



SCIPPIA



CONTENT

► Sarhad Par Sena Baithi Hai

► G20 Presidency

► ROBOS - The Inevitable future

► Nascent Civilization
- A Theory Untold

► Editor's note

Sarhad Par Sena Baithi Hai

ek sainik ka apne desh vasiyo ko aashwasan

Main kal bhi tha, main aaj bhi hun
Phir gham main doobe chehre kyun,
Bechain na ho, mayus na ban
Sarhad par sena baithi hai
Masoom ki jaane lekar
Aatanki seena tante hain,
Laachar hai vo, dushvar hain vo
Sadbuddhi kahin gava baithe hai
Jispar goli barsaate hain
Vo bhi Allah ki naymat hain,
Farq sirf bas itna hai
Vo janme ghar pados mein hain
Jab jab dushman lalkara hai
Tab tab usko pachhada hai,
Gar aankh utha kar vo dekhe
Usse nayan mukt kara denge
Yeh sena Hindustan ki hai
Chahat keval balidaan ki hai,
Tum so sako sukh chain ke sang
Zimma sambhale sainik hum
Raat tanik lambi to kya
Subah abhi aati hogi,
Baichain na ho, mayus na ban
Sarhad par sena baithi hai
Sarhad par sena baithi hai

~ Lt. General Mukesh Sabharwal
Veteran, Indian Army

We, the people of Bharat, have been granted an inheritance of an exceptional martyrial history and not the identity of the defeated nation that Marxistic textbooks describe us to have. Being narrated as an isolated experience as the only country being constantly invaded, defeated, and easily colonised would be an absolute misconception. Would it really be fair to believe that the numbers that we have today in terms of population are because of any lack of effort or intent on the part of the invaders or the colonizers? Undeniably, this is not a fair trade.

Note the numbers of princely states that Sardar Vallabhbhai Patel had to put together to create the Indian Union, the number of princely states that ultimately the British took the power from. Until the Third Battle of Panipat, in 1761, and significantly thereafter, we as a nation had clearly reconquered so many parts. Compare that with Africa; compare that with Latin America; compare that with North America, Australia, and even Europe, and for that matter, the rest of the world. Europe was not a Christian civilization at the outset, but it has become one. Therefore, it would be appropriate to say that the very first defeated civilization, the very first conquered civilization, and the very first converted civilization is in fact the European civilization, which has completely lost its pre-Christian origins, its pre-Christian faith systems, and its pre-Christian history and heritage.

Consider the first major invasion and incursion of Sindh by the Arabs in 712 AD. It took the Arabs close to 300 years just to be able to cross Sindh. What do we make of the Rajputs and their anti-British agrarian revolts? What do we make of the Marathas and the Anglo-Maratha Wars? What do we make of the Sikhs and their contribution to protecting this country? Somehow we selectively celebrate them all and still continue to believe that we are a defeated civilization. The Dutch Navy lost at the hands of Marthanda Varma, the king of Travancore, during the Travancore-Dutch War (1729–1758). King Varma's forces defeated the Dutch East India Company's forces. The Dutch never recovered from the loss and no longer posed a large colonial threat to India.

Our ancestors have not just withstood but successfully repelled the invaders. They died and they fought to protect the civilizational space to protect this "Punyabhoomi," not as a territory but as a bhoomi where our ancestors are worshiped. The Brahmins fought with sticks and vessel utensils against Alexander, who was given the toughest and most ruthless resistance that was ever known by the Brahmins and the ladies of the region today known as

"Vahik Pradesh." Alexander, the so-called conqueror, who is said to have conquered every mass of land he had ever laid foot on, was stopped in his tracks in the one nation he could not defeat, which is India. The country where his army refused to go to battle because they were convinced they could not defeat the army; this is not the entire Bharat Army, but one Janapad, which is Magadha. One Janapad's army is capable of instilling dividends in the so-called world conquering force, which is Alexander's army, which had defeated Darius of Persia, the army that had finished all the way from Middle East Babylon and came all the way to Bharat and stopped tracks here, and we think we have inherited a legacy of defeatism?

An entire army cannot protect a nation where we, as civilians of that nation, do not understand our history, our legacy, or our heritage. Our soldiers at the borders have never failed us, and likewise, we must not fail them. It's high time that we as a country do our part in protecting the country, and that is through educating ourselves about our civilization. As individuals, we must examine whether our beliefs come from a position of knowledge or the darkness of ignorance. We must free ourselves from this disease and from this notion, and for that we must read our history and not jump onto the conclusions fed to us through the textbooks.

