic Greece, and that would've protected you from, let's say, random arrow strikes on the battlefield. So you could have gotten hit by arrows and they simply wouldn't have gone through.

Lex Fridman
What are the benefits? Is there a major weight difference?

Gregory Aldrete
Yes. So the benefits of this are, it's much lighter than metal armor. So the linothorax is about 11 pounds. A bronze cuirass of comparable protection would've been about 24 to 6 pounds. The chain mail shirt would be about 28, 27 pounds. It's cooler. I mean, the Mediterranean is a hot place with the hot sun. Even today, a linen shirt is something you wear when you want to be cool. So it's much lighter, that gives your troops greater endurance on the battlefield. They can run farther, fight longer. It's cheaper. You don't need a blacksmith who's a specialist to make it. In fact, probably, this is interesting, any woman in

the ancient world could have made one of these because they were the ones who spun thread and sewed it into fabric. So I can easily see in a household a mother making this for her son, a wife making it for her husband. So it's a form of armor you could have made domestically that would've been maybe not the greatest armor, but pretty good, pretty comparable to bronze armor.

Lex Fridman
And it's amazing that you used all the materials they had at the time and none of the modern techniques, but I should probably say, maybe you can speak to that, they were probably much better at doing that than you are, right? Because again, generational, it's a skill. It's a skill that probably has practiced across decades, across centuries [inaudible 00:55:32].

Gregory Aldrete
I mean, in terms of producing the fabric, I'm sure they could do it 10 times faster than we could just, that's a speed thing, but it's still incredibly labor-intensive where I think there's a big difference between our reconstruction and ancient ones is in the glue. So we ended up using a kind of least common denominator glue. We used rabbit glue because it would've been available anywhere and it's cheap. But in the ancient world, they did have basically the equivalent of super glues. I mean, we found, for example, a helmets that were fished out river in Germany that had metal parts glued together that after 2,000 years of immersion and water were still glued together. So they had some great glues. We just don't know what the recipes for them were. So we went the opposite tack and said, "Well, we're just going to make something that we know they could have made." So it was at least this good, you know what I'm saying?

Lex Fridman
But actually, this is a materials thing, but I think glue, aside from helping glue things together, it can also be a thing that serves as armor. So if you glue things correctly, the way it permeates the material that is gluing, can strengthen the material...

Gregory Aldrete
Yes.

Lex Fridman
... the integrity of the material. That's an art and the size probably that they understood deeply.

Gregory Aldrete
The process of lamination did add something. So there's actually a huge debate among scholars and actually a sort of amateur archeologist that was this linothorax thing glued together or was it simply sewn together? Was it composite, partially linen, partially leather, or other materials? And my honest answer is I think it's all of the above, because again, every

piece of armor in the ancient world was an individual creation. So I think if you had some spare leather, you put that in. If you wanted to make one that was just sewn together, or even quilted stuffed with stuff you do that, maybe you were good at gluing stuff, you use that. So I think there's no one answer. We investigated one possibility because we just had limited time and money and resources, but I think all these other things existed at the same time and we're variants of it.

Lex Fridman
Just as a small aside, I just think this is a fascinating journey you went on. I love it. Sort of answering really important questions about, in this case, armor about military equipment and technology that archeologists can't answer by using all the literary, so all the sources you can to understand what it looked like, what were the materials, using the materials at the time, and actually doing ballistic testing. It's really cool. It's really cool that you see that there's a hole in the literature and nobody studied it, and going hard and doing it the right way to sort of uncover this. I don't know, I think it's an amazing mystery about the ancient world.

Gregory Aldrete
I mean, shifting from just sort of Roman history in general to my research that I've done as a scholar, the theme that runs throughout my scholarship is practical stuff. I'm interested, how did this actually work in the ancient world? So there's people who are much more theoretical, who look at the symbolic meaning of something. I'm simpler. I just want to know how did this work? So almost all of my books that I've written, have started with some just how did something work, and I'm trying to just figure out that aspect of it, and that's just, maybe it's a personality thing. I also have a sciency background, so I think I've used a lot of that. Even though I'm a humanist and a historian, I've used a lot of hard science in my work. I did a book on floods where I had to get really heavy into vectors of disease and hydraulics and engineering and all that stuff, and I think, again, having that sort of hard science combined with a humanist background, helps with those sorts of projects.

Lex Fridman
Well, like you said, I think the details help you understand deeply the big picture of history. And I mean, Alexander the Great wore this thing.

Gregory Aldrete
Yeah.

Lex Fridman
This is -

Gregory Aldrete
And I should say by the way, it does drop out of use around Roman times. And I think what's going on there is technology that with bronze, it's hard to keep a sharp edge on things, but once you get into metals, which approximate steel, you can get sharper, and a key factor to penetrating fabric is the edge on the arrowhead. So as soon as you start to get something more like a razor edge, it's going to go through it more easily. Also, there's changes in the bows that are being used. You start to get eastern horse archers showing up with composite bows, which are much more powerful. And so, it just becomes outdated as frontline military equipment. What's interesting is by the Roman period, people are still wearing it, but it's now things like when I go hunting, if I'm hunting lions, I wear this. There's an actual source that says, "It's really good for hunting dangerous big cats because it catches their teeth and stops them from penetrating. One emperor wears one of these under his toga. It's kind of like a, not bulletproof vest, but stab proof vest. So again...

Lex Fridman
Awesome.

Gregory Aldrete
... it's not to fight in the frontline of legions, but it'll protect him from somebody trying to assassinate him. So it still has those uses where you're not up against top line military equipment

Lex Fridman
To honor aforementioned undergraduate student who loves Alexander the Great, we must absolutely talk about Alexander the Great for a little bit. Why was he successful, do you think, as a conqueror, probably one of the greatest conquerors in the history of humanity?

Gregory Aldrete
Yeah, and I mean, that is then he one of the greatest heroes or one of the greatest villains in humanity, too. It's like Julius Caesar. He's famous for conquering Gaul. Well, about a million people were killed and a million enslaved in that. So does it make him a horrible person or one of our heroes? But Alexander is a combination of two things, one is he really just was a skilled individual, and he was one of those guys who had it all. He was smart, he was athletic, and he was supremely charismatic. I mean, it's obviously one of these people that would walk into a room and everyone just kind of gravitates to him. He had that magic that made him an effective leader. And secondly, he was lucky because it wasn't all him. He inherited a system created by his father, Philip II. So he was in the right time at the right place and had this instrument placed in his hands, and then he had the intelligence and the charisma to go use it. So it's one of these coming together of different things, but often his father's contribution, I think, is not recognized as much as it is. It's his father who reformed the Macedonian army, who came up with that system of equipping them with the sarissa, this extra long spear that made them really effective, created the mixed army. So one of the

keys to Alexander's successes, in a tactical sense, is that his army was composed of different elements: heavy cavalry, light cavalry, heavy infantry, light infantry, missile troops, and he understand that he can use these in different and flexible ways on the battlefield; whereas a lot of warfare before then had just been, you line up, two sides smashed together. So he did clever things with this army that was a better tool than others did. And then, he was just supremely ambitious. I mean, he cared about his fame, which I guess his ego, but he clearly cared about that more than he did about things like money. He was indifferent to that, and he did have a grand vision. So he did have this vision of trying to unite the world, both politically under his control, but also culturally, and this is an interesting thing. So he was very open, in fact, insistent of trying to meld together the best elements of all the different cultures. So he, himself, was a Macedonian, but he admired Greek culture. So he pretty much adopted Greek culture as his own. When he conquers Persia, he starts adapting elements of Persian culture. He dresses in Persian clothing. He marries a Persian woman. He sort of forces thousands of his troops to marry local women. He appoints Persians to positions of power. He integrates Persian units into his military. He really wanted to fuse all these things together. And some people see this as a very enlightened vision that, "Oh, he's not just, I want to conquer people and now they're my slaves," that he was really trying to create this one culture that was sort of the best of everything. Others see it, of course, as a form of cultural imperialism. You're destroying other cultures and trying to warp or twist them into something, but what I think is interesting is that this vision he had of uniting cultures creates very problematic tensions among his own followers because the- Tensions among his own followers, because the Macedonians, his original troops, did not like this on the whole. They wanted the old model where we conquer you, you're our slaves. We don't want to share stuff with you. We don't want you joining us in the army. We don't want you appointed to positions of power. We are your conquerors and that's it. And so, Alexander had to deal with a lot of friction from his own oldest, most loyal elements at the way he was being in their eyes, too generous to the conquered. So Alexander is one of these interesting personalities because every generation sees him in a new light and focuses on different things. So for some, he's this enlightened visionary who was taught by Aristotle, the Greek philosopher, and they say, "Well, this influenced him." Others see him as an egomaniacal warmonger, just I'm out to kill and gain glory. There was a book a couple of decades ago, it says, "Oh, he's just an alcoholic," which he probably was. Yeah. So you get all these competing images, and the great thing is, we don't really know what the true Alexander was or what his motivations were. It's a mixed message.

Lex Fridman
Why do you think the Roman Empire lasted while the Greek Empire as the Alexander expanded, did not?

Gregory Aldrete
That's a clear answer. So Alexander's Empire fragmented the moment he died. And so his empire was all about personal loyalty. It was his charisma holding it together, his personality. And he completely failed to create a structure so that it would continue after his death. And of course, he died young. He didn't think he would die when he did, but still, you should put something in place. So his was a flash in the pan. It was, he had this spectacular conquest in 10 years. He conquered what was then most of the known world, but he had no permanent structure in place. He didn't really deal with the issue of succession. It fell apart instantly. The Romans are much more about building a structure. I mean, as we talked about a little, they were very good about incorporating the people they conquered into the Roman project. I mean, they're oppressive, they're imperialistic as well. Let's not whitewash them. I mean, they had moments when they would just wipe out entire cities. But on the whole, they were much more about trying to bring people into the Roman world. And I think that was one of their strengths, is that they were open to integration and bringing in different people to keep rejuvenating themselves.

Lex Fridman
One of the most influential developments from the Roman Republic was their legal system. And as you mentioned, it's one of the things that still lasted to this day in many of its elements. So it started with the Twelve Tables in 451 BC. Can you just speak to this legal system and the Twelve Tables?

Gregory Aldrete
Yeah. I mean, Roman law is one of their most significant, maybe the most significant legacy they have on the modern world. So I mean, just to start at that end of it, something like 90% of the world uses a legal system, which is either directly or indirectly derived from the Roman one. So even countries that you wouldn't think are really using Roman law, kind of are, because all the terminology, all that comes from Roman law. And the Romans, their first law code was this thing, the Twelve Tables. So this is way back in the middle republic and it was a typical early law code. So most of the stuff it concerns are agricultural concerns. So if I have a tree and its fruit drops onto your property, who owns the fruit? If my cow wanders into your field and eats your grain, am I responsible? I mean, I love these early law codes that are all about this farmer problems. But law codes are hugely important because you need a law code to enable people to live in groups. So they're the transitional thing that lets human beings live together without just resorting to anarchy. And most of the early law codes are agricultural, like Hammurabi's Code in Mesopotamia. Most of them are retaliatory, meaning eye for an eye type justice. So you do something to me, it gets done to you. But they're this necessary precondition for civilization, I would say, and the Twelve Tables is that. It's a crude law code. It has a lot of goofy stuff in it. It has things about if you use magic, this is the punishment, but it's that basic agrarian society law code. Now, that's typical in many societies. Where the Romans are different is, they keep going. They keep developing their law code. And by the late republic, the Romans just get really into legal stuff. I don't know

why, but the Romans are very methodical organized people. So maybe this has something to do with it. But their law code just keeps getting more and more complicated and keeps expanding to different areas. And they start to get jurists who write sort of theoretical things about Roman law. And eventually, it becomes this huge body both of cases and comments on those cases and of actual laws. And in the 6th century AD, so the 500s, the Roman Emperor, Justinian, who is an emperor of the Eastern Roman Empire by this point, the Byzantine Empire, compiles all this together into something that today, we just loosely called Justinian's Code of Roman law, and that survives. And so that becomes the basis for almost all the legal systems around the world and it's very complicated. And Roman law, I think is really fun. Because on the one hand, it's really dry, but it also preserves these wonderful little vignettes of daily life. So you get these great, just entertaining law cases. One of my favorite, and this may not even be a real case, this might be a hypothetical that they would use to train Romans or law students, is one day, a man sends a slave to the barber to get a shave. And the barber shop is adjacent to an athletic field and two guys are on the athletic field throwing a ball back and forth. And one of them throws the ball badly, the other guy fails to catch it. The ball flies into the barber shop, hits the hand of the barber, cuts the slave's throat, he dies. Who's liable under Roman law? Is it the athlete one who threw the ball badly? Is it athlete two who failed to catch it? Is it the barber who actually cut the slave's throat? Is it the owner of the slave for being stupid enough to send his slave to get a shave in a place adjacent to a playing field? Or is it the Roman state rezoning a barber shop next to an athletic field? What do you think?

Lex Fridman
Well, do they resolve the complexity of that with the right answer?

Gregory Aldrete
We don't have the answer.

Lex Fridman
We don't have the answer.

Gregory Aldrete
It's a case without the answer. We have various jurists commenting on this one, but we don't have what was actually ruled. But it's just a great little sort of vignette. And that's how complicated Roman law got, that it was dealing with these weird, esoteric questions. There's another one where a cow gets loose and runs into an apartment building, goes up onto the roof and crashes down three stories into a bar on the ground floor, and kicks open the taps to the wine jug and all the wine flows out. Who's at fault? I mean, this seems to have happened, as crazy as it sounds. And Roman testamentary law is great. I mean, something like 20% of Roman law has to do with wills and what you do with the will and what makes a will valid. You have to have seven witnesses and you have to have a guy named, the liber [inaudible 01:11:31] to witness it, and the witnesses have to be adult men who can't be blind

and all this other stuff. So it's just great. It's fun to mess around in this, but it always contains these little nuggets about what happens. I mentioned I wrote a book on floods. And there were all these law cases about if a flood strikes the city and picks up my piece of furniture in my apartment building and carries it out the door and deposits it in another apartment building, does that guy now own my furniture because it's now legally within his apartment? Or can I go in there and repossess it because the flood took it out of my apartment? This is the stuff law is handled and that's how sophisticated Roman law got.

Lex Fridman
Did corrupt, unfair things seep into the law?

Gregory Aldrete
Oh, yeah. I mean, it's biased in favor of the wealthy, obviously. And I mean, Roman law cases are interesting because they became linked to politics. So one of the way that politicians, up and coming politicians, aspiring politicians could sort of make their name or become famous was by either prosecuting or defending people in Roman law courts. And especially during the late Roman Republic, you get a lot of really sensational, what today we'd call celebrity law cases. So this is where some of the biggest politicians were accused of very melodramatic kinds of things. And I mean, the most famous Roman order of all time, Cicero, is a guy who made his entire career in the law courts. And that's how he made his reputation, was able to parlay that into political power and eventually was elected to the highest office in the Roman government. But it's purely because of his skill, his facility, using words at giving speeches in public.

Lex Fridman
So they loved the puzzle and the game of law, the sort of untangling really complicated legal situations and coming up with new laws that help you tangle and untangle the situations.

Gregory Aldrete
Yes. And law cases, again, especially in the late republic, also became a form of public spectacle.

Lex Fridman
Right.

Gregory Aldrete
So Rome did not have law courts in a building locked away. A lot of these cases were held in the Roman Forum in the open, and audiences would just come to be entertained. And the people presenting the speeches, they were playing as much to this audience as they were to let's say, the jury or a judge. And that became a big part of the cases. So that's all tied up in the Roman orator too.

Lex Fridman
So we're talking a bit about the details of the laws. Is there some big picture laws that are new innovations or profound things like all Roman citizens are equal before the law, founding fathers type in the United States, in the western world, these big legal ideas?

