DAILY CURRENT AFFAIRS

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THE NEW JUSTITIA AND REIMAGINING JUSTICE

The 'new' Justitia and reimagining justice

The addition of the open-eyed Justitia in the Supreme Court of India has led to public debate. The 'new' six-foot white statue is a sari-clad ornamented goddess-like figure without a blindfold, holding scales in her right hand and a copy of the Constitution of India in her left hand. It signified, said then Chief Justice of India (CJI) D.Y. Chandrachud, who commissioned the statue in October 2024, that "Law is not blind; it sees everyone equally". This is, historically speaking, puzzling since the Bombay High Court has an open-eyed Justitia statue along with a Statue of Mercy – the open-eyed justice is as much part of colonial iconography as the blindfolded figure of justice.

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History and the images

The former CJI does not tell us that allegorical images of Justitia, both with and/or without a blindfold, have existed in ancient Roman, Greek and Egyptian cultures. Martin Jay in 'Must Justice be Blind?' (1999) argues that iconography historians tell us that "allegorical images of justice did not always cover the eyes of goddess Justitia". During the first and second centuries, Roman coins dedicated to justice and impartiality depicted Justitia as clear-sighted considering the merits of the cases before her.

It was at the end of the 15th century, evidenced through a 1494 wood engraving of a Fool tying the eyes of Justice, that a blindfold began to be placed over the goddess's eyes, and led to a plethora of interpretations throughout Europe. Initially, it implied that Justice was "robbed of her ability to get things straight, wield her sword effectively, or see what is balanced on her scales". Away from this negative satirical connotation, the blindfold, by 1530, transformed into a positive emblem of equality before the law and impartiality. Like the scales, the blindfold began to imply neutrality rather than helplessness, and resisting the 'lust of the eyes' became a virtue to achieve the dispassionate distance necessary to render impartial verdicts.

It is important to ask whether the interpretation now attributed to an open-eyed justice relates to equality, impartiality and transparency

The mural in the Court

Apart from the complicated history of Justitia, it is important to ask whether the interpretation now attributed to an open-eyed justice, or to use the ableist metaphor of 'seeing' by the lady justice, really relates to equality, impartiality, and transparency. What is the rationale behind the lady being presented as a Hindu goddess and the statue in white colour? The inspiration is perhaps the mural that is placed between the two entrances from the judges' wing while entering the CJI's court. This mural is not open for public viewing. This writer was privy to it during his research on courtroom iconography, in 2015-16. It is made up of porcelain marble tiles in shades of white, yellow and green, depicting Gandhi, the *Dhamma Chakra* and the goddess of justice. In the mural, the goddess is placed on the right side, facing left, wearing a crown, clad in a sari and jewellery, holding scales, and appearing as a *devi* (goddess), very much like this statue. She holds the scales at the level of her face, with her gaze at the balance – the contemplative gaze is somewhat reminiscent of Johannes Vermeer's painting of Justitia.

The mural with an open-eyed Justitia, with a book near her waist, found theological interpretation in the former Supreme Court judge M. Jagannadha Rao's work who interpreted it as "the book of *Dharma Shastra* signifying the offer of total knowledge to one and all", in the edited volume, *Supreme but not Infallible: Essays in Honour of the Supreme Court of India* (2000). In 'Interpreting the Scales of Justice' (2017), this writer interpreted the book besides the sari-clad Justitia as signifying the Indian Constitution, rather than the Dharma Shastra, which arguably restricted access to knowledge to certain caste/gender groups (*Dwija* men) and denied it to 'others'. The placement of new statues of B.R. Ambedkar earlier and lady Justitia now, and having a new emblem for the Supreme Court, ought to be contextualised in relation to caste, gender and religion-based inclusions and exclusions in recent times; especially when questions are asked of the higher judiciary on diversity and equality, attempts are being made to improve its public image. It is not surprising then that the open-eyed Justitia statue is interpreted in several ways on social media like "justice will now be given by seeing one's caste, religious identity and political ideology". Such an interpretation of the personification of justice has its roots in the public desire for accessibility to higher courts by all – not only as litigants but also as lawyers and judges, as well as access to justice itself.

Do not cause newer forms of discrimination

Controversies around statues are not new. Even the history of the 'mother and child' statue in the Court suggests so, as this writer has demonstrated in his 2017 work mentioned above. But there needs to be a careful inclusive approach to how we want law and justice to be represented in a visual art form. Should the idea of justice itself be re-envisioned? Should justice be iconographically presented in the form of a protest, resistance, lived experience, and struggle? Should it act as a transformative legal culture signifying feminist, anti-caste, secular, equality, judicial independence – virtues also enshrined in the basic structure doctrine? Should art and aesthetics, including statues, be utilised to creatively challenge the non-independence and hegemonisation of the judiciary by a select few, and to open discussions on improving its public perception? Decolonisation must not become a driver either of a recurrence of older precolonial or newer postcolonial forms of social discriminations and state violences.

