

石窟寺研究

STUDIES OF THE CAVE TEMPLES

中国古迹遗址保护协会石窟专业委员会 ◎ 龙门石窟研究院 编



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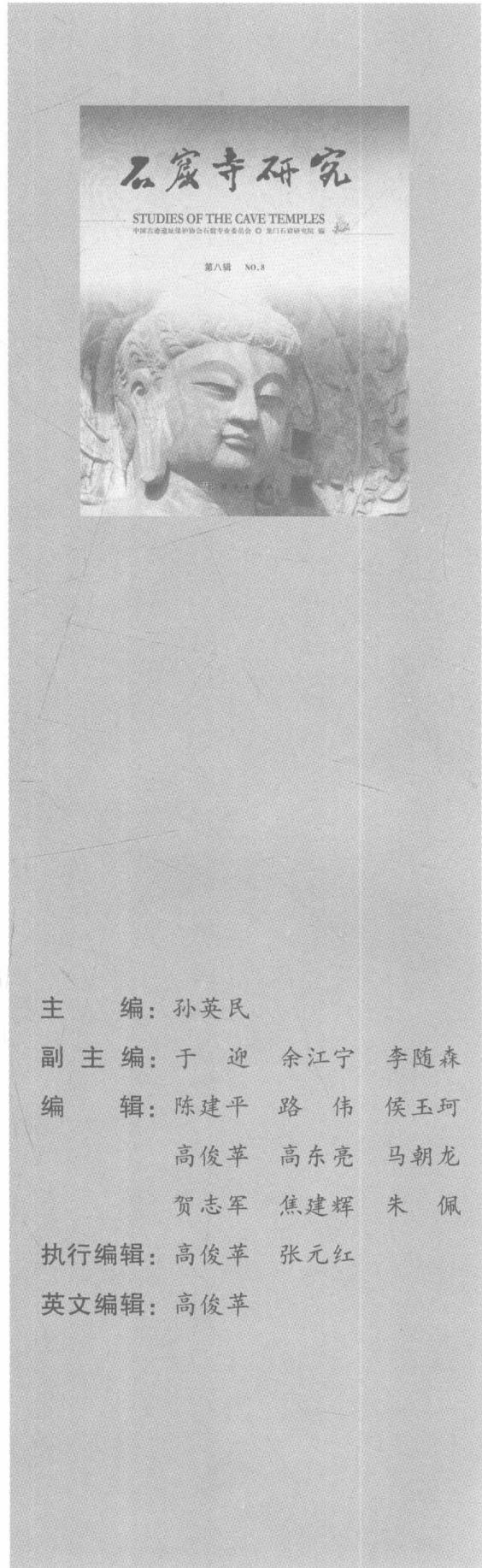
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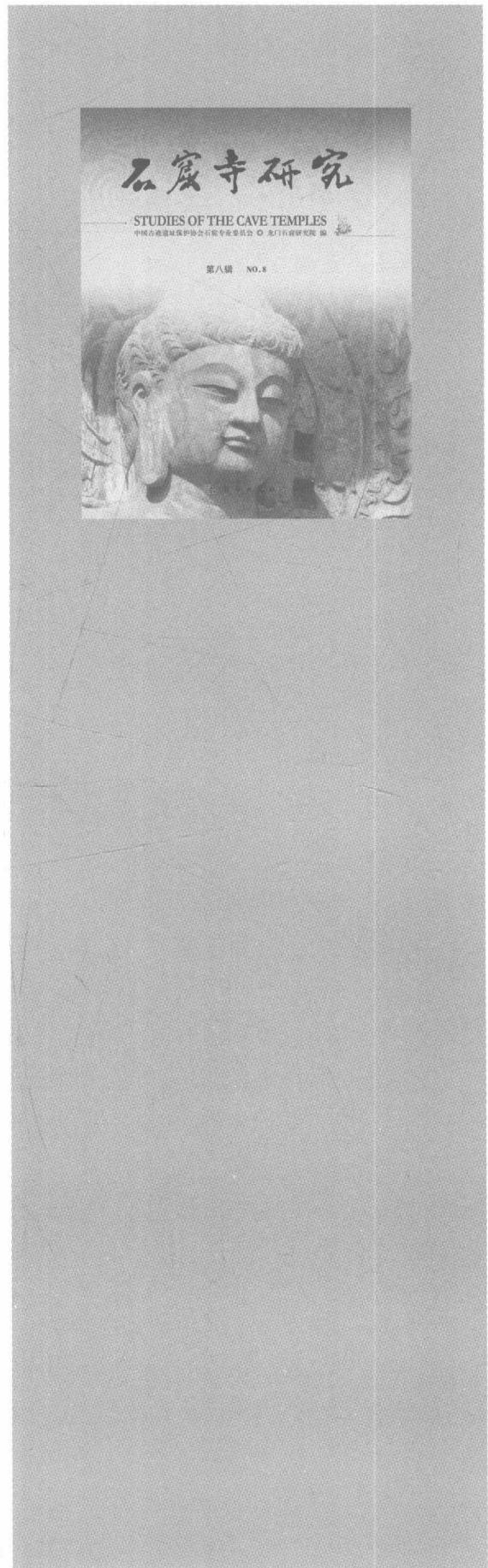
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因岩结构与邻岩构宇^{*}