Gregory Aldrete
I think maybe one of the things that was really stressed in Roman law early on, even as early as the Twelve Tables, is the notion of Roman citizenship. So if you were a Roman citizen, it came with a set of both privileges and obligations. So the obligations where you're supposed to fight in the Army, you were supposed to vote in elections. The privileges were, you had the protection of Roman law. And at least in theory, if not in practice, everybody was equal under that law. Now of course, keep in mind, we're talking about men here. And even at the height of the Roman Empire, so let's say second century AD, there were about 50 million human beings living within the boundaries of the Roman Empire, maybe 6 million were actual citizens. So we tend to go, "Oh, it's so great. If you're a citizen, you have all these things." Well, adult free men who are not slaves, who are not resident foreigners, they have this great stuff. And that's always a tiny minority of all the human beings who existed in this society. But still, the notion, the notion of citizenship is huge. And citizens, for example, early on, you had to be tried at Rome if you were accused of something. And there's this very famous moment in Sicily where an abusive governor who's corrupt is punishing a citizen arbitrarily. And this person cries out, "Civis Romanus Sum," meaning, "I am a Roman citizen." And it really was this hugely loaded statement that that gives me protections. It is wrong for you to do this to me. It's wrong for you to beat me because I am a citizen and that gives me certain protections. So that notion of citizenship is something that I think, the Romans really emphasize and becomes a legacy to a lot of civilizations today, where citizenship means something. It's a special status.

Lex Fridman
So you mentioned slaves, slavery, that's something that is common throughout human history. What do we know about their relationship with slavery?

Gregory Aldrete
Well, Roman slavery, a couple of just reminders at the beginning, first of all, it's not racial slavery. So for people in the United States, you tend to think of slavery through this racial lens. So slaves in ancient Roman society could be any color, ethnicity, gender, origin, whatever. It's an economic status. Now, having said that, slavery is fundamentally horrific to human dignity because it is defining a human being as an object. And very famously, a Roman agricultural writer who's writing about farms, just as a kind of side says, "On your farm, you have three types of tools. You have dumb tools." And by dummy, means can't speak. So that's like shovels, picks, things like this, wagons. "You have articulate tools which are animals, and you have articulate tools which are human beings, slaves." And for him, these are all just categories of tools. It's so intensely dehumanizing to view people in that

way. So Roman slavery is odd in that it doesn't have this racial component. It's horrible in the way all slavery is horrible, but the other thing about is it's not a hard line. It's a permeable membrane, and many people move back and forth across it. So you have many people in the Roman world who were born a slave who gained their freedom through one means or another. And you have many others who were born free and become slaves. And you have some who go back and forth. There's a great Roman tombstone of this guy who says, "I was born a free man in Parthia. I was enslaved. Then I gained my freedom and I became a teacher or something, and I had a life, and now I'm a Roman citizen." So it's this whole back and forth across all these boundaries multiple times.

Lex Fridman
Oh, so there's probably a process like an economic transaction.

Gregory Aldrete
The most common source of slaves in the Roman world was war. So wherever the Roman army went, in its wake would be literally a train of slave traders. So you're in war, you capture an enemy city, you whack the people over the head, and you turn around if you're a soldier and you sell them to one of these slave traders that's following the army around, literally. So that's probably the biggest source of slaves. Another big source is just children of slaves or slaves. And some people could literally sell either themselves or their children into slavery due to economic necessity, or privation or something. So as terrible as that sounds, a father could sell a child if he needed money. Once you were a slave though, the experience of slavery varied a lot because a lot of the slaves were agricultural slaves. So they would work like in the American South, big plantations. They might be chained. They were probably abused. That's very similar to slavers as we think of it in let's say, the Caribbean, South America or the United States prior to the Civil War, that kind of slavery. But a lot of Roman slaves were also some of the more skilled people. And this seems a little weird. So if you're a rich person, you have slaves, it's actually a good investment for you to train your slaves in a profession. So a lot of Roman doctors, scribes, accountants, sort of, all this sort of thing, barbers, were slaves. Because if you train this person, and then they produce a lot of money for you, you get that money. And those slaves would sometimes be given an incentive to work hard where they could... And this is just sort of an agreement between the master and the slave. If they earned a certain amount of money, X amount of money, they could then buy their own freedom from the master. So this was your incentive to work harder if you were trained let's say, as a doctor. "I work really hard, I can buy myself out of slavery." Or a lot of masters would free their slaves in their wills. So when they died, they would say, "I manumit this slave and that slave." So it was a weird institution in that elements were just as horrible as what we think of as slavery and just as exploitative. And like I say, the overall notion of slavery is intensely dehumanizing, but yet, there was this wide range of types of slaves. And the odd thing is, in the city of Rome, many of the worst jobs, so if you're just a laborer hauling crap around at the docks or things like that, you might

well be a free person and a slave would hold a skilled job. And that seems a little strange or counterintuitive to us, but you see how in the Roman economy it sort of works.

Lex Fridman
And that could be one of the things that would be surprising to us coming from the modern day to the ancient world, is just the number of slaves. So you mentioned one of the things we don't think about is that most of the people are farmers. And then the other thing is just the number of slaves.

Gregory Aldrete
And there's a big debate. How many slaves were there? What percentage of the populace, let's say in the city of Rome, were slaves? And this is something historians like to argue about a lot. And we keep coming back to this theme of sometimes it's the little things that illustrate stuff well. And for slaves, the one that always gets me is some slaves, and these would be sort of the more abused slaves, they would literally put little bronze collars on them with a tag that said, "Hi, my name is Felix. I'm the slave of so-and-so. I've run away. If you catch me, return me to the temple of so-and-so, and you'll get a reward." So it's a dog tag, except this is a human being. And you can see these in museums. I mean, you can go to a museum today and see this little bronze collar with a tag on it that's talking about a human being as if they're this kind of animal that's run away. And this is very telling too. We're talking about Roman law. Under Roman law, technically, when a slave runs away, the crime that he's committing is theft because he's stolen himself from his master. So again, it's this very dehumanizing view of it.

Lex Fridman
And just a reminder to people in America thinking about this, we have a certain view and picture to what slavery is, a reminder that all of human history, most of human history has had slaves of all colors, of all religions. That's within us, to select a group of people, call them the other, use them as objects, abuse them. And I would say, as a person who believes the line between good and evil runs through the heart of every man, all of us, every person listening to this is capable of being owner of a slave if they're put in the position, of capable of hating the other, of forming the other, of othering other people. And we should be very careful not to look ourselves in the mirror and remind ourselves that we're human. It's easy to think, "Okay, well, there's these slaves and slave owners through history. And I would've never been one of those." But just like as we would be farmers, we could be both. If we went back into history, we could be both slaves and slave owners, and all of those are humans.

Gregory Aldrete
I mean, just to build on that, I'd say the othering of others is a morally corrosive thing to do.

Lex Fridman
Yeah. So this fascinating transition between the republic to the empire, can we talk about that? How does the republic fall?

Gregory Aldrete
Oh, boy. Okay. So the Roman Republic on the one hand is incredibly successful. Right? In a short period of time, it's expanded wildly. It's conquered the Mediterranean world. It's gained tons of wealth. The contradiction here is that Rome's very success has made almost every group within Roman society deeply unhappy and boiling with resentment. So this is the contradiction. Enormous success on the surface, you end up with this boiling pot of resentment and unhappiness. So let's break this down. Who's unhappy? Well, the people fighting Rome's wars, the common farmers who went off to fight. They joined the army. They went and fought. They've come back. They've seen Rome get wealthy. They've seen their generals get wealthy. They've conquered all these areas. All this money and stuff is flowing back to Rome. But when they're discharged from the army, they don't get that much. So they feel like, "I spent the best years of my life fighting for my country, I deserve a reward. I haven't gotten it." So you have a lot of veterans who are now unemployed or underemployed. Many of them have sold their small family farms when they went off to join the army, and now they don't have them. So that group's unhappy, the veterans. You have the aristocrats who on the surface, the ones who are doing well, they're the politicians and the generals. But as time goes on, the ones who get the plum appointments, who get the good general ships, starts coming from a smaller and smaller subset of the aristocrats. The Scipios and their friends start to dominate. So you end up where most of the aristocratic class is feeling, "Hey, I'm left out. I didn't get what I deserved." What about the half citizens and the allies? The Italians who have fought for Rome, who stayed loyal when Hannibal invaded, they didn't go over to his side. Well, they feel rightfully, "We stayed loyal to Rome. We fought for them. We deserve our reward. We should be full citizens." But the Romans are traditional. They're conservative. They don't like change. They don't give them that. What about all the slaves? Well, they've conquered all these foreigners. They've sold them. Now, many of them are working these plantations, big plantations owned by rich people that used to be little family farms. The slaves are obviously unhappy. So you end up with a society where it's incredibly successful by about 100 BC, but almost every group that composes it feels like, "I haven't shared in the benefits of what's happened or I've been exploited by it." So they all end up intensely unhappy. And the next 100-year period from 133 to 31 BC is called the Late Roman Republic. And it's a time of nearly constant internal strife, ultimately culminating in multiple rounds of civil war. So Roman society literally breaks apart, turns on itself, and goes to war with itself over not equitably sharing the benefits of conquest and of empire. So it's a lesson about not sharing the benefits of something in a society, but concentrating it in one little group. And the other thing that happens is among the aristocrats, they start to get more and more ambitious. So in the past, there was a lot of ideology of, the state is more important than the person. If you were a little Roman kid, you would've been told these stories of Roman heroes. And they're all about self-sacrifice,

putting the state before you, about modesty, about these values. Well, by the late republic, you have a succession of strong men. And it is a chain. So it goes, Marius, Sulla, Pompey, Julius Caesar, where each one pushes the boundaries of the Roman Republic a little bit, pushes at the structures of the institutions of the Republic, and they're motivated by personal gain. They're putting themselves above the state. So at the same time, you have lots of groups unhappy in society, and you get these strong men who are now undermining the institutions, chipping away at the things that have been shared, things holding the state together. And in the end, they just become so ambitious, they're like, "I don't care about the state. I'm going to try and make myself ruler of Rome." So I mean, this is going to culminate obviously in Julius Caesar who does succeed in making himself dictator for life of the Roman Republic, which is tantamount to king, and he gets assassinated for it. But he's the end point of this progression of people who really undermine the institutions, the republic, through their own personal greed.

Lex Fridman
So the resentment boils and boils and boils, and there's this person that puts themselves above-

Gregory Aldrete
And they exploit it. They're demagogues.

Lex Fridman
Yeah.

Gregory Aldrete
They exploit it.

Lex Fridman
But Caesar puts himself above the state. And that I guess, the Roman people also hate.

Gregory Aldrete
Well, I mean, it's a love-hate because Caesar is very successful at playing to the Roman people. So he becomes their hero where he says, "I'll be your champion against the state who doesn't care about you." So Caesar will do things where he'll put on big shows for the people, and it's cynical. I mean, he's doing this to further his own political power, but he's presenting himself as a populist in essence, even though he aspires to be a dictator. Right? But it's a way of winning the people's support because that's a tool for him and his struggle with other aristocrats.

Lex Fridman
So a dictator in populist clothing.

Gregory Aldrete
Yes.

Lex Fridman
But he gets-

Gregory Aldrete
When convenient. Other times, he'll play to the aristocracy.

Lex Fridman
And when he gets assassinated, another civil war explodes?

Gregory Aldrete
That's an interesting moment, because all these things have been leading up to Caesar and it really is a chain of men. So it starts with this guy, Marius, who was one of the first to start making armies loyal to him, rather than to the state. That's a step in the wrong direction. Right? The army should be loyal to the state, not to an individual general. They shouldn't look for him to rewards. Marius breaks that, makes a precedent. One of his protegees is a guy named Sulla. Sulla comes along and he ends up marching on Rome with his army and taking it over. And he says, "Well, I'm just doing it for the good of the state." But that's another precedent. Now you've had someone attacking their own capital city, even if they say they're doing it for the right reasons. Then Pompey comes along, and Pompey just breaks all kinds of things. He starts holding offices when he's too young to do so. He raises personal armies from his own wealth. He disobeys commands. He manipulates commands. He does all kinds of stuff. But in the end, he sides with the Senate when sort of forced. And finally, Caesar comes along and Caesar's just shamelessly, "No, it's about me. I'm going to push it." And he is the one who wins a civil war against the state and Pompey, takes over Rome and says, "Now, I'm going to be dictator." And dictator is a traditional office in the Roman state, but dictators were limited to no more than six months in power. And Caesar says, "Well, I'll be dictator for life," which of course, is king. He gets killed for it. So Caesar succeeded in taking over the state as one man, but he couldn't solve the problem. How do you rule Rome as one person and not get killed for looking like a king? That's the dilemma, the riddle that Caesar leaves behind him. He did it. He seize power as one guy, but how do you stay alive? How do you come up with something that the people will accept? And Caesar did some other things which are bad. He was arrogant. He didn't even pretend that the Senate were his equals. He just railroaded them around. He didn't respect them. He named a month after himself, July, Julius. He did egotistical things. So that pissed people off. They didn't like it. And when Caesar dies, it's this interesting moment. The Republic is sort of dead by then. You're going to have a hard time reviving it. You've broken too many precedents, but there's a power vacuum now. Caesar's gone, what's going to happen next? And you have a whole group of people who want to be the next Caesar. So the most obvious is Mark Antony, who is Caesar's right-hand man, his lieutenant. He's a very good general. He's very charismatic.

Everybody expects Mark Antony to just become the next Caesar. But there's also another of Caesar's lieutenants, a guy named Lepidus, sort of like Antony, but not quite as great as him. There's the Senate itself, which wants to reassert its power, kind of become the dominant force in Rome again. There's the assassins who killed Caesar, led by Brutus, and another guy, Cassius, they now want to seize control. And finally, there's a really weird dark horse candidate to fill this power vacuum. And that's Julius Caesar's grandnephew, who at the time, is a 17-year-old kid named Octavian. Who cares? He's nobody. Absolutely nobody. But when Caesar's will is opened after his death, so posthumously read in his will, Caesar posthumously... And this is a little weird, posthumously adopts Octavian as his son. Now again, who cares? Antony gets the troops. Antony gets the money. The other people get everything. What does Octavian get? He gets to now rename himself, Gaius Julius Caesar Octavianus. Who cares? Well, around the Mediterranean, there's about 12 legions full of hardened soldiers who are just used to following a guy named Gaius Julius Caesar. And even though it's not quite logical, this 18-year-old, he's now an 18-year-old kid, inherits an army overnight. So he becomes a player in this game for power. And the next 30, 40 years is going to be those groups all vying with one another. There's another candidate too, Pompey's son. Pompey was Caesar's great rival. He has a couple of sons. And one of them, a guy named Sextus Pompey, basically becomes a warlord who seizes control of Sicily, one of the richest provinces, has a whole Navy. He's vying to be one of the successors too. So for the next 40 years, it's as you said, another civil war to see which guy emerges. Is it going to be the Senate? Is it going to be the assassins? Is it going to be Antony? Is it going to be Lepidus? Is it going to be Sextus Pompey? Is it going to be Octavian?

Lex Fridman
So now, looking back at all that history, it just feels like history turns on so many interesting accidents. Because Octavian later renamed Augustus, turned out to be actually... It depends on how you define good, but a good king/emperor, different than Caesar in terms of humility, at least being able to play, not to piss off everybody. But it could have been so many other people. That could have been the fall of Rome. So it's a fascinating little turn of history. Maybe Caesar saw something in this individual. It's not an accident that he was in the will.

