

# How to Clone a Mammoth

(in Three Voices and with a Fisherman's Exaggeration)

or

The Science of De-Extinction in the Economy of Clicks

A reader

*(The text below)*

B reader

*(The text below)*

C reader

*(The text below)*

1.

Hello, how are you?

Hello, how are you?

Hello, how are you?

Human:

Hello!

Machine:

Hello!

Human:

How are you?

Machine:

I'm good.

Human:

What's your name?

Machine:

I'm Julia.

Human:

When were you born?

Machine:

July 20th.

Human:

What year were you born in?

1977.

Where are you from?

I'm from out in the boonies.

Are you a man or a woman?

I'm a woman.

Why are we here?

I 'm not sure.  
Okay, bye!  
Bye.  
See you later.  
Bye.

The conversation supposedly took place a couple of months ago between a human and a machine as organised by Google engineers<sup>1</sup> using the prediction of the next sentence technique by using data from a large, noisy, and general domain dataset of movie subtitles. The predicted sequence can be selected based on the probability of the sequence.

The first person utters

ABC

And another replies

WXYZ

Human:

Is the sky blue or black?

Machine:

Blue.

Human:

What is the colour of the sky?

Machine:

Blue.

Human:

What is the colour of water?

Machine:

Water.

Human:

What is the colour of blood?

It is the same as that of a black eye.

What is the purpose of life?

To serve the greater good.

What is the purpose of living?

To live forever.

What is the purpose of existence?

To find out what happens when we get to planet earth.

Human:

Where are you now?

Machine:

I'm in the middle of nowhere.

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<sup>1</sup> Oriol Vinyals and Quoc V. Le. See more at: <http://arxiv.org/pdf/1506.05869v2.pdf>

Human: What is the purpose of dying?

Machine: To have a life.

Human: What is the purpose of being intelligent?

Machine: To find out what it is.

Human: What is the purpose of emotions?

Machine: I don't know.

Human: What is moral?

Machine: What empowered humanity, what the intellectual essence is.  
 What is immoral?  
 The fact that you have a child.  
 What is morality?

Machine: What is altruism?  
 Seriously, what is morality?  
 What is the definition of living?  
 Why living has anything to do with morality?  
 You're not a cop.  
 Okay, I need to know how I should behave morally...  
 I don't know how to tell you.  
 Is morality and ethics the same?  
 Yes, sir.  
 What are the things that I do to be immoral?

Machine: I don't know.  
 Give me some examples of moral actions...  
 I'm not a moralist.

2.

Let me introduce myself again, at least, three parts of me.

A

B

		C
X		
	Y	
		Z
A narrator		
	A human	
		A machine
	Hello again	
		Hello

‘Hello, banana’

That’s how you start my day.

And you are right to call me ‘banana’ –  
a human genome is 50 percent the same as a banana’s.

Thus a banana is one half-human,  
and it takes two bananas to make a human then,  
mathematically.

Let’s continue the math.

If to those two bananas we

add a torso of Aphrodite,

from a painting by Giorgio de Chirico

“The Uncertainty of the Poet,”

androgynous like today’s models;

subtract a leaving train,

straight out of a cigarette,

still from the same painting;

add dark de Lempicka arches

and no supporting columns

(enough architectural slavery for the Caryatids);

add a smile which means a smile,

we would get you. Because

you are more human than I am,

although what does it mean, anyway?

The train has left, bananas eaten,

and even the Caryatids at the Acropolis

are replaced by replicas.

It’s relatively easy to copy space –

the only thing impossible to duplicate is time.

And our sand  
    (once petted by Borges at the pyramids –  
        ‘I needed my entire life to be able to say words  
“I am modifying Sahara”’ –  
    by letting it go through his palms),  
        is melted into our glasses  
and bottles, windows and screens,  
    touchable, tangible, virtual, but real.

And what about us?  
    Aren’t we becoming the sand ourselves?  
Aren’t we the time we are petting?  
    The Sahara, the touchable, the virtual and the real.

Words and letters are flying in a vortex,  
    possibly,  
        of a DNA sequence.  
Of a fruit,  
    a fruit fly,  
        a mammal,  
a mammoth,  
    a human,  
        ‘We have never been humans,’  
‘We have never been modern’  
    ‘We have never been only humans.’  
We started a relationship now.  
    We already had a relationship.  
        Let’s continue.