Introduction

- The installation of the open-eyed Justitia statue at the Supreme Court of India has sparked significant public debate. The statue, unveiled by then Chief Justice of India (CJI) D.Y. Chandrachud in October 2024, represents a deviation from the traditional blindfolded Justice figure. It raises important questions about historical symbolism, judicial philosophy, and cultural representation.

Goddess Justitia (Lady Justice) → symbolic personification of moral force in judicial system.

The New Statue of Justitia in the Supreme Court

- Design and Symbolism.
  - Six-foot-tall statue depicting a sariclad, ornamented goddess-like figure.
  - Open-eyed, holding scales (right hand) and the Indian Constitution (left hand).

Symbolizes the philosophy that "Law is not blind; it sees everyone equally," **as articulated by CJI Chandrachud**

Historical Contet of Justitia's Imagery

- Ancient Origins:
  - Allegorical images of Justitia have existed in Roman, Greek, and Egyptian cultures.
  - Roman coins from the 1st and 2nd centuries depicted a clear-sighted Justitia assessing cases.
- Evolution of the Blindfold:
  - Blindfold added around the late 15th century, first appearing in a 1494 wood engraving as a satirical representation.
  - Initially depicted as impairing Justice's ability to judge.
  - By 1530, it evolved to symbolize impartiality, equality, and neutrality—an emblem of dispassionate judgment.
- Colonial Iconography in India:
  - Bombay High Court also features an open-eyed Justitia statue, along with a Statue of Mercy.
  - Both blindfolded and open-eyed versions have colonial and historical precedent in India.

Interpretation of the Open-Eyed Statue

- **Questions of Impartiality:**
  - Does open-eyed Justitia truly reflect impartiality, equality, and transparency?
  - Historically, the blindfold symbolized neutrality and resisting external influences.
- **Cultural Representation:**
  - The depiction of Justitia as a Hindu goddess raises questions about religious and cultural inclusivity.
  - The white color and ornamentation are possibly inspired by a mural in the Supreme Court, reflecting aesthetic and symbolic considerations.

. Broader Implications of the Debate

- **Judicial Philosophy:**
  - The move reflects a shift in how justice is conceptualized—less as blind impartiality and more as an active, discerning entity.
  - Raises the question of whether cultural reinterpretations dilute or enrich universal symbols.
- **Public Perception:**
  - The statue has sparked discourse on inclusivity, modern judicial values, and the relevance of traditional iconography.

NEW INFECTIOUS DISEASES AMONG BEES THREATEN WORLD ECONOMIES

Research has uncovered the transmission of pathogens between managed honey bees and wild pollinators, a process called pathogen spillover and spillback. Western honey bees are often viral reservoirs and can infect wild species when they share habitats. The emerging diseases also threaten the wider pollinator community

Rupsy Khurana
BENGALURU

A significant chunk of the world's agricultural productivity and nutritional security relies on small insect pollinators. More than 75% of food crops, fruits, and flowering plants need bees, wasps, beetles, flies, moths, and butterflies to yield successful harvests.

This is why threats to insect pollinators, including pesticides, pollution, and climate change, endanger the economies of entire countries. A new actor on this list is infectious diseases made worse by habitat loss.

While the declining populations of pollinators, particularly bees, has been well-documented in Europe and North America, data from biodiversity-rich regions like the Indian subcontinent are scarce. In fact, most of what scientists know about bees comes from research on managed western honey bees (*Apis mellifera*).

Bee in the bonnet: A western honey bee rests on a clover flower in Frankfurt, Germany. ANDREY LAPKOVSKY

Diversity is better, again

"In many cases, wild bees are more efficient pollinators than the western honey bees. It is essential to study wild bee communities and look at their state of health," Corina Maurer, a postdoctoral researcher at ETH Zürich, wrote in an email to this reporter.

Research has uncovered the transmission of pathogens between managed honey bees and wild pollinators, a process called pathogen spillover and spillback. Western honey bees are often viral reservoirs and can infect wild species when they share habitats. These emerging infectious diseases also threaten the wider pollinator community.

