# A History of Knowledge

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What the Indians knew

• Bibliography
  – Hermann Goetz: The Art of India (1959)
  – Heinrich Zimmer: Philosophies of India (1951)
  – Surendranath Dasgupta: A History of Indian Philosophy (1988)
What the Indians knew

- Insert pictures of Asian Art Museum
India

- 304 BC - 184 BC: Maurya
- 184 BC - 78 BC: Sunga
- 78 AD - 233: Kushan
- 318 - 528: Gupta
- 550 - 1190: Chalukya
- Hoysala (1020-1342)
- 1192-1526: Delhi sultanate
- 1526-1707: Moghul
- 1707-1802: Maratha
What the Indians knew

- Tantra
  - 10\textsuperscript{th} c
  - Influenced by Bhakti movement
  - Mainly central and south India
  - Ancient practice to worship the mother goddess through sexual intercourse
  - Group intercourse
  - Kundalini power
  - Hinduism = devotion (Bhakti), knowledge (Vedanta) and action (Tantra)
What the Indians knew

- Tantra
  - Esoteric Hinduism
  - Dialogues between the god Shiva and his wife Parvati
  - Reversals of Hindu social practices (e.g., incest)
  - Reversals of physiological processes
  - Forbidden substances are eaten and forbidden sexual acts are performed ritually
  - "Five m's": maithuna ("intercourse"), matsya ("fish"), mansa ("flesh"), mudra ("grain"), mada ("wine")
  - The chakras of the body as steps in magic
  - Increasing psychosexual energy (the serpent power of Kundalini) to achieve the union of the god and the goddess
Buddhism

• Rapid decline of Buddhism in India after the Gupta era
Buddhism

- Tantric/ Vajrayana Buddhism (650 AD)
  - Influenced by Hinduist Tantrism
  - Female bodhisattvas
  - Esoteric
  - Mandalas (symbolic maps of the spiritual universe)
  - Ritual gestures (mudras)
  - Ritual recitations (mantras, eg "om mane padme hum - the jewel is in the lotus")
  - Mainly Tibet
What the Indians knew

• Carvaka school (600 AD)
  – Materialism and hedonism
  – Only one surviving author: Jayarasi Bhatta
  – Sacred literature is false
  – There is no god, there are no supernatural phenomena
  – The soul is not immortal
  – Karma is an illusion
  – Everything is matter, including mind
  – The goal of life should be just to... enjoy it
What the Indians knew

• 0: Like all symbols it refers to something, but in this case it refers to nothing.

Inscription K-127, from Sambor on Mekong, the oldest extant representation of zero: the number 605 etched on a Khmer stele (7th c)

The second oldest extant representation of zero: the number 270 etched in a Gwalior temple (9th c)
What the Indians knew

• 0: Like all symbols it refers to something, but in this case it refers to nothing.

Europe/ Africa/ Asia/ Latin America

1 km = 1,000 meters = 1,000,000 mms

1 yard = 3 feet
1 foot = 12 inches
What the Indians knew

• Chalukya art:
  – Badami
  – Aihole
  – Pattadakal
What the Indians knew

• Pallava art:
  – Mamallapuram temples (7th-8th c)
  – Kanchipuram
• Shailodehavas 7th-8th
What the Indians knew

- Rashtrakuta
What the Indians knew

• Elephanta caves
Kailasa Temple, Ellora (757 AD)
India

• 711: the Arabs conquer Sindh and Multan (Pakistan)
• 800: kingdoms are created in central India and in Rajasthan by Rajputs (warlords)
South India

- Pandyan (southern India and Sri Lanka, 0 to 15th c)
- Chola (southern India and Indonesia, 0 to 13th c)
- Pallava (southeastern Indian, 4th to 9th c)
- Chalukya (south-central India, 6th to 12th c)
India

- Pala (eastern India, 8th to 12th c)
- Pratihar (northern India, 6th to 11th c)
- Rastrakutas (southwestern, 8th to 10th c)
- Hoysala (south India, 1020-1342)
India

- Vijayanagara (south India, 1336-1646)
- Nayak (south India, 1559-1736)
- Bijapur (southwestern India, 1347-1686)
India

