



Hello and welcome to the 20th issue of Astra News!

Starship is back on the launchpad, ready for its second test flight. If you haven't seen the video "Road to Mars" from our previous issue yet, allow me to remind you of it.

After watching the footage of Starship's first test flight, I had a feeling that combining it with SpaceX's recent short film, titled "Starship Mission to Mars", would be worthwhile. However, there was still something missing once I did that. That's when I discovered Isao Tomita's music, "The Sea Named Solaris", to replace the original soundtrack.

"Road to Mars" begins with Richard Strauss's "Thus Spoke Zarathustra". Then, the magic kicks in when Isao Tomita's music comes into play. As it play alongside Starship's takeoff and the sight of a bird in flight, you'll hear the bird sounds in the music give voice to the bird we see. These kind of blends continue throughout the video. It feels like "The Sea Named Solaris" was specifically written to combine Starship's test flight and "Starship Mission to Mars" into one whole, creating an inspiring experience.

Watch "Road to Mars" HERE

Be extraordinary, be the future!

To the stars!

Max and Leonid

The collage on the cover features an image taken by the James Webb Space Telescope, showcasing the Ring Nebula. Additionally, an image of "a marble head of a youth" (Roman, 117–161 CE) from the Metropolitan Museum of Art collection was included. The collage was created by Leonid Vishnevskiy.

TABLE OF CONTENTS

ROM (The Republic of Mars)	
Martian Stone Age: In Need of a New Philosophy By Leonid Vishnevskiy	5
NONFICTION	
The Point of History: an Argument By Amber XinTi Wang	9
Hydro-Powered Curios: Making a Pythagorean Syphon By Amber XinTi Wang, a.k.a Dr. Amber	
FICTION	
Whispering Wood: an Anthology By Amber XinTi Wang	9
THE HILL THAT DUG ITSELF OUT	
Collages and accompanying text By Leonid Vishnevskiy	25



Martian Stone Age: In Need of a New Philosophy

By Leonid Vishnevskiy

Right now, as you read this, four individuals are participating in a human survival experiment on Mars known as CHAPEA - Crew Health and Performance Exploration Analog- which started roughly three months ago on June 25th, 2023.

CHAPEA comprises a series of analog missions, each featuring four crew members, aimed at replicating year-long stays on the Martian surface within the relativly small perimeter of Mars Dune Alpha, which is a 3D printed structure. This closed habitat is situated at the Johnson Space Center in Houston.

Throughout the mission, the crew will conduct simulated spacewalks and collect data on various aspects, which may encompass physical and behavioral health as well as performance. By watching this short video, you can get an idea of what Mars Dune Alpha looks like.

There is not much information about this first mission available on the internet yet, but here is the firsthand information about this mission on the NASA website.

However, my article isn't focused on this mission; instead, it aims to remind everyone of an idea repeatedly expressed in our magazine, summed up in the phrase "Martian Stone Age."

Thanks to courageous individuals who dream big and take action, something once deemed impossible is now happening - we're heading to Mars!

The collage for this rubric (above) was created by Leonid Vishnevskiy. Images from the public domain were used, including an image of the Martian surface in long strips by NASA and an image of Australia's Great Sandy Desert by USGS from Unsplash.

However, some are concerned that humans might not make it there or that establishing a home on Mars is too challenging. Such belief is rooted in contemporary expectations of human longevity, the high level of comfort in our current way of life, and our reluctance to give up either. But even more importantly, it arises from the perception of humans solely as Earth-bound creatures and not considering the possibilities as we explore other planets.

I believe that before we become true space travelers, we'll experience a kind of "Stone Age" phase, similar to ancient times. Once we overcome that, who knows where we'll end up - it's as uncertain as our modern world was to people from the past.

We're cheering for the CHAPEA mission! However, it's crucial to remember that, despite its immense importance, it's just the beginning. To establish Mars as our new home, we must not only adapt physically but also rethink our approach to space exploration.

