

Understanding Santal Identity through their Architecture

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Abstract: We discuss in this paper how the architecture of the houses of Santals helps to understand the distinct identity of the community. Santals are one of the largest tribal communities of India and expanse over the eastern Indian states such as Assam, Bihar, Jharkhand, Odisha, and West Bengal. They mainly live in villages in the hill-forest regions of these states and subsist on practicing agriculture. They build their houses employing traditional methods and with locally available resources instead of industrial built hard materials. The community is renowned for the craftsmanship, plastering, decorating, and precision in their built. They learn the craftsmanship through direct experiences and without any textual training. This totality of the architecture of their houses is distinct from that of other communities and thus become the markers of their distinct identity: such a technique, with which Santals build their houses, in recent years has come to be known as ‘vernaculararchitecture’ in the language of architectural research.

Keywords: Santals, Identity, House, Vernacular Architecture

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I. INTRODUCTION

In recent years, several scholars of social science and humanities disciplines have taken an intense interest in questions concerning ‘identity’. The word ‘identity’ has different meanings and definitions in different disciplines and school of thoughts. Scholars, thus, also have presented different definitions over time. The word ‘identity’ first academically appeared the book ‘Identity and Life cycle’ by psychologist Erik Erikson (1959). In his previous book *Childhood and Society*(1950), he developed a periodically analysis table of psychological development of child and youth, and described the process of identity formation. According to him, identity of is human being developed throughout the span of whole life. According to the Oxford English Dictionary, identity means ‘the characteristics determining who or what a person or thing is’. In philosophical terms, the word ‘identity’ refers to the nature, appearance, and the type of physicalism of existent. It also refers to the nature with distinction (Moin 2002). Identity can also be defined as a set of material, biological, cultural, and psychological symbol, which expresses a kind of uniformity, solidarity, and persistence, and integrity of a particular society or a group (Moharami, 2004). In 1988, Hogg and Abrams gave a definition – *Identity is “people’s concepts of who they are, of what sort of people they are, and how they are related to others”*.

However, ‘identity’ is not only signified through human being but also through materiality. In *The Materiality of Stone*, Chris Tilley (2004) argues that prehistoric stone and tool express the symbolic view of particular community or civilization and reflect social identities in various ways. In this sense, particularly of houses, exhibit the identity of the community, which carry the concept and characteristics attributed to a community (Buchli 2013; Torabi and Brahman, 2013). According to Rapoport (1969), forms of house and location of the house represent the social status of the dwellers. People personalize their home and workplace with decoration, so that their home and workplace reflect who they are. (Despres 1991; Csikszentmihalyi & Rochberg-Halton 1981; Nasar & Kang 1999; Rapoport, 1982).

Under the above background, with particular reference to the one of the largest tribal community of India Santals, this paper attempts to show how the architecture of their houses helps to understanding the distinct identity of the community. This research paper has been written by analysing the available literature written on the houses of Santals; thus, the data sources are mainly secondary. Similar researches done elsewhere in the world and on other communities have also been taken into consideration for comparative understanding on particular issues. Besides, both the authors have first-hand experience on Santal architectures. The first author is himself a Santal and was born and brought up in a uni-ethnic Santal village of Paschim

Medinipur district, West Bengal, India. The second author was also born and brought up in a village of Burdwan district of West Bengal where there are a number of Santal villages in its surroundings.

Among the scholars who have made notable contributions on the understanding of Santal architecture, Bodding (1940), Roy *et al.* (1998), Mitra (2002), Bharat (2015), and Hembram *et al.* (2016) may be specifically mentioned. However, these scholars mostly concentrated on the processual aspects of Santal architecture i.e. the types of Santal houses and how they are built. In this context, the present paper deals with how the elements of Santal architecture become the identity markers of the community. But before we enter into the actual discussion on house, it is of utmost important to understand why houses are important.

