

## Rediscovering the Hindu Temple



Rediscovering the Hindu Temple:  
The Sacred Architecture and Urbanism of India

By

Vinayak Bharne and Krupali Krusche

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**SCHOLARS**  

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**P U B L I S H I N G**

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The Sacred Architecture and Urbanism of India,  
by Vinayak Bharne and Krupali Krusche

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To Lakshimbai and Ragu

*Vinayak Bharne*

To my father - my source of knowledge,  
and my mother - my inspiration

*Krupali Krsche*



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# Map of India

(Indicating regions and towns of cited temples)



Drawing by Ryan Hughes.

# Hindu Temples Cited in this Study

(Listed according to region and chronology)

## North India

### *Himachal Pradesh*

Champavati Temple (Durga), at Chamba (10<sup>th</sup> c. CE)  
Chandragupta Mahadeva Temple (Shiva), at Chamba (10<sup>th</sup> c. CE)  
Hari Rai Temple (Vishnu), at Chamba (11<sup>th</sup> c. CE)  
Vajreshwari Devi Temple (Parvati), at Chamba (current structure, 1739 CE)

### *Madhya Pradesh*

Tēlī-kā-mandir Temple (Siva), at Gwalior (700-750 CE)  
Brahmā Temple (Brahma), Chandella, Khajuraho, (ca. 900 CE)  
Lakṣmaṇa Temple (Vishnu), at Khajuraho (930-950 CE)  
Khandariya Mahādēva Temple (Shiva), at Khajuraho (950-1050 CE)  
Duladeo Temple “Kunwar Math” (Shiva), at Khajuraho (1000-1150 CE)  
Vishvanatha Temple (Shiva), at Khajuraho (early 11<sup>th</sup> c. CE)  
Chitragupta Temple (Surya), at Khajuraho (early 11<sup>th</sup> c. CE)  
Sas-Bahu Temple (Vishnu), at Gwalior (1092 CE)  
Krishnapura Chhatri (Holkar ruler cenotaph), Indore (ca. 1849 CE)  
Mahakal Temple (Shiva), at Ujjain (present temple, 1736 CE)

### *National Capital Region*

Gauri Shankar Temple (Shiva), at Delhi (lingam ca. 1200 CE; present temple, 1959)  
Lakshmi Narayan Temple (Vishnu, Lakshmi), at New Delhi (1933-1939)  
Shri Adhya Katyani Shakti Peeth Mandir “Chhatarpur Mandir” (Katyayani- sixth avatar of Durga), at New Delhi (1974)  
Swaminarayan Akshardham Temple Complex, at New Delhi (2001-2005)  
Sankat Mochan Temple (Shiva, Hanuman), at New Delhi (completed 2007)

### *Rajasthan*

Mahāvīra Temple, Ōsiāñ, Jodhpur District (750-775 CE)  
Udayeshvara Temple, at Udaipur (1059-1080 CE)  
Brahma Temple, at Pushkar (ancient origins; present structure, 14<sup>th</sup> c. CE)

### *Uttar Pradesh*

Gupta Temple, at Bhītargāñv, Kanpur district (425-450 CE)  
Jaina Temple No.15, at Devgad (750-775 CE)  
Har Devaji Temple (Krishna), at Mathura (present structure, 17<sup>th</sup> c. CE)  
Vishvanatha Temple (Shiva), at Varanasi (present temple, ca. 1776 CE)  
Panchakroshi Temple (Shiva), at Varanasi (ca. 1870 CE)  
Kesava Deo temple (Krishna), at Mathura (present structure, 1965)  
Kalabhairava Temple (Shiva), at Varanasi.  
Trilocaneshwara Temple (Shiva), at Varanasi.

## East India

### *Orissa*

Satrugnesvara temple at Bhuvanēśvara (ca. 600 CE)  
Vaitāl Dēul Temple at Bhuvanēśvara (ca. 750 CE)  
Brahmeshvara Temple (Shiva), at Bhuvanēśvara (880 CE)  
Sun Temple (Surya), at Konarka (ca. 1250 CE)  
Mukteswar Temple (Shiva), at Bhuvanēśvara (10<sup>th</sup> c. CE)  
Lingaraj Temple (Shiva), at Bhuvanēśvara (11<sup>th</sup> c. CE)  
Rajarani Temple (Shiva), at Bhuvanēśvara (11<sup>th</sup> c. CE)  
Jaganatha Temple (Krishna, Balaram, Subhadra), at Puri (present temple, 11<sup>th</sup> c. CE)

## West India

### *Chhattisgarh*

Lakṣmaṇa Temple in Sirpur (ca. 625-650 CE)

### *Gujarat*

Sun Temple (Surya), at Mōḍhērā (1026 CE)  
Palitana Temple Complex (various Jain deities), at Mount Satrunjaya, Palitana (12<sup>th</sup> c. CE)  
Dwarakadheesh Temple (Krishna), at Dwarka (16<sup>th</sup> c. CE)

### *Maharashtra*

Karla Caves, near Pune (Phase 1, 2<sup>nd</sup> c. BCE - 2<sup>nd</sup> c. CE; Phase 2, 5<sup>th</sup>—10<sup>th</sup> c. CE)

### *West Bengal*

Temple of the Vedic Planetarium (Krishna), at Mayapur (under construction, 2012)

### **South India**

#### *Andhra Pradesh*

Tirumala Venkateshwara Temple (Vishnu), at Tirupati (ancient origins; present temple, 16<sup>th</sup> c. CE)

#### *Goa*

Navadurga Temple (Parvati), at Madkai (present structure, 1603 CE)

Shantadurga Temple (Parvati), at Kavalem (ca. 1700 CE)

Mangesh temple (Shiva), at Mangashim (ca. 1715 CE)

#### *Karnataka*

Kada Siddhēśvara Temple, at Paṭṭadakal (550-757 CE)

Gaḷaganātha Temple, at Paṭṭadakal (Phase 1, ca. 685-696 CE; Phase 2, ca. 720-740 CE)

Kāśīviśvēśvara Temple, at Paṭṭadakal (Phase 2, ca. 696-720 CE)

Jambulinga Temple, at Paṭṭadakal (Phase 2, ca. 696-720 CE)

Śaṅgamēśvara “Vijayēśvara” Temple, at Paṭṭadakal (697-733 CE)

Durga temple, at Aihole (Phase 2, ca. 700 CE)

Lad Khan Temple, at Aihole (late 7<sup>th</sup> - early 8<sup>th</sup> c. CE)

Virūpāśka Temple (Shiva), at Paṭṭadakal (origins, 7<sup>th</sup> c. CE; additions, 14<sup>th</sup> c. CE)

Mallikārjuna Temple, at Aihole (Phase 2, ca. 700-715 CE)

Pāpanātha Temple, at Paṭṭadakal (Phase 2, ca. 720-740 CE)

Hoysalēśvara Temple (Shiva), at Halēbīd (12<sup>th</sup> c. CE)