We're eagerly awaiting your thoughts on what this new version of humanity will be like, what values they'll hold, how they'll remember Earth, and their perspectives on nations, planets, and everything beyond. What will our new, space age philosophy be?

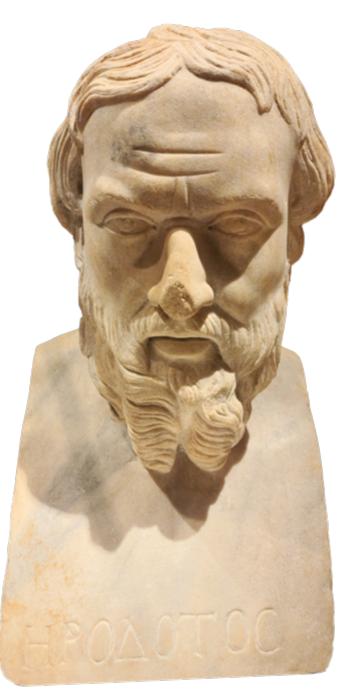
Share your bravest ideas!



The Point of History: an Argument

By Amber XinTi Wang

The point of history is not time, not excavated ancient artifacts, not pivotal moments. No, my dear Watson. The point of history is the people, celestial objects, atoms, and animals, who made history even at first history; in other words, the point is the presence of any single being, however small.



History was not invented or discovered in a day; in fact, the most probable origins of what is today a vast, labyrinthian subject, are a few centuries of work by separate early historians. And even then, before those first historical writings were produced, history was history.

If you wound back the clock to around sixty-five million years ago, the extinction of the dinosaurs would still count as history. Move out a couple more millennia? You arrive at the branch of history called 'Big history'. Finally, at the very beginning, before the Big Bang made life even plausible, that empty space full of hydrogen atoms? Still history.

The point of history is not any one definable being; instead, it is an entire cascade of tiny atoms and tiny atoms shaped into humans, stars, planets, and animals.

Start with Herodotus, the first known human to ever document history systematically, if not slightly inaccurately. His many works including The Histories, all documented the known history of the world from the Greek point of view, and yet, inevitably, he was part of his own history. By writing The Histories, he was becoming part of history. Indeed, my action of writing this essay makes me a part of the millions of histories being made every day, and not

just those typed or written.

If I were to focus on a random point in history, such as Zenobia's revolt against Roman domination of Syria, it would not be the events that were key to creating that history. Zenobia's revolt was not the point of her history; the point of her history was her own self and the many selves of the Roman Empire. Likewise, you will find that even events naturally caused (for example, the eruption of Mt. Vesuvius at Pompeii) are very much interwoven with human and animal histories, even though they might not have been caused by those humans and animals.





Herodotus's Bust - a Roman copy of a Greek original. Image source

And now, to the animal side of things. I will proceed with one of the most well-known examples of animal-related events: the tale of a pigeon. Winkie, the pigeon, was sent across the North Sea with a call-for-help message to the mainland after a carrier plane was shot down. The pigeon was able to deliver the message with surprising rapidity, thus saving the crew of the aircraft. In this tale, the pigeon's actions result from its simple existence. Had the crew in that aircraft not had at hand a carrier pigeon, the course of history (which is grateful to Winkie) may have been altered by just a few millimeters. But in any case, no matter how diverse the historical event, History's point? The people, atoms, and animals who made those events even comprehensible.



Now, you may be thinking that History is actually the study of the past and therefore the events in the past should be the point of history. However, say The battle of Waterloo never happened. Would that change history? Perhaps slightly. But in the end, Napoleon would still have fallen from power due to the fact that the armies fighting against him didn't really need Waterloo to come out victorious. Hence, it wasn't actually the Battle itself that was pivotal; it was the pitting of European armies against Napoleon that actually counted as History's main point.

To summarize: The point of history is not the actions, the events, or the cultures of history. No; the point, or rather, points of history are the people, animals, and atoms that made everything, from the computer I am currently typing this essay at, to the gargantuan Egyptian pyramids, to the very concept of history, possible.