II. (PRE) HISTORY OF ARCHITECTURE

When and where human being came out from caves and began to build houses is a difficult question to answer. However, it is obvious that since then, houses of diverse architecture have been built in different parts of the world. Nowadays, the term 'architecture' is defined in new ways by integrating it into the anthropological dimension, including primate-logical and palaeo-anthropological considerations which implies all-what humans and their biological relatives built and build (Egenter 1992).

It is evident that, about 16 million years ago tropical rain forests vanished and were replaced by open savannahs. During that time, the early ancestors of *Homo* built the ground nest on loose vegetation. In the Ice Age, early men established dwellings by leaves, stone, unbaked or sun-dried mud. In the Neolithic period, people lived in permanent sedentary villages in mud or brick-made houses. In the Bronze Age, cities and states were formed in such a way that they reflected the social hierarchy that was existing during that time (ibid). Then came the Iron Age construction—house building materials were mud brick, and adobe brick variety in size, sometime big rectangular slabs were used for covering the floor. Building making materials used were same with the former but new technologies were developed i.e. using the roller, plaster of paris and glass and also the use of staircase. Due to the development of science and mathematics, buildings gradually were becoming geometric shaped. Pyramid architect of the Egyptian civilization (3100-2040 BC), White Temple of the Sumerian civilization (3200-323 BC), Parthenon temple of the Greek civilization (600-27 BC), Colosseum (the elliptical Flavian Amphitheatre in the Centre of Rome) of the Roman civilization (Architecture of mediaeval period of Rome named Gothic Architecture) are the examples of Iron Age construction (Hamlin 1909).

During the late medieval age Gothic architecture flourished in Europe. Gothic architecture is most familiar with its characteristics include the pointed arch and the ribbed vault. Many of the great cathedrals, abbeys and churches of Europe exhibit this architectural design. Consecutively, from the mid-12th century, with the hands of European Renaissances, Gothic architecture was replaced by Baroque architecture with characteristics of new explorations of form, light and shadow, and dramatic intensity. In the 18th century, through colonialism European architecture spread over to the rest part of the world (Kniffen 1965). The Industrial Revolution of Europe in the late eighteenth century has brought the mass production of iron and steel. The world thus experienced brewery, factory, winery, and mill structured buildings as well as high-rise buildings and monuments.

In the 21st century, the style of world architecture took a great turn towards new contemporary mode with the century. Presently, the earlier building making materials, i.e., adobe, masonry (stone, clay, or concrete blocks, timber) have been replaced by hard, machine-made building materials (Deysarkar 2015). Beside the world's great architecture, the style and forms of folk or rural architecture also have changed over a long period. In the language of architectural research, this kind of architecture is called *vernacular architecture*. The traditional *Reethaus* houses of Germany, *Shotgun* houses of United States, *Batak* houses of Sumatra, and the traditional *Brgule* of Serbia are the notable examples of this architecture. It is a style of architecture which takes into account all the needs and requirements of the residents, nature, construction materials. The style thus reflects the traditions and culture of the dwellers (Dey Sarkar 2015). As for Rapoport (1969) the folk houses of a community are the indicator of traditional cultural patterns of the community.

III. INDIAN ARCHITECTURE

On the basis of historical development, Indian architecture can be classified into some major groups such as the architecture of Indus Valley Civilisation, the architecture of Post-Mahajanapads period, the Indo-Islamic architecture, the Colonial architecture, and modern/post-modern architecture. The architecture of Indus Valley Civilisation is characterised by multi-storied houses, drainage system, ventilation system, and bitumen water-proof great bath. Beside its settlement pattern is marked by socio-political differentiation similar to that of a modern city (Ching *et al.* 2011). The architecture of Post-mahajanapads Period is distinguished through Stupa architecture and rock-cut architecture. Islamic architecture consisted of the Persian and Central Asian architectural elements consisting bulbous dome, tomb, thick wall containing passages, and staircase. Most of the wall floor was made by *shurki*, limestone, and marbles. The Colonial architecture is characterised by a mixture of Indo-Islamic, Indo-Mughal and Indo-Gothic Architecture (Stamp 1981).