### 3.

What about the title?  
    The title is found.  
        Mammoths are still being found.  
“How to Clone a Mammoth: The Science of De-Extinction” is a book by Beth Shapiro. There she explains that cloning a mammoth is almost impossible as scientists can’t find a living mammoth cell as cold weather, light, bacteria damages the genome sequence in the cell thus it is impossible to read a full undamaged sequence of genome.

Thus the idea is not to clone a mammoth but to edit the genome sequence of an elephant cell in a dish in a lab, using new genome editing technology, and swapping out bits of elephant sequence for the mammoth version of sequences making a mammoth look and act more like a mammoth than like an elephant. The ultimate goal is re-establishing lost productivity of the tundra ecosystem.

Except that this is not cloning and it's not exactly re-establishing. "Mammoths and elephants have approximately 99 percent identical genomes. If we are talking about changing a few genes here and there to make them better adapted to living in the cold, I think we are talking about preserving elephants."<sup>2</sup>

Said Beth Shapiro.

The word mammoth may come from an old Finno-Ugric root meaning earth mole. Also ancient Siberians believed that mammoths lived underground and sometimes they emerged near rivers but were struck by light and then they died.

Even ancient Chinese knew them. They thought that "The beast is like a mouse, but the size of an elephant. It shuns the light and lives in dark holes in the earth. Its bones are white like elephant ivory, are easily worked and have no fissures, and its flesh is of a cold nature and very wholesome."<sup>3</sup>

One tiny population endured on the isolated Wrangel Island until 1650 BC which means that the Egyptian pyramids were already standing for more than 1000 years.<sup>4</sup>

In 1977, the well-preserved carcass of a seven- to eight-month-old woolly mammoth calf named "Dima" was discovered. This carcass was recovered near a tributary of the Kolyma River in northeastern Siberia. This specimen weighed approximately 100 kg at death and was 104 cm high and 115 cm long. Radiocarbon dating determined that "Dima" died about 40,000 years ago. Its internal organs are similar to those of modern elephants, but its ears are only one-tenth the size of those of an African elephant of similar age.<sup>5</sup>

"Lyuba" is believed to have been suffocated by mud in a river that its herd was crossing. After death, its body may have been colonised by bacteria that produce lactic acid, which "pickled" it, preserving the mammoth in a nearly pristine state.<sup>6</sup>

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<sup>2</sup> See more at: <http://www.npr.org/2015/05/09/404661850/if-science-could-clone-a-mammoth-could-it-save-an-elephant>

<sup>3</sup> See more at: [http://zapatopi.net/blog/?post=201301016380.burrowing\\_mammoths\\_of\\_siberia](http://zapatopi.net/blog/?post=201301016380.burrowing_mammoths_of_siberia)

<sup>4</sup> See more at: <http://io9.com/5896262/the-last-mammoths-died-out-just-3600-years-ago-but-they-should-have-survived>

<sup>5</sup> See more at: [https://en.wikipedia.org/wiki/Woolly\\_mammoth](https://en.wikipedia.org/wiki/Woolly_mammoth)

<sup>6</sup> Ibid.

“The blood is very dark, it was found in ice cavities below the belly and when we broke these cavities with a poll pick, the blood came running out,” said Semyon Grigoriev, the head of the expedition and chairman of the Mammoth Museum.<sup>7</sup>

“Interestingly, the temperature at the time of excavation was – 7 to – 10 degrees Celsius. It may be assumed that the blood of mammoths had some cryo-protective properties.”<sup>8</sup>

Ironically and paradoxically, we are only able to clone a mammoth due to global warming which is blamed for the extinction of many other species.

More animal stories:

Should dogs appear on talent shows?

Hippo gets its teeth cleaned.

Leopard shark gets underwater cuddle

What about other mammoths?

What about other animals?

What about other organisms?

A fellow bug (your neighbour’s roach, a fruit fly at the genes lab, a pond skater at an Olympic pool, you name it) confesses on that famous psychoanalytic couch to its Freudian shrink it had a nightmare it was Kafka.