Thus, I agree with Hans-Georg Gadamer when he states,

"History does not belong to us; we belong to it."

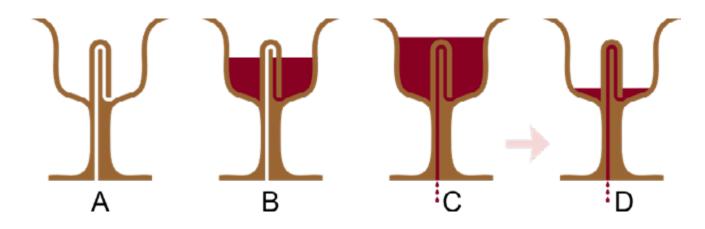
Hydro-Powered Curios: Making a Pythagorean Syphon

Amber XinTi Wang, a.k.a Dr. Amber

If you love the scent of water, its twisty-wily ways
Then this little verse
Will teach you more
On Water's becoming gaze

Here Comes the Greedy Cup Powered by a drinker's lust for wine Which came out of the vines And thus the subject of this rhyme

Pythagoras, more well known for his pythagorean theorem, also created a surprisingly simple - and fun- water curio. This month, I did my best in an attempt to replicate that curio, the greedy cup siphon- and ended up exemplifying another important hydrodynamics rule via a series of craft misakes. Join me in revising these... and in having fun with this contraption!



The Greedy Cup/Pythagoras's Cup/ Tantalus's Cup. Image source

The Pythagorean cup can often be called Tantalus's cup due to an ancient Greek Myth involving Tantalus, forever condemmed to have fruits dangled in front of his eyes and water below, but to never be able to reach them.

The cup drains away liquid, tantalisingly, that is excess above a certain level, leading the greedy drinker to be soaked through! When the water level exceeds that of the U-turn, water will rise up to the top of the upside-down U and flow out of the bottom of the cup.

So, here's how you can make one yourself.

Materials (assistance possibly needed).

A Straw, slitted diagonally
Two containers or a plastic bottle cut in half (this might not work)
Hot Glue Gun
Water & Food Colouring (if desired)

Steps

As my craft went haywire, I highly suggest you visit kiwico.com and search for this item there, as they make it quite clear. However, to clarify: the slit in the straw is there to allow water to flow easily into the turn.

https://www.kiwico.com

 14

Whilst crafting the pythagorean cup, I made a crucial mistake - but one which also helps clarify water pressure.





Why is my syphon not an official Greedy cup?¹

Now, the solution to my craft problem is as follows. I didn't do a U-turn or a slit in the straw! The official Pythagorean Syphon has a U-turn, which will preferably cntain small air bubbles, so that only when the water has reached a certain height will the water be drained out.

My mechanism works similarly, only the fact that the straw's opening is so small compared to the large pressure exerted by any excess water poured in causes it to drain slower (just as if you turn a full bottle of water with sand clogged in upside down, water pressure on the inside

of the bottle forcing out of such a small opening will make drainage slower - the water particles have a slight adherence to each other, a rule named the van-der-waals force, definitely worth googling). Oh - and I sealed my water-cap with tape, therefore inducing a classic Level 10 leak.

Tape?

Bye-bye.

I know that most of my audience will not like being told 'And the moral of this story is...' so I'll subtly slip it in.



RULE OF THUM



WHEN CRAFTING HYDRODYNAMIC - RELATED INSTRUMENTS

Stay safe and prevent leaks. So basic, so ignored.

