#### Issue 5 August 2024





The journey through cognizance

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### THE LOST INDIAN MYTHOLOGY



India has always been a land of rich mythology, with a vast tapestry of stories, legends, and epics that have shaped the cultural and spiritual fabric of the nation. From the ancient Vedic texts to the timeless epics of the Ramayana and Mahabharata, Indian mythology offers a profound understanding of life, morality, and the human condition. These tales have been passed down through generations, offering wisdom, guiding principles, and a sense of identity to millions.

However, much of this rich mythological heritage has been lost or forgotten over the ages. As time has progressed, the intricate web of stories and lessons embedded in Indian mythology has gradually faded from the collective memory. The modern world's rapid pace and the increasing influence of Western culture have led many to overlook these ancient narratives, favoring contemporary stories and authors from the West.

While Western authors and stories have their own value, it is important to recognize that the tales of Indian mythology are not just stories; they are cultural treasures that hold the key to understanding the nation's history, values, and traditions. By embracing these narratives, we can reconnect with the essence of what it means to be Indian. Authors like Devdutt Pattanaik, Amish Tripathi, and Chitra Banerjee Divakaruni have made significant contributions by retelling these stories in ways that resonate with contemporary audiences. Their works have brought to life the characters, events, and philosophies of Indian mythology, making them accessible to new generations.

It is essential that students in India are taught about the country's mythological past, starting with the foundational stories like the Ramayana and Mahabharata. These epics are not just tales of heroism and conflict; they are profound explorations of dharma (duty), karma (action), and the complexities of human nature.

By ensuring that the younger generation is familiar with these mythological stories, we can preserve India's rich cultural heritage and instill a sense of pride and identity. In a world that is increasingly globalized, it is more important than ever to stay connected to our roots, and Indian mythology offers a powerful way to do so.

## CIVIC SENSE: WHY IS IT LOST?

#### "For once, let us choose 'Us' over 'Me'"

Civic sense refers to the basic social ethics and consideration that individuals have towards their community, society, and environment. It encompasses the respect for public spaces, adherence to laws, proper disposal of waste, and maintaining general cleanliness and order. Civic sense is a reflection of how individuals perceive their role in society and their responsibility towards others. It is not just about following rules but about understanding the impact of one's actions on the larger community. Civic sense is crucial because it directly influences the quality of life in a community. A society with high civic sense is more likely to be clean, safe, and orderly, creating an environment conducive to progress and development.

Countries like Japan are often cited as examples of exceptional civic sense. Despite facing numerous challenges, including natural disasters and economic hardships, Japan has thrived largely due to its citizens' strong sense of civic duty. Japanese people are known for their discipline, respect for rules, and commitment to cleanliness. This strong civic sense has contributed significantly to Japan's development, making it one of the most advanced and orderly societies in the world. In contrast, India struggles with a lack of civic sense among many of its citizens. This is evident in various aspects of daily life, where people often disregard rules, dirty public spaces, and show little respect for community norms. Streets littered with garbage, spitting in public, and flouting traffic rules are common issues. The condition of hawkers and street vendors, who often operate in unhygienic conditions, further exacerbates the problem. The lack of civic sense in India not only affects the country's image wherein it causes a major decrease in tourism but also hinders its development. Laws need to be enforced more rigorously to ensure compliance.

Simultaneously, there is a need to educate the masses about the importance of civic sense from a young age. Schools and community programs should emphasize the value of maintaining cleanliness, respecting public property, and following rules. When people understand the importance of civic sense and its impact on society, they are more likely to act responsibly, contributing to a cleaner, safer, and more orderly nation.





### Is India The Next Biggest Tech Hub?

A tech hub is a region or country recognized for its robust technology sector, often marked by innovation, research, and the presence of numerous tech companies and startups. For a country to become a tech hub, it must have a solid infrastructure, a skilled workforce, a supportive government, and an ecosystem that fosters innovation. Currently, the United States, particularly Silicon Valley, is the world's leading tech hub.Other significant tech hubs include China, with cities like Shenzhen and Beijing, and Israel, often referred to as the "Startup Nation." These countries have advanced by creating a supportive ecosystem for tech companies, including government incentives, venture capital, and a focus on science and technology education.

India is steadily progressing towards becoming the next big tech hub. Over the past decade, India has seen substantial growth in its IT sector, driven by a young and talented workforce, an increasing number of startups, and the presence of major global tech companies. The Indian government's initiatives like Digital India and Make in India have also played a crucial role in this development by promoting innovation and entrepreneurship. Cities like Bengaluru, Hyderabad, and Pune are emerging as tech hotspots, attracting both domestic and international investments.

