

In ancient times, so it was said, the greatest of all Greek heroes had visited Italy.

The story was a favourite one among the Romans.

Hercules was the son of Jupiter, a paternity that had thrown Juno, the Queen of the Gods, into a towering rage.

So irate was she at her husband's adultery that she had sent a mist of madness down upon Hercules.

His insanity had driven him to commit a terrible crime, the murder of his wife and children.

To expiate this, he had been sentenced by the gods to complete a series of supposedly impossible labours, which, being a hero and the strongest man of all time, he had duly completed.

One of these labours, the tenth, had required him to travel to a distant island beyond the setting of the sun to kill a three-headed giant and then to drive the monster's cattle all the way back to Greece.

It was in the course of completing this feat that Hercules had arrived in Italy.

Reaching what would one day be Rome, he had built a bridge over the Tiber and slain the local giant.

Then, heading southwards, he had arrived in Campania, the rich and fertile land which stretches inland from the Bay of Naples.

Here, he had found himself confronted not by one giant but by an entire nation of them.

Never a man to duck a challenge, he had fought the whole lot at once.

The clash had made the earth shake, but Hercules, aided by his divine father, had finally emerged triumphant from the battle.

The defeated giants, their wounds still fiery from the impact of Jupiter's thunderbolts, had been chained and imprisoned by the victorious hero beneath the great mountain that rose above the Campanian plain, Vesuvius.

So that, Tom Holland, is an absolutely wonderful passage from one of the great history books, isn't it?

A book about Rome at the height of its empire and that book is Pax by none other than the rest is history's Tom Holland.

What a moment, Tom.

Oh, thank you, Dominic.

What a wonderful moment for you to have that so wonderfully read on the podcast and our subject today is, of course, that mountain.

It is Vesuvius and its explosion, its eruption and the fate of the cities of Pompeii and Herculaneum.

This is actually one of the great subjects in all history, but it's because it's one of the great lessons, isn't it?

It's a lesson in human hubris and our subservience to nature.

It's a lesson in the maximum that we're always only one step away from disaster and we're dancing on the edge of an abyss and all these kinds of clichés.

Don't you think?

Dancing on the edge of a volcano, Dominic.

Exactly.

I might almost say.

Yes, it's one of the great scenes in Roman history.

It's one of two great episodes, canonical episodes, that take place in the reign of an emperor called Titus, who actually, he doesn't reign for very long at all.

He becomes emperor in June 79 and then he dies two years later, but not only does his reign witness the eruption of Vesuvius in 79 and we'll maybe talk about exactly when that happens, but he also inaugurates perhaps the most famous monument in the whole of ancient Rome, which is the Colosseum.

That will be the subject of the second episode in this series, but you're absolutely right.

Probably the destruction of Pompeii and Herculaneum are even more famous than the inauguration of the Colosseum.

Of course, Pompeii is a subject we have already done in this podcast, we did it with brilliant Sophie Haye, who was, I think, our first guest, wasn't she?

Our first ever guest in the rest of history.

She came once to talk about the archaeology of Pompeii, all the latest discoveries, all that sort of thing, but this is more about the story and about Vesuvius and the role of Vesuvius.

About the destruction, the process of destruction, exactly.

It's a story that we can kind of piece together, drawing on various sources.

We've got the written sources.

We have two very, very famous letters written by Pliny the Younger, who was a young man at the time, about 18, and he was asked by the great Roman historian Tacitus to give his account.

He was an eyewitness of it.

He does this in two letters.

The reason that Pliny the Younger was an eyewitness is that he was present with his uncle, Pliny the Elder, the great Encyclopedist, I think very much a friend of the rest of his history, who was also, when he wasn't writing his Encyclopedia, the admiral of the great fleet at Mycena, which is just down the Bay of Naples from Herculaneum.

We have those written sources.

Then, of course, we have the archaeology, which Sophie talked about in the episode she did with us, and the archaeology enables us to trace what happened with the eruption right the way down to what happens to people who try to escape.

We have the remains of over 1,500 people who've been kind of discovered there, and you can tell from objects that they're carrying, path that they're taking, what their last desperate moments were.

It's incredibly vivid, incredibly moving.

Also, intriguingly, archaeology helps us to date when in the year the eruption happened, because according to Pliny the Younger, at least the transcript of the letters that we have, he dates it to the 24th of August.

The question that has been raised, actually, for many centuries, going right the way back, I think, to the 18th century, this began to be proposed, that actually the remains of crops and of food materials that have been found in the cities point to a date in autumn.

This, I think, is probably now the consensus that the date of the 24th of August is a mistranscription. It's not just recently, as people have found pomegranates, wine, which seems to date it to autumn.