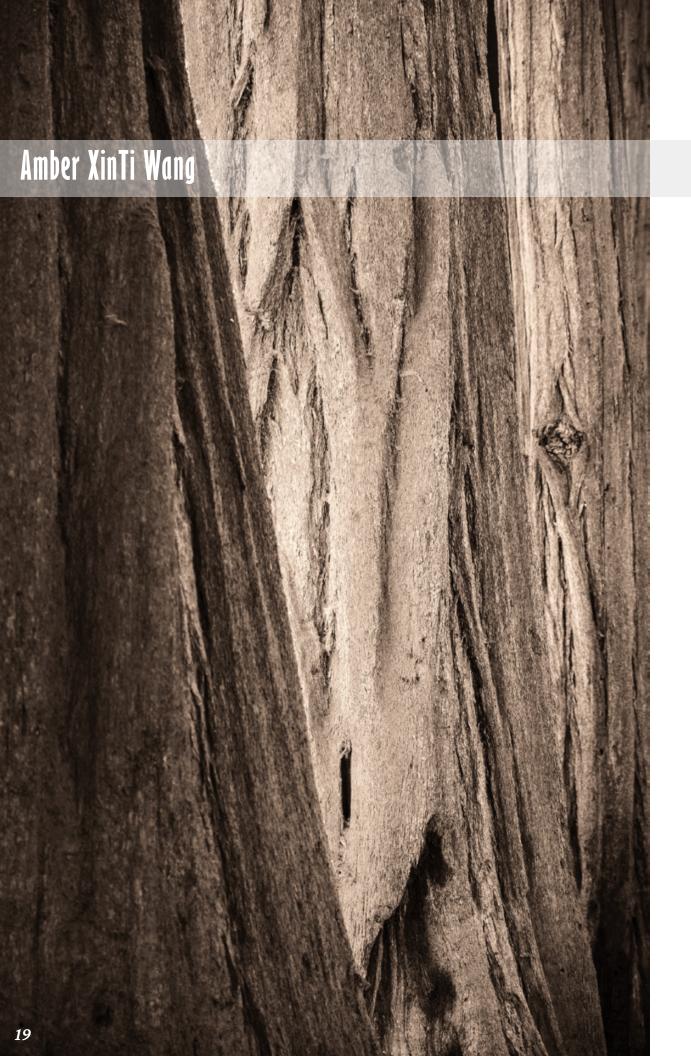
(Okay, so that wasn't so subtle)

On that note, I guess I should have stuck to Pythagoras's theorems (wink, wink). So-there you have it! Pythagoras's greedy cup... mythology... and a craft slip crash course.

Whew!

By Juvan Vd Westhuizen - Own work, CC BY-SA 4.0. Image source





Whispering Wood: an Anthology

Whispering Wood

You whisper, sigh to me You tickle the winds and heave a bitter laugh

Your trunks are ready to fall, fall
Fall under new era's despair
Your branches have premonitions of being fencepoles
Your leaves flutter and fall
Like a Victorian lady's kerchief
Under the steady tread of a booted foot
On illustrious autumnal leaves
The crunch and twinkle
Of chance fallen

O Beautiful woodA wood full of iridescent, starry eyes,
That hath stolen my heart away
And yet you have oft complained to me
In a flood of rapid pit a pats
Pit a pat
Pit a pat
Pit a pat
Dappled sunshine frowns
You ask -

And as for me
I have no answer to that

What canst thou wish From someone as me?

And you have never answered Never, even in extremes

In a thousand years perhaps
Mortals who stride as if you are theirs
Will be gone
Yet you, I hope
Will see the unbroken line of constellations
that doth drizzle so
As once a trillithon ago

Image source 20

The Garden of Water Willows

They sigh
They cry
On an ancient riverbank near here
Their roots search out poisoned ponds
Their heads are raised to polluted air
Alas the grey stair
Which leads to their lair
Is un-swept and shattered still
In some old dynasty of plum blossoms and honey
Their green buds rejoice each year

Yet every day they grow older, nay,
They sag and wrinkle
And who is to say
Which kind of acid that twines the ground
On which
In the Garden of Water Willows
Each wizened bark shard
Each delicate vine strand
Each tarnished trunk and livery of leaves
Doth cling to in amorous content
Oh water willows, water willows!
Do not haste in your torment!
This earth will be cleaner
This water all the clearer

Fruit

It is nearly Summer now
The trees are blooming with youthful pink
blossoms
And fruitWhy many jewels of splendid sour and sweet
Yet they are black
to the core
Black, acrid

Some, at least
This little world of ours
How pitifully it shrieks
Why are we making it so?
Like torturers of an innocent beast

So when I taste the mellow sweetness of each husk's melody
To mind
Comes our want of harmony
Like a banana peel's
Halves

Summer Calls

When trees cry
And the swallow tweets
When woodcutter's engines sigh
I know 'tis Summertime
For only when despair
Hits the uncultivated grove
Is there any dry warmth
In the Summer

Philosophy of a Rabid Rabbit

The cows burp
It is not their fault
Yet the trees do bleed by their luxuries
Oh halt!