Chamundeshwari Temple (Durga), at Mysore (12<sup>th</sup> c. CE)

Keshava Temple “Cennakēśava” Temple (Vishnu), at Bēlūr (1117 CE CE)

Trikūta Kēśava Temple, at Sōmanāthpura (ca. 1268 CE)

Vijayavittala Temple complex, near Hampi (16<sup>th</sup> c. CE)

Yoga Narasimha Temple (Vishnu), Hampi

Krishna Temple (Vishnu), near Hampi (1513 CE)

Sarangi-math Temple “Konti-temple” (No. 4 of the Kuntigudi group), at Aihole

Kotilingeshwara Temple (Shiva), near Udupi (1987)

Radha Krishna-Chandra Temple (Vishnu and Lakshmi), at Bengaluru (1998)

#### *Kerala*

Tirunavaya Temple (Vishnu, Lakshmi, Ganesha), near Tirur, Malappuram district (ca. 13<sup>th</sup> - 14<sup>th</sup> c. CE)

### *Tamil Nadu*

Shore Temple, (Shiva), at Mahabalipuram (700-728 CE)

Rājasiṃhavarmā “Kailāsanātha” Temple (Shiva), at Kāñchīpuram (701-735 CE)

Arunachaleshwar Temple (Shiva), Tiruvannamalai, (9<sup>th</sup> c. CE)

Ekambreshwara Temple (Shiva), at Kāñchīpuram (origins, 600 CE; remodeled, 10<sup>th</sup> c. CE)

Tillai Nataraja Temple (Shiva), at Chidambaram (10<sup>th</sup> c. CE)

Vadaraja Temple (Vishnu), at Kāñchīpuram (10<sup>th</sup> - 11<sup>th</sup> c. CE)

Bṛhadēśvara Temple (Shiva), near Tañjāvūr (ca. 1018 CE)

Varadaraja Perumal Temple (Vishnu), Kāñchīpuram (1053 CE)

Ranganatha Swami Temple (Vishnu), at Srirangam, Tiruchinapalli (ancient origins; present complex, 13<sup>th</sup> c. CE)

Meenakshi Sundareswara Temple (Parvati, Shiva), at Madurai (ancient origins; present structure, ca. 1600 CE)

Brahmapureeswarar Temple (Brahma), at Tirupattūr, Tiruchirapalli.

### **Temples Outside India**

Xkuj pwVgo r ng.'cvCpi nqt'Y cv\*3335/3372'EG)

Krishna Degah in Patan, Nepal (1637)

Venkateshwara Balaji Temple (Vishnu, Shiva), Malibu, Southern California (1981)

Swaminarayan Temple (Bhagwan Swaminarayan-Vaishnav tradition), London, UK (1995)

Sanatan Hindu Temple, Wembley, UK (2010)

## Foreword

What this extraordinary book reveals is the power of a new attitude. Instead of looking at the Hindu temple with the eyes of historians or anthropologists, it espouses the mindset of the technician laying bare the workings of a well functioning machine. It is relevant to know that the authors are practicing architects and urbanists. For them the subject of analysis is not an exogenous object to be described, classified and archived as historical dead matter. They are physiologists studying a live organism. They describe the un-renounceable components that ensure the life and survival of a precious species. The timeless principles of building, composition and adornment which underlie the creation of the Hindu temple, they demonstrate, are fundamental to generating meaningful new ones. Bharne and Krusche not only use or teach traditional techniques of planning and building for restoration and conservation purposes but more importantly as disciplines to design modern buildings and cities.

It must not be forgotten that, in the genesis of artistic and architectural modernism, the founding myth were established as a radical break with the past. The rest was pronounced prehistory. "There is no going back." Anything that is not drawn into the mainstream of this sectarian vision is disqualified as anachronistic, historic, dated and superseded. The break with the past and its parallel historicization is still today modernism's reigning mode of auto-definition, of legitimation, of domination and exclusion. But modernity is an evolving concept. Under the pressure of its catastrophic mis-steps, that short sighted worldview is now under critical scrutiny and the re-evaluation of traditional conceptions is an urgent undertaking in an age of fossil fuel depletion.

The "going back" as is brilliantly demonstrated by this book, is well underway. It is a step not accomplished by entering a time machine, but by re-opening our eyes and minds to the treasure house of tradition as experience and perennial technology.

Hindus are a blessed people. They revere their gods not as an awesome abstraction but as their own kin, as the life force pulsing in their own hearts and bodies. A break with their building tradition means a break of their own lives and reasons. The lively playfulness of their modern temples couldn't be a more telling contrast to the clinical sterility of modern western temples. This study is not only relevant for the sub-continent but contributes importantly to the general re-evaluation of traditional values globally. It demonstrates that traditional planning and building is not only alive in the continuous recreation of Hindu temples, but is instrumental for cementing the delicate bonds of peoples as communities, ultimately for favoring their well-being as individuals and families.

Leon Krier

Uzes

February 2012





## Preface and Acknowledgments

This book assembles independent studies by two scholars on the common subject of the Hindu temple. Born and raised in India as Hindus, we both had an immersion into the workings of Hindu temples from childhood. We were both trained as architects, in India and the West, and developed an intellectual curiosity for the subject of Hindu temples. But our individual interests in and approaches to the subject were different. Krupali Krusche was studying the temple as an architectural entity: its formal, spatial and tectonic attributes, semantics, orders, proportions and elements, and the historical texts and forces that have established its canons in Indian classicism. Vinayak Bharne was studying the temple's urbanist dimensions - its evolutionary processes, roles in city-making, forms and types of sacred habitats, and their ritualistic and populist attributes. We were, unknown to each other, engaged in examining two parallel dimensions of the Hindu temple, that enmeshed together, promised a far richer, broader and more holistic perspective on the subject than either of us could have done alone.

It is this realization that inspired us to assess each others' studies, revisit our own, take independent field trips to further our observations, and engage in numerous discussions - all leading to the eleven chapters comprising this book. Some of these chapters, originally written as scholarly papers, have been published before, and they have been adapted, updated and sequenced within this book's larger framework. During this book's making, we have cross-examined and contributed to each other's commentaries, but have also tried to respect the others' personal expertise and viewpoints on specific subject matters, as well as methods of research and inquiry, and styles of writing and diagramming. A reader may therefore hear two distinct voices, rather than a synergized one in this book. But this duality, we would argue, has only made the narrative more complex and richer as a whole.

The idea of creating this book was born in our very first phone conversation. This conversation would have never happened were it not for our mutual friend Scott Ford, who after reading our independent papers, had the wit and insight to introduce us.

We thank Carol Koulikourdi, Chris Humphrey and Amanda Miller of Cambridge Scholars Publishing for their patience with all our queries and minute details related to this book's publication.

We are honored that architect and urbanist Leon Krier agreed to pen a foreword; and that scholar of the caliber of Dr. Rana P. B. Singh graced this study with an advance praise.