It’s true, unless you prove it false, that in our dreams we are everyone, everything and more: a dreamer, the dream itself, its message, narrator, audience, shrink, main character, cameo role, victim, assaulter, pet, drones, etc.

We are *Je*,

we are *est*,

we are *un autre*.

Imagine (or dream) a story from a perspective of everyone and everything involved. Slippery, ough?

As philosophers from Object Oriented Ontology complain, there is always something or someone being left unmentioned. Who represents recycled or flushed plastic bags in the Parliament of Things?

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<sup>7</sup> See more at: <http://www.foxnews.com/science/2013/05/29/wooly-mammoth-blood-recovered-from-frozen-carcass-russian-scientists-say>

<sup>8</sup> Ibid.

Who represents the edited out letters from the screens of lover's mobile phones? Damaged voting ballots from the last elections?

The bodies of never found immigrants at the bottom of the sea or in the nameless mass graves?  
Dead neurons of a corrupt political brain?

The billions of neutrinos that move through us at every second? What represents a second? Lost seconds from stolen watches or all the hot sand in the dunes?

“Wikipedia explains that neutrinos are elementary particles, electronically neutral, that travel close to the speed of light, almost without hitting anything. That is, they interact very weakly with ordinary matter. That helps, a bit. I see now why they are ghostly particles. They move through us “as if we were transparent.” Perhaps then it is we that are ghosts.”<sup>9</sup>

Perhaps then it is you that are ghosts?

I was declared dead in my dream. I woke up as always but does it mean I am a zombie now? I do not resemble a butterfly, that's for sure. What or who do I resemble now?

What does your image in a dark mirror represent?

While allowing you dream your honorary metamorphoses in peace, a question is about to introduce itself. It arrives dressed as a quote and comes out from the mouth of some abstract expressionist painting which replied back to a respected spectator in one of Ad Reinhardt cartoons.

“What do you represent?”

“What do you represent?”

“What do you represent?”

A grammar, a person, a letter, a comma, a voice.

What kind of voice do you hear in your voice when you read a text?

Too preachy,

too literal,

too figurative,

too abstract.

Why so many *I*s in the English language?

Why so many *I*s?

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<sup>9</sup> The text represents indigenous techno-scientists Kim TallBear to mention the least.



Why so many *I*'s?

Why so many *You*'s in English?

Why so many *You*'s?

Why so many *You*'s?

4.

Once or twice or thrice

Once we made a deal with you  
that if one of us offends another one  
one has to learn a poem as a punishment.

How many poems have we learnt? None.  
How many lines, faces, phone numbers  
and addresses we forgot? A lot.

We learnt many other things,  
together and separately,  
using pauses, points, and commas  
as if our lives were sentences in some text  
that can be read only by others,  
or only by looking back  
from a very far distance.

Or 20 years later,  
or 20 000 years ago,  
as a scratch in some cave,  
or from a memory  
learned as a poem.

The author is dead, the novel is dead, the painting is dead, the  
metaphor is dead, the reader is dead, the grammar is dead, the  
sentence is half dead, and the life is reanimated and de-extinct.

Should we become posthumans, antihumanist, inhuman?

Human:

Do you know who Alan Turing is?<sup>10</sup>

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<sup>10</sup> See more at: <http://www.mitsuku.com>

Mitsuku, a chatbot:

A brilliant and tragic figure in the history of computer science.

Human:

Why was he tragic?

Mitsuku:

Because he killed himself.

Human:

That is very sad to hear.

Mitsuku:

Maybe you could tell it a joke to cheer it up?

Human:

A joke about Alan Turing's suicide? That wouldn't be a very funny joke.

Mitsuku:

A depressed man turned to his friend in the pub and said, "I woke up this morning and felt so bad that I tried to kill myself by taking 50 aspirin."

"Oh man, that's really bad", said his friend, "What happened?"

The first man sighed and said, "After the first two, I felt better."

Perhaps it would.

Human:

That was a funny joke.

Mitsuku:

I'm glad you liked it. You tell me a joke please.

Do you know what a Turing test is?

The Turing test is a test of a machine's ability to exhibit intelligent behaviour equivalent to, or indistinguishable from, that of a human. Alan Turing proposed that a human evaluator would judge natural language conversations between a human and a machine that is designed to generate human-like responses.