——中印石窟寺外观初探

李崇峰

内容摘要：佛教石窟寺既是对一般寺院（地面寺院）的模仿，也可视作同时期砖木结构或泥笆草庐之寺的石化形式，这在印度石窟群中表现得颇为显著。其中，木构或砖石垒砌的 vihāra（僧坊）是石雕 lēṇa（僧坊窟）的原型，即 lēṇa 模拟 vihāra 雕造；而 chētiyaghara（塔庙窟），则为木构 caityagrha（塔庙）的石化形式。印度典型塔庙窟的外立面，如珀贾第 12 窟，系模仿木结构塔庙的正面雕镌和营造。早期塔庙窟皆无石质前壁，而以高大的木构门屏替代。拱形明窗与门道相连，拱顶呈尖状，拱腹雕出仿木椽头，拱两翼弯曲斜下，拱脚外张，完全模拟地面塔庙之外貌。

郦道元《水经注》记载武州山“凿石开山、因岩结构”。云冈第 19、18、7、8 等窟的崖面遗迹显示：窟外接建的木构檐饰或殿阁，山面向前，形如尖拱。石窟外貌作尖拱和木构与岩体相结合，应与印度早期石窟寺有关，如珀贾第 12 窟前壁即采用半石雕半木构之法营造。从第二期开始，云冈石窟出现仿木结构的石雕窟檐。如第 9、10 窟模拟汉式木结构殿阁，外立面形如一座“正面六间的木构建筑”。这种模拟木结构的石雕窟檐，应对武州山后续石窟的营造产生影响，开中土石窟寺外貌仿木结构石雕之先河。

龙门石窟东山擂鼓台区窟前遗址的考古发掘，表明中洞与南洞的策划与设计，可能基于高宗“邻岩构宇、别起梵居”之理念，外貌意在模仿唐代“国家大寺”规制。当时长安与洛阳大型佛寺受天竺祇洹寺影响，基本都采用多院落式布局，如长安大慈恩寺“仿给园”，“大唐西明寺以祇园精舍为规模”。道宣所记祇洹寺，正中佛院有“前佛殿”和“后佛说法大殿”之分；龙门擂鼓台区

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* 关于中国古代佛教石窟寺的窟前建筑，杨泓曾有专文刊行。在杨先生大作启发下，本文以印度珀贾 (Bhājā)、阿旃陀 (Ajanṭā) 石窟和中国克孜尔、云冈、龙门、响堂、栖霞等皇室或显贵营造的典型石窟寺为例对中印佛教石窟寺的外观试做初步探讨，不当之处，请方家指正。至于麦积山石窟与天龙山石窟的窟前建筑，前人多有论述，此不赘。参见 a. 杨泓：《中国古代佛教石窟的窟前建筑》，《汉唐美术考古和佛教艺术》，北京：科学出版社，2000 年，第 328 ~ 344 页。b. 傅熹年：《麦积山石窟中所反映出的北朝建筑》，《傅熹年建筑史论文集》，北京：文物出版社，1998 年，第 103 ~ 135 页。c. 李裕群、李钢编著：《天龙山石窟》，北京：科学出版社，2003 年，第 10 ~ 13、41 ~ 46、71 ~ 74、95 ~ 98 页。

此研究系国家社会科学基金重大项目《中印石窟寺研究》(项目号 15ZDB058) 的阶段性成果。初稿完成后，承蒙刘建军、钟晓青和李裕群先后提出很好的意见。谨此致谢。

窟前营造的木构殿阁疑作“前佛殿”之用，而岩石主室或为“后佛说法大殿”，同时建造了高水平的石砌踏道与“殿阶基”，致使佛教石窟寺的中国化登峰造极。敦煌等地唐五代以降流行的大型木结构窟前殿堂建筑，应是受到中原北方地区文化中心同类建筑影响出现的。

关键词：地面寺院 石窟寺 石化 模仿

Evolution of General Appearance of the Buddhist Cave-temples

Li Chongfeng

Abstract: The Buddhist cave-temple of India is an imitation of a free-standing Buddhist temple or monastery constructed in timber, or a petrified version of the contemporary brick-and-timber or the wattle mud-and-thatch structures of Buddhism. A free-standing *vihāra* is a prototype of a rock-cut *lēṇa*, and a rock-hewn *chētiyaghara* is a petrified form of a free-standing *caityagrha*. The style of architecture employed in the rock-cut temple is a very significant and evocative character. It took the form of reproduction of the original structure, the general shape of such a wooden building as well as some details were exactly imitated in the natural rock. Façade of the great *chētiyaghara* at Bhājā, which was hewn out in the 2nd century B.C.E., is an accurate reproduction of the gable end of a timbered *caityagrha* chiseled in the rock-face, though it has now become a great open archway, bringing the entire interior of the hall into view. The whole open space was originally filled in with an appropriate wooden construction, which completely screened the lower portion and affected to no little extent the appearance of the upper parts of the façade. The large *chaitya* arch here has a very wide span, with rafter-end decoration on the soffit and paws of the arch being of the projecting type. It is crowned at the top with a rising pointed pinnacle. The façade of wood was, in fact, ornamented in the same manner as the rock-cut oriels still existing on each side, with lattices and brackets in keeping with the remainder of the scheme. The earliest examples of the *chētiyaghara*s make clear that the process was practically half-timbered, and this timber-and-rock conception is an architectural composition of considerable merit, ingenious in its construction, with present of artistic effect.

