

PLACE-MAKING THROUGH PRACTICE:
AN INTERDISCIPLINARY APPROACH TO SANTAL ARCHITECTURAL HISTORY

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Abstract

Santals are one of the many Adivasi (indigenous) communities in eastern India and are particularly renowned for precision and craftsmanship in their domestic architecture. The visually stunning dwellings and settlements fascinated me as an undergraduate architecture student, and now, in this doctoral research project, I take this forward as a critical enquiry into the production, use and transformation of Santal built environments. There are two important concerns in the study. First, I examine Santal dwellings and settlements as both sites and processes, i.e., I analyse built forms, everyday life, domestic art practices, and people's perceptions of important aspects of their surroundings in order to understand Santal senses of space and place. Second, I attempt to correlate architectural shifts to wider changes in the Santal and other Adivasi communities and the Singhbhum region in order that the architectural analysis may be brought to bear upon a wider understanding of Adivasi pasts. In short, using architecture as a lens, I aim to understand Santal senses of being-in-the-world and how these have transformed in the course of the past two centuries.

This study is an important departure from architectural discourses on traditional environments since it examines processes of making and people's experiences together with architectural forms. This approach allows a new kind of architectural history to emerge: one that is no longer about buildings alone, but that offers insights into peoples' sense of their collective lives, and in particular their phenomenological engagements with the social, environmental and historical worlds that are in part defined by architecture. The project is inherently interdisciplinary in that architectural analysis is combined with ethnography and participatory visual methods in the effort to study senses of place. More significantly, however, I aim to contribute to critical discourses on traditional built environments and their historiography.

(295 words)

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Table of Contents

Abstract	1
Acknowledgements	2
Table of Contents	4
List of Tables	7
List of Figures	7
1. Exploring an Adivasi architectural history	11
1.1. Introduction to the study	11
1.2. Aim and objectives	13
1.3. The sites of study	15
1.3.1. <i>The Singhbhum region and Adivasi communities</i>	15
1.3.2. <i>Social, economic and historical profile of case study villages</i>	20
1.4. Fieldwork and methodology	28
1.4.1. <i>Preliminary fieldwork and architectural documentation</i>	29
1.4.2. <i>Primary fieldwork</i>	37
1.4.3. <i>Participatory research and reflexivity</i>	37
1.5. Structure of the study	39
2. A phenomenological approach to Adivasi architectural history	40
2.1. Introduction to theoretical background	40
2.2. People-place relationship in vernacular architecture studies	40
2.3. Space and place in anthropology	44
2.4. Place and phenomenological perspectives	47
2.5. Architectural history and a phenomenological perspective	51
2.6. Summarising key theoretical frameworks	54
3. Transformation of Santal dwelling layouts	55
3.1. Introduction	55
3.2. Data and methodology	56
3.3. Layouts of Santal dwellings	60
3.3.1. <i>Orak</i>	60
3.3.2. <i>Kumbaha - an older dwelling type</i>	66
3.3.3. <i>Courtyard type houses</i>	69
3.3.4. <i>Ath-chala houses</i>	83
3.4. Spaces within Santal houses	93
3.4.1. <i>Entrance</i>	93
3.4.2. <i>Racha (courtyard)</i>	97
3.4.3. <i>Bhitar</i>	100
3.4.4. <i>Cooking areas</i>	102
3.4.5. <i>Animal shelters</i>	105
3.4.6. <i>Sleeping areas</i>	106
3.4.7. <i>Chali (Verandahs)</i>	107
3.4.8. <i>Barge (backyard garden)</i>	109
3.5. Identifying and contextualising transformations	109
3.5.1. <i>Transformation of dwellings</i>	110
3.5.2. <i>The context of nineteenth century Singhbhum</i>	112
3.5.3. <i>Emergence of courtyards</i>	115
3.5.4. <i>Differentiation of spaces</i>	116
3.5.5. <i>Conflation of room and house as categories</i>	118
3.5.6. <i>Sense of ground</i>	119
3.6. Conclusion – Towards a history of everyday life and dwellings in Singhbhum	121

4. Transformation in ways of making	123
4.1. Making from a phenomenological perspective	123
4.1.1. <i>Data and methodology</i>	125
4.1.2. <i>Structure of discussion</i>	127
4.2. Building elements and practices	129
4.2.1. <i>Foundations for walls</i>	129
4.2.2. <i>Building walls</i>	132
4.2.3. <i>Roof structure: Central beam-and-post and ridge beam</i>	135
4.2.4. <i>Roof structure: Rafters</i>	140
4.2.5. <i>Roof structure: Eaves</i>	144
4.2.6. <i>Roof structures in other dwelling types</i>	145
4.2.7. <i>Roofing materials</i>	154
4.2.8. <i>Conjecturing the structure of the kumbaha</i>	164
4.3. Identifying and contextualising changes	168
4.3.1. <i>Changes in availability of building materials</i>	169
4.3.2. <i>Changes in wall as a structural element</i>	171
4.3.3. <i>Changes in roof structure</i>	172
4.3.4. <i>Continuities in structure</i>	174
4.3.5. <i>Role of design memory</i>	176
4.3.6. <i>Shifts in labour and introduction of cash economy</i>	178
4.4. Conclusion	179
5. Practices of floor plastering and wall painting as inscribing domestic spaces	182
5.1. Introduction: Inscribing domestic spaces	182
5.1.1. <i>Scholarship on domestic art practices</i>	183
5.1.2. <i>Data and methodology</i>	184
5.2. Floor plastering	185
5.2.1. <i>Floor plastering and the making of domestic space</i>	193
5.2.2. <i>Comparison of floor plastering practices in Santal and Munda dwellings</i>	194
5.3. Alpana	197
5.4. Wall painting	203
5.4.1. <i>Design developments in wall painting practices in Seraikela</i>	207
5.4.2. <i>Contextualising the differences in design development</i>	209
5.5. Conclusion: Correlating practices, design forms, memories and meanings	216
6. Gender and the structuring of domestic space	220
6.1. Introduction to gender and space	220
6.1.1. <i>Scholarship on gender and space</i>	221
6.1.2. <i>Women in Santal societies</i>	222
6.1.3. <i>Data and methodology</i>	223
6.2. Daily routine in Santal households	225
6.2.1. <i>Daily routine of men</i>	228
6.2.2. <i>Comparing the routines of women and men</i>	229
6.3. Networks of resources in everyday life	229
6.3.1. <i>Collecting water</i>	230
6.3.2. <i>Collecting firewood</i>	231
6.3.3. <i>Collecting cow dung</i>	239
6.3.4. <i>Visiting the weekly market</i>	239
6.3.5. <i>Difference in networks between men and women</i>	241
6.4. Movement and thresholds of interaction	241
6.5. Awareness about the <i>tola</i>	246
6.6. Conclusion: Exploring women's relationship to dwelling	249
7. Structure of settlement and senses of community	252
7.1. Introduction: Settlement, community and senses of place	252

7.1.1. <i>Data and methodology</i>	255
7.2. Morphology of settlement	256
7.2.1. <i>Establishment of village</i>	262
7.2.2. <i>Place names and senses of place</i>	267
7.3. Dwelling clusters and social groupings	269
7.3.1. <i>Kulhi as a community place</i>	274
7.4. Notions of a village community	279
7.4.1. <i>Land ownership and senses of community</i>	279
7.4.2. <i>Participation in the jahira and sense of community</i>	281
7.5. Conclusion: Santal villages as social and spatial entities	282
8. Evaluating Santal perceptions of built environments using participatory visual methods	285
8.1. An event in the village	285
8.2. A call for reflexivity	287
8.3. On participatory methods	288
8.3.1. <i>Children's drawings of dwellings and the village</i>	289
8.3.2. <i>Participatory photography</i>	293
8.3.3. <i>Guided photography</i>	296
8.3.4. <i>Public displays of visual material</i>	300
8.4. Contextualising people's choices	302
8.4.1. <i>People's choices as sites of meaning</i>	305
8.5. Conclusion: Subjectivities and the possibility of different architectural histories	308
9. Conclusion: An architectural history in a world in flux	310
Bibliography	316
Appendix 1: Houses documented for this study	327
Appendix 2: Summary of interviews and fieldwork interactions	334
Appendix 3: Exhibitions in the village	343

List of Tables

Table 1-1: Economic geography and livelihoods in case study villages	22
Table 1-2: Social dynamics in case study villages	27
Table 1-3: Fieldwork stages and methodological choices	29
Table 1-4: Features observed during preliminary fieldwork.....	31
Table 4-1: Structure of discussion combining layouts and stages of construction	128
Table 4-2: Categories of joinery in Santal roofs	175
Table 6-1: Daily routine of women in Santal households in the case study villages.....	227

List of Figures

Figure 1-1: Views of Santal houses from different villages in the Singhbhum region.....	12
Figure 1-2: Location of case study villages	21
Figure 1-3: Case study localities and their connections with Jamshedpur.	24
Figure 1-4: Administrative boundaries in the 19th century	26
Figure 1-5: Localities and villages identified during preliminary fieldwork.....	30
Figure 1-6: Dwelling layouts observed during preliminary fieldwork in 2012.	32
Figure 1-7: Differences in roofs observed during preliminary examples.	33
Figure 1-8: Differences in wall paintings observed in preliminary examples.	34
Figure 1-9: Comparison of Santal houses in Bolpur, West Bengal and in Singhbhum, Jharkhand.....	36
Figure 3-1: Examples of <i>orak</i> layouts.....	61
Figure 3-2: Layout of widow's house in Bangoda	62
Figure 3-3: Entrance to widow's house at Bangoda.....	63
Figure 3-4: View of <i>racha</i>	63
Figure 3-5: View towards house from <i>racha</i>	63
Figure 3-6: Layout of widow's house, Bhagabandh.....	64
Figure 3-7: Views of verandah.....	65
Figure 3-8: Comparison of <i>bhitar</i> in the two widows' houses.	66
Figure 3-9: View of Birhor house as close equivalent of <i>kumbaha</i>	67
Figure 3-10: Comparison of activities in <i>kumbaha</i> and <i>orak</i>	68
Figure 3-11: Cattle shelter in widow's house in Bangoda.....	69
Figure 3-12: Examples of courtyard type houses.....	70
Figure 3-13: Layout of B. Hansdah's house in Bhagabandh.....	72
Figure 3-14: Layout of M. Murmu's house in Chauda.....	75
Figure 3-15: Layout of Mardi brothers' house in Bada Bandua.....	77
Figure 3-16: View of back entrance of Mardi brothers' house	78
Figure 3-17: Comparison of <i>racha</i> (marked in grey) in different houses..	79
Figure 3-18: Emergence of <i>racha</i>	80
Figure 3-19: Comparison of distribution of cooking and sleeping areas across case study examples.	82
Figure 3-20: Examples of <i>ath-chala</i> houses.....	84
Figure 3-21: Layout of Santal <i>ath-chala</i> house.....	86
Figure 3-22: View of <i>bhitar</i> in Santal <i>ath-chala</i> house	87
Figure 3-23: View of <i>chali</i> interior	87
Figure 3-24: Layout of Munda <i>ath-chala</i> house	88

Figure 3-25: Layout of house with <i>ath-chala</i> in Chauda	90
Figure 3-26: View of dovecote in Santal house in Chauda.....	91
Figure 3-27: Location of <i>bhitar</i> in <i>ath-chala</i> houses	92
Figure 3-28: Comparison of activities within <i>ath-chala</i> and <i>orak</i>	93
Figure 3-29: Diagram showing movement from <i>kulhi</i> into the dwelling.....	95
Figure 3-30: Patches of cow dung plaster applied at entrances	96
Figure 3-31: Ritual markings such as palm prints and vermilion dots on doorways.....	97
Figure 3-32: Objects typically found in the <i>racha</i>	98
Figure 3-33: <i>Racha</i> of extended family with multiple <i>tulsi pinda</i> and <i>chulha</i>	99
Figure 3-34: Villagers gathered in a <i>racha</i>	100
Figure 3-35: Location of <i>bhitar</i> within <i>ath-chala</i> and courtyard houses	101
Figure 3-36: Comparison of cooking spaces in <i>ath-chala</i> and courtyard house.....	103
Figure 3-37: Views of cooking area.....	103
Figure 3-38: View of semi-open cooking area.....	104
Figure 3-39: Views of goat shelter and chicken coop.....	106
Figure 3-40: Interior of cattle shelter	106
Figure 3-41: View of sleeping area.....	107
Figure 3-42: <i>Chali</i> in different dwelling types.....	108
Figure 3-43: Views of <i>barge</i>	109
Figure 3-44: Transformation of Santal houses.....	111
Figure 3-45: Child's drawing indicating notion of interiority in dwelling.	117
Figure 3-46: Objects kept off the floor by hanging them from the roof	121
Figure 4-1: Digging the area marked within ropes on ground	130
Figure 4-2: Foundation trench flooded with water to soften soil.....	130
Figure 4-3: Deepening of foundation trench after soil is softened by water.....	131
Figure 4-4: Pile of <i>murru</i> <i>mati</i> to be used for wall construction.....	133
Figure 4-5: Kneading of <i>murru</i> <i>mati</i> to soften and prepare it for use	133
Figure 4-6: Load of prepared <i>murru</i> <i>mati</i> being carried to the building site	134
Figure 4-7: Rounds of <i>murru</i> <i>mati</i> being placed on wall	134
Figure 4-8: Smoothing of <i>murru</i> <i>mati</i> to create flat surfaces	134
Figure 4-9: Wall left to dry before addition of further courses.....	135
Figure 4-10: Roof structure in <i>orak</i>	136
Figure 4-11: Post notched into central beam.....	137
Figure 4-12: Additional wooden member used for joint between post and beam	137
Figure 4-13: Post carved to accommodate ridge beam	138
Figure 4-14: Joint between post and ridge beam using additional wooden member	139
Figure 4-15: Lap joint in ridge beam held between and propped by the post.....	139
Figure 4-16: Rafters with round cross section	141
Figure 4-17: Rafter with rectangular cross section	141
Figure 4-18: Rafters pinned together above ridge beam.....	141
Figure 4-19: Unusual case of extended rafters supported by extra beams.....	143
Figure 4-20: Eaves beam supported on extension of central beam.....	144
Figure 4-21: Eaves beam supported on additional wooden supports.....	145
Figure 4-22: Comparison of roofs where rafters rest on eaves beams (left) and where they rest directly on the wall (right).	145
Figure 4-23: Hipped roof with the addition of <i>chali</i>	147
Figure 4-24: End of ridge beam supporting multiple rafters in <i>ath-chala</i> roof	148
Figure 4-25: Comparison of eaves beam detail with detail of <i>chali</i>	149
Figure 4-26: Diagram showing the geometry of roof members in L-shaped roof in courtyard houses	150

Figure 4-27: View of L-shaped junction in the roof of courtyard houses.....	151
Figure 4-28: L-shaped roof junction with perpendicular ridge beam.	152
Figure 4-29: <i>Orak</i> roof with inclined supports for rafters.....	154
Figure 4-30: Closely spaced battens for <i>khapra</i> (burnt clay tile) roofing.....	155
Figure 4-31: Battens spaces further apart for <i>tali</i> (rectangular clay tiles).....	155
Figure 4-32: Very few battens required for roofing done using sheets.....	155
Figure 4-33: Men laying thatch on a roof	156
Figure 4-34: Needle used for tying thatch to the battens below	156
Figure 4-35: Types of clay tiles used for roofing: <i>khapra</i> on the left and <i>tali</i> on the right.....	158
Figure 4-36: Pit dug in the ground for soaking <i>murram mati</i>	159
Figure 4-37: Pit filled with <i>murram mati</i> and filled with water.....	159
Figure 4-38: The soaked <i>murram mati</i> is piled outside the pit and kneaded by repeatedly stepping on it.	160
Figure 4-39: After kneading, the pile is smoothened out and left to rest.....	160
Figure 4-40: A final round of kneading is done by hand	160
Figure 4-41: The prepared <i>murram mati</i> is shaped into cylinders before being handed to the potter for shaping on the wheel	161
Figure 4-42: Cylinders being shaped on the wheel in the desired size of the final tile	161
Figure 4-43: Cylinders being split in half to produce <i>khapra</i>	161
Figure 4-44: Two layers of tiles used to cover the hip junction in an L-shaped roof.....	163
Figure 4-45: Comparing roof structures across layouts	165
Figure 4-46: Forked end of post used to support beam in Birhor house.....	167
Figure 4-47: Rafters, battens (made of thin branches) and thatch visible in the ceiling of Birhor house	167
Figure 4-48: Bamboo used in roofing.	178
Figure 5-1: Circular patch of cow dung applied at the entrance to the house.....	186
Figure 5-2: Plaster around the <i>chulha</i> (mud stove).....	186
Figure 5-3: <i>Kulhi</i> being plastered in the morning	187
Figure 5-4: Plastered <i>kulhi</i> in Bhagabandh.	188
Figure 5-5: Plastering in Chauda.....	188
Figure 5-6: Plastering the entrance to the house with a piece of cloth dipped in a cow dung mixture.....	190
Figure 5-7: Plastered <i>racha</i>	191
Figure 5-8: Woman in Bada Bandua plastering the floor with mud.	191
Figure 5-9: Comparison of Santal cluster and Munda cluster of houses.	195
Figure 5-10: Ritual <i>alpana</i> made with a finger and having thick lines.....	199
Figure 5-11: Decorative <i>alpana</i> made at the entrance to houses.	199
Figure 5-12: <i>Alpana</i> made by dripping dots of rice paste on the ground.....	199
Figure 5-13: Triangles in the <i>alpana</i> representing the feet of Goddess Lakshmi.....	200
Figure 5-14: Pattern of rooted or growing flower.	200
Figure 5-15: Comparison of <i>alpana</i> in Bhagabandh (left), which is spread out on the <i>kulhi</i> , and <i>alpana</i> in Bada Bandua (right), which is framed within a square border.....	201
Figure 5-16: <i>Alpana</i> line leading from <i>kulhi</i> to the entrance of house.	202
Figure 5-17: Design scheme of horizontal bands on walls of Santal houses	204
Figure 5-18: Differences in painting to mark parts of the house occupied by a different nuclear family unit.	205
Figure 5-19: Black vertical plaster line demarcating property boundaries.....	206
Figure 5-20: Geometric shapes painted within horizontal bands in Chauda	208
Figure 5-21: Floral patterns and geometric designs added within horizontal bands in Beltad village	208

Figure 5-22: Geometric designs observed in different houses in Chauda	211
Figure 5-23: Floral motifs observed in different houses in Beltad village	211
Figure 5-24: Sculpted columns observed in different houses in Mahotabeda village	211
Figure 5-25: Selected photographic documentation displayed in the <i>kulhi</i> in Chauda.....	214
Figure 5-26: Images of selected wall paintings displayed in the <i>kulhi</i> in Chauda.....	215
Figure 5-27: Image unanimously selected by Santal villagers as the best wall painting in Chauda.....	215
Figure 6-1: Photograph of men in the <i>kulhi</i> that I displayed in the village.....	229
Figure 6-2: Access to water sources within a <i>tola</i> (neighbourhood).	230
Figure 6-3: Plan of Bhagabandh showing forests in the vicinity of the village.	232
Figure 6-4: View of forest typically found around case study villages	233
Figure 6-5: Collecting dried branches.....	234
Figure 6-6: Thrashing the branches to get rid of the leaves.....	234
Figure 6-7: Making a bundle with green leaves to carry the load of wood on their heads	235
Figure 6-8: Carrying firewood back home.....	235
Figure 6-9: Two types of stove that use different kinds of fuel	238
Figure 6-10: View of village market at Kolabira	240
Figure 6-11: Diagram showing different levels of access for family members and outsiders with increasingly degrees of familiarity	243
Figure 7-1: Different <i>tola</i> in case study villages.	258
Figure 7-2: Section showing the land owned by a family.....	260
Figure 7-3: Settlement level plan of Bhagabandh showing location of dwelling units (marked in black) vis-à-vis forests and agricultural land	260
Figure 7-4: Satellite image showing present-day <i>kulhi</i> and the older abandoned <i>kulhi</i> in Chauda.....	262
Figure 7-5: Section through the <i>kulhi</i> in Devghar village.....	262
Figure 7-6: Manjhithan in different villages	264
Figure 7-7: <i>Manjhithan</i> in Chauda.	265
Figure 7-8: View <i>Sasan dhiri</i> in Bada Bandua	266
Figure 7-9: Comparing building densities of Bada Bandua and Chauda.....	272
Figure 7-10: Child's drawing where he marks segments of the <i>kulhi</i> with the names of the <i>tola</i>	274
Figure 8-1: The first few drawings made by children in Bhagabandh.....	291
Figure 8-2: Drawing with details such as plants growing around the hand pump (right) and roots of trees (left)	292
Figure 8-3: Drawing showing the village of Bada Bandua.....	292
Figure 8-4: Portraits of villagers taken during fieldwork.....	296
Figure 8-5: Photographs suggested by K. Mahato in Bhagabandh.....	298
Figure 8-6: Drawing with houses and trees.....	298
Figure 8-7: Drawing of Bada Bandua.	299

1. Exploring an Adivasi architectural history

1.1. Introduction to the study

A decade long fascination with Santal architecture lies at the heart of this research project. Santals are one of the many Adivasi (indigenous) communities in the Jharkhand state in eastern India and are locally renowned for their architectural skills.¹ Travelling through villages around Jamshedpur in south Jharkhand since 2001, I was, and even today remain, struck by the finesse, colours and overall appearance of Santal houses (Fig.1-1).² Though nearly all other rural communities build using similar construction materials and technology, Santal houses stand out as distinctive architectural objects on account of their craftsmanship, precision and decorative practices. As W.G. Archer (1974, 20) remarked about Santals - ‘of all the other tribes of eastern India, none has quite the same relish for neatly ordered houses, the same capacity for tidy spacious living or the same genius for domestic architecture’. These visual qualities fascinated me as an undergraduate architecture student, and now, in this doctoral research project, have grown into a critical enquiry into the production, use and transformation of built environments. Using architecture as a lens, I explore Santal senses of being-in-the-world and how these senses have transformed in the course of the past two centuries and thereby contribute to the body of literature on Adivasi architectural histories and architectural anthropology.

¹ Santals are listed as a Scheduled Tribe by the Indian government. Members of the community typically refer to themselves as *hor* or man. I use the term Adivasi, which is a more generic term and means original inhabitants of a place, throughout this study.

² These earlier visits were conducted as preparation for my final design and research projects during my undergraduate architectural studies between 2001 and 2003, and subsequently for my postgraduate dissertation between 2005 and 2007.



Figure 1-1: Views of Santal houses from different villages in the Singhbhum region

In this project, I study three Santal villages located around Jamshedpur, a major urban and industrial centre in the Singhbhum region in south Jharkhand.³ This region is one of India's most important industrial centres while also being home to nearly forty Adivasi communities including Santals. The region has undergone massive change since the mid-nineteenth century and transformed from being a thickly forested region to a paddy cultivating and industrial landscape. The region's Adivasi inhabitants have correspondingly shifted from living as forest dwellers to becoming settled agriculturists and industrial labourers. The large-scale environmental and economic transformations started in the early nineteenth century and were prompted by an influx of non-Adivasi people who migrated into the region on account of its natural resources. One gets an inkling of the demographic changes in the region from colonial records. Tuckey - a colonial officer and land surveyor - noted that 'the population is a much more cosmopolitan one than it was twenty five to thirty years ago, for the great iron and steel works at Jamshedpur have proved a magnet attracting representatives of almost every caste and language in India. But it is still true to say that the population of the *pargana*

³ Karan summarises the industrial developments in the Singhbhum region. He points out that the region of Singhbhum is 'mainly a zone of heavy metal industries with copper mining and smelting in the east, iron ore mining in the west and the iron and steel heavy metallurgical industrial region about Jamshedpur. Karan 1953, 218.

[province] as a whole remains predominantly aboriginal' (Tuckey 1920, 3). The Singhbhum region continues to be marked by complex social and economic conditions and Adivasi experiences and everyday lives are informed by these different modes of living. So the focus of this study is not just the visual qualities of Santal domestic architecture, but also the context of Singhbhum as a transformative milieu within which Santal senses of space and place are rooted and shaped in particular ways.

1.2. Aim and objectives

Given this area of interest, this study aims to construct an architectural history of Santals based on comparing the transformation of Santal engagements with their environment and over time in three different sites. I study Santal dwellings and settlements as both sites and processes and thereby move away from dominant architectural histories that either focus entirely on the architectural object or only on the processes that shape it.⁴

This emphasis on localities and relationships is important for two reasons. First, while sub-disciplines such as vernacular architecture studies increasingly recognise the complexity of tropes such as tradition and society and their bearing on built environment studies, one finds few theoretical or methodological frameworks that engage with the range and diversity of indigenous built environments and their processes of transformation. It is not surprising then that architectural historians as recently as in the last decade continue to call for a theoretical position where 'architectural production' is understood as 'always triangulated by the exigencies of time and place' (Ching, Jarzombek and Prakash, *A global history of architecture* 2007, x). What this call clearly suggests is that in spite of various disciplinary developments, much of architectural history remains 'driven by traditions and essences' rather than highlighting the 'drama of historical change,' which is what this study aims to do (Ching, Jarzombek and Prakash, *A global history of architecture* 2007, x).

The second reason why the emphasis on relationships and architectural production is important is that the study attempts to theoretically and methodologically reconcile vernacular architecture studies – which is a subset of architectural discourses that examines various kinds of traditional and indigenous architecture – with architectural history discourses, where traditional domestic environments such as that of Santals rarely feature.⁵ This disjuncture occurs because architectural history narratives necessitate the specific

⁴ For a discussion on how form and motif oriented approaches continue to dominate architectural history, see Maudlin 2010.

⁵ In Chapter 2, I discuss what vernacular architecture studies are and how this has developed over time.

location of examples in time and geography. This is difficult in the case of domestic environments because though communities may inhabit particular locations for long periods of time, the physical built forms transform in complex ways through generations. In other words, domestic environments are marked by temporal continuities that make it difficult to locate them in specific historical time. One also faces this difficulty in the case of Adivasi societies such as Santals, who, in scholarly discourses, are framed as fragments of a long dead past or as being outside of historical time altogether. The ahistorical framing of such communities makes it difficult to locate them within linear and chronological historical narratives. This challenge is overcome by foregrounding the contingencies of time and locality that shape Santal built environments, whereby one may construct an architectural history premised on the shifts in relationship between Santals and their social and material worlds, rather than a linear or evolutionary imagination of changes in the community and their built forms over time.

Within this larger aim the study has three objectives. First, I add to the emerging body of interdisciplinary scholarship, where anthropological, material and architectural concerns are simultaneously addressed in order to understand built environments as both sites and processes of human habitation. This emerging scholarship fundamentally challenges the notion of architecture as 'fixed objects' and explores the various processes through which architecture is produced, used and becomes meaningful (Maudlin and Vellinga 2014, 1-3).⁶ My study is a similar attempt where I consider the physical built forms, building knowledge, everyday life, social identity, collective memory, and transformations in the region in order to understand conceptions of space and place. So while this is basically an architectural history narrative, it considers people, practices and built forms as a being conceptually inseparable and, as I discuss in the next chapter, comprising a phenomenological whole.

The second objective of this study is to explore methods of interdisciplinary enquiry and to reflect on the processes of architectural knowledge production. The interdisciplinary nature of enquiry necessitated the use of architectural, ethnographic, oral history and participatory visual methods. While the methods are well established in their respective disciplines, their

⁶ A more detailed discussion on this architectural and anthropological scholarship focusing on the relationships between people, practices and built environments is conducted in Chapter 2 of this study.

simultaneous employment in architectural studies is less common.⁷ Through this study, I reflect on how the different methods generated particular kinds of knowledge during fieldwork and subsequent analysis, and, how they each contribute to evoking Santal senses of space and place.

The final objective of this study is to contribute to the area of Adivasi studies, and more specifically, to the discourses of everyday lives of communities such as Santals. Santals and other Adivasi communities have been the subject of scholarship since the mid-nineteenth century, when colonial administrators and Christian missionaries arrived in the region and produced documents ranging from land and revenue records to compilations about local traditions and institutions.⁸ These and subsequent works cover aspects such as ethnographies of Adivasi communities (Bodding 2001 [1916]; Datta- Majumder 1955; Carrin-Bouez 1991), political and social struggles (Devalle 1992; Damodaran 2006; Rycroft and Dasgupta 2011; Das Gupta and Basu 2012), traditional knowledge (Jewitt 2002; Sengupta 2003), and economic development in the region (P. P. Karan 1953; Areeparampil c.1995) to name just a few. While this scholarship provides rich insights into the communities and the region, the discourse on Adivasi everyday life is sparse. By focusing on individuals, places and practices, this study attempts to connect larger narratives such as history and social identity to the processes of everyday lives of Adivasis. Conversely, careful analysis of everyday life and domestic architecture provides new insights into the collective life and history of Adivasis societies and the region as a whole.

1.3. The sites of study

In this section, I outline some of the broad historical, social and economic features of the Singhbhum region, the ways in which these factors have shaped Santal (and other Adivasi) lives and experiences in the past, and continue to do so today.

1.3.1. The Singhbhum region and Adivasi communities

There are three case study villages in this study – Bhagabandh, Chauda and Bada Bandua - and they are all located in the eastern part of the East Singhbhum region. More specifically, the villages lie in what may be considered as the economic hinterland of Jamshedpur, a major industrial and urban centre in the region. Jamshedpur has a large iron

⁷ That the use of interdisciplinary approaches is less than common is evident when Arnold, Ergut and Ozkaya (2006, xiv) suggest the use of material from other disciplines in order to aid the writing of architectural histories. The challenges and need to an interdisciplinary approach in this study is discussed in Chapter 2.

⁸ See, for instance, Bodding (2001 [1916]), Tuckey (1920), Reid (1913).

and steel manufacturing factory and a number of associated mining and metallurgical industries in the surroundings regions.⁹ Also located around Jamshedpur are copper mining areas to the southeast, uranium mining to the south and small-scale metallurgical industries to the west¹⁰. Within this landscape, a number of Adivasi villages lie interspersed with factories and mines of various scales. Employment in these industries form an additional source of livelihood for the Adivasi communities who otherwise subsist through paddy cultivation.¹¹ In fact, most Adivasis typically vacillate between agriculture, industrial labour and forest gathering for their subsistence.¹² Throughout this study, I refer to the developments in the economic geography of the region in order to establish that Adivasi communities have been in direct engagement with non-Adivasi peoples and with modern economic and industrialised worlds for generations and these modes of living form inextricable components of Adivasi experiences of the environment as well.

The gradual incursion of non-Adivasi peoples into Singhbhum led to a complex demography but more importantly, to a history of dispossession for the Adivasi peoples and various scales of conflict ranging from the everyday in multi-community villages to the larger scaled revolts of the past two centuries. As Bandopadhyay (1999, 11) points out

‘the process of migration of non-tribes in Chotanagpur started during the period of state formation when Hinduised *rajās* [kings] and chiefs granted land and villages to the non-tribal cultivators and encouraged them to settle in the region. The migration into this area continued throughout the colonial period but a spectacular increase in the volume of immigration took place in the wake of mining activities since the middle of the nineteenth century.’

In this climate of conflict, forests were a particularly important site of contestation between the local Adivasi populations and various outsiders such as non-Adivasi landlords, the colonial government and even the modern Indian state through the state forestry departments. The forests declined during the 19th and 20th centuries due to changes in legislation, encroachment by outside landlords, the building of railways, and legislations such as forest reservations by the state (Damodaran 2006, 181). This led to the curtailing of the traditional common rights of the local Adivasi communities; access to forests for

⁹ For a history of industrialisation and the emergence of Jamshedpur, see Dutta 1977.

¹⁰ For detailed description of the industrial developments around Jamshedpur see Areeparampil c.1995 5-11.

¹¹ For a detailed reading of Adivasis engaging in wage labour see Shah 2006, 91-118.

¹² This aspect is discussed in greater detail in Chapter 4 where I focus on domestic responsibilities of the women in their households.

grazing, gathering wood for fuel, and the collection of minor forest produce was both limited and regulated (Damodaran 2011, 106). Through this long history of forest legislation, contestation and environmental change through people's engagements, two dominant features emerge as characteristic of the Adivasis' relationship to forests. First, in the face of this history of conflict, forests were increasingly articulated as being integral to Adivasi political identity and this has influenced how forests are remembered and engaged with in everyday life by most Adivasi communities (Damodaran 2006, 180). Second, the legacy of colonial forest legislation together with the above mentioned political articulations of significance have resulted in a complex modern-day relationship between Adivasi communities and their neighbouring forests.¹³ This is seen in the case study villages where people have restricted access to the forests around the village. Yet, they remain dependent on forests for basic needs such as fuel, building material and minor produce for everyday subsistence. Forests also carry deep symbolic value for Santal communities in that their primary place of worship is the *jahira* or sacred grove, which Troisi (1979, 52) argues refers to a mythical forest. The cultural significance of the forest is also evident during *disom sendra* or the annual hunt. This important event brings together Santal communities from a wide region and the gathering of men during this annual event comprises the Loh Bir council, which is the highest decision making body for Santal people (Carrin-Bouez 1991, 13-15). What must be noted here is that the shift in access and the persisting significance of forest serve to highlight the complex historical and social worlds that mark Adivasi experiences in the region as distinctive from those of non-Adivasis.

To return to the discussion of the demography of the region, it is useful to focus briefly on the complexities within Adivasi populations of Singhbhum and their characterization in academic scholarship. The first suggestion of the complexity of social identities in the region comes from the terms of reference used for and by different Adivasi communities. The term Adivasi is a generic one and typically refers to (descendants of) original inhabitants. It is often used synonymously with 'tribe' but implies a 'range of historically defined, contested and mediated indigeneities' (Rycroft and Dasgupta 2011, 1). 'Tribe,' on the other hand, presumes a primitive social formation that is 'isolated, self-contained and socially homogenous' (Beteille 1998, 187). Irrespective of academic usage, however, Adivasis are not isolated and homogenous groups and share great similarities with each

¹³ See, for instance, Kumar and Corbridge 2004.

other and with other Hindu peasant communities in the region.¹⁴ Corresponding to the idea of social and cultural overlaps between communities, I found complex and contextually varying usages of the terms tribe and Adivasi. Nowadays, most Santal villagers used the English word ‘tribe’ or the Hindi term Adivasi to describe themselves and the historical *hor* (i.e. a Santal person) and *diku* (i.e. foreigner) dichotomy is less prevalent.¹⁵ What made the descriptions complex was that they described themselves as Adivasis and their Hindus and Muslims neighbours as ‘others’, while in some cases even other Adivasi groups such as Mundas were described as ‘others’. The terms of reference typically depended on the context of the conversation, and begin to suggest the manner in which communities identify themselves depend upon the personal and historical contexts of interaction.

Before moving onto a more specific discussion on the inter-relations between Santals and other communities, it is useful to get a statistical overview of the different Adivasi groups in the region. There are nearly six million Santals in Eastern India spread over the states of Jharkhand, West Bengal, Bihar, Odisha, and the neighbouring countries of Nepal and Bangladesh (Census Commission of India 2001, 1). In Jharkhand specifically, there are nearly 2.3 million Santals and they constitute thirty four percent of the total Adivasi population. Apart from Santals there are twenty-nine other Adivasi groups notified as Scheduled Tribes in Jharkhand by the government of India (Census Commission of India 2001, 1). While Santals are the most numerous community in Jharkhand, Oraons, Hos and Mundas are the other major Adivasi groups and together comprise approximately forty five percent while Kharwar, Lohra, Bhumij Kharia and other groups such as Birhor make up the rest of the Adivasi population (Census Commission of India 2001, 1). These Adivasi populations are primarily rural with 91.7 percent residing in villages (Census Commission of India 2001, 1). Though these statistics typically compartmentalise people into distinct groups, the multifarious linguistic, cultural, social, economic lives of different Adivasi groups have considerable overlaps. Below, I draw attention to some similarities and differences in order to illustrate this point.

Santals, Hos, and Mundas are together culturally and linguistically considered as the Kherwar peoples. Their languages belong to the Munda or Kherwari group within the

¹⁴ Beteille argues that both Adivasis and Hindu peasants ‘perpetuate and emphasize collective identities in remarkably similar ways’ (Beteille 2008, 34) and the distinction between these groups is made by anthropologists rather than economists or historians (Beteille 1974, 59).

¹⁵ For further reading on Adivasi relationships with *diku* (foreigners), see Carrin-Bouez 1991, 15-16.

larger Austro-Asiatic group of languages.¹⁶ These communities share the same creation myth ‘believing that they evolved from the male and female Kherool eggs’ (D. Rycroft 1996, 67). The subsequent developments in social structure such as the division of the community into clans show some similarities as well. Each of these communities are divided into *kili* or patrilineal clans and the priest and headman are figures of authority and power within the communities. For instance, among Santals, one finds twelve *kilis* (clans) and each *kili* is believed to have mythical origins.¹⁷ Mundas on the other hand are typically divided into two ritual moieties descended the priest’s and headman’s lineages respectively.¹⁸ The Santal headman is selected from the lineage of the founding fathers of the village while the priest typically belongs to the Murmu clan. It becomes evident that the idea of *kilis* and the position of the priest and headman within the two communities is similar while the specifics of the clan structure and the roles of these figures of authority vary.¹⁹

While discussing points of similarity between Santals and other Adivasi communities, it is important to note variations between Santals in different contexts as well. In a study comparing religious and social practices between Santals living in a city and a village, Orans (1958, 422-445) finds that there are changes in marriage and ceremonial patterns. He finds that migration to urban areas affects social bonds much more than rural migration, where traditional practices continue to evolve without disruption (Orans 1958, 85-86). While it is not possible to give a nuanced profile of Santal societies and the various facets of their relationship to other neighbouring communities, one may summarise that the many Adivasi groups in Singhbhum are closely linked at various levels, and the social history of the region presents a ‘variegated development’ of its indigenous societies and their processes of transition (Devalle 1992, 50). The realization of significant differences between Adivasi communities provided the impetus for using a comparative approach in this study to bring out the similarities and variations between Santal communities located in different contexts.

¹⁶ In discussing the Adivasi populations of central India i.e. the modern-day states of Maharashtra, Madhya Pradesh, Chhattisgarh, Bihar, Jharkhand, West Bengal, Odisha and Telangana, Sinha suggests that languages of these various groups belong primarily to two stocks, the Munda or Kherwari and the Dravidian. Within this distribution, Munda speaking groups are restricted to the areas around the Chotanagpur Plateau i.e. Jharkhand and parts of Chhattisgarh, Bihar, West Bengal and Odisha. See Sinha 1958, 504-517.

¹⁷ For a discussion of Santal clans, see Carrin-Bouez 1991, 10-11.

¹⁸ A moiety refers to one of two units of a community formed on account of unilineal descent. Carrin-Bouez 1991, 10.

¹⁹ For a detailed comparison of Santal, Munda and Ho leadership structures, see Carrin-Bouez 1991, 4-8.

1.3.2. Social, economic and historical profile of case study villages

The three case study villages were selected from different localities within the eastern Singhbhum region. The difference in locality was important in order to examine different factors that influence Santal communities and their built environments. The idea of locality is central to this comparative study and must be explicated. Locality, as Appadurai (1988, 178) suggests, is a ‘relational and contextual’ concept rather than a ‘scalar or spatial’ one. It is a ‘complex phenomenological entity, constituted by a series of links between the sense of social immediacy, the technologies of interactivity, and the relativity of contexts’. This fluid conception of locality is necessary in order to engage with the multiple factors and attributes in the interplay of which Santal villages have developed. It is also a shift away from thinking of the contexts architecture in definite geographical or spatial terms to considering flows and forces in particular places and at particular times. Following this line of thought, in order to identify localities, I overlaid historical, economic, cultural and demographic characteristics onto geographical zones and then selected the case study villages from the localities that emerged. Below, I discuss and compare the economic geographic landscape and livelihood, demographic composition and social relations, and historical conditions in each locality to establish the context in which different Santal communities and their built environments may be viewed.

1.3.2.1. Economic geography and livelihoods in the case study villages

The case study villages fall under different blocks in two different districts.²⁰ Bhagabandh and Bada Bandua both lie in the East Singhbhum district but in the Golmuri-cum-Jugsalai and the Potka blocks respectively (Fig.1-1). The third case study village of Chauda lies in the Gamharia block in the Seraikela-Kharsawan district. While these are the specific locations of the villages in administrative terms, the broader localities may be identified as follows:

- Village Bhagabandh located in ‘Ghatsila region’ (across the Golmuri-cum-Jugsalai and Ghatsila blocks of the East Singhbhum district, lying southwest of Jamshedpur)
- Village Bada Bandua located in the ‘Karandih- Hata belt’ (across the Potka and Jamshedpur blocks of the East Singhbhum district, lying to the south of Jamshedpur)

²⁰ The term block here refers to an administrative sub-unit of a district. A number of villages and or cities typically comprise a block, and a number of blocks comprise a district. If the district is very large, then a number of blocks may comprise a *tehsil* and a number of *tehsils* together may comprise a district.

- Village Chauda located in the ‘Kandra region’ (in the Seraikela - Kharsawan district and lying to the west of Jamshedpur)



Figure 1-2: Location of case study villages

The areas mentioned above, i.e., the Ghatsila region, the Karandih – Hata belt and the Kandra region are not singular administrative units but emerge as localities when one examines the economic, social and historical conditions that have shaped these places. Each of these localities have a characteristic landscape and agricultural practices, and particular forms of industrial development, which together create specific livelihood conditions for Adivasis in each area (See Table 1-1). For instance, Bhagabandh (in the Ghatsila region) has more fertile agricultural land that sustains most families and therefore fewer people work as daily wage labourers. Chauda (in the Kandra region), on the other hand, is less fertile and more families need to work for daily wages in order to sustain themselves. The nature of industries in each area affects livelihood possibilities as well. The Bhagabandh region has only copper mining and small scale stone quarrying which offer fewer possibilities for wage labour as compared to Chauda, which is surrounded by

small scale industries that employ large numbers of temporary workers. These factors contribute to distinctive senses of locality and affect everyday lives of Santals in terms of domestic, ritual and agricultural cycles.

Parameters	Bhagabandh in the Ghatsila region	Chauda in the Kandra region	Bada Bandua in the Karandih-Hata belt
Landscape and topography	Region lies in the Subernarekha River valley and is extremely fertile	Relatively drier area to the north of Subernarekh and Kharkhai river valleys	
Agriculture	Single rain-fed paddy crop, but vegetables grown in homestead gardens to supplement family diet and incomes.	Single rain-fed paddy crop but less fertile and stony landscape limits agricultural possibilities.	Single rain-fed paddy crop, supplemented with water and forest produce gathered from the vicinity of the village.
Nature of industries	Copper mining and small scale stone quarrying	Small scale metallurgical industries	Uranium mining and small scale stone quarrying;
Livelihood options for Adivasis and other rural communities	Mostly agriculture, landless families work as agricultural labourers; women (widows particularly) work in stone quarries to supplement family incomes ²¹	Both agriculture and daily wage labour; Both men and women are involved in wage labour	Some agriculture by families who own sufficient land; large numbers of permanent and daily wage labourers.

Table 1-1: Economic geography and livelihoods in case study villages

In discussing the interrelations between agriculture, industrial development and livelihoods in eastern Singhbhum, it is useful to explore the impact of connectivity of the case study localities to the urban centre of Jamshedpur. Of the three case study areas, the Karandih – Hata belt is nearly contiguous with Jamshedpur, while the other two localities of Ghatsila and Kandra are separated from Jamshedpur by the Subernarakha and Kharkai rivers respectively (Fig.1-3). As a consequence, people’s movements to and from Jamshedpur were significantly higher from the Karandih–Hata belt as compared to the other two areas, which got connected to the urban centres only after the construction of bridges across the two rivers in the mid-twentieth century. Further, the road that connects the Karandih–Hata area with Jamshedpur further links to Chaibasa, a neighbouring city that was very

²¹ In Bhagabandh, it was typically elderly widows or young girls without much familial support who worked as labourers in private stone quarries in order to earn a livelihood. Landless men worked as agricultural labourers in the fields of other families in the village itself. Personal conversations with L. Hansdah and P. Hansdah in February 2013.

significant in earlier times as a centre of colonial administration in the region. This ensured that there was regular traffic between Jamshedpur and Chaibasa and the villages such as Bada Bandua that lay along the highways were well connected as well. While one may not draw a direct correlation, the historical connectivity may have played a role in the large numbers of Adivasi people who commute to work as industrial labourers in Jamshedpur and, more broadly, in mainstreaming industrial wage labour as an integral part of Adivasi life in the region.²² In case of the other two areas, not only did the road access with Jamshedpur develop later, but the impetus for movement was less as well. The Kandra area was under a royal family and most residents practiced agriculture and paid taxes to the royal family. The distance and lack of connectivity ensured that few people ventured to seek employment in Jamshedpur.²³ By the time of Indian independence – when royal estates seceded with the Indian Union – a number of small-scale industrial works were established around the Kandra region itself and Adivasis began working as labourers in these establishments (M. Dutta 1977, 92). In other words, the movement from the Kandra locality was much less when compared to people's movements from the Karandih–Hata belt. In the third case study area, the connection with Jamshedpur was even less and began in a systematic manner only after the construction of the bridge across the river Subarnarekha in 1945.²⁴ Consequently, the movements to and from Jamshedpur – both historically and today – are the lowest when compared with the other two localities.

²² This becomes important in light of my earlier discussion on how Adivasi societies in academic scholarship are typically characterised as pre-modern and often in opposition to rubrics such as industrial.

²³ As R. Tudu recalled, it took nearly four hours to walk to Jamshedpur from Kandra. During the construction of the iron and steel factory in Jamshedpur in the early 1900s, small groups of men travelled from the villages around Kandra to Jamshedpur. They left at 3:00 or 4:00 a.m. and arrived at the factory site at 8:00 am. They then worked until 5:00 p.m. and returned to the village at about 10:00 p.m. at night. Further, this journey was carried out through dense forests and men often encountered wild animals such as bears and leopards. They also had to cross the River Kharkhai by boat in order to reach the construction site in Jamshedpur since the first pedestrian bridge across the river Kharkhai was only built 1962. The gruelling schedule meant that very few people were involved in wage labour in Jamshedpur and most people preferred to stay in their villages and practice agriculture, even though it was meagre on account of the relative infertile and dry landscape in the region. Personal conversation with R. Tudu in March 2013. See Maya Dutta 1977, 92.

²⁴ In this case too, people had to cross the River Subarnarekha by boat in order to get from Ghatsila to Jamshedpur, and during the monsoons, the river flooded. So crossing was not possible and the two areas were completely disconnected. Personal conversation with Prof. D. Hansdah in July 2013.