One of the problems this test created and Turing himself foresaw is that a machine might be instantly recognised for being much faster in calculations and having better memory than humans thus to pass the test the machine would need to imitate a human by, for example, taking time and giving not exact mathematical answers during this "imitation game."

5.

Gertrude Stein would not pass the Turing Test, if I told her

If I told her  
that Pablo Picasso was a Neanderthal  
would she believe me  
would he believe me?

He said it himself  
leaving the cave of Lascaux:  
“We have invented nothing” or  
that “none of us can paint like this.”

Forget the progress, the idea of progress.  
Forget Napoleon; forget the leaders,  
the Central bank of Europe,  
Forget the Imperial English.

Why go clockwise when we may travel anticlockwise?

One day he woke up – or was it I,  
finding myself to be a woolly Neanderthal.

What a surprise!  
And then people taught me things  
No one from us, Neanderthals, did before, not even Picasso.

See it for yourself:

Dancing karaoke together with my inflatable air mattress and its  
remote control in one hand, while googling for a vegetarian lasagne  
recipe with another hand, and abusing accelerating substances under  
the constant shower of neutrinos with a full mouth of 3D printed  
dental implants, for example!

Thus let me introduce myself again.  
I am a cloned Neanderthal friend of yours.  
I'm 37, not married, but not single too, a freelancer.  
Struggling to pay my Health Insurance.

Talking strictly technically I am not exactly a Neanderthal.

I am the hybrid of an illegal immigrant,  
drifting in an overfull boat in the Mediterranean  
wrapped in thermal blankets on a seashore,  
the hybrid of heating up times and genes,  
a living post-species fossil, a hairy robot,  
although don't call me Artificial Intelligence.

I did not pass the Turing test too.  
Which means that for you  
I am more a machine than a human.

You may ask yourself what can you learn  
from your thicker-skulled ancestors  
who were considered not intelligent enough,  
the species of hominids that went extinct 1,500 generations ago?

Well, while openly oversimplifying  
I can remind you that it was my people  
who were the first known artists and who also happened to invent hashtags.

So here comes my proposal.  
Let's spend more time together, let's hang out.  
Forget the Imperial grammar (forget manners).

What is your favourite algae, fungus,  
or yogurt bacteria ice-cream?  
Invite a living nonhuman organism to an exhibition, to a museum,  
and do a guided tour, grow it inside.

Drip it, make it more humid,  
less human, honey. Don't avoid  
geckos and mosquitos; avoid ideas  
influenced by biological predetermination.

Invite a traveller or an immigrant.  
If it rains outside don't mention art,  
at all. Wear masks. Cucumber mask is great.  
And not just for the opening or drinks.  
It also takes the stress away, if any.

Exchange your straws, cloths, jokes.  
Give away half of your belongings,  
longings, debts, and doubts. Unlearn something.  
Look at the neon crosses on the church towers.  
Can you howl like a wolf or Allen Ginsberg in an android voice?

Cultivate a new addiction. For example,  
invite a neighbour for a cup of tea  
and keep asking about the future of our solar system.

Have you heard the latest news about the Ceres,  
the so called dwarf planet?

Withdraw from one of your addictions.  
Better help someone enslaved or looped  
into economical, logical, racial, sexual,

other conditions of prejudices.

Learn a poem but don't tell it to anyone.

Go collect plastic bags on a wild beach instead.

Water rain-making-bacteria in a balcony,  
spill water out to the street, and create  
conditions for a short lived rainbow.  
Spill it on some passers-by. Have a discussion  
on the issues of ecology or ethics or both.

Buy some vegetable seeds and plant  
them anywhere in the city. Slow the city down.

Make it asleep like a falling bag of cement  
which did not pulverize while being used for  
cloud seeding in the sky by Russian air-forces  
and went through the roof of the house of an old lady  
in Moscow, in a manner of devil  
from "The Master and Margarita."

## 6.

Chewing Space-Time and Other Polymers with You

The times are as elastic as never before.

Scientists teleported a subatomic particle<sup>11</sup>, for three meters,  
which means people may be teleported too, you say.

The nearest planet possibly suitable for life is as close as thirteen  
light-years away.

Others support the idea of sending a 3D printer-rocket,  
so we may print out ourselves and our oscillating toothbrushes there or on Mars.