Maurer and her team recently published a paper in *Nature Ecology and Evolution* exploring the presence of deformed wing virus and black queen virus in 19 wild bee and hoverfly species across different landscapes in Switzerland. They found higher loads of these pathogens in wild pollinators that used floral resources the honey bees accessed as well. The loads were 10-times higher among the wild pollinators in these shared habitats.

Based on these findings, the researchers suggested that diverse pollinator-friendly habitats with more floral resources lowered the chance of pathogens being transmitted between wild pollinators and managed western honey bees. Habitat loss, on the other hand, could force pollinators into smaller suitable habitats and increase the risk of disease transmission.

"We cannot exclude the possibility of spillover if wild species are forced to share spaces due to loss of habitat or if managed species are transported into new habitats," Axel Brockmann, a retired professor who studied honey bee behaviour at the National Centre for Biological Sciences, Bengaluru, said.

India hosts over 700 bee species, including four indigenous honey bees. Western honey bees were introduced in India in 1983 to increase the nation's honey yield

Habitat overlap and native bees

India hosts more than 700 bee species, including four indigenous honey bees: Asiatic honey bee (*Apis cerana indica*), giant rock bee (*Apis dorsata*), dwarf honey bee (*Apis florea*), and the stingless bee (sp. *Trigona*). Western honey bees were introduced in India in 1983 to increase the country's honey yield.

In 1991-1992, a Thai sacbrood virus outbreak devastated around 90% of Asiatic honey bee colonies in South India and reemerged in 2021 in Telangana. The virus has been reported from other parts of the world, including China and Vietnam.

The Thai sacbrood virus is one of the greatest threats facing the Asiatic honey bee. The disease caused by the virus's infection kills the bees' larvae. The particular viral strain that attacks western honey bees is less virulent.

Importantly, researchers don't know how the virus is transmitted between bee populations.

"Transmission of viruses from a managed species, such as the honeybee, to wild pollinators could be a problem for the honeybee and wild pollinators," Maurer said. "The viruses spilling over from honeybees to wild pollinators could mutate in the wild pollinators and then spill back to honeybees in a more virulent form, ... being more detrimental to honeybees. In the case of wild pollinators, diseases which are not naturally occurring in wild pollinators but spill over from the managed honeybee may severely affect their health."

When bees migrate

"Since 2009, we have been surveying different states such as Gujarat, Madhya Pradesh and Maharashtra. In some of these areas, local bee populations are absent probably because they are on the migratory route of managed western honeybees," Sujana Krishnamoorthy, executive director of Under the Mango Tree Society, a non-profit organisation that trains small farmers to work with native honey bees, said.

When managed honey bees migrate, beekeepers carry their bee boxes along a specific route where there are more bee flora. In North India, for example, they move through the mustard or sunflower fields of Uttar Pradesh and Madhya Pradesh. In Jammu and Kashmir, the bees migrate from plains to apple orchards, where bumble bees live.

A study published in *Scientific Reports* in February estimated that 40% of bumblebee species in the Indian Himalaya could lose more than 90% of their habitat by 2050, raising concerns about the competition for resources with western honey bees.

"During our surveys in Kolhapur in Maharashtra many years ago, conversations with local beekeepers and experts informed us that after a few western honey bee colonies were brought in, some disease completely decimated the indigenous pollinator populations," Krishnamoorthy said. "Kolhapur used to produce eight to 10 tonnes of forest honey but it struggled to produce even a tonne after that."

"There is no discussion about what these diseases could be."

Need for focused research

Experts agree that more research and surveillance are required to monitor emerging diseases in bees and other pollinators.

"Surveying wild pollinators is probably difficult and a huge effort, as there are so many species," Maurer said. "A better approach is to survey the managed honeybee colonies and control their diseases to minimise transmission to wild pollinators."

Dedicated research on viral threats like the Thai sacbrood virus is crucial for protecting the health of pollinators because it can pave the way for early warnings and help researchers and policymakers devise prevention strategies.

"Understanding the basic ecology of pollinators is key to conservation-oriented studies of how they will respond to threats such as climate change, habitat loss or infectious diseases," Brockmann said.

(Rupsy Khurana is Science Communication and Outreach Lead at the National Centre for Biological Sciences, Bengaluru)

THE GIST

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Spillover, Spillback
transmission of pathogens between managed honey bees and wild pollinators.

Managed bees
↓
maintained by humans for honey production.

Thai Sacbrood Virus
↓
affects honey bees.