Vinayak Bharne would like to acknowledge the following:

In over a decade of exploring sacred Hindu landscapes, I have crossed paths with many known scholars on the subject. Of these, Rana P. B. Singh from Benaras Hindu University and Neils Gutschow from Abtsteinach, Germany, stand out for their consistent encouragement and generosity in sharing their resources and insights on several related topics. Their research continues to inspire me.

Several opportunities and invitations to lecture and write on the urbanist dimensions of Hindu temples instigated deeper reflections on this subject. I am particularly thankful to the Urban Design Quarterly Journal in the United Kingdom, Marg magazine in India, Kyoto Journal in Japan, and the Association of Collegiate Schools of Architecture, and Museum of Asian Art in the United States for these platforms.

Many friends, travelers and photographers have generously contributed images for this book: Hannah K. Tandon, Chloe Pariset, Neha Jain, Sivakumar Venkataramani, David Rodriguez, Douglas Duany, Vivek Nanda, Nikhil and Bharath Narayanan, Thomas Cole, Sandip Kalra, Siddha

Sardessai, Siddhartha Joshi, Aravind Satyamoorthy, Sanjeev Nayyar and Galen Frysinger.

Many of my students have made significant contributions to this effort. Muriel Skaf patiently copyedited and helped endlessly compose my text. Sonal Kulkarni and Komal Panjwani served as invaluable research assistants and produced many of the diagrams and graphics, and Nicole Friend and Mina Greas also assisted with some of the drawings.

In summer 2007, a team of 21 students from the University of Southern California, School of Architecture accompanied me to Varanasi, where we conducted several studies on the morphology and social dimensions of the historic city and its ghats. Those studies have remained an invaluable resource during the making of this book.

I remain grateful to my two academic mentors at the University of Southern California – Professor Robert Harris from the School of Architecture & Professor Tridib Banerjee from the Sol Price School of Public Policy. For over a decade, they have consistently supported my interest in the larger topic of non-Western urbanism and architecture, served as invaluable advisors and reviewers, and given me various opportunities to lecture and teach.

I am indebted to my parents and two sisters for the wonderful upbringing they gave me in India. This book is a tribute to everything they have taught me. The rituals and festivals we celebrated together as a Hindu family are indeed the foundations on which my thoughts and writings are based.

To Paige, my wife, and most trusted discussant and critic: no words can express my gratitude for your patience and consistent support. We have traveled together to many places mentioned in this book, and your brilliant mind and keen eye for nuance and detail has helped me see many things I would have otherwise evaded.

And to my children Sebastian and Portia: you both have been my inspiration to see this project through.

Krupali Krusche would like to thank the following:

The initial idea of this book was seeded in my mind while seeing the need to understand my own culture through a traditional lens. A life changing experience at the Prince of Wales American Summer School provoked this and many other questions that have inspired my life and work

since then. I would like to thank all faculty involved at the program and especially HRH, The Prince of Wales, who through this opportunity ignited my curiosity to study my own tradition and culture. To Dean Lykoudis, who offered constant support in all possible ways, as well as advice and help in making this book. To the Archeological Survey of India for their site and library access. To the Oriental Library, Chennai, for their free access to age-old treatises that were immensely useful during this study. To the School of Architecture library and staff that tirelessly made available rare books from across the world. Ryan Hughes, my valuable research assistant, who has poured countless number of hours editing and compiling this book. To Jill Kapadia and Selena Anders who tirelessly worked with me on the proportional studies of the various orders of Hindu temples, and produced many drawings in the book. To my fourth year students and those of Aimee Buccellato who studied Hindu temples as part of their architectural education in our respective studios and contributed with their renderings and personal experiences.

Dr. Adam Hardy for this valuable advice during the earlier stages of my chapters. The open access to his books and articles have deepened my understanding on the subject of the canonized Hindu temple. Dr. Robert Stencel for sharing his interesting study on the Ankor Wat Temple. Dr. Bettina Bauemer for sharing her research and access to her drawings and those of Alice Boner. Sanket Mestry who helped me document many of the temples of Chennai, Hubli, Kanchipuram, Tirupati, Aihole and Badami. Dennis Doordan, my mentor at the School of Architecture provided advice at various stages during the production of this book. John Stamper and Samir Younes also served as valuable discussants throughout the various versions in which these chapters were written and re-written.

Most of all, in the countless numbers of years that I have been working on this book, my husband, Markus supported me at every step of the way. He has been my strength throughout the book project and its multiple versions of production. To my daughter Lilian, who became part of this world while working on this book and her smiles gave me hope everyday when the going was tough. To my both sisters, Bhakti and the ever-silent Suchita for their help and effort at every stage and for whatever I have achieved till today.

Bharne & Krusche, Sept 2012

## A Note on Authorship

Chapter 1 on the backdrop of Hinduism, and the Epilogue have been jointly written by the authors.

Chapters 3, 4, 5, 6 and 7, dealing with the Hindu temple's architectural dimensions, are authored by Krupali Krusche. They have emerged from research and fieldwork initiated in 2006 to document, study, and analyze World Heritage sites, historic buildings and monuments in India. Many of the drawings and plates seen in this book show the original analysis and proportional studies done by the research team. Chapters 3, 4, and 5 highlight the contributions of Hindu philosophy and traditional architectural practices that were instrumental in making the canonized temple; Chapters 6 and 7 concentrate on the individual structures and elements that constitute it.

Chapters 2, 8, 9, 10 and 11 deal with the Hindu temple's urbanist dimensions, and are authored by Vinayak Bharne. Chapter 2 on the metamorphosis of temples from wayside shrines, and Chapter 8 on sacred towns have been published before in other versions in *Urban Design Quarterly* (2004), *Association of Collegiate Schools of Architecture Annual Conference Proceedings* (2008), and *Marg* (2012). Chapter 10 on the temples of Varanasi has been adapted from a paper written for the Museum of Asian Art in San Francisco (2011). Chapter 11 on the temple's evolving identities is part of a larger on-going study on contemporary Hindu sacredscapes in India.



## Introduction

Even as India today strives to change its image from its former third world profile in the hope of becoming a global economic superpower, the Indian city continues to be shaped by complex and contradictory forces. One such force is its dominant sacred dimension. Across the Indian geography, shimmering metropolitan skylines rub shoulders with temples, mosques, churches and shrines dedicated to numerous cults and faiths the country nurtures. These seemingly anachronistic, kitschy entities of all shapes and sizes and the micro-communities they sustain, are not simply evidence of their persistence and resilience, but more significantly, their paramount place in the emerging future of India at large. One such entity is the Hindu temple, the Hindu place of worship—and the subject of this book.

The Hindu temple is a complex cultural entity. It is both ancient and new. Its origins trace back to the beginnings of Indian civilization itself, but it is also a significant contemporary artifact, exerting a powerful influence on the lives of millions of Hindus in India today. Its architectural forms are based on ancient building rules, yet thousands of ad hoc shrines across India violate these rules, adapt them in new ways, and employ new materials and construction techniques. Several historic temples that catalyzed the beginnings of modest habitats are today the epicenters of prominent Indian cities that are evolving and adapting to technological advances. Discussing the subject of the Hindu temple is therefore as much about discussing continuity as change.