Many of the people who've been found seem to have been wearing quite heavy clothes, so clothes are unsuited to the dog days of summer.

A charcoal inscription was found in 2018, which is dated to the 17th of October.

It's unlikely that that would have stayed there for an entire year.

It suggests that probably the eruption happened after the 17th of October.

Right.

Yeah.

All of that is evidence.

Then on top of that, dominate the science in the form of vulcanology.

How can that possibly date to the-

It does, it enables us probably to, if vulcanologists, drawing on Pliny's descriptions of what happens, are able to work out what happens when a volcano like Vesuvius erupts and map it onto the archaeology,

cross-reference with the literary sources, and basically enable us to work out the chain of events that happened those two terrible days, the date of the eruption.

Just before we get into the story, just to give people a sense of the geography, we're in southern Italy, the Bay of Naples.

Yeah.

Vesuvius is southeast of Naples, dominating the bay, and Pompeii and Herculaneum are these two towns that are sort of nestled under Vesuvius, aren't they, between Vesuvius and the sea?

And important to point out that although Pompeii and Herculaneum are the two most famous cities affected by the eruption, the Bay of Naples has a lot of highly, highly significant cities, so Naples most obviously, but it also has Putioli, which is the great port.

This is where the grain ships coming from Africa and Egypt to feed Rome come.

So this is crucial to the entire functioning of the Roman economy.

We have Mycena, which I already mentioned, which is the headquarters of the fleet.

There are various other towns dotted along the coast, and these are very, very high-end resorts, villas.

So this is Monte Carlo, this is the kind of the most attractive, stylish, most fashionable sea resorts that you could have anywhere in the world at the time, but it is also a center of the industry because, as the Romans understood, there is a peculiar quality to the ash that is in the neighborhood.

It can be mixed with water to create concrete that sets under water, and it's this that enables both the kind of the pleasure piers that stick out from resorts like Bayi or from the individual villas that are owned by the super rich, but it's also what enables them to build the great kind of groins and moles that stick out into the sea that enable the harvest to be built.

So although the Romans don't know that Vesuvius is a volcano, they do understand that geologically it's very unusual, and this is where the stories of giants being buried underneath Vesuvius come from.

So this sense that Pliny the Elder, for instance, doesn't think that it's buried giants.

He kind of is aware that there are geological explanations that don't depend on that, but it is definitely part of the appeal of the area, I think, this sense that it has a supernatural quality to it.

Right.

And do people have a sense that does the earth ever shake?

Is the smoke coming out of the mountain or these kinds of things?

The earth shakes, and the earth has been shaking quite badly in the decades before the final eruption.

So we can date a very, very violent earthquake that hits Pompeii on the 5th of February 62 and also Herculaneum.

So Seneca, the advisor to and teacher to Nero, he reports that part of Herculaneum had collapsed and that the buildings that are left standing, he wrote are very unsteady.

It's also reported back in Rome that large stretches of Pompeii have been leveled.

This is probably an exaggeration, but the damage does seem to have been pretty severe.

So in Pompeii, the Temple of Jupiter, which stands on the forum, this had been brought kind of crashing down.

Various both complexes have been put permanently out of action.

You know, plaster has fallen off, there's enormous amounts of work for builders and renovators to do.

And for the 17 years that have followed this earthquake in 62, basically Pompeii and Herculaneum have been absolutely highs of activity.

The hammering has never stopped.

And if you were sailing into Pompeii, so it has a kind of harbour, the largest temple in the town is to Venus, the goddess of love, who is the patron of Pompeii.

And this remains an absolute building site.

And we can tell this because of the archaeology, the sediment that buries Pompeii enables archaeologists

to see the trenches that have been dug, the building material that lies piled up, the sense in which this temple has only been half-built.

Now, of course, the fact that they're renovating it is a statement of faith in the future of the city.

It's saying we don't think that these earthquakes are so fatal that we should get out, even though it's possible that certain people, you know, have left, that people have read the runes.

But Pompeii is definitely a functioning city in the summer of 79 and probably moving into the autumn.

And Pompeii and Herculaneum, you mentioned them as resorts.

Well, Pompeii less so.

Herculaneum is much more of a, it's kind of much more upmarket.

Pompeii is a working town.

Pompeii is bigger than Herculaneum, I assume.

It's actually hard to tell because most of Pompeii is buried under the modern town.

So it hasn't been fully excavated.

I guess it's kind of much of a much less.

Shall we get fast forward to the key?

So in the year 79, Titus is the emperor.

He has followed his father, Vespasian, who's the general who's taken power at the end of

the year, the four emperors at the end of this period.

And there are signs, aren't there, in the summer, I suppose.