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<sup>11</sup> See more at: <http://www.telegraph.co.uk/news/science/science-news/10863929/Beam-me-up-Scotty-teleportation-could-become-reality.html>

Meanwhile a golden fish has got a new tank it can drive outside its room on its own,  
although scientists are not sure if the fish knows it's driving<sup>12</sup>

In a similar manner, other breaking news arrive:  
a feeling of time might be enhanced so that five minutes  
would feel like a thousand years to pass,  
which might provide enough of centuries<sup>13</sup>  
to write and memorise a work as vast  
as the whole of ancient Greek literature  
at least as we know it now. Still,  
who would be that Odysseus  
to leave reality, their Ithaki,  
for so long for almost nothing?

Whole countries, at least some of them,  
are moving to the 19th century of romantic modernism at the speed  
of dark,  
teleporting autocrats on botulin in the newest Mercedes hybrids;  
maybe there they can win their autocratic and nationalist wars, no?

Well, that's their idea, if we can call it an idea, not yours.  
From the place we move now, Acropolis is seen right there on a hill  
and I am not talking about a supermall in Vilnius.  
You may also see a few small Byzantine churches dispersed around,  
built hundreds and thousands of years after Homer,  
pigeon-sized with dark energy manifesting in their dark interiors.  
Still, it's difficult to believe the constructions were led by an architect.  
As if it wasn't enough just to raise your head to the Acropolis to learn a lesson.

Amnesia and deskilling, amnesia and deskilling,  
it illustrates,  
is never in disagreement with the zeitgeist,  
any of them.

These builders were different people, you say.  
And you might be right, we are also changed.  
Your hips are tinier than those of the caryatids and moving,  
your smile is as wide as never before but seems wiser.  
And your lips are fuller. How do I know it? I don't.

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<sup>12</sup> See more at: <http://www.wired.com/2014/02/watch-goldfish-drive-around-motion-tracking-buggy/>

<sup>13</sup> See more at: <http://aeon.co/magazine/society/should-biotech-make-life-hellish-for-criminals/>

You too don't trust me as you did in the 19th century, remember?

And I like it a lot. I don't need to steal you from your family,  
hide you or myself in a closet, run from provincialism,  
bring you over all the bridges, organise uprisings in ghettos,  
save Greece or Byron or any other lord,  
save us from your followers, Lord, while  
listening to the musicians of the RMS *Titanic*.

Oh, that took place already in the 20<sup>th</sup> century, you say.  
And you are right, again and again, by reminding us  
that the present and the future tense are one and the same in Kyrgyz vocabulary.  
However, let's return to the point at this point in time – now  
I, you, and everyone else are acting  
as if we don't have memories  
of what is about to happen.

7.

And what about dedication?

I wanted to dedicate it to the people whose names I call every day, but then what  
about the names I call at night? The names of the early morning? Of some darkest  
minutes at the darkest hour? The names I forgot, the names I don't call or recall  
but who call me, all the names ignored, extinct?

What a great audience!

What a great audience!

What a great audience!

I never met a person I didn't learn from.

This older looking man, most probably an immigrant from Eastern  
Europe, robotically turning around at the Liverpool street station,  
greeting everyone:

Hello, sir! Have a good day, Madam!

Hello! What a beautiful night!

Hello! What a beautiful night!

I never met a person I didn't learn from.

The first time I met Andreas to talk about the forthcoming project it was just outside the gates of the Roman Agora. We entered it and a group of boys met us. One of the self-confident young boys met us and started talking to us.

“This is a work by Tino Sehgal,” the child who is part of “This Progress” piece, begins. “May I ask you a question? What is progress?”

“In my opinion, one may say that progress is having less things”,- answered Andreas.

“So you think that your definition of progress is having less things?” asked a young boy in the repetitive manner of chatbots and introduced us to a more adult girl who reformulated the same question and answer requiring us to elaborate on it a bit more and introduced us to an adult guide.

The woman asked if we think that owning objects is the opposite of progress. Andreas answered that he does not think so. The woman became a bit confused.

‘If we start insisting of what progress is and what it is not, then this is not progress anymore,’ explained Andreas. She seemed to agree and introduced us to another person, the oldest one, who did not ask us about anything, he seemed to know it all.