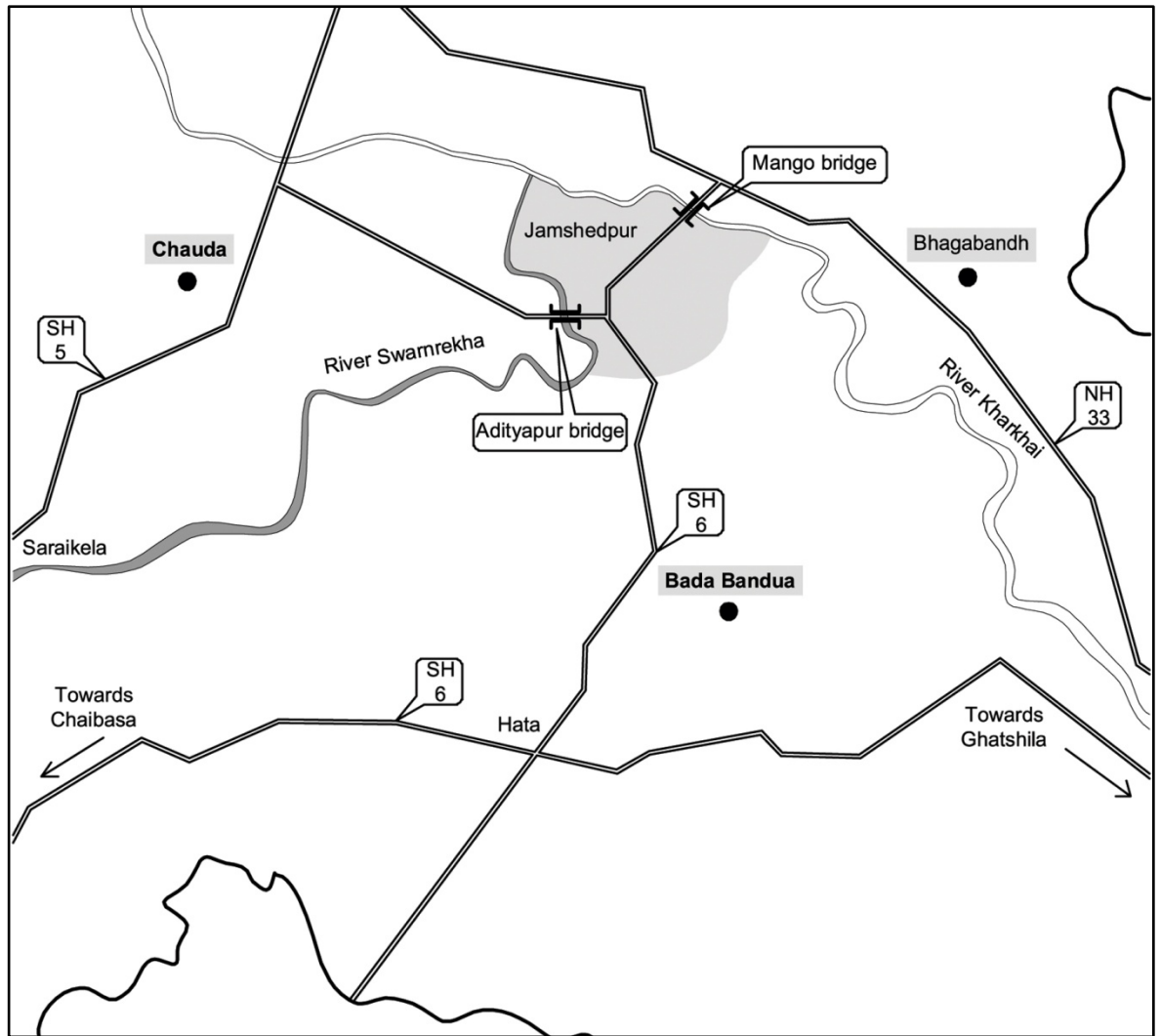


Figure 1-3: Case study localities and their connections with Jamshedpur. Note the road connection from Hata to Jamshedpur that led to better connectivity for Bada Bandua as compared to the other villages that connected after the making of bridges across the rivers.

1.3.2.2. Historical differences between case study localities

Another major point of difference between the localities is their local histories. Each of the localities belonged to different administrative centres in the mid-nineteenth and early twentieth centuries. The Ghatsila region was part of the colonial Dalbhum Subdivision under the Singhbhum district, the Karandih-Hata belt was a part of the Potka Subdivision in the Singhbhum district, while Kandra fell within the erstwhile royal estate of Seraikela²⁵ (Fig.1-4). The differences in historical administration and political boundary translated into different local histories in terms of demographic composition and land and forest legislation, and this in turn impacted Adivasi social structures and institutions in particular

²⁵ For a brief history of the formation of the Seraikela Royal State and its recognition by the British Colonial government, see Connolly 1908, 2-3.

ways. For instance, in Seraikela – where the case study village of Chauda is located - rents for agricultural land were payable to the local ruler and were collected through a network of officials designated for the purpose. After a particularly bad famine in the late nineteenth century when the Adivasi farmers were badly affected, the officials forcibly extracted rent from the villages, and often resorted to extortion and coercion to do the same. The recurrence of such events led to a general wariness about outsiders among Adivasis and the emergence of mechanisms to mediate interactions between Santal village communities and outsiders.²⁶ Among the Santals in this region even today, one member of the village council known as the *paranik* or *parmanik* is designated as the village mediator. The *paranik* is responsible for checking outsiders' credentials before allowing them to engage with the community, and is generally informed about happenings in the region. In the other two localities, though having faced situations of exploitation at different times in history, the *paranik* as an institutionalised figure is not to be found.²⁷ The point to be noted here is that the history of each locality has shaped the village communities in particular ways and have led to subtle differences institutional and social structures of Santal communities.

²⁶ This wariness towards outsiders became apparent during my fieldwork visits as well. Of the three case study villages, I was repeatedly questioned and asked for proof of identity in Chauda by one person who I eventually concluded was the *paranik*. He clearly stated that in the absence of any proof of identity, it was difficult to trust an outsider and allow them access into the village. Personal conversations with M. Murmu in March 2013.

²⁷ Personal conversation with Prof. D. Hansda, in March 2012.

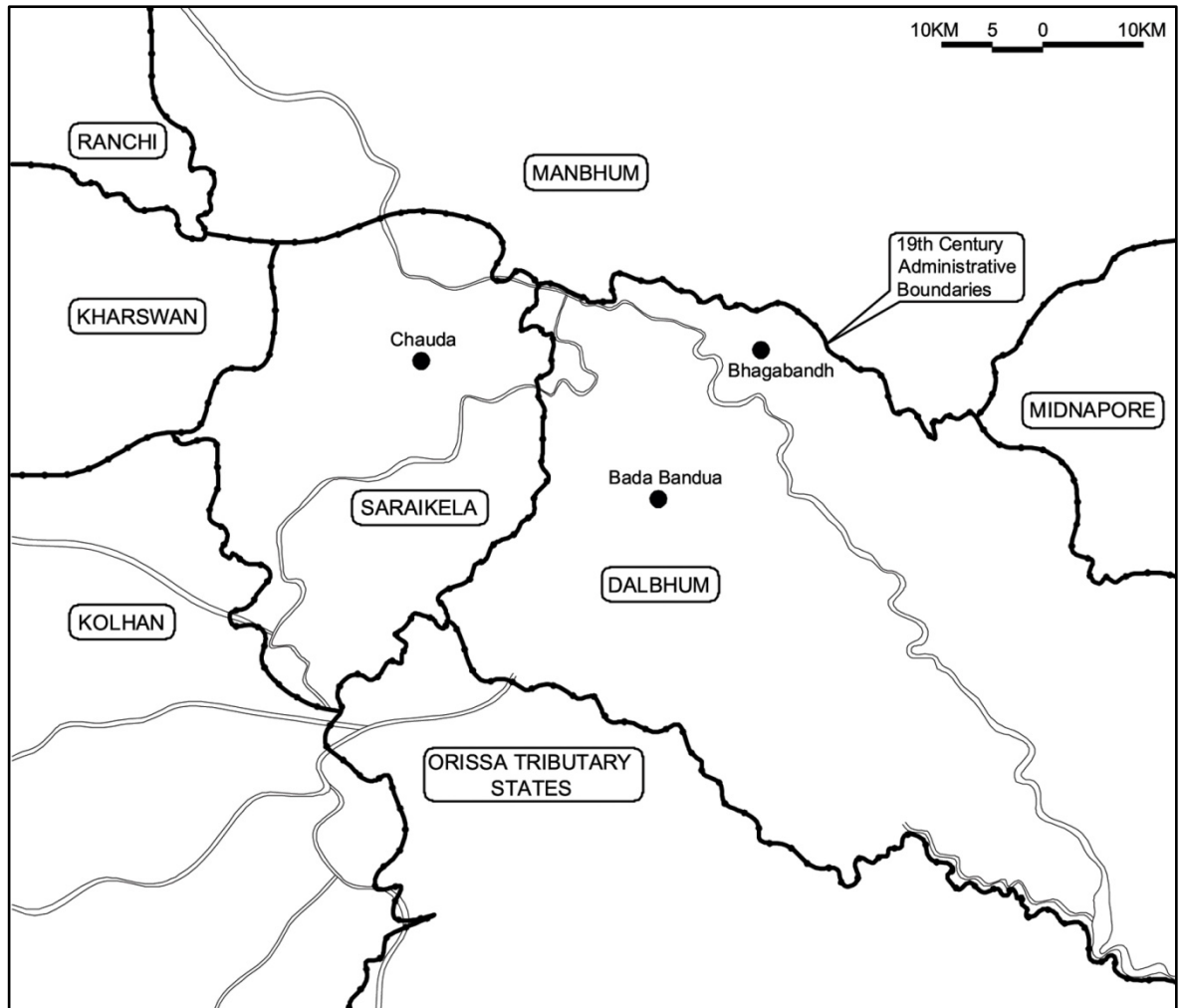


Figure 1-4: Administrative boundaries in the 19th century

1.3.2.3. Social dynamics of Santals and other communities

The demographic composition of different villages was another important criteria followed for the selection of the case studies. Most villages in this region are multi-community i.e., where Santals live together with other Adivasi and non-Adivasi communities. In order to understand the effect of these varying demographic contexts on Santal built environments, Bhagabandh was selected as an example of Santals living with Mahatos (though in separate neighbourhoods in the same village), Bada Bandua as a case where Santals and Mundas lived together in mixed neighbourhoods, and Chauda as a case with only Santal families (see Table 1-2).²⁸ The difference in demographic composition has an impact on

²⁸ With regards to the interrelations between these communities, Mahato points out that Mahatos, Mundas and Santals 'constitute a common social civilization known as Hor-Mitan (*hor* refers to man, which is a common Adivasi term of reference for themselves, while *mitan* refers to friend). The premise of this common social civilization is the tradition of 'ritual friendship' among different Adivasi communities and 'tolerance and reciprocity' in many aspects of daily and ritual life.' While it is beyond the scope of this study to go into the details of intra-community interactions, it will suffice to point out that there is considerably interaction and complex inter-dependencies between different communities in the region. See Mahato 2000, 32.

leadership structures, interactions and everyday life, access to and control of resources, among other things. More specifically, comparing the social dynamics in each locality helped explore similarities and differences in built forms, practices and their meanings for Santals in different locations and for Santals vis-à-vis other proximal communities. It helped delineate what aspects of the built environment may be considered as uniquely Santal vis-à-vis aspects that were generic to the region or locality.

Parameters	Bhagabandh in the Ghatsila region	Chauda in the Kandra region	Bada Bandua in the Karandih-Hata belt
No. of households	Approximately 150	Approximately 100	Approximately 200
Communities	Santals and Mahatos in nearly equal numbers with a few cow-herding families who recently migrated into the area	Only Santals	More than half the population is Munda, rest are Santals and a few Gop families
<i>Tolas</i> (neighbourhoods) ²⁹	Four <i>tolas</i> : Jahira Tola and Dangarkulhi (with Santal families), Mahato Tola (Mahato families), Shankardih (cow-herder families)	Four <i>tolas</i> (Santal families only)	Three <i>tolas</i> (Santal, Munda and Gop families living together in each <i>tola</i>)
Original settlers of the village ³⁰	Santals	Santals	Mundas
Leadership in village ³¹	Santal <i>manjhi</i> (and village council) as leader of entire village; Mahato leader specific to Mahato Tola	Santal village council	Munda headman as leader of entire village; Santal <i>manjhi</i> recently appointed leading to conflict within village community

Table 1-2: Social dynamics in case study villages

Three points become clear from the above discussion. First, the economic geography and linkages to the urban centre in the region have been instrumental in shaping livelihood choices in the villages. The different temporal cycles of seasonal agricultural work and daily wage labour affect, for instance, cycles of everyday domestic practices and house

²⁹ The definition and formation of *tolas* is discussed in detail in Chapter 7 on ‘Structure of settlement and senses of community.’

³⁰ Original settlers refer to the group of people who, at some point in the past, first cleared the land to build their homes and practice agriculture.

³¹ Santal communities are governed by a *manjhi* (headman) together with a council comprising four to six other members. For further reading on Santal leadership structures, see Somers 1977.

building and maintenance. Second, differences in administration structures in the past have influenced Adivasi relationships with other communities, and with particular centres of power such as the Seraikela Royal family. In the case of Santals in the case study villages, this directly shaped Santal institutions (such as the village council) in unique ways in different localities. Third, different demographic profiles of different villages shape intra-village Santal social and religious structures in particular ways. This in turn affects land owning and house building practices in different villages. In short, comparing the economic, historical and social contexts in each of the case study localities reveal the contingencies that have shaped Santal architecture in different localities in particular ways.

1.4. Fieldwork and methodology

The fieldwork for this project was conducted over a three-year period from 2012 to 2014. There were different stages to the fieldwork, which was necessary considering the comparative approach (which required the careful selection of three villages) and the interdisciplinary focus (which entailed the used of different fieldwork methods) (Table 1-3). Towards the end of the study, it became clear that the fieldwork began with an architectural emphasis (on account of my own training) but developed to incorporate other methods and reflections as the study progressed.

Fieldwork phase	Preliminary fieldwork – Year 1 of study	Primary fieldwork – Year 2 of study	Post-fieldwork discussions and reflections – Year 3 onwards
Time and duration ³²	Reconnaissance visits in early 2012 to identify case studies; Follow up visits for preliminary architectural documentation in mid-2012	Between January and April 2013	Every three to six months from mid-2013 to end of 2014
Locations	Reconnaissance in eleven villages across the east Singhbhum region; Follow-up visits to five villages narrowed down as potential case studies	In selected case study villages of Bhagabandh, Chauda and Bada Bandua	Mostly in Bhagabandh, and with Santals and Santal related institutions in Karandih and Jamshedpur

³² See appendix for details of visits and summary of conversation with various informants.

Methodological choices	Interviews and literature survey to establish localities; architectural documentation	Detailed architectural documentation; ethnographies of everyday life; recording oral histories of villages and the region	Discussion on key findings in different chapters
Tasks/ activities	Architectural drawing and photography; preliminary analysis of architectural layouts to establish key similarities and differences	Architectural drawing and photography; interviews; video recording of domestic activities; participatory methods – guided photography, drawing of dwellings and settlement by village children, public exhibition of architectural documentation in village street ³³	For thesis: Building an archive of fieldwork material and writing of thesis; On fieldwork sites: Sharing of and discussion over visual material such as posters and architectural drawings

Table 1-3: Fieldwork stages and methodological choices

1.4.1. Preliminary fieldwork and architectural documentation

In the first stage of preliminary fieldwork, I visited a number of villages in the localities, which were identified using economic, historical and social factors as discussed above. The criterion for selection of case study villages was largely architectural, i.e., I actively searched for differences in architectural features in different villages with the idea that differences in each locality produced different kinds of built environments (Fig. 1-5 and Table 1-3). I documented – through architectural drawings and photographs – a few houses in each village that I visited and conducted a preliminary analysis of layout and designation of spaces for specific activities, roof forms, and wall paintings. The layout and designation of internal spaces served to reveal the differences in the basic constitution of Santal dwellings and differences in layout may be usefully explored to develop themes and variations in the making of Santal dwellings (Fig.1-7). The roof as an architectural feature became important since different types such as pitched and gabled roofs were documented

³³ The different documentation methods used during fieldwork are discussed at the beginning of each chapter (Chapters 3 to 6) and the participatory methods are discussed in Chapter 7.

in different localities (Fig.1-8). The making of these roofs entailed different technological abilities and suggested that construction processes may have evolved differently in different localities. Similarly, differences in wall paintings suggested different techniques and sensibilities that may have informed how dwellings are decorated and for what purpose (Fig.1-9). In this way, these architectural features were identified as gestures that represented subtle differences in Santal conceptions of space and place in each locality, and by selecting them as case studies I could usefully compare Santal built environments at different places.

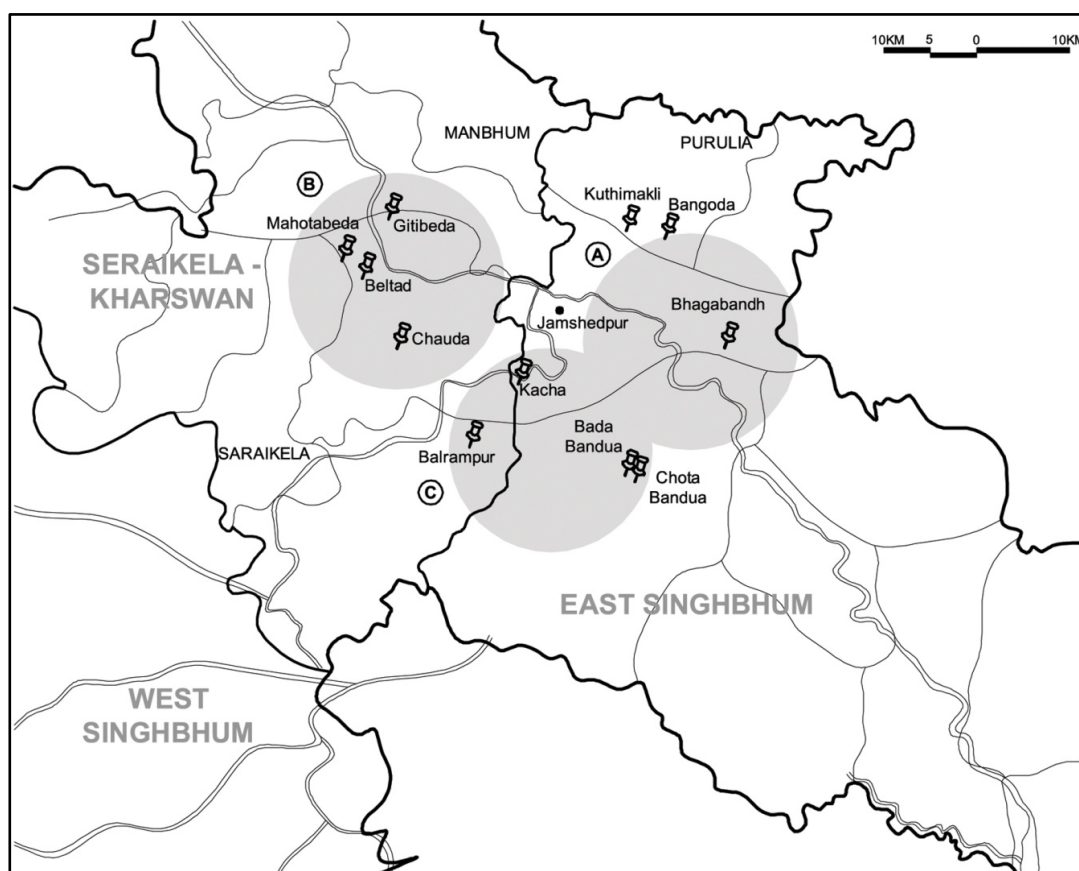


Figure 1-5: Localities and villages identified during preliminary fieldwork

	Bhagabandh	Chauda	Bada Bandua
Basic plan organization	Rooms (<i>orak</i>) organized around a central courtyard	Rooms (<i>orak</i>) organized around a central courtyard	<i>Orak</i> (rooms) organized around a central courtyard; one central room with verandah all around
Size of house	Large houses and large backyards	Large houses and large backyards	Comparatively small houses with very small or no backyards
Roof	Simple pitched roofs	Gable roofs and simple pitched roofs	Gable roofs and simple pitched roofs

Front elevation	Band of colour- mostly white, ochre, red, black and green; wide palette of colours and artificial paints used.	Geometric patterns within one of the bands; colours are white, ochre, red, black and blue; wide palette of colours and artificial paints used.	Bands of colour- mostly white, ochre, red and black; limited palette and mostly naturally occurring colours used.
Courtyard elements	Two <i>chulhas</i> and <i>tulsi</i> platform	Two <i>chulhas</i>	Two <i>chulhas</i> (mud stoves)
Family size and type	Extended families sharing single courtyard house	Nuclear families in single courtyard house	Extended families sharing a single courtyard house

Table 1-4: Features observed during preliminary fieldwork

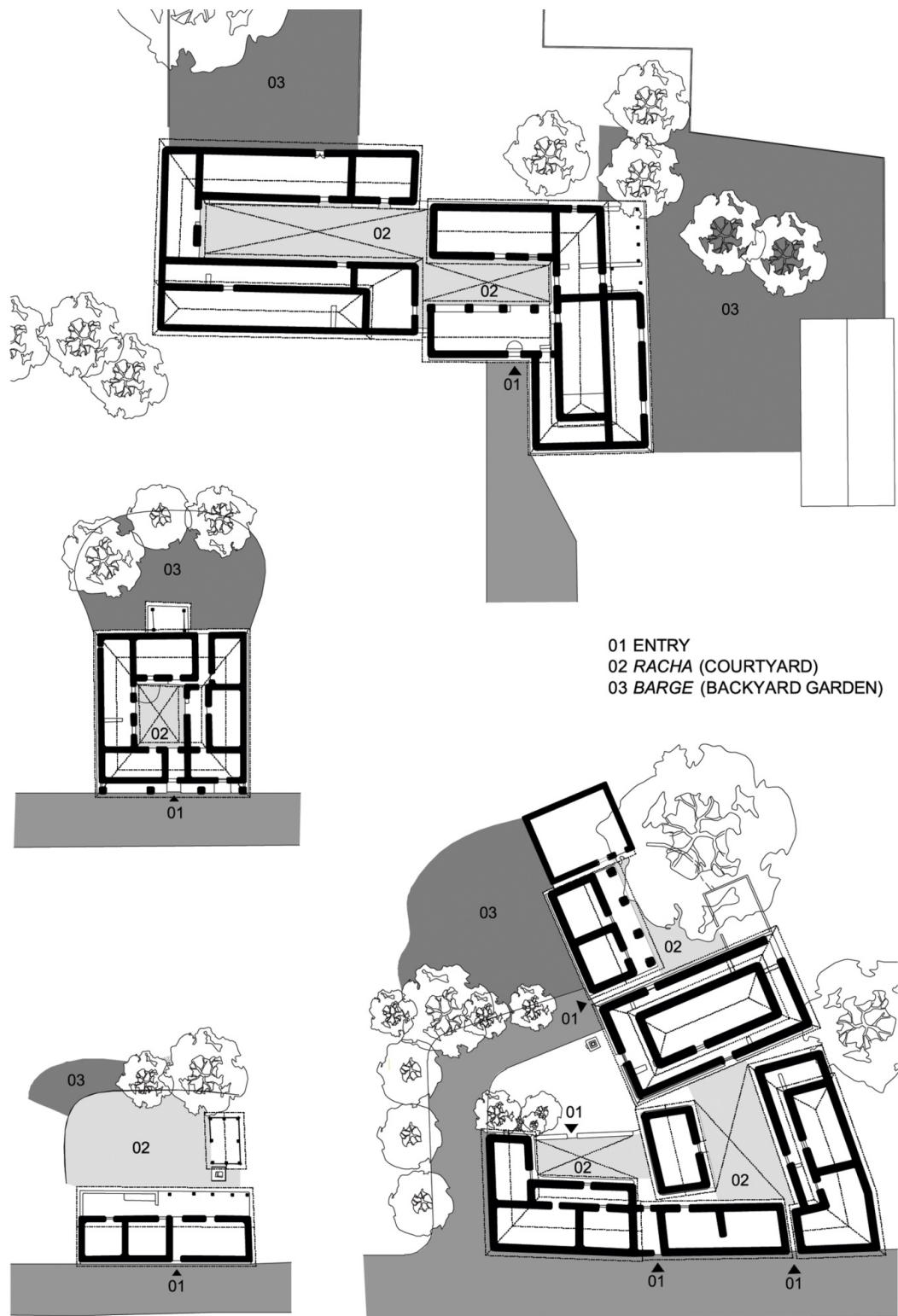


Figure 1-6: Dwelling layouts observed during preliminary fieldwork in 2012. Note the variation in sizes and configurations of built volumes and open spaces.



Figure 1-7: Differences in roofs observed during preliminary examples. From top to bottom – simple pitched roof, L-shaped roofs and hipped roof.



Figure 1-8: Differences in wall paintings observed in preliminary examples. From top to bottom – bands of colour, geometric motifs, and floral motifs.

That Santal houses may be different and, therefore, influenced by local conditions in different contexts had already been established prior to starting fieldwork when a comparison of Santal houses in the Singhbhum region and those in the neighbouring state of West Bengal revealed that they were distinctly different.³⁴ For instance, I found that Santal houses in Singhbhum typically had spaces organized such that they define a central courtyard. Santal houses in Bolpur in the neighbouring state of West Bengal too have a courtyard, which is typically defined using a compound wall (Fig.1-10). Also, in the Bolpur houses, an entrance is created in the compound wall, through which one enters the house from the street. In the Singhbhum houses, the built volumes are themselves located along the central street and one enters the house through a vestibule. These differences suggest different notions and ways of marking domestic space and different relationships between the domestic spaces and the public realm of the street. Further, the most important volume in Santal houses in Bolpur, i.e. the space where the *bhitar* (the interior space of worship) is located is a double storied structure and is usually the largest volume in the house. In Singhbhum however, all the volumes of the house have nearly similar dimensions and the *bhitar* is not distinguishable from the other spaces when seen from the outside. Also, Santal houses in Bolpur are typically not elaborately painted while in Singhbhum, the painting and plastering particularly on the front walls of the house is renowned as a distinctive feature of Santal domestic architecture (Dey 2007, 67). These differences in architectural features highlighted the fact that Santal houses in different localities varied and that one needs to examine local conditions that may account for the variations in Santal built environments. Having conducted preliminary fieldwork and identified three case study villages, the next stage comprised of detailed architectural documentation of the case study villages, ethnographies of everyday life and oral histories to explore memories and experiences of the past.

³⁴ For further reading on Santal houses in Bolpur, see Dey (2007).

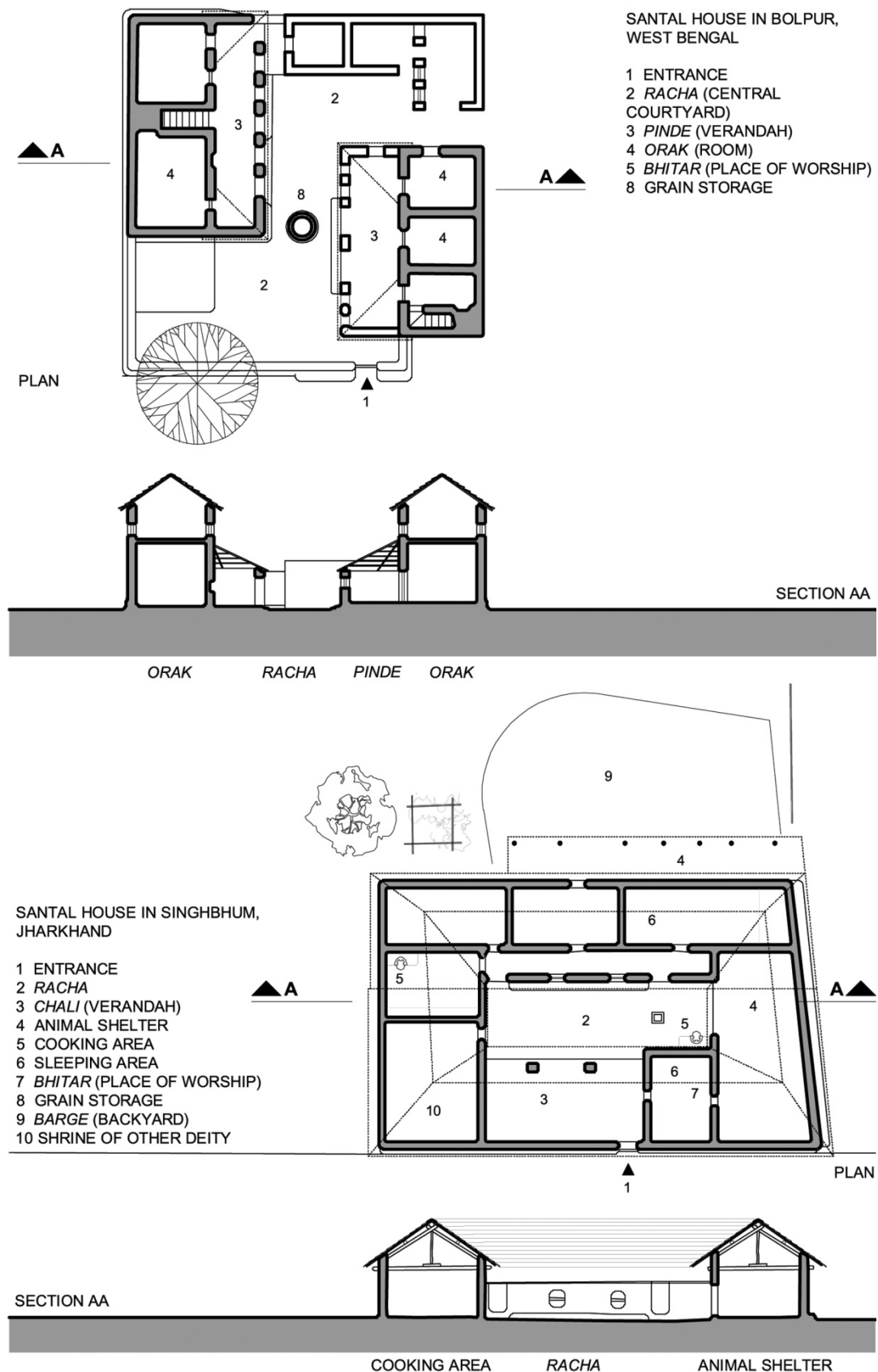


Figure 1-9: Comparison of Santal houses in Bolpur, West Bengal and in Singhbhum, Jharkhand. Note the double storied volumes and the central circular grain store in the Bolpur example, both of which are distinctly different from the Singhbhum example.

1.4.2. Primary fieldwork

Having selected the case study sites, I proceeded with primary fieldwork, which comprised of detailed architectural documentation, ethnographies of everyday life and recording oral histories to explore Santal memories and experiences of the past. These fieldwork periods were of longer duration and I spent nearly one month in each village. This took place between January and April 2013 since that period is a break in the annual agricultural cycle in the region and many villagers are present in the village. During the agricultural season, both men and women are away working in the fields and are not available for conversation or discussion. This was also true of daily wage labourers who were away from their homes from early morning until late evening and were typically unavailable for conversation.

The methodological choices made during fieldwork are linked to the interdisciplinary approach used in the study. As mentioned in the introduction, each method supplemented each other and provided a different way of engaging with Santal senses of space and place. This is seen clearly in the analysis where, for instance, when examining the transformation of Santal dwelling layouts in Chapter 3, architectural documentation forms the basis for discussion, but the oral histories narrative provide key insights that helped identify specific moments of transformation. To analyse wall paintings and other domestic art practices (in Chapter 5), the ethnographic narratives of how the paintings or floor drawings are done today provide the cues for understanding shifts in practice. In the chapter on gender and the structuring of domestic space, the ethnographic narratives are contextualised against my own experiences of visiting Santal dwellings in order to examine notions such as privacy thresholds and gendered access. In short, the analysis in each chapter employs combinations of architectural documentation, ethnography and oral history in order to develop some aspect of Santal architectural history. Since it is nearly impossible to offer an overview of these processes of analysis, the choice of methods and their contribution to the analysis is discussed at the beginning of each chapter.

1.4.3. Post-fieldwork phase: Participatory research and reflexivity

In addition to documenting built forms and Santal everyday practices, I was also interested, in the villagers' articulations of aspects of the built environment that were significant to them and why. This took the form of various participatory visual methods that were employed during fieldwork. It added another dimension of the voices of Santal villagers to the architectural history narrative that was being constructed. By using different

participatory visual methods such as guided photography, drawings by children, and a public exhibition of architectural documentation where villagers engaged with the self-representation of their environments, Santal villagers become explicitly recognized as social agents and their own intentions and ideas became an important frame for examining their places and practices. These engagements positioned the villagers not merely as informants, but in better measure, as research participants within this project.

A corollary to these participatory encounters was that my own ethnographic presence in the village also became a subject of analysis. Just as villagers' actions and intentions were both significant for understanding the production and significance of their built environment, so a reflection on the modalities of my engagement in the field form an integral part of this study. In the later chapters, I reflect, for instance, on how my gendered presence influenced fieldwork interactions and how my training as an architect led to a prioritising of visual methods (over ethnography or oral history) as a medium to understand Santal conceptions of space and place.

A final contribution of the participatory fieldwork was that it opened up a new avenue for the later stages of research as well. Drawing from the inputs from the participatory encounters, at various stages of the project, discussions about intent, method and output were held with different Santal villagers. So what began during the primary fieldwork phase, continued nearly till the end of the study when I was analysing writing up the thesis.³⁵ Conversations with Santal villages in this stage were an opportunity to discuss and reflect on various findings and conclusions. It became increasingly evident that this process of sharing and reflection not only was a method but, more significantly, developed into an ethical position that guided both fieldwork and the writing up of this study. When presenting the analysis and inferences in each chapter, I have incorporated villagers' responses and reception of my ideas as part of the narrative. The process of recognizing and respecting the villagers' responses and preferences became a guiding principle in terms of the ethics of ethnographic and architectural documentation in this study and shaped my approach to Adivasi architectural histories as a whole.³⁶

³⁵ For a detailed list of interactions with various Santal villagers, see Appendix 2.

³⁶ Individual villagers have been anonymised through the use of initials in place of their first names. Santal family names are common to all members belonging to a clan and therefore did not need further anonymising.

1.5. Structure of the study

The range of intentions and method in this study translate into a range of analytical foci in the following chapters. In the next chapter, I elaborate on the key theoretical frameworks that are employed in this study. I discuss the ways in which people and their relationship to places has been studied in vernacular architecture studies and anthropology. I also establish why phenomenology becomes an important theoretical and methodological foundation for this study. I then analyse different aspects of Santal built environments and practices, beginning with an architectural analysis of dwelling layouts in order to build a picture of what constitutes Santal dwellings in Chapter Three. Further, by comparing the conditions in each case study locality, I collate a trajectory of transformation of Santal dwellings in the Singhbhum region since the mid-nineteenth century. The fourth chapter focuses on construction materials and technology. I use the narrative of transformation developed in the previous chapter as a frame of reference to argue that the shift is not just of dwelling form, but, more broadly of the repertoire of ways of making dwellings. The fifth and sixth chapters focus on everyday life and practices through which domestic places and territories get inscribed. The emphasis shifts from the dwellings as architectural forms to dwellings as lived places. The discussion also moves beyond the dwelling to the wider settlement as the settings of various aspects of everyday life. In the seventh chapter, I then discuss senses of settlement in relation to various definitions of community groupings in the village. The eighth chapter reflects on the fieldwork interactions and particularly on the participatory visual methods that I used in the field in order for villages to engage with this research project. I focus on the relationships between fieldwork interactions and the development of this narrative as part of a broader reflection on the production of architectural historical and anthropological knowledge. In conclusion, the architectural history narrative that emerges from this study asks for a reconceptualising of relationships between places and people. I suggest that these relationships, and therefore the built environment, cannot be defined by a static conception of tradition but must be seen as dynamic meshwork comprising various trajectories of movement and lines of influence.

2. A phenomenological approach to Adivasi architectural history

2.1. Introduction to theoretical background

The relationship between people, places and practices has been the subject of many disciplines including architecture, anthropology and material culture studies. There are however differences between the disciplines in terms of emphasis and trajectories of development of ideas. In this chapter, I outline how the equation between people, practices and built environments has been explored in different disciplines in order to clarify how and why this study is interdisciplinary in nature.

2.2. People-place relationship in vernacular architecture studies

Within architectural discourses, a study of this kind typically falls under a category of vernacular architecture, which is broadly concerned with built environments produced primarily by users themselves.¹ A glance at the genesis and development of vernacular architecture discourses, however, reveals the fluidity of the category. The term vernacular architecture was ‘first used in the nineteenth century by architectural theorists to refer to traditional rural buildings of the pre-industrial era’ in North America (Upton 1983, 262). It was subsequently used in various contexts with building practices and histories of development distinctly different from the American one, but the implied association of ‘traditional’ with the ‘pre-industrial’ and the ‘rural’ remained. It was the British and American Arts and Crafts revivalists prior to World War 1 who set the agenda for modern-day vernacular architecture studies.² As compared to the formal and aesthetic qualities that dominated architectural discourses of the time, the revivalists emphasised historical and cultural aspects of such built environments (Davidson 2012, 212). The historical strain sought to ‘understand architectural change in detail by relating it to patterns of social structure, economic differentiation and craft tradition’ while the cultural tradition delved into ‘large patterns, common values, and shared perceptions through typological, statistical, or geographical analyses of architecture’ (Davidson 2012, 113). This architecture

¹ While this is a broad definition and leaves many aspects open-ended, it establishes a degree of difference from environments that are produced through specialised forms of building knowledge, such as buildings rooted in canonical traditions or those made by professional architects. It must be mentioned however that degrees of specialization are found in most building traditions and the idea of users may itself be a multivalent one. What is important to note here is that vernacular architecture as a category typically assumes a closer correlation between society, environment and built forms as compared to other forms of architecture.

² The British Arts and Crafts revivalists were a group of people who attempted to revive craftsmanship related practices during the advent of industrialization in nineteenth century England. See Davidson 2012, 113.

was however segregated from academic architectural discourse since ‘the vernacular was not academic, it was not modern, it was not aesthetic- therefore it did not belong’ (Davidson 2012, 114). In other words, vernacular architecture had found a foothold within architectural discourses but did not yet warrant any serious academic engagement.

It was not until the late 1960s that vernacular architecture featured significantly within the academic domain particularly through the writings of Bernard Rudofsky, Paul Oliver and Amos Rapoport.³ In a comparative critique of these three works, Crysler (2003, 75) points out that the renewed interest in vernacular architecture may be attributed to a reactionary stance of each of these scholars to the modernist ‘blight’ that characterised architectural thinking and production at the time. They sought to draw attention to ‘so-called traditional societies’ i.e. ‘non-Western, non-professional, non-industrialized’ people and places as natural, ‘well-crafted buildings’ that blend symbiotically with the surrounding landscape (Crysler 2003, 75-76). Rudofsky’s project titled ‘Architecture without architects’ was an exhibition of black and white photographs of vernacular settlements from around the world.⁴ Crysler argues that Rudofsky intended to portray the ‘simple uncorrupted essence’ of traditional settlements as instances of ‘true functionalism and timeless modernity’ and as being in contrast with the ‘excesses of [architectural] modernism’ at the time (Crysler 2003, 76). Paul Oliver, on the other hand, ‘hoped that the “documentation and preservation” of “primitive and vernacular communities” would inspire a shift towards “culturally responsive” design within the community of architects.’⁵ It was Amos Rapoport, however, whose book attained an almost textbook like status as he described a ‘fully developed model of an ideal traditional society in the abstract’ and then showed ‘how that theory can be operationalised in field research’ (Crysler 2003, 77). Rapoport translated the complex relationships between architecture and culture into a usable framework comprising parameters such as climate, technology, basic needs, defence and economics. He suggested that the values of communities became formalised as ‘schemata’ that were then translated into built forms in an attempt to ‘recreate, however imperfectly’ notions of an ideal landscape (Crysler 2003, 77). This implied that communities followed rules - which were ideally handed down from one generation to the next - that allowed

³ The works refer to Rudofsky, ‘Architecture without architects’ 1964, Oliver, ‘Shelter and society’ 1969 and Rapoport, ‘House form and culture’ 1969 respectively.

⁴ Rudofsky’s book was based on his earlier exhibition held at the Museum of Modern Art’s New York galleries. Both the book and the exhibition proved very popular, prompted by ‘the way it tapped into rising popular and professional criticisms of architectural modernism’ (Crysler 2003, 76).

⁵ Oliver as quoted in Crysler 2003, 77.

them to create ‘distinct cultural landscapes’. The evaluation of built environments then was to be done in terms of the correspondences between ideal notions and material realities (Crysler 2003, 77-78). In other words, vernacular architecture forms were concretisations of a community’s values and any contact with an outside world could only prove to be a corrupting influence. It is this notion of timelessness, the fixity of meaning and the seamless transmission of value that may be considered as one of the most problematic aspects of early vernacular architecture studies.

Compared to the deterministic position of these early works, recent scholarship has undergone significant transformation in terms of content, method and as an episteme more generally.⁶ AlSayyad discusses some of these emergent concerns when he asks how one may define vernacular architecture in the twenty-first century and suggests that the term itself has ‘etymological and epistemological limitations’ (AlSayyad 2006, xvii).

‘Etymologically’, AlSayyad says, ‘for anything to be considered vernacular, it was always assumed that it must be native or unique to a specific place, produced without the need for imported components and processes, and possibly built by the individuals who occupy it’ (AlSayyad 2006, xvii). Epistemologically, vernacular was largely posited as being in opposition to modern and therefore, buildings and building traditions classified as vernacular are considered as belonging to a pre-modern past. The conditions of our times challenge these assumptions in various ways. For instance, given that culture and traditions are becoming less ‘place-rooted,’ what gets considered as vernacular needs to be ‘recalibrated to reflect these changes’ (AlSayyad 2006, xvii). Today, a diversity of built environments, attendant concerns and approaches that get discussed as vernacular architecture have increased. While it is not possible to identify any dominant protagonist for this intellectual shift, but a few examples of scholarship in journals may highlight the range of critical engagements now taking place.

One site where the shift in discourse is evident is the journal ‘Traditional Dwellings and Settlement Review’, which was founded in 1989 following an international symposium on the subject at the University of California at Berkeley.⁷ While it was initially imagined as a site primarily for scholarship on traditional built environments, it has, in the past decade, ‘expanded to include critical engagements with the notion of tradition itself’ (Moffat 2009,

⁶ See, for instance, Asquith and Vellinga (2006) and Maudlin and Vellinga (2014).

⁷ From IASTE website - Berkeley University of California, *IASTE*, November 17, 2014, iaste.berkeley.edu (accessed November 17, 2014).

8). This began by questioning ‘the value of authenticity as an attribute of tradition’ and then in terms of a shift towards the political motivations behind the articulation of traditions (Moffat 2009, 9). The most recent conference of the IASTE focuses on questions of authorship and agency in the articulation of tradition by asking the central question of “Whose tradition?”. From a ‘relatively benign’ concern with traditional environments as responding to basic needs or creating ‘value and meaning through a common sense of artistry’, architectural discourses now are engaging with how ‘larger social and political currents effect the shape of built environments (Moffat 2009, 9)’. IASTE research today equivocally suggests that ‘all cultures are to some extent hybrid. And it has revealed how traditions migrate and change over time and distance, as societies adapt building elements from one another, deal with shifting economies and environmental crises, and endure cultural and political conflict and restructuring’ (Moffat 2009, 10).

A similar shift is evident in the proposed second edition of the *Encyclopaedia of Vernacular Architecture*, where one finds vernacular architecture is discussed not just in terms of geographic or ethnic categories but in terms of themes that underlie contemporary traditional environments in general.⁸ The proposed encyclopaedia will have two new sections – one on consumption of traditional environments including issues of adaptation, appropriation, conservation, inspiration and representation, and the second on sustainable development including discussions on environmental sustainability, disasters, population and globalization. These new dimensions of discourse clearly indicate that it is no longer adequate to discuss vernacular architecture in anecdotes that describe local conditions and peculiarities. It has become imperative to develop a global perspective on vernacular architecture and foreground processes and relationships that define the production of such environments. These developments lie in complete contrast to the deterministic approach of early vernacular architecture studies, where culture and society were considered as the fixed stratum from which built forms drew their meaning, current scholarship recognizes a meshwork of factors in the interplay of which built environments are produced, used, transformed and become meaningful. This study draws from and aims to contribute to these developments in vernacular architecture discourses since the social, environmental and political conditions in Singhbhum region no longer remains a mute backdrop or an irrevocably lost idyllic past but a complex transformative milieu within

⁸ See <http://architecture.brookes.ac.uk/research/pci/encyclopedia-of-vernacular-architecture.html>.

which architectural shifts may be seen and narrated, documented and interpreted and evaluated and analysed.

2.3. Space and place in anthropology

Given that notions of tradition and structures of culture and society are an integral part of discourses on vernacular built environments, one finds a number of anthropological works that share this area of study with vernacular architecture scholars.⁹ Before moving to specific works, however, it is useful to trace how space and place have featured more generally in anthropological enquiries. Just as culture, social structure and meaning were considered as fixed and unchanging within early architectural discourses, space in early anthropology was a 'kind of neutral grid on which cultural difference, historical memory and societal organization [were] inscribed' (Gupta and Ferguson 1992, 7). Spaces and cultures neatly mapped onto to each other and were considered as self-contained and discrete. In other words the links between cultures and the spaces they occupied was considered an unproblematic one. This neutral conception of space had repercussions on how people, communities, societies and localities were imagined and, further, on how the role of the ethnographer was constructed in comparison to inhabitants and migrants. As Appadurai points out, sites of ethnographic study were imagined as geographically bound entities, and the perceptions and practices of the inhabitants were considered bounded as well (Appadurai 1988a, 37). In contrast to the sense of immobility of the (indigenous) inhabitants of a place was the relative mobility of the anthropologist (Appadurai 1988a, 37). This line of thought presupposed the idea of culture as a 'whole' where the intellectual operations of the inhabitants were tied to their local situations (Appadurai 1988a, 38). The anthropologist, on the other hand, could maintain a distance and think about the relationship between inhabitants and their surroundings in an abstract manner. This mobility put them on a higher plane of knowledge as compared to the inhabitants who were presumed to know only of their surroundings and could only do what the place permitted them to. This position has come under criticism in the past three decades and it has been argued that such 'incarcerated natives' were products of the anthropological imagination (Appadurai 1988a, 39). People, no matter in which geographic corner of the globe, have always been affected by the knowledge of other worlds through migration,

⁹ For recent works in this area, see Buchli (2013) and Ingold (2013).

trade conquest or material production networks.¹⁰ The realization of the complex relationships between people, places, localities and regions lies at the core of ethnographic enquiry in this study. It flags up the need to study the multifarious networks of interaction and engagement between people and their environment in order to understand how dwellings and settlements simultaneously become the produced objects of and settings for Santal everyday life.

It is useful at this point to consider some anthropological works that went beyond static conceptions of space as a neutral background and critically explored the relationship between people and the built environments they occupy. Here, I discuss three works that each present different foci of explorations and were particularly important in providing inspiration to this study. The first is Roxana Waterson's work, which outlined an anthropological approach to Southeast Asian architecture and offered inspiration and intellectual direction in the early stages of this study (Waterson 1990). Waterson focuses on dwellings among different indigenous communities in Southeast Asia in order to understand kinship structure. She argues that the production and use of dwellings is central to the tracing, and therefore understanding of kinship in the region. More specifically, Waterson discusses regional influences and shifts in architecture, society and processes of signification to argue that the equation between these entities is a fluid and dynamic one.¹¹ The idea of historical, temporal and regional continuities between architectural forms and meanings is clearly established and forms an important framework in this study.