Or maybe we'll study later in the autumn that something is happening, there's something.

Is it earth tremors?

Is it smoke?

Yes.

So there are tremors are coming back again.

I mean, it's plenty reports this and it is noted with considerable alarm by people in Pompeii that springs on the slopes above the city are drying up.

This is what Robert Harris and his brilliant novel, Pompeii, does, you know, it's a novel set against the backdrop of a hydrogen engineer trying to work out why the springs have stopped and gradually arriving at the terrible truth.

And even as engineers are trying to work out what is happening to the water supply, people in the neighborhood of Pompeii and Herculaneum are reporting that they are seeing strange figures striding over the landscape.

Such creatures, in fact, as the giants are supposed to have been.

So very, very ominous.

And yet, you know, as I say, despite these very worrying portents, life carries on.

And we can tell this from the archaeology.

So we know that, you know, donkeys are milling bread, that wine is being made, that it's being gathered, that people are conducting their business.

And then suddenly everything changes.

Everything changes utterly.

And, you know, as far as Pompeii and Herculaneum are concerned, forever.

And the amazing thing here, Tom, is that we have an account of that moment, don't we?

So this is what is so astonishing about it, that we know that the eruption happens about an hour after midday.

We don't know the precise date, but we know the exact time.

And we know this because at Mycenum, where Pliny the Elder and his nephew are settled, Pliny the Elder's sister comes in and says to her brother, who's lying on a couch reading a book, that a remarkable cloud has appeared in the sky.

And so Pliny the Elder, who is always fascinated by natural phenomena, kind of rushes out.

And he looks out over the Bay of Naples, and he sees that, you know, his sister had not been exaggerating.

The cloud, like nothing anyone has seen, in appearance and shape, it most closely resembled a pine tree, Pliny the Younger later writes, for it had a column of great length and height as though it were a trunk overtopped by a number of branches.

But I guess we today, if we saw it, probably describe it as a mushroom cloud.

Terrifying.

Yes.

Such a chilling image.

Completely terrifying.

And Pliny is fascinated by this.

Pliny thinks, oh, I must go and investigate it.

And so he orders a galley to go over and see what's happening.
And the thing is that what's interesting is that he can't yet tell where this cloud is coming from.
So we can see it's rising from a mountain, but he can't tell that it's coming from Vesuvius.
But in Pompeii and Herculaneum, they can absolutely tell what's going on.
So Herculaneum is at the base of Vesuvius.
And you know, they are right underneath this massive spreading cloud.
Well, to them, I guess it's both a cloud, but it's more vividly, it's a column.
It's a column of ash and rock.
And you know, minutes after the eruption, it is miles up in the sky and it blocks out the sun.
So although it's just after midday, suddenly that, you know, they're being pitched into darkness.
And then after about 30 minutes, a kind of a drizzle of pumice and ash begins to fall.
And in Herculaneum, it's very, very light because the breeze is coming from Naples and it's blowing the pumice and the ash away from Herculaneum towards Pompeii, which is kind of further down.
And so people in Herculaneum are thinking, oh, this is not good news.
And so large numbers of them start piling up wagons or, you know, carrying bags of their possessions and streaming away from the cloud of drizzle of pumice towards Naples.
Meanwhile, in Pompeii, there it is absolutely kind of pitch black because the downpour of pumice is much, much thicker.
And so the darkness there is pretty much total.
The only light is kind of along the line of the horizon to the south and east.
So in the opposite direction from Vesuvius, but it's kind of, you know, it's like a very, very faint and feeble dawn.
And so people are literally coming out with torches.
Is that right, Tom?
And lamps and stuff.
It is basically like night.
So otherwise they can't see a thing.
And as they are coming out with their torches, so they're having to start wading through the streets because the pumice is starting to pile up and block their exit.
And so people in Pompeii obviously are also trying to escape, but it's much, much harder for them than it is for people from Herculaneum because their path is blocked.
I mean, in your description in Pax, you say you describe how people are looking at their streets or their own homes, and they observe how the roofs are straining under the weight of the load and increasingly as the hours past giving way.
And that should, to me, the interesting words there are as the hours past.
So people are paralyzed, a lot of people, I suppose, but it's a temporary phenomenon, but they're not all piling out of the city in one go, are they?
People are presumably reacting in very different ways.
I mean, I think you need help to remove your belongings.
So if you have wagons or if you have slaves, then maybe it's easier.