There is however, a significant difference between writing a book on Hindu temples, versus Hinduism. The latter is about the multifaceted philosophical and esoteric dimensions of one of the world's oldest religions. The former, on the other hand, is a focused examination of one the religion's principal components and its various physical, symbolic and social dimensions. It is about built forms and places associated with this sacred construct, and peoples' relationships with them. A discussion of the Hindu temple

is related to, but essentially different than a discussion of the vast and complex subject of Hinduism, which is beyond the scope of this effort.

The Hindu temple has long been the subject of significant architectural scholarship. Many books, by scholars such as Stella Kramrisch, Dr. Bruno Dagens, Alice Boner, Ananda Coomaraswamy, and Dr. Hendrik Kern have focused on temples as sacred objects, elaborating on their formal and stylistic canons. Other books by Michael Meister, Madhusudan Dhaky, George Mitchell, and Adam Hardy, have documented historic temples in significant detail, attempting to untangle the relationship of the temple's architectural form and its inherent meaning and derivation. They have studied and identified various aspects related to the architectural language of the temple, articulating its formal underpinnings in a compelling, practical and graphic manner.

Relatively few books have elaborated on the urbanist dimensions of Hindu temples except for the works of Diana Eck. Books such as *Temple Towns of Tamil Nadu* edited by George Mitchell, *Chidambaram: Temple and City in the Tamil Tradition* by Vivek Nanda, *The Body of God: An Emperor's Palace for Krishna in Eighth-Century Kanchipuram* by D. Dennis Hudson, *Benaras: A Spiritual and Cultural Guide* by Rana P. B. Singh, *Benaras: The Sacred Landscape of Varanasi* by Neils Gutschow and *Sacred Complex of Ujjain* by Dipak Kumar Samanta exemplify some of the worthy scholarly elaborations on the place and idea of Hindu temples as part of larger sacred landscapes.

### The Intent of this Book

Inspired by and built on existing scholarship, this book claims that Hindu temples deserve to be presented simultaneously in terms of their forms and meanings, as well as the larger landscapes in which they are situated, blurring the boundaries between their architecture and urbanism. Attempting to remedy the lack of a broad, comprehensive

study of this kind, this book therefore seeks to examine the multifarious dimensions that constitute the idea of the Hindu temple as an architectural built-form and an urban place. It reflects on the Hindu temple through many lenses, expanding its idea beyond stereotypical understandings. It argues that a Hindu temple is a far more complex and intertwined resultant of form, habitat and ritual that is not easy to simplify or unpack, and that it has to be understood as much through its canonized as populist dimensions, however contradictory they may seem.

This book then is not a historian's descriptive account on Hindu temples. We refer into historic sources and age old techniques of composition and building, but our overarching goal is not so much to authenticate temple history, as to overview the breadth and depth of the dynamic forces that continue to shape the Hindu Temple as a contemporary artifact. Through various case studies across India—from Modhera to Puri, Srirangam to Varanasi; from wayside shrines to entire temple towns—this book seeks to bring out the rich and complex workings of a sacred entity that continues to exert an indelible influence of the present and future of Indian architecture and urbanity.

The chapters that follow unravel several seemingly contradictory dimensions of Hindu temples. They discuss the intellectual roots of the canonized Hindu temple, but also reveal how these canons are violated and appropriated through grass-roots efforts found across India. It dissects the form of the canonized temple – its elements, their assemblage, spatial relationships, and symbolic significance – but simultaneously presents its parallel elusive forms as anointed trees and wayside shrines. It examines the symbolologies behind the details of temple carvings and motifs, while simultaneously tracing the temple's influence in generating larger sacred habitats – from campuses to entire towns. It looks at the mythic connections of the ritualistic and social attributes within and around the temple, while simultaneously assessing their larger socio-cultural impact on the contemporary Indian city.

While this book seeks to capture a more holistic understanding of the Hindu temple through a broad intellectual frame, we also recognize that certain subjects deserve further elaboration. There is for instance little discussion on the construction techniques and structural systems of Hindu temples, and their history and evolution. Temple

sculpture and iconography, the history of sacred planning in Hindu India, and the birth and evolution of temple rituals are also significant subjects in their own right. Though we hope to add commentaries on these and other related topics over time, we do not see this book as a replacement for the many in-depth focused studies on Hindu temples, rather a re-introduction to how multi-faceted and complex Hindu temples truly are.

We intend for this book to serve as a resource for people interested in the traditional architecture and rituals associated with temples, as well as those intrigued with the role of sacred spaces in urbanism and planning today. We also intend for it to serve as a tool for architects and architectural historians around the world, to better understand the guiding principles that are inherent to the creation of traditional Indian architecture. These principles are derived from the translations of ancient treatises and identify many primary ideologies that govern architecture in the East. Recent scholarship in this field of study began as early as the 1834 when Ram Raz created illustrations from on-site measured drawings as well as translation of various the Indian architectural treatises. More recent translations of treatises by scholars attempting to clarify these ancient texts form the basis of this book – in the hope of creating a more comprehensive assembly of descriptions that shed new light on the ancient art of Indian temple architecture. This book also uses these works to further analyze the use of proportioning, geometry, and the various tools necessary to create some of the most magnificent temples we find throughout South Asia today. Detailed illustrations derived from the translation of these texts are used along with traditional measuring systems to derive modular or parts-to-the-whole design to further explain the composition and proportioning techniques observed and utilized in Indian temples. Though known to scholars in the field for long, this research and its output in this book, will hopefully allow architects, art historians and planners to study the articulation of Indian temple architecture in a manner similar to that seen in traditional Western buildings, outlining the differences and commonalities that exist within Eastern and Western architectural traditions. Likewise the discussions of temple habitats, their morphologies and typologies, and their macro, meso and micro ritualsapes, we hope will help expand the idea of preservation and conservation beyond the confines of the sacred object.



## The Structure of the Book

The Hindu temple cannot be discussed without considering its mythological and religious underpinnings, which is covered in the first chapter overviewing Hinduism. This chapter overviews the history, basic concepts, mythologies, epics, and pantheon of Hindu gods as the essential backdrop to understanding the Hindu temple. Chapter 2, *The Plebian Temple: Anointed Trees & Wayside Shrines*, discusses the phenomenological attributes behind some of India's greatest temples—from abstract beginnings, such as anointed trees and wayside shrines, to eventually formalized monuments. This chapter establishes the duality of the canonized versus plebian dimensions of the Hindu temple that remains one of the overarching themes of this book.