In terms of the Cave Temple Complex at Yungang, Cave 19, the largest of the Five Caves of Tanyao, was hewn out in the early Heping period (460 ~ 465 C.E.), with outside wall being cut deeper into the cliff than that of the fronts of Caves 19A and 19B. The uppermost part of the very outside wall contains two sloping incisions which extend to the outside walls of both Caves 19A and 19B, giving an impression of the outline of a gable-end. Just beneath the apex where the two sloping incisions meet, a rectangular hole is visible and this may once have been intended to support the end of a ridge-pole. These remains

indicate a large wooden roof was once constructed above, adjoining the front of the cave. The accurate reproduction of the gable end of a wooden structure chiseled in the rock-face at Yungang is very similar to that of the Indian cave-temples, such as Lomas Rishi Cave and the great *chētiyaghara* at Bhājā, and the construction was also half-timbered. The appearance of Caves 18, 7 and 8 surely followed that of Cave 19. These early cave-temples show a definite influence from their land of origin. However, the exteriors of Caves 9, 10, and 12, which were hewn out between 484 ~ 494 C.E., are the petrified versions of a contemporary timbered Buddha-hall, which completely imitated the traditional Chinese architecture. Therefore, the cave temple complex at Yungang indicates the caves built at the very beginning technically followed that of the Indian prototype, with a gable-end appearance and half-timbered methods. Shortly after that the carving of the cave-temples were gradually Sinicized, because the gable facing front seems to be a work of foreign origin. All the cave-temples were hewn out from rocky cliffs according to their own designs and most of them were carried out totally in stone-work. The exterior of each cave-temple, which looks like a three-bayed temple hall (Cave 12) or even a six-bayed hall (Caves 9 and 10) in elevation, has preserved in stone faithful copies of a hip-roofed wooden architecture of their time. The mode and style of the cave temple complex at Yungang, which were half-timbered or hewn out on the basis of the cliff structure according to Li Daoyuan (466/472 ~ 527 C.E.), had influenced the cave-temples carved out in northern and central China thereafter.

After an excavation being carried out at the site of Leigutai area, Longmen, in 2008, the cave-temple at Leigutai was found to comprise a main cave, a timber-frame hall and a stairway. With regard to a large cave temple complex, Emperor Gaozong (649 ~ 683 C.E.) of Tang Dynasty instructed a timber frame hall to be constructed in front of the cave, closing to the rocky cliff, and the living quarters or habitable structures be built at a different locations. The great *saṃghārāma* of the Tang Empire, such as the Daciensi *saṃghārāma* and the Ximingsi *saṃghārāma* in Chang'an, had imitated the Jetavanārāma of Śrāvastī, Hinduka. The Buddha's courtyard in the Jetavanārāma of Śrāvastī, according to Daoxuan (596 ~ 667 C.E.), has a front Buddha-hall and a rear Buddha-hall in the premises. In this context, it can be inferred that the cave hewn out from the rocky cliff at Leigutai is probably used for the rear Buddha-hall, with the Buddha image set up on the central altar in the cave, while the timber-frame hall built on the stone platform in front of the cave might be used as the front Buddha-hall, and stairway connected with the platform is a typical set for a timber-frame hall of the large *saṃghārāma*. Such a new design and layout of the cave temple is possibly a result of the imitation of a free-standing Buddha-hall in the great *saṃghārāma* of the Tang Empire. This new type of the rock-cut temple, which had come to a climax of the Sinicization of the cave-temples, exercised a great influence on the large wooden structures built in front of the caves at Mogao, Dunhuang.

Key words: free-standing temple, cave-temple, petrified version, imitation

石窟寺既是对一般佛教寺院（地面寺院）的模仿（an imitation of buildings constructed

in timber)^①, 也可视作同时期砖木结构或泥笆草庐之寺的石化形式 (petrified versions of the contemporary brick-and-timber or the humbler wattle mud-and-thatch structures)^②。由于木构建筑或泥笆草庐易于朽毁, 古代天竺 (ancient Hinduka) 的原始地面寺院早已不复存在。不过, 一百多年来的考古调查与发掘, 刊布了大量石窟寺的平面及外观信息, 并揭露出土了许多地面寺院遗址。

一 天竺石窟寺：地面佛寺之石化

根据洞窟形制和使用性质的不同, 古代天竺的佛教石窟大体可以分作僧人栖止禅修生活用窟和供养礼忏佛事用窟两种。前者以僧坊窟为主, 附以方形窟和水池等 (其中晚期开凿的僧坊窟也雕造龛像, 兼有佛事用窟的性质); 后者主要指塔庙窟。作为宗教场所, 后者应占主导地位, 前者只是为后者服务的。一座塔庙窟与一座或若干座僧坊窟组成一处小型僧伽 (samgha) 或寺, 许多僧伽或寺连在一起构成气势宏伟的大型石窟寺院 (图 1)^③。

现以僧坊和塔庙为例简述天竺石窟寺与地面寺院之关系。

僧坊窟, 通称 vihāra (音译毗诃罗, 意译僧坊), 不过依据窟内的俗语 (Prākṛta) 题铭, 这种洞窟原作 lēṇa, 意为静室或僧房, 为僧人隐居之处。典型僧坊窟平面多作方形、平顶, 前壁正中辟门道。中央为方形大厅, 大厅左、右、后三壁均向外凿出小室, 小室门道与大厅相通。这种洞窟, 系高度模仿地面砖、木结构的僧坊雕造^④。

一世纪末、二世纪初, 古代天竺流行一种二层或多层的自御型砖砌佛寺, 主要由浮图 (塔院) 和僧坊 (僧院) 构成。僧坊平面方形, 小室环置中央庭院四周, 如咀叉始罗建造于二、三世纪的焦莲佛寺遗址 (图 2-a)^⑤。宽敞的庭院中央, 有时会增建一座方形柱厅, 如三、四世纪营造的龙树

^① 参见 M. N. Deshpande. “The (Ajanta) Caves: Their Historical Perspective”, *Ajanta Murals* (Pages 14 ~ 21), ed. A. Ghosh, New Delhi: Archaeological Survey of India, 1967: 17 ~ 18.