How painful to see
Each slaughtered slab of meat

I dizzy

And tumble

The air is all a mumble

There is naught a jungle here

For it 'twas cleared away

So what am I to do

Pray tell?

A little jungledee rabbit in a wide-wide world

Foaming at the mouth

Oh burrow

Oh cow

How soft the clouds to merge in the now

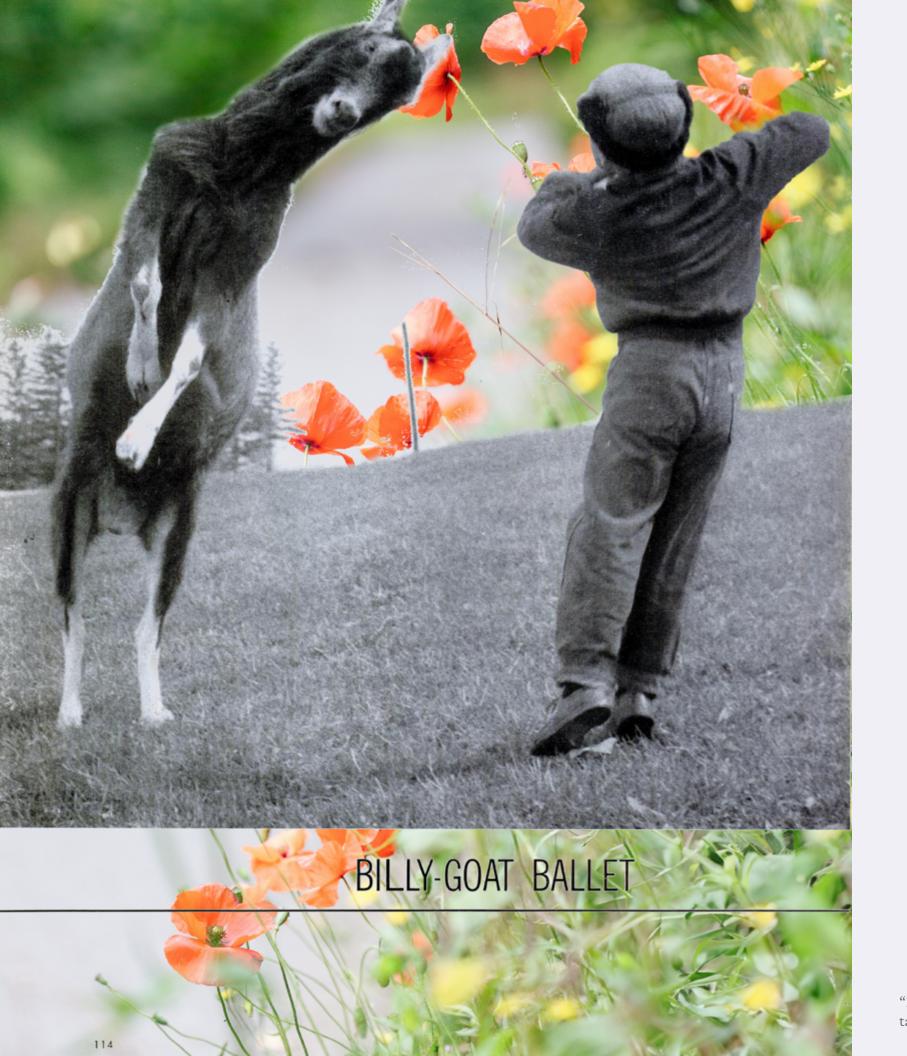
But

I'm a a a a a a a a a a rabbit aren't I?

