

The intangible art of toy making process and its impact on the house forms of Kondapalli village, Andhra Pradesh, India

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A house can be defined as an interpretation of perceptions of the society, inculcated within it, in a direct or indirect method. The social cycle of creation of space depends on parameters of site, settings, cultural history, and traditions. Therefore, it's not only the house form or architectural elements of the space, which encapsulates the whole idea behind its invention but also the symbolic dimension added to it, defining its significance and identity. The study analyses the association of toy-making process of Kondapalli Village (Andhra Pradesh) with its impact on the built environment of the inhabitants over years. The following study attempts to analyze the toy-making process of Kondapalli Village and its impact on the built environment of the houses. The study is threefold, firstly it attempts to understand the traditional knowledge in the process of wooden toy making in Kondapalli; secondly, the spatial analysis of different house forms ranging from vernacular to modern house and their inter-relationship with the art form deduced to examine the sequential evolution of forms and functions; lastly, an establishment of the symbolic relationship of the toy-making process with the community. Therefore, the study helps to analyse and establish an inter-connection between the house forms, occupational practices and the community.

Keywords: Cosmos symbolism, Gender symbolism, House form, Kondapalli toys, Social organization, Wooden toy-making

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The traditional architecture of a region is a representation of their environment and culture adapting the lifestyle of people through sustainable approach. The tropical state of Andhra Pradesh has an identity in terms of vernacular architecture, depending on the size, utility and region of the built environment. The vernacular architecture of Andhra Pradesh is categorised into coastal and non-coastal settlements, where the design and configuration of the building remains the same, while the function, scale and materials used changes due to their location and context. The coastal settlements are dense and clustered in nature, so as to withstand the heavy winds, whereas the non-coastal settlements comprise of large-scale courtyard houses aligned to one another, adaptive to the hot and dry climate¹.

The coastal part of Andhra Pradesh comprises of traditional huts made of mud and thatched roofs named as Chuttillu houses. These huts are built in clustered configuration, adaptive to the heavy coastal winds, and cater to the functional needs of the people. These dwellings are mainly meant for the fishermen

and consist of storage spaces for boat, nets and fishes, in the lower portion and habitable spaces in the upper portion².

On the other hand, the non-coastal dwellings are called Manduva logili homes mostly found near the Godavari, Guntur and Vijayanagaram region. These dwellings are basically categorised into two types, the first type features a central courtyard surrounded by rooms on all sides, known as Illu mainly found in villages; and the second type of residential structure consists of a large central hall spanning across the house, with rooms on either sides, named as Chavadi illu. These two types of houses are based on the social hierarchy of the society, where typically the illu houses are used by lower caste people and the Chavadi illu houses are used by the upper caste people³.

Andhra Pradesh being a distinctive example exhibiting various forms of art and crafts is home to marvellous handicrafts portraying their uniqueness. The highly skilled artisans and craftsmen utilise the locally available raw materials along with their knowledge skills and expertise for the production of these art forms, which is further supported by their

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built environment, on the basis of function and utility. Some of the examples of various art forms found in Andhra Pradesh are decorative hand-crocheted lace work of Narasapur and Palakollu of West Godavari district, where the crochet needles and threads are used by the artisans, in small scale compact houses having storage and weaving spaces⁴. Kalamkari, the art of hand and block printing, is found in the houses of Machilipatnam and Srikalahasti, where in the artisans use wooden blocks, wax and natural dyes for the twelve stages of the art form, with dedicated spaces provided in the dwellings of the artisans itself⁵. Similarly, Kondapalli wooden toys are another example where the locally available wood is utilised by the craftsman for the production of toys, varying from small scale domestic production to large scale production. This study focuses on the toy making process of Kondapalli and its impact on the built form, with transformation in society. The aim of this study is to establish an understanding of the impact of economic activity and the art of toy making on the dynamic built environment of Kondapalli village.

Vernacular architecture of Andhra Pradesh

The vernacular houses of coastal Andhra Pradesh were compact with a single room with spaces demarcated into smaller sections for cooking and other utility spaces with no major partition walls⁶. The non-coastal vernacular houses of Andhra Pradesh had courtyards within their houses. The courtyards were enclosed within a colonnaded verandah which provided access to the rooms surrounding the courtyard⁷. The case of traditional settlement of Pippara village, located near the Godavari basin, represents the rich culture and the vernacular style of architecture. The streets in the settlements of the village were organized in the gridiron pattern. The area of the dwellings extended up to 982 sq. m. predominantly adopting joint family system. The street patterns were intervened closely to each other, to increase the porosity and reduce the rigidity, to form a closely knitted network, thus eliminating the harsh solar exposure in the hot and humid climate⁸. In the vernacular settlement of the Marikal village, the structures were designed to adapt to the composite climate. The village had grown through the bazaar street spreading in the south-west direction, following a transit development. The division of the houses were based on the proximity with the fort, with the closest proximity occupied by the highest caste people, and vice versa. The dwellings were planned as

a cluster with the houses facing inwards; at a human scale to provide the feeling of a neighbourhood. Such a spatial organisation often results in a closely knitted structure, eliminating the direct solar radiation⁹.