- Vijayanagara (south India, 1336-1646)
  - South India's agricultural and industrial boom
  - South India self-sufficient
  - South India has little need for foreign goods
  - South India does not engage in sea trade
  - South India invests in large-scale agriculture
  - The Indian ocean is left to Muslims in the west and Chinese in the east
India

- After the fall of Vijayanagara no Hindu empire until the 20th century

Hampi
India

• Central East Coast:
  – Somavamshis 10-11th
  – Eastern Gangas 1038-1568
What the Indians knew

- Summary of Indian art periods
  - see www.scaruffi.com/travel/art.html
What the Indians knew

- Pallava dynasty
  - Buddhism, Jainism, Hinduism
  - Patrons of music, painting and poetry
  - Mahamalla’s temples at Mamallapuram (7th c)
What the Indians knew

- Chalukya dynasty
  - Pulakeshin II (610-42) builds free-standing temples at Badami and Aihole
What the Indians knew

• Chola dynasty
  – Incarnation of Vishnu but mostly worship Shiva
    (Vishnu worships Shiva)
What the Indians knew

- Rashtrakuta dynasty
  - Kailasa temple to Shiva at Ellora
  - Replica of Mt Kailash
What the Indians knew

- South-Indian Bhakti (8th-11th c AD)
  - Taittiriyas’ *Shvetashvatara Upanishad*: supreme devotion to a personal god as a path to one's spiritual progress and mentions of shiva as an adjective
  - *Bhagavad Gita*: karma yoga, jnana yoga AND bhakti yoga (bhakti as an alternative to action and knowledge)
  - *Narada Bhakti Sutra*
  - Bhakti as personal devotion threatens the power of the brahmins
  - Shift from Vedic sacrifice (brahmins) to temple-based devotion (influence of Buddhism)
What the Indians knew

- South-Indian Bhakti (8th-11th c AD)
  - Bhakti poetry and devotion written in Tamil
- Saiva Nayanars/ Nayanmars/ நாயன்மார்கள் (4th-10th c AD): teachers of Shiva (63 of them)
  - Three are women, including Karaikkal Ammaiyar
- Vaisnava Alvars (3rd-9th c AD): teachers of Vishnu (12 of them)
  - Compiled in Nalayira Divya Prabandham/ நாலாயிரத் திவ்வியப் பிரபந்தம் (4,000 verses)
  - Included: Nammalwar (9th c): Tiruvayumoli (1102 verses)
  - Only one woman, Antal
What the Indians knew

• South-Indian Bhakti (8th-11th c AD)
  – Bhakti monotheism of 6th c introduces the concept of blasphemy in India
  – Conflicts between Hindus and Jains and Buddhists
  – The "Bhagavad Gita" becomes the holy text of monotheistic Hinduism
  – Krishna-theism
  – Islamic (monotheistic) influence
What the Indians knew

- South-Indian bhakti (8th-11th c AD)
  - Hymns in Tamil by two groups of poets, Nayanars (worshipers of Shiva) and Alvars (worshippers of Vishnu)
  - New form of bhakti, associated with singing in the languages of the common people (not sanskrit) and passionately (almost erotically) intense
  - Sense of unrestrained joy, expressed in music and dance
  - The god's dancing girls (devadasis, sometimes also prostitutes)
  - Bhakti poets (writing in vernacular, not sanskrit, and therefore belonging to any class, not only brahmin)
What the Indians knew

• South-Indian bhakti (8th-11th c AD)
  – Popular deities for bhakti
    • Vishnu
    • Shiva
    • Devi/ Durga/ Parvati/ Lakshmi/ Saraswati
    • Ganesha
    • Surya
    • Subrahmanya
What the Indians knew

• South-Indian bhakti (8th-11th c AD)
  – Larger temple complexes
  – Regional styles
    • Orissa (Lingaraja temple of Bhubaneswar, 1000; Sun Temple of Konarak, mid-13th c)
    • Khajuraho (Kingdom of Bundelkhand, 11th c)
    • South Indian (Rajarajesvara temple of Thanjavur/Tanjore, 10th c)
    • Great walled temple complexes of South India: small cities containing several shrines, bathing tanks, administrative offices, residences of the temple employees, workshops, bazaars, schools, banks, etc.
What the Indians knew

