the professional trajectory of many Sicilian architects. Although Neil and Federica Scibilia also comment on this matter in their essays, only Di Fede hypothesizes an explanation. Her suggestion that this connection is manifested elsewhere in the Spanish world and traceable to Juan de Herrera’s founding of an Academy of Mathematics in Madrid in 1582 is one of the book’s rare acknowledgments that Spanish models of architectural practice had an impact on Sicily under Spanish dominion. Di Fede also includes a few well-chosen words about ornament that complement Scaduto’s essay. Rather than reduce the architecture of eighteenth-century Sicily to what Giuffrè calls “flights of fancy,” Di Fede suggests that scholars strive to uncover the mathematical underpinnings of late baroque design. This is especially prudent advice, given the quasi-scientific, quasi-theological writings of authors like Juan Caramuel de Lobokwitz, whose work was widely known among Sicilian architects.

The catalog ends with three short appendices and checklists that should make future work on Sicilian architecture more fruitful. The architectural books that survive in Palermo’s principal libraries derived largely from that city, but some come also from other important places on the island.

The exhibition’s demonstration of the pivotal role of books and printed matter in architectural practice complements Maria Giuffrè’s portrayal of a rich architectural culture across the geographical range of Sicily. Together, the survey book and exhibition catalog explore this “island without frontiers” in a much broader context.

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Adam Hardy
The Temple Architecture of India
West Sussex, England: John Wiley & Sons Ltd., 2007, 256 pp., 168 color and 7 b/w illus., 151 drawings and maps. $75 (cloth), ISBN 9780470028278

Adam Hardy’s new book, The Temple Architecture of India, upon first glance appears to be a general survey of the sub-continent’s religious architecture. However, this beautifully produced volume is not just an overview but a highly ambitious attempt to decipher the design principles underlying the development of temple architecture between ca. 600 and 1300. An architect by training, Hardy has spent over two decades devoting his practitioner’s eye to discovering meaningful ways to approach this large body of visually complex monuments. Whereas his earlier Indian Temple Architecture (1995) was a regional study of temples in Karnataka, his new book ranges broadly across the subcontinent in order to explore the nature, origins, and evolution of India’s two most significant architectural traditions: the northern Nagara and the southern Dravida.

Hardy’s central argument, which is laid out in the first of the book’s six parts, has two main components. The first emerges from Hardy’s conceptualization of Nagara and Dravida as architectural “languages,” each functioning as “a system providing a ‘vocabulary,’ a kit of parts, along with a ‘grammar’ which regulates the ways of putting the parts together” (14). This vocabulary is identifiable in the variety of aedicules, or little buildings, that have long been known among scholars of Indian art. Indeed, Hardy takes as his point of departure James Fergusson’s 1876 observation that “everywhere . . . in India, architectural decoration is made up of small models of large buildings” (10). But Hardy pushes beyond to assert that “aedicules are not just ornaments, but the basic units from which most Indian temple architecture is composed” (10). Although this idea can be traced back to Ananda Coomaraswamy, Hardy develops and systematically applies it to a wide range of monuments.

The second part of Hardy’s argument is that the development of Nagara and Dravida grew from the possibilities inherent in the architecture’s aedicularity. Hardy suggests that over time, a pattern of “centrifugal” growth moved downward and outward from the temple’s central axis as aedicules multiplied, emerged, and expanded through “projection,” “staggering,” and “splitting” (part one, chapter three). Architects creatively exploited these dynamic processes to design increasingly complex monuments. They built in a modular fashion by breaking down the aedicular units and “playing out the potential of the architectural languages” (71). Over time, architectural forms evolved through complementary aspects of “fusion,” defined as the successive incorporation of earlier groupings, and “unfolding,” a process through which “new designs are unpacked and pulled out of previous ones” (69). It was this way of designing (71), passed down through generations, that shaped the evolutionary trajectory of India’s architecture.

The rest of the book follows from these basic arguments. Whereas part two, “Precursors,” briefly traces the origins of India’s aedicules in the sculpture and forms of early Buddhist stupas and later Buddhist and Hindu rock-cut architecture, part three, “Temple Design,” maps evolutionary patterns from the eighth century onward. Here Hardy details architectural features, ranging from plans, geometry, piers, and ceilings to moldings and elevations. He suggests that temples expanded to incorporate larger mandapas (pillared halls) with deep blossoming, corbelled ceilings that built upon earlier designs (part three, chapters nine and fifteen).