Similarly, the Adadakulapalle settlement, in the Anantapur district of Andhra Pradesh is an example of climate responsive vernacular architecture of the Sughalis tribal groups. The social stratification in the entire village is based on multi-caste communities, out of which Sughalis tribes were one of the major constituents. The dwellings were designed based on the hierarchical distribution of caste and community. The non-courtyard configuration is followed having compact spaces eliminating solar radiation¹⁰.

Thus, the vernacular architecture of Andhra Pradesh comprised of varying forms and styles based on the topographical traits, while considering the social and cultural aspects in the planning of settlements.

Influence of the regional occupation of the people over the built forms

The Mangalagiri town of Guntur district, is known for the handloom woven cotton Mangalagiri saris. The vernacular houses of the weavers' included the spaces for the spinning wheel and knitting machines at the front portion and habitable spaces at the rear portion, providing privacy. The spatial organization of the dwellings provided maximum visual connectivity within themselves, along with a sense of enclosure, supporting the user centric parameters of tradition and social values. The built form enhances space optimization in such a way that multipurpose spaces are encapsulated within the design¹¹.

The village of Iyengarkulam located at the outskirts of Kanchipuram district is known for its silk weaving art. These traditional house forms of the weavers, comprises of front and rear open spaces along with central courtyard, which are utilised for silk reeling and pit loom weaving activities. Thinnai (Shrine area) in the front of house is used for twisting of silk and brocade. The workspaces of these houses open to the exterior encouraging social interaction with other households¹².

The traditional Chettinad houses of South India, exhibit an interactive spatial organization in terms of multi courtyard arrangement along longitudinal axis, connecting the spaces within. The semi open and open spaces accommodate the festival activities and rituals of the Tamil calendar throughout the year. The scale, spatial configuration and construction materials utilised in these houses are the reflection of the social

status of the merchants, unique to the region¹³. Also, the traditional handloom practices of Nyishi tribe are the reflection of the indigenous society and their associated knowledge systems¹⁴.

Similarly, the houses of Kondapalli are a reflection of the social status and occupational pattern. The dwellings are utilised as living spaces of the artisans and also for the toy making activity.

Materials and Methods

The study attempts to understand the relationship between the built form and the traditional art of toy making process in Kondapalli. The study analyses three typical house-forms found at Kondapalli village. The scope of the study is limited to one example of each house-form, based on the permission and accessibility from the occupants.

- (1) First, the different stages involved in the toy making process were documented.
- (2) Second, the study attempts to establish the relationship between the Toy making process and the house-form to identify the occupational influence on the built form.
- (3) And lastly, the study analyses the symbolic relationship between the art of toy making and the artisans.

The method of study adopted in the paper is based on house form as a strategy for categorisation and analysis based on the definition by Amos Rapoport. The link between people's behavioural pattern and their lifestyle defines the spatial usage of house-form, reflecting physical embodiment of their activities. Changes in culture expressed as behaviour relates to change in the built environment, revealed through physical form. Similar strategy was adopted in the study of the house-forms of Kondapalli, where the

art of wooden toy making were weaved together through generations as an intangible element. This intangible aspect of their life has further shaped their physical spaces¹⁵.

Case of Kondapalli village

Kondapalli is a census town located in the Krishna district of Andhra Pradesh, India (Fig. 1). It is located 4 km away from the Mandal headquarters of Ibrahimpatnam (town) under the revenue division of Vijayawada. The region shares its prominent history from the establishment of Kondapalli fort in 1360 A. D. in the province of Reddy dynasty, extended to the Vijayanagara and Mughal Empire. During 18th century A. D. it existed as a hinterland to the nearby port towns. The proximity of Kondapalli Reserve Forest, near to the village led to the origin of the unique art of wooden toy making creating an identity to the artisans residing in this village. This art form is the primary occupation of the villagers and remains as their main source of income. Other than the toy making, the villagers are also involved in the agricultural practices for their livelihood. The house forms varying from vernacular to modern categories are dependent on multiple factors such as culture, society, communities and their behavioural psychologies; and their relation to the occupation of toy making.

The village is exclusively known for Kondapalli Wooden Toys (Kondapalli bommalu), the major art form and the economic industry of the villagers. Toys were chiselled from native softwoods (Tella Poniki) and coloured with vegetable colours and bright enamel colours. They are made by local wood and lay artisans. The most popular toys include Dasavatarams (ten incarnations of Lord Vishnu), elephants with