• South-Indian bhakti (8th-11th c AD)
  – Vimana + mandapas + gopuras
  – Erotic reliefs (the celestial “apsaras” of the afterlife)
South Indian temples

Panch Rathas (630 AD)
Kanchipuram: Kailasanatha (8th century)

Bhubaneswar: Parashurameshvara (7th century)
Pattadakal: Mallikarjuna temple (745)

Chidambaram: Nataraja (9th c)

Thanjavur: Brihadiswara temple (1000)
What the Indians knew

South Indian temples

Brahmesvara: Bhubaneswar (11th c)

Bhubaneswar: Muktesvara (11th c)

Somnatpur: Keshava temple (1268 AD)

Belur: Chennakeshava temple (1117)

Halebid: Hoysaleshvara temple (1150)
Somnatpur: Keshava temple (1268 AD)
What the Indians knew

• Persecution of Jainas in south India
  – Hindu texts boast of impaling Jainas
Jodhpur
What the Indians knew

- Adi Shankara (Kerala, 788AD)
  - Vedanta Advaita (non-dualist) school of monotheism
  - Unifying view of the Hindu religion
  - Only one substance exists, Brahman
  - Atman as pure consciousness and equivalent to Brahman
  - Brahman and Atman are identical
  - The Atman cannot grasp its Brahman nature and the fundamental unity of everything, thus it perceives separate selves and objects and periods
  - “The self cannot be denied because it would be the very self that does the denying” (cfr Descartes)
What the Indians knew

- Shankara (b 788AD)
  - The phenomenal world of selves, objects and time periods is only an appearance (maya) that leads to the cycle of karma and samsara
  - Through a process of superimposition (adhyasa), the unity formed by atman and Brahman is refracted as a multitude of conscious beings
  - Reality is an indifferentiated unity. It can only be defined by saying what it is not.
  - Reality is immanency: the more permanent something is, the more real it is.
  - The phenomenal world disappears once Brahman is attained (moksha)
What the Indians knew

• Shankara (b 788AD)
  – The key to achieving release from samsara is knowledge (jnana), the spontaneous mystical realization of the fundamental oneness of reality
  – The Path of Knowledge is the main path to salvation
What the Indians knew

• Shankara (b 788AD)
  – Advaita = Buddhist nihilism clothed in Vedic terminology
Cholas ruled over Andaman, Nicobar, Srilanka, Java and Sumatra.
What the Indians knew

• Pala-Sena Art (10th-14th c)
  – Tantric Buddhism of infinite emanations
  – Mysticism, eroticism and symbolism
  – All male and female deities emanate from sunyata
  – Magic circle (mandala) to evoke the deities
  – Cultural center in the Buddhist university of Nalanda in central Bihar (established in the 5th century BC, destroyed in 1199), attended by 5,000 international students
  – Pala-Sena influence: Bagan in Burma (esp. Ananda temple), Borobudur in Java, Tibet
What the Indians knew

- Pala-Sena Art (10th-14th c)
  - Borobudur
    - Buddhist cosmogony
    - More than 16kms of relief sculptures
The Indian influence

Potala, Lhasa, Tibet, 17th c

Bagan, Burma, 12th c

Angkor, Cambodia, 13th c

Borobudur, Java, Indonesia, 8th c
The Indian influence

Angkor Wat

Bayon, Angkor, Cambodia, 13th c
What the Indians knew

• Pratihara Art (9th-10th c)
  – Temple-cathedrals
• Chandella Art (10th-11th c, successor of Pratihara)
  – Tantric cult
  – Eroticism
Khajuraho
(10th-11th c)
Khajuraho
(10th-11th c)

What the Indians knew

- Chola Art (9th-13th c)
  - Temple-towns (religious, social and economic centers)
  - Five huge imperial temples
    - Chidamambaram: Nataraja temple
    - Thanjavur: Brihadiswara temple
  - Tanjur temple (1009)
India

• 1030: the Solanki kings build the Jain temples at Mount Abu
• 1192: Turkic-speaking chieftains from Afghanistan's led by Muhammad of Ghor defeat Prithvi Raj, capture Delhi and establish a Muslim sultanate at Delhi
India