However, despite these advancements, India faces challenges that could hinder its growth as a tech hub. One significant issue is brain drain. Indian professionals are often recruited by foreign companies, which see them as a source of cheap, highly skilled labor. This trend not only benefits the foreign companies but also deprives India of the talent needed to fuel its tech industry. To counter this, there is a growing call for Indians to support homegrown companies and use Indian-made products. By focusing on developing the domestic market and retaining talent, India can ensure that its growth benefits the nation as a whole.

While India is on the path to becoming a major tech hub, achieving this status will require continued investment in education, infrastructure, and innovation. Encouraging the growth of Indian companies and reducing brain drain will be crucial to securing India's position as a global leader in technology.





India's cuisine is a reflection of its rich history, diverse cultures, and varied landscapes. From the snowy peaks of the Himalayas to the sun-kissed coasts of the south, the country's culinary traditions are as varied as its people. Indian cuisine's richness stems from its centuries-old tradition of incorporating local ingredients, age-old recipes, and an intrinsic understanding of the balance between taste and nutrition.

In India, the culinary landscape changes drastically from one region to another. The northern part of India, known for its wheat-based bread like rotis and parathas, is rich in dairy products such as paneer, yogurt, and ghee. In contrast, southern India, with its rice-dominated diet, features dishes like dosas, idlis, and sambars, often cooked with coconut, tamarind, and curry leaves. Eastern India brings in the unique flavors of mustard oil, poppy seeds, and fish, particularly in Bengali cuisine, while Western India showcases a mix of spicy and sweet dishes, such as the vibrant Gujarati thali and the fiery Goan curries.

The variation in terrain, climate, and agriculture deeply influences these regional cuisines. Northern India's cooler climate and fertile plains make it suitable for wheat and dairy farming, while the coastal regions of the west and south thrive on rice, coconut, and seafood. Eastern India, with its lush river plains, is ideal for rice and fish, and the arid regions of the west have developed cuisines that make the most of hardy vegetables and legumes.

Contrary to misconceptions, Indian food is rich in protein, whether it comes from legumes, lentils, dairy, or a wide variety of vegetarian and non-vegetarian sources. The extensive use of vegetables, pulses, and spices makes Indian food excellent for gut health. Sticking to our regional foods ensures a diet that is naturally low in unhealthy fats and high in nutrients, unlike many Western diets that often rely on processed and fatty foods.

Embracing our traditional diets is key to maintaining good health, as they are tailored to our body's needs, climate, and lifestyle.

### ALPHAFOLD 3 A GAME CHANGING TOOL



AlphaFold is a computer program created by Google DeepMind. It predicts the structures of proteins, which are like tiny machines in our bodies that do many important jobs. Knowing the shape of these proteins helps scientists understand how they work and how to create medicines to fix problems.

AlphaFold 3 doesn't just look at proteins. It can also predict the structures of DNA, RNA, and other important molecules called ligands. This is like being able to see not only puzzle pieces but also how they fit into the bigger picture of a completed puzzle. DNA and RNA are the instructions, and ligands are the fuel and other essential fluids. AlphaFold 3 can now help with all these parts, making it easier to build the complete car model.

AlphaFold 3 uses a technique called "diffusion." Think of it like this: you start with a blurry picture and slowly make it clearer until you can see all the details. This method helps AlphaFold 3 predict the structures of many different molecules accurately. While AlphaFold 3 is a big step forward, it's not perfect. Its accuracy can vary depending on what it's predicting. For some tasks, it's very reliable, but for others, like figuring out how proteins interact with RNA, it's still learning.

DeepMind is not releasing the full code of AlphaFold 3 to the public. Instead, they offer a tool called the AlphaFold Server. This server allows scientists to use AlphaFold 3 for research, but with some limitations. This makes it easier for more scientists to benefit from the tool without needing deep technical knowledge. If you asked AlphaFold 3 to predict how a certain enzyme could break down plastic, it might give you a good starting point. However, scientists would still need to do more experiments to be sure.

AlphaFold 3 is like a brilliant helper for scientists, making it easier to understand and work with the complex world of biology. It speeds up research, aids in drug discovery, and opens new doors to understanding how life works.