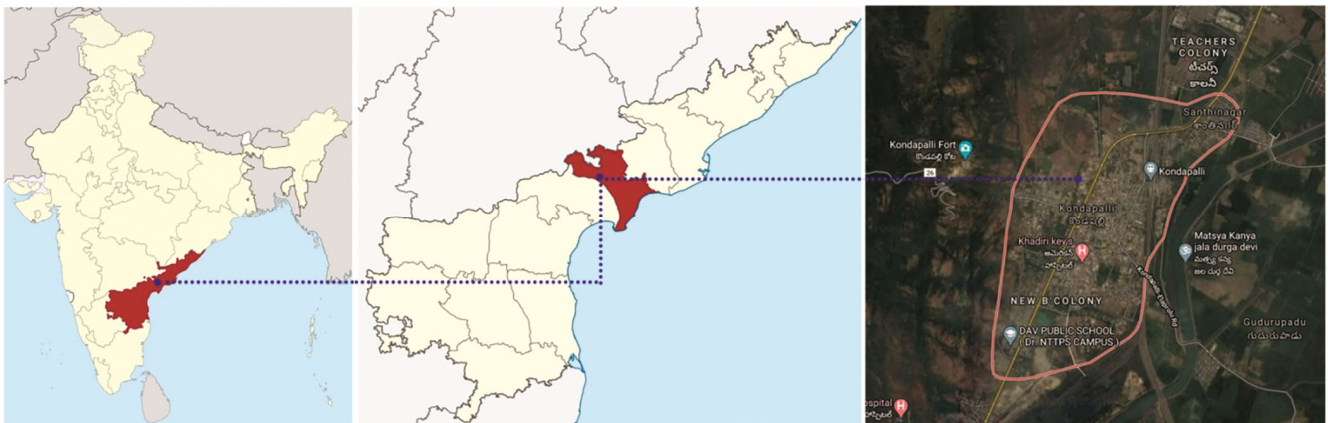


Fig. 1 — Map showing the location of Kondapalli village in Krishna district of Andhra Pradesh. Source: Google Earth

Ambari, palanquin-bearers carrying the bride and bridegroom, dancing doll, set of village craftsmen, and animal miniatures¹⁶.

Results and Discussion

Documentation of toy making process

The Kondapalli toy making process involves six stages namely collection of raw materials, shaping, air drying, assembling, coating and drying and finally painting and polishing.

Stage I – Collection of raw materials: The first stage involves the collection of raw materials, mainly the core material of the toys, *i.e.*, softwoods from the nearby hills, known locally as Tella Poniki (Jiuotia Rotteri Fromis - Scientific Name). The red processed clay powder (generally imported from Tamil Nadu), & treated wood powder are also collected. Wooden wedges which are used for carving the tiny parts of toys are collected from the existing scrap. Adhesives and soft clay are used for the assembling of the small parts of the toys that acts as the binding material for the toys. Finishing materials such as Primers, Paints, Enamels and Polishes are also gathered, which gives sparkling effects to the toys.

Stage II – Shaping: After the collection of raw materials, the second stage involves the shaping of wooden blocks from the dried & seasoned wood, according to the desired shape and size. This is done either through manual workmanship, with the help of wooden and iron tools, or through electrically driven machines, setup in the dwellings of the artists itself. The shaping of blocks sometimes involves a combination of both physical and mechanical processes, depending on the type and scale of the toys. Shaping not only involves the wooden blocks, but also the clay blocks, associated with the toys, which are shaped manually by hands and through custom made moulds.

Stage III – Air drying: The third stage comprises of air drying the shaped blocks of wood and clay. The clay blocks are sundried and air dried, in the existing open spaces in the dwellings to form compact shapes. Whereas the wooden blocks are dried and seasoned over a wire mesh kept on a low flame. The drying of the blocks allows them to shrink to the extreme extent, making it hard. The processing of the raw materials into an usable form of seasoned product is done at the initial stages of the toy making process, and the end products are further segregated on the basis of different parts required for specific toy, (Fig. 2).

Stage IV – Assembling: After the completion of initial stages, different parts of the toys are assembled together, with the help of adhesives and binding materials. This involves the craftsmanship of the artisans, since it is done completely without involvement of any machines.

Stage V – Coating and drying: After the assembling of the toy, it is coated generally with two coats of primer, and is sun dried completely before being painted. The final stage comprises of painting the toys, with multiple layers, highlighting specific portions and features of the toys, and with the final coat of enamel finishing.

Stage VI – Painting and polishing: The final finishing is done at indoors, performed by the women folks of the house, in their leisure afternoon times. In few cases, the coating and painting of toys parts are done before it is being assembled, depending on the type of toys. One of the examples is that of the dancing doll, which involves the art of paper mache. The dried parts of the paper mache dolls are initially painted and dried before assembling the parts of the toys, due to the fact that these toys are having movable portions, which will be difficult to paint after assembling, (Fig. 3).

Thus, for the later three stages, *i.e.*, secondary stages, all the steps are inter-related to each other in a non-linear form, which is flexible in nature, varying with the type of toys produced. All these stages of toy making require open and closed spaces within the house-form, along with storage spaces that are required for the raw and finished materials. These spaces are intertwined with the habitable spaces of the villagers that encapsulate the daily chores associated with their livelihood.