- Mount Abu pictures
India

• See pictures of Modhera's Sun Temple (11th c)
India

• 1250: Narasimadeva of the Chodaganga dynasty builds a temple to the Sun in the form of a giant chariot at Konarak
What the Indians knew

• Abhinavagupta (Kashmir, 975)
  – Kashmir Shaivism
  – Monism
  – God is pure consciousness
  – The selves and the universe emanate from God
  – Both the ultimate subjective reality of the self and the ultimate objective reality of the universe are God
  – “Liberation is the revelation of one’s identity”
  – The identity of the self is consciousness
  – Consciousness makes the universe appear
  – Therefore “Liberation is knowledge”
What the Indians knew

- “Yoga Vasishtha” (Kashmir, 11th c)
  - 29,000 verses
  - Pretends to be a leftover of Valmiki’s *Ramayama*
  - A long dialogue between Rama and the sage Vasishtha
  - Kashmir Shaivism
  - Pratijna (“recognition”) school = Shaivism + Buddhism + Shankara
  - Monism
What the Indians knew

• Abhinavagupta (Kashmir, 975)
  – Experiencing the flavor of a work of art requires not only that the work evoke a response, but also that the experiencer possess the aesthetic sophistication and knowledge required to respond in an appropriate way
  – The experience of a work of art is a process of exchange between the creator and the spectator
What the Indians knew

• Abhinavagupta (Kashmir, 975)
  – There are nine rasa (emotional experience incited by performance, poetry and art): shringara (the erotic), hasya (the comic), karuna (the compassionate or pathetic), raudra (the angry), bibhatasa (the unappealing), vira (the heroic), abhuta (the awe-inspiring), bhayanhaka (the terrifying), and shanta (the peaceful)
What the Indians knew

• Ramanuja (Kanchipuram, 11th c)
  – Vedanta - Qualified monism (vishishtadvaita)
  – Brahman is God and contains everything that exists
  – Brahman and Atman are not the same
  – The Path of Devotion (bhakti) is the main path to salvation
  – The soul does not become one with God, but simply similar to God

• Madhva (Karnataka, b 1197AD)
  – Vedanta – Dualism (Dvaita): objects exist as well as souls
What the Indians knew

- Vaishnava schools (commentaries on Vedanta)
  - Vishnusvami (8th c)
  - Ramanuja (11th c): visishta-advaita
  - Nimbarka (12th c)
  - Madhva (13th c): dvaita
What the Indians knew

• Vasudeva Madhvacarya (b 1238)
  – Dvaita/Tattvavada, one of the three main subschools of Vedanta (with Shankara's Advaita or Nondualism and Ramanuja's Qualified Nondualism or Vishishtadvaita)
  – One of the realist schools (the universe is real not illusion) with Samkhya, Nyaya, Vaisheshika and Purva mimamsa, opposed to the idealistic schools (Yogacara, Madhyamika Buddhism, Advaita)
What the Indians knew

- Vasudeva Madhvacharya (b 1238)
  - The plurality of souls is real not an illusion
  - Dualist instead of monist (vs Advaita) but still monotheistic
  - God/Ishvara = Brahman = Vishnu
    ("brahmashabdabashcha vishhnaveva")
  - Distinction between Ishvara (God) and the individual selves (jivas)
  - Both souls and Ishvara exist
  - Souls are not created by Ishvara but depend on him for their existence
  - Ishvara is the efficient cause of the universe but not the material cause
What the Indians knew

• Vasudeva Madhvacharya (b 1238)
  – The soul/self/consciousness never becomes one with the deity
  – Individual consciousness survives and attains the fullness of the essence of selfhood
  – The state of salvation/moksha is a positive state of being where the consciousness persists
What the Indians knew

• Vasudeva Madhvacharya (b 1238)
  – Vishnu is the only deity that does not have a body.
  – Other deities (starting with Brahma and Vaju) have bodies
  – Brahman (Vishnu) and Atman (soul) are eternally different, never become one
What the Indians knew