But even that is dangerous because firstly, the roads are being blocked.
So if you're taking your wagon out and all this pumice is piling up and then it gets stuck, what are you going to do?
You can't shelter anywhere.
So I think lots of people think, well, we'll stay in our houses and hope that it will blow over.
But also the other thing is that fragments of rock have been blasted up with the force of column of ash that has gone up.
These lumps of rock are also starting to drop.
You don't know when they're going to come, but at any minute you might be smacked on the head by a lump of rock.
So that is also increasing the jeopardy.
And so I think that, I mean, it's such an invidious choice.
Do you take to the road and risk being stranded there by the pumice or hit on the head by a fragment of rock?
Or do you kind of hide in your cellar and hope that it will go away?
But then, of course, there's the risk that, as you say, the pumice might just kind of build up such kind of weight on the roof that it all collapses and then you'll trap there.
So I mean, horrible, horrible decision.
The other alternative, of course, is to try and escape from the harbor.
And so lots of people think, well, we'll take that option, rush down to the harbor.
But there also the pumice is forming a kind of very thick scum on the face of the sea.
And so ships can't pull out.
And this is a problem also for ships trying to come in.
And the main squad of ships that are trying to come in are led by Pliny, because Pliny, in the intervening time, has been alerted to the fact that actually it's not enough for him to go and do a scientific investigation.
He needs to conduct a full scale evacuation.
And he's been tipped off about this by a letter that has been sent to him by a woman who has a villa in the vicinity of Pompeii saying, things are really kicking off here.
And what's interesting about that is that that letter must have been sent before the actual eruption.
So it suggests that the tremors are so violent that this villa owner is sinking.
We've got to get out of here.
And that would have reached him by boat, should have sent a boatman with the letter.
Probably, yeah.
So that's arrived.
And so Pliny has set off at the head of an entire fleet to try and affect this evacuation.
But he pulls up into the harbor at Pompeii and he discovers that he just can't get in.
And so he's thinking, well, you know, what am I going to do?
Should I turn back?
That's not very Roman.
And it's very much not Pliny.
Pliny wouldn't want to turn back and avoid the chance to investigate this fascinating

phenomenon.

And also the winds are against him.

So he decides that he will head on along the bay.

So away from Pompeii, southwards towards a place called Stabii, which again is a kind of very chic resort.

And he has a friend there, a senator by the name of Pompeonius, who has a villa.

So Pliny thinks, well, I'll go and see how he's getting on and maybe kind of take a rain check there, a pumice check.

They arrive in Stabii and they find that Pompeonius is down in the bay desperately trying to get away and they're facing the same problem.

The pumice is too thick now.

And so effectively by heading for Stabii, Pliny has ensured that he is, he's now stranded there.

Pliny is still being very kind of measured about it.

He's trying to play the kind of the cool, hard-headed, practical man of action, keep everyone's panic at bay.

So he takes Pompeonius in his arms, kind of tries to reassure him, suggests that they go back up to the villa and they arrive there.

And Pliny is very kind of, you know, I mean, filthy, streaked with ash.

And he says, well, I think I'll have a bath.

That is extraordinary behavior, Tom.

And in these circumstances, volcano is erupting around you.

Like, well, I think I'll take a bath just because I'm a bit.

It's very carry on up the kyber.

It's kind of stiff up a lip.

Very stiff up a lip.

Very stiff up a lip.

So he goes up and he has his bath and then he comes out and he says, you know, what's, well, what's for dinner?

Such an impressive, such an impressive display of son foie.

I mean, we have to bear in mind that this account is being written by his nephew, who loved him very much.

But I still think, I mean, it's clearly, these are reports from people who survived the eruption, who saw his behavior and were evidently very, very impressed by it.

So Pliny says, Pliny the younger says of his uncle that at dinner, he was in perfect spirits or at least with a show of good spirits that was under the circumstances, no less remarkable than the genuine thing.

And this is even as the skies are black, the waters are filling up with a scum of pumice.

The stash is raining down and there's rumbling and the earth shaking and they're having dormice and fish sauce as usual.

Yes, exactly.

So I think because at this point, all that is happening, of course, it's a lot, but

all that is happening is this fall of pumice and this sense of a kind of universal darkness.

I mean, terrifying enough, but worse is to come.

And I think we should take a break at this point.

And then when we come back, we'll talk about how death is preparing to claim Herculaneum and we will see how death claims Herculaneum.

Oh, what a terrifying story.

So we'll see you after the break.

Welcome back to the rest is history.

Pliny the elder having just had his bath is having dinner.

He's having his lovely elegant dinner under a blackened sky as ashes filling the air and pumice is raining down.

Now, Tom, you ended the first half by saying that death was about to engulf Herculaneum.

So talk us through what happens next.

OK, so this is noted by Pliny and his fellow guests at Stabii kind of a few miles on from Vesuvius and that they are looking back towards where Vesuvius looms.