Relationship between toy making process and house forms

House forms and construction materials

The residential spaces of the artisans are based on their occupational activities with little emphasis on their personal sophisticated needs. As their economic status improved, the artisans began to add more spaces to their built form. However, the spatial extension at Kondapalli is solely based on their association with the toy making art form. These socio-cultural aspects and behavioural pattern of the artisans defined their house-forms.

The house-forms in the village are identified into three categories, based on the spatial organization, materials, construction style and techniques. House-



Fig. 2 — Primary stages of toy making process

form I is the Vernacular huts, constructed completely with the locally available materials and techniques; House-form II is constructed using both locally available materials and conventional construction

materials and system; and House-form III is completely constructed with conventional load bearing construction system and materials. Despite having different identities, in terms of spatial

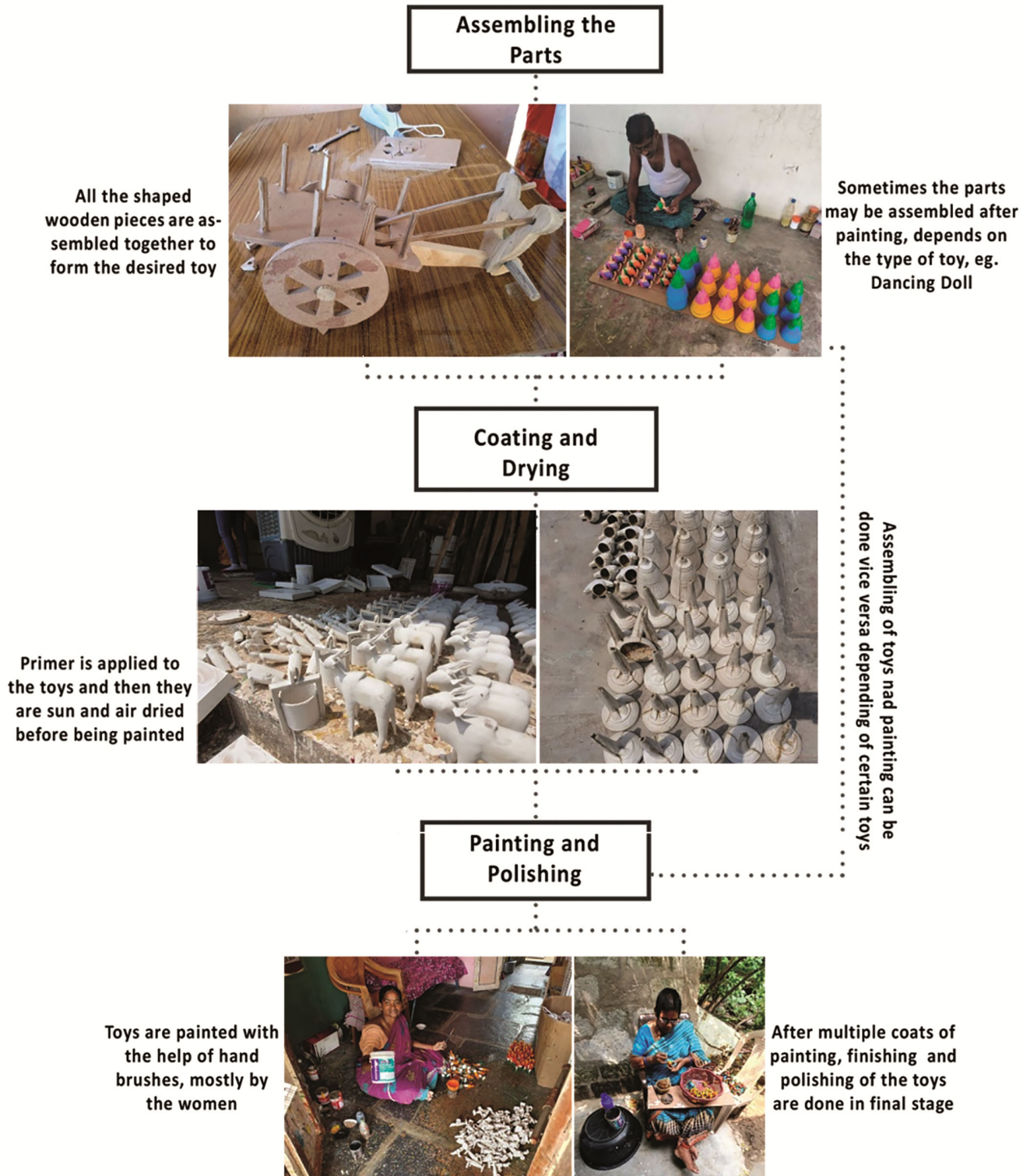


Fig. 3 — The secondary stages of toy making process

organisation, these dwellings serve the purpose of both habitable and toy making spaces for the inhabitants of the respective dwellings, (Fig. 4).