Gregory Aldrete
Yeah. I mean, Caesar clearly did see something in him. And Octavian, I mean, to cut to the end, is the one who emerges from all that as the victor. We can talk about how he does it, but he's the one who ends up in the same position as Caesar. It takes him 30 years, but he defeats all the foes. He's the sole guy. He now faces Caesar's riddle. How do you rule Rome as one guy and not get killed? And Octavian, what makes him stand out, what makes him fascinating to me, is he wasn't a good general. In fact, he was a terrible general. He lost almost every battle he commanded. But what he is, is he's politically savvy and he's very good at what today we would call, manipulation of your public image and propaganda. So he basically defeats Mark Antony partially by waging a propaganda war against him. Antony

partially by waging a propaganda war against him. Antony starts out as a legitimate rival, and there are two Romans vying for power. At the end of this war, propaganda war, Octavian has managed to portray Antony as a foreign aggressor, allied with an enemy, king or queen, in this case, Cleopatra, and who is an official enemy of the Roman state, and that's all propaganda. So, he takes what's a civil war and makes it look like a war against a foreign enemy. And when Octavian becomes the sole ruler, he looks at what Caesar did wrong, and he very carefully avoids the same mistakes. So, the first thing is just how he lives his life. He's very modest. He lives in an ordinary house like other aristocrats. He wears just a plain toga, nothing fancy. He's respectful to the Senate. He treats them with respect. He eats simple foods. I mean, he's someone who cared about the reality of power, not the external trappings. Clearly there's some rulers who love, "I want to dress in fancy clothes. I want to be surrounded by gold. Everything. This is what makes me feel good." Octavian is the opposite. He doesn't care about any of that. He wants real power. And then, the other thing is, how is he going to rule Rome without looking like a king? And his solution to this is brilliant. He basically pretends to resign from all his public offices and not pretends he does. So, he holds no official office. But what he does is he manipulates so that the Roman Senate votes him the powers of the key Roman offices, but not the office itself. So, the highest office in the Roman state is the consul. Consuls have the power to command armies, do all sorts of things, run meetings of the Senate. Octavian gets voted the powers of a consul so he can command armies control meetings of the Senate, do all this. But he's not one of the two consuls elected for every year. So, he's just floating or drifting off to the side of the Roman government. He gets the power of a Tribune, which has all sorts of powers. He can veto anything he wants, but he's not one of the Tribunes elected for anyone. So, the state, the Republic appears to continue as it always has. Each year they hold the same elections, they elect the same number of people, notionally, those people are in charge. But floating off to the side, you have this guy Octavian, who has equivalent power, not just to any one magistrate official, but to all of them. So, any moment he can just pop up and say, "No, let's not do this. Let's do something else." And he also keeps the army under his personal control.

Lex Fridman
Isn't this a fascinating story? What do you think is the psychology of Augustus, of Octavian?

Gregory Aldrete
Yeah. And he later changed his name to Augustus when he becomes the first emperor. The other thing he does is he hides his power behind all these different names.

Lex Fridman
The greatest strategy.

Gregory Aldrete
Caesar called himself dictator for life, right? So, everybody knew what he was. Octavian. We even have a source that talks about it. He says he wondered what to call himself. "Do I call myself king? No, he can't do that. Dictator for life. No way. Maybe I'll call myself Romulus. That was the founder of Rome. No, no. Romulus was a king." And finally, a solution is he takes a bunch of titles, which are all ambiguous, and no one of them sounds that impressive, but collectively they are. So, for example, one of the titles he gets is Augustus, which is something tied to Roman religion. Something that is Augustus in Latin has two possible meanings. One is someone who is Augustus is very pious. They respect the Gods deeply. Well, that sounds nice, doesn't it? Well, on the other hand, an alternative meaning for Augustus is something that is itself divine. So, is he just a deeply religious, pious person, or is he himself sacred? There's that ambiguity. He calls himself Princeps, which means first citizen. "Okay, what the hell does that mean? Am I a citizen just like everybody else? Or am I the first citizen, which means I'm superior to all the others?" So, every title he takes has this weird ambiguity. He calls himself Imperator, which is traditionally something that soldiers shout at, a victorious general who's won a battle. And now he takes this as a permanent title. So, it implies he's a good general. And by the way, it's from Imperator that we get the word emperor, an empire. So, originally it's a military title, a spontaneous military acclamation.

Lex Fridman
It's just fascinating that he figured out a way through public image, through branding to gain power, maintain power, and still pacify the boiling turmoil that led to the civil wars.

Gregory Aldrete
Yeah. Well, two things I think work in his favor as well. One is he brings peace and stability. So, by this point, the Romans have experienced a hundred years almost of civil war and chaos. So, at that point, your family, maybe you've had family members die in these wars or been prescribed, your property has been confiscated, who knows what. And here's a guy who brings peace and stability and doesn't seem oppressive or cruel or whatever. So, you're like, "Okay, fine, I don't care. Maybe he's killed the Republic, but at least we're not dying in the streets anymore." So, that's a big thing he does. And secondly, even though Augustus always seemed sickly his constitution, he lives forever. He rules for like 50 years, and by the time he dies, there's no one literally almost left alive who can remember the Republic. So, at that point, by the time he dies, this is the only system we know.

Lex Fridman
That's another just fascinating accident of history, because as we talked about with Alexander the Great, who knows if he lived for another 40 years, if over time the people that hate the new thing die off and then their sons and come into power, that could be a very different story. Maybe we'll be talking about the [inaudible 01:42:07].

Gregory Aldrete
That's a fluke of fate, but it's hugely influential on history.

Lex Fridman
You mentioned Cleopatra. If we go back to that, what role did she play? Another fascinating human being.

Gregory Aldrete
Cleopatra is interesting. I mean, she was a direct descendant of one of Alexander the Great's generals Ptolemy. When Alexander's empire had broken up Ptolemy, this general had seized control of Egypt, made it his kingdom. And she 10 generations later, is a descendant of this Macedonian general. So, Egypt had been ruled by, in essence, foreigners, these Macedonian dynasty of kings. And often they literally were ruled by the same dynasty because they had a habit of marrying brothers to sisters. And Cleopatra was in fact originally married to her younger brother. But despite that, she seems to have intensely identified with Egypt. In fact, she seems to have been the first one of all these Ptolemy kings who actually bothered to learn to speak Egyptian. So, she seems to really have cared about Egypt as well. And she was clearly very smart, very clever. And so, she's living at a time during the late Republic when Rome is having all these civil wars. And Egypt is really the last big independent kingdom left around the shores, the Mediterranean, everything else has been conquered by Rome. So, she is in this very precarious position where clearly she wants to maintain Egyptian independence, but Rome is this juggernaut that's rolling over everything. She ends up meeting Julius Caesar when Caesar comes to Egypt chasing Pompey, his great rival, after he defeats Pompey, Pompey runs to Egypt thinking he'll find sanctuary there, and the Egyptians kill him and chop off his head. And when Caesar lands, they hand it to him and say, "Here have a present." And she, of course, famously ends up having a love affair with Caesar. Was that a genuine love or was she just using this as a way to try and keep Egypt independent to give it some status? We don't know. After she does have several kids with Caesar. After Caesar's assassinated, and the Roman world is having another civil war between Octavian and Mark Antony. Mark Antony is basing himself in the east. He meets Cleopatra and he has a big love affair with her. And this one seems pretty genuine. I mean, Antony and Cleopatra, there's a lot of stories about them partying together. They liked to cosplay and dress up as different gods. So, Cleopatra would dress up as the goddess Isis and Antony would dress up as the god Dionysus in a leopard skin, and they'd have these big parties and stuff, and they end up together fighting against Octavian. And in the end, they're defeated by Octavian and Antony commits suicide. Cleopatra there's differing accounts of her death. She may have also killed herself, or she may actually have been killed by Octavian to just get her out of the way. But she's an interesting figure because she was clearly a very smart woman who managed to keep Egypt alive as an independent state. She seemed to have actually cared about Egypt and identified with it and succeeded at a time with all these famous people in being a real mover and shaker and a force in events.

Lex Fridman
I mean, she's probably one of the most influential women in human history.

Gregory Aldrete
She certainly... Again, she's someone that her image is incredibly important. And I mean, one of the interesting things, the whole question of gender in the Roman world, I mean, this gets into Roman sources, but of course it's a heavily male dominated history. And I mean, men and women did not have equality in ancient Rome. It's a male dominated society. It's misogynist in many ways. But what I'm constantly struck by is when you start, again, delving into the sources, you always hear, "Okay, well, there was this one woman who was a philosopher, and she's an exception to the rule. And yeah, okay, she's fine." And then, you start looking into, "Oh, and there's also 60 other female philosophers. Well, it's not so much an exception anymore. Or Cleopatra is the one queen. She's this strong queen." And then, you look, "Well, there was this other queen here. There was this queen here. There was this queen here who led armies, and here's another one who led armies." And again, it's like, well, are they exceptions to the rule or is just the history that was written, which is written by men a little bit selective in how it portrays them, because the sources are all these male elites who have very definite ideas about women. The conventional notion has always been that business in the Roman Empire was a male field. Well, but then there's this woman, Eumachia in Pompeii who actually had the largest building in Pompeii, right on the forum named after her with a giant statue of her. And she was a patron to a bunch of the most important guilds in Pompeii. Okay. She's the exception to the rule. Oh, but then there's these other four women we have from Pompeii who also were patrons of guilds. And then, there's this woman, Plancia Magna in this other place, and she was the most important patron in the town and put up all these statues. So, at some point, when do you start to say, "Well, maybe women did play more of a role, but they just haven't been recorded in the sources in the way that maybe they deserve to be."

Lex Fridman
Yeah, that's a fascinating question. Is it the bias of society, or is it the bias of the historian?

Gregory Aldrete
Yeah.

Lex Fridman
The bias of the society that the historian is writing about, or the bias of the actual history.

Gregory Aldrete
And the bias of the historians who have written history up to this point. I was just writing a lecture, which was about this woman Musa who has a crazy story, and she ties into Augustus, actually. Augustus, his biggest diplomatic triumph that he boasted about constantly was that about 50 years before him, the Romans had sent an expedition into

Parthia, this neighboring kingdom led by Crassus, and they'd gotten wiped out. So, it was this big disaster, military disaster. And the standards of the Roman legions, the eagles, that each Roman legion carried, had been captured by the Parthians. And this is the most humiliating thing that can happen to a Roman legion to have its eagles captured. And Augustus desperately wanted to negotiate with the Parthians to get these eagles returned. Okay? This was his big diplomatic thing. So, he was constantly sending these embassies to Parthia. On one of these embassies, he sent along as a gift to the Parthian King, a slave woman named Musa. Musa seems to have pleased the king of Parthia because she becomes one of his concubines, and then she gives birth to a son by the king, and eventually she becomes upgraded to the level of wife. And Musa eventually murders the Parthian king, arranges it so that her son becomes the king of Parthia, and she's really ruling the whole empire behind the scenes as his mother. So, this is a literal rags to riches story of a slave, someone who starts out a slave and becomes the queen of an empire, almost as large and powerful as Rome. Okay. But yet, how often do we hear about Musa? And when you look in traditional histories of Roman, Parthian relations, and I went and looked at this because I was just writing this lecture, most of those histories didn't even mention her. They just talked about her son, like he had just come out of nowhere and become the new heir to the Parthian throne when it was all her doing clearly. Now, that's selective editing of history by historians to downplay the role that this woman played. And there's a lot of examples like that.

Lex Fridman
That's fascinating.

Gregory Aldrete
She got overthrown after a few years. There was a revolution against her, and we don't know what happened to her then, but she's a really interesting figure. And by the way, Augustus didn't negotiate the return of the Parthian standards and got them back, and he was so proud of this that this is what he constantly boasted about. And the most famous statue of Augustus, the Augustus from Prima Porta, which is in the Vatican today, he's wearing a breastplate. And on the breastplate right in the middle of the stomach is a Parthian handing over a golden eagle legionary standard to a Roman. So, this is what Augustus thought of as his greatest achievement. And that embassy that arranged that was the one that sent Musa to Parthia.

Lex Fridman
So, Augustus marks the start of the Roman Empire.

Gregory Aldrete
Yep.

Lex Fridman
You've written that Octavian Augustus would become Rome's first emperor, and the political system that he created would endure for the next half a millennium. This system would become the template for countless later empires up through the present day, and he would become the model emperor against whom all subsequent ones would be measured. The culture and history of the Mediterranean Basin, the western world, and even global history itself, were all profoundly shaped and influenced by the actions and legacy of Octavian. He was the founder of the Roman Empire, and we still live today in the world that he created. So, what on the political side of things and maybe beyond, what is the political system that he created?

Gregory Aldrete
Well, I mean, I think Octavian/Augustus is the same guy, is one of the most influential people in the history because he did found the Roman Empire. So, he's the one who oversaw this transition from Republic to Empire, and he sets the template which every future emperor follows. So, just in the most obvious way for the next either 500 or 1500 years, depending how long you think the Roman Empire lasted for, everyone is trying to be Augustus. They all take on the same titles. Every Roman emperor after him is Caesar, Augustus, Imperator, Pater patriae, all these titles he has, they take too. And so, he's hugely influential for Western civilization, all this. But beyond just that literal thing, which is already 500 years, 1500 years, he becomes the paradigm of the good ruler, so of an absolute ruler who is nevertheless just does good things, builds public works as popular. So, if we jump ahead, let's say to the Middle Ages, the most significant ruler of the early Middle Ages is Charlemagne. He's the guy who unites most of Europe. He becomes the paradigm for all medieval kings after him. Well, what is the title that the Pope gives to Charlemagne? Because there's this famous moment when the Pope acknowledges Charlemagne as the preeminent European king and crowns him on Christmas day of the year 800. And the title that the Pope gives to Charlemagne is Charles, that's Charlemagne Augustus, Emperor of the Romans. He's giving him the title of Augustus because that's the nicest thing he can think of to say to Charlemagne is to say, "You're the new Augustus. You're emperor of the Romans." So, that image is hugely powerful, and that persists on and on. I mean, even the literal names of most rulers afterwards come from this. In Russia, the Czars are Caesars. That's where Czar comes from. Prince comes from Princeps, first citizen, one of the titles. Emperor comes from Imperator, one of the titles of Augustus. When Napoleon becomes Emperor, what does he call himself? First consul, which is like Princeps, and then he calls himself emperor. I mean, everybody wants to be this kind of ruler. So, he's the paradigm of this for the rest of history. And you can see that as both a positive and a negative legacy. It's like Alexander. I mean, everybody wants to be the next Alexander. Now, nobody does become the next Alexander. Nobody's as successful as him. But a lot of people try and you can see that either as, oh, inspirational or awful, because lots of people killed lots of other people and started lots of wars trying to be the next Alexander. At least Augustus has this

notion of good rulership that you're not just a great powerful person, but you're a good ruler somehow.

Lex Fridman
Can you speak to the kind of political system he created? So, how did he consolidate power as you spoke to a bit already, and what role did the Senate now play? How were the laws? Who was the executive? How is power allocated and so on?

Gregory Aldrete
Yeah, so once the empire begins, let's say 27 BC, so in 31 BC, Octavian defeats Antony at the Battle of Actium. So, that's the moment he becomes the sole ruler. And then, in 27 BC, a couple years later, he settles the Roman Republic is how it's referred to, which is basically sets up his system. And in this system, on the surface, it all looks the same. You still have a Senate, each year there's elections, all the Roman citizens vote, they elect magistrates who notionally are in charge of Rome. But as I mentioned off to the side, you now have this figure of Augustus who controls everything behind the scenes, and that continues. So, this political system he establishes continues. And in reality, I would say Augustus at that point is again a king. It really is one man controlling the state. Even if notionally, it's still continuing as a republic. They are electing magistrates, but the magistrates only do what the emperor tells them. But it's this formal versus informal power, the formal structure as a republic, the way things really work informally is it's a monarchy. Now, if you asked Augustus, what did he do? Did you become a king? He said, and he says this explicitly, "No, no, no. What I did is I refounded the Roman Republic." That's how he phrases it.

Lex Fridman
This guy is good at framing.

Gregory Aldrete
He's so good at propaganda. I'll give you one more example that I love. Augustus actually writes his own autobiography, which is very rare and survives. So, here we have the autobiography of one of the pivotal figures in history. And if you had conquered the world, let's say starting at the age of 18, what would you call your autobiography? It'd be something like, "How I conquered the world," right? Augustus calls his, derace quae feci, which the best literal translation is stuff I did. I mean, it's the most modest title for someone who could have given the most grandiose title. And the first line of it is at the age of 18, when the liberty of the Republic was oppressed by a faction, I defended it. Now, the way I might phrase that sense is at the age of 18, I fought a civil war against another Roman and conquered the Roman state. But no, he defended the liberty of the republic when it was oppressed by the tyranny of a faction. That's propaganda, and it works.