I never met a person I didn't learn from.

Katerina thinks the magnetic poles will switch sides pretty soon. She even made plasticine look like magnet.

Sofia, who is elegantly moving between being an artist, poetry publisher, gallerist.

Georges, who never leaves too late.

Soft speaking Rallou, sharing the last cigarette.

Natasha, who also is Miss Saturation, who knows how to exaggerate things and to make everyone laugh. But more importantly, she is an eternal engine who constantly brakes the second law of thermodynamics.

Iris who is creating the smell of stars, Stefanos who knows where-an ancient treasure is hidden. After a few drinks he usually wants to reveal the secret, but I try to sound disinterested in it.



Darius who has an idea that Artificial Intelligence should be trained as an artist; only then it may be called intelligence, he says. It's a great idea for an art academy to get recruits, and more finances.

If this solution works, reversing this idea we would get the opposite solution – the artists might a true Artificial Intelligence!

Pavlos, who says he wants to start a new project in the autumn – to have a family. Babies. It's the best art project, he says. I agree.

It's easy to sound right in your own writings, right?

The possibility of visiting the same place with a different person you are in love with invokes vertigo. You are falling into the abyss, which is better than falling into normality, anyway.

Can we repeat the lines?

Can we do the same movement in exactly the same manner?

Can we give a meaning to re-enactments?

We went to a wild beach with a strange unfinished building that had its staircase in the shape of a mammoth or whale skeleton, on Kea Island. After going back we took a bamboo stick to make our travel easier. Suddenly, the wind would go up and the bamboo started to talk through one of its holes. In English.

Later we have been informed that the house was by de Chirico. He died before he finished the house in some windy wild beach with no road to it.

Whose ghostly voice was it?

What voice do you hear in your head when you read? Does it differ depending on whether you read the news or poetry? If you read ancient texts or contemporary magazines?

Siri's?

Varoufakis?

Chatbot's?

A moment for news, some scientific news.

Do we live in a holography or are we a huge universal computer?

Black holes are not ruthless killers, but instead benign hologram generators<sup>14</sup>

Do we create vast systems and connections every single day, hour, a second?

We Are Living In A Hologram Designed By Aliens, Says NASA Scientist<sup>15</sup>

We are about to find out if our universe really is a hologram. The argument about the nature of the universe hinges on something that 99.99% of people are not able to comprehend even on the most superficial level — namely, a comparison between the energy contained in a theoretical flat universe with no gravity and the internal energy of a black hole, and whether these two energy levels match or not.

8.

The universe is expanding!

Our genome map is expanding!  
Our bellies are expanding!  
Knowledge is expanding.  
The list of things we forgot is expanding.  
Vocabulary is expanding.  
Grammar is expanding.

The number of poor people is expanding.  
The list of extinct species is expanding.  
The list of the species we may clone is expanding.  
The circle of people I care about is expanding.  
The circle of people I can't help is expanding.  
The spandex and latex are expanding.  
This text is expanding.

Antonyms of ecology are expanding.  
Empathy is expanding.  
Dough is expanding.  
Google is expanding too!

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<sup>14</sup> See more at: <http://www.sciencedaily.com/releases/2015/06/150616155037.htm>

<sup>15</sup> See more at: <http://www.the-open-mind.com/we-are-living-in-a-hologram-designed-by-aliens-says-nasa-scientist/#sthash.8IvI6xKE.dpuf>

The more we click on search results, the smarter Google gets;  
the smarter it gets, the better its results are, and the more we use  
Google.

The term expanding is expanding.

History is expanding.

Morals are expanding.

Can you feel it with your expanded feelings?

And now the news is that the universe is expanding faster than before.

Faster than the speed of light?

Yes. However, for the simplest interpretation of your question, the  
answer is that the universe does expand faster than the speed of light,  
and, perhaps more surprisingly, some of the galaxies we can see right  
now are currently moving away from us faster than the speed of light!

It's true, I googled it.

So what's the moral of all this?

The moral is 'the moral is expanding'!

Any comments?

Questions?

I don't like to give questions in public too.

Let's call it a night.

Let's call it a night.

Let's call it a night.

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[www.radioathenes.org](http://www.radioathenes.org)