The next five chapters focus on the canonized temple. Chapter 3, *Codifying the Hindu Temple: The Controversial Role of Treatises*, overviews the various intellectual and scriptural dimensions that have shaped the idea of the canonized Hindu temple—from the ancient Vedas and their role in formulating the first sources of Silpasastric scriptures to discussions on the actual relevance of such books in the temple design and execution processes. Chapter 4, *Conception of a Hindu Temple: Sthapaka, Sthapati and Shilpi*, describes how cosmograms, and treatises help generate the design of a canonized temple, through the combined effort of the priest (sthapaka), the architect (sthapati) and craftsman (shilpi). Chapter 5, *The Hindu Temple as Language and Style*, debates the contradictory viewpoints presented by various scholars over the last century, regarding the classification of the Hindu temple based on its stylistic variations and its regionally diverse formal and stylistic assemblages and dispositions. Chapter 6, *Universal Principles of a Canonized Temple*, discusses the anatomy of the canonized Hindu temple, its constituent parts, and symbolism behind its forms. And, Chapter 7, *Systems of Measure, Order and Proportion*, examines the canonized “tool-kit” for the three-dimensional building of an authentic Hindu temple. Collectively, these chapters afford the reader a broader understanding of how treatises, a community of skilled builders, and culturally embedded rituals helped the formation of a canonized Hindu temple form.

The next four chapters glean into the Hindu temple's various urbanist dimensions. Chapter 8, *Beyond the*

*Object: The Temple and its Habitats*, discusses the typologies and morphologies of various sacred habitats across India—from campuses to entire towns—and the role of the temple in birthing and shaping them. Chapter 9, *Ritual: Unifying Temple & Habitat* elaborates on the temple's diurnal and seasonal activities and the elaborate sacred events and enactments between devotees, priests and gods. Chapter 10, *Circuits, Cartographies & Contradictions: The “Faithscape” of Varanasi*, offers a focused discussion on the temples of one of India's holiest Hindu cities, with the goal of bringing out some of the most profound, yet lesser-known urbanist and ritualistic dimensions of Hindu places of worship. Finally, Chapter 11, *Evolving Identities: The Hindu Temple in Prospect*, examines the continuing role and relevance of Hindu temples within the rapidly changing milieu of globalizing India: How are temple identities changing? How are they staying the same?

Taken together, the eleven chapters combine scholarly research, personal observation, documentation, and interpretation to re-present the Hindu temple across the broad spectrum of evolution, formalization, and enactment. Their combined narrative argues that the place and potential of Hindu temples in contemporary India cannot be underestimated; indeed, their presence and inclusion in the mainstream dialogues of Indian architecture and planning is not simply useful, but essential. The aim of this book therefore is not to glorify the Hindu temple as a historic artifact, but trace the complex connections of its past and present, thereby expanding the dialogues on its future into more complex and holistic territories.





# Chapter 1

## Hinduism and the Hindu Temple

As a place of worship, the Hindu temple is situated deep within the complex evolutionary history of Hindu faith. Within this vast history, which traces back to the beginnings of human civilization, the Hindu temple has taken on many guises in response to the transformative shifts within Hinduism itself. If one were to survey Hindu history from its ancient pre-Vedic and Vedic roots down to the present day, ideas associated with the Hindu temple range from the primordial spirituality of the natural landscape to abstract insignia and symbolism, from modest shelters for deities to colossal sculptural monuments. The processes of making a Hindu place of worship are equally complex, including spontaneous creations of shrines and artifacts to highly organized acts of temple- and city-building. Societal perceptions of Hindu temples too have transformed over time: They have been the abodes of divinity in which all are equal; they have been exclusive domains available only to the privileged; they have been monumental landmarks that are as much about edifying devotion as expressing royal or political power; and they have served as cultural treasuries, holding precious resources of ancient Hindu knowledge. In short, the Hindu temple is an intrinsically complex and multifaceted entity and, accordingly, must be understood beyond the stereotypical image of a flag-laden spire or iconographic stone edifice. To comprehend the Hindu temple in all its aspects, a brief survey of the history of Hinduism as well as its key concepts is essential.

Foremost, it is critical to recognize that “Hinduism” is a relatively new term. The religious activities to which it refers, however, have been practiced for the last three thousand years in a variety of forms native to India, including those whose origins lie in various cults and sects surviving since ancient times. Hinduism, in this light, is less a faith than an embodied life practice, a “way of life.”<sup>1</sup> It is a collection of mythologies, beliefs, and cultural norms deeply rooted in innumerable forms across India. Accordingly, the Hindu people pray to an array of deities in a number of different languages at both local and regional scales. Evidently,

the very nature of the religion has been in a state of constant evolution due to its disposition to encompass variant religious practices. This multifaceted nature ultimately frustrates any simplistic attempt to systematize Hinduism, making its study a relatively complicated, even controversial pursuit.<sup>2</sup>

From religious customs known and practiced by ancient tribes to present-day monotheistic denominations, Hinduism has maintained its integrity despite various religious infuxes and their consequent transformations. Its name is derived from the original Sanskrit word for river (*sindhu*), which comes from the term *Sapta Sindhu*, or “the Land of Seven Rivers,” and is used to describe the region in and near the northern state of Punjab. Since access to India for both Islamic and Christian nations was primarily through Punjab, “sindhu” (spoken as “hindu” in Persian) became the name of the people who lived in India. Thus, from Hindu came the name Indu, or Indus. Ultimately, “India” (or Hindustan) was coined by European and Middle Eastern cultures, respectively.<sup>3</sup> The Hindus themselves always called their country Bharat, a name still used by many religious denominations.