However, similar to other countries or continents, India has also retained its vernacular architectural style and its planning. But has evolved organically over time through the skillful craftsmanship of local people. *Thakarshouse* of Maharashtra, the *Do-chala-bari*, *Chachala-bari*, *Kotha-bariof* West Bengal are the examples of such architectural designs. In the book *Peasant Life in India*, Biswas and Behura (1961) classified the houses of rural India into three major types such as rectangular ground plan with horizontal roof, rectangular ground plan with inclined roof, and circular ground-plan with conical roof.

Further, houses are constructed under various influences such as the environment of the region in which the house exists, socio-economic condition of the owner, and his/her aesthetic sense. In general, *kachcha*, *pakka*, and *semi-pakka* houses are observed in different parts of India. However, one of such varieties is the existence of mud houses across the world, despite the fact that building a mud house is an energy intensive technique and is least durable compared to other forms of houses (S.S.G. 2013). Mud houses are built using indigenous knowledge, i.e., such knowledge has been transferred across generations through experiences and craftsmanship and not by reading written texts. Both the houses and the knowledge of their construction contain within themselves the tangible and intangible cultural heritage. Now, before we discuss the architecture of mud houses built by Santals, it is worthy here to give a brief note on the community.

IV. WHO ARE THE SANTALS?

The word 'Santal' was first found in an article entitled 'Some extraordinary Facts, Customs, and Practices of the Hindus' by Lord Teignmouth (Sir John Shore) published in the *Asiatic Researches* of 1795. In the article, the community was designated as a rude unlettered tribe residing in Ramgur (Ramgarh), the least civilised part of the Company's possessions (Sen 1984). Later, the Santals appeared with the names Sonthal and Saontar. They were identified as 'a large Dravidian tribe, classed on linguistic grounds as Kolarian'. They used to be 'found in Western Bengal, Northern Orissa, Bhagalpur and the Santal Parganas' according to colonial descriptions (Risley 1915; Russell 1916).

According to the records of mythology of the tribe by colonial anthropologists, the tradition of Santals is traced back to their origin from a wild goose which laid two eggs. From those eggs sprang *Pilchu Haram* and *PilchuBurhi*, the parents of the tribe who begat seven sub-tribes. The earliest abode of Santals was *Hihiri(Ahiri) Pipiri*. From there, they moved westward to *Khoj-Khaman* where they were destroyed by fire-rain from the wrath of their creator *Thakur Jiu*. A single pair, which was saved in a cleft of the mountain *Hara*, went to *Sasangbera* where they started to worship their main deity *Marang Buru*. Moving from *Sasangbera*, after passing through and spending some time in *Ahiri, KendiandChai*, they finally reached to *Champa*. In *Champa*, they sojourned many generations and all the present-day institutions existing among Santals were formed. Hindus drove them out of *Champa*, and they established themselves in *Saontand* ruled there for about two hundred years. Again, pressed by Hindus, they wandered on and received a shelter under a Raja called *Hambhir Singh* to the eastern part of the *Manbhum* district near *Panchet*. Although their Rajas adopted the Hindu religion there, the people did not change their religion. So, they left their chiefs and wandered on to the Santal Parganas where they are settled 'now' (Risley 1915).