One of the strengths of Hardy’s focus on and use of aedicularity is the way it reveals the modularity of temple forms; once patterns became established, they provided the basis for further experimentation and the different formulations of Nagara and Dravida architecture (parts four and five). Hardy’s discussion of Nagara emphasizes the progressive development of Nagara’s five modes: Latina, Valabhi, Shekha, and Bhumija; the fifth, Phamsana, is treated earlier in the book (part three, chapter ten). Hardy succeeds in showing how each mode built upon earlier forms; Shekha and Bhumija, for example, evolved through the multiplication of Latina applied in a “centrifugal” manner. A particularly convincing argument is presented in part four, chapter nineteen, where he points out that the central cluster of the shikhara (spire) of the Ambika temple at Jagat (ca. AD 961; fig. 19,2) incorporates the “proto-Shekha” form of the shikhara of the Vamana temple.
in the Sas-Bahu complex in Nagda (fig. 1.6), a shrine that is later in date (ca. 975), but that exhibits a module that may have been worked out earlier. This idea works less well for other monuments, such as a twelfth-century temple at Ramgarh (fig. 20.9), which combines two distinct modes (Bhumija and Latina) in a manner not fully explicable through this paradigm.

In part five, Hardy turns the discussion away from architectural modes, which he deems a less useful category for Dravida temples, and instead organizes his discussion around South India’s two major regional traditions, Tamil Nadu and Karnataka. He prefers to see the architecture of the latter as emerging naturally from the former, and thus designates it “Karnata-Dravida” rather than the more commonly employed “Vesara.” Non-specialists should be aware that this choice is not universally accepted. Ajay Sinha, in particular, has recently made a strong case for understanding Vesara as an original mode that was consciously developed by eleventh-century architects in order to depart from the Dravida tradition farther south (Imagining Architects [Wilmington: University of Delaware Press, 2000]). Hardy’s dissenting belief—that these temples do not represent a distinct mode, but rather a variation that emerged naturally from the potentialities of the Dravida language—reveals a weakness in his approach.7 “Karnata-Dravida” certainly works better as a concept if one follows Hardy’s line of thinking, but “Vesara” is unmistakably a historical term, found frequently in inscriptions, that was employed to describe a new kind of temple that was conceptualized as such by architects themselves.8

Throughout the book, Hardy interweaves his evolutionary approach to architecture with the Indian conception of the universe as emanating from a single point. He argues that just as divine manifestation takes place “through the sequential emergence . . . of one form or principle from another” (44), the temple develops through the successive unfolding of one aedicule from another. “The multiplicity of creation” (68) is expressed in almost every detail from the plan to the ceiling where “even the soffits of beams have lotuses, manifesting polycentric divinity as if through a sprinkler system” (156). Even the ubiquitous garcuksha (“cow eye”) window, an ornamental element long associated with divinity, reveals ideas of cosmic manifestation through its unfolding patterns (160–61). Hardy explicitly prefers not to follow the path of such scholars as Devanga Desai, who have attempted to link the Indian temple to specific religious systems (Religious Imagery of Khajuraho [Mumbai: Franco-Indian Research, 1996]). Instead he simply suggests that temples express divine multiplicity because “the [architectural] forms and the [religious] ideas both spring from the same way of thinking, the same view of the world” (44).

This choice is consistent with Hardy’s overall intent, which he revisits in his concluding chapters (part six). Citing an ancient Hindu maxim that “the eye is truth,” he asserts his commitment to “see the tradition clearly” by looking closely at forms (243). The advantage of Hardy’s formalist approach is that it reaffirms the importance of visual analysis in understanding Indian temple architecture. The disadvantage is that it does not always take into account the extent to which historical and cultural conditions may have significantly shaped the emergence of new temple forms. There is very little discussion of how sculptural imagery interacted dynamically with the temple building, and there is only limited attention to the ritual and political contexts of individual monuments. Given the book’s breadth, it is curious that Hardy does not engage more specifically with the role of region in the transformation of architectural form. For example, in his discussion of Bhumija temples, Hardy effectively lays out the dispersal of the mode from its beginnings in Malava and pinpoints new characteristics that emerged in different regions. But there is little assessment of why the mode may have become transregional, how it may have interacted with regional traditions, and whether its diffusion may have shaped subsequent developments in places outside its origin. Indeed Hardy’s suggestion that “the range of Bhumija types presented itself from the outset, leaving no room for evolution” (190) fixes the mode in time (mid-eleventh century) and in space (Malava) despite the fact that it continually transformed as it became rooted in new regions. Nevertheless, in reaching his main goal—opening new eyes to the complexity of Nagara and Dravida architecture—Hardy has succeeded admirably. His sweeping approach and hundreds of beautiful images will provide a dazzling introduction for non-specialists. The crisply produced drawings, illustrating a wide range of architectural forms and processes, will be highly useful to any serious student of Indian temple architecture. And Hardy’s conclusions, developed over decades of study and through intimate engagement with monuments in the field, will interest scholars for many years to come.

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**Notes**


Karl Kiern

**Die Freie Universität Berlin**
1967–1973: Campus Design, Team X Ideals and Tectonic Invention


Few building types better epitomized the tensions between a newly institutionalized modern architecture’s social, technological, and aesthetic goals than the university. Latin America, largely unaffected by World War II, seized the lead with the new campuses of the National University of Columbia, begun in 1937, the Central University of Venezuela, begun in 1944, and the National Autonomous University of Mexico, completed in 1954. These col-