### 1.1 Hinduism – An Historic Overview

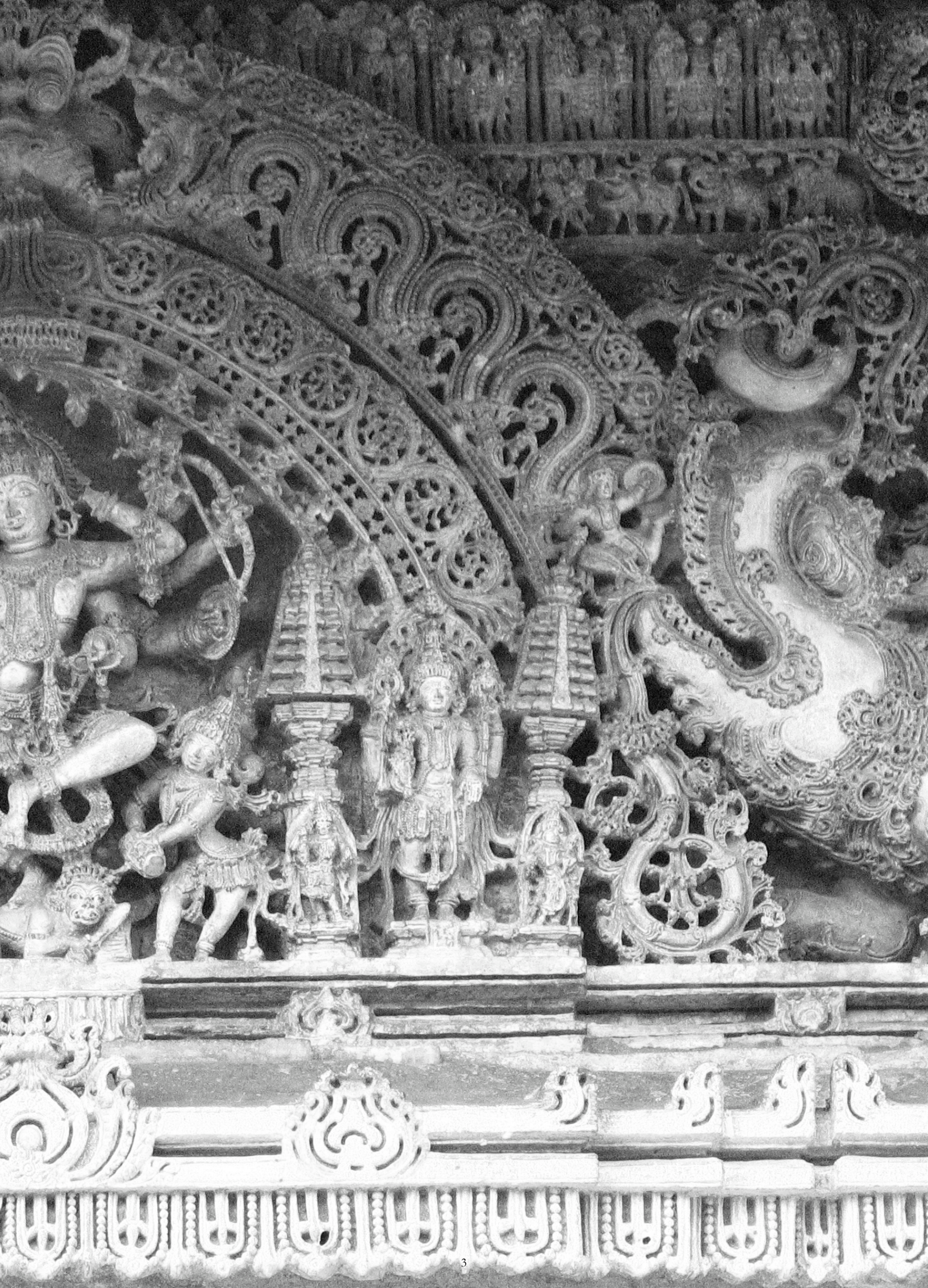
It is generally agreed that the backbone of today’s Hinduism developed primarily from Vedic traditions of the Iron Age, but a number of contemporary scholars have speculated that its roots are deeper, connected to the Indus Valley civilization during the Bronze Age.<sup>4</sup> There is evidence that deities, commonly prayed to in Vedic and Harappan times, can still be seen in Hinduism today, suggesting an organic origin of the religion.<sup>5</sup> These ancient deities are said to have had connections to the symbolic forms of Shiva and goddesses like Prakriti, Uma, and Mother Earth (Prithvi). Female figurines found during excavations suggest female deity worship in early Indus culture. Reinforcing this idea, “Indus female figurines as fertility figures and as possible representations of the Mother Goddess,” have been discovered alongside phallic symbols smeared or decorated with bone ash.<sup>6, 7</sup>

*Figure 1.1 left* Portraits of Hindu gods on sale in a temple stall at Kavlem, Goa. Source: Vinayak Bharne.











## Vedic Deities

An all powerful supreme ruler

a creator deity, presiding over procreation and protector of life

<i>Twelve Ādityas</i> (personified deities)	<i>Eleven Rudras</i>	<i>Eight Vasus</i> (deities of material elements)
1. <i>Mitra</i>	1. <i>Ātmā</i> "self"	1. <i>Prthivī</i> "Earth"
2. <i>Aryaman</i>	Five abstractions	2. <i>Agni</i> "Fire"
3. <i>Bhaga</i>	1. <i>Ānanda</i> "bliss"	3. <i>Antarikṣa</i> "Atmosphere"
4. <i>Varuṇa</i>	2. <i>Vijñāna</i> "knowledge"	4. <i>Vāyu</i> "Wind"
5. <i>Dakṣa</i>	3. <i>Manas</i> "thought"	5. <i>Dyaus</i> "Sky"
6. <i>Aṁśa</i>	4. <i>Prāṇa</i> "breath"	6. <i>Sūrya</i> "Sun"
7. <i>Tvāṣṭṛ</i>	5. <i>Vāc</i> "speech"	7. <i>Nakṣatra</i> "Stars"
8. <i>Pūṣan</i>	Five names of Śiva	8. <i>Soma</i> "Moon"
9. <i>Vivasvat</i>	6. <i>Īśāna</i> "ruler"	Additional deities
10. <i>Savitṛ</i>	7. <i>Tatpuruṣa</i> "that person"	9. <i>Prajāpati</i> "Master of creatures", the creator
11. <i>Śakra</i>	8. <i>Aghora</i> "not terrible"	10. <i>Indra</i> , chief of the vedic devas
12. <i>Viṣṇu</i>	9. <i>Vāmadeva</i> "pleasant god"	11. two <i>Aśvins</i> (or <i>Nāsatyas</i> ), twin solar deities
	10. <i>Sadyojāta</i> "born at once"	12. <i>Jala</i> "Water"

Table 1 Chief ancient vedic deities. Source: Krusche.

Figure 1.2 previous Trimurti detail at the Hoysalesvara Temple, Halebidu, Karnataka from 1121 CE. Carving above the temple entrance with Shiva in the center and sculptures of Brahma and Vishnu to the left and right, respectively. Source: Douglas Duany.

Through Hinduism's amalgamation of various gods and goddess over thousands of years, the Harappan and Indo-Aryan gods are all present in its pantheon as primary and secondary divinities (*devas*)—namely, the king of all devas, Indra, eleven Rudras, eight Vasus, and twelve Adityas.<sup>8</sup> These devas are positioned on three separate layers of earth (*prithvi*), the intermediate skies (*antarikṣa*), and the heavens (*dyaus*) above. Of these, the eight Vasus are uniquely significant for architecture. Given Vedic names, the Vasus are as follows: the earth (*Dhara*), fire (*Anala*), water (*Apā*), wind (*Anila*), the moon (*Soma*), morning light (*Prabhāsa*), and the polar star (*Dhruva*). According to Hindu mythology, these various Hindu gods and goddesses became over time

earthly manifestations of the Trimurti: Brahma, Vishnu, and Shiva (Figure 1.2). Therefore, praying to any of these devas is like praying to the eternal God itself.