For Sen, no authentic account can be given about the early movements of Santals. However, there is sufficient prove that they are not the original inhabitants of *Jungle Mahals* i.e. South-west part of West Bengal (Sen 1984). Apart from their mythical golden-age living in the regions such as *HihiriPipiri, Chai*, and *Champa*, they migrated continually owing to population growth or pressure from others (MacDougall 1985). A tradition was noticed by Colonel Dalton of an old fort in *Chai*, a pargana of *Hazaribagh* district (existed during 1901, as recorded by Risley) which was occupied by one *Jaura*, a Santal Raja (King). The Raja destroyed himself and his family on hearing the approach of a Muslim army under a general of Muhammad Tughlak named *Sayyd Ibrahim Ali alias Malik Baya*, who died in 1353. In this way, *HihiriPipiri* is traced back somewhere in *Hazaribagh* (Risley 1915). *Troisi* refers *Damin-i-Koh*, a region of Santal Pargana District of Bihar where he conducted his study, as the 'heart of the Santal homeland' (Troisi 1978). Sen opines that since the second half of the eighteenth century, the first record of Santal settlements was found in the *Chotanagpur* plateau and in the adjoining districts (Sen 1984), and most of areas are least develop hill-forest region. After the independence, this area comes under the jurisdiction of *Jharkhand, Bihar, and West Bengal* states.

V. SETTLEMENT PATTERN AND ARCHITECTURAL DESIGNS OF SANTAL HOUSES

For centuries before British rule, Santals practiced settled plough agriculture and had segmental-egalitarian type of society (MacDougall 1985). Anyone in the society who rendered land cultivable was entitled to cultivate it. His descendants had permanent right to such land. They grew lowland wet-rice which was their main source of food, although upland dry rice was also an important agricultural product for them. Land was plentiful, and when a village became too large for them they cleared the nearby forests and established a new village. The forests were an economic resource. They hunted and gathered food from there and used forest products for building materials, implements, and fuel. They fulfilled their economic needs themselves or

employed village servants to meet those needs. For all practical purposes, their villages were self-sufficient (MacDougall 1985).

Generally, the community life of Santals is centred in their villages. A Santal village consists a long street; houses are built on the two sides of this road (O'Malley 1910; Culshaw 2004). The Santal dwellings are never found in isolation because of their intention to live collectively (Bodding 1940). The Santals believe in man-nature-spirit, man is part of the nature. A natural phenomenon occurred for certain cause can indicate the future (Culshaw 2004). During the time of site selection for a new settlement, *majhi* (head man of a Santal village) with three or four *mengo* to inspect a site in a forest. After entering the forest, if they see footmarks of a tiger or birds quietly sitting on their eggs, it is good fortune for them. To their belief, if they settle down in that place, in future their village will thrive and prosper (Bodding 1940; Culshaw 2004). On the next day, they test their omens if they settle down into the place. *Majhi* of this village goes to the selected place, and where he intends to build his house and makes five *sindur* marks. Close to *sindur* marks, he makes a small heap of sun dried rice; and keeps a water contain. Later, he ties three fowls (one speckled and two white colours) in a row, just far enough away to be unable to reach the rice. Next day morning, *majhi* and his deputy go to the same place to investigate. If the feather of big fowl has fallen, they say 'some adult person will die within few days'. And if small feathers have fallen they say 'children will die here in future'. And it is excellent to them that if no feathers have fallen. On the next day, people make a shelter for their *majhi*. Thereafter, *majhi* distributes homestead lands and fields to the villagers. Then they build their own house. They help each other to build their house.

We have already mentioned that Santals are agriculture practicing community. A communal 'we feeling' sentiment works among them because, they are economically depended with each other. It is also the reason why they live collectively in a village. The presence of central axial village road from east to west divides the whole village in north-south alignment, thus having a direct relationship with each unit signifying the community feeling of the people. Further, the distribution of houses in north and south helps to the channelisation of wind blow in every season of the year.

The Santal house is square and long in shape that suggests the members of family three or more. The windows of Santal house are mostly absent and small in size, because they believe that evil sprite might look through them causing misery to the inmates. Socio-economic, cultural, and religious factors help to shape the 'typicality' of the Santal house (Mitra 2002).