Lex Fridman
It is propaganda, but is there a degree to which he also lived it? That kind of humility, establishing that humility is a standard of the way government operates. So, it's not a literal direct balance of power, but it's a cultural balance of power where the emperor is not supposed to be a bully and a dictator.

Gregory Aldrete
I would really like to know what Romans of his time thought. If you were alive at that moment, would you honestly believe, "Oh, okay, we've got this guy Augustus, but he's brought peace. He's just keeping in charge for a while until things settle down. We've just had a hundred years of civil war. I think we still have a republic," or would you say, "Nah, we have a king now." And I don't know what the answer to that is. I will tell you that it takes 200 years before we have the first Roman source that bluntly calls Augustus a king. So, 200 years, it takes the Romans 200 years to admit to themselves. And that's a guy who comes along 200 years later and says, "Hey, Augustus, he looks like a king. He acts like a king. Let's just call him a king, because he had every aspect of a king except the patriae Title."

Lex Fridman
Maybe I'm buying his propaganda, and maybe I'm a sucker for humility, but I suspect that the Romans bought it, and I also suspect he himself believed it. I mean, there is such thing as good kings. There's kings that understand the downside, the dark side of absolute power and can wield that power properly.

Gregory Aldrete
And to give both sides here, Augustus wasn't all nice. I mean, there were moments where he was extremely cruel. So, early in his career when he's still fighting, when he's... for power, he goes all in on prescriptions, which is where he and Anty and other people basically post lists of their enemies and say, "It's legal for anyone to kill these people." And so, hundreds are massacred there, including Cicero, the Great Order is prescribed and killed. There's moments when he's really cruel. One slave once gets him angry, and he has him tortured in particularly cruel manner. So, I mean, on the one hand, he had this clemency. On the other hand, he could be really hard-nosed and hard edged, and I think he was a very calculating person.

Lex Fridman
Yeah. So, the thing I would love to know is what he was actually behind the mask.

Gregory Aldrete
Yes. I mean, that to me is one of those, if you could invite a historical person to dinner or whatever, I want to know what the real Augustus was, what he really thought he was doing, because he's an enigma and he has this great moment when he dies. What's his dying lines on his deathbed? He says, "If I've played my part, well dismiss me from the stage with

applause." So, he's seeing himself as an actor that his whole life was acting this role, which is again, all that manipulation and public image. He was brilliant at that. But who's the real guy? What was behind that image?

Lex Fridman
And by the way, as long as we're talking about brutality, I think you've mentioned in a few places that there's a lot of brutality going on. At the time, Caesar just killing very large numbers of people brutally.

Gregory Aldrete
I mean, Caesar, his campaigns in Gaul are interesting because for a long time they were held up as, oh, genius general. Look at the amazing things he did. But another way to view it is he provoked and he truly provoked a war with people who were not that interested in fighting Rome and just repeatedly attacked different tribes for the sole purpose of building up his career, his prestige, his status, gaining territory, making himself wealthier. And he basically conquers all of modern France and Belgium and some of Switzerland. So, this is a big chunk of Europe gets conquered. Hundreds of thousands of people killed, hundreds of thousands of people enslaved to further one guy's career. I mean, if you wanted, could call Caesar a war criminal, and I think that wouldn't be unfair. But on the other hand, some people see him as a great hero. I mean, to talk about history and its reception, it's quite interesting to see how Caesar has been viewed by different generations. So, at different points in time, the received wisdom on Caesar was very different. So, back in the, let's say the 1920s or '30s, there were a number of scholarly things written which looked at Caesar as an admirable figure. He's a strong man who knows what Rome needed and was going to give it to them. And of course, that's the era when fascism was trendy and was seen as a positive thing. And then, you get Hitler and World War II and all of sudden fascism is not so favored anymore. And then, in that post-war generation, all of a sudden Caesar's terrible. He's a dictator. He is destroying the Republic. So, often histories that are written tell you a lot more about the time they're written than they do about the subject they're written about.

Lex Fridman
Do we know what did Hitler or Stalin think about the Roman Empire?

Gregory Aldrete
I mean, certainly they borrow a lot of the trappings. I mean, Nazi, Germany borrows a lot of iconography from ancient Rome. I mean, they carry it around little military standards with eagles on them, just like the Romans. But then everybody does that. I mean, the US has eagles as their standards. Mussolini had them. Napoleon had eagle standards for his military. So, a lot of people like that imagery.

Lex Fridman
You mentioned Cicero. He's a fascinating figure. On the topic of Roman oratory, who was Cicero?

Gregory Aldrete
Cicero was a new man. So, he's someone who didn't have famous ancestors. So, he was at a disadvantage. And I think Cicero is really interesting for a couple of reasons. One is he wrote an incredible amount. I think we have almost more words from Cicero than any other author that survived, and it's all kinds of stuff. It's philosophical treatises, it's books about how to be a good public speaker. He published volume after volume of his personal letters to his friends. He published these things. So, there's tons of stuff from him. And secondly, he's interesting because he lived at this incredibly important time in the late Republic when things were falling apart. But he seems to have been born with none of the natural advantages that all these other people had. So, he was a lousy general. He didn't come from a wealthy family. He didn't come from a famous aristocratic family. He didn't have a lot of these advantages, but yet he ended up being right at the center of things, rose to the highest elected office in the Roman state on the basis of one skill. And that was his ability with words, his ability to get up in front of a crowd and persuade them of what he wanted them to believe. And oratory, public speaking was absolutely central to life at Rome. There were just all these events where people had to get up and give speeches. So, in courtrooms, at funerals, in the Senate to the people of Rome, at games, I mean just constantly, there were these opportunities for giving speeches. So, if you are good at this, that was a huge advantage in your political career. And Cicero was the best. He was arguably the best public speaker of all time. Some people claim. And he lived right in this era, and he parlayed that skill with words into this very successful political career. He was one of the guys involved with all this stuff with Caesar and Pompey and all the other things going on, Octavian, Mark Antony.

Lex Fridman
And you've written, which is fascinating. It's fascinating when the echoes of people from a distant past are seen today. The same stuff is seen today, not just like some of the beautiful legal stuff that we've been talking about, but the tricks, let's say the shitty stuff we see in politics. So, many of the rhetorical tricks you wrote, such as mudslinging, exaggeration, guilt by association, ad hominem attacks, name-calling, fearmongering, us versus them, rhyme, and so on and so forth. So, I'm guessing it worked given that we still have those today.

Gregory Aldrete
Yeah, I mean, one of the things Cicero did is he wrote at least three of these handbooks about how to be a good public speaker. So, we know a lot about that. We have his own speeches that survive. And then, we have later people after Cicero who wrote about what Cicero did too. So, we know a lot about what he did. And the key to Cicero's whole enterprise

about persuading an audience, let's say either it is speech to the people or in the courtroom is Cicero believed that people are fundamentally ruled by emotion. So, if you can touch their emotions, all sorts of other things become less important. If you can get a jury emotionally worked up and fear, anger, or particularly powerful there, then the facts might not matter, the truth might not matter, evidence might not matter, reason might not matter. Emotion is the key to everything. So, Cicero used what I would arguably call a lot of tricks to get his audiences emotionally riled up. And you can just go through these and they're all the stuff you were saying, name-calling, mudslinging, us versus them arguments, ad hominem attacks, incredibly sophisticated. All this stuff that we think of today is, oh, very sophisticated techniques for propaganda and persuasion. It's not new. People aren't coming up with that much that's new outside the realm of technology, human nature is the same. Cicero understood human psychology. He knew how to play on people. He knew how to play on their emotions, and he would do just... I mean, I want to say hilarious, but they're depressingly hilarious things. He thought it's important to use props. So, he said, "People are visual. They will respond emotionally to visual things in a way that just words alone won't work." So, he says, "An order is just like an actor and like an actor he has to prepare his stage and use props and things as visual cues to stir up the audience. So, for example, once he was defending a man in a court case who had just had a new baby born to him, and Cicero literally delivered the defense oration for this guy while cradling his newborn son in his arms, you can imagine, "Oh, cute little baby. Jury, how could you find him guilty and leave this cute baby without a father to take care of him?" Another time, he was defending a guy who had a photogenic son, a young boy, and Cicero literally propped up the kid behind him while he was giving the speech, and again said- Literally propped up the kid behind him while he was giving the speech, and again said, "Look at his eyes brimming with tears, thinking about his father being punished. How could you leave this wonderful boy without a father to care for him?" Another time someone didn't have a photogenic kid, so he propped up his old parents in the courtroom and said, "Look at this nice old couple. You won't want to take their son away." That kind of stuff; I mean, it's manipulative. Cicero, by the way, I should say also had philosophical beliefs about defending the republic and such. But he wasn't above using these things. Even though he may have had altruistic or high notions of what he was doing, he also wasn't above using these kind of rhetorical tricks.

Lex Fridman
Also you mentioned to me that you studied the gestures they used.

Gregory Aldrete
Yeah.

Lex Fridman
This is one of those on the theme of extremely interesting details of life.

Gregory Aldrete
This was actually my dissertation, and it was my first book as well.

Lex Fridman
That's amazing. That's amazing.

Gregory Aldrete
Again, I told you I like practical stuff. This all started with I kept reading about people like Cicero giving speeches in ancient Rome, lots of speeches. They would give a speech in the Forum with 10,000, 20,000 people. And the thought occurred to me, "Well, in ancient Rome, you don't have microphones. You don't have loudspeakers. So how does someone give a speech outdoors in a windy place, not acoustically sound, to 20,000 people?" They just can't hear you. Part of the answer, it turns out, well, part of it's oratorical training. You learn how project your voice. But some of it too is that the Romans actually had this system of gestures that orators like Cicero would use to accompany their speeches. And what I ended up doing is combining two types of evidence again. So I looked at the rhetorical handbooks like Cicero's. And also there's this guy, Quintilian, who lived about 100 years after Cicero, who wrote this long thing called the Institutio Oratoria, which has a description of all types of oratorical stuff, including about 40 pages on gestures. So he actually says, "When you put your fingers like this, it means such and such." It turns out Roman orators had a system of sign language that they would use to augment their speeches. But here's the fun part. It wasn't like modern American Sign Language, where a gesture means the same thing as a word. Instead; and this goes back to Cicero; a certain gesture would indicate a certain emotion that you were meant to feel when you heard the words. It's like your body is adding an emotional gloss to your speech. You're saying words, and then you're indicating how you think those words should make you feel. And even more fun, the Romans believed that, "If I make certain hand gestures, you will almost involuntarily feel certain emotion." So if you're skilled, you can manipulate your audience by playing on their emotions. This might sound weird or improbable, but the metaphor that Cicero himself uses is he says, "Think about music. Everybody knows that certain musical tones will make you feel a certain way." Think of movies today: in a horror movie, they're going to play strident, tense music. In a romantic scene, you're going to have strings, and it'll make you feel a certain way. When you hear the Jaws theme, you feel tense. Cicero said, "The orator's body is like a lyre." A lyre is a musical instrument. "And you have to learn to play on your own body as a musical instrument to affect the emotions of your audience."

Lex Fridman
I think he might be onto something, especially given how central public speaking was in Roman culture.

Gregory Aldrete
Yeah. And a lot of the Roman oratorical gestures: I could probably do some, and you could probably guess what emotion they're meant to be. For example, there's one where you hold up your hands to the side and push like this. This is the gesture, and what that means is mild aversion. I don't like something. Now if I couple this with turning my face to the side, that; pushing off to one side, turning my face away, it's a strong aversion. That's like fear or something. If I clench my fist and press it to my chest, that's anger or grief. If I slap my thigh, again, that's indication of anger. So a lot of these make sense. I mean, they're natural gestures. Now, some are really weird and artificial. I mean, one of my favorite of these is if you hold your hand up open, then curl the fingers in one by one, and then flip it out; this sort of thing; that, to the Romans meant "wonder," which you sort of see. But again, if you've been raised in a societal context where you're used to the notion that this gesture means this emotion, when someone does it, you're probably going to feel that emotion.

Lex Fridman
Yeah. It's like memes today: if it goes viral, [inaudible 02:12:49]

Gregory Aldrete
You know what it's supposed to mean.

Lex Fridman
It percolates through the culture.

Gregory Aldrete
It has that affect.

Lex Fridman
It has power. I mean, and it's actually interesting that we don't use gestures as much in modern day.

Gregory Aldrete
Well, I mean for me, I just love analyzing modern political figures in terms of their body language.

Lex Fridman
Yes.

Gregory Aldrete
Because how you deliver a speech is often more important than what you say. In fact, in the ancient world, the most famous Greek orator was a guy named Demosthenes. And once a guy came up to Demosthenes and said, "Demosthenes, tell me: what are the three most important things in giving a speech?" And Demosthenes said, "Well, they are delivery,

delivery, and delivery." That even the most brilliant speech, if accompanied by a boring delivery, is going to be less effective than a terrible speech given in an engaging and exciting or funny way.

Lex Fridman
Speaking of modern day and gestures, what do you think of Donald Trump, who has these very unique kind of gestures? I don't know the degree to it's true, but he uses these handshakes when he pulls people in, that kind of stuff. What do you make of that?

Gregory Aldrete
I mean, Trump gesticulates a lot, but it's a fairly narrow set of gestures. I mean, if you watch him for a bit, he kind of has the same small set of gestures. I want to say they're not natural in that they're not illustrating what he's saying. It's more just punctuation points. I think of his as more kind of these punctuation points for just going along with what he's saying. There are speakers who truly can use their hands and arms and faces creatively. You watch them and it's really enhancing the speech. I mean, just historically, Martin Luther King: he's famous for a lot of good speeches, content. He was a good gesticulator, too. He knew how to use his body. On the other hand, Adolf Hitler was a phenomenal gesticulator. If you watch some of his speeches; even just turn off the sound and watch them; he's doing all kinds of stuff. And he's really emphasizing his points in a very creative way. This is what's fascinating about oratory and public speaking, is it's this two-edged sword. You can use these techniques for good, or you can absolutely use them for evil. You know?

Lex Fridman
Yeah.

Gregory Aldrete
The very same techniques in the hands of MLK, you say, "This is wonderful, this is fantastic." In the hands of Hitler, you say, "This is awful. Look, he's persuading a nation to commit atrocities."

Lex Fridman
I encourage people to watch the speeches of Hitler. The oratory skill there, to be able to channel the resentment and the frustration of a people, and control it and direct it to any direction he wants through speaking alone.

Gregory Aldrete
Yeah, it's the visual embodiment of the words, where he's talking about Weimar Germany being taken advantage of, supposedly, and all this stuff. You're right, he's channeling the resentment of the people and using that to his personal advantage and for cynical, evil really, purposes. But oratory is like that. The question I always end up asking my students,

after studying Cicero and all these techniques, I say, "Okay, this is great oratory. But do you like this? Is this good that this works on human beings?"

Lex Fridman
I remember Noam Chomsky once was asked, "Why do you speak in such a monotone way?" And he said, "Well, I want the truth of my statement, the content of my statements to speak; that I don't want you to get deluded by me because I'm such a charismatic and eloquent speaker. The more monotone I speak, the more you'll listen to the content of the words."

Gregory Aldrete
Right. I want you just focusing on the content and not being distracted. I'll tell you also with Cicero: one of the things that he and other people who write about Roman oratory do is to say, "And you can do this stuff badly," in which case it backfires horribly. So you can have people who attempt to gesticulate. Again, modern politicians, you'll see this sometime where they feel like, "I'm supposed to be making hand gestures," and they're terrible at it. And it undercuts it. Cicero and Quintilian give some very amusing examples from ancient Rome. He says, there was this one guy who when he spoke, looked like he was trying to swat away flies because there were just these awkward gestures. Or another who looked like he was trying balancing a boat in choppy seas. And my favorite is there was one orator who supposedly was prone to making, I guess, languid supple motions. They actually named a dance after this guy, and his name was Titius. And so Romans could do the Titius, which is this dance that was imitating this orator who had these comically bad gesticulation. So not enough gesticulation is a problem. Too much gesticulation is a problem. You have to hit the sweet spot. It has to seem natural. It has to seem varied. It has to conform to the meaning of the words, not distract from it.