• Vasudeva Madhvacharya (b 1238)
  – The universe is made of five fundamental differences:
    • between Selves and Brahman
    • between matter and Brahman
    • between one Self and another Self
    • between matter and Selves
    • between matter and matter
  – The plurality is not an illusion but it is reality
What the Indians knew

• Vasudeva Madhvacharya (b 1238)
  – Possibility of eternal damnation instead of certainty of eventual salvation:
    • Mukti-yogyas qualify for liberation
    • Nitya-samsarins are subject to eternal rebirth
    • Andhatamas (or Tamo-yogyas) are eventually condemned to eternal hell
What the Indians knew

- Origin of Marathi literature
  - Yadava Empire (1182-1317)
  - Non-Brahmin state
  - The vernacular is adopted in the religious world
What the Indians knew

- Jnanesvar/ Dnyaneshwar (1290)
  - Commentary written in colloquial Marathi of the “Bhagavad Gita” (written in Sanskrit) using the meter of female work songs
  - The “Bhagavad Gita” was meant as an explanation for the masses of the Vedas, but, written in Sanskrit, could be read only by the higher caste
  - Jnanesvar’s commentary fulfills the mission of the BG by making it accessible to women and lower castes
What the Indians knew

- Mathematics
  - Gelosia multiplication (12th c)

multiply 543 by 7695.

In the first row we have 3 times 7, 21, then 3 times 6, 18, then 3 times 9, 27, and then 3 times 5, 15. In the second row it’s 4 times 7, 28, 4 times 6, 24, 4 times 9, 36, and 4 times 5, 20. And in the last row it’s 5 times 7, 35, 5 times 6, 30, 5 times 9, 45, and 5 times 5, 25. Then adding along the diagonal first there is a lonely 5. Then 7+1+0=8. Then 8+2+6+2+5=23, write down the 3, carry the 2. Then 2+1+1+4+3+5+2=18, write down the 8 carry the 1. Then 1+2+5+3=11, write down the 1 carry the 1. Then 1+3=4. Then reading from the bottom around, the answer is 4,178,385.

(Shelley Walsh)
What the Indians knew

- Jains
  - Pictures of Abu
  - Pictures of Palitana
  - See pictures of Ranakpur (1439)
What the Indians knew

• Kabir (15th c)
  – North Indian Bhakti (Varanasi)
What the Indians knew

- Seated Ganesha from Karnataka 1200-1300
  San Francisco Asian Art Museum

- Vishnu from Karnataka 1200-1300
  San Francisco Asian Art Museum
What the Indians knew

• Sculpture

Buddhist deity Vajra Tara from Bihar 1075-1200
San Francisco Asian Art Museum
What the Indians knew

Brahma from Tamil Nadu 1000-1200 AD
San Francisco Asian Art Museum

Brahmani from Tamil Nadu 950 AD
San Francisco Asian Art Museum
What the Indians knew

• Sculpture

Vishnu, Lakshmi and Sarasvati
(West Bengal, 12th c)
What the Indians knew

• Jain Art
  – Elaborate temples (representing the celestial assembly)
  – Illuminated manuscripts
  – Giant pilgrimage paintings
What the Indians knew

• Jain Art

See
http://www.scaruffi.com/museums/jain
What the Indians knew

- Polonnaruva, Sri Lanka: Sacred Quadrangle (12th century)
What the Indians knew

- Polonnaruva, Sri Lanka: Gol Vihara (12th century)
What the Indians knew

- All invaders of India had come from the northwestern route:
  - 1600 BC: Indo-Aryans
  - 327 BC: Alexander
  - 155 BC: Bactria
  - 80 BC: Sakas (Scythians)
  - 78: Kushan
  - 455: Huns
  - 997: Ghaznavids
  - 1192: Ghurids (Delhi sultanate)
  - 1526: Moghuls
What the Tibetans knew

- Oracles
- Bon (shamanism)
- Mandala (a profound representation of the nature of the universe)
- Gesar: bridging the nomadic culture and Buddhist ideals
- Guru Rinpoche/ Padmasambhava (750AD): conversion to Buddhism, Samye monastery
- Monastic life
- Lamas (1578AD)
What the Tibetans knew

Guhyasamaja from Tibet (15th-16th c), Asian Art Museum, San Francisco
• Continued on Part III