House-form I (Fig. 4a), consists of a single room with an approximate area of 7 sq. m, accommodating habitable spaces for four people along with the

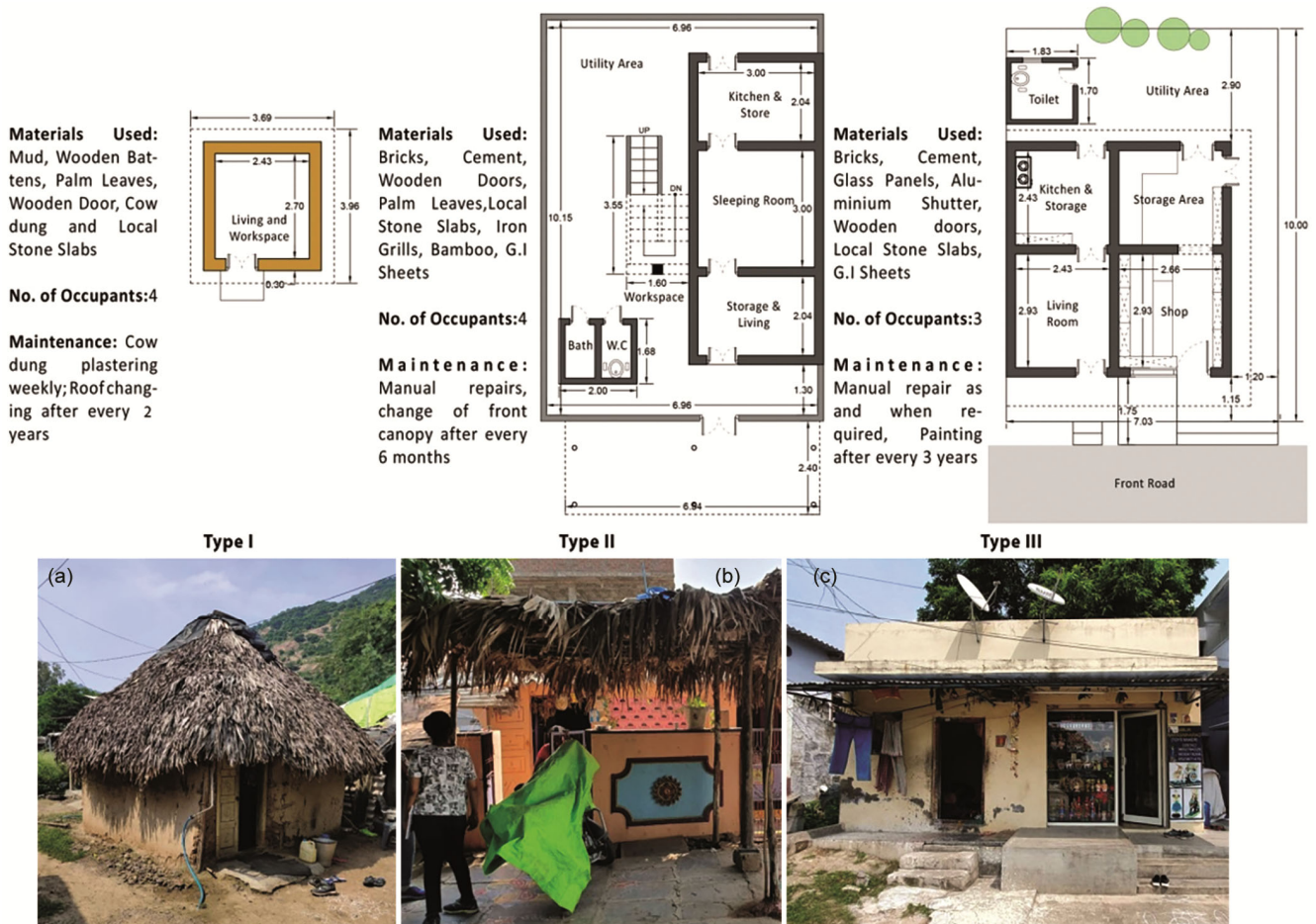


Fig. 4 — Three different house-forms in Kondapalli

cooking area. The walls are constructed using wattle and daub technique using wooden battens and mud and finished with cow dung plaster. The roof is constructed of irregular wooden truss, covered with waterproof sheet to avoid water seepage, and palm leaves. The floor finish of the hut is with locally available pieces of black stone known as cuddapah stone. This vernacular house requires an annual maintenance in terms of roof, whereas the walls are to be plastered with a mixture of cow dung and mud, on a weekly basis. The washroom facilities of these huts are constructed independently at a certain distance from the hut. The interior of the hut consists of electrical connections for amenities such as light, fan and T.V., with a small opening in the roof for ventilation purposes.

The House-form II combines the vernacular and conventional construction techniques (Fig. 4b), with a linear organisation of rooms. The living room, sleeping room and the kitchen are arranged sequentially with the doors connecting each of the

rooms, which further opens towards the utility space at the rear side of the house. The washrooms are constructed in the backyard of the house. The access to the terrace is through an external staircase. The front portion of the house consists of a verandah as an extended open space, covered with bamboo frame and dried palm leaves that are supported on bamboo posts. The walls of the house are constructed with bricks and cement mortar, plastered with cement, and covered with flat reinforced cement concrete roof. The black Cuddapah stone slabs are used for floor finishing similar to that of the vernacular hut. The doors and windows of the house are made of locally available teak wood frames and panels. There are four occupants in this type of dwellings who resides in the front portion of the house during day time, and occupies the rear room for sleeping during night time. The extended verandah in the front constructed using locally available material, acts as a shaded open space during the harsh afternoons and also protects the main structure from overheating.