Another important anthropological enquiry focusing on built environments is Henrietta Moore's book, which as the title - *Space, text and gender* – suggests, is concerned with how spaces may be 'read' in order to understand the logic that underlies the structuring of space. What is particularly important in this study is Moore's assertion that it is not enough to analyse space as a 'symbolic code and/or as a reflection of social categories' but that one needs to consider 'social change' and 'social actors' as well (H. Moore 1986, 2). She argues that in order to understand the structures of signification in built environments, one needs to reintegrate the 'intentions, strategies and meanings of social actors with the

¹⁰ See for instance an ethnographic account of the complex interactions of the San peoples in Africa, who were largely assumed as living isolated lives in the African bush in Wilmsen 1989, 2.

¹¹ For instance, at one point, Waterson discusses mausoleum structures that migrants build back in their native villages to commemorate all ancestors of the builder's clan. The new forms – such as idols wearing western style clothes - and materials such as concrete used in these structures suggest things get incorporated into indigenous architectural and symbolic structures. See Chapter 10: Migrations in Waterson 1990, 229-248).

production and reproduction of symbolic forms' or, as in the case of this study, with the meanings of spatial order (H. Moore 1986, 6). The concept of social actors is central to this discussion. While Moore does not offer an explicit definition of social actors, it is evident that she refers to individuals, their practical actions considered together with the knowledge and intentions behind those actions. She argues that rather than considering people as merely subordinate to the workings of an overarching system, or, rather than thinking of social action as entirely governed by the internalisation of rules or norms, it is important to consider individual practices and the actors ascribed to them.¹² The idea of practice itself as discussed by Moore refers to de Certeau's writings, which, in simple terms, refers to how people operate and is therefore concerned with both overarching structures and how people negotiate these structures in everyday life.¹³ Practice then goes beyond just action or use and delves into 'ways of doing' in relation to a dominant order (de Certeau 1988, xii-xiii). These concepts become important in this study since they underscore the notion that meaning in the built environment is invoked through practice, and it is important to consider actors and their actions in order to understand the built environment.

Using a slightly different lens of enquiry, Marchand's work among mud masons in Yemen and Mali focuses on the transmission of building knowledge through a system of apprenticeship (T. H. Marchand 2012 (2001)). He explores building practices, organizational structure and social relations among the builders and the transmission of knowledge from experienced builders to young apprentices in order to understand the production and spatial significance of built forms (T. H. Marchand 2012 (2001), 2). While Marchand's work focuses entirely on the 'making' of traditional environments, the two studies discussed earlier focused on architectural forms and on the structuring of space through use in order to explore questions of meaning. By examining builders' intentions and processes by which skills and cognition develops, Marchand argues that the masons constantly negotiate the boundaries of tradition through creativity and innovation and that it is through a combination of these two factors that the local built environment remains dynamic and meaningful (T. H. Marchand 2012, 8). Traditional built environments, from this point of view, must be considered as 'a set of meaning making practices rather than a

¹² By arguing thus, Moore critiques semiotic and structuralist perspective, which take a 'reductive' view of social action and actors by considering them subordinate to the larger structures within which they operate. See Moore 1986, 5-6.

¹³ See Michel de Certeau, *The practice of everyday life* (Berkeley and Los Angeles: University of California Press, 1988).

landscape of physical objects to be conserved for their unique forms or some inherent value' (T. H. Marchand 2012, 8). In short, Marchand emphasizes architectural production as the lens through which meaning may be studied as compared to the dominant perspective of examining traditional environments as forms or spaces alone.

These anthropological works and the vernacular architecture studies discussed earlier have both been concerned with social and material analysis in different ways and resonate with emerging concerns in material culture studies.¹⁴ As Miller (1998, 3-5) points out, material culture studies straddle disciplines and bring to the fore the complex nature of relationships between material objects and their contexts. He argues that it is useful to focus on 'the diversity of material worlds, which becomes each other's contexts rather than reducing them either to models of the social world or to specific sub-disciplinary concerns such as the study of textiles or architecture' (Miller 1998, 3). This relates to my earlier point about the intertwined nature of social and spatial analysis and how neither may be usefully separated as discrete lines of enquiry. Miller positions material culture as a 'means' to engage with cultural life as a whole, and thereby overcome the reductionism of strictly social or artefactual analysis. In addition to the blurring of analytical boundaries suggested by Miller, what is also particularly important is the call to recognize the 'diversity' and 'specificity' of the material domain in order to explore 'the way form itself is employed to become the fabric of cultural life' (Miller 1998, , 6). Similarly, in this study, I examine a range of things that constitute Santal built environments – spatial layouts, building structure, domestic decoration, and objects of everyday use – and frame these within ways of use and making in order to construct a narrative of Santal built environments.

2.4. Place and phenomenological perspectives

From the above discussions, it is clear that the ways in which the relationships between people, practices and built environments have been studied vary considerably in focus and method but also present certain similarities in recent conceptual developments. In a study of Adivasi built environments then, one may draw correlations between architectural forms, social structures, material contexts and ways of making. One of the ways of bringing these diverse possibilities of enquiry together is to employ the idea of senses of place and lived experiences of Santals in Singhbhum. Place, as a phenomenological concept, situates people and their sites and processes of inhabitation into inextricable

¹⁴ See, for instance, Harvey (2009) and Miller (2012).

relationship with each other (Seamon and Mugerauer, 2012 (1985); Otero-Pailos 2010). Below I outline some of the phenomenological perspectives that have shaped the theoretical and methodological basis of this study.

Philosophical writings on place are an important starting point since they provide a conceptual framework that situates sites and people in a dialectic relationship with each other. Central to this relationship, from a phenomenological point of view, is the role of perception, where perception is much more than mere sensing (Casey 1996, 18). Rather, it is synaesthetic, an experience of the whole body sensing and moving through a place (Casey 1996, 18). It is also an inherently complex interaction in that the act of perception is not merely the taking in of stimuli that are then processed internally to make them sensible or meaningful. Rather, the sensing body perceives things that are already meaningful and 'come configured' in 'highly complicated ways' (Casey 1996, 18). In terms of the concept of place, what this means is that people live in places and therefore know or become familiar with the attributes of the place. As a corollary however, the place becomes discernable on the basis of the qualities perceived by people. As Casey argues, 'as places are sensed, senses are placed; as places make sense, senses make place' (Casey 1996, 18-19). In other words, using a phenomenological understanding of perception, place and people lie in a dialectic relationship to each other. From this point of view, Santal perceptions of their environment and Santal built environments shape and are simultaneously shaped by each other. As I discuss in the subsequent chapters, this is the central thesis of this study, and is developed in different ways in relation to different aspects of Santal built environments.

Within architectural discourses on phenomenology and place, however, the spatial and the social aspects of the concept have largely remained as analytically discrete and ontologically unrelated entities. This is seen, for instance, in the works of Christian Norberg-Schulz who was one of the most important proponents of a phenomenological approach to architecture. According to Norberg-Schulz, 'place' broadly implied environments of some poetic quality (Norberg-Schulz 1980, 6-7). This poetic quality he discussed in the form of *genius loci* or 'spirit of a place,' which were brought to the fore by the physical characteristics of places (Norberg-Schulz 1996, 414). That is, the poetic qualities of place are made visible through concrete attributes of environmental and architectural character such as 'material substance, shape, texture and colour' (Norberg-Schulz 1996, 414). Two points become evident in Norberg-Schulz's theorizations. Firstly,

he argues that ‘architectural space may be understood as a concretization of environment schemata or images, which form a necessary part of man’s general orientation or ‘being in the world’ and thereby conceptually maintains a distinction between the physical attributes and the poetic qualities of space (Haddad 2010, 90). In other words, the concept of place remained conceptually divided into physical aspects and experiential aspects. Secondly, Norberg-Schulz discusses the experiential aspects not in reference to individual perception but on the basis on ‘historically determined judgements.’ For instance, Norberg-Schulz analysed examples in terms of morphology, typology, and topology to arrive at three types of places – romantic, cosmic and classical.¹⁵ The use of architectural features as the basis of analysis and the reduction of places into three types suggest that though phenomenological in intent, Norberg-Schulz’s discussion remained focused on the physicality of built forms on the one hand, and, on the architect’s experiences and evaluations of spatial qualities rather than those of inhabitants.

Recent architectural scholarship pays more critical attention to the experiences of individuals in the explorations of place.¹⁶ In recognising the centrality of the experiencing individual as comprehending the ‘physical actuality’ of place, Menin suggests that ‘there should be as much concern with what the self (both individual and collective) brings to the place as with the definition of the intrinsic character of that place’ (Menin (Ed.) 2003, 8). Consequently, Menin’s anthology is divided into segments titled ‘mind’ and ‘matter.’ Menin qualifies the division by saying that the essays under ‘mind’ ‘address the relationship between self and place, [but] they do not put aside nor do they deny the material aspects of this mental process of aspiration’ (Menin (Ed.) 2003, 8). On the other hand, the essays on ‘matter’ ‘address the detailed material reality of modern places, but they also make profound enquiries into aspects of the mind’ (Menin (Ed.) 2003, 8). This is a distinct departure from the ideas of Norberg-Schulz for instance, whose writings did not actively consider inhabitants, or, when they did, often suggested a faceless inhabitant or an unknown user. Menin however stresses the particularities of the experiencing individual as being important to the development of an understanding of place.

It is useful to reiterate two general attributes of place as emerging from the above discussion before moving on to issues of method. Though multivalent and dialectically

¹⁵ For a detailed critique of Norberg-Schulz’s phenomenological project, Haddad 2010.

¹⁶ For an overview of the ways in which place has become a subject of significance in recent scholarship, see Cresswell (2015, 1-15).

related to people as discussed earlier, three important aspects of the concept of place are as follows - first, place conveys a 'special sense of physical identity' to its inhabitants and this is one of its most important attributes.¹⁷ These identities may derive from a range of factors such as topographical features to a more central reference point within the topography (Berleant 2003, 43). It must be emphasized that the sense of identity need not be identical across the inhabitants of a place. In fact, as Tilley, points out, associations with places typically vary across lines of gender, caste etc.(Tilley 1994, 42) Consequently, it is important to remember that identities conveyed by a location are central to senses of place, but that these identities needs not be homogenous to the group of inhabitants under consideration. Second, senses of place and meaning are neither conceptually created by human interaction alone nor is it initiated merely by the presence of locations themselves. Rather, place and meaning lie somewhere in-between. Place becomes a slippery concept since it is both the background to and consequence of the world and the human experience of it. The question that remains is how senses of place may be studied without reducing the conceptually inseparable factors embedded in the concept.

A step forward in this regard is suggested through the writings of Tim Ingold who approaches phenomenology in terms of relational thinking between people and their environment. He suggests that a person must be considered as 'developing organism-in-its-environment as opposed to the self-contained individual confronting a world out there' (Ingold 2000, 4). Persons and their environments together comprise a meshwork, 'an entanglement of lines of movement and material flows' that is 'perpetually on the threshold of emergence' rather than pre-existing entities that are merely connected to each other (Ingold 2012, 435). Within this idea of persons and their environments as comprising a meshwork i.e. a phenomenological whole, Ingold introduces skill, livelihood and dwelling as practices through which people's engagement with their environment maybe examined. He argues, for instance, that skill does not just refer to 'techniques of the body, but the capabilities of action and perception of the whole organic being (indissolubly mind and body) situated in a richly structured environment' (Ingold 2000, 5). Livelihoods are explored as 'tasks' that people engage in order to make a living, without 'setting up a polarity between the ecological domain of their relations with non-human 'nature' and the

¹⁷ See, for instance, Berleant 2003, 43. Casey (1996, 24-25) also discusses this idea when he suggests that a 'essentail trait' of place is that it 'gathers' within its fold 'various animate and inanimate things.' By 'gathering' he does not refer to a physical amssing but an ability to bring together people, 'experiences and histories, even languages and thoughts.' It is by the configuring all these entities that places come into being and become particular to its inhabitants.

cognitive domain of its cultural construction’ (Ingold 2000, 5). Dwelling is explored as the ‘embodiment of capacities of awareness and response by environmentally situated agents’ (Ingold 2000, 5). What is interesting to note is that the philosophical underpinnings of Ingold’s ideas on relational thinking and Casey’s exposition on the dialectical relationship between people and place are similar. However, Ingold’s major contribution lies in explicating skills, livelihood and dwelling within this framework and offers a methodological opportunity for an architectural enquiry along similar lines. Drawing from Ingold’s definitions, built environments may be studied as gestures of people’s engagement with their environment to promote reflection on the interplay between ways of making, patterns of inhabitation in everyday life, and shifting architectural forms.

2.5. Architectural history and a phenomenological perspective

I mentioned at the beginning that an important aspect of this study is the shifts in Santal relationships with their environment in the course of transformations in the Singhbhum region as a whole. So in this study, I attempt to evoke Santal senses of place, but also, discuss how these senses have transformed over time. The focus on the past requires the construction of a narrative of either history or heritage, and more, significantly, raises questions of how an ‘architectural’ narrative of the past is perceptible. This focus presents two challenges. First, as discussed, vernacular traditions within architectural discourses were largely considered as timeless, and modernity was typically cast as a corrupting influence. The romanticising of traditional environments did not allow for a critical engagement with the modernity of the community and contemporariness of built environments.¹⁸ The limited knowledge on traditional environments as historically transforming entities presents a challenge to this study of architectural transformation in the Singhbhum region. Adivasi built environments in the Singhbhum region must be simultaneously framed within a history of industrialisation in the Indian sub-continent and in terms of the shifting definitions of Adivasi experience in the region. The two histories are intertwined and to cast Adivasi built environments as being in opposition to modernization and industrialisation in the region – as vernacular architecture studies in the past have done –would necessarily ignore the proposition that Adivasis senses of place

¹⁸ Scholarship focusing on traditional environments as historically transforming entities is limited. In one example, Veronica Aplenc compares the cases of traditional built environments in Slovenia and North America to argue that both contexts have different histories and therefore different present-day conceptions of modernity as well. She argues for ‘local constructions of modernity’ in order to recognise the engagement of local environments with social, economic and political processes within which vernacular settlements can become something beyond a romantic ‘other.’ See Aplenc 2005.

must be significantly informed by the industrial landscape. Consequently, in this study, rather than operating on pre-established dichotomies such as tradition and modernity, I consider various transformations that have taken place within Singhbhum as part of the meshwork within which Santal built environments are situated and have transformed. Given previous generations' experiences of industrialised environments, my broader concern is to understand how this transformative milieu has coalesced into present-day Santals' senses of space and place.

The second challenge is presented by the nature of the archive from which the architectural history narrative is to be constructed. Architectural histories typically present buildings and architects, or identifiable makers of buildings, as the primary archives to be examined in order to understand the built past (Arnold, Ergut and Ozkaya 2006, xiv). An inherent difficulty here is that though buildings may be built in the past, they acquire 'contemporary significance and are known within contemporary modes of visibility and experience' (Leach 2010, 116). How then, does one begin to examine architecture as a historically situated practice, or in this case, how does one begin to evoke senses of place in the past? Leach suggests that this requires analytical innovation, though he does not propose what they may be (Leach 2010, xx). Arnold, Ergut and Ozkaya suggest that the building as a primary archive must be supplemented with material drawn from other disciplines such as history for written records, archaeology for material evidence or anthropology for cultural practices' (Arnold, Ergut and Ozkaya 2006, xiv). Given the focus of this study, this approach presents further difficulties in that one finds few records of everyday life experiences in the anthropological record. A rare example is Bodding's monograph titled "How the Santals live," (1940) which provides information about the dwelling, domestic activities, diet and livelihood, among other things. It does not, however, mention which part of Santal geography this information is drawn from.¹⁹ Given the essentializing and totalising nature of most ethnography about Santals that did not acknowledge or address local and temporal specificities, their usefulness as an archive of everyday life or individual experiences is compromised.²⁰ It becomes evident that in order to engage with questions of Santal pasts other documentary evidences have limited usefulness.

¹⁹ One may argue here that the assumption that underlay the generalizing tone of the monograph is that characteristics of Santal life irrespective of location were similar.

²⁰ This relates to the larger issue of traditional environments being considered as ahistorical within academic scholarship. Like traditional architectural environments, even Adivasi communities were typically conceptualised as located outside of historical time. As Banerjee points out, societies such as Santals were

Considering the above challenges this study employs a combination of architectural analysis, ethnographies of everyday life and oral history narratives, where each mode of enquiry is considered as a different way of engaging with the question of Santal notions of being-in-the-world. In doing so, one begins to take into consideration both the experiences of the communities involved in the study and, importantly, those of the researcher in the field. Chakrabarty (1998, 23-24) points out that such an approach, where one attempts to go beyond the 'subject-object relationship between the historian and the evidence,' is needed when a historian is faced with an inadequate archive. In the absence of information or ways of explicating the past, the historian needs to consider the past in terms of instances in the present time. In other words, Chakrabarty argues that rather than considering people and objects as signifiers of other times and societies, they may be more usefully considered as illustrations of a way of being in this world, considered in the light of the historian's own contemporary experiences.²¹ In terms of this study, what this suggests is that Santal experiences in the present day as ways of being in the world can be re-employed as a mode of reflecting upon and of understanding the past. This is evident in the following chapters where ethnographies of everyday life are brought to bear upon people's memories of built forms and events in the past, and these accounts together provide some insights into Santal everyday life in the past.

The process of situating the researcher as a sensing self within the field presents two opportunities for this study – one, a phenomenological bridge to transcend the problem of the archive as discussed above, and second, it allows for reflexive engagement with the processes of architectural knowledge production as a whole. Throughout the study, I reflect on my own ethnographic presence, which forms an important part of the analysis and the resultant narrative. My own experiences and attendant reflexivity become important as ways of overcoming a positivist approach to exploring the relationship between people and their environment, and for engaging with the phenomenological notion of place, both in past and present times.

constructed and represented as 'endangered, almost lost cultures,' thereby rendering them as 'traces of past societies' or as 'reminders of the past in the present.' See Banerjee, 2006, 114-115.

²¹ Chakrabarty conducts this discussion in the context of subaltern or minority histories as cases where archives are 'intractable' on account of which the historicization of such people is not possible. See Chakrabarty 1998, 23-24.

2.6. Summarising key theoretical frameworks

To conclude, this chapter provides an overview of the key theoretical frameworks in this study. I outlined people-place relationships as explored in the discourse of vernacular architecture to suggest that there is an increase in thematic and relational thinking as compared to the earlier object-centric approach. A similar development is seen in anthropological and material culture discourses where people, practices and objects are now widely recognised as conceptually intertwined and analytical inseparable. In this study, these approaches resulted in a phenomenological turn and the notion of ‘place’ provides further theoretical and methodological framing for the study. I suggest that a phenomenological approach helps address some of the key challenges of engaging with Adivasi communities - such as the lack of architectural, anthropological and historical record - as well. These are the key strands of interdisciplinarity that this study is premised on. Specific theoretical and methodological frameworks are discussed in the beginning of each subsequent chapters as a way of framing the particular explorations in each case.

3. Transformation of Santal dwelling layouts

3.1. Introduction

In the outset of the study, I suggested that buildings may be considered as gestures that define the relationships between people and their environments. Against a backdrop of changing political, social and environmental contexts, these relationships, and therefore the gestures undergo transformation. By focusing on questions such as ‘what is shelter being sought for’ and ‘what is shelter being sought from’, I examine the constitutions and layouts of Santal dwellings as the first step towards understanding Santal people’s relationships to their environment. It is important to note here that dwelling layouts are considered simultaneously as spatial and social configurations. This position is distinctly different from architectural discourses on traditional environments, where, as I discussed in the previous chapter, rubrics such as society and culture did not have analytical agency but were considered as fixed stratum from which built environments drew meaning. In this study however, instead of beginning with conceptual divides such as spatiality and sociality, I attempt to think through dwellings as phenomenological wholes to see what conceptualisations can thus emerge.²² The question is not about the points of correspondence between spatial and social structures considered as distinct, albeit intertwined entities, but rather, that the spatial and social are enmeshed to a point that conceptual divisions between them are no longer useful. At what point can one meaningfully discuss space without taking cognisance of the social nature of its construction, and conversely, at what point can one discuss social interaction without acknowledging the setting in which it takes place? A particular space is not a physical structure to which function is secondarily applied, but rather, function is intrinsic to space. Similarly, social interaction is inherently defined by the setting it takes place in, rather than the setting being a mute backdrop for behaviour and action. From this position, the transformation of dwellings is studied as both a spatial and social change, with neither entity taking precedence over the other in cause-and-effect terms.

In the course of doing fieldwork, a range of architectural layouts and forms were observed across the region of Singhbhum. The question that arises is how these different layout types emerged within the architectural tradition of a region and community. In order to

²² This idea is developed in Henare, Holbraad and Wastell, 2007.

address this question it was necessary to recognise that Santal dwellings are not singular objects that may be studied as static and coherent entities, but are shifting configurations embedding successive generations of inhabitation. As physical structures, they are neither built all at once, and have not remained constant through time but are accretive and expand and divide on account of shifts in family relationships and requirements. With this in mind, the subsequent analysis focuses on similarities and differences in demarcation of spaces, the configuration of spaces within the dwelling, and thresholds of interaction as observed in the field. I then combine this analysis with oral narratives in order to identify patterns of development of layout, situate these developments in a temporal sequence and, thereby, evolve a trajectory of transformation of Santal dwellings.

3.2. Data and methodology

The first task of the study was to document a number of dwelling layouts in the Singhbhum region. Having studied Santal dwellings and settlements in the past, I went into the field with some prior knowledge about the places and the people.²³ Also, I was aware of some of the key architectural characteristics of Santal settlements, which helped in the initial assessment of similarities and differences in architectural form.²⁴ The earlier research particularly aided in the case of houses where I had limited access as some families were not familiar with me, and understandably, were reluctant to allow me into their houses. In such situations prior experience of fieldwork among Santal communities helped conjecture what functions may be inside rooms that I was not allowed to see. During subsequent fieldwork, visits to houses became easier on account of greater familiarity with people, but places like the *bhitar* (literally meaning ‘inner’ and referring to space for worship of households spirits and deceased ancestors) remained out of bounds. Considering the whole period of fieldwork, I documented more than fifty dwellings across seven villages in the three localities that comprise the case study and this forms the focus of analysis in this chapter.

It is important to mention here that the documentation was done in terms of architectural drawings, i.e., plan and section views of dwellings. Architectural plans are particular views of environments where all parts that make up the space/ building are equally visible from above, while architectural sections make certain slices of building visible. The situation of

²³ See Bharat, 2005.

²⁴ I was aware, for instance, that Santal houses typically took the form of courtyard layouts and had spaces for cooking, sleeping, sheltering animals and a *bhitar* (space of worship of deceased ancestors).

limited access as described above made the documentation task challenging since parts of the architectural plans and sections had to be left blank for the areas that were not visited. However, limited access led to two positive developments. First, a shift in focus on the outside spaces where a lot of daily activities take place and this eventually led to a re-evaluation of the outside spaces such as yards as integral parts of a dwelling. Second, drawing inspiration from perspectives of feminist ethnography, it was useful to think through the situation of limited access as a dimension of analysis.²⁵ In other words, not being allowed to enter certain spaces provided insights into the villagers' notions of outsiders, and those of interiority and privacy thresholds beyond which the house was not open to them.

An important component of analysis was the understanding of dwellings as lived places of the family. This was explored through ethnographies of everyday lives in the case study villages. I observed the distribution of activities and various kinds of interactions within and beyond the dwelling. While these ethnographies help understand the dwelling in the present day, the problem arises, as I mentioned in the earlier chapter, in exploring everyday life in the past. Banerjee (2006, 117) for instance points out that apart from historical narratives about the Santal Rebellion in 1855, 'at other moments, before and after, Santals remain relatively invisible in archive'. Compounding the problem of the sparseness of material on Santal everyday life are the physical aspects of Santal dwellings. Made of mud with wood or bamboo roofs and thatched roofing, Santal dwellings are typically substantially modified even though they are located in the same place for generations.²⁶ Consequently, the dwelling as documented at a particular moment is an amalgam of structures added or divided over time. The only source of information about such developments through time was the villagers' own descriptions. During preliminary fieldwork, for instance, people pointed out what were considered as the oldest houses in the village and often to older sections of their own houses as well. It was these suggestions that drove home the point about dwellings as accretive entities and sparked the search for transformation. Once the older dwelling block (which I discuss later as the *ath-chala* type of house) was identified, further architectural analysis revealed that many of the variations in layouts were in fact different permutations of old blocks and newer additions. The point

²⁵ Of particular interest here was Dube 2001.

²⁶ It is difficult to be precise about the frequency of modification since it based on shifts in a family's requirement for spaces and on the availability of land and resources within a family. What is clear however is that houses are inherited in the male line and typically equally divided between brothers. As each brother gets married and the family expands, their need for spaces increases as well.

to note here is that oral narratives proved crucial in identifying older structures and offering clues to understanding life in the past and it is this combination of different sources of historical information and architectural analysis that forms the crux of this enquiry.

To return to the point about sparseness of historical material on Santal everyday life, oral narratives by elderly village residents helped not only in identifying older houses but also by providing information about life in the region in the past. Elderly Santal villagers vividly described village environs, livelihood opportunities, ways of travel, governance, interactions with other communities, and villagers' perceptions of wider regional changes and developments in those times. However, it also soon became apparent that the villagers' sense of time was different from my own sense of calendric time. For instance, villagers often referred to the past in relation to earlier generations. Since most elders did not know their own age and there is no basis for speculating the time referred to in speaking of past generations, the narratives had to be contextualised with reference to other definite events such as the building of factories or shifts in regional governance.²⁷ The issue of temporal references apart, what the oral narratives most importantly provide are pointers to senses of places and community, the village and surroundings in the past rather than precise information about historical events. They also provide insights into how and what of the past is remembered, which highlight things that coalesced into villagers' memories and experiences. Such insights have been instrumental in developing trajectories of dwelling transformation in relation to the changes in the Singhbhum region at large.

A diametrically opposite source of historical information used in this study is the land survey and settlement records published by the colonial government between the mid-nineteenth and early twentieth centuries.²⁸ The oral narratives, are evocative of places in the past, while the documents provide a quantitative assessment of the landscape. These records are of two kinds. First are the survey maps of the entire Chotanagpur region (within which Singhbhum lies) drawn between 1859 and 1863.²⁹ The second are the land

²⁷ For instance, people talked about village life at the time of construction of the factory in Jamshedpur, which refers to the end of the nineteenth and the beginning of the twentieth centuries. People also spoke of village conditions during the rule of the royal family in Seraikela vis-à-vis under the modern Indian state. This refers to the eras before and after 1947 respectively when India became independent of colonial rule and many royal estates including Seraikela became part of the Indian Union.

²⁸ See, for instance, Reid, 1913.

²⁹ According to the dates mentioned in Singhbhum district maps by Captain Gastrell and De Pree in 1891. See bibliography for complete reference.

surveys and settlement reports that assessed the value of land for revenue purposes and established the control of the colonial government as the highest authority in the region.³⁰ The maps mark the names and locations of villages, including two of the three case study villages, and serve as the earliest known record of the villages' existence. The survey reports, on the other hand, include details of demography, traditional forms of governance, productivity of land, forest cover, mineral resources, early mining and metallurgical industries, and regulations regarding Adivasi land ownership and use of forests. The process of land survey and settlement effectively codified the relationship of people to land and forest, and the documents themselves provide insights into the tangible aspects of this relationship.³¹ As a source of historical information, they also provide some minute details about villages since they focus on large villages as basic revenue units. Further, since there were two successive reports within a twenty-year period, they also document some of the changes that took place in the region. The reports most importantly provide a detailed administrative and environmental context within which people's narratives of the past can be viewed.

It must be iterated here that these two sources of information do not precisely correspond or create anything close to a complete picture of the past. What they do is to provide pointers to aspects of the past that may help understand dwelling transformation and vice versa. Thus, fragments comprising legal documents, oral narratives, architectural documentation and analysis, and historical narratives from academic scholarship and colonial records are brought together to construct a narrative of transformation of Santal dwellings and everyday life in the Singhbhum region. It must be also remembered that both the historically changing context of Singhbhum and dwelling transformations are not imagined as linear progressions occurring at any one case study location, but rather, a narrative constructed by juxtaposing of occurrences across the three case study sites. In other words, the three sites present Santal dwellings within varying contexts and different stages of growth and when compared, constitute a broad process of transformation of Santal dwellings.

A final point regarding methodology is about the participatory encounters that shaped this chapter and the study as a whole. In each case, having developed a draft of the chapter, I

³⁰ This is evident from the land survey and settlement reports published for each region. See for instance Reid, 1913.

³¹ See Hill, 2008.

discussed key arguments with Santal villagers and other people.³² These discussions helped correct, corroborate and nuance my arguments. For instance, in considering the transformation of Santals from forest dwellers to a settled agriculturist society, I conjectured that the introduction of colonial land legislation in the late nineteenth century may have played an important role since the issuance of land deeds tied people to specific parcels of land. Through discussions with villagers and Santal scholars it emerged that my general premise was correct though I had misunderstood the actual impact of colonial land legislation. The shift to settled society was not a direct consequence of changes in land legislation but a gradual process of sedentarization of Adivasi societies in the region.³³ In other words, the legislation did not abruptly precipitate the transformation of Adivasis into settled communities but was one of many factors contributing to changes in the region. The process of discussing chapters with villagers and other people helped clarify my arguments and also, in some cases, added further information and detail to the narrative.

3.3. Layouts of Santal dwellings

Moving now to the dwelling layouts, three parameters are used to categorize the layouts and form the basis for further analysis. These are the relationship between the built volumes and open yards, the relationship between the dwelling and street, and the designation of functions to specific spaces within the dwelling. On this basis, the documented Santal dwellings may be grouped into three types i.e. *orak*, courtyard houses and *ath-chala*. Below, I discuss the key features of each type using specific examples.

3.3.1. Orak³⁴

Orak are small houses comprising a single volume when seen from the outside, but which may be internally subdivided into two or more spaces (Fig.3-1). In the case study villages, these belonged to families with limited resources or individuals such as widows who did not have large families living under the same roof. The two houses discussed here both belong to widows- one in Bangoda, who lived with her daughter and son-in-law, and the other who lived alone but next to her deceased husband's brother's family.

³² Refer Appendix 2 – List of interviews conducted during fieldwork.

³³ For further reading on the subject, see Das Gupta and Basu, 2012.

³⁴ *Orak* is a generic Santali term for both house and room and I use it here to refer to such small houses. Large houses (discussed later), i.e., comprising rooms around a courtyard are also locally referred to as *orak* but I use the term courtyard houses in my discussions for clarity of communication.

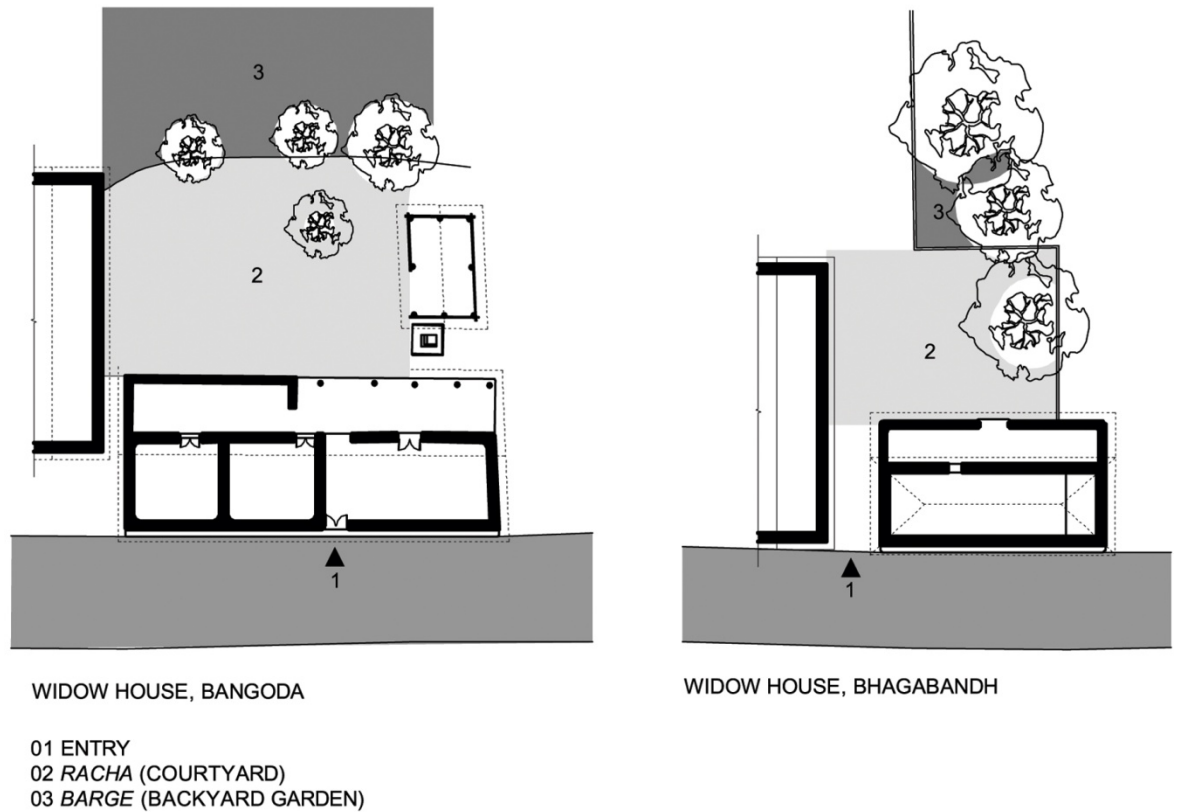


Figure 3-1: Examples of *orak* layouts

3.3.1.1. House of widow and daughter in Bangoda

This house comprises a single volume that is internally divided into three spaces and, as a whole, is positioned parallel to the *kulhi* (Fig.3-2). From the *kulhi*, one enters the house through a vestibule that leads into the *racha* (open yard) on the other side (Fig.3-3).³⁵ The *racha* has a shed for cattle and a small shrine on one side and a washing area for utensils on the other (Fig.3-4).³⁶ It also has a mud stove, which is used only for boiling paddy and is a feature of most houses in the region. Beyond the *racha* lies the *barge* (backyard garden) where piles of hay and agricultural implements are stored. Back in the *orak*, facing the *racha* is a *chali* (verandah) part of which is enclosed to make a covered cooking area (Fig.3-5). Inside the *orak* there are three rooms, including the newly constructed one. Two rooms located to one side of the entrance serve as the *bhitar* and a sleeping area

³⁵ During fieldwork, this room was newly constructed and comprised an entire half of the *orak*. It was to be further divided into an entrance vestibule and a sleeping area.

³⁶ The widow lives in this house with her married daughter and son-in-law. The son-in-law offers worship at the shrine in the yard. It is common among Santals who have only daughters to have their sons-in-law live with them and help look after land and agriculture for instance. A husband's clan is typically different from the wife's clan and so the deities to be worshipped are different as well. While sons-in-law are allowed to enter and offer worship in the *bhitar* (inner room for worship of deceased ancestors and household spirits) in his wife's house, he is required to offer worship to deities from his own clan as well. This explains the presence of the second shrine in the house.

respectively. The third newly constructed part was proposed as a sleeping area for the widow's daughter and son-in-law. While I was not allowed to see the interiors of any space, the widow particularly refused to open the door or say anything about the room in the space in the middle. That she was adamant about maintaining the privacy of this room suggests that it may be the *bhitar*, which is the most sacred part of the house and is usually zealously guarded from outsiders, i.e., people who do not belong to the family and are therefore not allowed to enter or offer worship there.

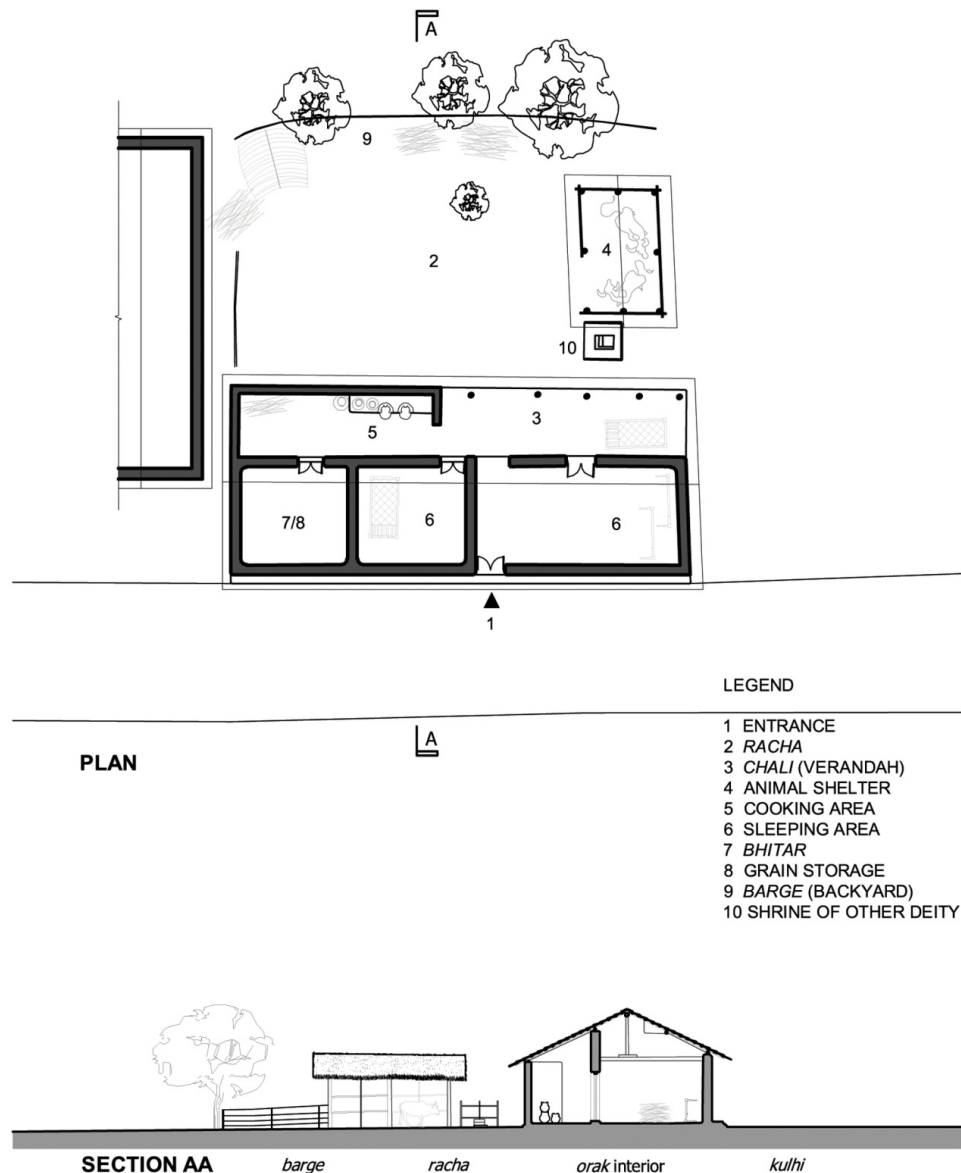


Figure 3-2: Layout of widow's house in Bangoda



Figure 3-3: Entrance to widow's house at Bangoda



Figure 3-4: View of *racha*



Figure 3-5: View towards house from *racha*

3.3.1.2. *Orak* of widow in Bhagabandh

Similar to the house discussed above, this *orak* also comprises a single volume though it is not internally divided into different spaces (Fig.3-6). The entrance is from the side of the *orak* and leads into the *racha* (yard). In this house, the *racha* is primarily used as place for

making *handia* (rice beer).³⁷ One corner of the *racha* has a mud stove for boiling rice, and a utensil washing area is at another end. Again, as in the above example, there is a *chali* (verandah) facing the yard. An end of the *chali* is used as a cooking area while the other side is used for storing miscellaneous household items (Fig.3-7). Other villagers often sit in the *chali* to drink the *handia* they purchase. Within the main interior space, at one end is a mud platform which functions as a *bhitar* and is dedicated to the lady's deceased husband, while the other end of the room is used for making and storing *handia*.

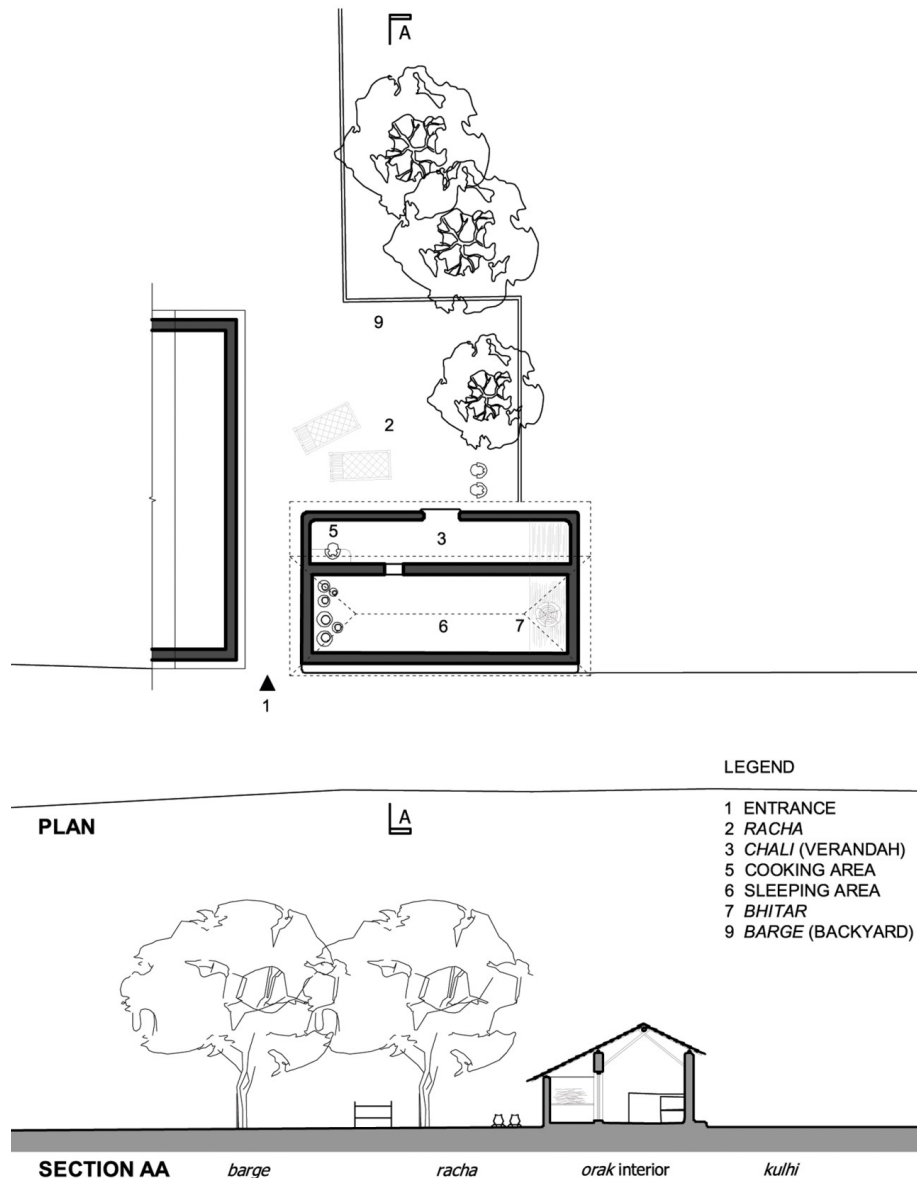


Figure 3-6: Layout of widow's house, Bhagabandh

³⁷ *Handia* (rice beer) is an important part of Santal social and religious life. For everyday consumption, some people such as the widow and her extended family prepare *handia* and other villagers buy it from them. For ritual events however each family prepares their own *handia*. Each *tola* (cluster of houses or neighbourhood) will have one or two people who make and sell *handia* in this manner. It is also worth noting that these sellers are often widows or spinsters who are employed in this manner since they do not have other sources of livelihood such as agricultural land.



Figure 3-7: Views of verandah

3.3.1.3. Key characteristics of *orak* layout

The layouts discussed above highlight two important things. First, given that these are built with minimum resources and for the smallest families, *orak may be* considered as the smallest house built by Santals. In this case its internal layout and designated functions of spaces may suggest what is essential for a Santal dwelling. The designated spaces in the two houses discussed above suggests that dwellings, at the very least, comprise a *bhitar*, sleeping areas, a cooking area, a yard with functions such as mud stove for boiling paddy and washing area, and a shelter for animals if there are any. These activities may vary in detail, as in the case of the *bhitar* as a room in the first example vis-à-vis the *bhitar* marked by only mud platform within a room in the second example (Fig.3-8), but the designations of functions appear to remain constant. One may then safely conjecture that even the smallest Santal dwellings will have designated spaces for these functions. Second, I argue that the location of the *orak* in relation to the street may be considered as a fundamental gesture representing the relationship between dwelling and street and by extension between the family and the community. In both cases, the *orak* is located parallel to the *kulhi* and serves to separate the space of the backyard from the space of the *kulhi*. Other configurations such as a house having a yard and entrance from one side were observed in case of other dwellings types but never in the case of the *orak*. Suffice to say that the location of the *orak* with respect to the *kulhi* creates a distinction between the public space of the *kulhi* and the more interior space of yard within the house. Towards the end of the chapter, I attempt to account for how these spaces are different by examining the terminology used to describe these and the usage attributed to them. To sum up, the

analysis of the *orak* provides insights into some essential aspects of Santal houses both in terms of constitution and configuration of spaces.

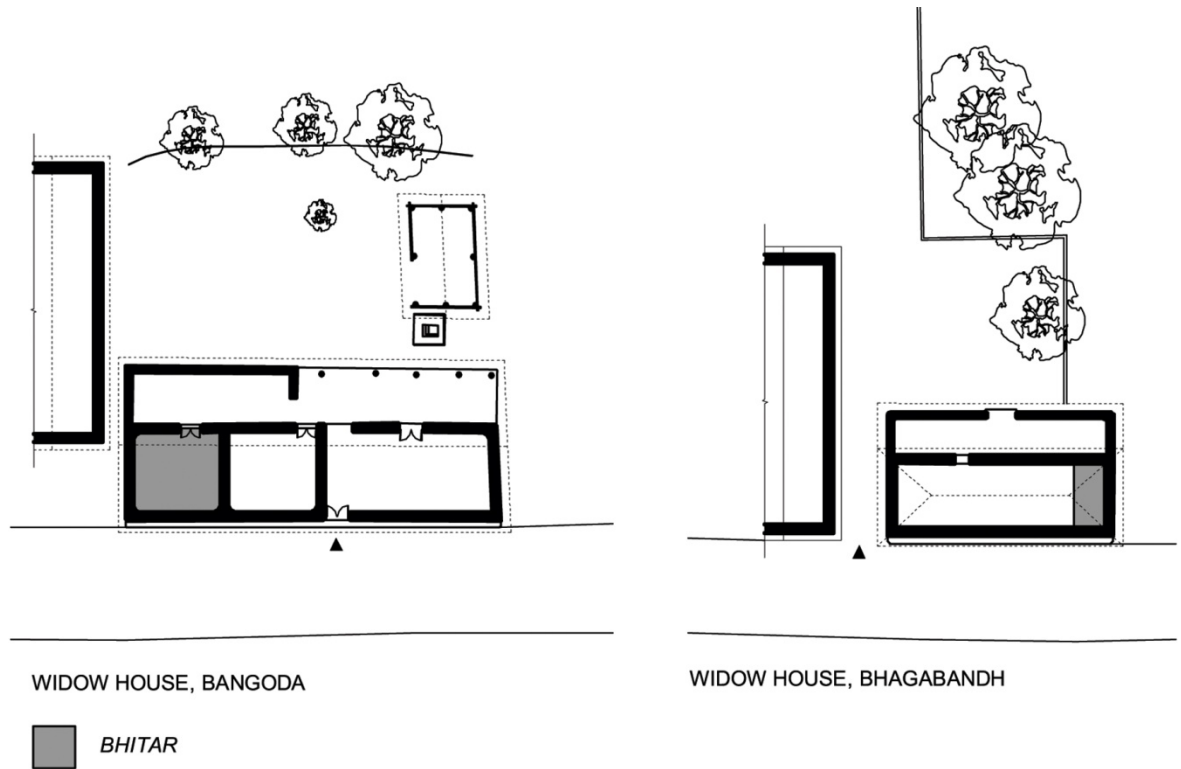


Figure 3-8: Comparison of *bhitar* in the two widows' houses. Note the *bhitar* is a separate room in the Bangoda examples while it is located in one corner in the Bhagabandh example.