Threats of Pollinators and their Ecological Impact

- Insect pollinators are vital for global agricultural productivity and nutritional security. Over 75% of food crops, fruits, and flowering plants depend on pollinators like bees, wasps, beetles, flies, moths, and butterflies for successful harvests. However, their populations face multiple threats, including pesticides, pollution, climate change, and infectious diseases exacerbated by habitat loss.
- **Role of Pollinators in Agriculture and Ecology**
  - Pollinators are essential for:
    - Over 75% of food crops and flowering plants.
    - Sustaining agricultural productivity and nutritional security.
- **Threats to Pollinator Populations**
  - Common threats:
    - Pesticides and pollution.
    - Climate change and habitat loss.

- Emerging threat: **Infectious diseases** worsened by environmental degradation

Regional Disparities in Research

❖ **Europe and North America:**
- Decline in pollinator populations welldocumented.

❖ **Indian Subcontinent:**
- Scarcity of data despite its biodiversity richness.
- Research heavily focused on **managed western honey bees** (Apis mellifera), leaving knowledge gaps about wild bee species.

❖ **Importance of Wild Bees**
- Wild bees often outperform managed western honey bees in pollination efficiency.
- Study of wild bee communities is essential for:
  - Understanding their health and ecological role.
  - Preventing biodiversity loss.

Pathogen Spillover and Disease Transmission

❖ **Pathogen spillover and spillback:**
- Managed western honey bees act as viral reservoirs.
- Pathogens spread to wild pollinators when they share habitats.

❖ **Recent Findings:**
- Study published in *Nature Ecology and Evolution* by Corina Maurer and team:
  - Presence of deformed wing virus and black queen virus in 19 wild bee and hoverfly species.
  - Higher pathogen loads (10 times more) in pollinators sharing floral resources with honey bees.

Solutions to Mitigate Disease Transmission

❖ **Diverse pollinator-friendly habitats:**
- Rich floral resources lower pathogen transmission risks.

❖ **Impact of Habitat Loss:**
- Forces pollinators into smaller shared spaces, increasing disease risk.
- Increased overlap between wild and managed species.

Pollinator Diversity in India

❖ India is home to over 700 bee species, including:
- Asiatic honey bee (*Apis cerana indica*).
- Giant rock bee (*Apis dorsata*).
- Dwarf honey bee (*Apis florea*).
- Stingless bee (*Trigona* species).

- **Western honey bees in India:**
  - Introduced in 1983 to boost honey production.
  - Their interaction with native species poses ecological challenges.

Conclusion:

- The declining population of pollinators poses a significant threat to agriculture, biodiversity, and food security. Research underscores the need for conserving diverse habitats and mitigating habitat loss to prevent pathogen spillover. Focusing research and conservation strategies are critical in regions like India, where pollinator diversity is high but understudied.

GROWING EPIDEMIC

Growing epidemic

India has to scale up diagnosis to meet the 2030 WHO target for diabetes

From around 200 million in 1990, the number of people with diabetes has quadrupled globally to over 800 million in 2022 while the global diabetes prevalence in adults rose from 7% to 14% between 1990 and 2022, as in data released in *The Lancet* on November 13. At 212 million, India has the highest number of people with diabetes as against China's prevalence of 148 million. India also topped the list of countries with 133 million people over the age of 30 years with untreated diabetes as against 78 million in China. One reason for the steep increase in the number of those with diabetes was the methodology used for pooling and analysing the data – being on medication for diabetes, or having a fasting plasma glucose of 7·0 mmol/L or more, or an HbA1c of 6·5% or more. Unlike earlier studies that mostly relied on elevated fasting plasma glucose or other single-biomarker data, the analysis by the NCD Risk Factor Collaboration with support from the World Health Organization (WHO) included people whose fasting plasma glucose or glycated haemoglobin (HbA1c) was elevated. Taking into account elevated fasting plasma glucose alone without including those with elevated glycated haemoglobin, the study notes, misses out many people with diabetes, particularly in south Asia. That diabetes prevalence in India has increased in the last three decades is beyond doubt even if the absolute numbers are contested.

While consumption of unhealthy food, particularly high-calorie foods rich in carbohydrates and saturated fat, and a sedentary lifestyle are two major controllable risk factors for diabetes, the role of tobacco in causing diabetes has not been highlighted sufficiently. According to a November 2023 WHO report, there is overwhelming evidence that cigarette smoking raises the risk of developing diabetes by 30%-40% compared with those who do not smoke. Nicotine, the addictive substance in tobacco, impairs the function and amount of insulin producing beta cells, thereby affecting insulin production and regulation of glucose production, which together play an important role in the onset of diabetes. Nicotine also induces insulin resistance, another factor causing diabetes. Besides sharply lowering the risk of diabetes, avoiding tobacco in all forms is associated with a reduced risk of cardiovascular disease and mortality in people with diabetes. The role of managing gestational diabetes in reducing the risk of both mother and child developing diabetes at a later date cannot be overemphasised. With 133 million people remaining undiagnosed, India has to rapidly scale up diagnosis to meet the 2030 WHO target for diabetes – 80% of people with diabetes are diagnosed and 80% of people with diagnosed diabetes have good control of glycaemia.