The House-form III (Fig. 4c), are constructed using conventional construction materials and techniques, with rectilinear planning. The spatial organisation of spaces is divided into four parts that are connected either directly through doors or indirectly through openings from a common space. There is a clear demarcation of habitable spaces from the toy making workspaces such as display and selling spaces. The front portion of the house consists of a verandah, leading to the entrances of the living room and the shop. The living room connects to the kitchen, whereas the shop is connected to the storage area. Both the storage room and the kitchen open to a common open utility space at the rear side of the house. There is a washroom in the open utility space, separated from the other habitable spaces of the house. The walls of the house are made up of brick and cement mortar with reinforced cement concrete roof. The doors and windows openings of the house are narrow and are constructed using wooden teak frames, whereas the display area of the shop has a glazed façade with aluminium frames to provide maximum visual connectivity to the exteriors.

The three house-forms, despite being different in terms of spatial organisation, exhibit similarity in terms of materials used in them. The black Cuddapah stone used for the flooring, the idea of constructing washrooms as a separate entity away from the habitable spaces for hygiene concerns reflect their common beliefs.

Spatial organization and occupational influence

The occupants of all three house-forms at Kondapalli are involved in the toy making occupation. The stages involved in the process of toy making are carried out in the existing spaces of the houses that serve as multipurpose spaces, enhancing the adaptive use, with optimum space utilisation. The indoor and outdoor activities performed at various stages of toy making are demarcated according to the available spaces in each house-form (Fig. 5).

The house-form I (Fig. 5a) consists of central space serving as the multipurpose space for the toy making stages such as storage of raw materials in the attic, assembling of parts, coating, painting and polishing. Whereas the shaping of blocks, air drying of toy parts and the drying of paint is performed at the open space outside the hut. All the indoor tasks involved in the toy making process are performed during the day time, and all the materials and goods are shifted to the

attic during the night time, in order to utilise the existing space for cooking, eating and sleeping. Similarly, in the outdoor spaces, the drying of toys is done in accordance to the orientation and intensity of the available sunlight. After the completion of the toys, they are stored at the attic until they are transported to the market retailers for sale.

The house-form II (Fig. 5b), consists of multiple workspaces. A semi-open space adjacent to the staircase is utilised for wood shaping which consists of electrically driven shaping machine, and the rest of the open area is utilised for sun and air drying of clay moulds and wood seasoning. The raw materials are stored in the storage area below the staircase, so as to have adequate shade and easy accessibility for working. On the other hand, the indoor tasks such as painting and polishing of the toys are performed in the room located at the entrance of the house, and the finished goods are stored in the same room until they are exported to the market. Similar to the first house-form, the households of this house are also involved in the toy making occupation, with a difference in the scale of the wooden toys produced.

The type III house form, constructed completely with the conventional construction materials, reflects the modern day needs of the households in their life style and in the process of toy making (Fig. 5c). A shop is attached to the house for selling their finished products. Unlike the first two house-forms wherein multipurpose spaces are used for day-to-day activities as well as workspace, this house-form has dedicated and defined spaces for various stages of toy making. The front room of the house is designated as the shop, with glazed display towards the roadside to enhance the sale of the toys. The room adjacent to the shop is used for the storage of goods and raw materials that provides easy accessibility between the shop and the utility area in the rear side.

The utility area at the rear is utilized for shaping of wood, sun and air drying of the moulds and wood pieces. The final stage of painting and polishing of the toys, are performed by the women folks in the living room of the house during daytime after completing their household chores. The living room at the front is utilised as multipurpose space which is used for painting of toys during daytime and sleeping during nights. The occupants of these houses are involved in the production of wooden toys on a large scale for exporting to the markets and retailers; and selling of toys to the visitors and tourists on their own through

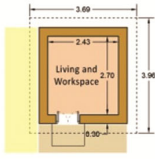
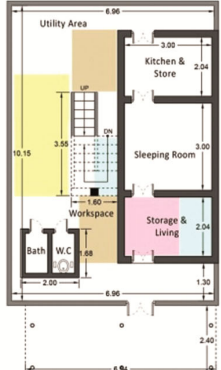
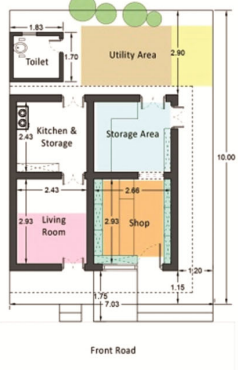