We as a nation have fought back spiritually, politically, culturally, militarily, and intellectually. We have inherited a history and a heritage of valour and huge, successful resistance that we proudly live to sing the tales of.

G20 Presidency

What is the G-20?

Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Republic of Korea, Mexico, Russia, Saudi Arabia, South Africa, Turkey, United Kingdom, United States, and the European Union makes up the Group of Twenty (G20), an intergovernmental forum.



For one year, the G20 Presidency sets the agenda and hosts the Summit. The Finance Track and the Sherpa Track are two concurrent tracks that make up the G20. The Finance Track is overseen by the Finance Ministers and Central Bank Governors, and the Sherpas of the participating nations who serve as the Leaders' personal envoys and coordinate the Sherpa Track. Additionally, there are other Engagement Groups that bring together civil society, legislators, think tanks, women, youth, labour, corporations, and researchers from the G20 countries.



India's G20 Presidency

India's G20 Presidency will strive to promote this sense of interconnectivity among all citizens. Hence,

“One Earth, One Family, One Future”

“Vasudhaiva Kutumbakam”

is our theme, according to Prime Minister Narendra Modi.



The G20 is led by India from December 1, 2022, until November 30, 2023. The last New Delhi Summit in September of this year will have 43 Heads of Delegation, the most ever to attend a G20 summit. India's special invitee guest countries are Bangladesh, Egypt, Mauritius, Netherlands, Nigeria, Oman, Singapore, Spain and UAE.

It is one of the most significant and strategic multilateral platforms of this age as its members collectively constitute over 85 per cent of the global GDP, 75 per cent of global trade and house two-thirds of the world population.

What are India's G20 Priorities?

- **Green Development, Climate Finance & LiFE (Lifestyle for Environment)**

Addressing climate change is a top goal for India's presidency, with an emphasis on not only climate financing and technology but also guaranteeing just energy transitions for underdeveloped countries worldwide.

- **Accelerated, Inclusive & Resilient Growth**

Accelerated, robust, and inclusive growth is essential for long-term development. India wants to concentrate on issues that could result in structural change during its G20 Presidency. This includes a desire to support the rights of workers and ensure their welfare, close the global skills gap, develop inclusive agriculture value chains and food systems, among other things. It also includes a desire to speed the integration of MSMEs into international trade.

- **Accelerating progress on SDG**

The key halfway point of the 2030 Agenda clashes with India's G20 Presidency. India thus recognises the negative effects of COVID-19, which turned the current decade of action into a decade of recovery. In accordance with this viewpoint, India wishes to reaffirm the G20's efforts to meeting the targets outlined in the 2030 Agenda for Sustainable Development.

- **Technological Transformation & Digital Public Infrastructure**

As the G20 Presidency, India may highlight its belief in a human-centric approach to technology and foster increased knowledge-sharing in important areas such as digital public infrastructure, financial inclusion, and tech-enabled development in sectors ranging from agriculture to education.

- **Multilateral Institutions for the 21st century**

India's G20 objective would be to continue pushing for reformed multilateralism that generates a more accountable, inclusive, just, egalitarian, and representative multipolar international structure appropriate for solving 21st-century challenges.

India began its presidency term with a variety of cultural endeavours, including numerous Jan Bhagidari celebrations, a special University Connect event involving 75 educational institutions from throughout the country.



The G20 emblem for India was also sculpted in sand by Shri Sudarshan Pattnaik on the Odisha beach of Puri.

The Group of Twenty (G20) will assemble for the eighteenth time in 2023 in New Delhi at Pragati Maidan, where the summit will be held.

ROBOS

- THE INEVITABLE FUTURE -

What comes to your mind when hear the word ROBO? I guess something metallic, human-like, full of tech, Working fast and doing all chores with just a flick. Well, you are not wrong. But are you one of those people who think they know it all when it comes to technology? Believe me, we know nothing. Do you even know where the word Robo or robot originated from? I guess not.

The word comes from an Old Church Slavonic word, rabota, which means servitude of forced labour. Yes, that's right, they were the replacement for labour.