Lex Fridman
Yeah, natural, authentic to who you are.

Gregory Aldrete
Authentic.

Lex Fridman
Which is when people try to copy the gestures of another person, it usually doesn't go well.

Gregory Aldrete
Right.

Lex Fridman
You have to interpret, integrate into your own personality and so on.

Gregory Aldrete
But gestures is really fun.

Lex Fridman
It's fascinating.

Gregory Aldrete
I enjoyed my dissertation a lot doing that. Because what I was trying to do there was to literally reconstruct them, so to say, "What were the actual gestures?" I did that by comparing the literary accounts of the handbooks with, again, Roman art: looking at statues of Romans and things, and just trying to say, "Okay, what were some of the gestures they actually used here?"

Lex Fridman
And in that way, the people from that time come to life, in your mind, in your work, which is fascinating.

Gregory Aldrete
Well again, it's this pragmatic thing. I want to know, "Okay, how does this work?"

Lex Fridman
Could we talk about the role of religion in the Roman Empire? What's the story there?

Gregory Aldrete
I mean, religion's interesting. Because in my mind, the rise to dominance in a lot of the world of monotheistic religions is one of the huge turning points, because it's just such a different mentality. I mean, it's very, very different where you say, "There's one God, and it's my God," versus, "Okay, I believe in this god, but there's an infinite number of legitimate gods." And nowadays, particularly in the West, we tend to view the monotheistic perspective as the norm. But for more than half of human history, it was not. It used to be the notion in a lot of Roman history, up until about 300 AD, the idea was, "Well, there's just a ton of gods floating around. Maybe you worship that one, and I worship these two that I like. And the guy across the street worships the oak tree in his backyard, and it's all good." They're all legitimate things, versus, "Oh, no, no, no. Now there is one God, and only one God that's the correct answer." And as soon as you do that, religion becomes foregrounded in your decision making much more. I mean, the Romans had religion, but it wasn't really driving anything, if you know what I mean. It was auxiliary to things, rather than a central force. For a lot of Roman history, you had standard, I guess, pagan polytheism where there's a bunch of gods. There's certain gods who are associated with the Roman state. There would be prayer said to those gods on behalf of the Roman state. But you weren't trying to execute the will of Zeus or something, or Jupiter or Mars or anybody else. And in your private life, it was the same thing. You might ask certain gods for help, but it wasn't as much of a dominant thing

in your own existence. So I think that's a real transition point where religion started to become so foregrounded. And as soon as you get the monotheistic religions; Judaism, Christianity, and Islam in particular; it really shifts how people start to think about themselves in relationship to the world around them.

Lex Fridman
So Jesus was born during the rule of Emperor Augustus.

Gregory Aldrete
Yep. Which is kind of neat, that really influential people in the realm of political events and religious events co-existed. What are the odds?

Lex Fridman
I mean, yeah, there's certain moments in history where just a lot of interesting, powerful people come together and make history. And he was crucified under Emperor Tiberius' rule.

Gregory Aldrete
Yep.

Lex Fridman
Why were the ideas of Jesus seen as a threat by the emperor?

Gregory Aldrete
The thing that causes conflicts between the Romans and Christians is a little bit strange. It's all with this where the Romans had a tradition of on the emperor's birthday, saying a prayer basically wishing him good luck. But technically it's in the form of sacrificing to that part of the emperor that might become divine after his death. To the Romans, this is the equivalent of a patriotism act: saying The Pledge of Allegiance or something to the country. But of course, to Christians, this is worshiping another God. And I think there's almost a failure of communication here, that the Romans just at least initially didn't quite understand. This is really problematic for these people, because they're coming from a polytheistic perspective where, "Yeah, everybody has different gods. So what? This isn't a religious problem. This is a political one. Then why won't you send good wishes to the emperor? If you're a loyal Roman, this is something you should want to do." And many of the early Christians, I think would've been fine with that. But it took the form of what they were asked to do was to basically worship another God. And that was the sticking point. And this is where I think movies have warped some of our images of Roman history: that Hollywood loves to depict very early Christians. I'm talking, like, first 200 years here after the ministry of Christ as a group, that all the Romans were obsessed with, that they were constantly trying to persecute and all this. Honestly, I think the Romans at that point were more just indifferent or didn't know what was going on. And if you look at some of the primary sources of that time, I mean, there's this very famous letter by a guy named Pliny who was a Roman

governor of a province in the East. He had the habit of writing letters to the Roman emperor at the time, who was Trajan, every time he had a problem with being governor. This is great. This is the two highest governmental officials in the Roman world hammering out policy between them, the emperor and one of his governors. This is about 100 years, 100 AD about. And Pliny says, "Hey, Emperor, I had this issue. I had these people come before me called Christians. I don't quite know what to do with them. What should my policy be? Here's what I know about them." And what he knows is almost nothing. I mean, it's this almost comic-like garbling. " They have this weird thing where they get together on some day of the week and they swear oaths to one another not to do bad stuff," which is of course his garbled understanding of the 10 Commandments. "And then they have breakfast together and they eat food," and this is communion. But he doesn't get that that's what's going on. And so he's really ignorant. But I think that the broader point is, okay, this is one of the best-educated, best-traveled Romans who has the most experience in the empire, has been all over the empire, and what does he know about Christianity? Basically nothing. So if one of the best-educated, most widely traveled guys really doesn't know much about them, that suggests that not many people did at this point in time.

Lex Fridman
At this time, was a fringe movement that really did-

Gregory Aldrete
Yeah, very fringe. I mean, it was one of hundreds of little mystery religions, the Romans thought of it as. These are religions that have some sort of revealed knowledge and that make more personal appeals to people. Now, stepping back from this in a broad way, I think you can say that Christianity really was different in some ways, and had some things that maybe the Romans should rightfully have viewed as a threat. I mean, the Romans are a people very focused on this world: citizenship, what you do. Christianity, in essence, has a focus on the next world. So this world isn't as important as what you're setting yourself up for. And even worse, from a Roman perspective, I'm kind of saying, "Okay, if I were a Roman," Romans are all about making distinctions between people. Citizen, non-citizen, man, woman, free, slave. Christianity comes along and says, "In God's eyes, you're all equal." Now, that's a pretty problematic idea if you're deeply invested in Roman hierarchy. And I think it is no surprise that among the earliest converts to Christianity are women and slaves, and in particular, female slaves. Now, who are they? They're the people at the rock bottom of the Roman hierarchy of status, which the Romans are obsessed with status. But here's a religion that says, "That doesn't matter." And in that same letter to Pliny, Pliny says, "Okay, in this group of Christians I've heard about, their leaders are two female slaves they call 'deaconesses.'" Now, this is really early. This is before the church exists, right? There's no church structure yet. And who is leading the local congregation of Christians? Two slave women. So that's an interesting moment, and that's not necessarily the image we get of early Christianity. But you can see how for people in this social structure, that would be very appealing to them. And in some ways, yeah, it is sort of a threat to the Roman system

because they're challenging it. Now, the irony is, of course, 300 years after the life of Christ, the emperor converts to Christianity. And another 100 years later under Theodosius, it becomes the official religion of the Roman Empire. So all of a sudden you have this flip-flop, where now the state itself is not just converted to Christianity, but actively promoting it and now persecuting pagans. And the reason the emperors do that is one of the biggest problems for emperors at that point in time is legitimacy. That there's tons of civil wars where you have lots of different people saying, "I'm emperor." So lots of generals declaring themselves emperor. Now under a polytheistic religion, you're all just fighting. It doesn't matter. But if you say there is only one God, then if that God picks someone to be His emperor, they're the only legitimate emperor. Right? So there is a real advantage to emperors now becoming Christian. Because they can say, "We're now a Christian empire and there's only one God, and I'm the guy that God picked to be emperor, that means all these other people claiming to be emperors are illegitimate."

Lex Fridman
Do you think that? Or is there other factors that explain why Christianity was able to spread?

Gregory Aldrete
Well, that's why it's appealing to the emperors. And we're talking here, I mean, the religious answer is people see the light, right? It's a faith-based thing. I'm looking at this as a historian. So putting aside religious feeling and saying, "Okay, if I'm doing an analysis of this as a social phenomenon, what would be appealing to people?" And there is that very compelling reason for emperors to want to go to Christianity because it helps them with their biggest problem, which is legitimacy. Now, if you're an ordinary person, what is the appeal of Christianity? Well, we already looked at a couple of them. One of them is that it promises you a reward in the afterlife. I mean, the Roman and Greek notions of the afterlife aren't that appealing. Either you just turn into dust, or at best you turn into this kind of ghost thing that floats around something that looks like a Greek gymnasium, which is like a bunch of grassy fields. It's not so hot. So here you're offered the idea of, "Oh, you go to paradise forever. That sounds really good." And secondly, for a lot of people in Roman society, that notion of, "Here's something that says I'm valuable as a human being. It doesn't matter whether I'm free or slave. It doesn't matter whether I'm Roman or non-Roman. It doesn't matter if I'm man or woman. Here's something that says I have equal value." That's enormously appealing. And finally, early Christians, I mean, they honestly, a lot of them do good works. They take care of the sick, they feed the poor. I mean, if you look at Jesus in the Sermon on the Mount, that's the stuff He really hammers. If we look at the words of Jesus when He says, "What do you do to be a Christian?" A lot of it is take care of the unfortunate, take care of people who are sick, take care of people who are starving. And a lot of the early Christians really take that seriously. They are helping people out. So that's appealing.

Lex Fridman
They're the good kind of populist, and populist messages spread. Let me ask you about gladiators.

Gregory Aldrete
Switch our pace here.

Lex Fridman
What role did they play in Roman society?

Gregory Aldrete
I mean, okay, gladiator games obviously become a popular form of entertainment. And they're one of the ones that's captured people's imaginations for all sorts of reasons. I mean, it's dramatic. But also I think it's that apparent contradiction. That in so many ways, Roman society seems familiar to us. In so many ways, it seems sophisticated and appealing. Law is wonderful, all this. But yet, for fun, they watched people fight to the death. So how do you reconcile these things? Gladiators, I find very interesting because they're an example of what historians call status dissonance. It's someone who in society has high status in some ways, and very low or despised status in another. So gladiators, most of them were slaves, the lowest of the low in Roman society, right? Also, they're fighting for other people's pleasure, and dying sometimes for other people's pleasure. And the Romans had a real thing about this: your body being used for others' pleasure. Even a humble working person who hired themselves out for labor, the Romans thought that was innately demeaning, because you're using your body for someone else's benefit or pleasure. They didn't have this notion of the dignity of hard labor or something. They thought the only noble profession was farming, okay, because there you generate something and you're producing it for yourself. But if you work for someone else, you're demeaning yourself. And gladiator's the worst of the worst, right? You're performing for someone else's pleasure. So on the one hand, they're very low status. But on the other hand, successful gladiators get famous. People admire them, women find them attractive, they're celebrities. This is the status dissonance. You have these people who, on the one hand, formally are very low status in society, but yet are very popular on the other hand. Another kind of myth about gladiators is that they were just dying all the time. I mean, you watch movies, and again, they'll always throw a bunch of gladiators and they all die. I think some scholars did a study of, like, 100 fights we know of where we know some details. And I think 10% of those ended in the death of one of the people. So gladiators are a lot more like boxing matches, where you're watching a display of skill between two people who are more or less evenly matched in terms of their abilities. And probably they'll survive, though there's a chance that one of them might get injured. In fact, one might die. Having said all that, in the end, you really are having people fight and potentially die for the pleasure of an audience. And anthropologists and Roman historians like to speculate, "Why did the Romans do this?" The Romans address it. I mean, there's a famous thing where a Roman says, "We Romans, we're a violent people.

We're a warlike people. And so it's fitting that we should be accustomed to the sight of death and violence." Kind of works. There's a more symbolic interpretation that says, "The amphitheater is an expression of Roman dominance," a symbolic expression. Because what you have are all segments of Roman society gathered together to control the fate of others. You have foreigners, you have wild animals, you have criminals, you have other people. And we are symbolically asserting our dominance over those groups by determining, "Do you live or do you die?" And that kind of works, too. And the cynical one is, humans like violence. I mean, when people watch a hockey game, what gets them most excited? The fight. When people watch car racing, there's a crash. What's going to be shown on the news? It's the crash. There's something dark in human nature sometimes that likes violence. And maybe the Romans are just being more honest about it than we are.

Lex Fridman
I think Dan Carlin has a really great episode called Painfotainment. I think in that episode, he suggests the hypothetical: that if we did something like a gladiator games today to the death, that the whole world would tune in.

Gregory Aldrete
Yeah.

Lex Fridman
Especially if it was anonymous. We have a thin veil of civility, underneath which would probably still be something deep within us would be attracted to that violence.

Gregory Aldrete
Yeah, I mean, yeah, is it human nature? Why do people slow down when there's a car wreck and try and see what's happening? On the other hand, to be fair, I mean there were Romans at the time who morally objected to them and said, "This is morally degenerate to take pleasure in this, and that's wrong." So I think in all eras, you have a diversity of opinions. There's no unanimous take on what this is or what this means.

Lex Fridman
Who usually were the gladiators? Was it slaves? Was it-

Gregory Aldrete
Well, the most common source, again, is prisoners of war. If you conquer some people and they seem to be warlike, you might well consign some of them to fight in the arena. And the other thing about gladiators is they were highly trained professionals. The gladiator schools who trained them were spending a lot of money to train these people. And it wasn't just, "We take some guy and throw them into the arena," like you see in movies all the time. These were people that you'd invested a lot of money, and that's why you don't really want to see them killed. But yeah, mostly they're prisoners of war. I mean, in very rare instances you

might have a free person volunteering, or even selling themselves to fight as gladiators. But much more common was that. And what's interesting is some people wouldn't do it. I mean, there's a lot of instances of gladiators refusing to fight and committing suicide, which you don't hear. There was one German who was supposed to fight as a gladiator. Instead, he stuck his head between the spokes of a wagon that was spinning and snapped his own neck. There were a group of 29 Germans who all said, "We're not going to fight for the Romans' pleasure." And they strangled one another the night before they were supposed to fight. So I mean, you have people sort of objecting to being complicit in this kind of performance as well,

Lex Fridman
And they also had interest in animals.

Gregory Aldrete
Yes.

Lex Fridman
Humans fought animals, exotic animals.

Gregory Aldrete
And animals fought animals.

Lex Fridman
Animals fought animals.

Gregory Aldrete
The Romans were a little weird with their animal thing. They loved exotic animals, but mostly they liked to see exotic animals die. I mean, there was an enormous industry collecting wild beasts, transporting them to Rome: which is no easy matter to transport elephants and giraffes and rhinos, particularly in this era of technology. But they were draining Africa and bringing lions and all these things and sacrificing them.

Lex Fridman
And what about the different venues? I mean, there's the legendary Colosseum. What is the importance of this place?

Gregory Aldrete
Well, the Colosseum's real name is the Flavian Amphitheater. It's interesting because for a long time, Rome always had a chariot racing arena, the Circus Maximus. But it didn't have a permanent gladiatorial venue until relatively late, till about 80 AD, during the reign of the Emperor Vespasian. He built this thing. He built the Flavian Amphitheater; he was from the Flavian family of emperors. And he did it as a deliberate act of propaganda. Before him had

been Nero, who was seen as a crazy or bad emperor. One of Nero's indulgences is he had built this enormous palace for himself called the Golden House. It was kind of this pleasure palace with 50 dining rooms and all this stuff, and it was basically wasting a ton of money on him. So right on the site where Nero had his Golden House, Vespasian says, "I'm going to erect a new building on top of it that's going to be for the pleasure of the people." So it was very much a political statement, that "My dynasty is going to be about serving Romans, not serving ourselves." That's why he builds the Flavian Amphitheater. The funds he uses from it is basically from looting Jerusalem. Because the other thing he had done just before this is he had sacked Jerusalem and destroyed the temple there, in fact, he and his son Titus. And so this is what he now builds in Rome is his gift to the people of Rome.