3.3.2. *Kumbaha* - an older dwelling type

Having established some key characteristics of Santal houses by studying the *orak*, I asked Santal villagers, particularly the elders, about houses built in earlier times.³⁸ They recollected that houses were much smaller in the past and were almost like shacks.³⁹ These houses were known as *kumbaha* and were built primarily using leaves and wooden branches (Fig.3-9).⁴⁰ It comprised a single rectangular volume with one end used as the *bhitar* while the other was used for sleeping or sheltering small animals such as goats or

³⁸ At a much later point in the study, I found references to early Santal dwellings in Bodding, 1940.

³⁹ People used the word *jhopdi*, which refers to a small, almost temporary shack like shelter, today seen typically in slums.

⁴⁰ Bodding (1940) uses the term *bangla orak* to describe such houses and says this refers to the gable roof that such structures typically had. In the case study villages however, such structures were referred to as *kumbaha* and that is the term I use throughout this study. It is interesting to note that the term *kumbaha* emerged very late in our fieldwork conversations. When I first heard descriptions of these houses, people simply referred to them as *jhopdi* or shack-type structures. Later, when I made architectural drawings of the *kumbaha* taking inspiration from other examples such as the Birhor house (discussed in the next chapter) and showed it to villagers, they responded by saying that this was a *kumbaha*. The recursive nature of fieldwork exchanges and the development of the narrative in this study are discussed in detail in the last chapter.

chickens (if the family kept any).⁴¹ Cooking was usually done in a corner of the *kumbaha* where a *chulha* (mud stove) and a low wall against which to store household essentials were built.⁴² People slept outside on *parkom* (string cots) when the weather permitted. Cattle were sheltered in another volume built in addition to the *kumbaha*.⁴³ In extension to the interior spaces of the house, a *racha* (yard) was demarcated by plastering a part of the ground outside the house. Here, activities such as socializing took place since guests were not allowed into the interiors. Another open space was demarcated as the *barge* (backyard garden). The *barge* was typically used for growing vegetables and tubers, for storing hay and agricultural implements and for activities such as washing utensils, daily ablutions and bathing.⁴⁴



Figure 3-9: View of Birhor house as a close equivalent of *kumbaha*

Given that the *kumbaha* type of dwelling is not extant but was built in the past as per people's descriptions, it may be considered as a predecessor of the *orak*. Comparing the *kumbaha* with the *orak*, two points of transformation become apparent. First, it is evident that the *kumbaha* typically had only one internal volume while in the case of *orak*, we begin to see greater internal subdivision into spaces with designated activities (Fig.3-10). This idea of increasing internal differentiation is further underscored by the analysis of the courtyard house and *ath-chala* layouts discussed next. Second, given that outsiders (i.e.

⁴¹ Ideas about the layout of the *kumbaha* were provided by Prof. D. Hansdah who drew a sketch from memories of such houses from his childhood days. The making of a *bhitar* within the *kumbaha* was also noted by Bodding 1940, 431.

⁴² Bodding, 1940, 431.

⁴³ It is not clear when or how Santal families started keeping herds of cattle and therefore how domestic spaces adapted to this requirement. What is clear however that people build separate spaces for cattle in a manner very similar to other spaces in the house. One may conjecture then that if people built *kumbaha* for other domestic uses such as worship, storage and sleeping, they may have built one for sheltering cattle as well.

⁴⁴ Personal conversation with D. Hansdah in Karandih on July 2013.

guests or other villagers who do not belong to the same family or clan and therefore are not allowed access into the internal spaces of the house) were not permitted to enter the interior space, the *racha* became the site for socialising. This corresponds to my own experiences where villagers typically met me on the *kulhi* in front of the dwelling or in the *racha* inside the house. This site for socializing on the *kulhi* immediately in front of the house is known as the *kulhi racha*. In other words, in the *kumbaha* houses, there is a single *racha* in front of the house while in the later *orak* one finds a *kulhi racha* on the street and a second more interior *racha* on the inside. The distinction between the two *racha* is better exemplified in the case of courtyard houses and in relation to thresholds of interaction within the house. This point is developed later when I discuss and contextualise the architectural transformations and argue that one of the attributes of the transformation of Santal dwellings is the emergence of a complex interiority as seen in the *racha* spaces.

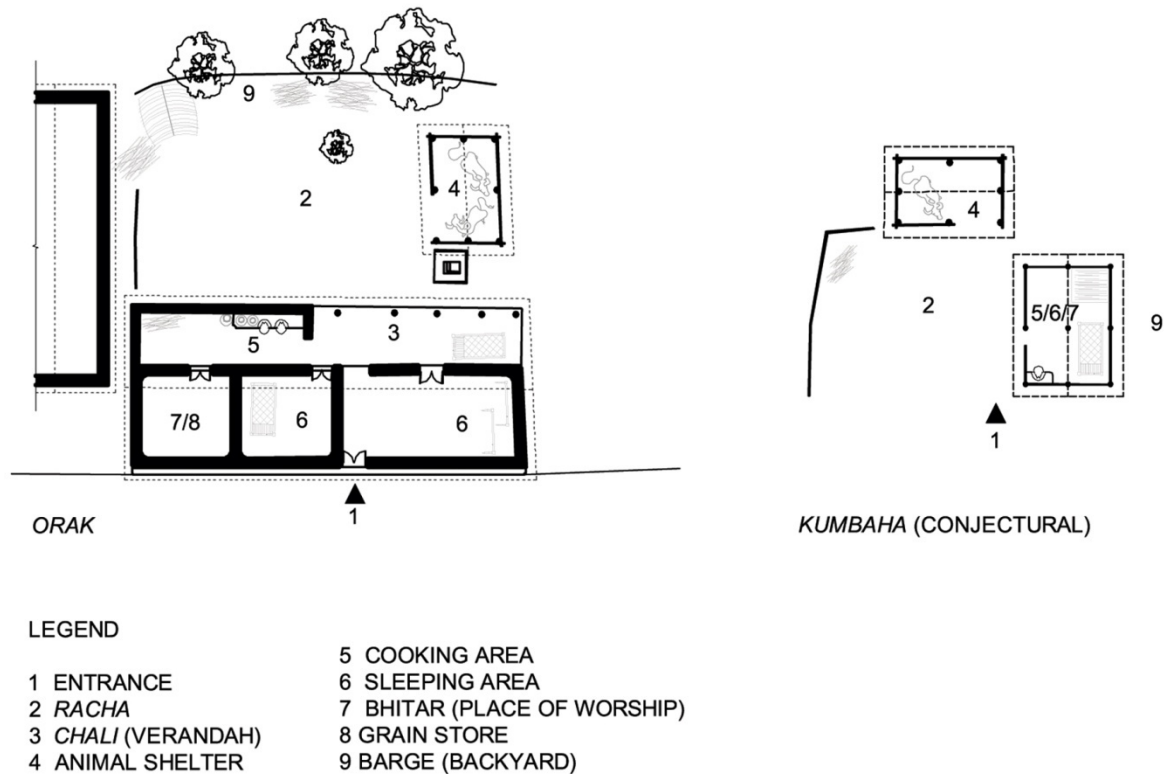


Figure 3-10: Comparison of activities in *kumbaha* and *orak*

One of the interesting aspects of the *kumbaha* and *orak* houses is the shelter for cattle. I mentioned earlier that since both these dwellings types are small, cattle were typically sheltered in separate shed (Fig.3-11). Bodding (1940, 432) notes that it was common for people to build additional structures to house cattle and more individuals as families grew.

For instance when sons' got married, a new *kumbaha* was built for the couple. He also observed that these additional structures were added in a manner that created a courtyard.⁴⁵ Given that present day Santal houses are characterised by spaces organized around a courtyard, one may argue that the single volume *kumbaha* developed into the courtyard houses observed today. To develop this idea further, I now examine these courtyard houses to understand the different layout configurations within this type and designation of internal spaces in these houses.

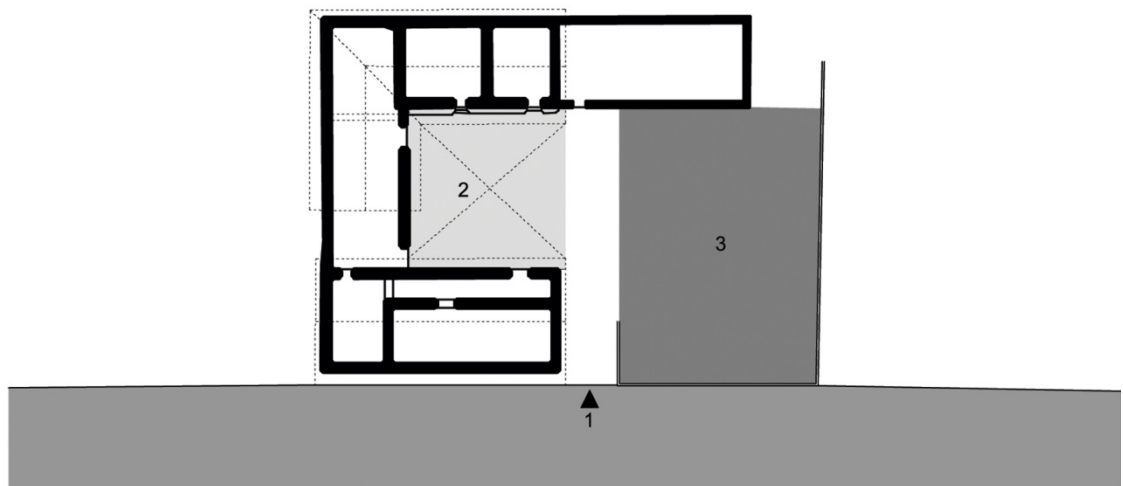
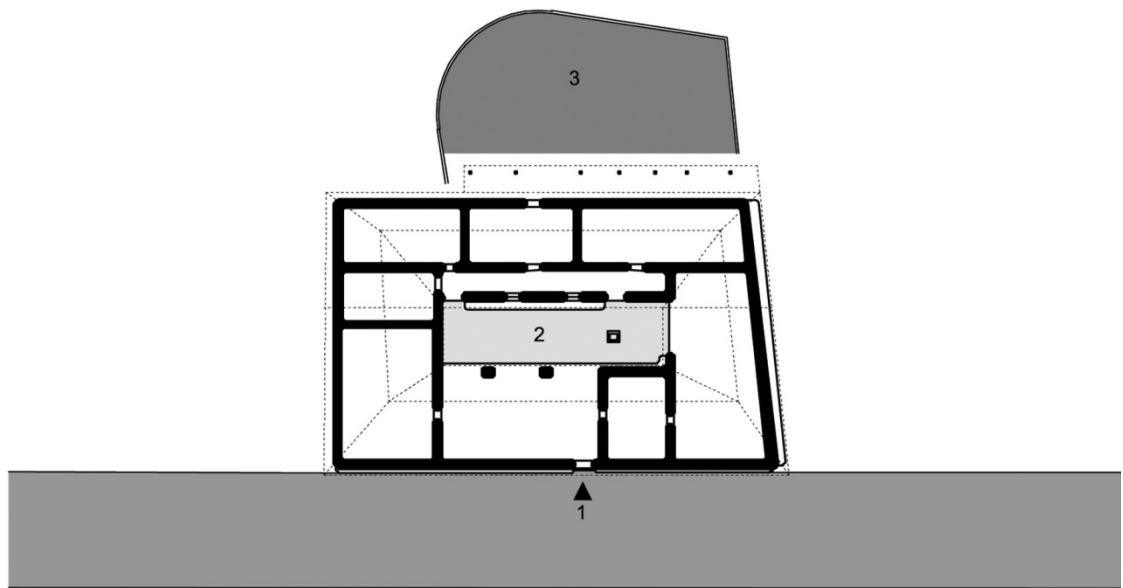


Figure 3-11: Cattle shelter in widow's house in Bangoda

3.3.3. Courtyard type houses

Courtyard houses are the most common layout type observed in Santal settlements today and typically have spaces arranged around a *racha* (central yard). The form of the *racha* is not fixed but different configurations of spaces form *racha* of various sizes. An important constant, however, is that the *racha* and houses are always orthogonal in layout (Fig.3-12). Three examples from each of the case study villages are discussed below to bring out the key attributes of this layout type.

⁴⁵ Bodding 1940, 432.



01 ENTRY
02 RACHA (COURTYARD)
03 BARGE (BACKYARD GARDEN)

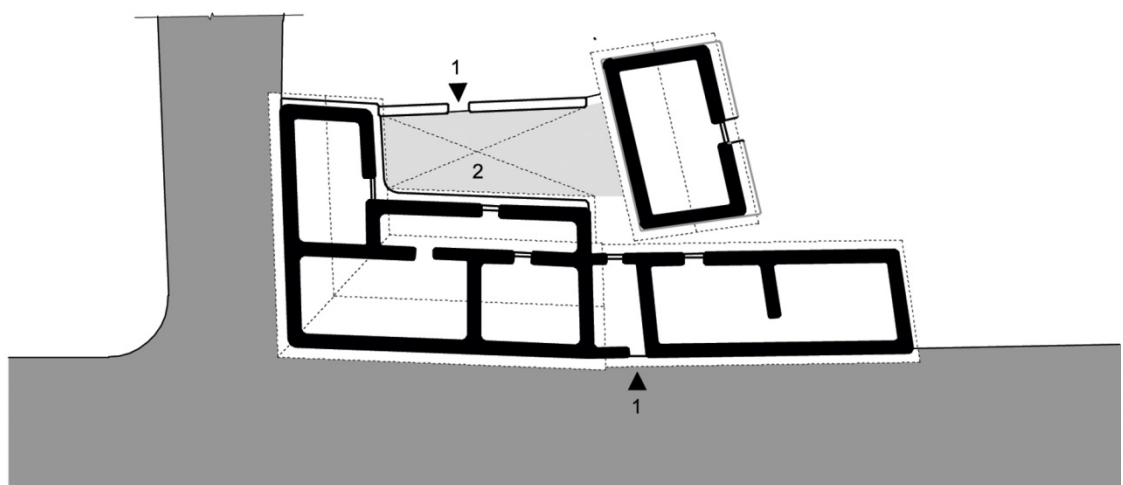


Figure 3-12: Examples of courtyard type houses

3.3.3.1. House of B. Hansdah, Bhagabandh

This house belongs to B. Hansdah who lives with his wife, two children, elderly widowed mother and unmarried sister.⁴⁶ This house has spaces on four sides enclosing a *racha* in the centre. One enters from the street through a verandah directly into the *racha* (See Fig.3-13).⁴⁷ Next to the entrance is a small room where B. Hansdah's mother and unmarried sister sleep. This space has a small *bhitar* dedicated to B. Hansdah's deceased father. Next to this room is a shelter for cattle and other animals such as chickens. Next to this space is a sleeping area used by B. Hansdah, his wife and their two children. One corner of this sleeping area is designated as the *bhitar*. The next room is a place for storing grain, agricultural implements and other belongings of the family. This is followed by a cooking area and a space for prayer, which is used mostly by B. Hansdah's unmarried sister. Along one side of the internal *racha*, the family has added a *chali* (verandah), which probably becomes an extra sleeping area during the rainy season. Through a small gap next to B. Hansdah's sleeping area, one goes into the backyard, which has patches for growing vegetables, a place for storing bales of straw, a pig sty, and two shrines marking the place where B. Hansdah's deceased father and brother were cremated.⁴⁸

⁴⁶ In Bhagabandh, there were many elderly unmarried women living together with the families of their married brothers. As I discuss later, this results in some particular requirements of spaces within the dwelling.

⁴⁷ This verandah is temporary and the family plans to enclose it into a room when they have sufficient resources to carry out the construction work.

⁴⁸ Santals often carry out cremations in one corner of the land that they own. In this case, since the Hansdah family's backyard is large, the cremations were carried out in their backyard itself and the two shrines were built to mark the location. It is unclear if this practice of marking the cremation site is carried out by all Santals since other such shrines were not encountered in the case study villages.

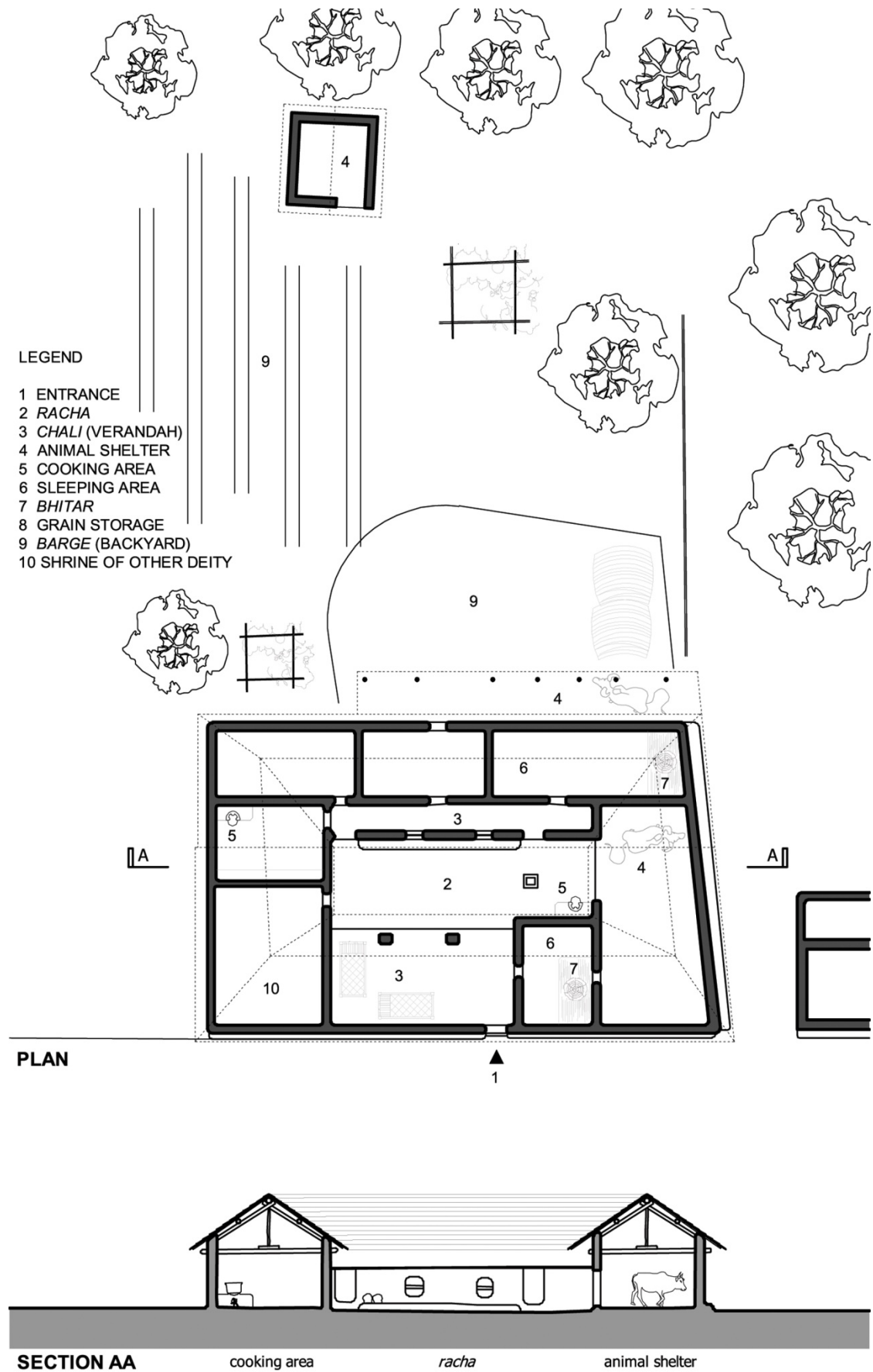


Figure 3-13: Layout of B. Hansdah's house in Bhagabandh

Two things were particularly noteworthy in this house. First, the *bhitar* was not a separate space but was part of the sleeping area itself. This was observed not only in this particular house but in most Santal houses in Bhagabandh village. The location of the *bhitar* within the sleeping area raises two issues. First, in terms of internal layout, it is similar to the *bhitar* in early *kumbaha* type houses where a small mud wall and platform demarcated the space to be used for worship in one corner of the dwelling space. However, in most other Santal villages, the *bhitar* is located in a separate room, which may sometime have an additional function such as the storing of paddy but no other activity. This suggests that shifts in the *bhitar* within Santal dwellings is of two kinds – first, as in Bhagabandh, where the *bhitar* remains part of the sleeping area while other spaces becomes more elaborate, or second, as in other villages, where the *bhitar* becomes a separate space with no other activities taking place there. The difference here is not just of location but of the relationship to the family and patterns of worship as well. In the earlier *kumbaha* houses Bodding (1940, 431) notes that though the *bhitar* was part of the sleeping area, and that it was considered an essential part of a Santal dwelling. In Bhagabandh, on the other hand, a *bhitar* is found in the sleeping area of all married (and widowed) people, who individually offer worship to their immediate ancestors.⁴⁹ The differences in the *bhitar* are important reminders that shifts in Santal houses were not uniform or linear but reveal different trajectories of transformation.

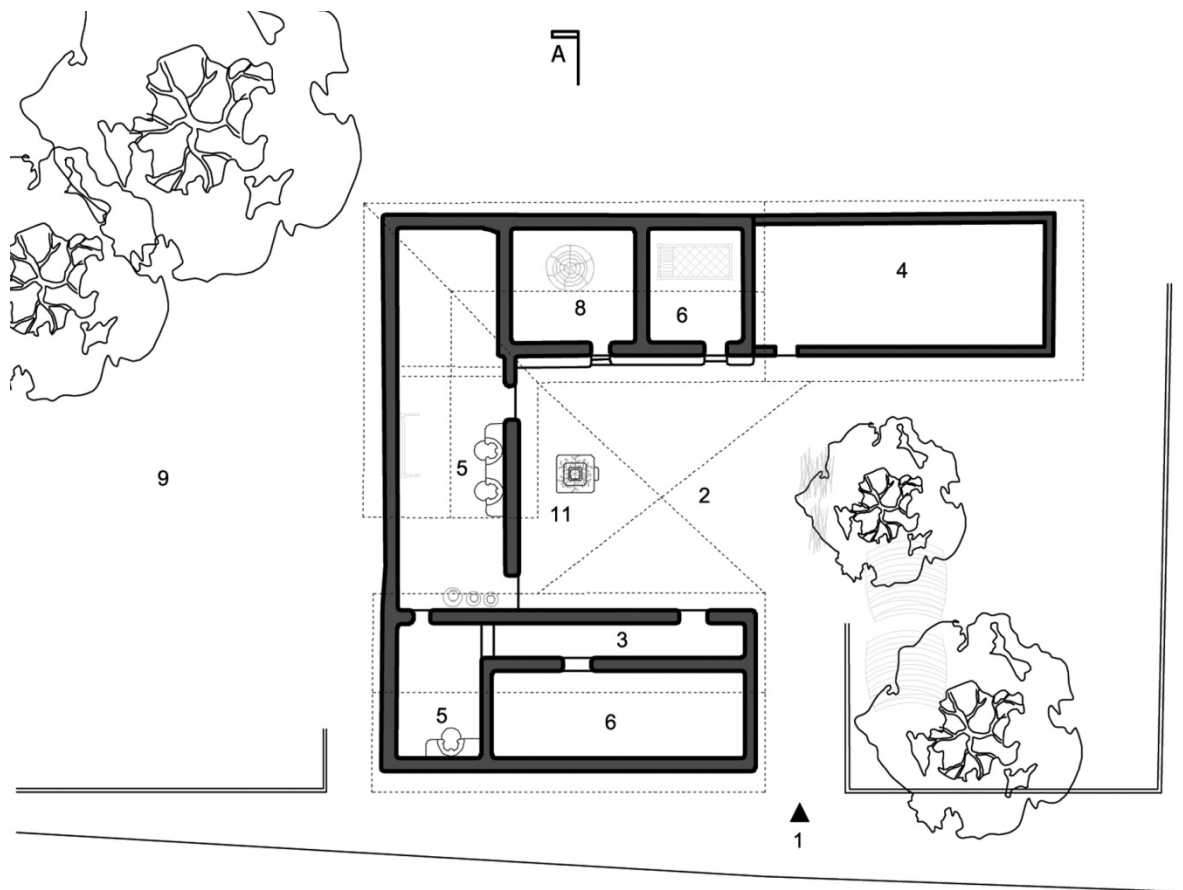
The second point emerging from the discussion of courtyard houses is regarding the thresholds of interaction within the domestic space that was observed in great detail in this house. The house owner B. Hansdah is the elected government functionary of the village and other villagers frequent his house throughout the day. Further, his widowed sister-in-law sells *handia* in her house located next door and these visitors come by into B. Hansdah's house as well. In short, a large number of Santal and non-Santal villagers visit the house and socialize in the courtyard with the family or drink *handia*. Later in this chapter, I compare the visitors in this house with my own experiences of visiting families in order to understand the different thresholds of interactions in Santal dwellings.

⁴⁹ In addition to individual worship by nuclear families, extended families came together to offer worship collectively nearly every five years. Personal conversation with M. Hansdah in February 2013.

3.3.3.2. House of M. Murmu, Chauda

This house in Chauda village has spaces on three sides enclosing a *racha* (courtyard). One of these spaces faces the *kulhi* and is the oldest part of the house (Fig.3-14).⁵⁰ The two other spaces were added later – a semi-open space used for cooking and storage of household things and a block of two rooms that were kept closed during my visit. It was apparent that M. Murmu used these two rooms for everyday activities such as sleeping and storage of paddy for instance since she herself walked in and out of these rooms, and there were no signs of these activities elsewhere in the house. Compared to the *orak* of widows discussed earlier, M. Murmu had a larger house and lived alone. This was because the house was inherited from her parents and her own brothers had already built their respective houses nearby. It is also worth noting however that since she lived alone, large parts of the house – particularly the older part – lay unused.

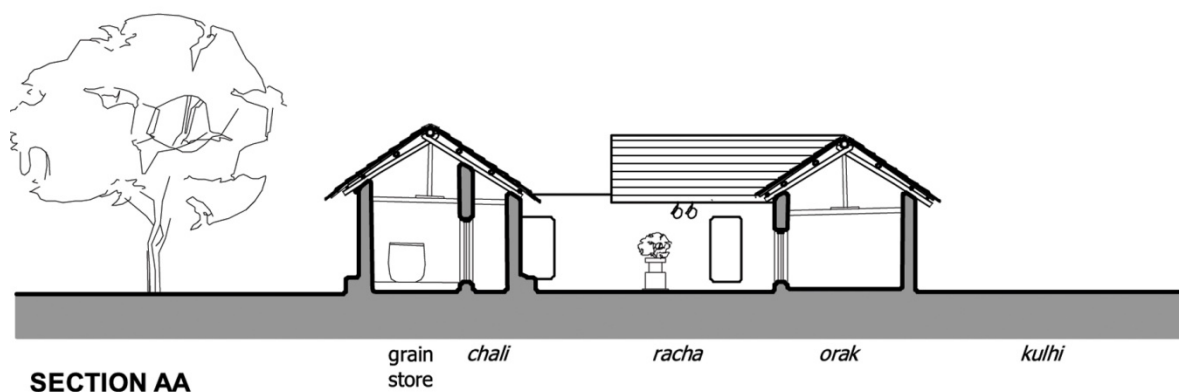
⁵⁰ M. Murmu pointed out that her parents built that (now older) part of the house when they got married. Her brothers built their own houses and live next door. She continues to live in her parents' house since she is unmarried and her parents have since passed away. Personal conversation with M. Murmu in Chauda in March 2013.



PLAN

LEGEND

- 1 ENTRANCE
- 2 *RACHA*
- 3 *CHALI* (VERANDAH)
- 4 ANIMAL SHELTER
- 5 COOKING AREA
- 6 SLEEPING AREA
- 8 GRAIN STORAGE
- 9 *BARGE* (BACKYARD)
- 11 TULSI PLANT



SECTION AA

grain
store

chali

racha

orak

kulhi

Figure 3-14: Layout of M. Murmu's house in Chauda

3.3.3.3. House of Mardi brothers, Bada Bandua

At the time of documentation, this house was in the process of being divided between three brothers who earlier lived together.⁵¹ The house has two volumes arranged in an L-shape, and a wall encloses the *racha* at one end. The smaller volume now belongs to one brother, while the longer volume is divided between two brothers (Fig.3-15). Though the *racha* is shared, the brothers have their own mud stove for par boiling paddy within the *racha*. The longer volume also has a *chali* (verandah) through which the inner spaces are accessed. One of these two inner spaces is the *bhitar*, but again, I was not allowed to go inside the rooms since two of the brothers were not at home. This house may be entered from the street and from the backyard (Fig.3-16). The backyard entrance is unusual but is explained by the presence of another house behind this one; the *kulhi* is extended to the back to allow the other house to have direct access. Consequently, the backyard of this house also opens into the *kulhi*.

⁵¹ A family dispute had led to the division of property between the brothers. What was interesting to note was that each brother had occupied one part of the house since the density of houses around them did not permit the building of separate houses for each brother.

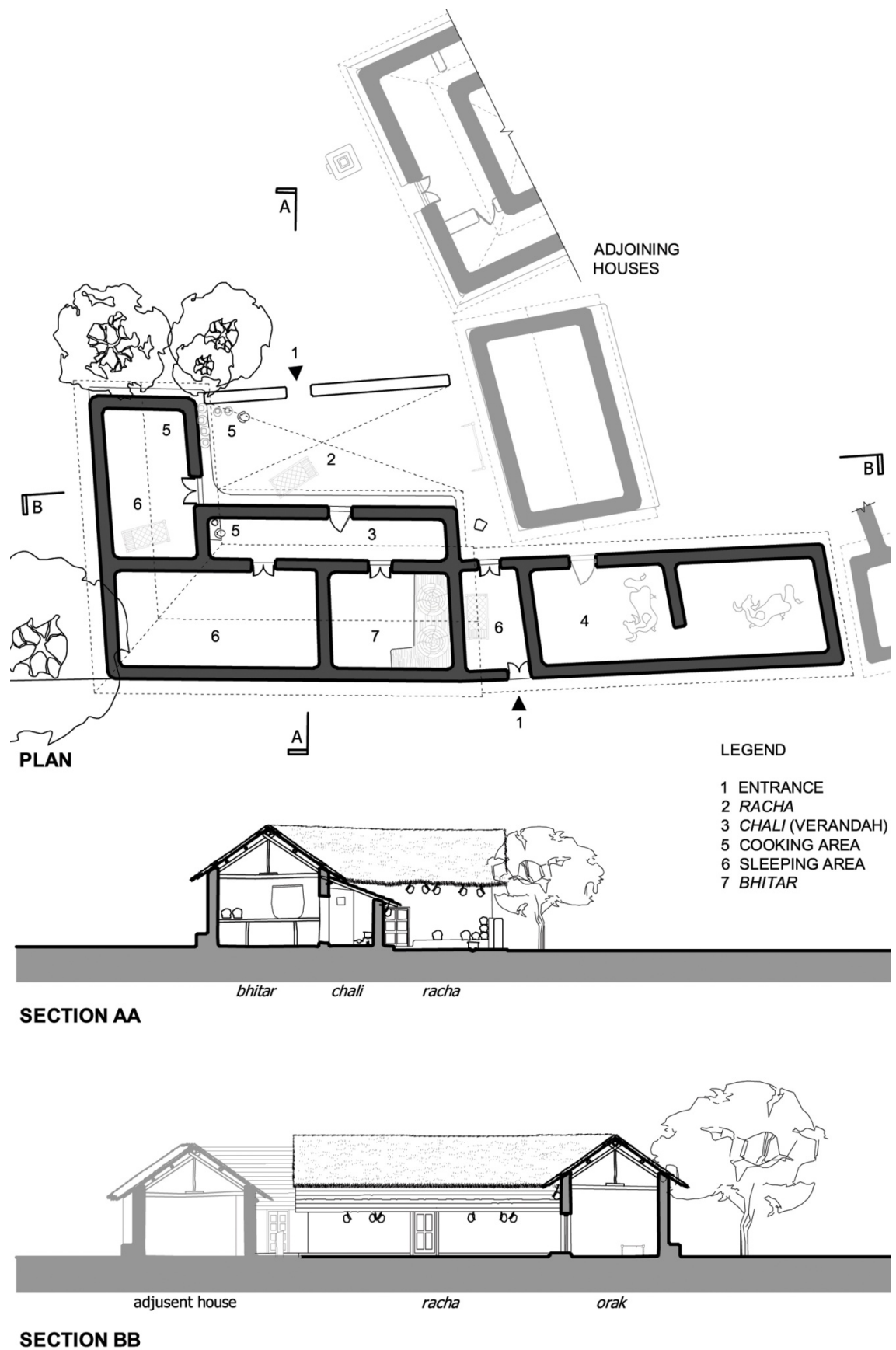


Figure 3-15: Layout of Mardi brothers' house in Bada Bandua



Figure 3-16: View of back entrance of Mardi brothers' house

3.3.3.4. Key characteristics of courtyard type houses

Two important characteristics emerge from the above discussion – first, the variations in *racha* in terms of size and, second, the kinds of spaces organized around the *racha* that comprise the dwelling. The variations in sizes of the *racha* are evident when we compare houses from different villages. For instance, in dense settlements such as Bada Bandua, the *racha* may be a mere sliver of space, where as in settlements such as Chauda that are more dispersed, the *racha* is more clearly formed with volumes on all four sides (Fig.3-17). These variations are important to note because they imply that although the *racha* is a central organizational feature of this layout type, it emerges over time with the addition of built volumes rather than being explicitly designed or formed. This ties back to an earlier discussion about the *kumbaha*, where I noted that cattle shelters and other spaces were added to the *orak* or *kumbaha* and in the process defined a yard-like space in their midst (Fig.3-18). In terms of interiority, the *racha* emerges as a space that is separated from the open space of the street but is not as private as the interiors of the built volumes themselves. In other words, the courtyard houses present more complex thresholds of interiority as compared to the *orak* or *kumbaha*. This development, I later argue, is significant in light of broader social and political transformation of Adivasi communities in the Singhbhum region.

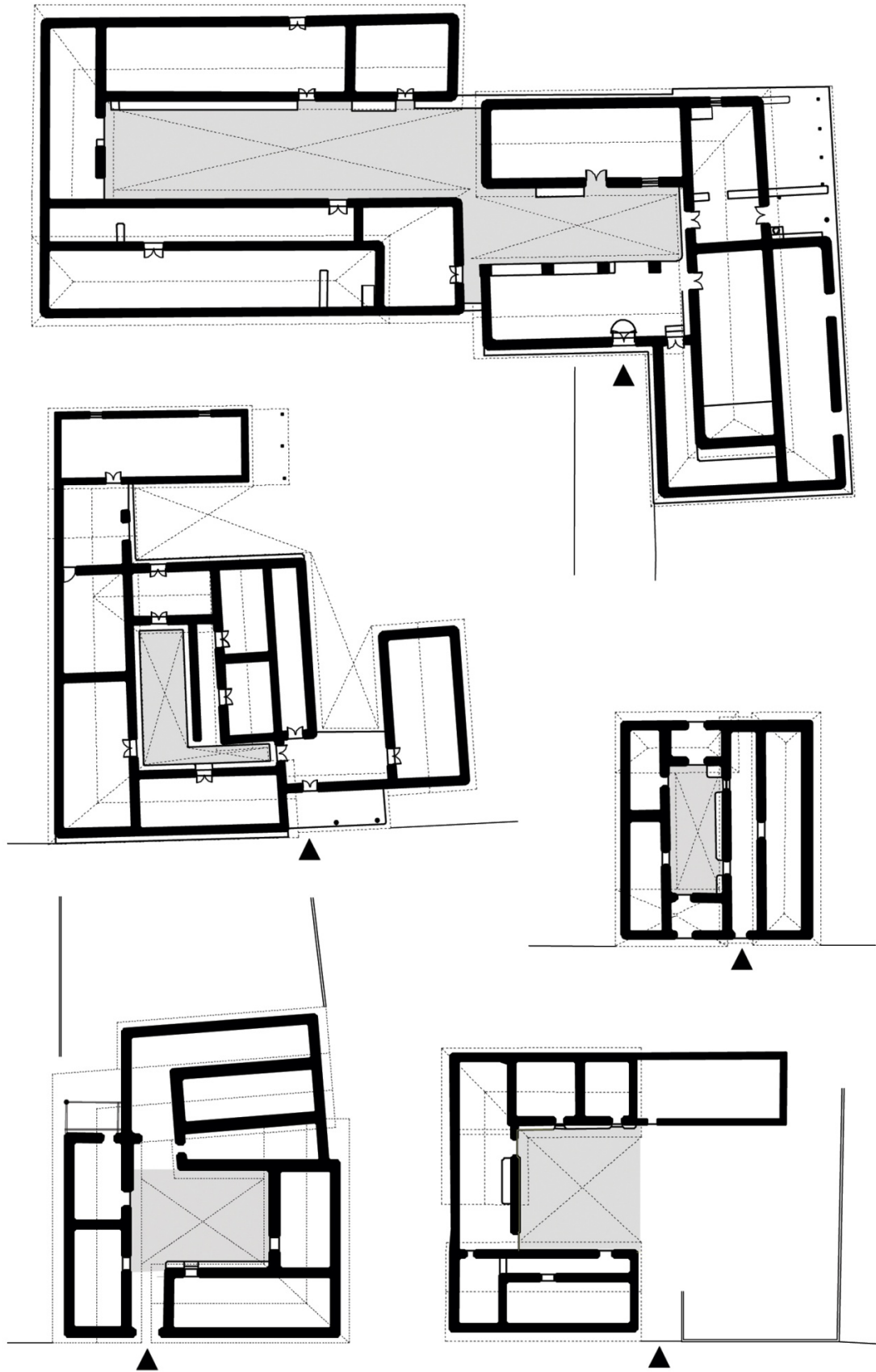


Figure 3-17: Comparison of *racha* (marked in grey) in different houses. Note the different shapes and sizes of the *racha*.

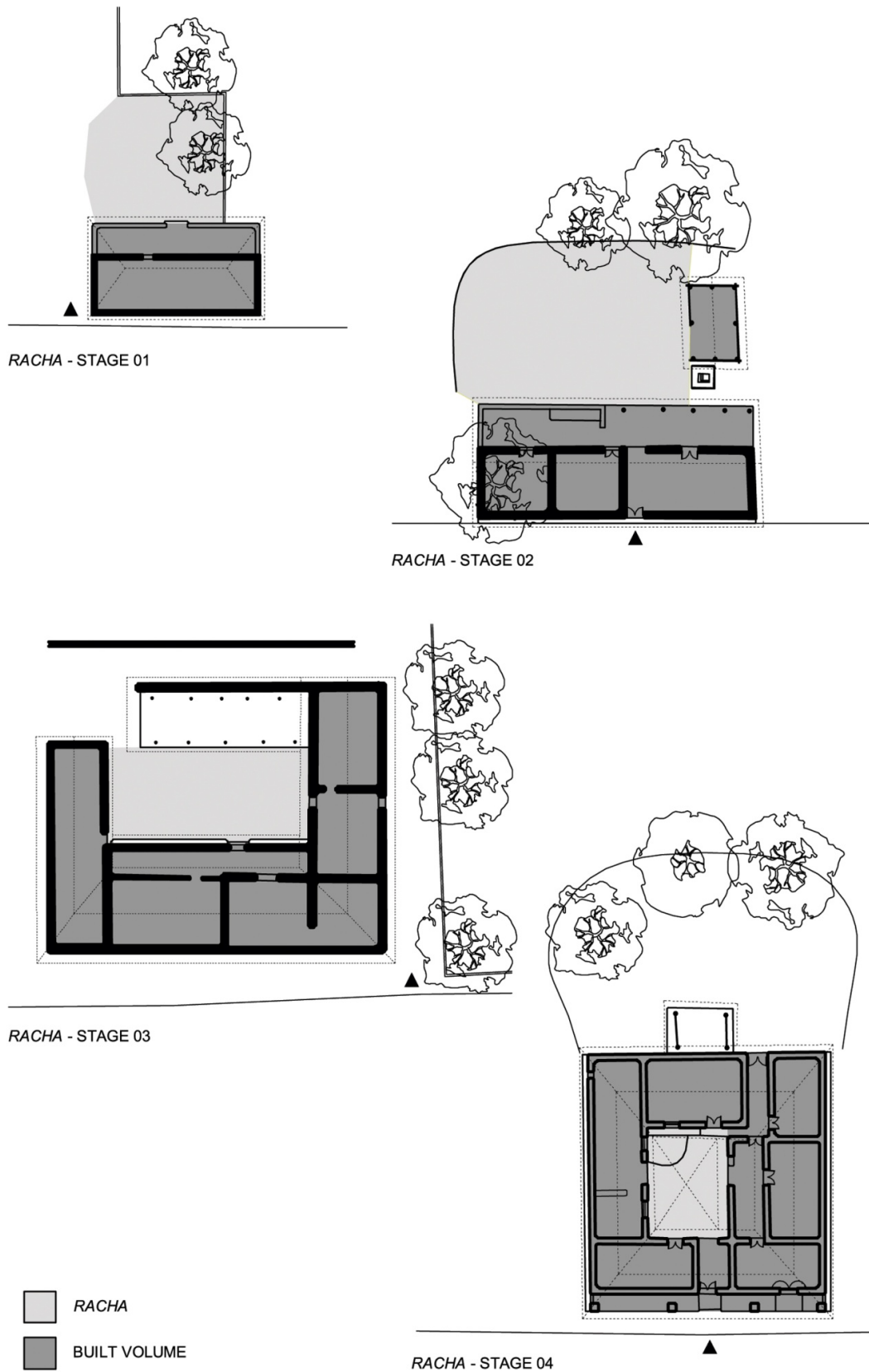
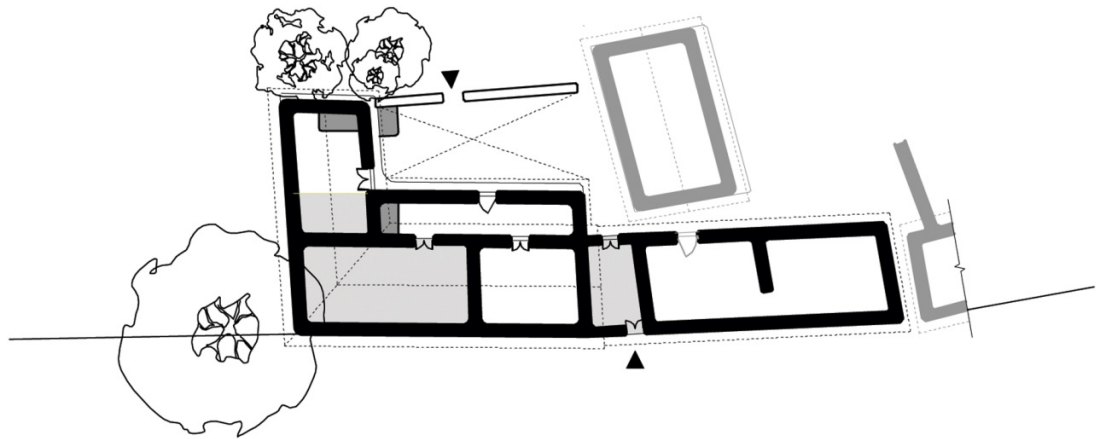
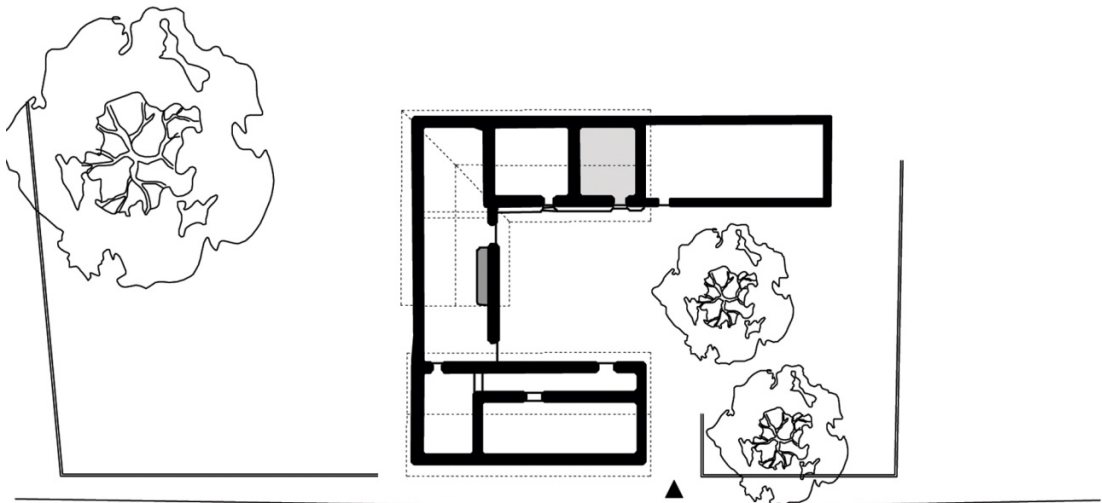


Figure 3-18: Emergence of *racha*- from stage 1 where the *racha* is only separated from the street by the built volume, in stage 4, it becomes a fully enclosed space.