I mean, they can't see it because everything is pitch black, but they suddenly start seeing fire and this is about three or four hours before midnight.

And if you're in Herculaneum, you are right underneath this vast jet of red flames starting to rise from the summit of the mountain.

And it can be seen through all the kind of the billowing black clouds and lightning starts to flare through the ash and great jagged bolts of fire.

And people cry out, the giants are coming, you know, they have woken their coming.

They are breaking free of their chains and there's absolute pandemonium and terror.

But still the worst is to come.

So this is by now it's midnight has come and gone and then abruptly about 12 hours after the initial eruption spectators in Herculaneum.

They're watching the lightning shimmer.

They're watching it kind of stab and fork above them.

And then suddenly apocalypse descends on them and it descends on them in the form of a great glowing red cloud, what volcanologists call a pyroclastic surge.

And it has emerged from the column of ash, it's begun to flow down the side of Vesuvius and it is advancing at an unspeakable speed and people watching it.

I mean, of course, they cry out in terror, they try to run from it, but it's impossible because it is moving so fast that it simply can't be outrun.

Your description, Tom, should I just read your description, which is so powerful or perished equally, the avalanche of ash and pumice and gas moving at ferocious speed.

Overwhelmed the entire city in a matter of minutes.

No living creature could survive the terrible heat.

Skin was vaporized, intestines were boiled, brains bursting through skulls dissolved on the passage of the fiery cloud.

Heads were knocked off statues, beams, tiles, walls all were sent flying.

The entire city was left buried.

The entombment of Herculaneum had begun.

Scorching scene.

Yeah.

It's reminiscent of the footage that you always get in films about the nuclear war,

you know, when the bomb lands and suddenly you're seeing glass and everything just shattering everywhere. I mean, that's what it's like.

So no one can survive this.

A firestorm. It's like a firestorm.

It's like absolute firestorm.

Bombings of Germany or Tokyo in World War Two.

And it doesn't matter where you are.

So it doesn't matter whether you are on the harbor trying to get away.

It doesn't matter whether you are hiding in the cellars, which is where the elderly women with children have gone.

They all die equally.

And basically Herculaneum, by this point, is already buried beneath ash and rubble and all the kind of accumulated rock that has descended in this pyroclastic surge.

And it is evident to people right of the way along the length of the Bay of Naples that something, you know, absolutely terrible has happened.

They can't see it because, of course, the darkness remains very, very thick, blotting out the moon and the stars.

But the change in the behavior of the mountain in the progress of the eruption can be felt by people in the air.

So Pliny, in Stabiae, he has been trying to downplay the significance of the lightning display that's been kind of forking above Vesuvius and has, you know, again, with tremendous song far has insisted on retiring to bed.

But there are very few people at Stabiae who follow his example, which is just as well because people are still awake, that they can see that the pumice is falling so heavily that Pliny is starting to be trapped in his bedroom.

And so they force their way through the pumice, knock down the door, get Pliny out, and even Pliny has to acknowledge, yeah, this isn't looking good.

And so they face the same dilemma that had confronted people in Herculaneum.

Do you hide in the cellar or do you go down to the sea?

And so they decide that they will go down to the sea, get down to the ships, see if they perhaps there's a chance of getting away.

They start heading down towards the shore.

They take pillows to put over their head because by this point, chunks of rock are falling in ever kind of a greater pace, ever greater speed, ever greater volume. They like torches.

They pick their way down to the docks, but the winds are still contrary.

The pumice is too thick in the harbor.

There is no prospect of making their escape on ship.

So a slave spreads out a sheet and Pliny, who is by now wheezing very, very heavily, he seems to be an asthmatic, lies down on it, calls for a cup of water, calls for a second cup of water, waits for the wind to turn, but the wind is continuing to blow in his face and the ash and pumice is continuing to fall.

And the horror is inescapable.

And he's and you were saying about him wheezing.

I mean, he's not a young man.

He's 55 and there must have been people dropping dead with fright.

I mean, you know, or struggling to breathe or all these kinds of things.

So at this point, it's an apocalyptic scene, isn't it?

I mean, it's like something from a nightmare.

Right. So, I mean, obviously, Herculaneum by this point has gone.

Everyone in Herculaneum is dead.

Pompeii is still standing, but there you're absolutely still in the eye of the storm, but the horror of it is now spreading right the way along the Bay of Naples. So just as it is terrifying for Pliny and his companions in Stabii, so also is his nephew, Pliny the Younger, who's been left behind in Mycenaeum. You know, it's terrifying for them as well.

There are tremors, there's the lightning crashing, there's this pyroclastic surge that they've been able to see that the one that buried Herculaneum.

So, of course, people are thinking, you know, that it's the end of the world.