Lex Fridman
But it's interesting to think about that place, to think about that relationship with violence across centuries for spectacle, watching people fight. And like you said, only 10% of the time it led to the death. But I read that still a lot of people died. A lot of gladiators were killed.

Gregory Aldrete
Oh, yeah.

Lex Fridman
There's numbers there that's crazy. I read a full 100,000 dead. This includes gladiators, slaves, convicts, prisoners, and so on. That's a lot of people.

Gregory Aldrete
The Flavian Amphitheater is really interesting too, just as a piece of technology, and as influence on later world. I mean, almost every sporting arena today owes something to the Flavian Amphitheater, the Colosseum, in terms of construction. It was amazingly sophisticated building. I mean, it had retractable awnings and elevators and ramps that things could just pop up into the arena from below. And it- ... just pop up into the arena from below. And it had very well-designed passages where everybody could file in and file out very efficiently, and they were all numbered. So I mean, it's one of, I think, the most influential buildings in history, just because of the way that all these buildings we go to today, they're all kind of variants on it and using some of the ideas from it.

Lex Fridman
And the Romans took their construction seriously.

Gregory Aldrete
Oh, yeah. They were good at that. So they were excellent engineers. And the Romans were excellent engineers, especially when it came to what you might think of as humble stuff. I mean, today, we tend to think of, oh, a Roman building as shining white marble, right? Well,

the core of that building was probably concrete, and the marble is just a superficial facade. And if you think about the Colosseum in Rome today, all the marble has been stripped off that building. And what you see is the concrete core, the structural core that's left, and the Romans, I mean, they didn't invent concrete, but they just used it more creatively than anyone had before. And if you look at buildings like the Greeks built, they're all rectilinear, they're all rectangles or squares, and they always have a lot of columns because you need to hold the roof up. The Romans, because of their use of concrete, could build wooden frames, they could have curves, they could have domes, they could have all kinds of stuff. And it just explodes the architectural possibilities. They also made a lot of use of the vault. So if you cut rocks and arrange them so that they form a curve, you could have big vaulted spaces. And they were just brilliant with their mix of things. I mean, the Pantheon is the best preserved Roman building, and it's another brilliant building, incredibly influential. I mean, every capitol building in the world or museum is an imitation of the Pantheon. The capitol in Washington, D.C., the Capitol in Madison, where I'm from, Wisconsin, Austin, where we are now, they're all Pantheons. It's a big dome with a triangular pediment and some columns on the front. So it's just an amazingly influential building. But it's brilliant because the way it's constructed is the concrete at the bottom of the dome is both thicker and has a denser formulation, so it's heavier where it needs to bear the weight. And then as you get further up the dome, it gets narrower and narrower, and they mix in different types of rock. So at the top, you're using pumice, that very light volcanic stone. So where you want it to be light, it's light, and it's here 2,000 years later. I mean, look around you. How many buildings that we're building` now do you think are going to be here in 2,000 years? I suspect not many.

Lex Fridman
And it's not only that they lasted, but they were beautiful, or at least in our current conception of beauty.

Gregory Aldrete
Yeah, I mean, Vitruvius, his principles are things should be functional and they should be aesthetically pleasing. So that's a winning combination, I think.

Lex Fridman
Yeah, they pulled that off pretty well. If you could talk about the long line of emperors that made up the Roman Empire, how were they selected?

Gregory Aldrete
Oh, boy. We've been talking about Augustus' great achievements and how clever he was with propaganda and all, this is his great failure. So his great failure is that he did not solve was the problem of succession. How do you ensure that the next person who follows you is not just the best person but is qualified? And he fails to do it. So the principle he settles on is heredity. So the nearest blood relative. And he goes through all these people, all these young kids in his family die that he keeps trying to make the heir, and he ends up making his

heir Tiberius, who he never liked, it was his stepson, he didn't like him, but he ends up inheriting it. And the next set of emperors, the Julio-Claudians, which is the family that Augustus starts, they all basically are who is the nearest male relative to the previous emperor. And that's how we get a lot of crazy emperors like Caligula or Nero. And then the next family, the Flavians, the first guy is kind of an Augustus, it's Vespasian, the one who builds the Flavian Amphitheater, and then one of his sons takes over, Titus, who's okay, and then the next son takes over, Domitian, who's nuts again. So heredity just isn't working, And Rome fights a couple civil wars, and in 98 AD, we're 100 years now into the Empire, and they look back at this track record and say, "Okay, we've been picking our emperors by heredity and we've gotten some real duds here, some real problematic people. Is there a way to fix this?" And this is one of the few instances where the Romans, who I keep saying are very traditional and resist change, I think actually make a change and realize we got to do something different. And so the next guy looks around and says, "Okay, forget who's my nearest male relative, who's the best qualified to be emperor after me? I'll pick that person and then I'll adopt him as my son." So they kind of stick with heredity. Now, it's this fake adoption, and you end up with a lot of old guys adopting middle-aged adults as their son, which is a little strange, but it works. And so for the next 80 years, you have only five emperors, and they're often called the Five Good Emperors, they're not related necessarily by blood, they sort of picked the best qualified guy, and they're all sound, competent, good emperors. And the 2nd century AD, from Nerva to Marcus Aurelius, is often regarded as the high point of the Roman Empire. And a lot of that comes from you have political stability, you have a succession of decent guys being emperor who rule relatively wisely, promote good policies. There's other things working to Rome's advantage, but that's good. And then where it falls apart is where the last guy, Marcus Aurelius, looks around and says, "Who's the best qualified guy to succeed me? What a coincidence, it's my own dear son.", who turns out to be a psycho. And then it all goes downhill.

Lex Fridman
And some people place the sort of the collapse of the Roman Empire there at the end of Marcus Aurelius' rule.

Gregory Aldrete
Yeah, so 180 AD is one common date for an early date for the end of the Roman Empire when you... Because from then on, it's a mixed bag of good and bad emperors.

Lex Fridman
At the very least, this period is when the Roman Empire is at its height on all different kinds of perspectives.

Gregory Aldrete
Certainly geographically. I mean, at this point, stretches from Britain to Mesopotamia, from Egypt up to Germany. Like I said, probably about 50 million people within its boundaries.

Within those boundaries, there's relative peace. So I mean, sometimes people talk about the Pax Romana. I mean, the Romans are fighting lots of people, but within the boundaries, you have relative peace. There's relative economic prosperity. I mean, nothing in the ancient world is that prosperous. It's just a different sort of economy, but it's pretty stable. There's no huge disasters happening yet. Some plagues start in Marcus Aurelius' reign. But yeah, this is pretty much seen as the high point of the Roman Empire, and I think it is. I think that there's truth to that.

Lex Fridman
Let me ask the ridiculously oversimplified question, but who do you think is the greatest Roman emperor or maybe your top three?

Gregory Aldrete
Greatest emperor? I tell you what, I'll tell you my favorite Roman who wasn't an emperor, and that's Marcus Agrippa, who was Augustus' right-hand man. So Agrippa's this interesting guy who is extremely talented. He's a terrific general. He's a terrific admiral. He's a great builder. He is kind of like the troubleshooter for Augustus. He's the guy who wins the Battle of Actium for Augustus. So literally, Augustus would not have become the first emperor without Agrippa. When Augustus rebuilds the city of Rome, it's Agrippa that he gives the job to. Agrippa rebuilds the campus marshes. He builds the first version of the Pantheon. He personally goes through the sewers to clean them out. And he just has this great set of qualities that he's very self- effacing. I think he likes power, he wants real power, but he realizes I don't have that kind of clever politician's ability to be the front guy, so I'll just serve my friend, Augustus, loyally. They were childhood friends. I'll win the battles for Augustus and I'll let him take all the credit, but I'll be his number two guy, and that's what I'm good at. And he realizes his limitations. I mean, so many people don't. So many people are like, "Oh, I just want to keep grabbing for more and more and more when it's not something they're good at." And I think Agrippa says, "I'm good to this point and I'll play that role and no more, and that'll give me a lot of power, but I'm not going to press it." And yeah, he's just very hardworking, he's modest, he's self-effacing, he's highly competent.

Lex Fridman
I wonder how many people in history that are like the drivers, the COO of the whole operation that we don't really think about or don't talk about enough to where they're really the mastermind?

Gregory Aldrete
Or the ones who make something possible. I mean, even in this conversation today, you would not have Alexander the Great without his father Philip II having built that army and handed it to him on a silver platter. Octavian would never have become emperor without Agrippa. So they play central roles sometimes. But if I had to pick an emperor, I'd probably pick Augustus just because of his influence and because I admire the thing Agrippa didn't

have, his political savvy, his manipulation of image and propaganda. All that, I find very fascinating. Though I'm not sure he's a great human being, but he's a really interesting figure.

Lex Fridman
Whether he's good or bad, he was extremely influential on defining just the entirety of human history that followed. Probably one of the most influential humans ever. Nevertheless, if you ask in public who the most famous Roman emperor is, would that be Marcus Aurelius potentially?

Gregory Aldrete
I don't know.

Lex Fridman
He's up there.

Gregory Aldrete
That's a good question.

Lex Fridman
Right?

Gregory Aldrete
He's real famous because he was a stoic philosopher and he wrote this book, the Meditations.

Lex Fridman
I mean, it's interesting. Stoicism as a philosophical ideology had a role to play during that time. I mean, the tragic fact that... Did Nero murder Seneca?

Gregory Aldrete
Yes.

Lex Fridman
Well, he drove him to suicide, let's say. There's a lot of interesting questions there, but one is the role, especially when it's hereditary, the role of the mentor, who advises who with the Aristotle and Alexander the Great, that dance of who influences and guides the person as they become and gain power is really interesting.

Gregory Aldrete
Well, I mean, one of the big questions with the Roman emperors, and we've been talking about some of them, is why did so many seem to be either crazy or just sadists? I don't know

that there's a good answer to that. I mean, people have theories. Oh, Caligula got a brain fever and changed after that or something. But I think there's a lot of maybe truth in the notion that the ones who seem to go craziest quite often are the ones who become emperor at a young age. And there is something about that old cliche that absolute power corrupts absolutely, especially if your own personality isn't really fully formed yet. You know what I'm saying? I think take anybody when they're a teenager, if you all of a sudden said, you have unlimited power, what would that do to you? How would that warp your personality? I mean, look at all the... [inaudible 02:51:40] like the Disney stars who sort of go wrong or something because they get rich and famous at this very young age.

Lex Fridman
Yeah. Fame, power, and even money, if you get way too much of it at a young age, I think we're egotistical, narcissistic, all that kind of stuff as babies. And then when we clash with the world and we figure out the morality of the world, how to interact with others, that other people suffer in all kinds of ways, understand the cruelty, the beauty of the world, the fact that other people suffer in different ways, the fact that other people are also human and have different perspectives, all of that, in order to develop that, you shouldn't be blocked off from the world, which power and money And fame can do.

Gregory Aldrete
And conversely, a lot of the emperors we regard as, quote, "good emperors", are the ones who become emperor at a middle-aged or something, where their personalities are fully formed, where they're not going to really become different people. And so that works in that theory too. I mean, I don't think it's absolute. And of course, the greatest exception is Octavian Augustus, who starts as rise to power as a teenager. Somehow doesn't seem to go nuts.

Lex Fridman
Yeah, history has a lot of-

Gregory Aldrete
It's not an absolute, but it doesn't help to get that much power at a young age, I think.

Lex Fridman
What does it take to be a successful emperor, would you say?

Gregory Aldrete
So you say, what does it take to be a good Roman emperor? If you were going to draw up a job description, seeking Roman emperor, what are the qualities and qualifications you would put on it? Obviously, you would put responsible, good understanding of military, economics, whatever, ability to delegate. But just to be fun, let's consider how much does it matter whether the emperor is good or bad? Because in the ancient world, what does it

affect really if you're say a peasant in Spain, if the emperor is crazy Nero or good Vespasian? I mean, how does that affect your day-to-day life? How does it affect you if you're a peasant in Italy? Which is the average inhabitant. I mean, the crazy emperors mostly affect the people within the sound of their voice. So yeah, they go crazy. They murder senators, they murder members of their own family. They do wacky stuff. But a lot of that is constrained to the immediate surroundings around them. And meanwhile, the mechanism of the Roman Empire is just grinding along as it would anyway, I mean, the governors are running their provinces, stuff's happening. I mean, I guess an emperor can start a war, he can maybe raise taxes, but that would be the ways that he's affecting the whole empire. And here, we get into technology does matter. We're dealing with a world where, let's say you're in Rome and you're the emperor and you want to send a message to a province far away, let's say Judea, that message might take one or two months to get there and one or two months to get a reply. So how much influence as emperor are you really having over that province? I mean, those people pretty much have to make their own decisions and then just say to you, "This is what we did. I hope that's okay." Because otherwise, nothing gets done if they're waiting four months for a decision.

Lex Fridman
Even in the realm of ideas, they can't get on TV and on the radio and-

Gregory Aldrete
Communication-

Lex Fridman
... broadcasts.

Gregory Aldrete
... is so slow and so uncertain in ways that today, with the ability to instantaneously talk to people across the world, we can't even imagine. And the Roman Empire is huge. I mean, it is months to send a message and get an answer. So here, you have the emperor in Rome, yeah, he affects who's around him, and he can affect even common people. I mean, there's crazy emperors who are at the games and they're bored and they say, "We'll take that whole section of the crowd and throw them to the lions or something." There, you're being affected by the emperor, but if you're outside the range of his sight and voice, do you care who the emperor is -

Lex Fridman
So the big one-

Gregory Aldrete
- most of the time?

Lex Fridman
That's a really important idea to remember. Same with the US president, frankly, in terms of the grand arc of history, what is the actual impact? But I would say the big one is probably starting wars, major global wars or ending them in both directions. And then taxation too, as you said. What was the taxation? What was the economic system? What was the role of taxation in the Roman Empire?

Gregory Aldrete
Romans are really weird with this. So in the Republic, once they started to acquire overseas provinces, they had to decide, well, what are we going to do with these provinces? And they, in the end, settled on this notion of, we'll put a Roman governor in charge. We'll collect some sort of taxes. But they often didn't collect the taxes directly. Instead, they would sell contracts to private businesses to collect taxes. So the private businesses would bid and say, "All right, if you give us the contract to collect taxes in Sicily, we'll give you X number of money up front and then we go out and try to collect enough to make back that money and make ourselves a profit." And this is a terrible system, because obviously, they're going to go and try and squeeze as much as they can out of Sicily. And these companies were called publicans, publicani. And in the Bible, there's a phrase, publicans and sinners, and that should give you an idea how they're viewed. So everybody hated these tax collectors, and it was a really kind of dumb system because the publicans were going out and squeezing way more than they should in an unhealthy way from the provinces. And the Roman state was doing this kind of weird thing that they should have been doing themselves. And over time, that shifts a bit and it becomes more like your standard taxation. And a lot of the taxation ends up being in kind too. So it's like, okay, we're taxing you, you pay it in wheat if you're a farmer or something, not necessarily in cash. So in many ways, the Roman economy is underdeveloped. They didn't have a lot of the sophisticated systems that we have today, and it probably held them back in some ways. And again, they have that resistance to change. The Romans also had weird notions about just business and profit making, that at least originally, there was this notion that's shameful, again, the only thing that's a worthwhile profession is farming. So rich Romans would get involved in what we would call business manufacturing, particularly long distance trade with ships, but they would often do it through sort of front companies or employees who did it on their behalf, officially, and then they funneled the profits to the guy funding it because they don't want to be soiled with business, which is beneath them. So the Romans had a lot of weird attitudes about the economy that I think in some ways didn't help.

Lex Fridman
But nevertheless, they had many of the elements of the modern economic system with taxation, the record keeping.

Gregory Aldrete
They were good at record keeping. So the Romans... I mean, the census is a Roman word. They're the ones that came up with that.

Lex Fridman
And obviously, the laws around everything.

Gregory Aldrete
Yes. So in certain ways, yes, they were extremely sophisticated. And of course, the biggest thing about people in the ancient world and today is that they weren't stupider than us. I mean, sometimes you get this assumption, oh, well, in the ancient world, they just weren't as smart or something. No, no, no. They were fully as intelligent as we were. They didn't have access to the same technology as we do, but that doesn't mean they were any less smart.