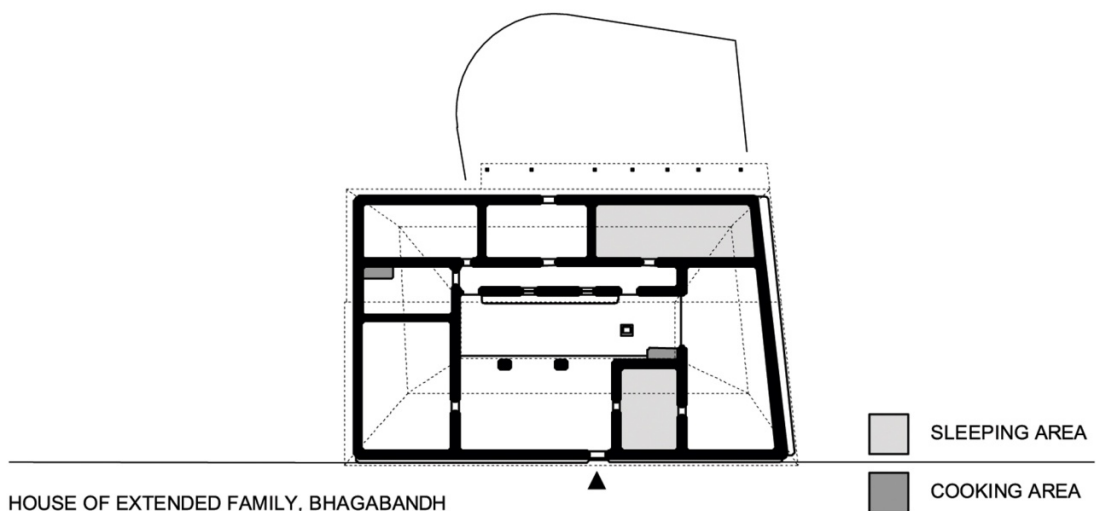
A second characteristic of courtyard houses is the designation of internal spaces for different functions such as sleeping and grain storage, which in the case of the *kumbaha* or *orak* may have taken place within the same volume. It must be noted however that these spaces vary according to family sizes and requirements. For instance, in the examples discussed above, B. Hansdah's house has four adults and two children living together, and consequently has more rooms designated for sleeping while M. Murmu lives alone and many parts of her house lie unused. In complete contrast, the Mardi brothers are three nuclear families living within one courtyard house and particular corners of the *chali* (verandah) are seen to be designated for specific activities such as cooking for one family (Fig.3-19). What is interesting across these examples is that the functions for which spaces are designated remain the same, i.e., each family has spaces for worship, cooking, grain storage, animal shelters and sleeping, while the degree of differentiation varies. Where the dwelling is large as in B. Hansdah's house, there may multiple spaces for the same function such as two sleeping areas, two animal shelters and two worship areas. Where the dwelling is small, activities still find designated, though much smaller, spaces. This internal differentiation of activities and spaces becomes an important aspect of the transformation of Santal dwellings and that this corresponds to broader shifts in Santal modes of living.



HOUSE OF THREE BROTHERS, BADA BANDUA



HOUSE OF A SINGLE WOMAN, CHAUDA



HOUSE OF EXTENDED FAMILY, BHAGABANDH

Figure 3-19: Comparison of distribution of cooking and sleeping areas across case study examples. Note the multiple sleeping areas in the first and third houses since they are occupied by extended families.

3.3.4. Ath-chala houses

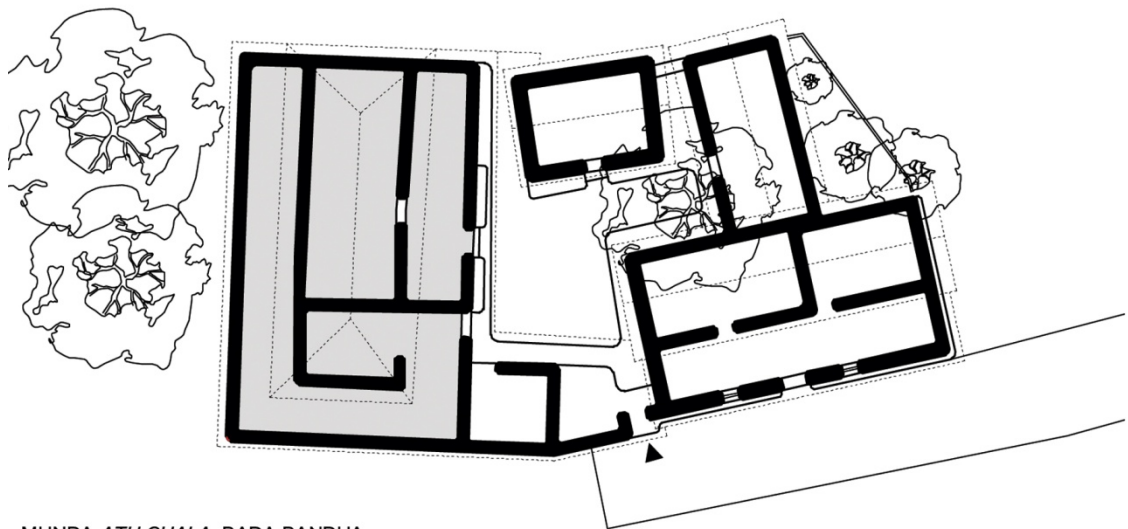
I mentioned in the earlier chapter that villagers pointed to some dwellings in the case study villages as being very old structures. These houses typically had gable roofs and were internally organized as two concentric spaces comprising one interior space and a *chali* (verandah) all around. These structures, together with other volumes are organized as present-day courtyard houses and were it not for the explicit mention by villagers, it would have escaped notice as being complete dwellings on their own (Fig.3-20).⁵² These houses are known as *ath-chala*, which literally mean eight roofs and refer to the eight surfaces of the gable roofs typically found on these houses.⁵³ As I discuss in the examples below, when they were in use, these houses contained a place of worship, grain storage, cooking areas and animal shelters, and therefore may be considered as examples of complete dwellings from the past.⁵⁴ Three distinct examples of such old houses were pointed out during fieldwork. A preliminary analysis of such layouts formed the basis for identifying other such units that blended in with the courtyard houses and were less distinctly visible. One of the three examples discussed below is a Munda house while the other two are Santal.⁵⁵ All three are used in the discussion on account of the similarities in layout. Thus, details of architectural similarities and differences between Santal houses and those of neighbouring communities such as Mundas are discussed at various points through out this study.

⁵² During preliminary fieldwork, I noted that some villages had houses with two layers of spaces and gable roofs, while others had a single layer of spaces organized around a layout. I initially attributed these differences in layout and roof form to regional or local differences in Santal houses. For instance, I conjectured that proximity to Bengal, where such gable roofs are common, may have influenced Santal dwellings forms in some localities. When the villagers identified these layouts as being older dwellings, it became apparent that the differences were temporal rather than regional or local.

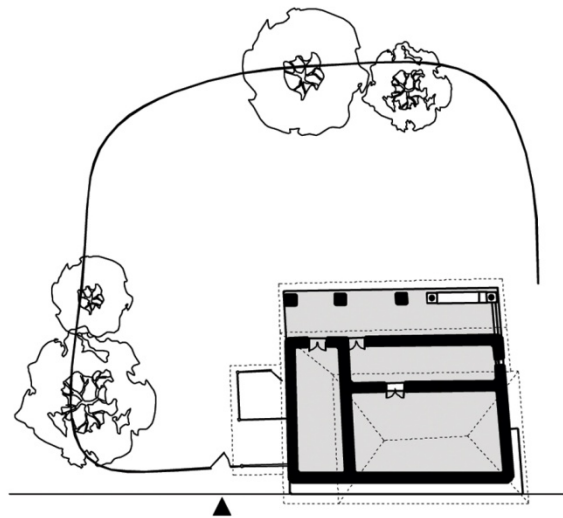
⁵³ *Ath-chala* is a term borrowed from the neighbouring region of Bengal where such roofs are commonly constructed. It is possible that this term is used in areas contiguous with Bengali speaking regions while other localities use other terms. In this study, however, I use this term since it is a satisfactory descriptor of such houses. Personal conversation with G. Singh in Bhilaipahadi in July 2013.

⁵⁴ Not all such *ath-chala* houses were in use. The activities described here refer to how the house may have been used in the past.

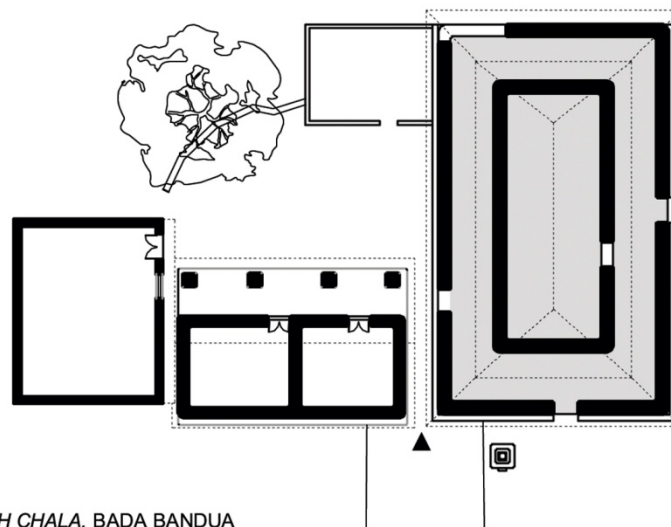
⁵⁵ As mentioned in the previous chapter, Mundas are one of the other Adivasi communities in this region. One of the findings from preliminary fieldwork was a considerable degree of similarity between layouts and construction of houses across different Adivasi and non-Adivasi rural communities here. Given these similarities, one may generally consider a Munda *ath-chala* as contributing to discussion about older house types in the region.



MUNDA ATH CHALA, BADA BANDUA



SANTAL ATH CHALA, BANGODA



SANTAL ATH CHALA, BADA BANDUA

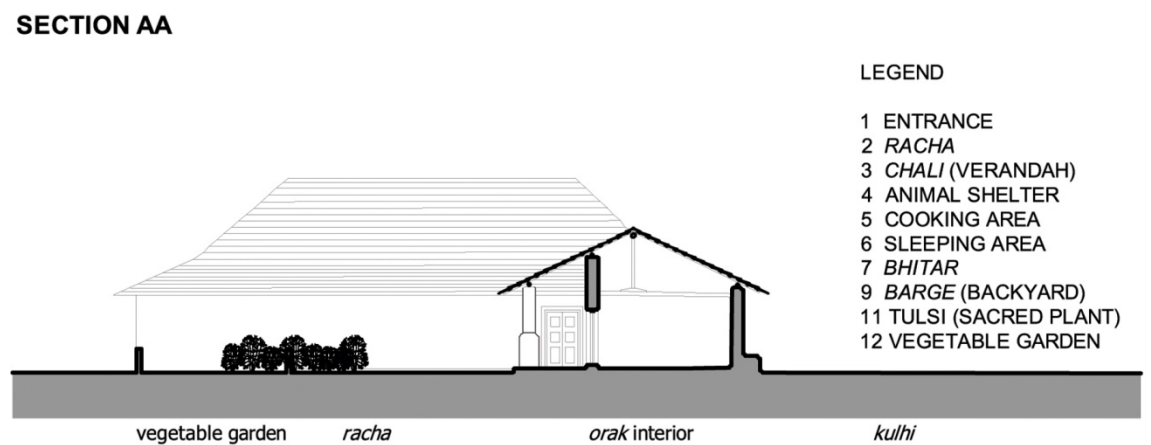
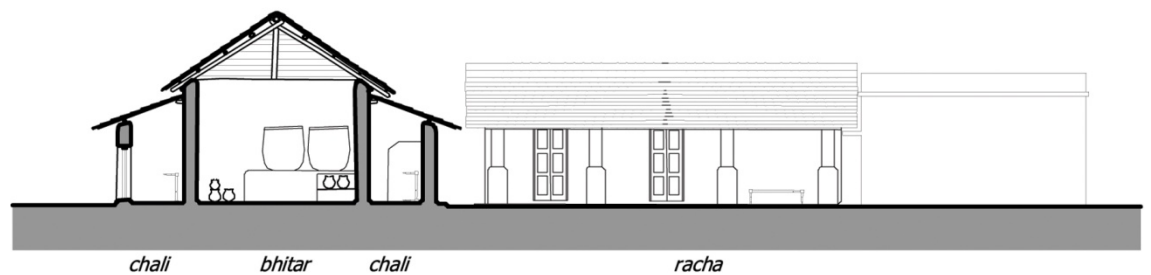
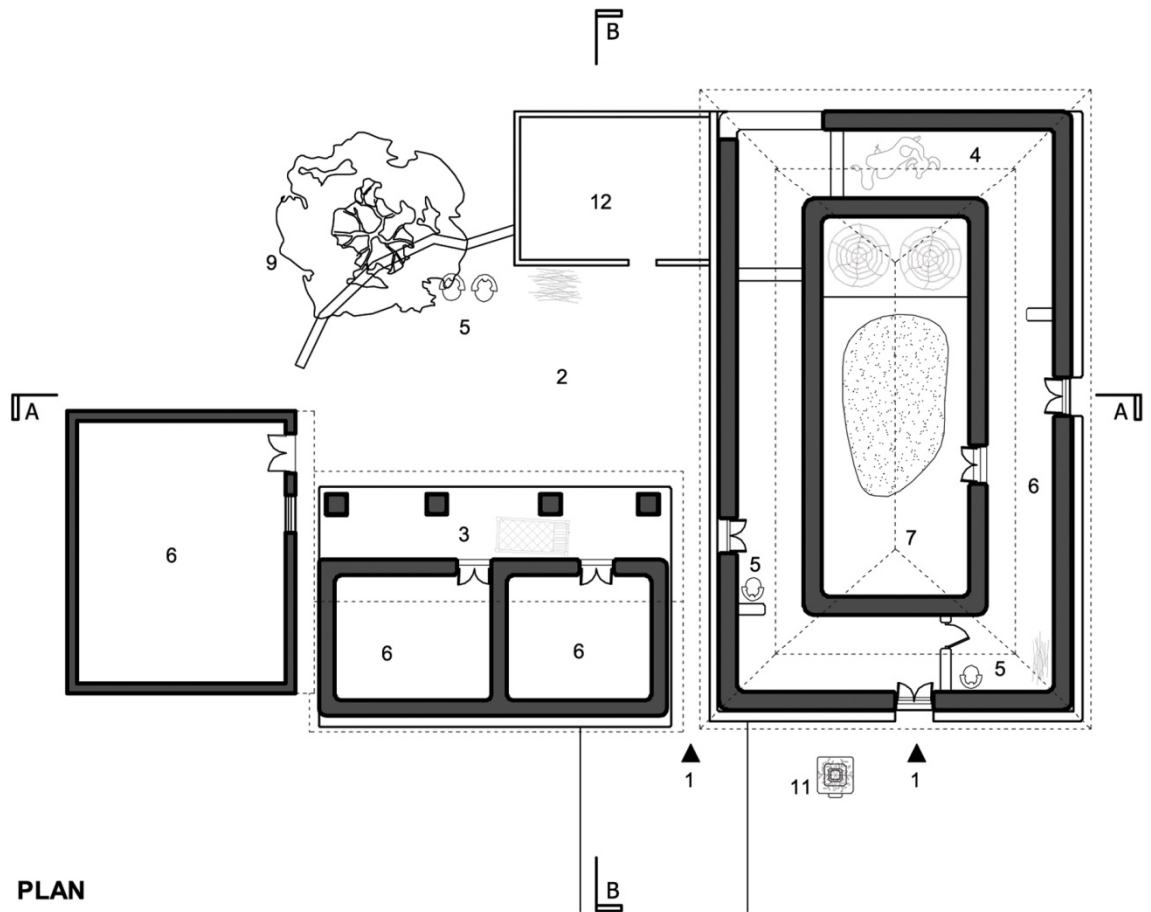
Figure 3-20: Examples of *ath-chala* houses

3.3.4.1. Santal *ath-chala* in Bada Bandua

This example of an *ath-chala* has a central volume with other spaces built on three sides. It is located within a cluster of other houses and is not in daily use since the family has other spaces as well (Fig.3-21). The central interior volume is the *bhitar* and today is also used for storing grain (Fig.3-22).⁵⁶ This is the only part of the house that continues to be used even in the present. In other words, other activities are now located within the newly constructed space around the courtyard house while the *bhitar* remains located within the *ath-chala*.⁵⁷ The *chali* built around the *bhitar* is a continuous space and different parts of it were used for activities such as cooking, sheltering animals and sleeping (Fig.3-23). These activities were separated by low walls rather than occurring within distinctly divided rooms. This particular *ath-chala* has entrances on three sides though it is possible that some of these doors did not exist previously and were carved out later. Today, this *ath-chala* is located such that there are two courtyard houses on either side. Though A. Murmu mentioned that the house belongs to her family, she may have referred to the extended families and so it is not clear to which of the flanking courtyard houses the *ath-chala* belongs.

⁵⁶ A. Murmu – who lives in this house - explained how the house was used in earlier times and this description served to understand the layout of the house. Personal conversation with A. Murmu in March 2012.

⁵⁷ The location of the *bhitar* is connected to the kinship structure in Santal families. Generally speaking, as Troisi points out, the *bhitar* is located in the house of the eldest male member of a family (Troisi 1979, 92). This may be the father whose sons, though married, may continue to offer worship in the parental *bhitar*. This may also be the eldest married brother in a family with many brothers. What is clear however is that A. Murmu's husband is the eldest of seven brothers and definitely offers worship at the *bhitar* within the *ath-chala*. Given that the houses of the other brothers were not studied, one cannot ascertain if they had separate *bhitar*. In any case, a precise correlation between the presence of a *bhitar* and family structures is beyond the scope of this study.



LEGEND

- 1 ENTRANCE
- 2 RACHA
- 3 CHALI (VERANDAH)
- 4 ANIMAL SHELTER
- 5 COOKING AREA
- 6 SLEEPING AREA
- 7 BHITAR
- 9 BARGE (BACKYARD)
- 11 TULSI (SACRED PLANT)
- 12 VEGETABLE GARDEN

Figure 3-21: Layout of Santal *ath-chala* house



Figure 3-22: View of *bhitar* in Santal *ath-chala* house



Figure 3-23: View of *chali* interior

3.3.4.2. Munda *ath-chala* in Bada Bandua⁵⁸

Another distinct example of an *ath-chala* house, this house has a central volume with a loft above and a *chali* along three sides of the central volume (Fig.3-24). Unlike the example discussed above however, this one is actively used for everyday activities. The central space is the *bhitar*, which I was not permitted to enter or see.⁵⁹ Above this central volume is

⁵⁸ During fieldwork, it was particularly recommended that I see this house as a very old example of houses in the village and because it has a loft above. Lofts were found in the houses of some of the more prosperous families in the region and were typically used for storing grain or even sleeping indoors during the monsoon. As I discuss in the next chapter on construction, lofts are relatively more difficult to construct and are both labour and resource intensive. For this reason, it is likely that only the prosperous families in the village may have constructed lofts within the *ath-chala* houses.

⁵⁹ M. Singh, who lives in this house, mentioned that it was a place for prayer. Munda families have two spaces for prayer – one for ancestral spirits and one for other deities. Personal conversation with G. Singh in Bhilaipahadi in July 2013.

the loft, which is accessed from the outer *chali* space. The surrounding *chali* has designated spaces for three activities - a separate room for cooking, also through which the *bhitar* is accessed, a place for the *dhenki* (device for husking paddy) near the entrance, and the remaining length of space for sheltering cattle. In addition to this *ath-chala*, there are other spaces such as sleeping areas and a separate verandah for socializing that were added later on, and in the process, the dwelling developed into a courtyard type layout.

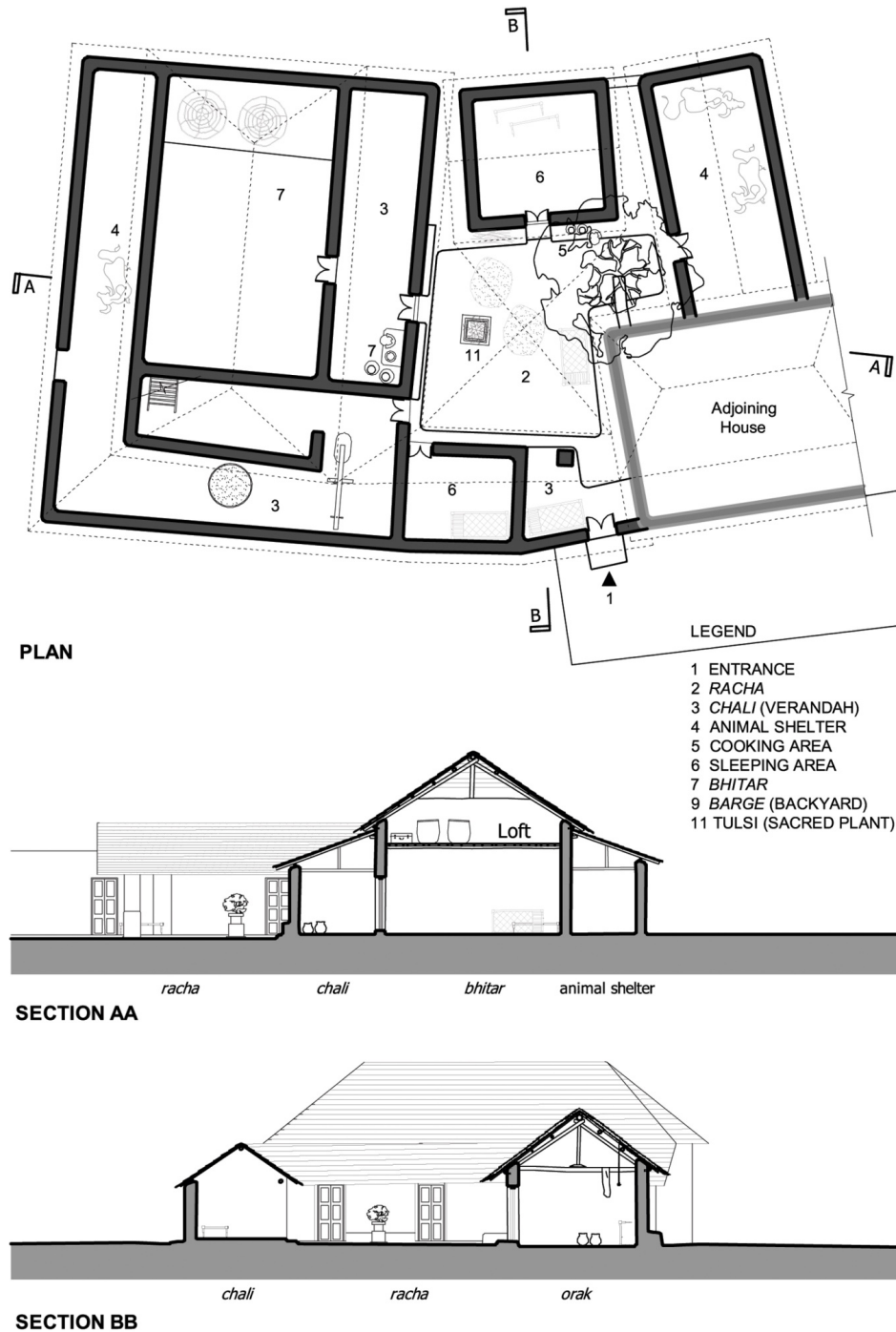


Figure 3-24: Layout of Munda *ath-chala* house

3.3.4.3. House of R. Tudu in Chauda

This example is a large house belonging to the *manjhi* (headman) of Chauda village. The *ath-chala* in this case was very difficult to distinguish during preliminary fieldwork. It was only when it was clearly identified through other examples such as the ones discussed above, did it become apparent that part of this house is an older block to which spaces were eventually added and that created the courtyard (Fig.3-25). What is particularly interesting in this house is the presence of two *ath-chala* connected by a *chali*, which in earlier times, served as a dovecote (Fig.3-26).⁶⁰ Focusing on the *ath-chala*, both comprise a central volume with a *chali* added on the sides. The central volume may be used as the *bhitar*, though the family did not confirm it.⁶¹ One may conjecture that the *ath-chala* accommodates activities such as cooking and sheltering cattle since signs of these activities were not evident elsewhere in the house. Though much information could not be gathered about the distribution of activities in the interior of this house, the presence of the *ath-chala* and its subsequent development into a courtyard type layout offer vital cues for developing a trajectory of transformation of houses in the region.

⁶⁰ Bodding (1940, 432) points out that some Santal families built a dovecot in the middle of the courtyard. However, this was the only house where a dovecot was observed.

⁶¹ This is difficult to ascertain since I was not permitted to see in the interiors of the *ath-chala* except for one *chali*, which presently housed cattle.

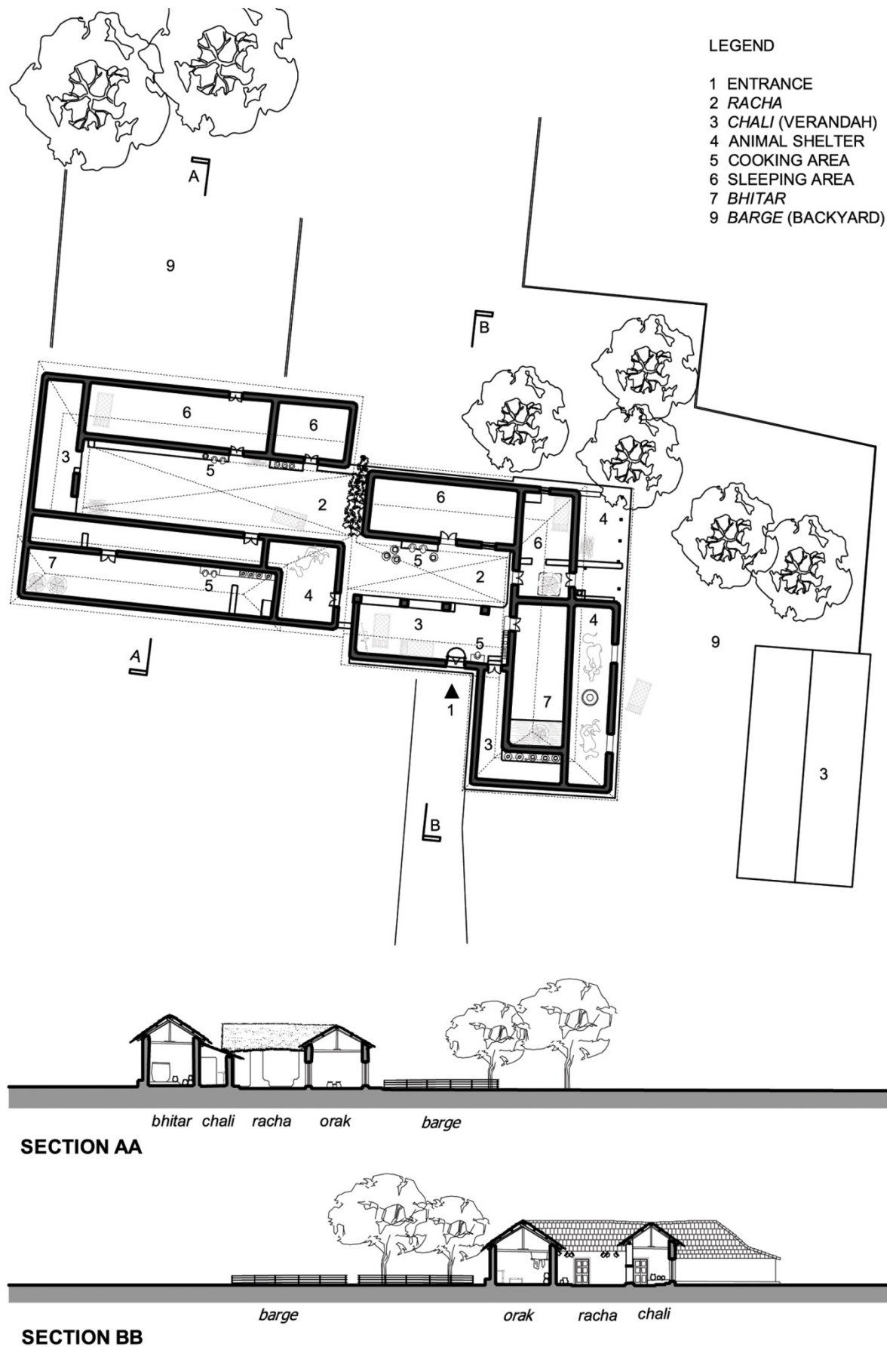


Figure 3-25: Layout of house with *ath-chala* in Chauda



Figure 3-26: View of dovecote in Santal house in Chauda

3.3.4.4. Key characteristics of *ath-chala* layouts

Compared to the *orak*, *kumbaha* and courtyard layouts discussed earlier, it is evident that the *ath-chala* has a completely different spatial organization. Rather than the single volume of the *orak* or *kumbaha* or the many volumes forming the courtyard houses, *ath-chala* layouts have spaces organized concentrically thereby creating two levels of interior spaces. The most interior space then becomes the *bhitar* while the outer spaces are used for cooking, sleeping, and sheltering cattle (Fig.3-27). At a broader level however, the dichotomy between the interior and exterior spaces and the relative distribution of activities in these spaces is similar between the *ath-chala* and the *kumbaha* for instance. This suggests that in both cases, the interiors are accessible strictly to family members. As a corollary then, socializing with outsiders must have taken place in *racha*. Given the present day locations of *ath-chala*, it is difficult to establish precisely where the *racha* may have been located but considering the similarity of interior activities, one may safely conjecture that *ath-chala* houses had *racha* and that these were the site for socializing. What is also evident is that there is a clear dichotomy between the interior and exterior spaces. This is different from the courtyard houses where, as I argued earlier, the presence of two *racha* (the *kulhi racha* and the one within the house) present multiple thresholds for interactions with outsiders and therefore a more complex sense of interiority.

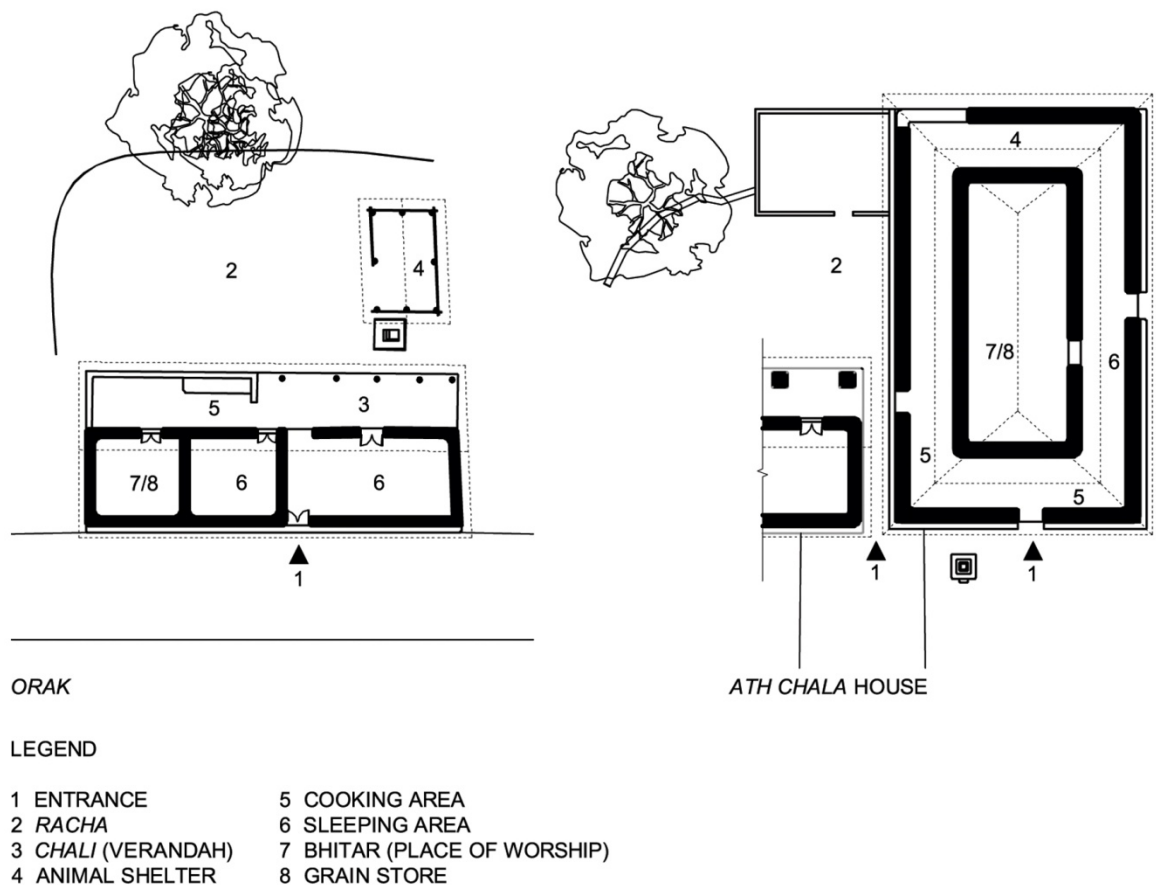


Figure 3-27: Location of *bhitar* in *ath-chala* houses

In terms of designated functions, what takes place within the *ath-chala* are worship in the *bhitar*, cooking, storage of grain, sleeping, and sheltering animals. This range of internal activities is more than what is found in the *kumbaha* or *orak* but less than the activities found within courtyard houses (Fig.3-28). For instance, the *ath-chala* had spaces for cattle within the dwelling itself, which the *kumbaha* typically did not on account of its size. When compared to the courtyard house that often have multiple sleeping and grain storage areas, the *ath-chala* typically have only one area designated for these activities. In short, one begins to find an increasing degree of differentiation in the designation of interior spaces across the *kumbaha*, *orak*, *ath-chala* and the courtyard house. This is discussed later as an important aspect of the transformation of Santal houses particularly when seen against shifts in livelihood practices and gradual sedentarization of Adivasi communities in the region.

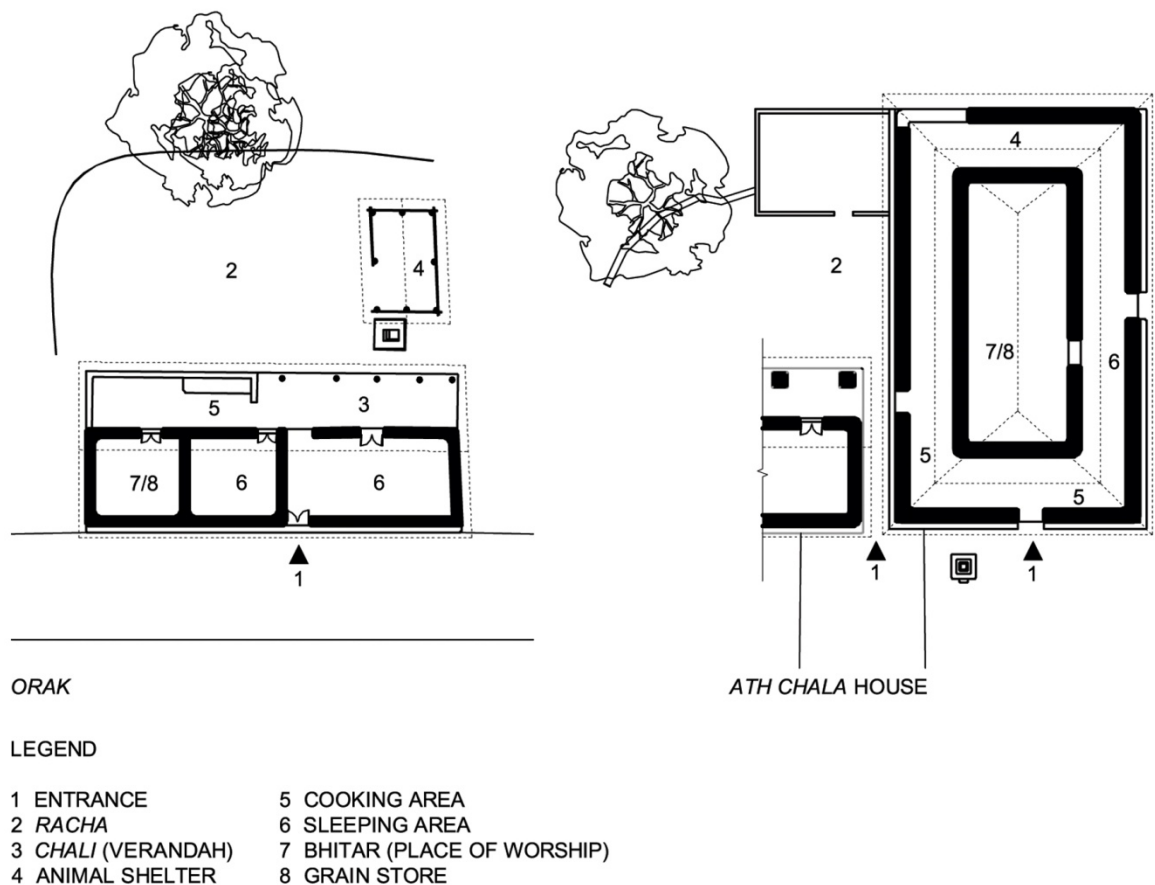


Figure 3-28: Comparison of activities within *ath-chala* and *orak*

3.4. Spaces within Santal houses

Before moving on to a discussion on shifts in dwelling layouts and its correlation to broader changes in the Singhbhum region, it is useful to consider the individual spaces of the dwelling in greater detail in order to address the questions raised at the beginning of the chapter. I asked ‘what is shelter being sought for’ and ‘what is shelter being sought from’ and suggested that through these questions one may address the wider concern of people’s relationship to their environment. More specifically, examining the variations in spaces across the layouts types can help understand which particular spaces and functions have transformed the most, and conversely, which spaces have transformed the least. The spaces considered here are those commonly found across the different layouts discussed above.

3.4.1. Entrance

The entrance, though not always a distinct space, is an important point of connection between the dwelling and street, and by extension, between the family and interior space on the one hand and the community and public space on the other. In the layouts discussed above, two kinds of entrances become apparent: one, the single doorway in *kumbaha* and

ath-chala layouts, which itself forms a clear threshold between the interior and exterior spaces, and two, a vestibule in the *orak* and courtyard houses. In case of the latter, the vestibule is known as *duar orak* (literally meaning space of door or entrance). In case of the doorway in *kumbaha* or *ath-chala*, one enters from the *racha* into the interior space of the dwelling, while in the case of the *duar orak* in the *orak* or courtyard house, one enters into the *racha* and then into the different interior spaces (Fig.3-29).

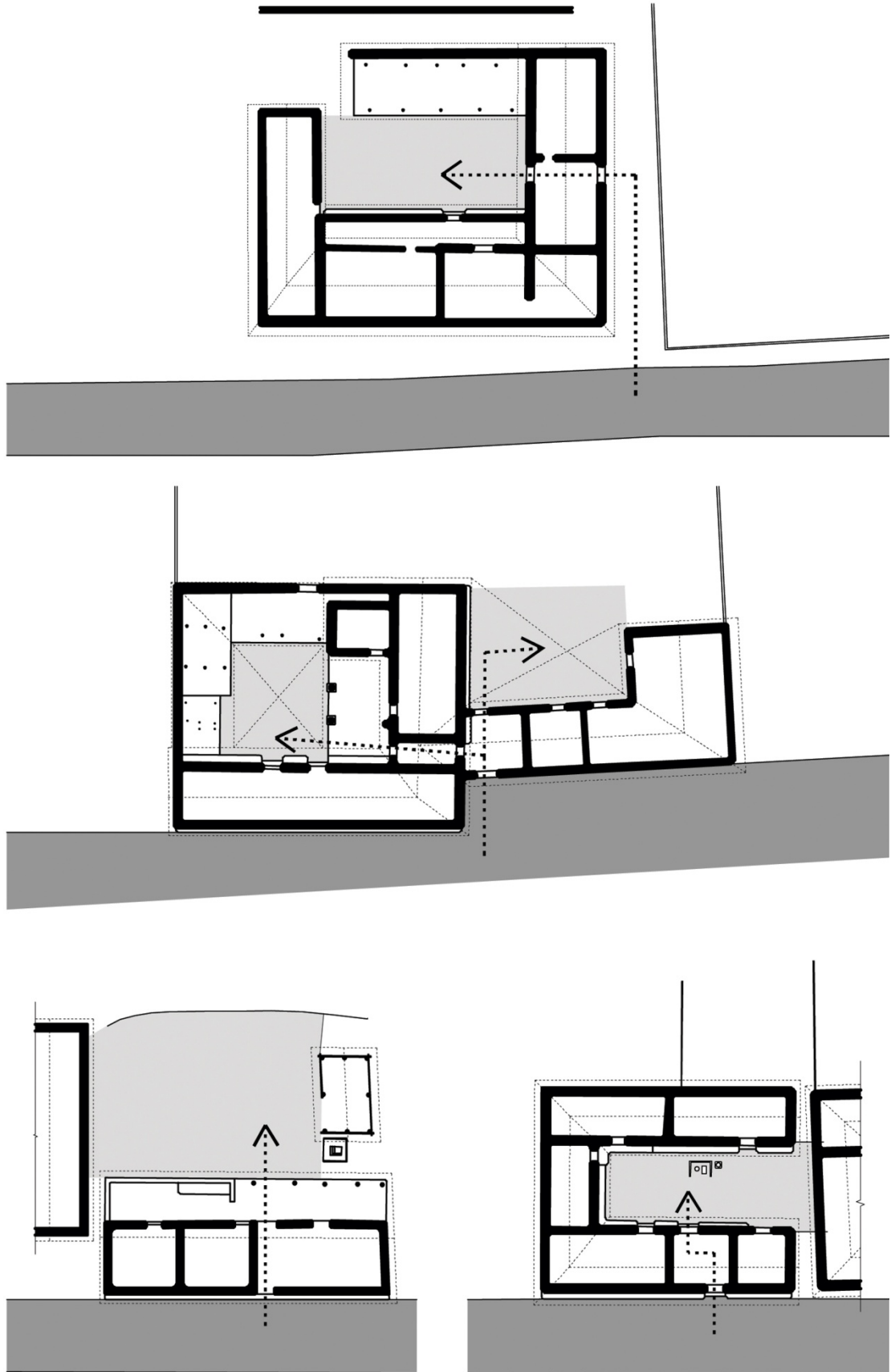


Figure 3-29: Diagram showing movement from *kulhi* into the dwelling

The significance of the entrance to the dwelling and within the daily life of Santals is suggested through the ritual practices in and around the entrance. For instance, the first activity of the day performed by Santal women as soon as they begin their daily chores is to apply a small patch of cow dung plaster at the entrance to the house and that to every space within the house in case of *orak* and courtyard houses (Fig.3-30). During certain festivals such as Sohrae, doorways are marked with palm prints and vermilion dots, which are considered as invocations to Lakshmi (the goddess of wealth) to visit and bring prosperity to the house (Fig.3-31).⁶² What is interesting is that such rituals are done in front of all entrances, i.e., the main doorway leading into the dwelling and doorways leading into individual spaces and therefore, all these doorways are notionally equally important. This suggests a conceptual conflation of the main entrance with other doorways and, by extension, of the whole house with individual rooms, and, is rooted in the transformation of the Santal dwelling from the single-volume *kumbaha* into the multi-volume courtyard house.



Figure 3-30: Patches of cow dung plaster applied at entrances

⁶² Lakshmi is a Hindu goddess but many Adivasis worship her as well.



Figure 3-31: Ritual markings such as palm prints and vermillion dots on doorways

In addition to the application of cow dung at entrances, two or three times a week, the floor of the entire house is plastered with a cow dung mixture. This is done beginning with the entrance and the *kulhi racha*, after which the interior *racha* and the other interior spaces of the house are plastered. As the Santal villagers pointed out, the house becomes ‘stale’ through the night, and each morning, it needs to be purified through the application of cow dung plaster.⁶³ While this must ideally be done every morning, the exigencies of domestic and agricultural work do not allow it and the patch of cow dung applied at entrances each morning becomes a gesture that represents the plastering of the entire house. It is evident that the entrance, phenomenologically speaking, is both the physical and the ritual beginning of the domestic space of a family and, therefore, an important point of connection between the dwelling and the neighbourhood, the family and the community, or more broadly, between the family and the outside world.

3.4.2. *Racha* (courtyard)

As discussed earlier, the *racha* is the primary site of socializing within the dwelling. It is demarcated in front of the house – as the *kulhi racha* – or within the house, where it is simply referred to as *racha*. In both cases, these areas are made evident through regular plastering and cleaning of that part of the ground. In case of the *kulhi racha*, it comprises a low platform built against the front wall of the house used for sitting and the part of the *kulhi*, which is plastered and maintained by the family. In the internal *racha*, the presence of certain objects indicate its patterns of usage within the dwelling.⁶⁴ These objects include

⁶³ Cow dung is widely believed to be a purifying material. Its procurement and manner of usage is discussed in detail in Chapter 5.

⁶⁴ The issue of identifying a *racha* comes up particularly in *orak* where the *racha* is contiguous with the *barge* (backyard garden). However, the spaces are distinctly different in terms of usage and significance and

a *chulha* (mud stove) for parboiling paddy before husking and a *tulsi pinda*, which is a small mud platform with a sacred plant where women light a lamp and incense by way of worship everyday (Fig.3-32). What is interesting to note is that in houses occupied by extended families, one finds as many *tulsi pinda* and *chulha* as there are married couples or equivalent nuclear family units living together in the house (Fig.3-33).⁶⁵ Most families also have a *parkom* (string cot) in the *racha* to be used for seating guests. Apart from these activities, one occasionally finds a corner of the *racha* used for cooking, particularly the evening meal. The *chulha* used for cooking is always different from the one used for parboiling paddy; the former is located in one corner of the *racha* while the latter is typically located more centrally within the space of the *racha*. In short, the specificity of location and use of objects in the *racha* often served as important cues for understanding family structure.



Figure 3-32: Objects typically found in the *racha*

therefore the demarcation is distinctly done as well. The *racha* is regularly plastered while the *barge* is swept and cleaned when possible but not maintained at the level of the *racha*.

⁶⁵ By equivalent units I refer to unmarried women who lived with their brothers for instance and had separate *tulsi pinda* and *chulha*



Figure 3-33: *Racha* of extended family with multiple *tulsi pinda* and *chulha*. Note the two *chulha* (stoves) at either end of the image and the two *tulsi pinda* (indicated by mud platforms) near the centre of the image.

The *kulhi racha* and the internal *racha* form two distinctly different thresholds of interaction. The *kulhi racha* may be used by anybody in the street while only those people who are familiar with the family may enter the interior *racha* unrestricted. This was evident during my fieldwork interactions when people gathered and talked to me in the *kulhi racha* but I went into the interior *racha* only when invited by members of the family. For other villagers however, they often went into each others' house unrestricted (Fig.3-34). This included people from other communities (such as Mahatos and Mundas) who live in the same village.⁶⁶ To return to the issue of dwelling transformation, as Santal dwellings transformed from the *kumbaha* to the present-day courtyard type, the *racha* as a site of socializing becomes differentiated into the *kulhi racha* that is open to anybody on the *kulhi* and the more interior *racha* where only those familiar with the family were welcome.

⁶⁶ The following account illustrates the nature of interactions taking place in the *racha*. During my fieldwork visits in Bhagabandh, the house of B. Hansdah became my base in the village. During the day, when people saw me return to the Hansdah house after visiting other houses or parts of the village, they often came by to see what I was doing. A young Mahato woman - who was a regular visitor to this house - mentioned that she did not step out of her own house much, but visited the B. Hansdah's family since they were among the few Adivasi families who spoke to Mahatos. Even as an infrequent visitor, she walked confidently through the courtyard and around the house. Another woman belonging to a Dom community⁶⁶ also frequently came into the house to chat with me. This account underscores the observations made above that the *racha* was frequented by other people from the village irrespective of their community background or gender but complete outsiders such as I did not enjoy the same level of unrestricted access.