The Santals built their house by fixing nine poles in ground into three rows, three poles in the middle to support the inclined roofs. The roof is made with rafter of *salwood*, over which bamboo saplings, climbers, etc., are tied, the whole being thatched with jungle-grass. The Santal community mainly produces the low land crops such as rice. They also use the straw for thatching material. Use of this thatching material signifies the subsistence activity and materiality. Then the walls are made by fixing thin poles of any suitable, finishing the whole off with a plaster of clay and cow-dung, and glossing it over with white earth (O'Malley 1910; Bodding 1940; Mitra 2002). Above described house type has two roofed, they called *itbanglaorakor* gable house (a rectangular shaped house), another form of house is called *chatomorak*, it is an umbrella shaped house, having four-sided roof. However, interior decoration of Santal houses is same in each types of house. Inside every dwelling-house, there is a small partition with a low wall and a small compartment in one corner; this is the so-called *bhitar* the place where the ancestors and the *orakbonga* (Lord of house) are worshipped. Only certain persons outside of the family are permitted to enter this place (Bodding 1940).

Generally, in front of the house the eaves of the roof are elongated so as to form a kind verandah. Well-to-do people, as a practice, have in front of their houses a partially walled verandah, which runs around the two sides or sometime runs along four sides of the house. The floor of the house is always more or less raised above the ground, the space being filled up with earth firmly beaten down.

A Santal house is usually composed with main dwelling hut, kitchen, and husking room. Main dwelling hut used for sleeping, storing grains and for ancestral worship. A Santal house-hold never completed without storage granary, piggery, cow shed, pigeon sty etc. For the agro-economic subsistence they build storage gunnery. They build cow shed to keep traction animal. They rear pig to consume. A typical Santal house must have a courtyard and backyard for exclusively used by household inhabitants. Courtyard either closed or semi-closed, is used for domestic purposes such as cooking, taking rest, gossiping, and brewing liquor (*handi*) (Mitra 2002).

VI. FROM ARCHITECTURE TO IDENTITY

Oliver (2003) shows that dwelling of any culture is interdependently linked to the economic needs, cultural values, and social relationships of its inhabitants. Thus, it plays significant role to the formation of identity. Every architectural element of Santal houses expresses their culture, such as structure, shape, design and using raw material. Generally, Santal people build their houses by locally available raw materials and non-textual craftsmanship. They learn the craftsmanship to construct their houses through direct experiences and without any textual training. During the time of house building, they keep in mind some aspects such as architectural form, process of construction, construction knowledge, cosmic knowledge, cultural belief and

memories of dwelling. For these instances, they maintain uniformity in their built. These uniform characters differentiate their houses from those of non-Santal communities and thus become the markers of their distinct identity.

The technique and art of architecture are the most important signs and characteristics of each culture. Santals build their houses to retain dignity, prestige, honour, and social recognition. Composition of a Santal household symbolises 'agro-economic' character. Commonly, every household of Santal community has storage granary, kitchen, husking room, and livestock's shed and thus show a self-sufficient household. Space used in the community is classified by age and sex. For example, they build a bamboo clump backside of a house is used to act as incidental space. The place is mostly preferred by village youth boys and not youth girls (Mitra 2002). The economically sound Santal families enjoy closed private courtyard while less sound families enjoy semi-closed common courtyard which exhibit the concept of the public and private property, and the family privacy (Mitra 2002). Through the closed and semi-closed courtyard defines the privacy of the family, it creates the boundary between insider and outsider (Fahey 1995). Santal architecture can be distinguished from other architecture by their wall paintings, *alpana* and floor plastering. Wall painting is a distinctive feature of Santal built environments; floor plastering and *alpana* both are considered as wall painting. Santal women regularly plaster their wall for to keep it smooth; it is an additional protection against the rains. The roofs of their houses are considerably overhanged that protect most part of walls and smooth plastered wall help to wash up rain water. Santal women are solely involved in for these practices. Typically, they use white, red, black, blue, and ochre colours.