^② 参见 K. R. Srinivasan. “Rock-cut Monuments”, *Archaeological Remains, Monuments & Museums*, Part I (Pages 109 ~ 156), ed. A. Ghosh, New Delhi: Archaeological Survey of India, 1964: 110.

^③ 印度佛教石窟寺, 有些在石窟附近或周边也营造地面建筑, 即采用地面建筑与岩石开窟相结合的形式。根据印度考古调查局 2000 ~ 2001 年在阿旃陀石窟区的考古发掘, 阿旃陀第 4 ~ 17 窟所在对面山腰, 即石窟群下方瓦哥拉河 (Waghora) 南岸山地上发掘出土了砖砌的建筑遗址。遗址中央为方形塔基, 塔基左、右、后三面环置小室, 整体布局作塔庙 - 僧坊混成式 (stūpa-cum-caityagrha); 中央佛塔为僧众礼忏供养之处, 周匝小室系栖止禅修场所。根据遗址出土的陶器和一枚拜占庭狄奥多西斯 (Theodosius, 402 ~ 450 年) 金币, 发掘者推测这处地面建筑营造于四、五世纪之间。参见 *Indian Archaeology 2000-01——A Review*, New Delhi: Archaeological Survey of India, 2006: 93 ~ 97, Plate 73.

^④ 参见 a. 李崇峰:《中印佛教石窟寺比较研究: 以塔庙窟为中心》, 北京: 北京大学出版社, 2003 年, 第 5 页。b. 李崇峰:《印度石窟中国化的初步考察》,《佛教考古 从印度到中国》(559 ~ 584、585 ~ 609 页), 上海: 上海古籍出版社, 2014 年, 第 561 ~ 566、588 ~ 592 页。

^⑤ 焦莲佛寺遗址中的有些装饰要晚到四、五世纪。参见 John Marshall. *Excavations at Taxila: The Stūpas and Monastery at Jauliāñ; Memoirs of the Archaeological Survey of India*, No. 7, Calcutta: Archaeological Survey of India, 1921: 38.

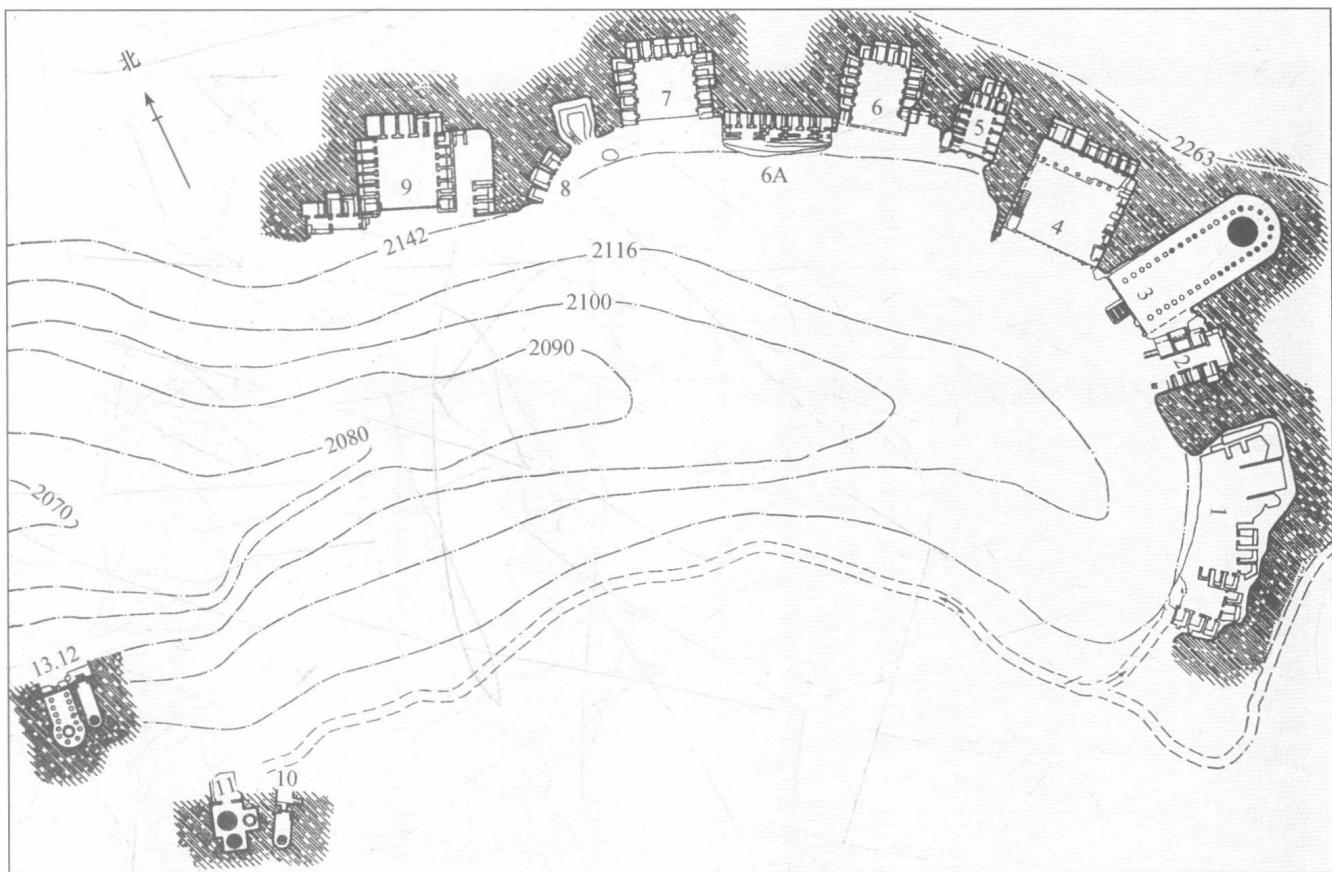


图1 印度比德尔科拉石窟连续平面图

(采自 *Ancient India*, No. 15, Pl. XLVI)