But in today's world, we are their labour. Don't agree with me, just try and think of our life without them. They are so integrated into our life that we don't even know where we are using them. Be it the lift in your building, or the smartphone you are using, all of them have a robotic component in them.

Today andro-humanoid robots are being developed to replace the classic industrial robots to increase their field of use and to perform more complex tasks with ease. Technologies such as RPA- Robotic Process Automation have enabled robots to be programmed for complex tasks. The increase in the field of AI interaction and understanding has made the demand for robots rocket. . The application of robots is done in the field of computer programming and remote control arms, sensors and automobiles.

Now, robots can be programmed to solve complex problems, collect and process data and also to resemble humans to make interaction with them a lot easier and more useful.



Now, robots can be programmed to solve complex problems, collect and process data and also to resemble humans to make interaction with them a lot easier and more useful. Advanced use of integrated software and hardware has resulted in better perception, planning, decision-making, task execution and action processing. This has led to a healthy interaction with the environment and has engaged humans as well as other robots to form an ecosystem of their own and work in harmony to make the most of their time. These advantages of robots have led to their use in every part of human existence.

But this has its side effects as well. A study done by MIT shows how machines replacing humans in the workspace has been a concern since the industrial revolution. It has become an increased topic for discussion with the rise in the field of AI and automation. It has affected employment and wages in industries and has led to unemployment and recession.

A study done by the India Times shows that by the year 2040 more than 63 million jobs will be lost in the field of agriculture, automobile and construction, all because of the increased demand for automation.

The study also shows that more than 240 million jobs will be in jeopardy across the sectors mentioned above, particularly in the Asia Pacific region (i.e. India, China, South Korea, Japan and Australia). But so far the hype has stifled the concern when it comes particularly to robots.





To compete with this change in every domain of human life, world leaders have come up with a plan, to prepare for the change brought up by automation. Five of the largest economies of the world have come up with their radical thinking workforce to minimise and overcome the outcomes of robotics and automation.

So, what should be our role as engineers in this? Well, we engineers are the ones who need to do our best to take the technology to its maximum capability along with keeping in mind the well-being of humanity. This may result in slow growth, but it will make sure that the future is desirable.

DO YOU KNOW-

In an experiment done at University of Leeds, a Robofish was accepted by other fish in the aquarium. This helped the scientists to better understand the the nature of in the aquarium.