Figure 3-34: Villagers gathered in a *racha*

The *racha* as a social space raises an interesting point of comparison to the interiors of rooms that may be considered primarily as storage spaces. This is because no collective activities take place indoors. The cooking and worship, which do occur indoors, are not really group activities or settings for family interaction. In contrast, all socialising, whether within the family or with outsiders, takes place in the yards. In the *kumbaha* and *ath-chala* houses, the distinction between the spaces of storage, i.e., interior spaces and the sites for socialising, i.e., exterior open spaces, is clear. In courtyard houses, the distinction begins to get blurred given that the *racha* is an interior yet unbuilt space. The enclosed *racha* here illustrates the emergence of a complex interiority in courtyard houses as compared to the earlier *kumbaha* and *ath-chala* dwellings types. This shift, I later argue, also corresponds to the socio-political climate of Singhbhum in the late nineteenth and early twentieth centuries where Adivasi communities found themselves in conflict with non-Adivasis and the state and the dwelling became correspondingly introverted.

3.4.3. Bhitar

The *bhitar* is the place where families offer worship to household spirits, ancestors and other deities and is the most sacred part of Santal dwellings. In the layouts discussed above, the *bhitar* is located in different ways within the internal configuration of the dwellings (Fig.3-35). In the early *kumbaha* houses, it is located at one end of the interior space of the *kumbaha* while in the *ath-chala*, it is located in the central volume that is surrounded by the *chali* on all sides. This location is congruous with the term *bhitar*, which literally means inner, and refers to the interior location within these layout types. The term, however, continues to be used in the courtyard layout, where the *bhitar* is no longer a more interior space as compared to the other spaces but is one of the many rooms that surround

the courtyard. However, while the *bhitar* shifts in terms of configuration, it notionally remains the least accessible space for outsiders, and therefore, arguably, the most interior corner of Santal houses.

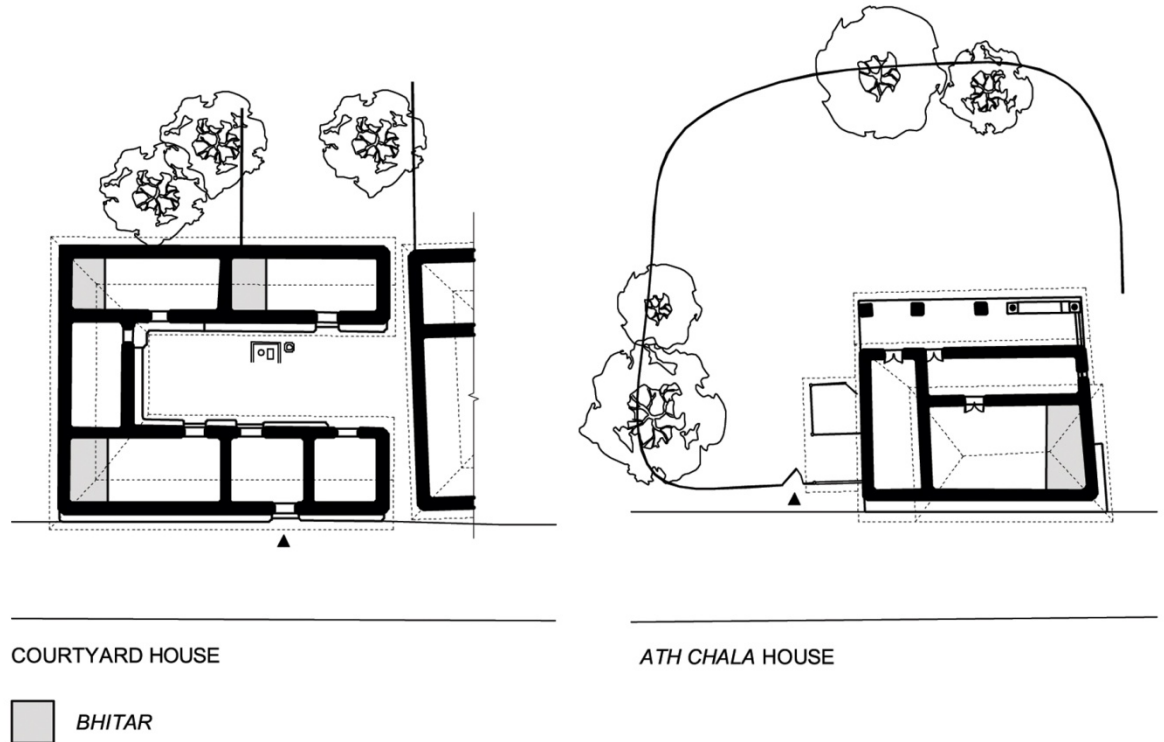


Figure 3-35: Location of *bhitar* within *ath-chala* and courtyard houses

Based on the limited glimpses that I did get of the *bhitar*, a few observations may be made about the interior space of the *bhitar* and objects within. The most important feature of the *bhitar* appears to be the mud platform located at one end of the space.⁶⁷ The platform comprises a low mud wall about 50 centimetres high and a top surface made of wooden planks. In the Bhagabandh examples where the *bhitar* is located in one corner of the sleeping area, the platform is built higher than what was observed in other cases.⁶⁸ In the Bada Bandua example, the *bhitar* is used to store grain that is kept in large baskets. When asked about the *bhitar*, most people referred to it as a place for storing grain rather than talking about its ritual function. What is evident is that not only are Santal villagers typically unwilling to allow outsiders to step into the *bhitar*, they also do not like to discuss the deities or domestic ritual practices.

⁶⁷ Bodding (1940, 431) describes a similar detail of the *bhitar* within Santal houses. He notes that families build a mud wall supporting a small platform in one corner of their dwelling and offer worship there.

⁶⁸ It is possible that the higher walls of the *bhitar* become a necessity given that it is located in one corner of a sleeping area and more people have access to it as compared to other villages. The higher wall may act as a visual barrier and thereby the sanctity of the *bhitar* may be maintained.

Among all the villages and houses visited, in only three cases was I allowed a quick glimpse of the *bhitar*; in all other cases, the door was kept locked and I was refused access into the room. In one case, for instance, a villager who refused to let me step into their *bhitar* said that misfortune may befall the village if he allowed me, an outsider, into the *bhitar*. This incident hinted at the seriousness of belief that an outsider may offend the spirits by accessing the *bhitar*. In the two cases in Bada Bandua and Bhilapahari where I was allowed to get a glimpse of the *bhitar*, villagers who showed it to me said that no harm would come if I took a look inside. In Bhagabandh, where the *bhitar* is a part of the sleeping area, I was permitted to look inside and photograph many examples. On asking why they did not object to my presence where most others did, they said that the sacred place was below the mud platform rather than the entire room. Considering the case of Bhagabandh, one may argue that the *bhitar* remains the most sacred corner of Santal houses, but the degree to which families protect the space from outsiders and the manner of protection has begun to vary in some cases.

3.4.4. Cooking areas

Cooking and eating in Santal families are largely considered as private acts, and were typically carried out indoors.⁶⁹ Consequently, in each of the layouts discussed earlier, one finds designated spaces for cooking. For instance, in the *ath-chala* houses, cooking takes place in one part of the *chali*, while, in courtyard houses, one of the spaces around the courtyard is similarly designated as kitchen (Fig.3-36). Among Santals, each nuclear family unit has their own cooking space.⁷⁰ In cases where extended families live together, one finds multiple cooking areas within the same dwelling. This space typically has a mud stove with a low platform around it and some shelves to hold utensils (Fig.3-37). This room is also used as a place for eating by the family. Apart from these designated indoor kitchens, two other locations have stoves— first, the *racha*, and second, occasionally, semi-open cooking areas in place of enclosed kitchens. The mud stove found in the *racha* are usually located in one corner under the overhand of the roof and is different from the mud

⁶⁹ Additionally, unless I was eating with a family, I was dissuaded from taking photographs of people eating or cooking.

⁷⁰ While this typically refers to a married couple and their unmarried children, other such units include unmarried women living with their brother's families or widowed women who lived with their sons for instance. In each case, these women have their own cooking area while their brothers or sons have separate kitchens respectively.

stove in the middle of the *racha*, which is used for boiling paddy.⁷¹ Women cook on this stove at times when it is too hot and smoky indoors.⁷² However, even if they did occasionally cook outside, they took the food inside to eat. The other type of cooking area observed was the semi-open, verandah like spaces with a stove (Fig.3-38). Such areas are alternatives to enclosed cooking areas, and are usually found as later additions in houses, i.e., built as a result of a additional requirement such as for a newly married couple who may need their own cooking space.

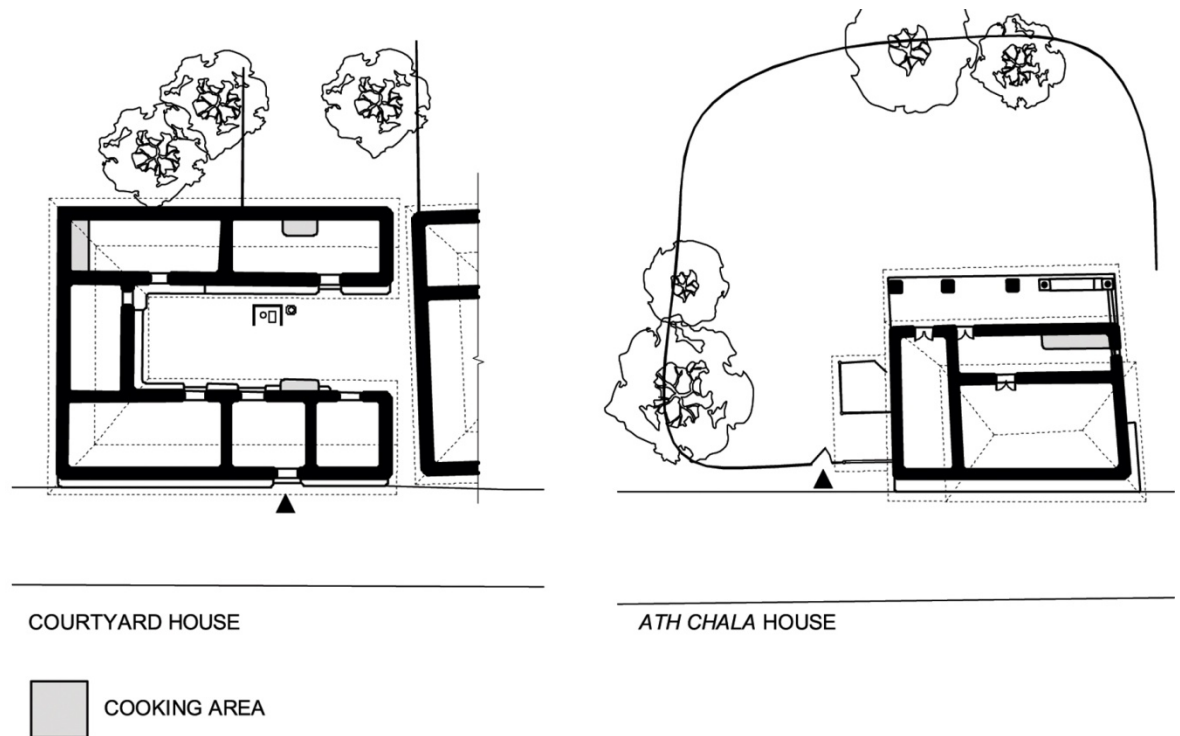


Figure 3-36: Comparison of cooking spaces in *ath-chala* and courtyard house



Figure 3-37: Views of cooking area

⁷¹ It is interesting to note these two mud stoves are not interchangeably used and this, as I argue later, may be on account of the degree of enclosure that is required for cooking as an activity.

⁷² This possibly happened during the rainy season when a general dampness led to an increase in smoke from the firewood and the kitchen became very uncomfortable to cook in.



Figure 3-38: View of semi-open cooking area

It is interesting to note that even when cooking is carried out in the *racha* or in a semi-open space, there is a degree of enclosure that is provided. In both cases described above, the mud stoves are built against a wall and have a roof cover, i.e., they are not completely open like the mud stove for boiling paddy. The fact that cooking and eating are always carried out in a physically or notionally enclosed space may be attributed to their belief in witchcraft, wherein a person with negative intent may cast an evil eye on food and bring misfortune upon the one who consumes it. This concern regarding the evil eye may be seen also in the fact that not only cooking and eating, but most other indoor activities take place in spaces that have no windows. Santal villagers however did not easily acknowledge this idea and typically suggested that it is a fear of something spoiling the food that led to enclosed cooking areas and a fear of thieves that led to the lack of windows in houses more generally. This is not a plausible explanation when one considers the semi-open cooking areas for instance. Only two people in separate conversations made oblique references to the belief in witchcraft by saying that in the past, villagers believed in spirits and witches and this made them conceal the *bhitar* and cooking areas.⁷³ What is interesting to note is that they referred to these beliefs as existing in the past though it is evident that they still persist in Santal communities today. One may contend that the belief in witchcraft may be considered regressive on account of the fact that it has been actively denounced by the state in the past few years and therefore Santal families are unwilling to discuss the

⁷³ Personal conversation with M. Hansdah (Bhagabandh) and D. Hansdah (Karandih) in February 2013 and July 2013 respectively.

practices associated with it. However, it becomes evident through activities such as cooking and eating that are particularly conducted indoors.

3.4.5. Animal shelters

Shelter for animals, especially cattle, forms an important part of the dwelling since animals are never tethered outside at night.⁷⁴ I mentioned earlier that in the *ath-chala*, one finds designated spaces for cattle within the *chali* while in the courtyard house, one of the spaces around the *racha* are designated for cattle. In some cases, separate shelters are built for different animals such as cattle and goats, while chickens are kept under a basket in the corner of some room (Fig.3-39). Even in the *kumbaha* houses, villagers suggested that separate shelters were built for cattle.⁷⁵ A particular feature of the cattle shelter is the floor, which is made of stones set in mud to allow for easy cleaning (Fig.3-40). In terms of daily routine, cattle are usually let out of their shelters in the morning, given water and feed and then taken for grazing. The cattle return at dusk and after being fed and watered and are herded back into their enclosures for the night. In some cases, such as in Chauda, families build fenced enclosures outside their houses where cattle are tied during the day.⁷⁶ At night however, they are returned to their shelters within the house. What becomes evident when comparing animal shelters across different layouts types is that they form an important interior space within Santal dwellings. Together with the *bhitar* and cooking areas, animal shelters are the only other constant designated interior spaces through the various stages of transformation of Santal dwellings. These aspects may be considered as a core of the interior dwellings spaces that have varied to a lesser extent as compared to spaces for activities such as sleeping and socializing.

⁷⁴ As one Santal villager pointed out, just as we humans have homes, animals need homes to sleep in as well.

⁷⁵ While the specifics of this cannot be conjectured due to the absence of extant *kumbaha* type houses, what is clear from people's narratives is that when family had cattle, they built a shelter for it. In other words, cattle were never tied out in the open.

⁷⁶ Grazing systems and its impact on daily life and domestic space are discussed in greater detail in Chapter 4.



Figure 3-39: Views of goat shelter and chicken coop



Figure 3-40: Interior of cattle shelter

3.4.6. Sleeping areas

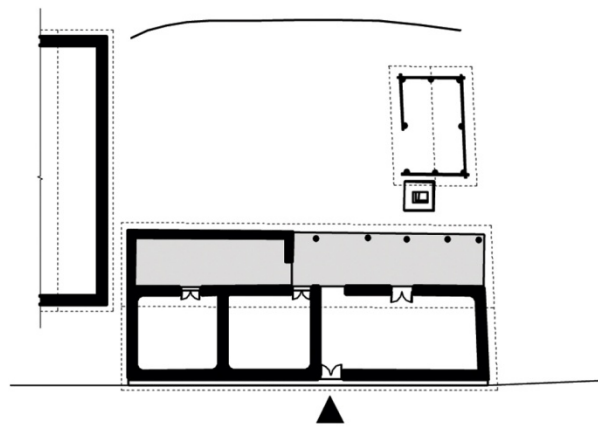
Designated sleeping areas are found in most Santal dwellings today. In the past people however, people slept on *parkom* (moveable string cots) in the *kumbaha* or *ath-chala* or in the *racha* when the weather permitted. In courtyard houses today, there are designated sleeping areas for married couples and other members of the family. The sleeping areas have become sites for other kinds of personalisation as well. Not only do families store personal belongings such as clothes and cosmetics, they also decorate the walls with calendar images, artificial flowers and posters (Fig.3-41). In an otherwise sparse material culture, where most objects in the house are related to cooking, fishing or agriculture, these other objects displayed in the sleeping areas stand out as markers of personal space of the occupants. In short, dedicated sleeping areas are a later development in that they are not found in the *kumbaha* or *ath-chala* types of houses, and they have emerged as sites for personal expression by Santal families.



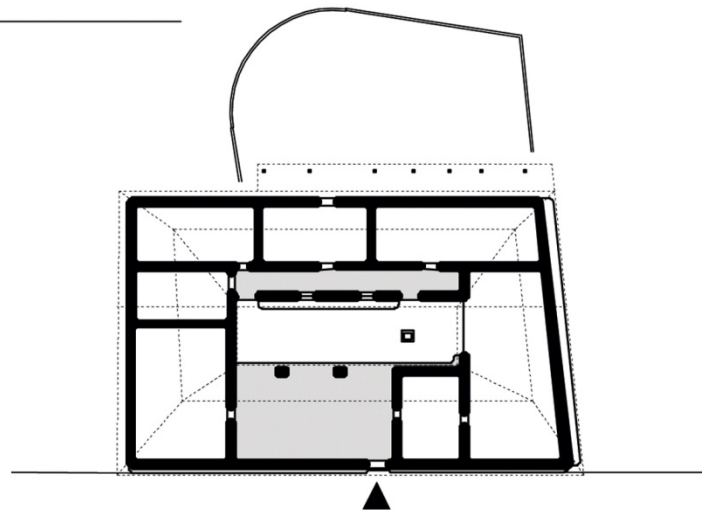
Figure 3-41: View of sleeping area

3.4.7. *Chali* (Verandahs)

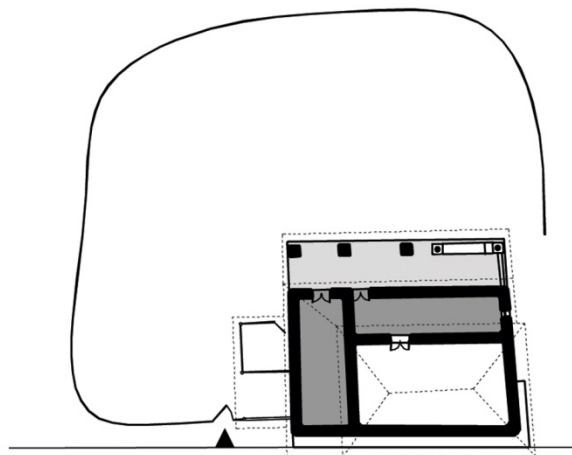
Chali refers broadly to verandah-like additions made to other volumes of a house and may be both closed on all sides or semi-open with only a roof cover like a shed. Of the four layout types discussed earlier, only the *ath-chala* type have *chali* as an integral part of the dwelling, while more recent *orak* and courtyard types houses may or may not have *chali* depending on the requirements of the family (Fig.3-42). In the documented examples, *chali* appear to be used specifically as animal shelters, or, in most other cases as the place where guests are invited to take a seat. In the latter case, one finds a *parkom* (string cot) kept in the *chali*. Apart from this however, there were no objects or functions routinely observed or consistently carried out in the *chali* and one may surmise that the it is an extra space that lends itself to activities as and when they come up, or as a shelter for activities during the rainy season. The *chali* spaces can also be converted into rooms by adding walls when more spaces are required within the dwelling by the family.



ORAK



COURTYARD HOUSE



ATH CHALA



-  *CHALI*
(AS PART OF ATH CHALA)
-  *CHALI*
(USED AS A MULTIPURPOSE SPACE)

Figure 3-42: *Chali* in different dwelling types

Two things are important to note about the *chali*. First, except in the *ath-chala* – where the *chali* has designated functions – they are largely multipurpose spaces in the *orak* and courtyard houses. Second, considering that *chali* often get converted into fully enclosed rooms, one may argue that it is built in anticipation of future needs rather than for a definite purpose. In any case, the development of such a multipurpose space is interesting considering that all other interior spaces within Santal dwellings have specific usage.

3.4.8. *Barge* (backyard garden)

The *barge* (backyard) is an important part of the house since it is the site for washing and cleaning activities, for storing agricultural equipment and straw, and for growing vegetables. The separation of washing and cleaning activities from the rest of the house is a particularly important distinction since Santal families are meticulous about keeping the domestic areas and their surroundings clean. By restricting washing and cleaning activities to the *barge*, they ensure that no dirty water is thrown in other parts of the house or street. Further, much of wastewater from washing utensils, for instance, gets channelled into vegetables beds and gourd vines that families plant in the *barge* (Fig.3-43). In terms of layout, the *barge* lies behind the house and leads on to the agricultural fields that lie further beyond. This enables harvested paddy to be brought directly into the *barge* during harvest season. Other things commonly found in the backyard are piles of straw, broken pots for hens to lay eggs in, and agricultural equipment. In short, the *barge* is the site for a number of essential livelihood and domestic activities and is an integral and active part of the dwelling.



Figure 3-43: Views of *barge*

3.5. Identifying and contextualising transformations

Thus far, I have discussed four different types of layouts i.e. *kumbaha*, *orak*, *ath-chala*, and courtyard houses, and different designated spaces within them. What is required now

is to compare these layouts and put them in temporal relation to each other in order to develop a narrative of transformation of dwelling and to correlate these to the changing context of Singhbhum within which these transformations have taken place.

3.5.1. Transformation of dwellings

Of the four layouts discussed earlier, I suggested that the *kumbaha* and *ath-chala* are older dwellings types compared to the *orak* and courtyard houses that one sees today.⁷⁷ Further, I noted that the *kumbaha* and *ath-chala* were possibly contemporaneous for two reasons. First, it was suggested by villagers that wealthier families typically built *ath-chala* houses while other people built the smaller *kumbaha* type dwellings.⁷⁸ This implies that these two house types must have been extant at the same time though built by Santals belonging to different economic strata.⁷⁹ Second, the types of activities in both layouts, i.e., *bhitar*, cooking, animal sheltering and sleeping, show the same degree of differentiation in the *kumbaha* and *ath-chala*, while in the *orak* and courtyard houses, activities such as storing grain and sleeping become much more elaborate. One may conjecture that at some point in the past, *kumbaha* and *ath-chala* gave way into the *orak* and courtyard houses that one sees today (Fig.3-44).

⁷⁷ As discussed earlier, this distinction is made broadly on the basis of oral narratives of Santal villagers. In case of the *kumbaha*, Bodding's (1940, 431-432) description of early Santal houses supports this contention.

⁷⁸ G. Singh for instance mentioned that when marriage proposals were discussed, families living in *ath-chala* houses were considered wealthy and marriage with such families was considered a good proposition. Personal conversation in July 2013.

⁷⁹ It may be useful to note here that *ath-chala* houses were built by other communities such as Mundas as well. However, given that I am making comparisons with other types of Santal houses, the correlations drawn are specific to a Santal trajectory of dwelling transformation alone.

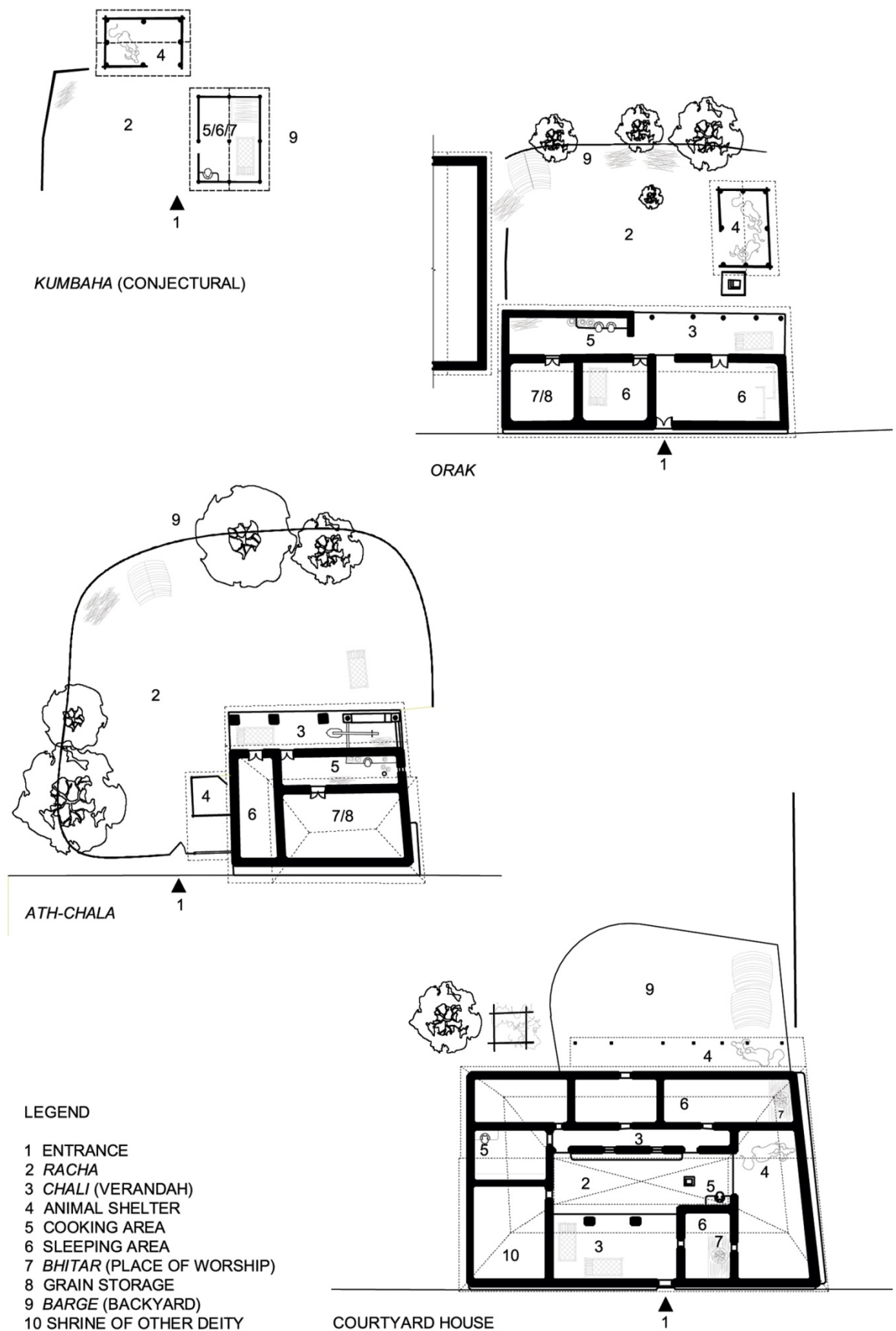


Figure 3-44: Transformation of Santal houses

It is useful to reiterate that the transformation of these houses was not an abrupt shift in ways of building but a more gradual process. Santal families typically make small additions and changes to parts of their houses and consequently, an individual house may be an amalgam of volumes from different periods of time. This is clearly seen for instance in *ath-chala* houses that are today parts of courtyard houses. However, it is useful to discern and discuss four different layouts as being the dominant types of spatial configuration in Santal dwellings. Further, the configurations in each present particular relationships within Santal domestic space and between Santal domestic space and public space, and therefore between Santal families and the community at large. With this in mind, the trajectory of transformation of Santal dwellings may be summarized as follows. The earliest known dwelling types in this region are the *kumbaha* and *ath-chala* houses. Of these, the *kumbaha* are no longer built and no extant examples were found during fieldwork. Some examples of *ath-chala* houses are found in a few villages, but in nearly all the documented examples, they are incorporated into courtyard houses. *Orak* and courtyard type houses are the most commonly found Santal houses. Individuals living alone or small families typically build the former while larger families build the latter type of house. Having established the broad sequence of transformation, what is required now is to ascertain the time periods in which these shifts occurred and to contextualize them within wider changes in the Singhbhum region.

3.5.2. The context of nineteenth century Singhbhum

One indication of the time periods in which above-mentioned architectural shifts occurred comes from a comparison of *ath-chala* houses in three case study sites. Two of the case study villages - Bada Bandua and Chauda –have examples of *ath-chala* houses while the third village Bhagabandh does not have any. What is interesting to note is that Bada Bandua and Chauda are older villages as compared to Bhagabandh. The period in which these villages were established is approximated on the basis of colonial maps and land records of the Singhbhum region. For instance, the earliest known colonial map was produced between 1859 and 1863 and includes the names of villages such as Bada Bandua (as Bandua) and Chauda.⁸⁰ This implies that these two villages must have been reasonably well-established settlements at that time. Bhagabandh on the other hand does not feature on this map. According to the villagers, the first survey that mentions Bhagabandh was in 1905. Considering that Bhagabandh does not have any *ath-chala* houses, and that it is first

⁸⁰ See map of Singhbhum by Captain Gastrell and De Pree published in 1891.

recorded as a settlement in 1905, one may argue that the *ath-chala* type of houses had largely gone out of currency by that time. A few decades later and with regards to the *kumbaha* houses, Bodding (1940, 431-432) notes that they are increasingly being replaced with mud houses, which, he predicts may become the common building practice in the future. Putting these dates together, I contend that between the mid-nineteenth and early twentieth centuries, the *kumbaha* and *ath-chala* types of houses gave way to the *orak* and courtyard layouts. It is most likely that these shifts were not abrupt and that some *kumbaha* and *ath-chala* continued to be built but, by the early twentieth century, the dominant layout type in the region gradually shifted to the courtyard houses that we see today.

The period between 1850 and 1900 where I suggest that dwelling layouts transformed is also a period of significant social and environmental change in Singhbhum. Since the early nineteenth century, the region of Jharkhand (to the south of which Singhbhum is located) had already witnessed significant non-tribal incursions, which escalated towards the middle of the nineteenth century in the wake of industrial and mining activities in the region (Bandopadhyay 1999, 10-11). Traditional rights and usage of forests by Adivasis were curtailed with Hindu landlords and colonial governments claiming large tracts of jungle land.⁸¹ Further, mining and industrial developments led to dispossession of Adivasi lands, and Adivasis themselves transformed from being forest dwelling communities to becoming agricultural and industrial labourers.

With respect to the case study villages, people's memories of this period provide some sense of the actual changes that took place at individual and community levels.⁸² During this time, Hindu landlords typically employed Adivasi people to cultivate their lands and grow paddy, which served as both a source of revenue and food for them. Adivasis, and among them Santals, were particularly renowned for their skills in clearing forests and cutting land into terraces for paddy cultivation (Bodding 1940, , 428). At the behest of the landlords, people were given tracts of land to clear and cultivate paddy, from which the landlord would collect a pre-decided amount as rent. Groups of such people settled in places that eventually grew into villages. They then invited their relatives and acquaintances to come and settle in a village. The land granted by the landlord to the village was then internally portioned out to cultivating families. These groups then began

⁸¹ See, for instance, Damodaran, 2006.

⁸² This obviously does not refer to individual memories but rather collective ones that have been handed down from earlier generations to the present day villagers. Santal villagers referred to things that they had heard from their grandfathers and other elders about village life in the past.

the gradual process of preparing land for cultivation. Forests were cleared and other plants and crops were grown for four or five seasons before land was ready for paddy cultivation. Over years, large tracts of paddy-suitable land emerged and systems of ownership and management evolved.⁸³ What also happened was that many families were only involved in preparing agricultural land rather than cultivating it themselves. It was common for families to stay in a particular location only as long as it took to prepare the land. Once prepared, they moved to another location. In other words, not only was the landscape of the Singhbhum region changing from a forested to an agricultural one, people's mobility was variously affected depending on whether they chose to clear land alone or cultivate it as well.

Another important shift that marked this period was in the administrative and political structures that emerged in the wake of an increase in settled agriculture and industrialization. In different localities, the structures of revenue collection emerged with landlords, Adivasi community leaders and other intermediaries having different degrees of authority to invite more settlers, distribute and manage land, and collect revenue. Landlords and eventually the colonial government were the final local authority, but within communities, the movement of people and the distribution of land varied.⁸⁴ Towards the end of the nineteenth century, when the colonial government conducted surveys in the area to determine revenue, many such local structures and practices got codified into the survey and settlement reports, and in many instances even today, serve as a legal basis for land legislation.⁸⁵

To return to the issue of transformation of dwellings, two aspects of the above narrative are significant- first, that Adivasi peoples gradually shifted from forest dwelling to settled agricultural practices. Though this shift was very gradual and uneven both in time and location, it is clear that a predominantly forest landscape prior to the nineteenth century was increasingly cleared to form terraces for rice cultivation. For Adivasis, this translated into a gradual transition from living in a largely forested landscape with locally evolved systems of engagement with the environment, to moving within localities and clearing forests for cultivable land, and eventually, to becoming permanently settled in specific villages. The second aspect is that these changes were accompanied by broad ranging

⁸³ Personal conversation with M. Das in July 2013 and D. Hansdah in July 2013.

⁸⁴ For more information on Adivasi customary law, see Sharan, 1999.

⁸⁵ Personal conversation with M. Das in Jamshedpur in July 2013.

dispossession and land alienation of Adivasis across Jharkhand. While this may or may not have directly affected the specific case study villages, it created a climate of conflict between Adivasis and outsiders, particularly over land and resources in the region. In the next section, I argue that the increasing permanence and interiority of Santal dwellings must be correlated to the social and political changes in the region.

3.5.3. Emergence of courtyards

With the climate of conflict emerging in Singhbhum, Santal houses were gradually transforming from *kumbaha* and *ath-chala* types layouts into the mud *orak* and courtyard layouts. The key shift here was a blurring of the sharp dichotomy between the built spaces and open yards that occurred with the emergence of internal *racha*. Within the layout of the dwelling, the *racha* introduces an intermediate level in the hierarchy of spaces; where the earlier layout had two levels of inside and outside, now there was an in-between space of the interior *racha*. In the earlier dwellings types, only family members were allowed into the interiors of the *kumbaha* and *ath-chala* and all outsiders were met with in the *racha*. The intermediate threshold of the internal *racha* may be seen as symptomatic of a distinction between different types of outsiders – those who are met at the *kulhi racha* alone vis-à-vis those who may enter the internal *racha*. For instance, members of the village community have unrestricted access into each others' *racha* but I – as a complete outsider - conducted most of my preliminary interactions with families on the street in the *kulhi racha*. This shift in engaging with outsiders, I argue, takes place in the climate of increasing conflict between Adivasis and non-Adivasis around the end of the nineteenth and beginning of the twentieth centuries when Santal dwellings gradually transformed from their single-volume layouts to more differentiated domestic environments with complex interior thresholds.

Another way to understand this shift in interiority is to locate it within shifting modes of living among Santals, who were becoming an increasingly settled agricultural community as compared to their earlier forest dwelling mode. With respect to divisions of space in foraging societies, Quinn (1977, 198) suggests that 'many hunter gatherers seem to lack even an incipient division of men's and women's worlds into public and domestic domains' and goes on to say, 'foraging Bushmen live under conditions which permit no distinction between the domestic and the public sphere. Camp inhabitants live in a wholly public world, sleeping and eating outside in a small circular clearing, within which all

activities are visible and normal conversations audible'. In case of earlier Santal layouts, many of their daily activities took place in the open yards with openness similar to the Bushmen camps mentioned by Quinn. However, the relatively settled way of life, together with the conflicts discussed above, may have broadly led to a 'closing in' of domestic space i.e. may have compelled families and communities to define personal space and thresholds of interaction with increasing clarity.⁸⁶ The internal *racha* became an interior yet open space but additionally other gestures of marking property became more evident. In the past, a patch of ground plastered with cow dung was sufficient to demarcate a domestic space. With increasing population densities, changes in land legislation and introduction of documented ownership of land (as compared to traditional, consensual systems of ownership and governance), a sense of private property emerged through the introduction of fences around yards and stone markers and painted walls as indicators of a family's domestic space. It is important to reiterate here that it was a *sense* of private property rather than actual legal divisions of land, since I do not intend to suggest that land was minutely parcelled and that this prompted the transformation of dwellings. Rather, the gradual transformation of dwelling was on account of being located within more confined settings rather than within a perceived expanse of landscape.

3.5.4. Differentiation of spaces

The emergence of the interior *racha* as a central feature of Santal dwellings was accompanied by another key change in that the spaces forming the courtyard were functionally more differentiated as compared to the earlier house types. As mentioned earlier, in the *kumbaha* and *ath-chala* houses, activities such as worship, cooking and sheltering of cattle occurred indoors, while in the later *orak* and courtyard layouts, these activities were carried out in different rooms and, further, one finds designated spaces for sleeping and grain storage as well. In other words, in the earlier layouts there were designated corners for different activities rather than individual rooms while in the present day layouts, one finds dedicated rooms for different activities. What is significant in these developments is that new hierarchies emerge as a consequence of this increasing differentiation. This is most clearly seen in the case of the *bhitar* and cooking areas. These may be considered as a core in Santal houses in that they are typically located in the most interior part of the dwelling and are accessed only by family members. Through the various transformations in layout, these areas have largely remained unchanged in terms of

⁸⁶ In conversation with M. Das in July 2013.

norms of access and attributes of the spaces themselves. What has changed however is the sequence of movement through which one accesses these spaces, i.e., from being the most interior spaces of the house in the earlier layouts, this core is now one of the many spaces around the courtyard (Fig.3-45). In other words, the interior nature of the core was reflected in the layout of the *kumbaha* and *ath-chala* but that is not the case in the courtyard layout. However, these remain the spaces with most restricted entry even in the courtyard house and thereby the memory of interiority is maintained even though the physical configuration no longer suggests the idea.⁸⁷



Figure 3-45: Child's drawing indicating notion of interiority in dwelling. The numbers 1-8 indicate spaces as follows: entrance, *racha* (courtyard), animal shelter, cooking, sleeping, grain storage and the *bhitar*. Note that spaces #4-7 are shown in sequence with the *bhitar* located at the end, as compared to actual movement in a house where all these spaces are accessed directly from the *racha*.

Another aspect of the increasing differentiation of spaces is that some functions show greater internal transformation while others remain the same across old and new layouts.

⁸⁷ This idea of the memory of the interior hierarchy of spaces is suggested in a drawing of a house by one of the village children. P. Besra (age eight) drew the house as a series of interconnected orthogonal shapes, where the sequence of the rooms were as follows- entrance, courtyard and animal shelter along one branch, and courtyard, sleeping area, cooking area and *bhitar* along another branch. Here again, what the drawing represents is the perceived interiority of functions and spaces, which is different from that of the layout itself.

For instance, newer developments in Santal houses are typically in the form of dedicated sleeping areas and multipurpose *chali* that are now commonly found in most houses. For instance, separate sleeping areas are created for couples or nuclear families, which suggests a different way of accommodating the privacy needs of such families. In the past, however, newly married couples would have made a house for themselves but now increasing population densities do not permit each nuclear family to make separate dwellings. Also, as I discussed earlier, sleeping areas are sites where Santals use forms of decoration that may have been previously unavailable and unused. The multipurpose *chali* shows a similar development in that it now becomes the primary site of socializing within the house. Where families would have earlier met their guests and visitors in the *kulhi racha*, outsiders are now invited to sit in the *chali* and a *parkom* (string cot) is kept there for this purpose. The point here is that though there has been an increased differentiation in spaces, the older activities remain internally similar while the newer spaces are both diverse and show developments such as novel forms of decoration and use.

It is useful at this point to return to the discussion of sedentarization of Adivasi communities. Even in the past Santal communities were not completely nomadic, but rather, were relatively more mobile in that they worked as agricultural labourers who moved from place to place in search of work. Santals (and other Adivasis) moved for economic reasons as much as they did on account of their belief that particular places did not ‘suit’ them.⁸⁸ Most Adivasi communities have strong beliefs in witchcraft and spirits, and families in the past often moved their dwellings from place to place if they felt that local spirits did not want the family to reside in a particular place. In the recent past however, one does not encounter such stories or incidences of families moving their place of residence on account of malevolent spirits. One may argue that the transformations in Singhbhum in the late nineteenth and early twentieth centuries reduced the possibility of families shifting residence and the role of protection from spirits was possibly attributed to the multiple thresholds that now marked the movement to the interior of the house.

3.5.5. Conflation of room and house as categories

I have already discussed that the shift from the *kumbaha* and *ath-chala* to the *orak* and courtyard houses was the transformation of the dwelling from being a singular volume to

⁸⁸ Such stories have been documented across the case study sites - in Chauda, the entire village was moved to higher ground sometime in the past, while in Bada Bandua, Ho peoples initially founded the village, but moved out since the spirits in the village were not favourable to them.

an agglomeration of spaces organised around a courtyard. This, I argue, led to a conceptual conflation of the categories of room and house. Two points that support this argument are the terminology used to describe these two entities and the ritual practices at the entrances of dwellings. To begin with terminology, the Santali term for room and house is the same word *orak*. For specific rooms, *orak* is prefixed with the function that takes place such as the cooking area, which is known as *dakal orak* (*dakal* refers to rice) while the entrance vestibule is known as the *duar orak* (*duar* refers to door). The common terminology may be account for by tracing the transformation of Santal dwellings. In the earlier layouts, the dwelling comprised a single volume that was known as *orak*. In the later layouts, though the numbers of individual spaces increased, both the entire house and the spaces contained within it were respectively referred to as *orak*. A similar sense of overlap between rooms and house is seen in the ritual practices performed at the entrances of the house. As mentioned earlier, the first task of the day for women in Santal families is to apply a circular patch of cow dung plaster at the entrance of the house. In the past, when there was a single entrance into the interior of the house, the application of plaster at that entrance was enough to ritually purify the entire dwelling. With the emergence of courtyard houses, the practice of applying cow dung continued, except that it is now applied to the entrance leading from the kulhi into the courtyard, and other entrances leading from the courtyard in various rooms. It appears that plaster at the entrance from the street into the courtyard is not considered sufficient to ritually purifying the whole house and each room needs to be purified individually. What this points towards is that even with the transformation of dwellings from being relatively temporary structures into more differentiated and permanent structures, memories of earlier dwelling forms persist and become meshed within the newer dwellings patterns and domestic practices.

3.5.6. Sense of ground

The discussion on shifting architectural forms and conceptions of dwelling up to this point suggests that the transformation was not absolute, but rather, was gradual and retained memories of past dwellings and conceptions of space. The practices of demarcating and using the *racha* and the *barge* serve to further underscore this point. I have already discussed that the *racha* is an important site for everyday activities and socialising and the act of plastering ground surfaces with cow dung remains an important domestic chore. In the past, the act of clearing ground was essential to marking space since enclosures were few and limited to providing shelter to or protecting the most essential things in Santal

daily life. However, with the dwelling becoming more elaborate in terms of functions and more permanent in terms of physical enclosure, and in some cases the floor now being made out of cement, the functional aspects of floor plastering have reduced. Yet, everyday, Santal women continue to plaster the ground and sweep the floors. One may argue here that though floor plastering is no longer a functional requirement but the activity persists on account of the ritual need to purify of the house.

Another attribute of the floor – and the ground – in Santal houses is that women constantly strive to tidy the house by picking things off the floor and depositing them on higher surfaces such as the eaves of the sloping roofs (Fig.3-46). Nearly all objects in Santal houses are stored off the ground- clothes are hung on rope and bamboo swings, brooms, baskets and other such objects are kept on the roof and agricultural implements are stored on temporary lofts within animal shelters. Combined with efforts made to plaster and clean floors, the sense of the ground in Santal houses is reminiscent of a camp like environment where the ground is kept clear as one does not expect the enclosures to keep things protected. Another small gesture that suggests this idea is the protection of the *chulha* (mud stove) when not in use. As discussed earlier, the *chulha* is located indoors within the cooking areas, which is typically an enclosed space. When not in use, the mouth of the *chulha* is kept covered with a dried branch. This is evidently not necessary given that the *chulha* is located indoors but many women continue this practice. One may argue that this gesture is a memory of cooking – and living – in the wooden *kumbaha*, which offered much less physical protection as compared to the mud *orak* and where animals had to be kept away from the *chulha*. In other words, even with a change in immediate environment of the dwellings from forests to more dense settlements and changes in the materiality and enclosure of dwellings, many aspects of Santal dwellings remain rooted in memories of a forest dwelling past.



Figure 3-46: Objects kept off the floor by hanging them from the roof

3.6. Conclusion – Towards a history of everyday life and dwellings in Singhbhum

In this chapter, I examined the layouts of Santal houses to suggest that they are broadly of four types – the *kumbaha* (not documented but conjectured), *ath-chala*, *orak* and courtyard type houses. Of these the former two are older types while the latter two continue to be built in the present time. I analysed and located these layout types in temporal sequence to establish the trajectory of transformation of Santal dwellings in the Singhbhum region. I argued that these dwellings types, phenomenologically speaking, present increasingly settled, permanent and interiorized modes of living and correlate to the wider social, economic and political changes in Santal societies and the Singhbhum region at large. These correlations underscore the proposition, which I made at the beginning of the chapter, that built environments maybe considered as gestures that represent relationships between people and their environment. The *kumbaha* dwellings from the late nineteenth and early twentieth centuries belonged in a forested landscape and to relatively mobile Santal communities, while the courtyard houses built today belong to a dominantly agricultural landscape in which Santal communities lead much more settled lives. In this way, different Santal dwellings become meshed within the context and processes of its production, and its transformation becomes symptomatic of wider shifts in Santal everyday life and experiences in the region.

It is important to note that some of these observations emerge only through comparison of the three case studies. Each locality presents specific conditions of Santal life and

experience and architecture that is shaped by the contingencies of the locality. The architectural forms and complexity of internal layout varies, but when considered in terms of patterns of use, organization and development, one begins to recognise similar intermediate stages of transformation, which I eventually collated as the *kumbaha*, *ath-chala*, *orak* and courtyard house. These layout types constitute a trajectory of architectural transformation not when analysed as insular objects but rather when considered as gestures of Santal relationships to the environment.

What is important to reiterate here is that social and environmental changes and architectural transformation in Singhbhum cannot be seen in cause-and-effect terms. Rather, as I showed in the preceding narrative, dwellings, everyday life and the larger context simultaneously transform and inform each other. Given that the material on Adivasi experiences in the past is sparse, the narrative of the transformation of dwellings potentially throws new light on the histories of everyday life and experiences of Adivasi communities in the Singhbhum region. Considering dwellings as concretisations of Santals' engagements with their environment, reconstructing the *kumbaha* as a dwelling type in the past then begins to evoke a sense of what Santals sought shelter for and from and how they did it. One begins to recognise, for instance, increasing population densities and shifts in access to resources accompanied the sedentarization of Adivasi communities in Singhbhum and architectural transformations occurred in the interplay of these factors rather than being a consequence of sedentarization alone. Further, different communities and indeed even families were affected by these factors to varying degrees. This becomes evident from the dissimilar levels of transformation seen in individual houses today. That is to say some houses in different villages are very old *ath-chala* structures and families have resided in the same place for generations while in other cases, entire villages were more recently established. This attests to the diversity of Adivasi movements and experiences in the region. More specifically, varying patterns of division and accretion to individual dwellings reveals local transformative factors at play. For instance, very high population densities in some villages such as Bada Bandua led to complex patterns of occupation of dwellings by extended families. This is not the case in other villages such as Chauda, where, the dwelling layouts and occupation by families are markedly spread out and different. While the wider changes in the Singhbhum region become a context for understanding the nature of architectural shifts in Santal dwellings, the specific transformations, in turn, reflect changes in Santal everyday life and practices.