山 (*Nāgārjunikondā*) 第 24 号遗址中的僧坊；方形柱厅与周匝小室之间为回形小道，小室后墙与寺院外墙共用（图 3-a）^①；其中，面对门道的小室通常为佛殿（龛），其余为禅室。这种僧坊，为栖止与禅修僧人提供了隐逸之所，保护他们不受风吹、日晒和雨淋。至于僧坊的石化形式，纳西克第 3 窟可作代表（图 2-b），其方形大厅、周匝小室及前廊与焦莲寺址的僧坊设计非常相似；而阿旃陀第 16 窟的平面布局（图 3-b），尤其是中央方形柱厅，基本上是对龙树山第 24 号遗址中僧坊的模仿。因此，文献记载的木构或砖石垒砌的 *vihāra*（僧坊），确实是石雕 *lēṇa*（僧坊窟）的原型。换言之，天竺石窟中的 *lēṇa* 是地面佛寺中 *vihāra* 的石化形式。

塔庙窟，通称 *caityagṛha* 或 *chaitygriha*（音译支提，意译塔庙），不过依据窟内的俗语题刻，这种洞窟应作 *chētiyaghara*^②，是天竺早期佛教石窟寺的供养和礼忏中心。印度现存最早的地面木结构塔庙遗址，发现于拉贾斯坦邦首府斋普尔东北 52 公里处拜拉特（*Bairāt*）^③ 的铭文山（*Bījak-kī-*

① K. V. Soundararajan, ed. *Nagarjunakonda (1954-60); Memoirs of the Archaeological Survey of India*, No. 75, Vol. II (The Historical Period), New Delhi: Archaeological Survey of India, 2006: 66 ~ 73, 182 ~ 183.

② 窟内俗语铭文 *chētiyaghara*，由 *chētiya*（支提 / 塔）和 *ghara*（窟）两词构成。在中国，这种石窟被称作塔庙窟或中心柱窟，亦作支提窟、制底窟、塔洞、中心塔柱窟等，忠实地表达了原词含义。

③ 现在多数学者认为 *Bairāt* 是玄奘《大唐西域记》卷四所记述的波里夜咀罗国（*Pāriyātra*）。参见〔唐〕玄奘撰，季羡林等校注：《大唐西域记》，北京：中华书局，1985 年，第 376 ~ 377 页。