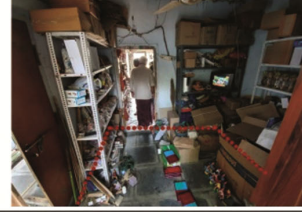







	House Typology I	House Typology II	House Typology III
<p>Legends</p> <ul style="list-style-type: none"> Multipurpose Area Wood Shaping Workspace Raw Material Storage Air Drying Area Painting and Polishing Area Selling Area <p>Note: All dimensions are in Meters.</p>	<p>(a)</p> 	<p>(b)</p> 	<p>(c)</p>  <p>Front Road</p>
Wood Shaping Workspace			
Raw Material Storage	 <p>During night goods are shifted to a Tarpaulin sheet supported by Bamboo trusses in the attic area.</p>		
Air Drying Area			
Painting and Polishing Area			
Selling Area	----	----	

Fig. 5 — Spaces involved in the process of toy making in different house-forms

the dedicated shop located in their house thus increasing the source of income.

All three identified house-forms at Kondapalli have adequate spaces required for wooden toy making through efficient usage of available spaces which vary in size. Also, they differ in terms of scale of toy production and sale of toys facilitated by induced shop area in the third house-form. The effective time management between the household chores and work of the occupants enabled them to improve their economy. The flexibility of the occupants to shift from one task to other permitted them to use the space for the production of wooden toys during daytime except early mornings and late evenings. At nights, all the materials and goods were shifted either to the storage space or to the attic, which enabled them to use the same space for dinner and sleeping.

Symbolic relationship of the art form and the settlement

The house-form is defined through multiple factors interacting together, on the basis of traditions, communal conditions and the social context. Schefold in a study mentions house to be expression of conceptions and a symbolic meaning associated with the people and context. The study analyses different theories of symbolic meaning associated with built form and the people, given by different researchers. Cosmos symbolism by Mircea Eliade (1995)¹⁷; Social Organisation by (Rassers)¹⁸; Gender-symbolism by

Pierre Bourdieu; and House Societies by Levi-Strauss (1982)¹⁹ are major symbolic meanings analysed by Schefold to study the different factors interacting together to impact the built form²⁰.

Similarly, the following study attempts to analyse and study the different symbolic meanings associated with the house-forms of the Kondapalli toy making artisans. The art form of toy making in the region is linked with the people, their built form and entire settlement forming an overall integrative symbolic relationship.

Cosmos symbolism: Kondapalli wooden toys show a distinct character through the depiction of the lifestyle of the villagers, in terms of day-to-day activities and occupations like farming, vegetable seller, carpenter, fisherwomen, etc. These representations are summarised within the wooden toys itself, as the artisans create what they see and follow on daily basis. This relationship between the habitual tasks and the idea behind following it forms a cosmos symbolic relationship with the wooden toys summarizing representation of their own lifestyle. Irrespective of the production of wooden toys at different houses, by different people, and at different times, they underlie the same universal character among themselves. Hence we can say that the distinct toys of the specific region are having a basic concept and ideology behind their creation, which can be found particularly in this region (Fig. 6).



Fig. 6 — Wooden toys depicting the daily life of the villagers resembling cosmic symbolism

Social organisation: The social stratification of the village is based on the socio-economic strata of the people. The demarcation between the household activity and work spaces, the use of vernacular materials and conventional materials reflects the scale of toy production and the economic status of the households. The privacy of the occupants ascended from house-form I to house-form III which is directly linked to their socio-economic status. However, the flexibility in usage of spaces has reduced respectively. As the affordability increased, segregation of residential and commercial spaces (work spaces related to toy making) became more evident. The social strata of the village is clearly evident in the character of the street ranging from kutcha houses made of locally available vernacular materials to pucca single storey RCC structure.

Gender symbolism: Gender categorisation at Kondapalli village is obvious in the activities performed by the household with regards to the production of wooden toys and organization of spaces in their residences. Female folks are restricted to the activities such as painting and polishing of toys that are performed in the indoors with less physical strain and are protected from the harsh outdoor climate. Whereas, the male folks are engaged in activities that are performed in the open and semi-open outdoor areas. Also, male folks are involved in activities such as woodcutting and shaping that require physical strength. Thus, the various stages of toy-making processes involve both the genders, within the available indoor and outdoor spaces of their houses (Fig. 7).

House societies: The common interest in certain activities, occupation or social significance, defines a