### THE CENTRAL DOGMA

How Genetic Information Works

The Central Dogma explains how information in our DNA is used to make proteins, which are the building blocks of our bodies. It's like a two-step process:

#### • DNA to RNA (Transcription)

Transcription is the first step where the information in DNA is copied into a messenger molecule called RNA. Think of DNA as a big book of recipes and RNA as a note you write to remember just one recipe.

#### • RNA to Protein (Translation)

Translation is the next step where the RNA is used to make a protein. This is like taking your note with the cookie recipe and actually baking the cookies.

Ribosome: The ribosome is the kitchen where the recipe is followed. It has two parts: a large subunit and a small subunit.

tRNA and mRNA: The RNA (now called mRNA) fits into the ribosome, and tRNA brings the ingredients (amino acids) to make the protein.

Building Proteins: The tRNA reads the mRNA three letters at a time (codons) and brings the matching amino acid. The ribosome then links these amino acids together to make a long chain, forming a protein. The genetic code is like the language that the recipe is written in. Each three-letter word (codon) in RNA tells which amino acid to add next in the protein.

#### **Key Points:**

Codons - There are 64 possible codons but only 20 different amino acids. Some amino acids have more than one codon, which makes the code a bit repetitive.

Start and Stop - One codon (AUG) signals the start of making the protein, and three others tell the ribosome to stop.

#### Why It Matters

The Central Dogma is essential because it explains how our genetic information is used to build everything in our bodies. By understanding this process, scientists can develop new medicines, understand diseases better, and even explore ways to fix genetic problems.

The Central Dogma is like the master recipe book for life, showing us how our cells use DNA instructions to make the proteins that keep us alive and healthy.



### NEUROPLASTICITY: HOW OUR BRAIN CAN CHANGE AND HEAL

Imagine if your brain was like a flexible, ever-changing network of roads and bridges. When one road gets blocked, your brain can create new paths to keep things moving. This amazing ability is called neuroplasticity.

Neuroplasticity is crucial because it helps our brains recover from injuries, learn new skills, and adapt to new experiences.

After a brain injury like a stroke, neuroplasticity allows the brain to rewire itself to regain lost functions. For example, a person who has lost the ability to move an arm can often regain movement.



There are two main ways neuroplasticity happens:

1. Neuronal Regeneration/Collateral Sprouting

Neuronal regeneration is like growing new branches on a tree. When some branches (neurons) are damaged, new ones can grow to replace them. This includes:

- Synaptic Plasticity- In the brain, the more certain neurons communicate, the stronger their connection gets. This helps us learn new things and remember them.
- Adult Neurogenesis: This is the process where new neurons are created in the adult brain.
- 2. Functional Reorganisation

Functional reorganisation is like rerouting traffic when a road is closed. If one part of the brain gets damaged, other parts can take over its job.

**IOE DISPENZA** 

Lose your mind and create a new one Some real-life examples of neuroplasticity include:

- Mirror Therapy for Phantom Limb Pain: People who have lost a limb sometimes feel pain where the limb used to be. Mirror therapy involves looking at the reflection of their intact limb, which can trick the brain into "seeing" and "moving" the missing limb, reducing pain.
- Constraint-Induced Movement Therapy (CIMT): After a stroke, if one arm is weak, CIMT involves restricting the use of the stronger arm, forcing the weaker arm to work harder. This helps the brain rewire itself to improve movement in the weaker arm.

Neuroplasticity is like the brain's superpower, allowing it to adapt, heal, and grow throughout our lives. By understanding and harnessing this ability, we can improve brain health, recover from injuries, and continue learning new skills. So, keep challenging your brain, stay active, and maintain a healthy lifestyle to boost your brain's incredible potential!



### DISNEY CHARACTERS

1.bamsi
2.leiar
3.lfoa
4.apshontcao
5.onem
6.ajfra
7.kcemyi
8.ikfari
9.sydia
0.oywdo

9.DAISY 10.WOODY

5.NEMO 6.JAFAR 7.MICKEY 8.RAFIKI

Answers 1.SIMBA 2.ARIEL 3.OLAF

4. POCAHONTAS



1. Sond State Drive 2. Uniform Resource Loca 3. Google 4. Apache 5. Microsoft Answers: 1.Tendons 2.Mitochondria 3.Cell Division OR Mitosis 4.Lymphocytes 5.Somatic Nervous System

# THANK YOU





Designed by: Amrita Mukherjee Aindri Singh

Send in your essays for the next edition at odysseypace@gmail.com