4. Transformation in ways of making

4.1. Making from a phenomenological perspective

In the previous chapter, I outlined how Santal dwellings transformed from the single-volume multipurpose *kumbaha* into the more permanent (in material terms), elaborate and differentiated courtyard houses that one finds in Singhbhum today. I suggested that this transformation correlates to wider social and environmental shifts in the Singhbhum region and among Adivasi societies such as Santals during the late nineteenth and early twentieth centuries. Keeping this trajectory of transformation in mind, I now turn my attention to the process of making. I examine shifts in the physical structure of Santal dwellings,¹ building technology and methodologies of construction in order to identify a different manifestation of change in Santal engagements with their environment.

The premise of this enquiry is that ways of making are not merely mechanical acts of putting things together to create a structure but are bound in ‘relational networks’ where buildings, builders and the environment shape and influence each other.² Santal dwellings are built and transform within a complex meshwork of social conditions, material resources and technological knowledge systems, to name just a few factors. Adding to these fields of relations are aspects such as memories and senses of dwelling and modes of living, which inform, and are simultaneously informed by, past practices and contingencies of time and place of communities in different locations. In order to engage with this complex phenomenon, McGinn provides a starting point in the form of a definition of technology from a phenomenological perspective. He suggests that technology may be considered as:

a form of activity that is fabricative, material product-making or object transforming, purposive (with the general purpose of expanding the realm of the humanly possible), knowledge-based, resource employing, methodical, embedded in a socio-cultural-environmental influence field, and informed by its practitioners’ mental sets.³

¹ Structure, in this chapter, refers to ‘a physical entity that can be conceived of as an organisation of positioned constituent elements in space in which the character of the whole dominates the interrelationship of the parts. Its purpose is to support and transmit loads into the ground.’ Schodek 2002, 2.

² See Ingold 2012, 427-442.

³ McGinn as quoted in Ingold 2000, 298-299.

Long though the definition may be, it provides a ‘convenient checklist of factors that need to be considered in any complete account of the human-labour process as it is involved in the production of things’ (2000, 299). In other words, drawing from this definition, one may posit object, process, knowledge, and volition as frames of phenomenological enquiry into Santal ways of making dwellings. The frames are conceptually intertwined and, yet, sufficiently distinct to enable further analysis.

In relating these different aspects of making, it is important to underscore that conceptualising a dwelling and knowing how and what to build is not considered a priori to the act of building itself. Rather, dwellings grow and simultaneously ways of making emerge within particular environments. Ingold develops this argument by criticising the ‘hylomorphic’ or ‘matter-form’ model of creation where form is active and imposed on an otherwise passive and inert matter. This distinction between the relative roles of form and matter in processes of making ‘fails to acknowledge, on the one hand, the variability of matter- its tensions and elasticities, lines of flow and resistances- and, on the other hand, the conformations and deformations to which these modulations give rise’ (Ingold 2012, 433). Ingold instead proposes that materiality needs to be considered together with their ‘sources of vitality in flows of energy and materials, their generation, liveliness, and capacities for perception and response’ (Ingold 2012, 428). In other words, the making of dwellings needs to be considered as a thing that emerges in the interplay of materials, skills, knowledge and environment, each of which are in states of flux, rather than being a static architectural object made through a finite, predetermined set of rules using which people mechanically operate.⁴

The notion of static architectural objects and set ways of building was, and continues to be implicit in much of vernacular architectural theory. Crysler borrows the term ‘ethnographic pastoral’ to describe an ‘academic register’ wherein vernacular architecture and societies are studied as being disconnected from the ‘ongoing lived milieu’ (2003, 95). Building in such narratives is ‘pre-industrial,’ ‘collectively produced,’ and ‘crafted rather than manufactured’ (Crysler 2003, 93). The relationship between communities, their values and their architectural environment is based on the assumption of a unified collective consciousness and when architectural environments are evaluated on grounds of such

⁴ Ingold makes a further distinction between ‘object’ and ‘thing’. He draws from Heidegger in saying that the ‘object is closed in upon itself and stands before us complete and ready-made.’ ‘Thing’ on the other hand, ‘is a gathering of materials in movement – a particular knotting together of the matter-flow- and to witness a thing is to join with the processes of its ongoing formation.’ (Ingold 2012, 436)

idealised notions (Crysler 2003, 94). Shifts in ways of making are not considered as an internal process of dynamic interrelations between architectural objects, makers and environments but as the influence of ‘an exterior capitalist world that is hostile and disruptive to the traditional environment’ (Crysler 2003, 94-95). In other studies that have looked at continuities in building practice, preconceived categories such as traditional and modern continue to underlie the discussion of building; for instance, Waterson (1990, 233) asks if zinc roofing sheets may be classified as traditional given that Minangkabau peoples have used it as a roofing material since 1905. In studying shifts in building, this chapter does not intend to demarcate thresholds between categories such as pre-industrial/ industrial or traditional and modern; instead it looks at building practices as continuously transforming engagements of people and their environments.

4.1.1. Data and methodology

In order to study the making of buildings within the meshwork of resource, skill, knowledge, design and notions of dwelling itself, this chapter focuses on three things.⁵ First, I analyse the architectural object in terms of building materials and structure; second, ethnographies of building processes observed during fieldwork are discussed; and third, a reflexive focus comprising my assessment of the value of these ethnographies in relation to the architectural analysis is developed. To begin with the focus on the architectural object, it may be considered as a primary archive and its analysis is a central task in the writing of architectural histories.⁶ More specifically, the analysis of building structure and construction may offer insights into the logic with which people built in the past.⁷ If we consider, for instance, that one of the important considerations in the course of making a building must be the stability of the structure as it emerges and so one may begin to retrace how people procure, shape, and join together various materials so as to produce a stable structure. Extrapolating from the building structure as seen today, we may begin to reflect on the processes and intentions with which people built in the past. The variations in dwellings across case study locations may also reveal the contingencies of each locality that shaped buildings practices in particular ways. In short, careful analysis of the architectural object can offer insights into the manner in which it was produced.

⁵ Ingold (2012, 435) defines meshwork as ‘the lines along which materials flow and bodies move. Together, these entangled lines, of bodily movement and material flow, compose what [Ingold] calls the meshwork, as opposed to the network of connected entities.’

⁶ For a detailed discussion, see Leach 2010, 76-79.

⁷ For a discussion on the rationale behind an analysis of buildings in order to understand the past, see Glassie 1987, vii.

It must be remembered that the analysis of dwellings can only reveal a broad understanding of the material conditions of production. In order to comprehend making through the lens of skills and intentions, it was important to supplement the analysis of the physical structure of the dwelling with ethnographies of building processes. The way Santal villagers construct their dwellings today and make other objects helps frame building and making practices within the social and material contexts of Santal communities. More importantly, one may begin to correlate the design of Santal dwellings to the various processes through which it is made. During fieldwork, some building processes were observed, viz. digging foundations, construction of walls, plastering of walls and floors, thatching of roofs, and the making of clay tiles for roofing. This ethnographic documentation reveals details such as the sequences of action, tools and their manner of use, and aspects of people's labour.

It is useful to reiterate here that both building analysis and ethnographic narratives are required for this study. Firstly, practical reasons such as the duration of fieldwork dictated that not all building practices could be observed first hand.⁸ The making of a roof structure, for instance, could not be seen in any of the case study sites while the digging of foundations, building of walls, making of clay roof tiles and plastering of floors were documented. Second, the full range of activities that constitute individual building practices could not be always be documented. For instance, the procurement of building material such as mud takes place in the backyard, and was documented in detail, but wood for roof building is usually cut and brought in from neighbouring forests or bought at a commercial establishment, and in this case it was not possible to document the networks of this building activity. In such cases, oral narratives of the villagers are used to get a sense of building processes as sets of interrelated choices and tasks. Third, there are theoretical considerations in attempting to understand ways of making through artefactual analysis vis-à-vis speaking to builders themselves, which relate to the differences between a researcher's conception of a design and building processes and a builder's understanding of the same. Glassie, for instance, points out that, for traditional builders, rules of building and geometry of structure are unconscious in the sense that they are not articulated in

⁸ This was largely because fieldwork was carried out during the four-month break in the agricultural season. Given that three case study sites needed to be covered during this time, I spent one month at each site, and different stages of house building were observed at the different villages depending on the time of fieldwork at a particular site.

communiques rather than not known at all.⁹ Researchers looking at the object and process in hindsight may use a propositional mode in order to explicate the relationship between the processes and product; a relationship that may be self-evident to the builders but is revelatory and an object of enquiry for the researcher.¹⁰ In this chapter, people's descriptions of building are considered against a backdrop of analysis of the architectural object and observations of processes in order to constitute ways of making from these different perspectives.

4.1.2. Structure of discussion

Some materials and technological changes were introduced in discussing the transformation of layouts in the previous chapter but it is useful to take a few steps back and get an overview of building practices across the case study sites. Santal dwellings, and those of most other rural communities in Singhbhum, are built in mud using cob wall construction techniques.¹¹ The dwellings have sloping roofs with a wooden structure and are covered with thatch, clay tiles or roofing sheets. These materials and related technologies form the basis for the following discussion on building practices. Differences in practice across the case study localities have also been noted and are woven into the narrative. The intention is to present ways of making not as a fixed set of actions or rules but rather as a range of possibilities that correspond to local contingencies of materials, labour, skills, technologies and the families' own requirements. This refers to back to the phenomenological perspective of making, where Ingold, with respect to artisans suggests that they 'do not so much interact as *co-respond* with [their materials]. Production, then, is a process of correspondence: not the imposition of preconceived form on raw material substance, but the drawing out or bringing forth of potentials immanent in a world of becoming' (Ingold 2012, 435). With this emphasis, I discuss the stages and processes of

⁹ Glassie (1987, 20) here refers to non-specialised buildings traditions, i.e. traditions where most people have preliminary knowledge of building and may make their own houses, rather than traditions with specialised builders or craftspeople.

¹⁰ In one instance, Ingold (2000,35) discusses this in terms of the differences between 'rules of thumb' and 'cognitive algorithms'. He says 'The notion of cognitive algorithm comes from planning theory, and posits a series of linked decision rules, internal to the actor, which operate on received information to generate plans for subsequent action. As a 'solution' to a perceived 'problem,' the plan is supposed to contain a precise and complete specification of the action that is predicated upon it, so that the latter is fully accounted for by the former: to explain what the foragers [builder in this case] do is enough to have explained how they decide what to do. The power and utility of rules of thumb, by contrast, rests on the fact that they are inherently vague, specifying little or nothing about the concrete details of action. Invoked against a background of involvement in a real world of persons, objects and relations, rules of thumb may furnish practitioners with a way of talking about what they have done, or about what they mean to do next.'

¹¹ Cob wall construction refers to a technique of building walls wherein mud is used *in situ*, and additives such as small stones or plant material are added to improve its strength.

construction as part of a wider phenomenological engagement between Santals and their environment.

The discussion below follows the sequence of construction beginning with foundations for walls, walls, roof structure, roofing, and plastering and painting of walls. At each stage of construction, I also discuss differences in materials, practices or forms across the case study villages (Table 1). For instance, foundations are similar across all studied locations though the walls of the dwelling vary from being built in mud to using a combination of mud and stones. So foundations are discussed in common while the next stage is discussed in terms of the three different ways of making of the walls. The roofs, which show the greatest range of structural variation, are discussed in series beginning with a basic sloping *orak* roof and then moving on to hipped and L-shaped roofs. Finally, three different roofing materials are discussed. Within each stage of construction I focus on the role of the construction stage or building elements within the architectural scheme of the dwelling, and material and technological considerations. This progression of the narrative in terms of stages of construction and building elements allows one to recognise specific points of similarity and difference, which in turn builds towards an understanding of Santal architectural production both in terms of common building principles and the contingencies of locality.

	<i>Jhopdi</i>	<i>Orak</i>	<i>Ath-chala</i>	Courtyard houses
1. Foundations		Common for mud walls		
2. Walls	<i>Jhanti</i>	Mud walls Mud and stone walls Using bricks		
3. Roofs	Lean-to roof	Gable roof	Hipped roof with <i>chali</i> (verandah) additions	Roofs with L-shaped junctions
		Other variations: Roof with extended rafters Roof with inclined support for ridge beam		
Roofing materials	Leaf or straw thatch	Thatch Burnt clay tiles Roofing sheets		

Table 4-1: Structure of discussion combining layouts and stages of construction

Differences in ways of making are framed within the transformation of layouts outlined in the previous chapter. This particularly applies to roofs as shifts in roof structure are

discussed in relation to the trajectory of dwelling transformation from *kumbaha*, *orak*, *ath-chala*, to courtyard houses. However, the correlation between layouts and structure is not a simple equation of linear transformation. I mentioned in the previous chapter that most dwellings are amalgams of the four identified layout types. In terms of structure then, different parts of a dwelling may date from different times and may have been partially renovated as well. This is particularly true of roofs, which are more likely to have been renovated as compared to walls.¹² With these complexities being present, two things come into play when determining the age of structures. First, the presence of thick round wooden sections in the roof indicates old roofs, since newer ones have more slender members. Second, with variations such as different parts of the building being new or old based on renovations and additions to dwellings, I constitute general characteristics of old structures on the basis of evidences such as thickness of wooden members. These evidences are highlighted in the discussion where relevant. What is important here is that as in the case of layouts, building structures too are amalgams of building elements and practices from different points in time. In constituting a trajectory of transformation I am once again connecting dots drawn from examples of different dwellings.

A final point is that this discussion focuses only on building structure and excludes any detailed enquiry into finishes such as floor plastering and wall painting. These two finishes serve important roles within the structure and the architecture scheme of the dwelling as a whole. However, they are discussed in the next chapter as part of everyday practices through which the dwelling gets inscribed as a domestic space.

4.2. Building elements and practices

4.2.1. Foundations for walls

The *orak* is typically a rectangular space with the width of the space ranging from 3.5 to 4.5 meters in width, while the length varies as per the requirements of the family. To make the foundations, this rectangular profile is marked on the ground using pegs and rope (Fig.4-1 to 4-3). A trench is dug out along the entire profile. The soil in this region, locally known as *murru* or *murru mati*, is of hard and clayey and softens with the addition of water. So when digging foundations, a thin layer of soil is dug out, almost scratching the

¹² This is because the roofs typically undergo maximum deterioration on account of their exposure to the outside. Compared to that, walls are relatively less affected because they are protected by the roof and annually maintained through the application of fresh coats of plaster.

surface of the ground. This is then flooded with water in order to soften the next layer of soil. Alternate soaking and digging continues until the desired depth has been reached, which ranges from 100 to 120 centimetres below the ground.



Figure 4-1: Digging the area marked within ropes on ground



Figure 4-2: Foundation trench flooded with water to soften soil



Figure 4-3: Deepening of foundation trench after soil is softened by water

Once the digging is complete, the foundation is built up using small stones and *murru* *mati*. The stones are used to provide additional strength to the foundations. The material that was dug out of the trenches may be used for building the foundation if it is satisfactory, but additional *murru* and stone may be required.¹³ The extra *murru* *mati* that is required is typically dug out from people's own backyards and is prepared before being used for building. First, *murru* *mati* is dug out and collected in a pile and at this stage it is in the form of dry, brittle lumps. The pile is thoroughly drenched with water and left to soak overnight. The next day, more water is added and two people working in tandem with each other knead the pile of mud. One person stands atop the pile and pushes the mud down with the feet, while a second person shovels the mud back onto the pile as it spreads outwards. Kneading brings out the cohesive properties of the clay and helps with better binding in the structure of the wall. When the mud is ready to be used, it is piled into the trench together with stones. In some villages where more stone is available, the stones form the bulk of the foundation and the mud acts as mortar alone.

Digging the earth, whether for foundations or for agriculture, is the responsibility of men. Santals believe that *bongas* (spirits) they worship may get offended if a woman was to dig the earth.¹⁴ In two of the three case study villages, men were often away working as daily wage labourers during the non-agricultural season, which is when people usually build or repair their houses. Consequently, there were a few cases where women carried out construction work on their own. In one instance in Chauda, a young, newly married couple

¹³ For instance, the composition of *murru* *mati* found at the case study locations was quite different. At Bhagabandh, very fine soil with small sized stones as aggregates is found. In Chauda, which is a more rocky area, soil contains much larger stones and rocks.

¹⁴ For taboos placed on Santal women, see Troisi 1979, 227.

were adding another space to their existing house. The family comprised the couple living together with the husband's two younger siblings, who both attended school. During the day, the husband and his siblings were away at work and school respectively.

Consequently, the young woman was carrying out construction work on her own. She spent the afternoons digging her backyard for rocks and *murrum*. She then broke the rocks into smaller pieces suitable for use in the wall and dug and readied the *murrum* by soaking and kneading. When I enquired about the taboo on women digging the earth, I was told that when circumstances were difficult, there was no choice for families but to do such things.

4.2.2. Building walls

Though the foundations are typically built using a combination of stones and mud, walls in the case study villages were seen to be built in three different ways – entirely in *murrum*, entirely in stone with *murrum* acting as mortar, or upto a certain height in stone and then in *murrum*. All three walls are similar structurally in that they are all load bearing walls.¹⁵

These differences emerge on account of the building materials that are available in the vicinity of the village. For instance, in Chauda, stone is easily available along with *murrum* in people's backyards and people use much more stone in building walls with *murrum mati* acting as mortar alone. In Bhagabandh, *murrum mati* is much finer and contains small pebbles/ stones that work as aggregates and add bulk to the walls. Consequently, walls in these two villages are built differently.

Murrum is prepared as in the case of foundations; it is dug up, soaked and kneaded before it is ready to be used for building the wall. All these activities are carried out in the backyard of the house. When the *murrum* is ready to be used, small loads are carried to the construction site.¹⁶ Then, the persons building the wall shape the mud in rough rounds with their hands and place it on the wall. After two or three such rounds are placed, the material is packed in place and edges shaped (Fig.4-4 to 4-9). The process continues until

¹⁵ A load bearing wall refers to a condition where the wall itself transfer the load of the roof to the ground.

¹⁶ While it is difficult to give a more precise sense of measure, the amount of mud carried in each load adds about 50 to 60 centimetres to the length of wall. In two cases observed in Chauda, the mud was piled onto a stretcher-like device made by supporting a used cement bag between two lengths of bamboo. This was then carried like a stretcher by two men who were kneading the mud and building the wall. In case of the young married woman building her house alone, she and her husband carried a few loads of mud and stone to the building site before her husband left for work. The woman then built the wall using that material later in the day.

one entire course measuring approximately thirty centimetres in height is built up.¹⁷ In other words, the *orak* is built up layer by layer, rather than as one wall at a time. As each course progresses, the vertical surfaces are scraped using a piece of wood with a flat edge.¹⁸ This ensures that the wall will have straight and smooth surfaces. Each course is left to dry for two or three days after which the next course is added. This continues until the wall reaches sufficient height, which is usually between 2.0 to 2.5 metres.



Figure 4-4: Pile of *murrum mati* to be used for wall construction



Figure 4-5: Kneading of *murrum mati* to soften and prepare it for use

¹⁷ A course, in brickwork or other masonry construction, refers to a single layer of bricks or masonry material within the wall.

¹⁸ Personal conversation with B. Hansdah in February 2013.



Figure 4-6: Load of prepared *murrum mati* being carried to the building site



Figure 4-7: Rounds of *murrum mati* being placed on wall



Figure 4-8: Smoothing of *murrum mati* to create flat surfaces



Figure 4-9: Wall left to dry before addition of further courses

In recent years, many villagers have started using bricks for making walls, since this is now available from kilns in the vicinity of the villages. In Bhagabandh, the Mahato Tola (one of the four neighbourhoods that make up the village precinct) has a brick kiln. This provides employment to many villagers and often has damaged bricks that are sold to the villagers at low prices. Additionally, one of the villagers owns a truck that is hired to transport the bricks from the kiln to dwelling construction sites. In Bada Bandua, a kiln was newly established at the time of fieldwork and a number of villagers were employed in the kiln. They mentioned that brick as a building material had become more accessible with the opening of the kiln. The manner of using brick depended on how many bricks were procured by a family; if a large number had been bought, then families built the entire wall in brick courses with *murru* acting as mortar.

4.2.3. Roof structure: Central beam-and-post and ridge beam¹⁹

When the walls are nearly completed and only the last course of mud remains to be added, the first set of wooden beams for the roof structure are put in place (Fig.4-10). These beams are placed spanning the shorter dimension of the room and are usually between two to three metres apart. After they are put in place, the final course of mud is added to complete the wall. Placing the beam within rather than above the wall prevents any lateral movement of the beam and provides additional support to the beam against bending forces.²⁰ At the two ends of the rooms, a few more courses are added to the gable walls to

¹⁹ I am thankful to Sankalpa, assistant professor at Faculty of Architecture, CEPT University, Ahmedabad, India, for detailed discussions on structural behaviour of Santal roofs. Some of the key ideas in this section emerged during these discussions and are accordingly marked within the text.

²⁰ Bending, in building technology discourses, refers to the forces that result in a beam, which is supported at two ends and consequently has a tendency to sag in the middle. When additional weight is placed above the beams at the point of support, the sagging, and therefore bending forces are lessened.

make them higher such that the ridge beam may eventually be supported at these two ends.²¹

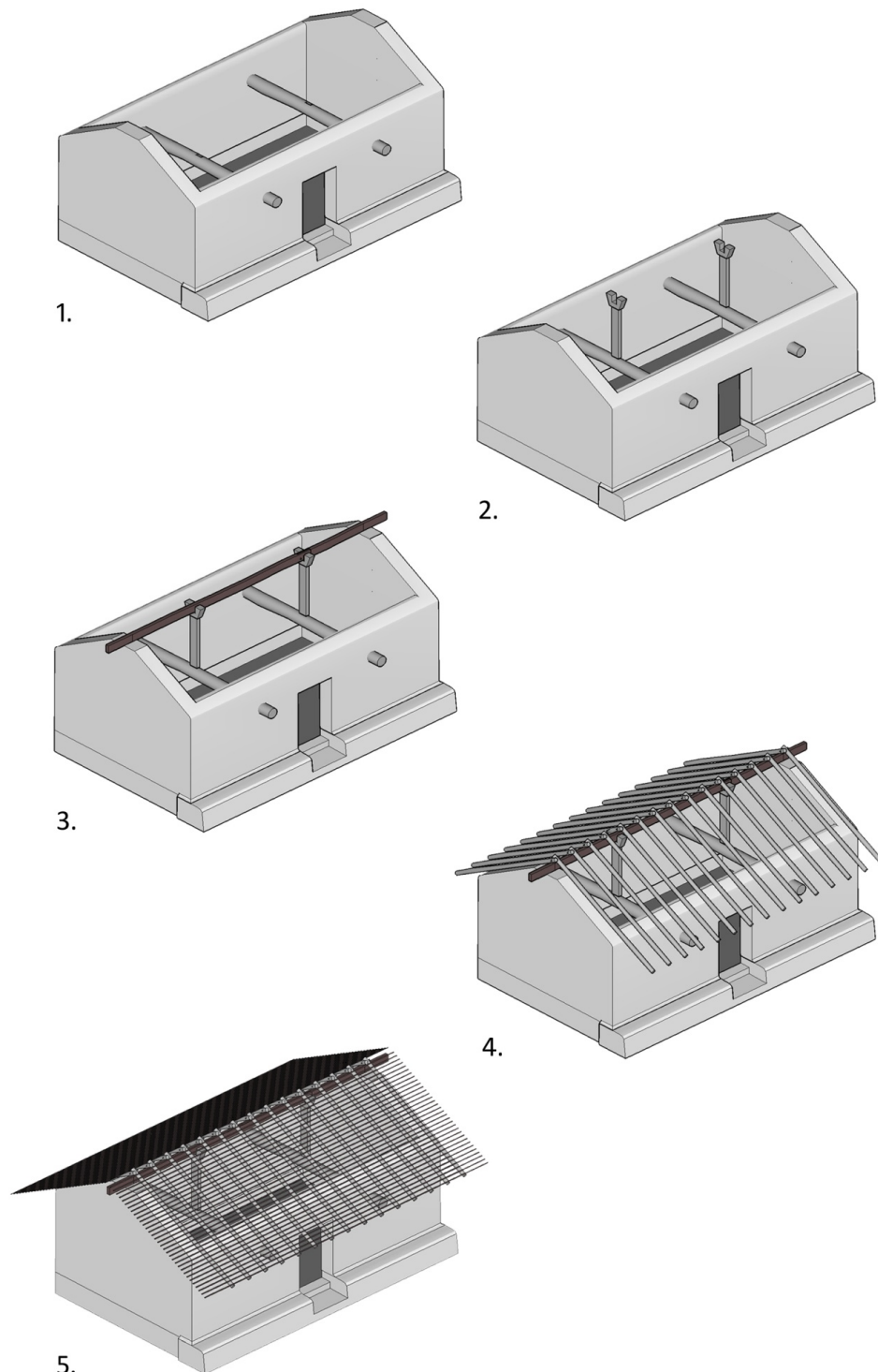


Figure 4-10: Roof structure in *orak*. From 1-5, the sequence of addition of structural members may be observed. First, central beams, followed by posts, ridge beam, rafters and batten, on which the final roofing material will be placed to complete the roof.

²¹ A gable wall refers to the 'wall with a triangular portion on top that encloses the end of a sloping roof from ridge to eaves. Ching 1975, 6.16.

Once the beams are in place and walls are built up to their final height, posts are added in the middle of the beams.²² Posts are fixed in place using one of two possible methods. In one method, the beam itself is notched and the post is fitted into it (Fig.4-11). In the second method, another wooden member is placed above the beam and fixed to the beam using nails or dowels (Fig.4-12). This additional member is shaped such that it has a notch to take in the post. While the two methods are similar in principle, they are used depending on the thickness of the central beam; if the central beam is not thick enough for a notch to be dug into it, then the additional wooden member is required. If it is, the post may be directly notched into it. These choices were typically based depending on the availability of wood at the time of construction.



Figure 4-11: Post notched into central beam



Figure 4-12: Additional wooden member used for creating joint between post and beam

²² Posts, as referred to here, are columns or vertical load carrying elements.

Once the central post-and-beam supports are in place, a ridge beam is placed above it spanning the longer dimension of the room. The joint between the post and the ridge beam is made in two possible ways, similar to the post and beam joint discussed earlier. If the post is of sufficient thickness, the end of the post is forked into an approximate ‘Y’ shape (Fig.4-13), within which the ridge beam is positioned. Alternatively, if the post is not thick enough to be carved, a separate piece of wood is carved into a ‘U’ shape and nailed to the top of the post. This ‘U’ will now support the ridge beam. (Fig.4-14). Considering that the ridge beam spans the longer side of the room, it is usually made of two or more lengths of wood depending upon the dimensions of the space being built and on the available lengths of wood. These lengths are joined to each other using lap joints (Fig.4-15). While the ends of the ridge beam are supported on the raised gable walls, the lap joints are propped up by the central beam-and-post supports.²³ In the absence of these props, the lap joints of the ridge beam will be unable to support the rafters and roofing materials that come above it. The role of the central beam-and-post is primarily that of a prop, and this, I argue later, is an important point in understanding the transformation of roofs across the changing layout configurations.



Figure 4-13: Post carved to accommodate ridge beam

²³ When the central supports are considered primarily as props, only then can the ridge beam be considered as primarily supported on the two end walls. This is an important conceptual shift in thinking about the structure of the roof, and is discussed in detail in the section on ‘Changes in roof structure’.



Figure 4-14: Joint between post and ridge beam made using additional wooden member



Figure 4-15: Lap joint in ridge beam held between and propped by the post

All three wooden members that comprise the basic supporting structure of the roof vary in terms of cross section. In some roofs, the cross sections are round and appear to have been directly cut from trees and used with minimal processing. These wooden members are also thicker. The extra thickness provides a factor of safety against any internal defects that may compromise the structural strength of the wooden member. Such wooden members belong to a time, particularly in the past, when villagers went into the forests and cut the wood they required for building roofs. With the forests coming under state control in the late nineteenth century and with reduced access for Adivasis continuing until today,²⁴ people can only collect wood for fuel but are no longer permitted to cut down trees for building. Consequently, people today buy wood from commercial establishments. These members are square or rectangular in cross section and are thinner compared to wooden members used earlier. This issue of the availability and sources of wood becomes an important consideration in understanding the transformation of roof structures.

²⁴ See, for instance, Damodaran 2011.

To return to the discussion of roof structure, I outlined that it comprises central beams, posts and finally the ridge beam supported on the gable walls and propped up by posts at intermediate points. This sequence and the manner of placing/ fixing these members suggests that they are intended to be self-supporting in the intermediate stages of construction. In other words, roof members do not require any additional supports, such as scaffolding, in order to hold them in place while the structure is being built. This allows the builders to conserve their scarce resources in that materials are optimized for use in building rather than serving as preparatory objects.

4.2.4. Roof structure: Rafters

After the ridge beam is set in place above the central post-and-beam supports, the rafters are placed on. Rafters are of two kinds - circular cross sections (between five to seven centimetres in diameter) generally seen in older houses or rectangular or square cross sections (approximately three centimetres in width and six to seven centimetres in depth) in the newer ones (Fig.4-16 and 4-17).²⁵ The rafters are simply supported at the two ends, that is, they merely rest on the ridge beam and eaves on the mud walls and are not physically fixed to these supports in any way.²⁶ The structural and constructional challenge is to ensure that the rafters do not slide off the roof and this is achieved by connecting the rafters on top i.e. on either of the ridge beam to each other with a nail (Fig.4-18). Eventually, the rafters are also held down by the weight of the battens and roofing materials that come above.



²⁵ Square sections are also found in old houses and round sections in new ones but the important point here is that it is increasingly common for people to use square sections since these are commercially available, and therefore, the likelihood of newer houses having such sections is higher.

²⁶ In technical terms, a simply supported condition refers to a joint between two members (typically one horizontal and one vertical) where the loads are transferred only axially at the point of contact between the two members,

Figure 4-16: Rafters with round cross section



Figure 4-17: Rafter with rectangular cross section

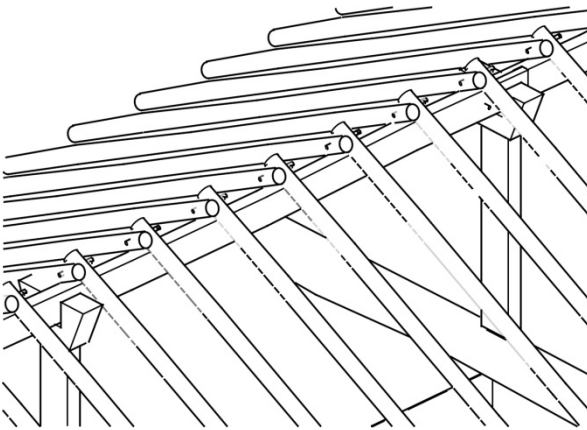


Figure 4-18: Rafters pinned together above ridge beam

Rafters in all the documented houses were made of single lengths of wood, except in one house where rafters were extended using extra beams as props. This was done by placing two beams on either side of the ridge beam thereby creating an additional support for the rafters (Fig.4-19). This variation in length and unusual support system amplifies three important points about the structure of the roof, and more broadly, about building technology in the region as a whole. First, seeing the typical rafters, it is evident that the simply supported end condition is only way of spanning in roof structures in the region. Second, only single lengths of wood are used. Third, if longer spans are required, as in the case of this unusual house with longer rafters, two or more wooden members are connected with a pin joint (as compared to a rigid joint) and need to be propped from below.²⁷ These

²⁷ It is important to note here the differences in structural behaviour of a pin joint vis-à-vis a rigid joints, particularly in relation to bending forces. Bending, in building structures, for instance, refers to forces that make beams sag or columns buckle. Now if the beam or column is made of two members that are held

three aspects are interrelated and determine the prospects for roof structures in the region. In other words, these three aspects characterize the ways of supporting, spanning and the kinds of joinery used. One finds for instance, that the propping of lap-jointed members is used to create longer ridge beams, which is required for increasing room lengths. However, the propping mechanism is elaborate and requires additional beams and posts and specialised joinery to create appropriate supports.²⁸ I argue, therefore, that families employ the propping mechanism selectively for primary roof supports such as ridge beams and opt for simpler spanning methods in the case of rafters. This structural choice, in turn, affects the internal dimensions of dwelling spaces, which are limited by the available single lengths of wood that may be used as rafters. The point to note here is that the structural possibilities afforded by simply supported and propped support systems have an impact on the typical spatial dimensions of Santal houses.

together with a pin joint (a joint where two or more members are connected, often with a single nail or a dowel, such that they may continue to move in relation to each other), it will bend or buckle on the application of load. If members are held together with rigid joints (where members are connected in two or more places using nails or dowels, for instance, in a manner that they cannot move in relation to each other), they will not bend or buckle insofar as their structural strengths permits. In Santal roofs, it is clear that pin joints are the preferred method as seen in the case of rafters joined above the ridge beam or in the lap joints between two or more lengths of the ridge beam.

²⁸ This specialised joinery refers to the notched beams, forked posts or additional wooden members mentioned earlier. This may be considered as specialised in relation to other joints such as pin joints that one finds in other parts of the roof structure.

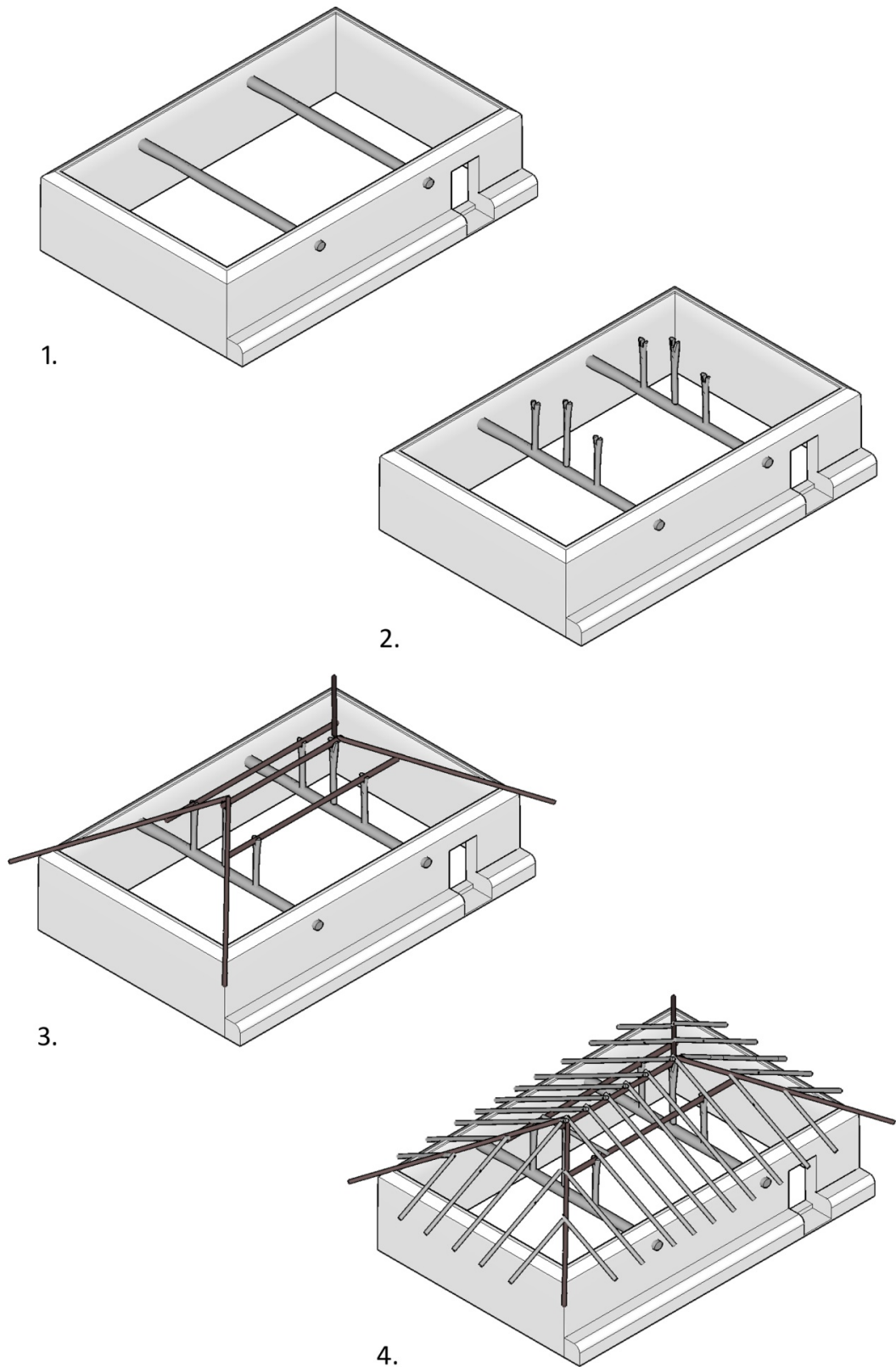


Figure 4-19: Unusual case of extended rafters supported by extra beams. Note in stage 2, there are three posts, rather than one, which is more typical. In stage 3, it is clear that each post supports a beam, on which lap jointed or longer rafters can rest.

4.2.5. Roof structure: Eaves

Having discussed that rafters are typically simply supported, it is important to make note of the supporting conditions at the end. The rafters are pinned to each other at the top near the ridge beam, while, at the lower end, the rafters are typically supported on the mud walls and extend beyond the walls on the outside.²⁹ In many houses, a separate beam is placed at the eaves to support the rafters. This is done in two ways: the central beams from within the space extend on the outside beyond the mud walls, or, a separate set of horizontal wooden members project out from the wall in order to support a beam (Fig.4-20 and 4-21). In both cases, the supports are notched at the ends and the beam is placed within the notch. This holds the beam in place and prevents it from sliding off. What is interesting to note is that this kind of eaves support is found only in older dwellings. This suggests that, at some point in the past, the rafters were supported on this wooden beam but, more recently, shifted to being supported directly on the mud walls themselves. The shift from supporting rafters on the eaves beam to supporting them directly on the wall is not just a practical consideration but suggests a more fundamental shift in the conceptualising and making of roof structures.



Figure 4-20: Eaves beam supported on extension of central beam

²⁹ Eaves refer to the overhanging lower edge of a sloping roof.



Figure 4-21: Eaves beam supported on additional wooden supports projecting from wall

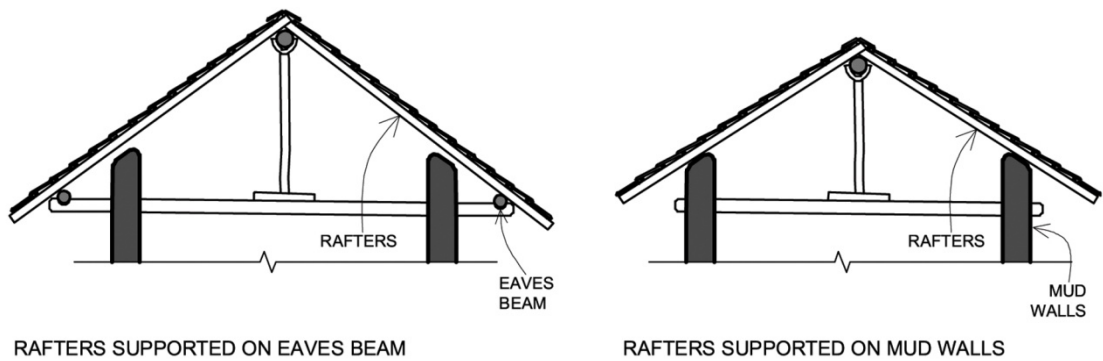


Figure 4-22: Comparison of roofs where rafters rest on eaves beams (left) and where they rest directly on the wall (right). Note the section on the left shows steeper slopes of the roof.

4.2.6. Roof structures in other dwelling types

In the sections above, I described the structure of a typical *orak* roof as comprising central beams-and-posts as the primary support, over which the ridge beam and rafters are placed in sequence. While this may be considered as the basic structural system of Santal roofs, other plan configurations such as the *ath-chala* dwellings and courtyard houses present particular conditions for which this basic roof structure gets adapted.³⁰ I now discuss these other roof conditions, viz., the *ath-chala* dwellings with the central hipped roof and addition of *chali* (verandahs), the courtyard dwelling with L-shaped corner junctions in the roof, and finally, an unusual example of a new *orak* roof with inclined supports for the

³⁰ Structural system, in this chapter, refers to ‘an assembly of interrelated or interdependent parts in a building and serving a common purpose of supporting and transmitting loads safely to the ground, without exceeding the allowable stresses in its members.’ Ching 1975, 2.02.

ridge beam in place of the central beam and post support discussed above. With these conditions, nearly all the different roof conditions documented across the case study villages are accounted for.

4.2.6.1. Ath-chala house

As discussed in the last chapter, *ath-chala* houses are an older layout type comprising a central volume with a hipped roof and surrounded by a *chali* (verandah) with a sloping roof on two or more sides of the central volume.³¹ The term *ath-chala*, as noted earlier, refers to eight slopes of the roof – four of the hipped roof and four of the verandah roofs sloping on all sides (Fig.4-23). The basic roof structure is similar to what is described above in that it has central beams and posts supporting the ridge beam which in turn supports rafters, except that roof has hipped rather than gable ends. This means that the ridge beam is not supported on the gable walls as in most Santal houses, but on the last beam-and-post support on either side. This difference in end condition is an important departure from typical roofs where the central beam-and-post supports are intended as props rather than primary supports. What is particularly interesting is that the difference is not so much in the structural behaviour of the props vis-à-vis the gable walls because they both support the ridge beam in a similar manner, but, in conceptualising that the beam-and-post supports may play the role of end supports rather than being intermediate props alone. This idea of shifts in conceptualising building structure in relation to structural behaviour of individual elements is developed in detail in the concluding segment of this chapter.

³¹ A hipped roof refers to a roof that has sloping sides and ends meeting at inclined projecting angles. Ching 1975, 6.17.

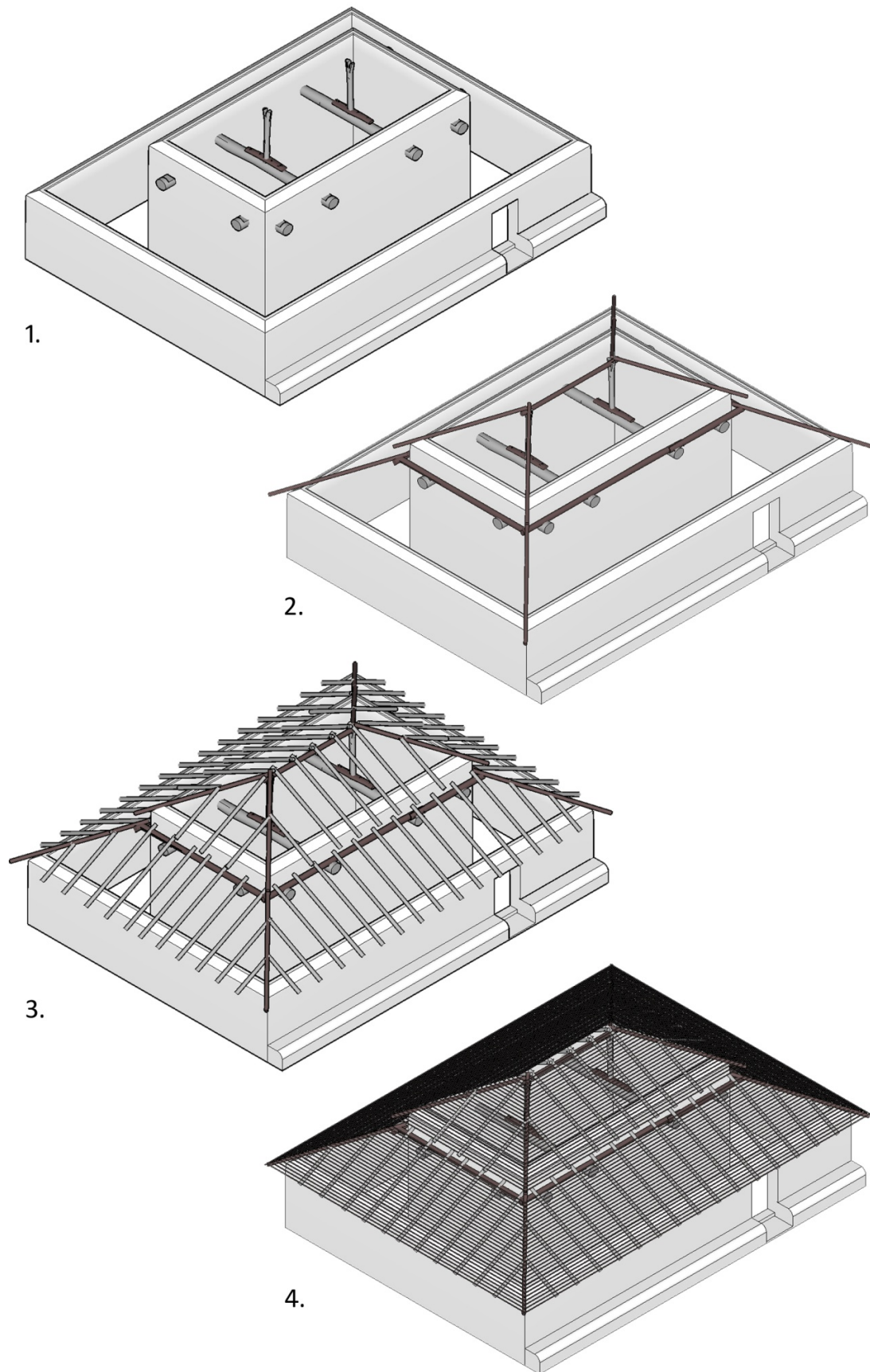


Figure 4-23: Hipped roof with the addition of *chali*. Note that *chali* may be found on two, three or all four sides of the hipped roof.

Apart from some key changes in the support for the ridge beam, the *ath-chala* roof presents some other challenges in terms of new kinds of roof junctions of the hipped edge. First, at the end of the ridge beam, five members meet and are required to be supported (Fig.4-24). These are two rafters that form the hipped edges of the roof and three other regular rafters supporting battens. This is resolved by extending the ridge beam a little beyond the support of the post. Two rafters are placed near the point of support while the three rafters of the hipped end are supported on the extension of the beam. The hip rafters have bevelled edges that allow them to be rested on the ridge beam at an incline. Second, the hipped ends present a challenge in details such as the laying of roofing materials, which is discussed later under the section on roofing materials.

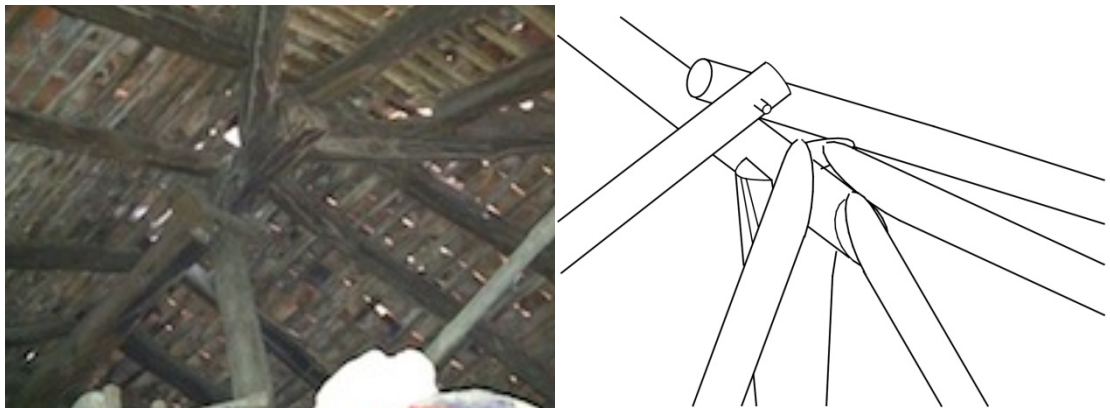


Figure 4-24: End of ridge beam supporting multiple rafters in *ath-chala* roof

Ath-chala dwellings have *chali* (verandahs) on two or more sides as mentioned earlier. In terms of structure and construction of the roofs, the addition of the *chali* may be seen in continuity with the system of supporting rafters at eaves discussed above (Fig.4-25). Projecting horizontal members are placed in the walls of the inner volume. A beam rests on these projections and the rafters are supported on that beam at one end and the outer wall of the *chali* on the other. It is evident that this detail is nearly identical to the detail of the eaves beam that is used to support rafters.