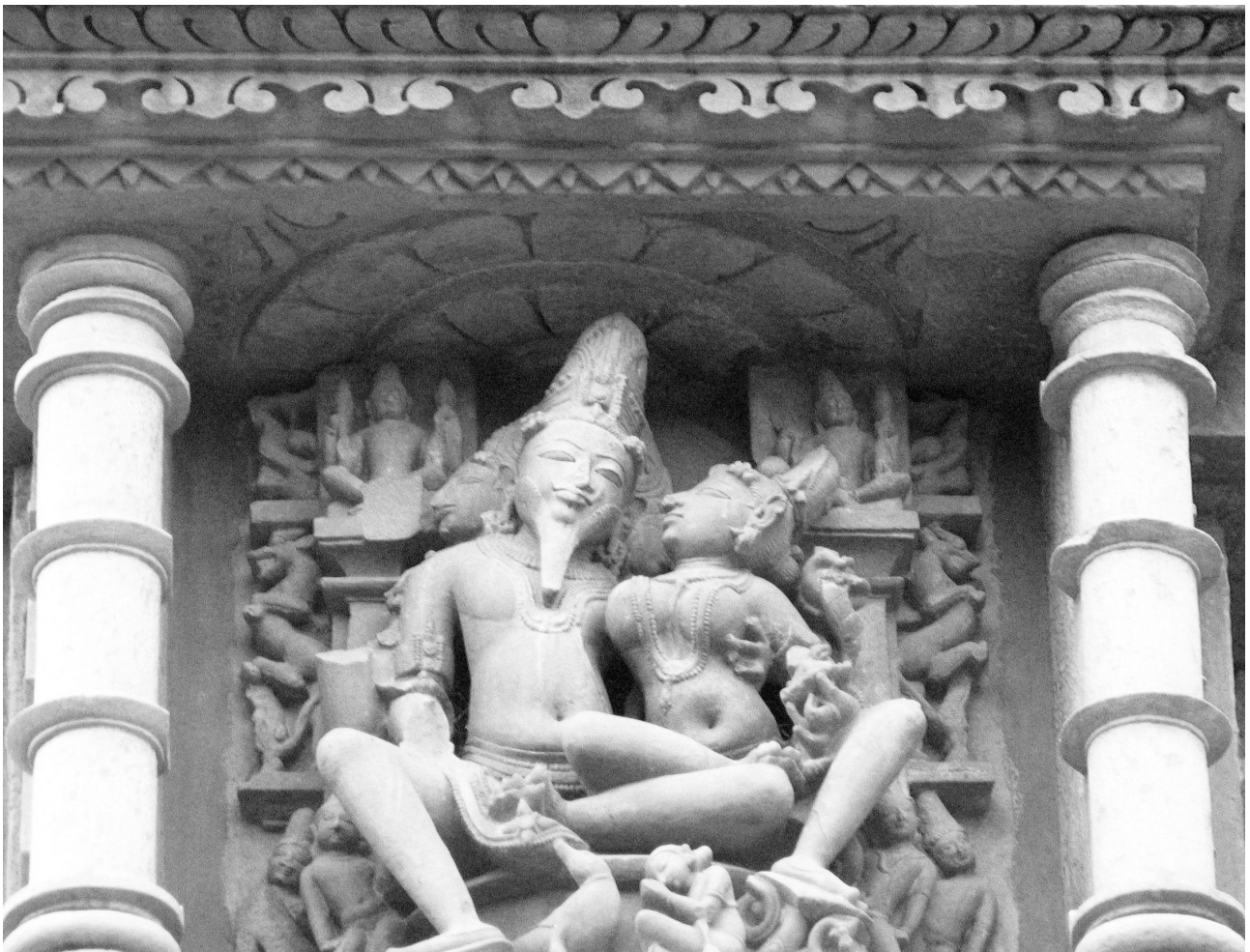
The Indo-Aryan tribes brought in Vedic rituals based on sacrifice (*yagna*) and prayer to deities (*devas*) like fire (Agni), sun (Surya), the god of rain and thunder (Indra), and death (Yama). These were then included in the local pantheon of gods already existing in the tribal groups of India. Archaeological evidence from the Mathura area between 200 BCE and 200 CE has indicated the importance of nature-spirits (*yakṣas*) and snake deities (*nagas*). These animistic cults "jostled with the cults of newer

brahmanical deities and pantheons, and held their ground,” but they were gradually overwhelmed as the focuses of worship shifted towards scripture-based Hinduism.<sup>9</sup> The first records of documented history from the Hindu system can be seen as early as 1000 BCE in sacred books like the Vedas, Upanishads,<sup>10</sup> and even the epic poems like the Mahabharata,<sup>11</sup> Ramayana, and Bhagvad Gita.<sup>12</sup> The Indo-Aryans followed strict rituals when praying to these gods. These prayers were orally recited for over a millennium and were finally written down in the first century BCE. The resulting sacred text, known as the Vedas, became the backbone of the Hindu religion.<sup>13</sup> The roots of today’s religion lie in these principles born of age-old practice. Originally written in Sanskrit, the Vedic scripts were used for various

*Figure 1.3 right* Sculpture of Brahma on the exterior walls of Keshava Temple at Belur from 1117 CE. Brahma is seen here with a scepter and *akshamala*, the string of beads used by him to keep count of the age of the universe. His wisdom is depicted with the long (white) beard and the four head facing the four cardinal directions reciting the four Vedas. Source: Duany.



*Figure 1.4 below* Brahma with his consort Sarasvati, as one of the exterior wall sculptures of the Chitragupta Temple, Khajuraho from early 11th century. Source: Duany.







*Figure 1.5* Garuda, the vehicle of Vishnu, is carrying Vishnu and his consort Lakshmi on his shoulders. At Hoysaleswara Temple, Halebidu.  
Source: Duany.



religious manifestations with deeply rooted societal norms. Even today, these books help people lead their daily lives, prescribing everything from dietary and clothing habits to festive culture. Highly ritualized, the everyday life of a Hindu is not separated from his religion but is, rather, routinely associated with the various cultic gods and their earthly abodes.

The brahmanical tradition of Hinduism was established after the third century BCE. Through a systems of castes, it reinforced the social dominance and prestige of the Brahmanas, a class comprised largely of priests and scholars, which was considered preeminent within the hierarchy. Royal patronage also played an important role in defining dominant brahmanical cults, less through direct patronage of religious establishments than the indirect patronage of Brahmanas. Rituals were explained in and followed from the holy Vedas, including those that pleased the various gods who brought prosperity and peace in the daily life of the local people. These texts were also queried for astrological and astronomical information.<sup>14</sup> A devout Hindu must consult the Hindu calendar (*muhurat*) for the astronomically favorable dates, times, and positions of the celestial bodies for any major event like marriage, opening a business, or buying a house. These prescriptions were closely followed for generations and can be seen even today, well-embedded in the cultural norms of Hindu society.