Lex Fridman
Can we talk about the Crisis of the Third century and the aforementioned Western and Eastern Roman Empires, how it's split?

Gregory Aldrete
Yeah. So I mean, after Rome starts to go downhill as you enter the 3rd century, so the 200s, so we're moving out of the golden era now, I mean, a famous Roman historian, Cassius Dio, who lived right at that moment, very famously wrote of the transition of Marcus Aurelius to what follows, "Our kingdom now descends from one of gold, to one of rust and iron." So even people who were alive at the time had a distinct sense something is going downhill here. And that's interesting, because usually, great historical moments are retroactive. And I mean, here's a guy who said, "Oh, something's going wrong. Something's really going badly now." And a lot of it becomes that the secret is out that what makes an emperor is who commands the most swords. And so you start to get rebellions by various Roman generals, each declaring himself emperor. So you'd always had this to a certain degree, but they had kept it in check during the 2nd century AD. But in the 3rd century, you sometimes get three or four generals in different parts of the empire, all declaring themselves emperor, and then they all rush off to Rome to fight a multiway civil war. And of course, while they're doing this, the borders are undefended, so barbarians start to see opportunity and come across and start raiding, they start burning and pillaging farms, the civil wars are destroying cities and farms. So the economy is kind of tanking. Then there's less money coming in as taxes. So when one guy finally wins, he jacks up the tax rate to try and make up for it, but now, there's fewer people able to pay, and it's all just a vicious cycle. The Romans start to debase the coinage, which means you take in a gold coin, you melt it down, mix it in with 10% something less valuable, and then stamp it and say it's worth the same. Well, people aren't stupid. They're going to know that's only 90% of that gold coin.

Lex Fridman
They've invented inflation.

Gregory Aldrete
Inflation. And you get horrific inflation uncontrolled. So the economy goes downhill, barbarians are raiding, you have internal instability. In one year, you have something like eight or nine different guys go through as emperor in 238. So it's a mess. And it looks like the Roman Empire is going to fall in around the mid-3rd century. So this is the crisis. And then the kind of shocking development is late in that 3rd century, they actually stabilize the empire. So you have a series of these kind of army emperors who are just good generals who managed to push the barbarians out, reestablish the borders. It's actually a whole group of them, but often, they get clumped under the most successful, the last guy, who's Diocletian, who comes in, and he tries to stabilize the economy. One of the things he does is he issues a new solid gold coin that he guarantees is solid gold. And he calls it a Solidus, a solid coin. He famously issues a price edict where he says, "This is the maximum it's legal to charge for any good or service." So it's attempt to curb inflation. And that's not going to work, but it helps. Kind of amusingly on Diocletian's price edict, can you guess what the most expensive sort of item is? Hiring a lawyer. So some things never change, right?

Lex Fridman
Oh, that's interesting. I mean, in that system, there's probably a huge amount of lawyers.

Gregory Aldrete
I mean, even lawyer isn't quite the right word. Romans didn't have true lawyers, but they had people you would hire to do legal stuff or give you legal advice. But anyway, no, the price edict is actually is really fascinating, because it's this long list of stuff. And you can see a good pair of shoes, a bad pair of shoes, how much each costs, and you can see the relative value of things. So what was food versus clothing, what was going to the barber versus hiring a doctor, all that kind of stuff. So it's a really fun document to just mess around with. But anyway, so Diocletian stabilizes, basically, the empire and these other guys as well and gives it a new lease on life. So it seems by the end of the 3rd century, that Rome is going to continue. And then as we go into the 4th century, you have the really dramatic thing where Constantine comes along and converts to Christianity. And at the time he converts, the percentage of Christians in the Empire is small, 10% at most, something like that. Who knows? But it's quite small. And all of a sudden, you have this weird thing where now, the emperor belongs to this new religion. What does this mean? You can debate a lot how sincere Constantine's conversion was. It's a little bit of a weird thing where he clearly is using it as a way to fire up the troops before a crucial battle to say, "Hey, I just had this dream and this god promised us victory if we put his magic symbol on our shields." And this would be okay, except that he had done this a couple times before. So one time, it was Helios the Sun god, one time, it was another god. Even after he converts, he continues to mint coins and stuff with other gods on them. He continues to worship other gods. But he

also kind of seems sincere in his conversion. It's just, I think the question is how much does he understand his new religion maybe more than, is it sincere. But that's a real turning point. So now, as we go into the 4th century, we have this thing with Constantine, the new religion. And the other thing that happens is the empire is really just too big to govern effectively. It's that thing we're talking about. It's too large, the communication is too slow and it starts to naturally fragment. And at times, they try systems where they split it into four. So under Diocletian, he tries the tetrarchy, where he splits the empire into four, and you actually have sort of four emperors working together as a team. More commonly, it just splits east, west. So from that point on, you really start to have the history of the Western Empire going in one direction, the Eastern Empire in the other. You tend to have two emperors, though there are moments occasionally where they reunite. So that's a big development as well. And that's a turning point.

Lex Fridman
So the most common date that people say, maybe you can correct me on this, that the Roman Empire fell was 476 AD. They're referring to the "fall", quote, unquote, of the Western Roman Empire. So why did the Roman Empire fall?

Gregory Aldrete
Yeah, this is a real game. Pick your favorite date for the fall of the Roman Empire. 476 is a very common one. And what happens in that year is a barbarian king comes down into Italy and deposes a guy named Romulus Augustulus, which is an amazing name. It's combining the names of the founder of Rome, Romulus, with Augustus, the second founder of Rome. And so some people say that's the end of the Roman Empire. Sure. But others say it's 410, when Alaric sacks Rome for the first time. Others say it's 455, when the Vandals come and sack Rome and do a much more thorough job of it this time. Some say it's 180, when Marcus Aurelius picks poorly in succession. Some say it's 31, when Octavian wins the Battle of Actium and kills the Roman Republic. Or you can go past that date and say it's 1453 when the Eastern Roman Empire finally falls. And I mean, the Eastern Empire is legitimately the Roman Empire. If you were to go and ask them, "Who are you?" They wouldn't say, "We're the Byzantines, we're the Eastern Roman Empire." They would just say, "We're the Romans." And they have a completely legitimate claim to do that. So this whole game of when does the empire fall is problematic. And the other thing is all those dates about invasions that cluster around the 400s, so 410, 455, 476, you have to ask yourself, who counts as a real Roman by that point? Because for a while now, the Romans themselves are often coming from barbarians, are crossing that boundary, Roman generals. They might get raised as a Hun, then serve with the Roman army for a while, then not, or a Visigoths or not. That's been going on for a long time. So what makes someone a real Roman? How do you tell that the guy kicked out in 476, was a, quote, "real Roman", and the barbarian king who took his place wasn't? That's a very arbitrary decision.

Lex Fridman
There's so many interesting things there. So of course, you described really eloquently the decline that started after Marcus Aurelius, and there's a lot of competing ideas there. And the tensions-

Gregory Aldrete
Just to interrupt you, I hate wishy-washy answers, which is what I kind of said. So I will give you this, I think by the end of the 5th century AD, the Western Roman Empire has transformed into something different. So I don't know what date I can pick for that, but I can say by around 500, I don't know that we can call whatever exists there the Roman Empire anymore.

Lex Fridman
And of course, the barbarians make everything complicated because they seem to be willing to fight on every side, and they're like fluid, which they integrate fast, and it just makes the whole thing really tricky to say, yeah, who's a Roman, who is not? And at which point did it-

Gregory Aldrete
And barbarians have been forming large parts of the Roman army for centuries. Yeah, it's extremely fluid and not at all just clear sides here. So it's a mess.

Lex Fridman
From a military perspective, perhaps, what are some things that stand out to you on the pressure from the barbarians, the conflicts, whether it's the Hans or the Visigoths?

Gregory Aldrete
There was a military strategist, guy named Edward Luttwak, who wrote this book, The Grand Strategy of the Roman Empire, which was basically about frontiers and how did the Romans define their frontier? And everybody's jumped on this and argued about it and says it's wrong and all, but started this debate among Roman historians about, yeah, what does frontier mean to the Romans? Did they conceive of their empires having a border or was it always expanding or what? And did they have a grand strategy? I mean, today, militaries have a strategy where we want to achieve this, we want to exert force here. We want to protect these areas. Did the Romans even visualize their empire in that sort of grand strategic way? And it's a real debate. I mean, there's some things that suggest, "Oh, here, they tried to rationalize the border and short it by taking or shorten it by taking this territory." Other people see as just kind of random. So that's an interesting take, is how do the Romans conceive of empire? I mean, if you look back at someone like Virgil, at the time of Augustus, he said, well, the Gods granted Rome empire without end. So it's that open-ended thing. But even under Augustus, he seems to be pulling back and saying, "Well, I'm going to kind of stop at the Rhine. I'm going to kind of stop at the Danube. We don't need

to keep expanding forever in the way we've been doing." So I mean, that's an interesting concept of how do the Romans see their empire? Does it have a boundary? What are those boundaries? What does that mean?

Lex Fridman
And then barbarians were very much making that boundary even more difficult to kind of define it even if you wanted to.

Gregory Aldrete
Right. And again, the other fun debate is were these invasions, when the Visigoths crossed the Danube come into the Roman Empire, is this an invasion as it was originally described, or is it a migration as some scholars have started calling it? Because the Visigoths were fleeing pressure from another Gothic group, and they were fleeing pressure from the Huns. And I mean, a lot of the early Gothic peoples who come into the Roman Empire are basically seeking asylum. They're saying, "Will you give us a piece of territory to live on within the boundaries of the empire? And in return, we will fight for you against external enemies." And the Romans make these deals with some of the Goths. In fact, they made a pretty good deal with the Goths, one group of Goths to do exactly that. You can settle within the boundaries. We'll feed you, we'll give you a certain amount of stuff, and you fight for us. And then the Romans treated them really badly. They kind of didn't supply what they had promised, and so they turned against the Romans with good reason. So the Romans blundered in these things too.

Lex Fridman
So is it correct that the Visigoths fought on the side of the Romans against Attila the Hun?

Gregory Aldrete
Some of them did. So again, there were various groups on both sides of those battles. So Attila is the famous Hun, and he comes into the Roman Empire and seems to be heading right for... He comes into the Roman Empire and seems to be heading right for Rome to knock it off, and everybody is so scared of the Huns that this weird coalition comes together of the Romans plus various barbarian groups against Attila and league with some other barbarian groups, and they fight a huge battle and it's more or less a stalemate. So Attila gets stopped and he says, "All right, we're going to just rest up for a year. Next year, we'll go finish off the Romans." Next year comes, he heads down into Italy, he's heading straight for Rome, and the Pope goes and meets Attila, and they have lunch together at this river. And at the end of the lunch, Attila goes back and says, "Eh, I changed my mind. We're going to go back up to France, hang around for another year. We'll finish off the Romans later." And Christian sources say, "Saints appeared in the sky with flaming swords and scared away Attila." Some other sources say, "Well, the Pope gave Attila a huge bribe to go away for a while," believe whichever you like, but then Attila ends up dying on his wedding

night before he comes back under mysterious circumstances and so that never materializes. And the Huns kind of fragment after his death.

Lex Fridman
So what was the definitive blow by the barbarians, by the Visigoths?

Gregory Aldrete
The barbarians are so many different groups,. And weirdly, I think an important one that sometimes people tend to focus on the Huns and the Goths, the Vandals end up going to Spain, conquering Spain, and then crossing over into North Africa and kind of conquering North Africa as well. And Spain and North Africa were some of the main areas that food surpluses were collected from and sent to Rome to feed the City of Rome. And it's after those Vandal invasions of the takeover of those areas that the population of Rome plummets. So I think that's an interesting moment, where the City of Rome had always been this symbol, and already it was no longer the capital. The emperors had moved to Ravenna, a little bit north, because it was surrounded by swamps, so it was more defensible. But there is something important about that old symbolic capital now just collapsing in terms of population, numbers, really no longer having importance because literally its food supply is cut off by losing those areas of the empire. And of course, the capital... Constantine had founded a new second capital at what used to be Byzantium, a Greek city on the Bosporus, which becomes Constantinople. He names it not very modestly after himself, and that now is really the dominant city for any of the Roman Empire's eastern or western.

Lex Fridman
So if you're actually living in that century, the 5th century, it's kind of like the Western Roman Empire dies with a whimper. It's not like-

Gregory Aldrete
Yeah.

Lex Fridman
It's a bunch of strife.

Gregory Aldrete
There's a lot of moments you can pick. There's an earlier one in the 300s when the Romans lose a big battle to some barbarians that symbolically is important. But yeah, I don't think there's one clear cut moment. And again, I don't know that it is the barbarians that cause, quote, "the fall of the Roman Empire." I mean, this is the other game as people like to say, "When did the Roman Empire fall?" The other big question is why. Why did the Roman Empire fall? If you define it as falling. And I mean, barbarian invasions was the traditional answer. So there's a French historian famously said, "The Roman Empire didn't fall. It was murdered." It was killed by barbarians, but I mean there's other explanations. I mean, some

people say it was Christianity. Some say it was a climate that the Roman Empire flourished during this moment of luck when just the climate was good, and then you get this sort of late Roman little ice age and everything goes downhill and that's what caused it. There's some that say things like disease. There were a whole series of waves of plague that started to hit under Marcus Aurelius and continued after him, which seemed to have caused real serious death and economic disruption. I mean, that's a decent explanation. Another popular one is moral decline, which I don't think really works well. You even get the people saying lead poisoning, but that's not true because they were drinking out of the same pipes when the empire was expanding, right?

Lex Fridman
Yeah, that's fascinating. That's fascinating. But often, we kind of agree that's something that you've talked about quite a bit is the military perspective is the one that defines the rise and fall of empires. You have a really great lecture series called The Decisive Battles of World History, which is another fascinating perspective to look at world history. What makes a battle decisive?

Gregory Aldrete
The easiest definition is it causes an immediate change in political structure. So who's in charge? So the classic decisive political battle is Alexander beats King Darius III at the Battle of Gaugamela. And in that moment, we switch from the ruler of the entire huge Persian empire being Darius to now being Alexander, from it being Persian to being controlled by the Macedonians. So there is a one afternoon has this dramatic switch over a enormous geographic area, so that's a decisive battle and that you see that immediate change. Other types of decisive battles are ones that might have more unforeseen long-term effects. You may not realize this is decisive at the time, but from a longer perspective it is. And often, those are ones that either allow some new people or idea or institution to either grow or have its growth curbed. So at various points, we have empires that were expanding and basically were stopped at some battle. And so you say, "Well, if they been stopped there, they might have gone on to dominate this whole area." Or conversely, you could say, "Rome wasn't..." They were one place before the second Punic War. After the second Punic War, they were its dominant force. So you could pick one of those battles and say that was decisive in setting them on this new path.

Lex Fridman
It's also an opportunity to demonstrate a new technology. And if that technology is effective, it changes history because that was either tactical or literally the technology used. So how important is technology, that technological advantage in war?

Gregory Aldrete
Huge. I mean, the history of warfare is basically the history of technological change often. So I mean, there's all the great moments of transition. For a long time, we fought with

hand-to-hand, with metal weapons, then you start to have the gunpowder revolution, which causes all sorts of shifts there. There's big changes. Planes, when they become a huge force. I mean, World War II is this crazy time where planes go from literally biplanes, string and wood, to jets four years later, so that's this moment of incredibly fast technological change. Going into World War II, everybody thinks it's all about battleships. Who's got the biggest battleships? Four years later, battleships are just junk. Let's just scrap them. It's all about aircraft carriers and that's everything war at sea. So you have these moments of, particularly in warfare, almost accelerated technological change where things happen very rapidly and the civilization or the nation or the army that adapts more quickly to the new technology will often be the one that wins, and we've seen that story over and over and over again in

Lex Fridman
It's also interesting how much geography that you mentioned a few times affects wars, the result of wars, the rise and fall of empires, all of it. As silly as it is, it's not the people or the technology, it's like sometimes literally that there's rivers.