They have no idea what is happening, just that the doom of mankind seems to have arrived. So the same convulsions that in Stabii have persuaded Pliny and his companions to go down to the shore and wait there in Mycenaeum on the other side of the Bay of Naples have jolted Pliny the Younger and his mother awake.

And so they come out of their rooms and they go out into the courtyard and they kind of, you know, like everybody else wonder, well, what should we do?

So Pliny the Younger, absolutely a chip off the old block, he decides the obvious thing to do at this point is to get out of book and sit in the courtyard and read it, which I think, again, is tremendous tribute to his commitment to scholarship and his love of reading.

So that's what he does and they wait for dawn and then dawn comes and it is evident as dawn comes that actually sitting around and reading a book isn't probably the best policy.

So even the Younger Pliny is forced to accept that.

And so he orders carts to be loaded.

So, you know, all the choice belongings from the villa and then he and his mother and their escorts and their slaves start pushing the wagons out of Mycenaeum, anything to get away, basically.

And as they do so, everyone else is doing the same.

The whole naval base is emptying and they reach open ground, try to stabilize their carts, which can't, you know, kind of rolling and rocking everywhere.

It's very kind of difficult to do that as Pliny is doing that, trying to make sure that the wagons aren't kind of rolling back down the hill.

He keeps looking over his shoulder and by now there is sufficient light.

It's very, very faint, it's very watery, but he can look out to sea and he can see an absolutely astonishing scene, namely that where the sea had been, there is now nothing but dry land.

And so you can imagine all the fish and the other marine creatures, they've been left stranded, they're kind of twitching and gasping in the open air,

littering the sands and in the distance, the mushroom cloud can now be made out absolutely terrifying.

In fact, also dominate what it's like is maybe it's kind of quite Lord of the Rings, because that mushroom cloud kind of is crowned by fire.

Yeah, you could imagine it.

It's like the explosion of Mount Doom or indeed what happens to Numenor, Tom. Yes.

In the Somerillum.

Anyway, we're getting into fantasy.

So what's happened in, well, let's start with Herculaneum.

What's happened in Herculaneum?

Completely buried?

Yeah, completely buried and being buried in evermore paraclastic flows, because what's happening by this point is that the column of ash and rock that had risen up above Vesuvius, which at what, you know, it had reached a miles and miles and miles into the sky, it is now starting to collapse.

And so it's that that periodic levels is sending these kind of great clouds of fire, edge, dust crashing down the side of the mountain.

And rolling over Herculaneum.

So I reckon that by dawn, the hours after dawn, the time when Pliny the Unger is, you know, looking at the dry sea, by that time, nothing at all remains of Herculaneum.

It's been buried beneath maybe 100 feet of rubble.

And so the entire shoreline has been transformed by this.

Yeah.

So if it's possible for people to look towards Herculaneum, it's not only that they wouldn't, there'd be no trace of the town.

There would also be no trace of the familiar shoreline.

It would be nuttily transformed.

Terrific.

This sense that, you know, the giants have awoken and they are not just destroying cities, but reshaping the very contours of the earth.

I mean, completely terrifying.

However, in Pompeii, meanwhile, no pyroclastic surge there.

And so with the coming of dawn, there's the sense that the rain of pumice is starting to subside.

And so for the first time since the eruption, they're able to start seeing the streets around them.

Now, what they see is not entirely reassuring, because basically it's not just the streets have piled high with the pumice, but all the buildings are absolutely buried beneath it.

And a lot of these buildings have collapsed.

The roofs have collapsed.

So from across the city, there is the sound of the screaming of people

who are buried beneath it, you know, begging for help.

But it's impossible.

You can't seem that the very city like a crippled beast was moaning in pain.

You have people sobbing and crying.

You have dogs howling in agony and fear and hunger.

I mean, you know, complete, I mean, apocalyptic scene.

Yeah.

But those who have not been buried beneath the pumice, those who can kind of escape their hiding places, it does seem now that there is an opportunity for them to make their escape.

And so they start stepping out into this very, very kind of watery, ghostly light, picking their way over the rubble, over the pumice and doing it, of course, as urgently as they can.

And so you get different groups of people heading for different gates.

And we know this because their remains have been preserved.

So you can trace how there were men leading their families, slaves, lugging heavy sacks, children holding hands as they run, all of them heading towards the various gates that lead out of the town.

We know that there was a doctor who was carrying his box of medical instruments.

We know that there was a temple servant who had bundled up all the most precious treasures of the shrine.

So they, you know, the statues of the gods struggling not to, you know, to drop them as he runs.

And there's, there's a group of about 20 fugitives, one of whom is a woman who is hugging to herself this tiny statue of Fortuna, the goddess of good luck and heartbreaking details, Tom.