Through the strict practice of Vedic doctrine, this knowledge was transmitted orally from one generation to another over centuries. Although poetic in nature, the vocal dissemination of the vedic recitations led over time to its corruption, rendering it increasingly opaque by the time of its transcription into written form and subsequent reproductions. These scattered Vedic teachings were redefined and emerged in new forms, with six schools of classical Indian philosophy—Purva Mimamsa, Nyaya, Samkhya, Vaisheshika, Vedanta, and Yoga—that represented the uncorrupted teachings of Hinduism up to the sixth century CE. Around this time (at the end of Gupta period), Sanskrit culture went into decline, and Medieval beliefs in the Puranas—texts related to mythological stories derived from the Vedas but with the inclusion of contemporary gods and goddesses—took root. The three qualities (*gunas*) of truth (*sattva*), passion (*rajas*), and ignorance (*tamas*) were presented through mythological stories of incarnations of the Trimurti. As Vijay Nath suggests, “careful scrutiny of



Figure 1.6 Vishnu with the seven headed snake, Shesha naga, is represented holding lotus (*padma*) in both hands, representing purity and perfection. Source: Duany.

the Puranic content... shows that Brahmanism (Vedism)... underwent a complete transformation at the hands of the Purana composers, so that it came to acquire a wholly new aspect, which can best be described as Puranic Hinduism.”<sup>15</sup> Puranic Hinduism helped establish a “religious ideology amongst pre-literate and tribal groups undergoing acculturation,” overshadowing all earlier traditions.<sup>16</sup>

During this period of transformation, two coincident ideas emerged regarding Hindu worship and its physical manifestations. The first was the divinity’s omnipresence. From mountains and rivers, to animals and plants, and eventually to one’s self, the divine was present in everything. As seen in the earliest texts, such as the Vedas and Upanishads, knowledge of self and the practice of virtue are both core ideals and goals. This idea found physical manifested in relatively abstract forms of worship (such as ablution rituals) and prayers to natural elements (such as the Sun). Many such primordial patterns persist to this day, representing the animistic, esoteric, and philosophical side of early Hindu forms and places of worship.

The second idea for malized divinity in human body. Here, on earth, the gods acquire human emotions; they get angry, fall in love, require nourishment, need to bathe, and—most importantly—demand service. Thus, the idea of the temple transformed from a place of contemplation on the transcendental form of divinity to one of prescribed service, eventually becoming a sacred ritual. This transformation was celebrated in a plethora of mythic tales rich in moral content, if pregnant with contradiction. The idea of a temple as the recognized “dwelling place” of a deity in human form took root, finding ultimate expression in the transformation of this terrestrial abode into an exuberant palatial residence fit for divinity alone.

This post-sixth-century politicization of early Vedic doctrine also saw the rise of the caste system to dominance. The Vedic idea of social classification had been originally based on an individual’s capability and propensities, leading to the emergence of four castes: Brahmins were the intellectuals; Kshatriyas, the warriors; Vaishyas, the traders; and Shudras, the servants. The exploitation of this idea in the hands of the power-hungry led to the transformation of the caste system into a hierarchical social structure with the Brahmins at the top and the Shudras at the base. One’s caste was no longer based on one’s abilities but on birth alone. If one was born in a family of Shudras, he was considered an untouchable and, therefore, prohibited from participating in the others’ activities. Such prohibitions included entering franchised Hindu temples, now the elite domains of Brahmins.

The perception of the Hindu temple as an elite domain has persisted over several centuries and remains so to this day. Numerous episodes in Indian history attest to this transformation—perhaps the most moving of which is found in a devotional song (*abhang*) by Chokhamela, a fourteenth-century poet-saint. Born in a lower caste, he is not allowed to enter the temple of Vitthala (Vishnu) in the town of Pandharpur; in fact, he is not even allowed to live within the boundaries of the town. Pining to visit his beloved deity’s abode, he builds a hut on the other side of the river where he can view the temple. In the song Chokhamela remarks that he is but a slave of the God’s many elite slaves. What he most desires is a visit to his god’s abode, to partake only of the leftovers of those above him; that is enough to fulfill his great spiritual hunger.<sup>17</sup>

From the fourteenth to the seventeenth centuries, the caste system’s implacable prohibitions and its exploitation by the elite led to the Bhakti movement, a “radical social protest against an oppressive social structure... reconciling different sects and schools of thought.”<sup>18</sup> This movement represented the thoughts and pleas of many belonging to society’s lowest strata and identified god as a friend and redeemer.<sup>19</sup> Poet-saints like Namdev, Dyaneshwar, and Mirabai aroused feelings of love and devotion (*bhakti*) for certain gods like Rama and Krishna in the north of India, or Vishnu and Shiva in the south.<sup>20</sup> In strong contrast to prescriptive Sanskrit texts, these devotional songs, written in the common language of the people, like Hindi and Marathi, devotees (*bhakta*) from any caste or creed were presented with the idea that God exists in every heart.<sup>21</sup>

Monotheistic religious sects (like Shaivism, Vaishnavism, and Shaktism) developed over time and denominations (like Smartism) attempted to bring all religious sects together under one roof through a revival of the Vedic teachings. A succession of figures, such as Sai Baba, Vivekananda, and Aurobindo, advocated this revival of Vedic Hinduism. They stressed its scientific, secular, and practical aspects, while criticizing the caste system and championing universal education.

The contemporary history of Hinduism is a subject in itself, and one well beyond the scope of this chapter. Suffice it to say, that today Hinduism is one of the three largest religions in the world (after Christianity and Islam) and, as one of the oldest known organized religions, it represents thirteen percent of the world’s population.

## 1.2 The Pantheon of Hindu Gods

Hindu philosophy of religion envisions the creation of life on four levels: Brahman, Purna Brahm, Par Brahm, and Brahm. The first, Brahman or “the absolute,” is the unitary, omnipresent source of life. It is the infinite, magnificent, perpetual, and unchanging source of all matter and energy, space and time, life and that beyond. In itself, however, Brahman is formless, failing to constitute a coherent being. Purna Brahm is the second level of creation, the highest which that can be accurately described as having form and being. Purna Brahm is an eternal, immortal deity, who, by acquiring different forms, lives among his people and contains and controls infinite universes (*brahmands*). Purna Brahm is the only eternal deity in the Hindu religion and





Figure 1.7 Narasimha (Ugra form), the fourth incarnation (*avatara*) of Vishnu, as seen at the Hoysaleswara Temple, Halebidu. He is depicted as a human torso and the face of a lion, representing anthropomorphism, required to kill Hiranyakashipu, a demon (*asura*) from Puranic scriptures. Source: Duany.





Figure 1.8 Krishna, Vishnu's eighth avatar, on the left and his older brother, Balram, on the right. Krishna is a very popular god in Hinduism today and is depicted with a flute in this hand. Source: Duany

encompasses all the forms of gods and goddesses within him. Next in line is the Par Brahm, also known as Akshar Purusha, who is immutable. Last is Brahm, also known as Kshar Purusha, who is the controller of the present universe (*brahmand*). Both the Bhagavad-Gita and Upanishads present the existence of the absolute Brahman and the various tiers of creation below it; however, these higher tiers are not present in Hindu idol worship. Rather, idol worship was observed for the Trimurti and the thousands of regional and local manifestations of these and other Vedic

and Puranic gods and goddesses. As the importance of Brahm and Par Brahm diminished in the commoners' folklore and poetry recitations, so too did their representation in the Hindu temple. Still, every Hindu knows that their omniscient presence exists and that all representations are forms of this one divine omnipresent God. The absolute is thus present in every manifestation of Hindu temple design. Though imperceptible, all signs and symbols implicate its presence.