So where's my carrot-

Give it neigh!





This rubric includes experimental and surreal art styles. The name of this rubric is THE THAT DUG ITSELF

"Happy Collage N°114" by Leonid Vishnevskiy, public domain images were used including an **image** by Natalie Kinnear from Unsplash.

OUT



STUDYING IMMORTALITY

Stu-dying Immortality

STAGE MANAGER:

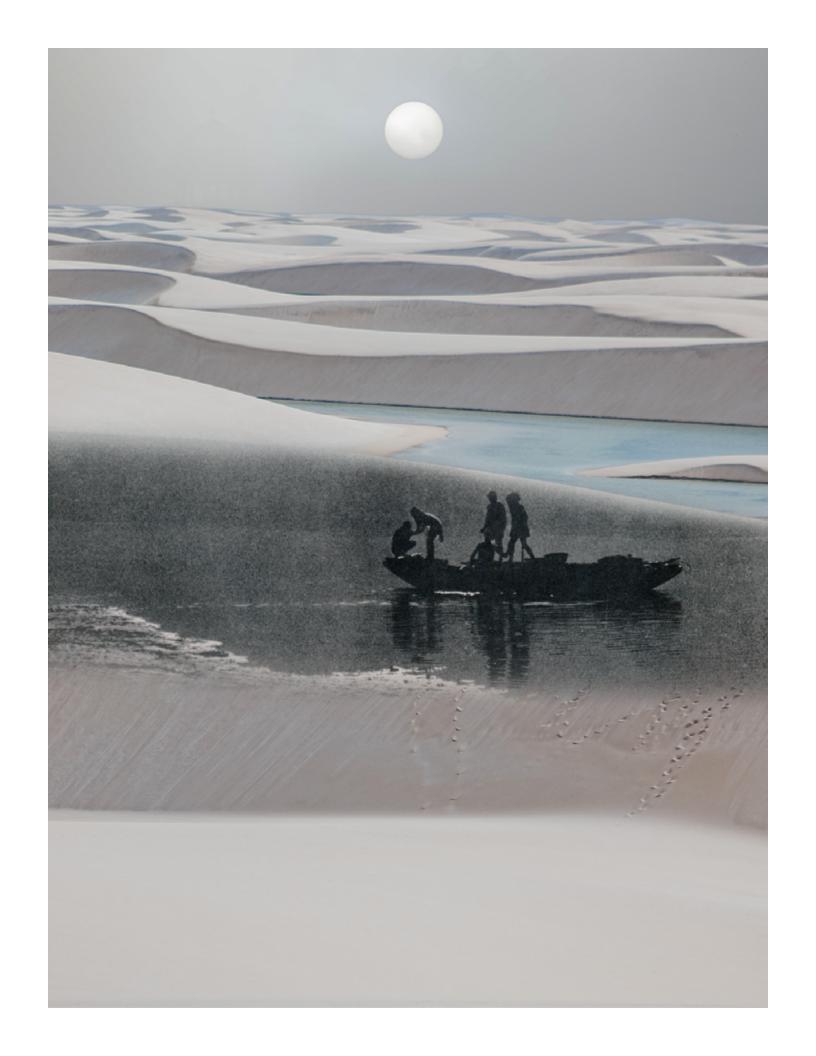
Want to tell you something about that boy Joe Crowell there. Joe was awful bright—graduated from high school here, head of his class. So he got a scholarship to Massachusetts Tech. Graduated head of his class there, too. It was all wrote up in the Boston paper at the time. Goin' to be a great engineer, Joe was, But the war broke out and he died in France.—All that education for nothing.

Thornton Wilder, "Our Town"

At first, the quote comparing human life to education seemed absurd. Then, I realized that removing that very last sentence turned the whole quote into yet another overlooked statement among the many tragic facts.

