Adaptive Temple-Cars: Tradition and Transformation

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Abstract

Temple-cars are tall structures up to five stories in height. They are synonymous to moving Indian temples that are used for bringing deities (idols of Gods) out for public procession on special occasions. Temple-car structure comprises of a base on wheels, a platform that seats the deities and a *shikara* supported on columns that acts as a roof. The shikara may be cone, trapezoid or dome shaped.

These structures are typically made of wood and dismantled after use in a procession. The dismantling and reassembly process is tedious, especially for larger temple-cars. Most times, new materials and members are used. As such, the task becomes time-consuming and expensive. Also, obstacles such as electrical power cables that crisscross roads are impediments that need to be overcome in order to maintain the grandeur of the large structures. A deployable base and transformable *shikara* are therefore proposed for temple-cars to befit the changing times and obstructions on the roads. Deployable *shikaras* allow for transformation from a compact to an enlarged configuration and vice-versa. They can thus be stowed easily when designed for maximum compactness and reused for subsequent processions. Two geometries of *shikaras*, one made of skeletal scissor members integrated with fabric membrane and another made of plates only will be discussed. The symbolism in the base and *shikara* shapes, loads on the structure, structural materials used, along with the geometric, mechanical and structural solutions will be presented.

With this adaptive design, an otherwise rigid form is brought to life during the temple-car festivals. The intent is not to break away from tradition but to revive, maintain and enhance the historical value and regenerate spiritual enthusiasm among devotees.

References

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