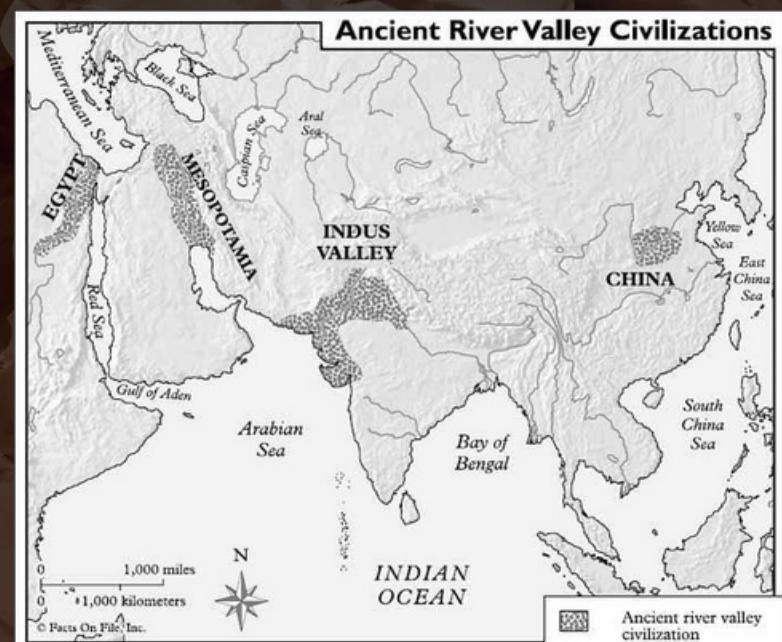
-Rudra Dhenkla, FE-AI&DS

NASCENCY OF CIVILIZATION-

A THEORY UNTOLD

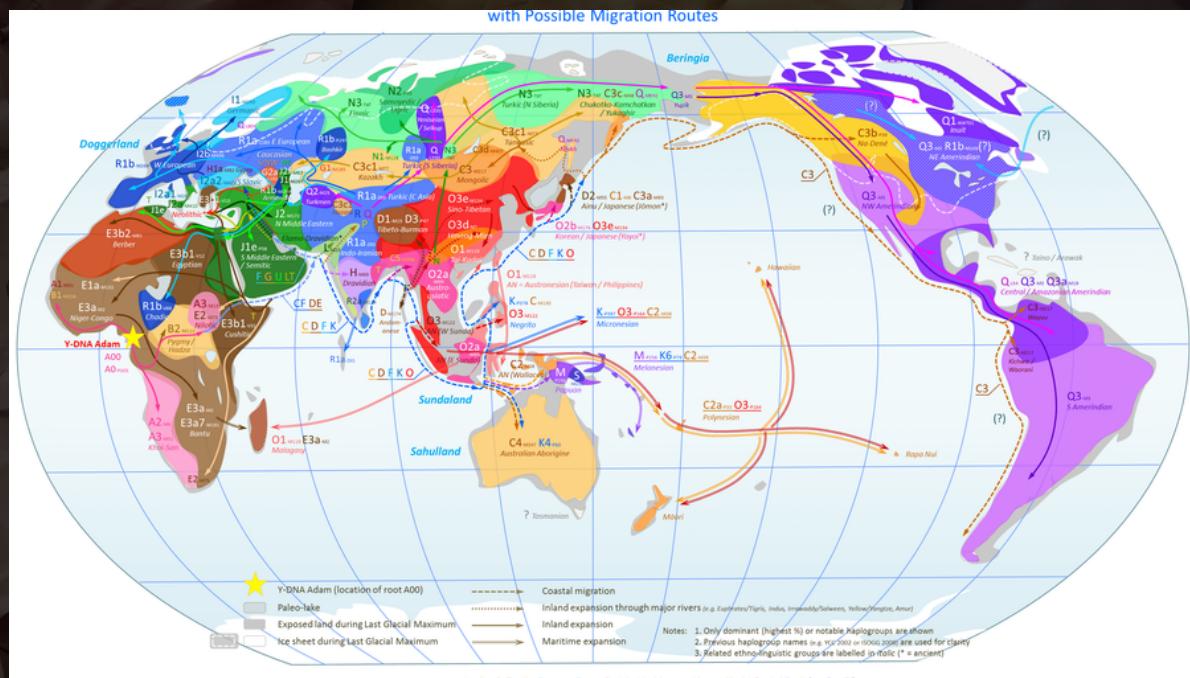
Human history also known as ancient history is one of the most stirring topic. Do you know that this human history as we know today is all because of the ancient civilization that were found like Mesopotamia, Egypt, Indus valley (India), China, etc.

But in order to actually learn about this civilizations you need to really go back into those roots and deeply study them. For doing this we have several methods like genetic lineage, carbon dating, obsidian hydration, pop stem dating etc.



But here we are mainly going to be discussing about population (genetic) lineage Our DNA contains 23 chromosome which is further divided as Y and X. Y chromosome present is passed from father to son and the mutation in this chromosome decides our patrilineal lineage.

The other one is mitochondrial DNA which is passed from mother to daughter from which female lineage is known. From this mutations we get to know our ancestral history.



The lineage named Haplogroup F which is male lineage present about 55,000 years ago is found in India. This haplogroup lineage is ancestral lineage of about 90% of male lineage which are not African . So it is been predicted that out of Africa Indian expansion took place . Now the matrilineal lineage have two haplogroup M and N which are Indian origin and where present 55,000 and 65,000 year ago. About 100% of non African women are of this descendent group.

So after Africa explosion of population took place from India. There are alternate theories of population explosion and this is one of them. This ancestral lineage through India is proved through scientific way and from this population explosion further civilization took place and here we are now.

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EDITOR'S NOTE

AI will be the best or worst thing ever for humanity.

– Elon Musk

As the years are passing, we are becoming more familiar to Artificial Intelligence (AI), from the earliest successful AI program written in 1951 by Christopher Strachey till present it has seen an evolution.

We as the youth of the country and be able to access this great technology we are favoured, but only if we use it for ethical purposes or else it would be the greatest rival.

“Scipia” is published by the AI&DS Department, this magazine will provide you with an overview of this vibrant field of knowledge i.e., Artificial Intelligence, Literature, Technical, Astrophysics, Politics, etc. The main motto is to provide the insight and create the curiosity within and we are working hard on it as this magazine is For the Youth by the Youth.