- Diabetes prevalence has been rising at an alarming rate globally and in India. With 212 million people affected, India has the highest number of diabetes cases globally, surpassing China's 148 million. To meet the World Health Organization (WHO) target for 2030, India must address several challenges, including scaling up diagnosis and management.

Global Diabetes Trends

- Diabetes prevalence has quadrupled globally:
  - 200 million cases in 1990 → Over 800 million cases in 2022.
  - Global adult diabetes prevalence rose from 7% in 1990 to 14% in 2022.
  -

India's Diabetes Statistics

- **Highest number of diabetes cases globally:**
  - 212 million individuals diagnosed in India.
  - 133 million over the age of 30 remain undiagnosed.
  - In comparison, China has 148 million cases, with 78 million undiagnosed cases.

Methodology and Data Analysis

- **Improved methodology in the study (The Lancet, November 2023):**
  - Used multiple diagnostic markers:
    - Fasting plasma glucose ≥ 7.0 mmol/L.
    - HbA1c ≥ 6.5%.
    - Patients on diabetes medication.
  - Earlier studies relied on singlebiomarker data, missing many cases.
  - **South Asia Focus:** Including glycated haemoglobin (HbA1c) data revealed a higher prevalence.

Risk Factors for Diabetes

- **Controllable Lifestyle Factors:**
  - Unhealthy diets: High-calorie foods rich in carbohydrates and saturated fats.
  - Sedentary lifestyles.
- **Tobacco as a Major Contributor:**
  - **Smoking increases diabetes risk by 30%-40%** (WHO, November 2023).
  - Nicotine effects:
    - Impairs insulin-producing beta cells, reducing insulin production.
    - Induces insulin resistance.
  - Avoiding tobacco reduces:
    - Risk of diabetes.
    - Cardiovascular disease and mortality in diabetic individuals.

Special Focus on Gestational Diabetes

- Gestational diabetes increases the risk of developing diabetes later for both:
  - The mother.
  - The child.
  - Managing gestational diabetes is critical to long-term prevention.

Challenges in Diagnosis and Treatment

- **Undiagnosed Cases:**
  - 133 million people in India remain undiagnosed.
- **WHO 2030 Targets for Diabetes:**
  - 80% of people with diabetes diagnosed.
  - 80% of diagnosed cases with good glycaemia control.

The Way Forward for India

- **Scale Up Diagnosis:**
  - Strengthen healthcare infrastructure.
  - Increase accessibility to diagnostic tests for fasting plasma glucose and HbA1c.

- **Promote Awareness and Lifestyle Changes:**
  - Campaigns on healthy diets, exercise, and tobacco avoidance.
- **Focus on Maternal Health:**
  - Improve screening and management of gestational diabetes.

INDIA CONDUCTS HISTORIC FLIGHT TEST OF HYPERSONIC MISSILE

India conducts 'historic' flight test of hypersonic missile with a range of 1,500 km

Speed 5 Mach
(five times speed of sound)

Dinakar Peri
NEW DELHI

India on Sunday announced the successful flight test of its maiden long-range hypersonic missile with a range of 1,500 km. The Defence Research and Development Organisation (DRDO) conducted the flight test late on Saturday from Dr. A.P.J. Abdul Kalam Island, off Odisha coast, the latest in a series of missile tests in the past two months.

"The missile is designed to carry various payloads for ranges greater than 1,500 km for all the services of the armed forces," the DRDO said in a statement. "The missile was tracked by various range systems, deployed in multiple domains. The flight data obtained from down-range ship stations confirmed the successful terminal manoeuvres and impact with high degree of accuracy."

High aims: Flight trial of the hypersonic missile being done off the coast of Odisha. PTI

Congratulating the DRDO, Defence Minister Rajnath Singh said on X, "India has achieved a major milestone by successfully conducting flight trial of long range hypersonic missile... This is a historic moment and this significant achievement has put our country in the group of select nations having capabilities of such critical and advanced military technologies."

This missile has been indigenously developed by DRDO. Hypersonic weapons are manoeuvrable and can fly at speeds of at least Mach 5, five times the speed of sound.

— Keep Learning and Keep Revising! —