Yeah, you would do.

Dominic is Fortuna.

Is she smiling on these people as they try to escape?

No, I know, because I've been to Pompeii, so I've seen the figures.

So lots of people have seen those figures.

They're not the original figures are they?

They're plaster casts.

Are they of the space?

So all you have is the space.

Yes, exactly.

Because it is at this point, as people are trying to make their escape, that the final collapse of the great column of ash finally happens.

And this surge does bury Pompeii, and it is the largest, the most monstrous of all the pyroclastic flows.

And it absolutely buries Pompeii as with Herculaneum.

So now it is simply too fast to be escaped.

And so it kills every living creature in its path.

And we know how people tried to cope with it.
So there's, you know, there are people who raise pieces of cloth to their mouths.
No help at all.
There are slaves who are shackled and the heat fuses the fetters to the bones of the slave.
Famously, there's a dog.
I mean, I'm sure everyone will have seen the mold of the dog, who again had been kind of tethered by the entrance of its master's house and kind of writhing in its death throes, and the ash falls, the rubble falls.
Everything is buried.
So there's a line from Marshall, isn't there?
All they sunk in flames and dismal ash, a fate that the gods themselves might have wished had not been in their power.
So Marshall is a great poet famous for his epigrams and actually also famous for writing about the inauguration of the Coliseum.
I mean, it is actually quite moving to see, isn't it?
Even at such a vast distance in time, almost 2000 years to see the figures frozen at the moment of their deaths, the dog, as you say, the woman with the cloth, the slaves and so on, the people holding hands, all of that kind of thing.
I mean, it's an absolutely terrifying lesson in mortality and in our own vulnerability.
And I think even more so because we have in the form of the letter written by Pliny the Younger to Tacitus, an account of what it was like to experience that final collapse of the great column of ash and survive it.
Right, because he's at a distance.
Yeah.
So he is on the high ground above Mycena.
You know, they've got their wagons.
They've tried to escape the town and they're looking back and they see the great avalanche of rubble and fire that buries Herculaneum for the last time and destroys Pompeii.
And it continues to kind of ripple out.
It's pulsing across the Bay of Naples.
It's burying Naples.
It's burying Puteoli.
It's burying by Blattering them completely and heading towards Mycena.
And people start to kind of scream on it coming.
And Pliny describes it a dense blackness that swept ever onward, spilling over the earth in a great flood.
And then it hits them again.
Pliny says it's like the dark of a deep prism that had never known light.
And he describes how children sob, how parents are screaming for their lost sons and daughters, how people are weeping, some for themselves.
Pliny says and some for the world itself, which they think is finishing.
For if there were many who raised their hands to the gods and there were many

others who declared the gods to be no more and that the darkness would last forever and that the world was at its end and they see through the dark spits of fire, flickerings of fire.

And then the fire is gone and then it's all blackness again.

The ash continues to fall.

Pliny says how he and his mother think that they're going to suffocate.

They're holding their hands to their mouths, desperately trying to get breath into their lungs without suffocating themselves.

And they genuinely think that this is the end of the world that they're doomed.

And then the darkness starts to become visible smoke and the sun in its absolute, of course, blood red, but it starts to shine very duly through the veil of thick black cloud.

And as the ash, the darkness starts to dissipate, Pliny the elder is looking around and he can see that mycenum is still standing.

And then it lifts again and they can see by the great seaside resort that's still standing and putty only the great harbor is standing and Naples is standing.

But when they look towards where Herculaneum had stood and where Pompeii had stood, nothing, the landscape has changed completely.

So they are gone.

Meanwhile, on the far side of the bay, the same cloud that has swept over mycenum has reached Stabii and Pliny the elder, he's very asthmatic.

He's very elderly.

He's exhausted.

He's been kind of sitting there.

They don't see the cloud coming.

But then they get this kind of stench, a stench of sulfur and it gets stronger and stronger.

And at this point, everyone in Pliny's party rise to their feet and panic.

They start running away from it, but Pliny can't.

He's too shattered.

He's too old, two slaves stay with him.

However, they try and help him to his feet.

Pliny takes a step forward.

He taugt us he collapses.

The smell of sulfur worsens.

The cloud of ash grows thicker.

The darkness becomes total and the slaves flee and no one knows what has become of Pliny the elder.

And then two days later, a search party arrives on the scene where Pliny the elder had last been seen and they discover him.

He hasn't been kind of gnawed at by scavenging animals.

He hasn't been brained by a lump of rock or anything.

He looks as though he's lying there asleep.

Golly, what a terrifying story.

So Pompey is gone.

Okay, and him has gone.