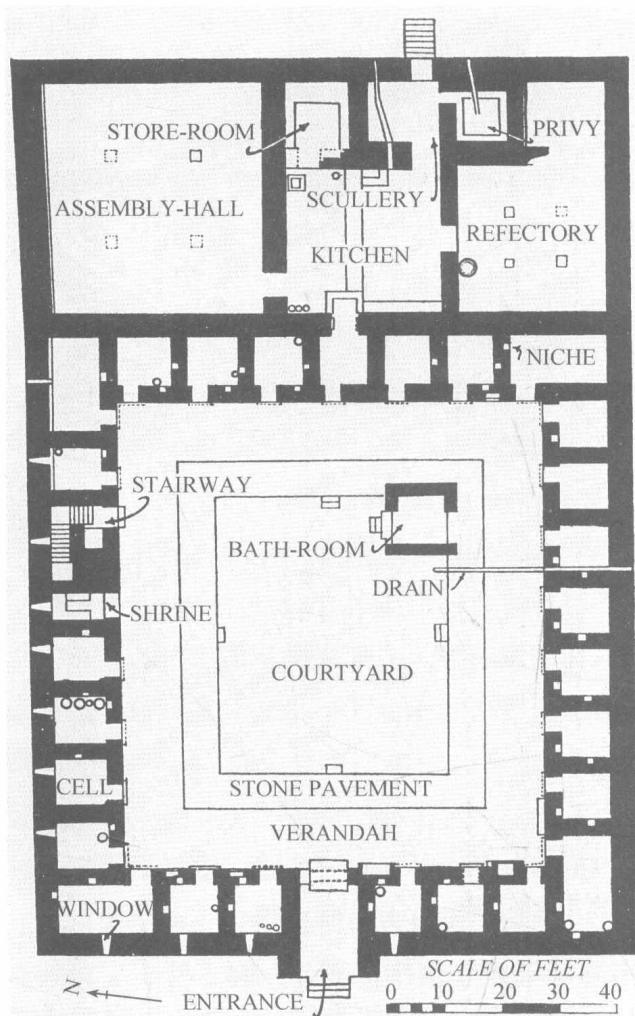


图 2-a 巴基斯坦咀叉始罗焦莲寺址中僧坊平面图

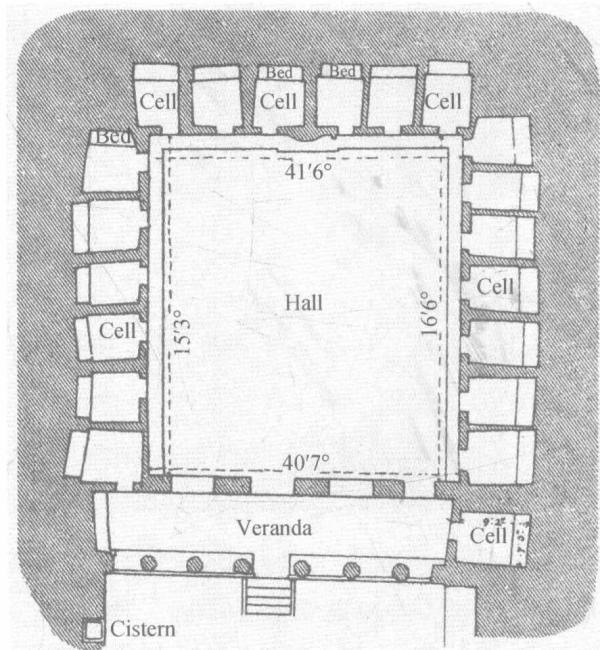
(采自 *Buddhist Monuments*, Fig. 10)

图 2-b 印度纳西克 (Nāsik) 第3窟平面图

(采自 J. Burgess 原图)

pahārī)。根据遗址的发掘地层，拜拉特的佛事活动前后延续了近四百年。遗址上层是一座砖筑长方形佛殿，下层为圆形塔庙，后者营造于阿育王时期（图 4-a）。塔庙直径 8.29 米，中央佛塔由 27 根八角木柱环绕；在环形列柱与外墙之间，是宽约 2.13 米的礼拜道。列柱^①与外壁皆于东侧辟门（图 4-b）^②。塔庙主室的屋顶不存，似为瓦作并冠以陶质尖饰；礼拜道之顶，则架于外墙与列柱顶部“圈枋”之上^③。既然僧坊窟系模仿地面寺院中的僧坊雕造，那么塔庙窟也应为地面木构或砖石结构塔庙的石化形式，这点已被郡那尔地区杜尔伽莱纳（Tūljā-lēnā）第 3 窟所证实（图 4-c）。第 3 窟平面圆形，中央雕造石塔，周绕 12 根八角素面石柱。石塔上方作穹隆顶，礼拜道顶部呈扇

① 塔庙窟内这种环状列柱，在性质上疑与露塔周围的栏楯相当。

② 经过发掘，圆形塔庙内壁由 27 根八角木柱做骨架，柱间砌砖，呈楔形结构。不过，柱间大砖似后来补砌，八角木柱原应独立环绕主体朝拜物——佛塔，柱间敞开。

③ D. R. Sahni. *Archaeological Remains and Excavations at Bairāt*, Jaipur State, 1937: 28 ~ 32, pl. vii a & b. 参见 Brown, *Indian Architecture: Buddhist and Hindu Periods*, 3rd Rev & Enl. ed. Bombay: Taraporevala Sons & Co, 1956: Pl. VI.

NĀGĀRJUNAKONDĀ

EIGHT-SPOKED STŪPA WITH MONASTIC UNIT

(SITE 24, N-XX)