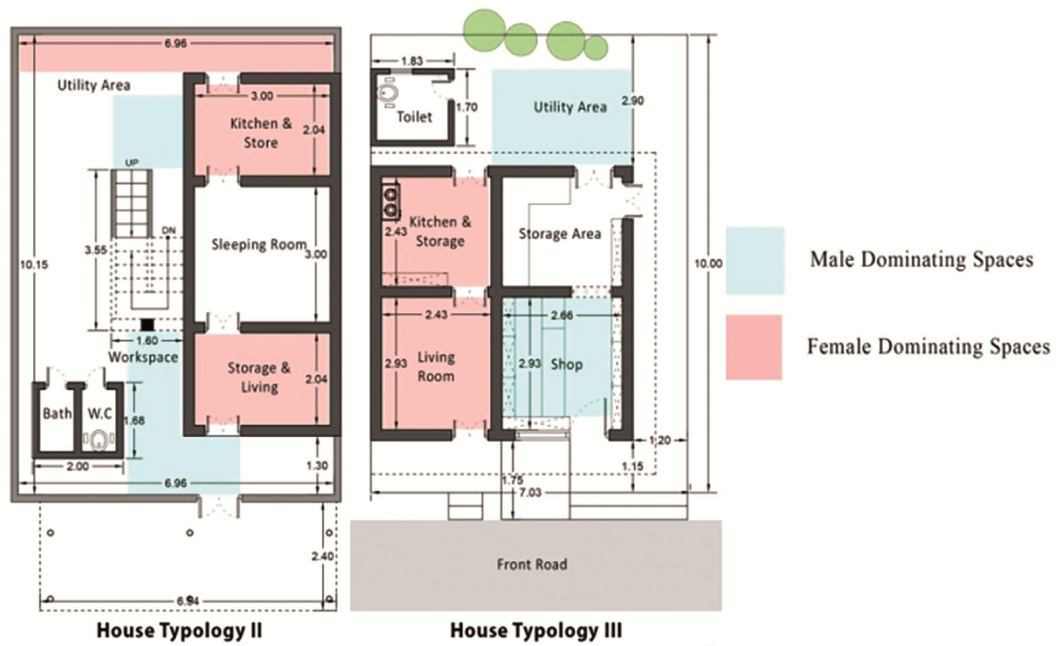


Fig. 7 — Division of habitable and working spaces in terms of gender



Fig. 8 — Three categories of social hierarchy - (a) only toy making; (b) toy making with small scale commercial outlet; (c) large scale production and commercial outlet

certain society exhibiting similar properties and functions. This is identified in the house-forms at Kondapalli involved in the art of wooden toy-making. They adapt themselves within the available spaces in their houses to accommodate the needs of toy making processes such as storage of raw materials, production, display and sale of the toys. The village comprises of three types of house societies, where the first type is involved only in the production of toys and export it to the urban market. In the second type along with the production of toys, they partially sell them to local tourists and visitors through the smaller shops attached to their houses and the remaining being exported to the major market. The third house-form functions as a small-scale industry consisting of multifunctional spaces for the production, sale and export of the toys on a larger scale (Fig. 8).

Conclusions

The village settlements today lack the vernacular character, due to the globalization which diminishes the regional character and integrity of the settlement. The economic and cultural globalisation impacts the habitable spaces and the indigenous art form of the practitioners²¹. The construction of houses has shifted from the use of locally available vernacular materials to the conventional materials due to its increased durability and reduced maintenance. This shift results in the increased construction cost ignoring their environmental impacts and occupants comfort. Though the houses at Kondapalli vary in size, they are compact and cater to all the requirements of their day to day activities and the spatial requirements of toy making process. The spatial planning of the houses at Kondapalli take into considerations the stages involved in toy making along with its storage and display of toys for sale. The artisans get their inspiration from the activities

performed by the villagers and their day to day experiences, which are depicted through their art form of wooden toys.

The character of the house-forms at Kondapalli has a direct impact on the economic status of the artisans, and the identity of the village is dependent on the growth of toy making activities rather than the agricultural activities. The toy-making process and the economic growth of Kondapalli are complementary to each other and it requires not only the capital stock but also the traditional workmanship to uphold the identity of this village.

Rural economies remain largely associated with local/traditional industries and primary agricultural production. Nevertheless, rural development is often deemed beyond the control of labour ministries. And yet, without their active involvement, the sustainable transition of both farming and rural non-farm society cannot be fully effective^{22,23}. Rural communities have more to do than just agriculture. A wide range of economic activities, including manufacturing and selling of agricultural products, art and craft products, tourism, mines and utilities, distinguish rural areas. It is imperative that promotional schemes such as Technology Up-gradation Fund (TUF), Babasaheb Ambedkar Hastshilp Vikas Yojna (AHVY), of Government of India are to be extended to the artisans of Kondapalli village to improve the rural economy. Though several online platforms provide support to such arts and craft production, it hardly improves the capital gains and economy of these small-scale artisans.

With the increasing shortage of the trees at present, the Forest Department set up a 'Wood Bank' with the goal of developing the softwood trees that could be lawfully dispersed to the toymakers of Kondapalli. Forest Department in India has been investing around 2.85 lacs (0.285 Million) each year to promote

plantation of softwood trees in order to support the wood bank scheme and provide raw materials to the artisans for the wooden toy production²⁴. Government schemes and programs are to be encouraged to promote these artisans and the concept of smart village can be introduced to enhance the digital marketing to support the artisans.

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Conflict of Interest

Authors declare no conflict of interest.

Authors' Contributions

LRA conceptualized the study and methodology for analysis, and reviewed the manuscript. SS compiled primary data, documentation, survey, analysis and preparation of the manuscript.

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