Santal and other neighbour communities both build their houses by locally available red soil (locally known as *murumhasa*). But, only the Santals practice wall painting and regular floor plastering. Santal women plaster the floors of their houses regularly for two causes. First, the dwellings are made of mud, the floors thus require frequent reworking to maintain the surface. Second, floor plastering is also important in ritual terms because they believe that 'the god lives in the house'. That is why they plaster the house particularly with cow dung then purifies the premises and makes it suitable for habitation (Bharat 2015). *Alpana* refers to floor drawing usually made with rice flour and different design. They usually draw *alpana* for ritual purposes and floor decoration (ibid).

Above mentioned architectural practices can also be seen among the Santals' neighbouring communities. Yet, there are significant differences among them. For instance, unlike Santals, the Munda dwellings are clustered and complex in terms of layout. The role and the meanings of practices in connection with Munda habitation within the domestic realm vary. Munda mud houses are also plastered since the time they are built, however, unlike that of Santals, plastered floors serve to establish connection between the front door of individual houses and village road. If a Santal house is compared with that of a house of a person belonging to the Lodha community (Lodhas live in neighborhood of Santals), we see that Lodha house is square in shape where Santal house is rectangular in shape. Santal houses are larger than Lodha houses. Mud walls of Santal house is smoother and well decorated. Spatial organization and hygienic concept of Santals is different from that of the Lodha community, which is reflected through their houses. Santal women plaster the floors of their house and rooms by cow dung and soil on regular basis, but Lodhas do not. These characters of habitation of Santals distinguish them from other communities residing in rural India and build mud houses.

VII. CONCLUSION

Vernacular architectural studies have material and functional distinction in the study of community (Vellinga 2011). It can help to explore mutual relation between people and things, at the same time it also reconnoitres material culture studies, consumption, and environmentality which are unchangeable characters of a community (Price 1989). This paper has attempted to navigate the role architecture plays to understand the identity of Santals. We have argued that Santals are similar to any other kinds of community existing in the broader society. It has its own culture, customs, traditions, and way of living. At the same time, they are also the third largest designated tribal community in India. A very recent and influential literature suggests that these tribal communities are nothing but 'product' of colonial policies. Contrary to the opinion, this paper argues that Santals have maintained a distinct identity which is different from others. Among many other things, this distinctiveness is reflected in the way they build and decorate their houses which altogether display their skillful craftsmanship. Among the other tribal communities, Santals are known as skillful house builders. A Santal house is not used only for residential purposes rather is built keeping in mind its multi-purpose uses. The social, environmental, religious, cosmological, and sense of communality are engaged with their architecture, at the same time exhibit the aesthetic and functional appreciation of their traditions.