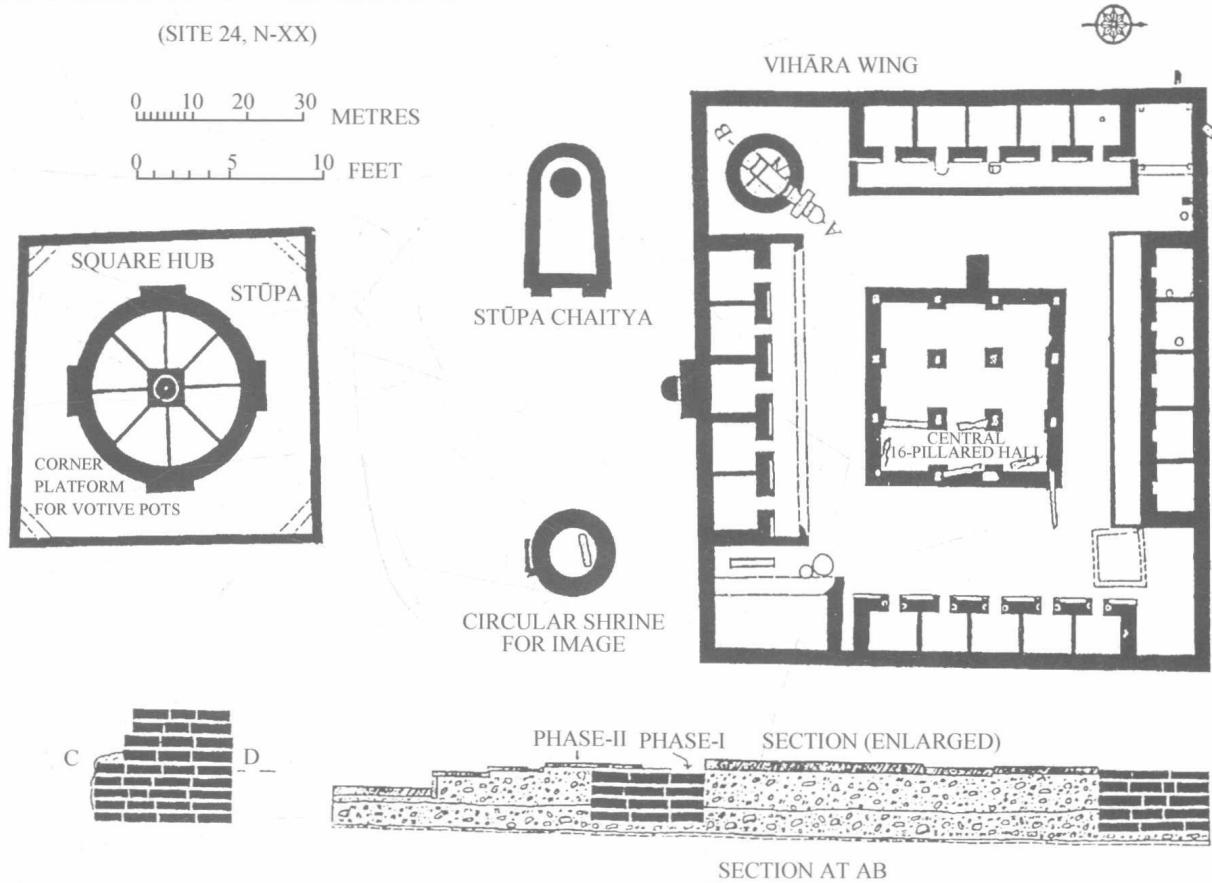


图 3-a 印度龙树山第 24 号遗址平面图

(采自 *Nagarjunakonda (954-60)*, Vol. II, Fig. 51)

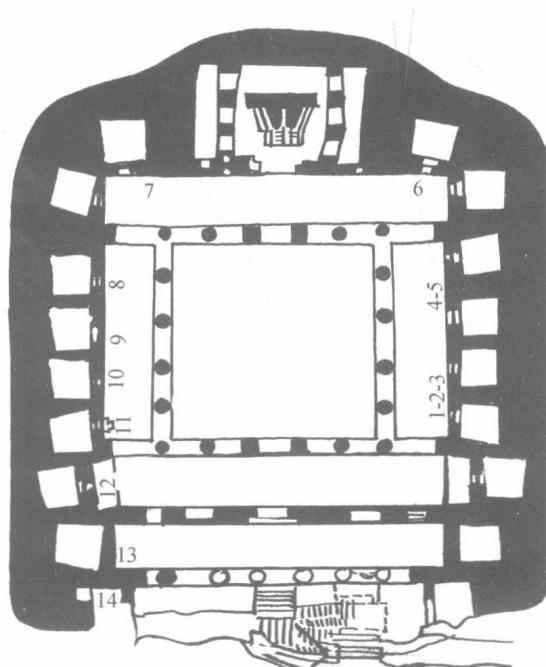


图 3-b 印度阿旃陀第 16 窟平面图

(采自 *Inscriptions of the Vākāṭakas: Corpus Inscriptionum Indicarum V, Pl. I*)