Gregory Aldrete
I think there's a real geographic determinism to civilization itself. I mean, if you look at where civilization arose, it's in Mesopotamia and sort of a swampy land between two rivers. It's in the Nile River Delta where the same situation, it's in the Indus River where you have the same thing, and it's along the Yellow Rivers and the Yangtze Rivers where it's the same thing. So I mean, that is geographically determined where those great civilizations of Asia or Europe are going to arise. It's very much determined by that. And often, the course of history has that strong geographical determination. I mean, you can argue that all of Ancient Egyptian society is based around the cycle of the Nile flood because it was so predictable and everything depended on it, and their whole religion actually develops around that. And Mesopotamia the same thing, the way their religion develops is a reaction to the particular geographic environment that those people grew up in. So that's a very profound influence on civilization. One of my professors once said to me, "The best map of the Roman Empire isn't any of these maps with political borders. It would be a map that shows the zone in which it's possible to cultivate olives." So if you simply get a map and map onto it where you could grow olives during this time, let's say, 1st century AD, it corresponds exactly, I mean really closely, to the areas that are most heavily Romanized. Now, I'm not going to say that, but there is something to that where Roman culture spread successfully is where people grow the same crops. And that's just one of those fundamental things.

Lex Fridman
Yeah. I mean, you so beautifully put that the perspective can change dramatically how you see history, I mean, you could probably tell world history through what? Through olives, cinnamon and gold.

Gregory Aldrete
Yeah, that's become really trendy is to look at history through objects. And I mean, for the Romans, diet is huge. I mean, probably 80% of the people in the Roman world ate basically a diet of olive oil, wine, and wheat, right? That those three crops are the basic crops that they subsisted on. And just the way you have to grow those crops, where you grow them, that dictates so much about culture, and the Romans saw it that way. One of my favorite documents from the ancient world... And they define civilization that way. So the Romans civilized people ate those crops and non-civilized people ate different food. So there's this letter from a Greek, who was serving as an administrator in the Roman government, and he gets posted to Germany, to the far north. And he writes these pathetic letters back home to his family saying, "The inhabitants here lead the most wretched existence of all mankind for they cultivate no olives, and they grow no grapes." So to him, that was hell, being posted to an area where they eat these terrible foreign foods. And of course, the cliche for the Romans of what barbarians eat is red meat. They're herders, so they're not farmers, but they follow herds of cow around, which a totally different lifestyle. They eat dairy products, and they drink beer. And I tell my students sometimes that if you were to stick a Roman in a time machine and send them to where we live, which I teach in Wisconsin, Green Bay, Wisconsin, that Roman would step out, look around, see all the beer, the brats, and the cheese, say, "I know who you guys are. You're barbarians.

Lex Fridman
Barbarians. That's another way to draw the boundary between olive oil, wine, wheat, and meat, dairy, and beer.

Gregory Aldrete
But it's more fundamental because it's different forms of life because if you're a farmer, you grow certain crops. And if you're a farmer, you tend to stay in one place. You tend to build cities. If you're following herds of cows around, you don't build cities, you have a totally different lifestyle. So it's diet, but it's more fundamental underlying things about your entire culture.

Lex Fridman
And many of the barbarians were nomadic tribes.

Gregory Aldrete
Some of them are, yeah, definitely.

Lex Fridman
Fascinating. I mean, this is just yet another fascinating way to-

Gregory Aldrete
It's dietary determinism, geographic determinism. Yeah, these things are big.

Lex Fridman
On the topic of war, it may be a ridiculous span of time and scale, but how do you think the world wars of the 20th century compare to the wars that we've been talking about of the Roman Empire, of Greece, and so on?

Gregory Aldrete
I mean, what's interesting about some of the Roman civil wars, particularly, is that they are world wars at the time. So let's take the war after the assassination of Julius Caesar. We've talked about that one a lot. That was fought. There were battles there fought in Spain, in North Africa, in Greece, in Egypt, in Italy. I mean, truly across the entire breadth of the Mediterranean involving at least seven or eight different factions of Romans, and that was the world to them. I mean, that's very similar in a way to our modern world wars where this was a global conflict, at least as they envisioned the world they knew of. And if we sort of, I don't know, somehow factor for transportation time, I mean, I think you can argue that that was a bigger war than World War II. In World War II, if you hopped on a plane, you could get from the US to China in a week or something, right? In little hops. I mean, in the ancient world, if you wanted to go from Spain to Egypt, it would take you a month. So they were fighting across a larger space- time zone in terms of their technology to move, then World War II took place across.

Lex Fridman
So in a sense, World War II was quite contained.

Gregory Aldrete
Smaller. Yeah. I mean, if we adjust for that sort of factor, so that was a global war, I think that would be very familiar.

Lex Fridman
How do you think the atomic bomb, nuclear weapons changed war?

Gregory Aldrete
Yeah. I mean, that's the now we can destroy the world and truly kind of destroy civilizations wholesale, and that does seem to be a new thing. I mean, no matter what the Romans did, they didn't have that choice, that ability to think, "I can do something that will end life as we know it at least, on the planet," and that's a very different perspective. And I think weird and interesting moment right now, I mean, I'm getting way beyond ancient history here, but for a long time, we had this sort of stasis with the nuclear standoff, with mutually assured destruction between the US sort of block of nations and the Soviet ones, and it worked. Now, we're entering this kind of time when a lot more countries are going to start becoming nuclear capable. We might have a resurgence of just building new weapons, platforms with China, seems very eager to expand their nuclear arsenal in all sorts of ways. So it's unnerving time, let's say, right now.

Lex Fridman
And it's a terrifying experiment to find out if nuclear weapons... When a lot of nations have nuclear weapons, is that going to enforce civility and peace, or is it actually going to be a destabilizing and ultimately civilization destroying?

Gregory Aldrete
Right. I mean, it was weirdly stable when it was a bipolar world where you had just sort of those two blocks. Now with a multipolar world with access to these weapons, I don't know. I mean, we're kind of jumping out of the ancient world, but I'll tell you one thing that's always fascinated me in this sort of comparison of ancient/ modern is how people don't learn the lessons of the past in military history. And the very specific example, that in my lifetime I've seen play out twice, is just certain places people make the same mistakes over and over again. So a nice example is Afghanistan or roughly that sort of northern Pakistan-slash-into-what-is-Afghanistan. I mean, that is a geographic region that over and over again, the best most sophisticated armies in the world have invaded and have met horrible failure. And that goes all the way back to Alexander the Great tried to conquer that area. The Mongols tried to do it. The Huns tried to do it. The Mughals tried to do it. Victorian Britain tried to do it. The Russians tried to do it. The Americans tried to do it. And they made the very same mistakes over and over and over again. And the two mistakes are not understanding the terrain, that it's a rocky mountainous area that people can always hide in caves. And it's not understanding the fundamentally tribal nature of that area that that's where the real allegiance is in these tribes. It's not in a centralized government. And that's the same era Alexander made, as the British made in the 19th century, as the Russians, as the Americans. And it's so depressing as a historian who studies history to see these things being repeated over and over again and you know exactly what's going to happen.

Lex Fridman
For leaders not to be learning lessons of history. You co-wrote a book precisely on this topic, The Long Shadow of Antiquity: What have the Greeks and Romans Done For Us? What are the some key elements of antiquity that are reflected in the modern world?

Gregory Aldrete
Yeah. It's a book that my wife and I wrote together, and it is trying to make people understand how deeply rooted are current actions in almost every way. Even things that we think are just truly unique parts of our culture or things that we think are just innate to human nature or actually rooted in the past. So this is another power of the past thing, and this is just a long specific list of examples really. So I mean, we go through government and education and intellectual stuff and art and architecture and a lot of the things we've been talking about today, language, culture, medicine. But even things like habits, the way we celebrate things, the way we get married. Our married rituals have all sorts of things in common with Roman weddings.

Lex Fridman
The calendar.

Gregory Aldrete
The calendar, the words, we're using Julius Caesar's calendar. I mean, Pope Gregory did one tiny little twist, but Caesar's the one who basically came up with our current calendar with 365 days, 12 months, leap years, all that. So we're living law. There's just no way to escape the power of the past. And what I believe very ardently is that you can't make good decisions in the present, and you can't make good decisions about the future without understanding the past. And that's not just true with your own life, but it's in understanding others. So it's not only your own past you have to understand, but you have to understand other people, what's influencing them. So you can't interact with others unless you understand where they're coming from. And the answer to where they're coming from is where they came from and what shaped them and what forces affect them. So I think it's absolutely vital to have some understanding of the past in order to make competent decisions in the present.

Lex Fridman
What are some of the problems when we try to gain lessons from history and look back? We've spoken about them a bit, the bias of the historian, maybe what are the problems in studying history and how do we avoid them?

Gregory Aldrete
Probably the biggest problems are the sources themselves, the incompleteness of them, and this gets more intense the farther back we go in time.

Lex Fridman
Yes.

Gregory Aldrete
So if you say, "I want to write a book about the 19th century," there is more material available for almost any topic you want to pick than you could possibly go through in your lifetime. If you say, "I want to write a book about the Roman world," this is a very different thing. In my office, I have a bookshelf that's, I don't know, eight feet high, 10 feet wide, and it contains pretty much all the main surviving Greek and Roman literary texts, okay?

Lex Fridman
Wow.

Gregory Aldrete
One bookshelf, it's a big bookshelf, but that's what we use to interpret this world. Now, there's a lot of other types of texts. There's papyri. There's all sorts of things. There're

inscriptions. There's archaeological evidence, so there's other stuff, but honestly, 99% of things about the world I study are lost. So then you get into all the issues is what we have surviving a representative example. We know it's not. For example, all the literary texts are written by one tiny group, elite males. So that's a problem there. There's the problem of bias. We know that they're not necessarily telling us the truth. They have an agenda. They're representing history in a certain way to achieve certain things, then there's the problem of transmission. I mean, all those texts are copies of copies of copies of copies, and everybody knows that game, where you whisper sentence to someone and then go around the room, are you going to get that same sentence back? Well, every ancient text we have has gone through that process. So this is a real problem, and that's just with the sources. And this is the historic era. When you move back just a little earlier to the prehistoric era or to civilizations that don't have written sources surviving. And some of these are ancient Mediterranean ones. I mean, anything goes. I mean, one of the jokes is that museums, archaeological museums, are full of objects which are labeled cult object. It's some religious object. And I think the honest label that should be on that thing is we have no idea what the hell this is, but I want to believe it's something important. So I'm going to say it's a religious object, but in reality, it's an ancient toilet paper roll holder or something. And it's a huge problem when you try to interpret a civilization without written texts. And my favorite little story that kind of illustrates this is, in the 19th century, this German who had gone to school in England, one of the best educated guys of his time, goes to North Africa and is poking around in the desert. And he finds this site with these huge stone monoliths, 10 feet tall in pairs, and there's a lintel stone across the top, so sort of two posts with a stone across the top, and there's a big stone in front of them too. And so he looks at this stuff and he says, "Well, what does this remind me of?" It reminds me of Stonehenge, right? And there's even a site where there's multiple of these kind of in a square. So he goes back and talks about this and an Englishman goes and studies them, and he finds a ton of these sites and he finds some of them where there's 17 of these pairs. And so he goes back, and he writes a whole book about how clearly the Celtic peoples who once lived in Britain came originally from North Africa because he's found this site and he reconstructs the religion where obviously they practice religious rituals here, and they had rites of passage. They squeezed between the things and the altar stones have this basin. So they had blood sacrifice and all this, and it seemed reasonable. And then you ask some locals, "Well, what's that stuff out in the desert there?" And they mean, "Oh, the old Roman olive oil factory." And those are the remains of an olive press, and we're back to olives. I keep dwelling on olives. Olives don't grow in England or Germany. So this is cultural bias. If all you have is physical evidence, you're going to interpret that evidence through your own cultural biases. So if you're an Englishman and you see big stone uprights like this, you're going to think Stonehenge. If you're from the Mediterranean, you're going to think olive press. So that's a salutary example I think of the dangers of interpreting physical evidence when you don't have written evidence to go along with it. And think today, if our civilization were to blow up in a nuclear war and archaeologists were to dig this up, how might they misinterpret things? I mean, if they were to dig up a college dorm like where I work, and that's what you had for

the civilization. You'd probably go in the dorm rooms, you'd find all these little rooms, and maybe in every room you'd find this mysterious plastic disc. And so everybody has these, so it must be a cult object. And it's round. So obviously, they're sun worshipers. And if you can decipher the inscription, you'll see that obviously they all worship the great sun god Wham-O. It's like, what do you find in every dorm room? A Frisbee. So that's the level of interpretation you have to beware of. And there's examples, where we've done exactly this.

Lex Fridman
So we have to have intellectual humility when we look back into the past. But hopefully, if you have that without coming up with really strong narratives, if you look at a large variety of evidence, you can start to construct a picture that somewhat rhymes with the truth.

Gregory Aldrete
Yes. I mean, as a professional historian, that's what you do. You attempt to reconstruct an image of the past that is faithful to the evidence you have as filtered through what you can perceive of both the biases and the problems of the source material and your own biases. And it's a interpretation, it's a reconstruction, but it's a lot like science, where you're in a process of constantly reevaluating it, and saying, "Okay, here's some new evidence. How do I work this into the picture? How do I now adjust it?" And that's what's fun. I mean, it's a mystery. It's you're being a detective and trying to reconstruct and to understand a society. It's even more fun where it's, yeah, you have to try to empathize. Empathy is a great human thing, to empathize with people who are not yourself, and we should do this all the time with just the people we encounter. But this is what we're doing with ancient civilizations. And as I talked about earlier, sometimes you'll feel great sympathy there. Sometimes you'll feel incomprehension. But by being aware of both of those, you can maybe begin to get some grasp, however tentative, on the truth as you might perceive it,

Lex Fridman
To ask a ridiculous question. When our time, you and I, we together become ancient history, when historians, let's say, 2, 3, 4,000 years from now, look back at our time, and you try to look at the details and reconstruct from that the big picture, what was going on, what do you think they'll say?

Gregory Aldrete
I would guess it'll be something that's actually more of a commentary on whatever's going on at that point than on the reality of us because that's what we tend to do. I'll tell you what I'd like to have them say, is to say, "In this civilization, I can detect progress," that they have advanced in some way, whether kind of in moral terms or in self-awareness, or have learned from what's come before. I mean, that's all you can try and do is do a little bit better than whatever came before you to look back at what happened and try to do something. Livy, I mean, one of the great Roman historians, the beginning of his work, A History of Rome, which is this massive thing, he says, "The utility and the purpose of history is this. It

provides you an infinite variety of experiences and models, noble things to imitate and shameful things to avoid." And I think he's right.

Lex Fridman
And they would perhaps be better at highlighting which shameful things we started avoiding and which noble things we started imitating. With the perspective of history, they'll be able to identify or maybe with the bias of the historians of the time. Well, in that grand perspective, what gives you hope about our future as a humanity, as a civilization?

Gregory Aldrete
We have curiosity. I think curiosity is a great thing that you want to learn something new. I think the human impulse to want to learn new stuff is one of our best characteristics. And at least up to this point, what makes us special is the ability to store up an accumulation of knowledge and to pass that knowledge on to the next generation. I mean, that's really all we are. We're the accumulation of the knowledge of infinite generations that've come before us. And everything we do is based on that. Otherwise, we'd all just be starting ground zero kind of just from the beginning. So our ability to store up knowledge and pass it on, I think is our special power as human beings. And I think our curiosity is what keeps us going forward.

Lex Fridman
I agree. And for that, I thank you for being one of the most wonderful examples of that, of you, yourself, being a curious being and emanating that throughout, and inspiring a lot of other people to be curious by being out there in the world and teaching. So thank you for that and thank you for talking today.

Gregory Aldrete
No, I enjoyed it. It's fun. I obviously like talking about this stuff.

Lex Fridman
Thanks for listening to this conversation with Gregory Aldrete. To support this podcast, please check out our sponsors in the description. And now let me leave you with some words from Julius Caesar, "I came, I saw, I conquered." Thank you for listening and hope to see you next time.