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REFERENCES CITED

- [1] Abrams, D., & Hogg, M. A. (1988)“Comments on the motivational status of self-esteem in social identity and intergroup discrimination”. *European Journal of Social Psychology*, 18, 317-334.
- [2] Barua, B.M. (1937)Barhut, the University of Michigan: Indological Book corporation.
- [3] Biswas, S. k., &Behura, N. K. (1961) “Types of Cottages”. In N. K. Bose (Ed.), *Peasant Life in India: A study in Indian unity and diversity* (pp. 7-15). Kolkata, West Bengal, India: Anthropological Survey of India.
- [4] Bodding, P. O. (1940) *How the Santals Live. Part III. Studies in Santal Medicine and Connected Folklore*, Vol. X, No. 3, Calcutta: Memoirs of the Royal Society of Bengal.
- [5] Buchli, V. (2013) *An Anthropology of Architecture*, London: Bloomsbury.
- [6] Csikszentmihalyi, M., &Rochberg-Halton, E. (1981) *The Meaning of Things*. Cambridge: Cambridge University Press.
- [7] Ching, F., Jarzombek, M., & Prakash, V. (2011)*A Global History of Architecture*, New Jersey, Hoboken: John Wiley and Sons.
- [8] Culshaw, W. J. (1949) *Tribal Heritage: A Study of the Santals*, London: Lutterworth Press.
- [9] Despres, C. (1991)“The meaning of home: Literature review and directions for further research and theoretical development”,*Journal of Architecture and Planning Research* 8 (2), 96-115.
- [10] Deysarkar, K. (2015) “Indian Vernacular Planning”. *Civil Engineering and Urban lanning: An International Journal*, 2.
- [11] Egenter, N. (1992)*Architectural Anthropology. The Present Relevance of the Primitive in Architecture*, I.
- [12] Erikson, E.H. (1950)*Childhood and Society*, New York: W.W. Norton & company.
- [13] Erikson, E.H. (1959) *Identity and the Life cycle*, W. W. Norton & Company; Reissue edition.
- [14] Glassie, H. H. (2000) *Vernacular Architecture*. Bloomington: Indiana University Press.
- [15] Hamlin, A. D. F. (1909) *A Text Book of the History of Architecture*, New York:Longmans, Green and Co.
- [16] Hembram, R., Ghosh, A., Nair, S &Murmu, D. (2016) “A visual Journey into Santal village life”, *Journal of Adivasi and Indigenous Studies*, III: 17-36.
- [17] Kniffen, F. (1965) “Folk Housing:Key to Diffusion”. *Annals of the Association of American Geographer*, 55, 549-577.
- [18] MacDougall, J. (1985) *Land or Religion? The Sardar and Kherwar Movements in Bihar, 1858-95*, New Delhi: Manohar.
- [19] Mitra, S. (2002) “Architecture in the Clay: A Santal Excellence”, *Journal of the Anthropological Survey of India*, 51: 77-101.
- [20] Moin, M. (2002) *Persian Dictionary*. Dehkhoda Dictionary Institute, Tehran University.
- [21] Moharami, T., (2004) “Our Islamic-Iranian identity”. *Research Institute for Humanities and Social Science*, Jihad University, Tehran.
- [22] Nasar, J.L., & Kang, J. (1999)“House style preferences and meanings across taste cultures”. *Landscape and Urban Planning*, 44, 33-42.
- [23] O'Malley, L.S.S. (1910) [Reprint 1999]*Bengal District Gazeteers: Santal Parganas*, Calcutta: West Bengal District Gazeteers, Department of Higher Education, Government of West Bengal.
- [24] Oliver, P. (1987) [Reprinted 2007]*Dwellings:The Vernacular House World Wide*, London,Phaidon Press.
- [25] Rapoport, A. (1969)*House form and Culture*, Foundation of cultural geography Series, Prentice- Hall Inc. Englewood Cliffs, N.J.
- [26] Rapoport, A. (1982)*The Meaning of the Built Environment*. London: Sage publication.
- [27] Risley, Sir H. (1915) *The People of India (Second Edition of the Tribes and Castes of Bengal edited by W. Crook)*, Calcutta and Simla: Thacker, Spink & Co.
- [28] Russell, R. V. (1916) *The Tribes and Castes of the Central Provinces of India*, Vol. I. London: Macmillan and Co. Limited.
- [29] Sen, S. (1984) *The Santals of Jungle Mahals: An Agrarian History 1793-1861*, Calcutta: RatnaPrakashan.
- [30] Stamp, G. (1981) “British Architecture in India 1857-1947”. *Journal of the Royal Society of Arts*, 129, 357-379.
- [31] S.S. G. (2013)“The House as an Expression of Identity”, *Forum*, II, 3-10.
- [32] Tilley, C. (2004) *The Materiality of Stone: Exploration in Landscape Phenomenology*. Oxford: Berg Publication.
- [33] Troisi, J. (1978) *Tribal Religion: Religious Beliefs and Practices among the Santals*, New Delhi: Manohar Publications.
- [34] Vellinga, M. (2011)“The End of the Vernacular: Architecture and the Achitecture of the Other”,*Ethnofoor*, 23, 171-192.

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