图 4-a 印度拜拉特圆形塔殿遗址

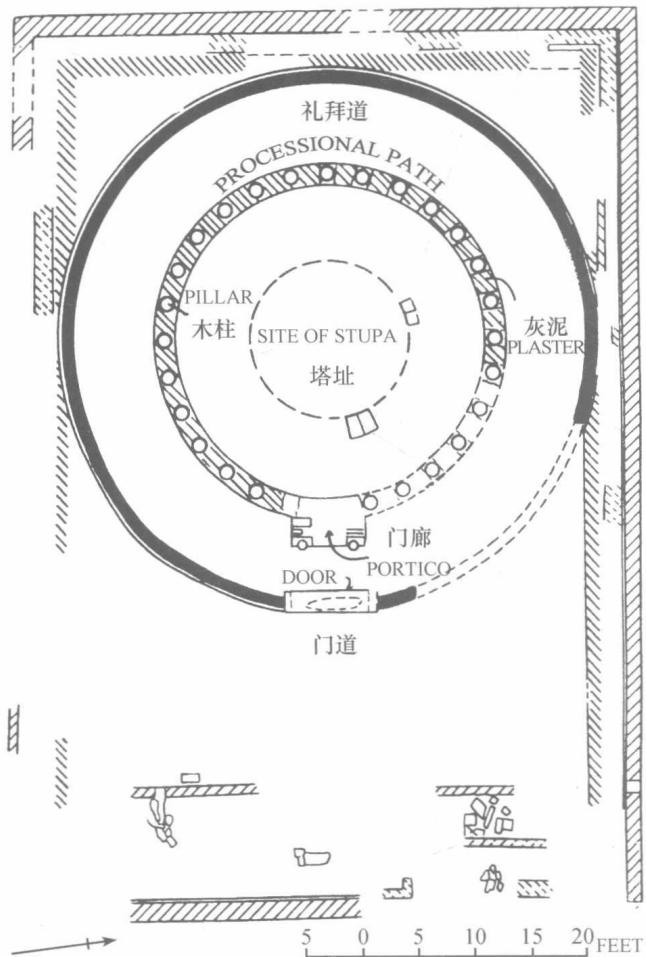


图 4-b 拜拉特圆形塔殿遗址平面图

（据 D. R. Sahni 原图绘制）

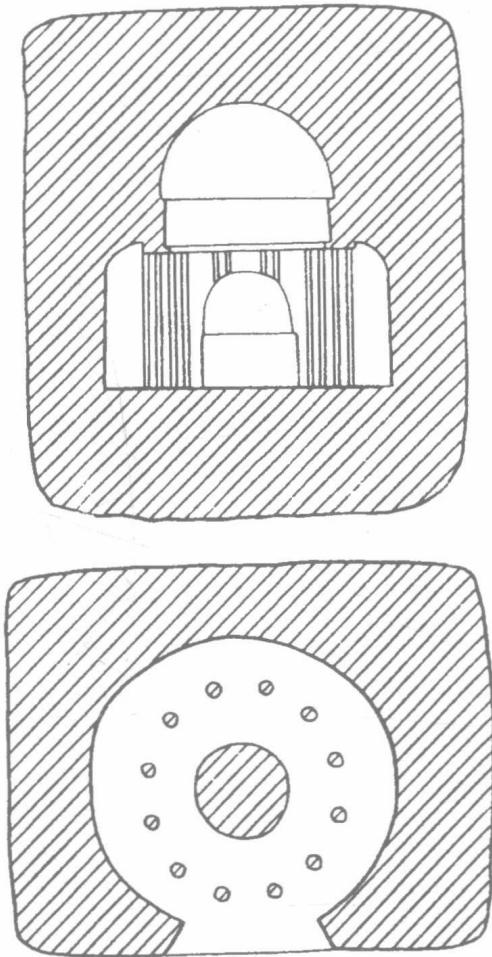


图 4-c 印度杜尔贾莱纳第 3 窟平面及横剖面图

（据 J. Burgess 原图绘制）

形，且较主室窟顶略低。此外，穹隆顶表面曾覆置纵横交错的木构梁椽，窟口亦安木质门框^①。至于外观，地面寺院中的塔庙与石窟寺中的塔庙窟亦相似^②。

基于石窟寺与地面佛寺之密切关系，尤其彼此在外貌结构、平面布局、内部设置、窟顶样式以及装饰纹样等方面相似，有学者把石窟寺称为“石窟型寺院”（monastery of the guhā-type）^③。一般寺院与石窟寺^④皆以空间的建构为基本手段，具有特定的建筑意象，可总称佛寺或 samghārāma（僧伽蓝）^⑤。

作为早期石窟寺的供养和礼忏中心，印度典型塔庙窟的平面为倒“U”字形，窟内通常由列柱分作一宽大主室、二狭窄侧廊和一半圆形后室；后室中央雕造一座独石塔，主室前部入口及其上方太阳拱系模仿木构塔庙的正面雕镌而成。依据平面、外立面、明窗、窟顶、列柱和石塔等，印度现存的塔庙窟在考古学上可以分作四期^⑥。第一期塔庙窟应雕造于公元前二世纪后半，即公元前 150~前 100 年。塔庙窟原无石质前壁，而以高大的木构门屏替代，如珀贾第 12 窟和阿旃陀第 10 窟。由于自然或人为破坏，珀贾第 12 窟入口及正面已变成巨大的敞开拱门，致使窟内设置尽收眼底（图 5）。这种情形并非设计者原意，整个敞开空间当初由木结构建筑封闭。根据地枕槽及窟口榫眼，并参考两侧浮雕的装饰图案，我们可以推见珀贾第 12 窟的外立面原貌：石雕窟口（拱门）两侧各置一木柱，两立柱与木梁咬合，木构屏围下部辟门道；横梁上方悬挂的露台由四根楹柱承托，整体构成一宽敞、典雅的木结构柱廊。拱形大明窗与窟口相连，拱顶呈尖状，拱腹雕出仿木椽头，拱两翼弯曲下垂，拱脚外张。拱内木构大多残毁，拱翼表面原嵌木质饰物。这种木材与岩石结合之构思，即半石雕与半木构之理念，是建筑学上颇具价值的技术创新，既在营造上别出心裁，又不缺乏艺术美感^⑦。整个塔庙窟的外立面造

① 参见前引书，《中印佛教石窟寺比较研究》，第 57 页。

② Brown. *Indian Architecture*, Plates III, VI, VIII, XVI, XXII.

③ 参见 Sukumar Dutt. *Buddhist Monks and Monasteries of India: Their History and their Contribution to Indian Culture*, London: George Allen & Unwin Ltd, 1962: 138~161, esp. 139.

④ 作为佛教石窟寺的发源地，印度石窟寺最早是英国人从学术上重新发现的，并从十九世纪中叶开始对其进行系统的调查与研究。故而，英国及印度学者研究印度石窟寺时所用术语值得我们重视或延续使用。迄今，较重要的英文论著关于“石窟寺”一词的表述有：rock-cut temples (James Fergusson)、cave-temples 或 caves (James Burgess)、rock-hewn shrines and monasteries (John Marshall)、rock-cut architecture (Percy Brown)、guhā-monasteries 或 cave-monasteries (Sukumar Dutt)、rock-cut monasteries 或 rock temples (Vidya Dehejia)、rock-cut monastic architecture (S. Nagaraju) 等。参见 a. James Fergusson. “On the Rock-cut Temples of India,” *Journal of the Royal Asiatic Society of Great Britain and Ireland* VIII (1846): 30~92. b. James Fergusson and James Burgess. *The Cave Temples of India*, London: W. H. Allen & Co., 1880: 163~398. c. John Marshall et al. *The Bagh Caves in the Gwalior State*, London: The Indian Society, 1927: 3. d. Percy Brown, *Indian Architecture*, 24~38, 68~74. e. Dutt. *Buddhist Monks and Monasteries*, 138~139. f. Vidya Dehejia. *Early Buddhist Rock Temples: A Chronological Study*, London: Thames & Hudson, 1972: 9~10, 30, 114. g. S. Nagaraju. *Buddhist Architecture of Western India (C. 250 B.C.-C. A.D. 300)*, Delhi: Agam Kala Publication, 1981: xiii-xiv, 3, 7, 11, 15.

⑤ 参见 Dutt. *Buddhist Monks and Monasteries*, 54, 201~203.

⑥ 参见前引书，《中印佛教石窟寺比较研究》，第 63~126 页。

⑦ 参见 Brown. *Indian Architecture*, 28, Pl. IV.