Presumably our sources are sketchy.

People must have been digging there for days, hoping to find, you know, loved ones.

Well, and looting seems again from the archaeological evidence that people in the immediate aftermath of the eruption do kind of starts going down, either to try and recover their belongings or to loot it or whatever.

There are lots of refugees.

They spill over the Bay of Naples.

Some of them go all the way up to Roman and to Ostia, the port outside Rome.

I mean, the reverberation spill right away across the Mediterranean.

So the ash is causing kind of spectacular atmospheric displays as far afield as Syria.

Craigie, and we know this from the sources of the time.

It's interpreted in apocalyptic terms unsurprisingly by Judean sources.

So Titus, the emperor in whose reign this happens, is the general who had captured Jerusalem.

And so there are kind of apocalyptic writings by Judeans that say this is the judgment of God, and there is definitely a feeling in Rome as well that this can only be the manifestation of divine anger.

And as we'll see when we do our episode on the Colosseum, I think that this plays quite an important role in the way that the opening of the Colosseum is framed by Titus.

I was going to ask about that because we haven't done many natural disasters on the rest of history, but one we did do is the Lisbon earthquake in the mid 18th century, which had a profound impact on the mentality of the Enlightenment and shaking people's faith.

You know, famously Voltaire wrote about it in Condi, shaking people's faith in a benevolent God and in a divine plan and all these kinds of things.

Do you think that the eruption of Asuvius in 79, do you think that had a similar effect on the Romans or did people just sort of say, well, stuff happens?

I think it has a really profound effect.

I think it's buried in the sources.

When you think that the Romans don't believe that the gods are benevolent in the way that Christians believe that the Christian God is benevolent, the Roman gods are you worship the gods, you pay your dues to the gods, rather in the way that you take out insurance. Therefore, if something terrible happens to you, the implication is that you haven't taken out enough insurance.

And the rule both of Titus and of his younger brother, Domitian, who succeeds him and is commemorated in the sources as a brutal tyrant, I think a lot of what certainly both Titus and definitely Domitian do are reflections of their attempt to appease the gods, the feeling that everything that is happening in Rome is because the gods are offended, they haven't been given their dues.

And therefore, a lot of what Titus in particular Domitian does is an attempt to get the gods back on side.

Okay, just on Pompey itself, you know, while people are appreciating the gods, it's

Pompey just abandoned and pretty much forgotten.

And then excavations begin in the 18th century and have been ongoing and are still not completed.

And on Vesuvius itself, the propitiation of the gods actually didn't work because Vesuvius is still one of the world's most dangerous volcanoes.

I mean, I'm just reading here, there have been eruptions 203, 472, 512, 1660, 1682, 1694 and so on and so on and so forth, killed more than 100 people in 1906, 1944 US planes, which were based there, destroyed.

And even now, just reading there, the Italian government has a contingency plan to evacuate 600,000 people.

Yeah, I mean, isn't this an extraordinary thing that even though we know what happened to Pompey and Herculaneum, you know, there are still 3 million people living in the Bay of Naples.

Well, because the volcanic soil is incredibly rich, it's what provides the concrete that enables the Bay of Naples to be the kind of architectural cutting edge.

It's the Bay of Naples where, for instance, domes are developed, which will then feed into the Pantheon in Rome, the Dome of Hagia Sophia, the domes that are characteristic of Islamic architecture, you know, it's all ultimately originates from the excellence of the concrete that is provided there.

And also there's this region called the Phlegarian Fields, which is kind of marked by fire and ash and things, but are also spectacularly fertile so that they can have two harvests.

So, yeah, the risk of being wiped out by a volcano is the tax that people have paid on the fertility and the productivity of the environs around Vesuvius.

Death is the tax we pay for life, Tom.

But so your passages on this and your book packs, I mean, they're brilliantly done.

It's an incredibly sort of sobering read.

Just writing that, you know, that must have been a highly charged chapter to write, I would guess.

Yeah.

And it was piecing together all the kind of the various elements of the evidence that, as I said, the literary, the archaeological and the volcanological to kind of work out what actually happened when it happens, what it would have been like to witness it and to experience it.

It was a thrilling piece of writing to do.

All right, right.

A thrilling piece of writing.

The book is Pax, War and Peace in Rome's Golden Age.

Tom, we've never plugged it before in the rest of history.

Obviously, I haven't mentioned it.

Never mentioned.

This will come as a complete shock to many of your admirers to know that you've been writing this book and that it's now on sale.

If I do have a besetting fault, it's a modesty.

What a note on which to end.

It's an extraordinary and harrowing story.
So thank you very much, Tom.
And on that note, thank you very much and goodbye.
Bye bye.