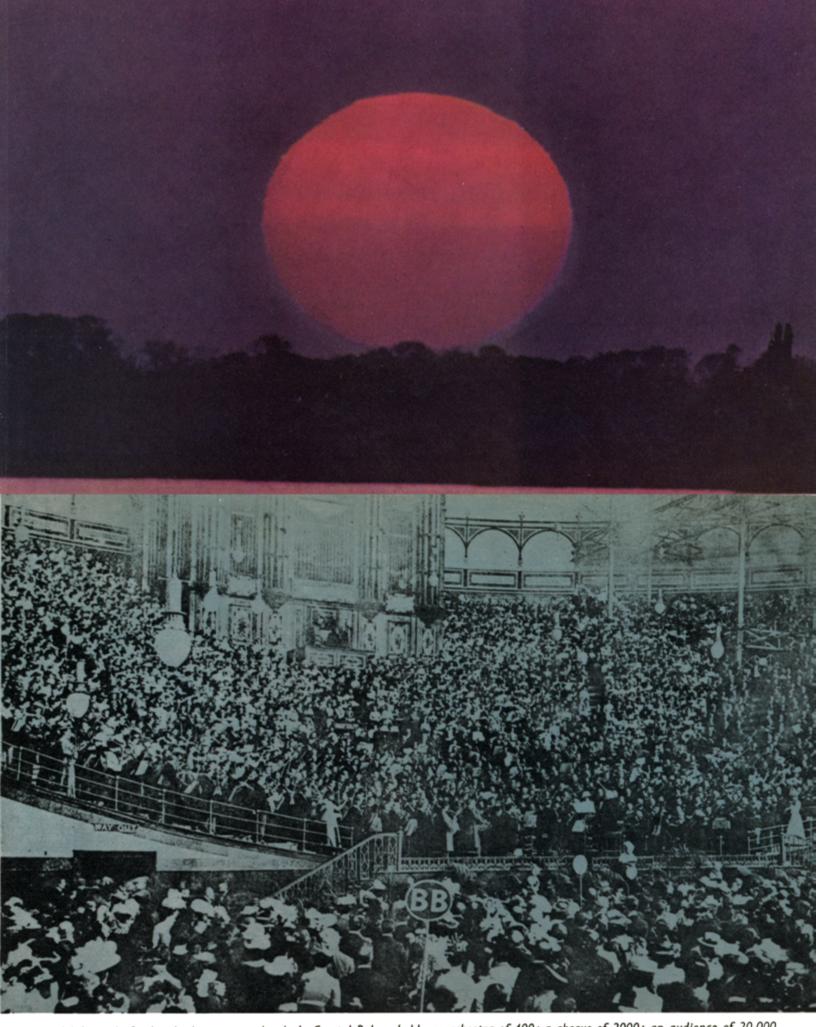
Maybe, protesting this heartless comparison helps us grasp the senselessness of a person's death, especially a young one on the battlefield.

I created a collage and titled it "Stu-dying Immortality".



Escape to the Shady Bay in Dunes

Collage by Leonid Vishnevskiy. Images used are from the public domain including an **image** by Léo Castro from Unsplash.



At a Handel festival of a hundred years ago, London's Crystal Palace held an orchestra of 400; a chorus of 2000; an audience of 20,000.

About Abbreviation

So, nearly a century ago, approximately 22,500 people gathered to enjoy Handel's music. How quickly can you spot "BB"?

I'm curious about the meaning of this abbreviation, but my greater interest lies in how AI interprets letter-coded information. When you notice "BB", you realize that if it weren't nestled among other elements, it would likely attract more attention than the details regarding the number of people, etc., simply because it aligns more closely with our focus.

It's intriguing to contemplate whether the same holds true for artificial intelligence. But even if it does, AI processes information so rapidly that it still sparks discussions about distinct information processing, all due to its speed.

abbreviation

Collage and text by Leonid Vishnevskiy. Images used are from the public domain.



While observing Earth as photographed from the Moon's surface, there are moments when we might feel as though a simple jump could transport us into space. This collage attempts to remind us of that sensation.

Once, there were children who longed to fly, They practiced jumping to reach for the sky