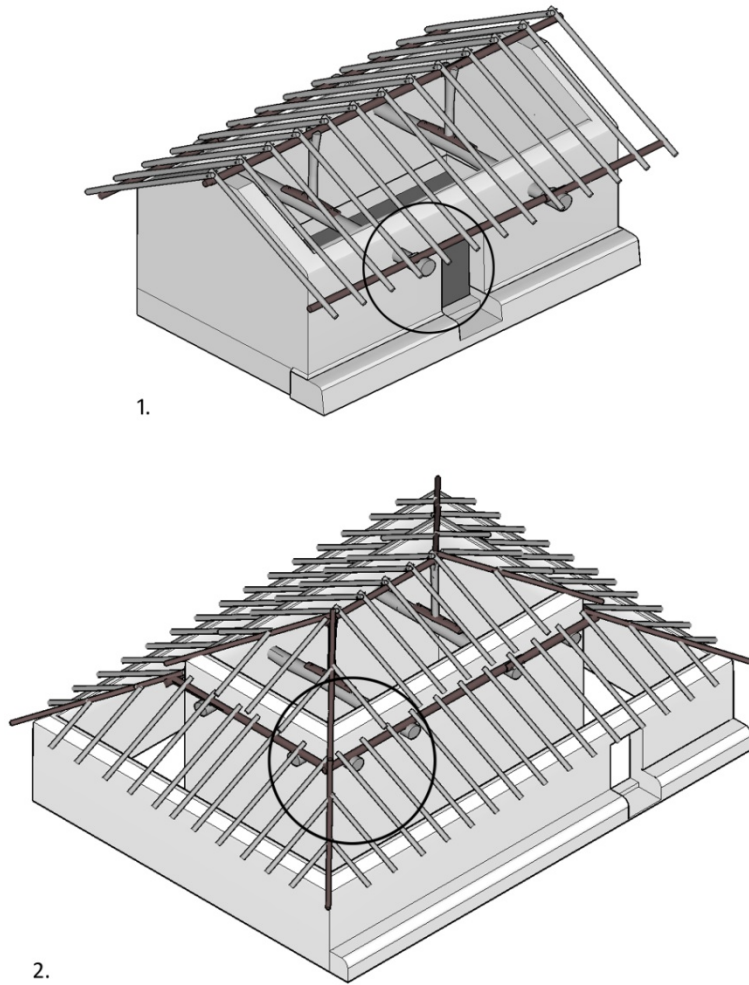


Figure 4-25: Comparison of eaves beam detail with detail of *chali*. Note the similarity of detail in the two cases.

4.2.6.2. 'L'-shaped roof junction in courtyard houses

Compared to *orak* or *ath-chala* houses, which are single and concentric volumes of spaces respectively, the courtyard houses often have long continuous volumes forming courtyards in the centre.³² Two spaces are built perpendicular to one another and in building a continuous roof above them this particular 'L' junction emerges.

In Fig.4-26, two spaces – ABCD and DEFG – form an L-shaped corner typically found in courtyard houses. The spaces forming the corner are not continuous in terms of being a single space but are separated by a wall (ED). In order for a continuous roof to be built above these two spaces, it is geometrically necessary for the roofs to have the same width

³² Courtyard houses often have disconnected volumes built perpendicular to each other and enclosing a *racha* within, but it is the continuous volumes that are of interest in this chapter on account of the L-shaped junctions that get formed at the corners.

and height as this will make their slopes identical. In terms of structure, in this roof the two ridge beams (R1 and R2) are supported on central beams and posts, but they meet at a ninety degree angle at the 'L' junction. The structure at the junction is resolved as follows – in Fig.4-26, the ridge beam R1 above space ABCD is supported on post x on beam b1b2. The ridge beam R2 above space DEFG is supported on the raised wall DE and further, on post y on beam b1b2. Both posts x and y are supported on beam b1b2 in order to individually support the two ridge beams. The two ridge beams do meet at the top of post x, but only one ridge beam is structurally supported while the perpendicular beam draws only nominal support from the post (Fig.4-27 and 4-28). In short, the idea of the central beam-and-post emerging as a primary support in the case of *ath-chala* houses discussed earlier, further transforms to accommodate perpendicular ridge beams and one sees the emergence of L-shaped roof junctions in courtyard houses.

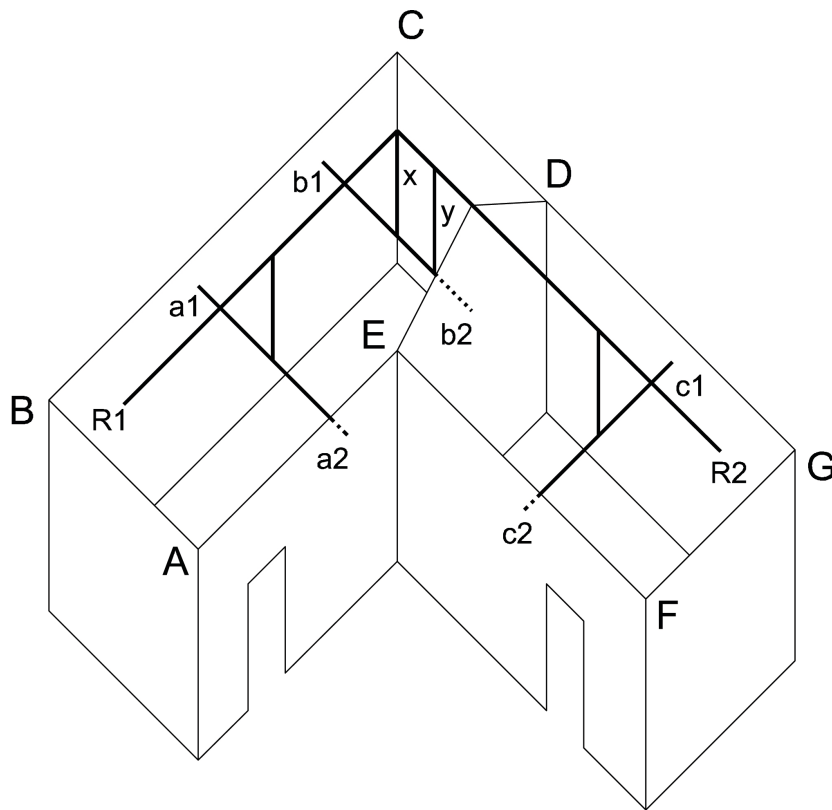


Figure 4-26: Diagram showing the geometry of roof members in L-shaped roof in courtyard houses



Figure 4-27: View of L-shaped junction in the roof of courtyard houses

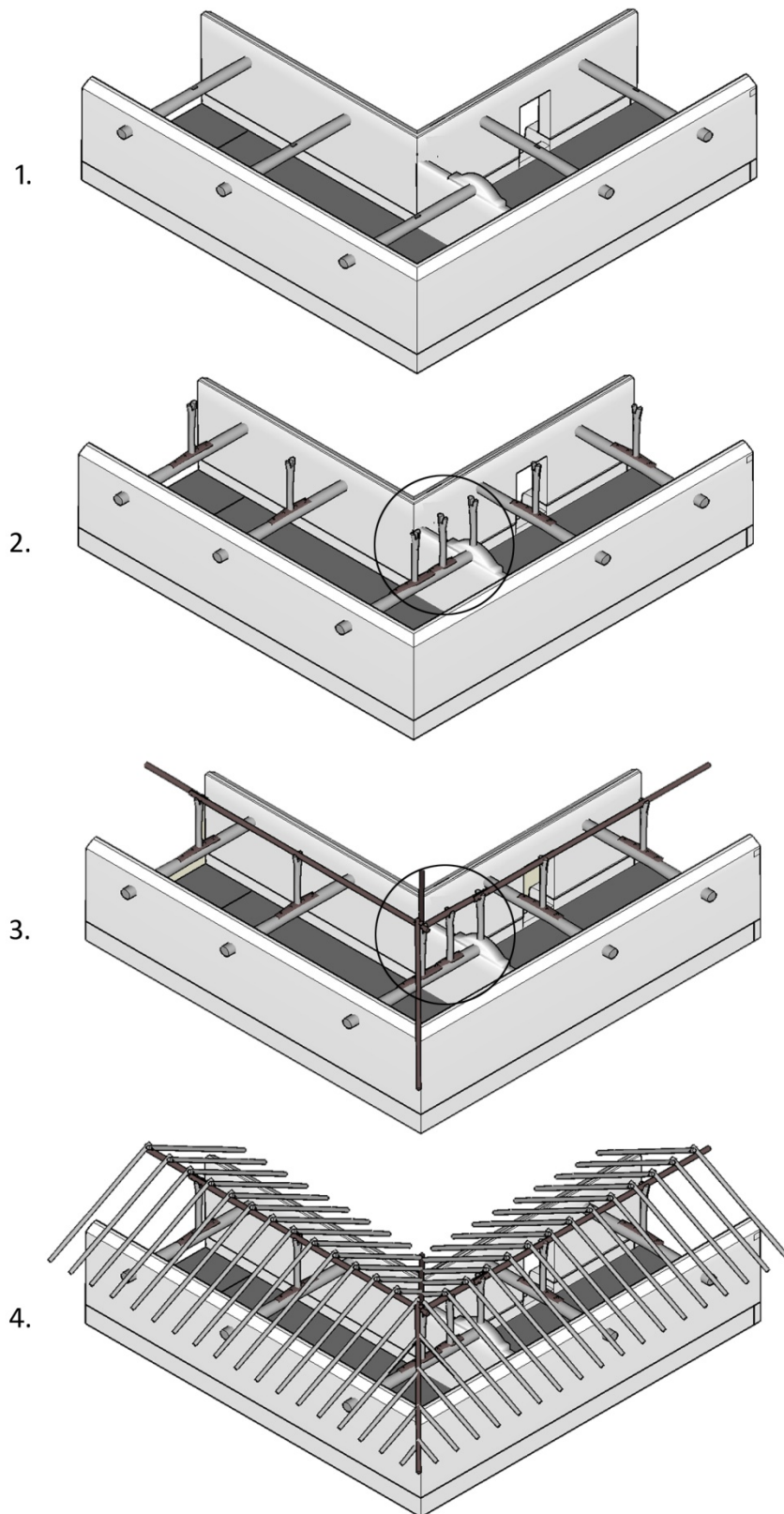


Figure 4-28: L-shaped roof junction with perpendicular ridge beam. Note the two posts (supporting the perpendicular ridge beams) supported on the same beam.

4.2.6.3. Inclined supports for ridge beam

Within this discussion about transformation of supports of the ridge beam, it is useful to take note of one exception in a newly built house in Bhagabandh. Here, the ridge beam is not supported by the central beam-and-post as props but by two inclined members that intersect at the top. The beam then rests within the intersection (Fig.4-29). All other aspects of the structure, that is eaves, rafters and roofing material – are similar to the other roofs discussed thus far. This structure is an interesting departure from common practice because roof structures in the region typically use wooden members horizontally or vertically. The use of inclined members presents two challenges. First, they require supports, i.e. some form of scaffolding, during construction to hold the inclined beams in place until the mud walls are built up, dry out and attain strength.³³ Second, the structural behaviour of inclined members is very different from the stresses on post and beam supports; inclined members exert a much greater degree of thrust on the walls on account of the angle at which they transfer load onto the wall. In terms of building practice, this translates into differences in joinery, but more importantly, indicates a different strand of building knowledge. Not surprisingly, this roof was built by professional carpenters rather than by the family themselves. This comparison between a roof built by carpenters and those built by Santal families themselves serves to highlight some central features of building technology, and, also throws light on the limits of the skills and knowledge that constitute a Santal repertoire of building.

³³ This is because, as long as the mud is soft and wet, the thrust exerted by the wooden member will cause it to get dislodged from the wall. Once dried, the wall is strong enough to hold the wooden member in place.

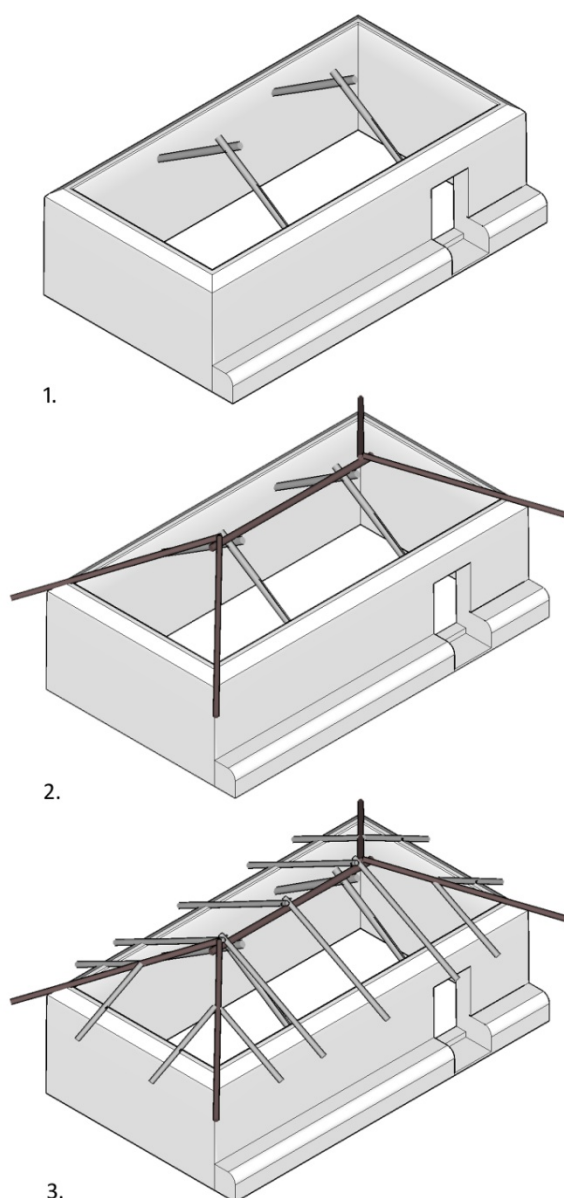


Figure 4-29: Orak roof with inclined supports for rafters. In stage 2, note the ridge beam supported in the intersection of the two members.

4.2.7. Roofing materials

Once the rafters are in place, the final layer of battens and roofing materials are ready to be placed on the roof. Battens are made of thinner wooden members (approximately two centimetres in diameter) or bamboo strips and are placed on the rafters according to the roofing material to be used. For instance, thatch requires battens placed very close to one another in order for it to be tied down at many places. Semi-cylindrical clay tiles also require closely spaced battens whereas rectangular tiles are larger in size and require fewer battens placed further apart. Roofing sheets require only two or three battens per length of sheet since they are fixed in position using J-bolts (Fig.4-30 to 4-32).

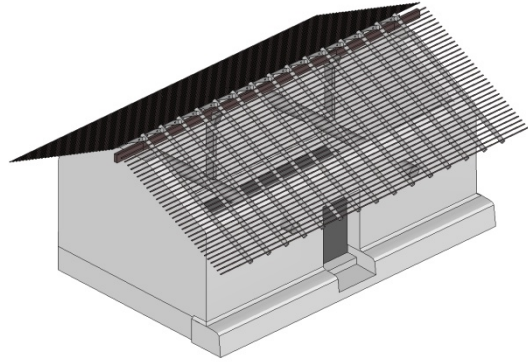


Figure 4-30: Closely spaced battens for *khapra* (burnt clay tile) roofing

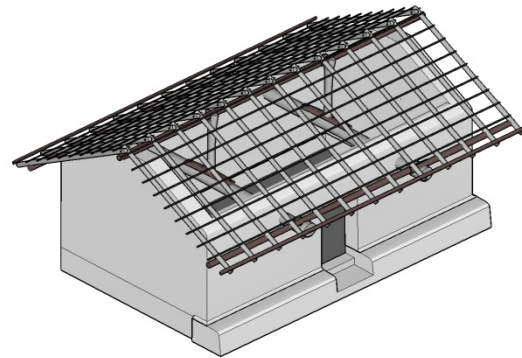


Figure 4-31: Battens spaces further apart for *tali* (rectangular clay tiles)

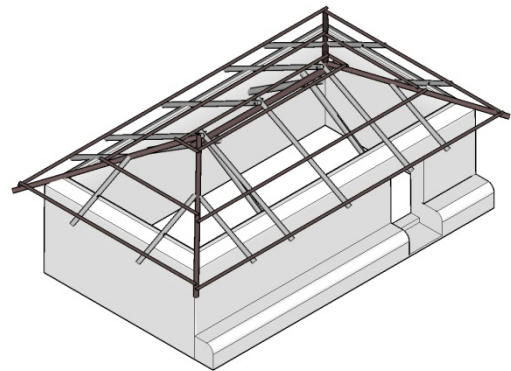


Figure 4-32: Very few battens required for roofing done using sheets

In terms of roofing materials, three different types mentioned above have been documented. They are thatch, clay tiles (semi-cylindrical and rectangular) and roofing sheets. Each roofing material is discussed separately since they each have different influences on structure and networks of materials and skills.

4.2.7.1. Thatch

Of the different roofing materials documented, different types of thatch are the oldest forms of roofing. Elderly villagers mentioned *jhopdi* houses that were covered in leaf

thatch.³⁴ Today, most people use straw obtained from paddy cultivation. Bundles of straw are placed on the battens and stitched together using rope and custom-made needle (Fig.4-33 and 4-34). They build up the thatch, layer by layer to finally create a roof that is between thirty to forty centimetres in thickness. Depending on the quality of the thatch and the workmanship, such a roof may last two to three years, after which new thatch needs to be laid on.



Figure 4-33: Men laying thatch on a roof



Figure 4-34: Needle used for tying thatch to the battens below

Thatch today is usually used by poorer families or as a temporary roofing material before tiles or sheets are procured and placed. Families generally aim to roof their houses with the best roofing materials they can afford, and on those grounds thatch is the least preferred material. This is because though it is the most easily available and can be procured every year after the paddy harvest, thatch is labour-intensive and time-consuming to lay on and then needs replacement every two or three years. Further, for straw to be used as roofing, it needs to be strong and have sufficient length, which comes only from particular kinds of

³⁴ Bodding (1940, 431) mentions that, in the past, Santals preferred the *sauri* grass that grew in abundance in the forests in the region. With the spread of agricultural practices, however, people shifted to paddy straw as a thatching material.

long-leaved paddy.³⁵ The use of fertilizers in recent years has resulted in straw becoming brittle and unsuitable for use as thatch.³⁶ The last consideration affecting the use of paddy is the balance between using straw as fodder for cattle vis-à-vis its use as roofing. Given that most paddy cultivating families keep a few cattle, they need to ensure that have sufficient fodder since grazing alone is rarely sufficient to feed the animals. Thatching the roof every two to three years may seriously deplete the fodder stock of a family. Given these changes in quality and other conflicting demands of procurement, use and maintenance, villagers prefer to use tiles or roofing sheets if they can afford it.

4.2.7.2. Burnt clay tiles

Burnt clay tiles in the form of *khapra* (semi-cylindrical tiles) or *tali* (rectangular tiles) are the most common roofing materials used in the rural areas of Singhbhum (Fig.4-35). Some important differences between the two types of tiles are, first, that *khapra* is made by potters and sold commercially while *tali* is industrially manufactured. Second, *tali* is stronger than *khapra*, which makes it less prone to damage. Third, the size of the *tali* is larger than *khapra*, which means fewer numbers are required to tile a given area of the roof and fewer battens are required to support them. However, *tali* are more expensive than *khapra* and only available in urban markets while *khapra* may be purchased from rural potter communities in the vicinity of the case study villages.³⁷ The choice between *khapra* and *tali* is made on the basis of both funds available and access to places where they may be bought.

³⁵ Personal conversation with M. Singh in Bada Bandua in March 2013.

³⁶ Villagers referred to fertilizers as ‘sulphates’ and pointed out that while the fertilizers helped with better paddy production, it weakened the straw itself and made unsuitable for roofing.

³⁷ For instance, in Chauda, the neighbouring village of Bholadih had a numbering of potter families who made and supplied clay tiles and pots to other villages. According to one elderly villager, R.Tudu, the *raja* (ruler) of Seraikela invited people practising various professions such as potters, weavers and ironsmiths to settle in his estates. This ensured that other communities such as cultivator Adivasis had access to their basic needs such as pots, cloth and tools. Personal conversation with R. Tudu in Chauda in March 2013.



Figure 4-35: Types of clay tiles used for roofing: *khapra* on the left and *tali* on the right

In the past it was common for villagers to hire potters to make *khapra* for their house. This was observed in one house in Chauda where a family intending to renovate the roof of their house hired two potters to make the required *khapra*. The potters had travelled from Gaya district in Bihar; they were farmers themselves but travelled in the Seraikela region during the non-agricultural season and made *khapra* for Adivasi families when hired to do so. The family that hired the potters was also involved in preparations for making tiles. The process began with the potters estimating the amount of clay that is required to make the *khapra* on the basis of the size of the house being built. They also suggested the amount of wood that would be required to fire the *khapra* on completion, and their own charges for making the tiles. If the family found the estimates and charges to be acceptable, the potters were hired and the process began.

In the example observed, the family procured clay from a dried pond bed in the vicinity of the village. This clay is the same *murrum* that is used for building walls but is required to be finer since the *khapra* are shaped on a potter's wheel. For this reason, only the top layer of *murrum* from pond or riverbeds is used. The backyard and courtyard of the house being renovated become the site of work for the next ten days during which the tiles are made (Fig.4-36 to 4-43). A pit is dug and sacks of clay are brought and emptied into the pit. The pit is then flooded with water and the clay is left to soak for approximately eight hours. More water may be added if the clay appears to dry out. The wet clay is dug out of the pit and as it is piled up, a second person begins kneading the clay with his or her feet. This is similar to the preparation of *murrum* for the walls, except that the clay is kneaded three or four times in this case and impurities such as twigs and small stones are constantly removed. After the clay has been kneaded well, lumps of clay are cut out of the pile and further kneaded by hand. At this stage, some amount of sand is added to the clay and any

remaining impurities are removed. The clay is kneaded very fine and shaped into a rough cylinder before being passed onto the potters' wheels. The two potters then set to work and shape the clay into hollow cylinders. The cylinders are narrow at one end and slightly wider at the other. Each lump of clay produced three or four hollow cylinders. These were set out to dry in the sun, and when nearly dry, they were slit in half to create the *khapra*. When all the *khapra* were ready, the entire lot of tiles would be fired together. For the particular house that was observed, the potters had estimated that nearly 7000 *khapra* were required, and they were shaping approximately 300 cylinders or 600 *khapra* each everyday. It took them nearly eight days to complete making the tiles.



Figure 4-36: Pit dug in the ground for soaking *murrum mati*, which is used for making *khapra*



Figure 4-37: Pit filled with *murrum mati* and filled with water. The *murrum mati* absorbs the water and softens before being used.



Figure 4-38: The soaked *murrum mati* is piled outside the pit and kneaded by repeatedly stepping on it.



Figure 4-39: After kneading, the pile is smoothened out and left to rest. This processes of kneading and resting is repeated three times before the *murrum mati* is ready for use.



Figure 4-40: A final round of kneading is done by hand



Figure 4-41: The prepared *murrum mati* is shaped into cylinders before being handed to the potter for shaping on the wheel



Figure 4-42: Cylinders being shaped on the wheel in the desired size of the final tile



Figure 4-43: Cylinders being split in half to produce *khapra*. These halves are dried completely and fired before being used for roofing.

This entire process of making *khapra* has now become rare since people prefer to buy tiles from commercial establishments as and when they require it. Commercially produced *khapra* are of a much poorer quality as compared to those made on commission. For instance, the *khapra* made by the potters described above were longer and thicker than *khapra* available on sale and would also last much longer.³⁸ The potters claimed that the tiles they were making may not require replacement for another forty to fifty years. However, there are some other factors that have led to a decline in families commissioning potters to make tiles. First, the preparations involve the entire extended family (two men, their wives, sons) in the case above. For families with fewer members or where some members work for daily wages, it may not be possible to bring enough people together to help with the preparations for making tiles. In earlier times, it was common for neighbours and friends to help with this work. Increasingly however most families in the villages are occupied with wage labour and younger adults and children with school. In some cases, other members of the village community may participate in building in exchange for wages, but that will increase the total expenditure for the family concerned. A second factor is the time involved since it takes more than two weeks for *khapra* to be made and fired. This poses a problem again for families engaged in daily wage labour who miss out on days of work and therefore on wages as well. Finally, resources required for the making of *khapra* are increasingly scarce – both fine *murrum* and wood for firing the tiles are now difficult to obtain from the vicinity of the villages. Compared to *murrum* for walls that is obtained from people's backyards, *murrum* for *khapra* and wood for firing the *khapra* are both collected from common village resources such as ponds and forests. With increasing village densities and many more claimants to these resources, these places can no longer provide *murrum* and wood as required by the villagers. Under these circumstances, it is simply more convenient for villagers to buy *khapra* even if it is of a poorer quality and may need to be replaced sooner than commissioned tiles. The meshwork of labour, resources, and choices introduced by a cash economy and its relation to building practices is exemplified here, and I develop this idea later as one of the important frameworks within which to view shifts in building practices of Santals.

³⁸ As the potters themselves mentioned, when they made *khapra* for general sale, they made smaller *khapra* since more tiles could be made from a given quantity of clay. Further, since *khapra* are sold individually, they made more profit if people bought larger numbers of tiles. Personal conversation with potters in Chauda in March 2013.

With regards to the use of *khapra* and *tali*, I have already mentioned that *khapra* requires more numbers of closely spaced battens as compared to *tali*. There are other particularities of use as well, for instance, the inclined end conditions of hipped and ‘L’ junction roofs require different tiles on account of angles and junctions. The requirements are of two kinds – special tiles for inclined edges of the roofing surface, and again special coverings for hip and valley junctions formed by the roof. In *orak* roofs, the roof surfaces are orthogonal and are easily covered with *khapra* or *tali*. In hipped and ‘L’ junctions roofs, the surfaces are inclined and the tiles placed on the edges need to be cut to match the incline. Since special tiles are not available for this purpose, tiles are individually cut to the required profile. For the hipped and valley junctions themselves other arrangements are made to ensure that the junctions are protected and made waterproof. For hip junctions, two layers of regular semi-cylindrical tiles are placed above the hip thereby covering any gap in the roof (Fig.4-44). The valley junction poses a different problem in that neither the special hip tile nor the extra layer of tiles is useful. What is required in the valley junction is a gutter-like device to channel water and prevent it from seeping through the roof. Most houses use a piece of galvanized iron roofing and place it in the form of a gutter in the valley. In many cases however, people avoid building ‘L’ junctions altogether, and if they do, the two perpendicular roofs are rarely tiled; one roof may be tiled while the other will be covered in thatch. Thatch being a more flexible material allows the valley junctions to be roughly patched together. The difficulties of roofing a valley junction may underscore the idea that courtyard houses are a much later occurrence as compared to other dwellings types.



Figure 4-44: Two layers of tiles used to cover the hip junction in an L-shaped roof

4.2.7.3. Roofing sheets

Some instances of roofing sheets such as asbestos cement sheets or galvanized iron sheets have been observed. This kind of roofing is expensive and is only done by families who have an income to be able to afford it. The key differences when compared to other kinds of roofing material is that, structurally, roofing sheets require fewer battens and much lighter supports since they are lightweight. However, compared to other roofing materials, they provide no insulation against the heat, and as the villagers pointed out, the dwelling may get very warm in the hot seasons.

4.2.8. Conjecturing the structure of the *kumbaha*

What becomes clear from the accounts above, is that the structure of the roof may be understood as comprising of three layers: first, the supporting elements including gable walls and central beams-and-posts as in the example discussed above; second, the ridge beam and rafters, and third, battens and roofing materials. Comparing the dwelling types of *ath-chala*, *orak* and courtyard houses, changes are observed in the first and third layers, i.e., in the supporting and the roofing material layers, while the rafters have remained the same in terms of dimensions and joinery (Fig.4-45). These points begin to suggest some of the key aspects of transformation of building structure in Santal dwellings. However, the *kumbaha* is yet to be account for. I established in the previous chapter that the *kumbaha* and the *ath-chala* house types were contemporaneous and preceded the *orak* and courtyard type houses found today. In terms of building structure too, it is important to conjecture the system of structural support and roofing in the *kumbaha* and establish points of correspondence between that structure and the ones discussed earlier.

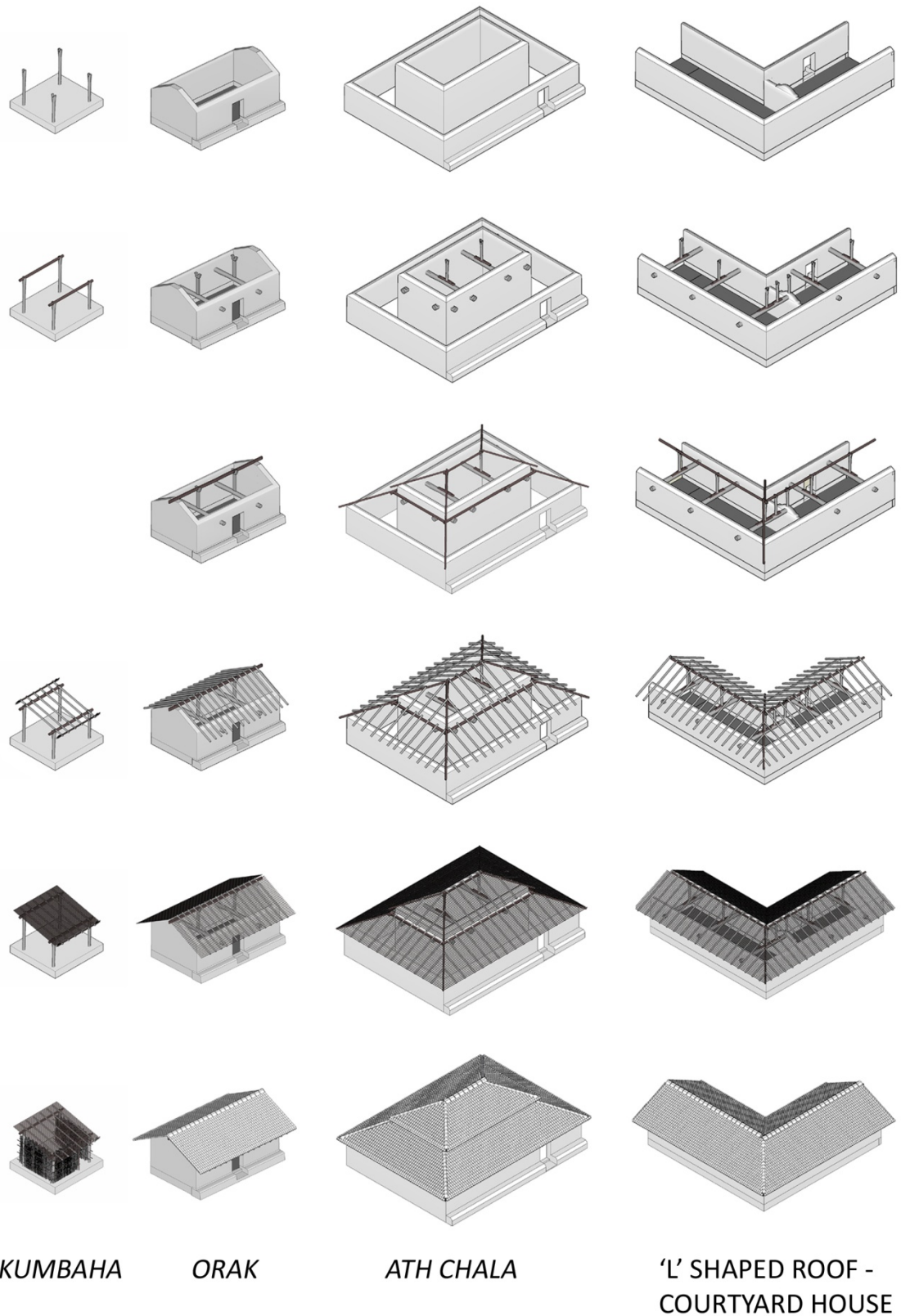


Figure 4-45: Comparing roof structures across layouts

One problem that emerges with *kumbaha* type houses, as I discussed in the previous chapter, is that they are conjectured on the basis of oral accounts by elderly Santals. No

extant examples of *kumbaha* type houses were documented in the case study villages. This lack of material evidence poses a problem for exploring ways of making but is resolved by examining Birhor houses and other elements such as fences and temporary cattle shelters that may be considered as broad similar to *kumbaha* type dwellings or its different parts. For instance, Birhor houses have walls and roofs similar to verbal descriptions of the *kumbaha* provided by elderly Santals. So the structure and joinery in Birhor houses may be considered similar to those employed in *kumbaha* type dwellings in the past. Further, given that elements such as fences and cattle sheds found in Santal houses employ materials and joinery similar to the Birhor house, I argue that all these practices of working with wood or bamboo belong to the same repertoire of skills and building knowledge.³⁹ Another source of information for conjecturing the making of *kumbaha* type dwellings is Bodding's description of Santal houses in the early twentieth century. Bodding observes that

... nine posts are fixed on the ground in three rows, three posts in each row, those in the middle being higher than those on two sides. On top of each of these three rows a heavy pole or beam (called *par*), as long as the house is to be, is fixed. Next cross beams are set up, one end resting on the outside posts and the other end being securely tied to the posts in the middle row. The rafters are then put in position; the old rule was twenty rafters (called *sener*) on each side of the roof. To keep these in place, three sets of laths (called *bata* are used, one set being tied at the top, another set in the middle, and a third set at the lower, eaves', end of the rafter. On the rafters, a framework of saplings (called *chatar*, nowadays mostly of split bamboo) is tied, and finally the roof is thatched with grass. (Bodding 1940, 431)

While Bodding does not use the term *kumbaha*, his description correlates to the examples of the Birhor house and other temporary wooden structures built by Santals, and this becomes the basis for conjecturing the structure and joinery in the *kumbaha*.

Beginning with the vertical supports, it is clear that a system of posts was used to support the roof. Bodding suggests that nine posts comprised a house while the Birhor house documented had six posts forming the vertical supports for the roof. The top ends of these posts were most likely to be forked, as seen in Birhor houses, either naturally by selecting

³⁹ There are considerable similarities in buildings practices across the different communities in the Singhbhum region. These are both in terms of common building materials such as *murum mati* (a locally found clayey soil), wood and bamboo, and building technologies such as cob wall construction and simply supported wooden joinery. It is on account of the similarities of practices that comparisons may be made between Birhor and early Santal houses.

a branching piece of wood or by carving a fork into the end of the post (Fig.4-46). These posts supported beams, which were held in place by cross beams, as pointed out by Bodding and observed in the Birhor house. These beams may have comprised a single length of wood or two members tied together and supported within the forked end of the post as seen in the Birhor house. Above these beams, Bodding notes that rafters were placed and tied at three places, which is similar to the rafters in the Birhor house. Finally, a layer of thin branches is tied onto the battens to provide a surface for tying down the leaf thatch. Here, too, Bodding's description matches the Birhor house (Fig. 3-47). In short, except for the numbers of posts, the basic support and roofing structure described by Bodding and documented in the Birhor house are similar, and, I contend this formed the basic structure of *kumbaha* type houses in the past.



Figure 4-46: Forked end of post used to support beam in Birhor house



Figure 4-47: Rafters, battens (made of thin branches) and thatch visible in the ceiling of Birhor house

It is important to conjecture the kind of structural system and joinery used in the making of the *kumbaha* in order to establish continuities and shifts in the structure of other Santal

dwelling types. If we consider the three layers of structure observed earlier, viz., the supports for the rafters, the rafters themselves, and the roofing material, one begins to see a similar hierarchy in roofing structure. For instance, in the *orak* roof, the walls together with the central beam and post support the ridge beam and the form the first layer of roof structure. In the *kumbaha*, it is the posts and the cross beams that form an equivalent first layer, with the tall central posts holding what may be considered as the ridge beam. The second layer, in both instances, is rafters formed of single lengths of wood and supported in the ridge beam and walls in case of the *orak*, and the ridge beam and eaves beams in case of the *kumbaha*. With the transformation of dwellings, the shifts in roof structure in the *orak*, *ath-chala* and courtyard houses were observed at the level of the first layer of support, i.e., in the central beams and posts, while the rafters remained similar across the dwelling types. In the *kumbaha* too, one finds that though the support system varies, the rafters are similar to those found in other house types, and, that the single lengths of wood become determinants of spatial dimension in this case as well. The final layer comprising battens and roofing depend on the kinds of roofing material chosen in each case. In short, it is clear that there are distinct continuities in structure across the four dwellings types (such as the rafters and its relationship to spatial dimension) and distinct differences (such as shifts in the supporting structure of the roof). In the next section, I address these in greater detail, and further, attempt to contextualise the shifts in ways of making within the larger frameworks of changes in architectural form, ecologies of materials, skills and building knowledge.

4.3. Identifying and contextualising changes

From the discussion above, it is evident that the key changes in ways of making Santal dwellings are shifts in building materials, in the nature of walls and vertical supports and in the roofs. I outline the possible stages of transformation in each case and correlate them to wider changes taking place in Santal society and the social, economic and political context of the Singhbhum region. In addition to these narratives to changes, however, it is important to identify the continuities in dwelling form and building practice. These continuities, I argue, help identify the key components of Santal building practice and establish the directions and extents of transformation.

4.3.1. Changes in availability of building materials

One of the most obvious changes in Santal dwellings is that of building materials. In case of walls, building material completely changed while in the case of roofs, the structure continues to be made of wood but had transformed in terms of the configuration of its constituent parts. Roofing materials, on the other hand, have completely transformed and thereby are discussed separately.

Beginning with walls, I noted that in the past, *kumbaha* houses had walls built of *jhanti* panels and these have transformed into mud walls in the *orak*, *ath-chala* and courtyard houses today. I also suggested that *kumbaha* type houses were extant until the early twentieth century, but that mud construction was gaining currency during the same period.⁴⁰ To understand this shift, it is important to reflect on how *jhanti* walls are made today, both as fences in Santal houses and in the case of Birhor houses. As I discussed earlier, *jhanti* is made of thin branches, which are collected from forests in the vicinity of the village, and tied together using strips of bamboo or wood. In the past, when Santals were leading relatively more mobile lives and Singhbhum was a thickly forested region, the use of *jhanti* was appropriate to the context; people moved from place to place and needed to set up a shelter quickly which was easily done with *jhanti* as availability of wood was plentiful as well. With the gradual process of sedentarization through the end of the nineteenth and early twentieth centuries, *jhanti* gave way to the more permanent mud wall as a common building element.⁴¹

One of the intermediate stages of the shift from *jhanti* to mud is seen in the Birhor dwelling examples where the interiors of some houses are plastered in mud. Once families have lived in the same place for sometime, they begin to consolidate the *jhanti* dwellings. The first step in this consolidation is the plastering of the interior surface of the walls. This reduces the porosity of the *jhanti* and walls, and as one villager pointed out, provides a little extra protection against insects and rains. The next stage is plastering on the outside. This adds up, eventually, to a mud wall that has an entire layer of *jhanti* embedded within it.⁴² One can reasonably conjecture, however, that in terms of sequence of development, *jhanti* walls, *jhanti* walls with mud plaster and mud walls may respectively have emerged

⁴⁰ Elderly people in the case study villages mentioned that they had seen such houses in their younger days, which in terms of time approximately refers to sixty to seventy years in the past.

⁴¹ This is discussed in detail in the previous chapter under 'context of nineteenth century Singhbhum.' See also Dasgupta and Basu 2011, 153-169.

⁴² While this was not seen, villagers pointed out that this was the case in some dwelling examples.

in continuation with each other. This shift is not a clear linear progression but has a considerable period of overlap where houses were being built both in mud and using *jhanti*. This is apparent in the fact that mud construction is also an old practice, as seen in the *ath-chala* houses, and may date back to the mid-nineteenth century.⁴³ In other words, both *jhanti* walls and mud construction were simultaneously in practice but the former declined while the latter became the most common mode of building in the region.

The access to and use of building materials may account for the gradual shift from wooden *jhanti* to mud construction. Material for *jhanti* comes from forests while *murrum* for building mud walls is dug from people's own backyards and never from any other location within the village. In the previous chapter (under 'The context of nineteenth century Singhbhum'), I described that the nineteenth and early twentieth centuries saw a change in landscape, economics, governance, and as a result in the Adivasi societies of Singhbhum. Forests were increasingly reserved and brought under state control and Adivasi access to them was restricted. This meant they had less access to wood from the forests as well. At the same time, land was increasingly terraced and brought under paddy cultivation, which led to a widespread sedentarization of Adivasi communities (Dasgupta and Basu 2012, 153-169). Villages were surveyed for purposes of taxation by the colonial government and individuals were issued land deeds that recognized houses and agricultural as belonging to specific people.⁴⁴ With the emergence of private property, villagers now had complete control over their own plots of land, while simultaneously access to forests was curtailed. In terms of building materials mud was now more easily available from people's own backyards while wood for construction was becoming scarce. I suggest that the gradual shift from *jhanti* to cob wall construction possibly took place within these shifting equations of resource availability.

The shift from *jhanti* to mud walls also led to the dwelling becoming a more permanent structure. *Jhanti* walls are quick to erect since neither the materials i.e. branches and wood, nor the joinery i.e. tying with rope, take time to prepare or execute. Mud houses take longer to construct and are more permanent as built structures; it takes nearly one month to construct a house if two people are involved and the walls do last long as the age of the

⁴³ Issue of age and the presence of *ath-chala* type houses in the mid-nineteenth century has been discussed in the previous chapter.

⁴⁴ Land survey and settlement records outline the process by which land was surveyed and accordingly taxed. In the case study villages, B. Hansdah showed me land deeds that accorded specific rights to families over their homes and agricultural lands. These documents gave almost absolute rights of use to families which and hence made the backyard as a source of mud available to people.

existing mud houses suggest.⁴⁵ This material shift towards more permanent structures corresponds with shift in layout discussed in the previous chapter where dwellings transformed from single-volume, multiple use spaces into more elaborate layouts with differentiated spaces organized around courtyards. In other words, Santal dwellings transformed in both material and organisational terms to becoming more permanent, and these shifts took place through the nineteenth and twentieth centuries within the broader context of the spread of agrarian life and economy, transformation of landscape from forests to paddy terraces, and the gradually sedentarization of Adivasi communities.

Transformations in ways of making are not restricted to the past but continue to take place with the absorption of building materials such as brick. Not only are bricks used together with *murram* as mentioned above but, where people can afford it, entire structures are made in brickwork and plastered with cement. Another factor that has encouraged the use of bricks among villagers is the increasing density of villages, which has meant that people have smaller backyards and therefore reduced area for digging *murram*. This combined with the availability and ease of transportation has made bricks in Bhagabandh, for instance, a viable building material. The continued use of new materials and adaptation in buildings practices underscores a proposition made in the introduction to this chapter, where I suggested that materials and practices may best be understood as a continuum rather than as conceptually divided into rubrics such as traditional and modernity. The consistent incorporation of new materials suggests that the making of dwellings must be seen as intertwined with the transformation of the social and material contexts of the community and the region at large.

4.3.2. Changes in wall as a structural element

With these shifts in material, as discussed above, one also finds a transformation of the wall as a structural element providing vertical support to the roof. I discussed earlier that, in the *kumbaha*, a series of posts provide support to the beams, which in turn support the rest of the roof. In the transformation from the *kumbaha* to the other dwellings types, the role of providing vertical support shifts to the walls. In the *kumbaha*, the posts provide the support for the roof, while the jhanti walls create the enclosure. In other words, the structural supports and the element creating enclosure are separate. In the mud *orak*, the walls both provide support to the roof and create the enclosure at the same time. Looking

⁴⁵ In the old houses, it is the roofs that are renovated as necessary while mud walls are retained. For this reason, one may contend that walls last a long time.

at the details of the eaves beam that supports the rafters in older houses, I argue that memories of the earlier separation between supports and enclosure persisted long after the dwelling had transformed. This is because the roof in the *kumbaha* was made of rafters, which were supported on a set of beams, which were in turn supported on the posts. In the older *orak* houses, one finds the rafters supported on the ridge beam and the eaves beam, and it is not until much later that the eaves beam becomes redundant and the rafters are directly supported on the mud walls. In other words, even though the mud walls have the physical strength to support the rafters, they continue to be supported on beams in a manner similar to the structure of the *kumbaha*. The point here is that although new building materials begin to be used, people's understanding of structural behaviour often takes longer to transform, and consequently, one finds building practices persisting even when materials and building elements have changed.

4.3.3. Changes in roof structure

I have already suggested that the system of supporting rafters changed across the *kumbaha*, *orak*, *ath-chala* and L-shaped roofs of courtyard houses, while the rafters remained the same both in terms of dimensions and as a simply supported element. I now outline how the first layer of the roof structure transformed in relation to the shifts in layout and architectural form of the four dwelling types. The first layer of the roof is made of all the elements required to support a set of rafters. In the *kumbaha*, this layer comprises a set of beams (that are supported on posts), which Bodding (1940, 431) notes, correspond to the length of the space. Based on this observation, one may suggest that the dimensions of spaces in the *kumbaha* typically depended on available single lengths of wood that may be used as beams.

Compared to the *kumbaha*, a key difference in the *orak* is that they are longer spaces. In order to build roofs of this length, longer ridge beams are required and, therefore, two or more lengths of wood are combined to create the same. This becomes possible only because the lengths of wood are lap-jointed and propped from below by the central beam-and-post system. In other words, the emergence of the central beam-and-post propping mechanism is simultaneous to the increase in lengths of spaces in later dwelling types. Two aspects of this development are important. First, it must be reiterated that the beam-and-post prop allowed the roof to elongate in only one direction. In the other direction,

rafter dimensions continue to determine the width of the space.⁴⁶ Second, I argue that the beam-and-post support becomes the basis for developments in the two other roof types as well. In the *ath-chala* roof, the prop becomes an end-support in its own right, while in the L-shaped courtyard house roofs, the linear geometry of the prop is modified to support two perpendicular ridge beams. The point here is that the beam-and-prop detail must be considered as a development that allowed the possibility of other roof forms, while simultaneously, limiting the direction of transformation since it was relatively more elaborate in construction (in terms of extra members and joinery such as forked end of posts) and could not be employed at all places within a structural system.

It is useful at this point to examine some triggers for changes in roof forms. While changes in internal roof structure took place in particular ways, one also needs to consider influences from without. For instance, *ath-chala* roofs may be inspired from Bengal, which is proximal to Singhbhum, and considerable movement existed between people in the two regions (Bandopadhyay 1999, 15-16). The *ath-chala* roof form is common to rural Bengal, and the term itself may have been borrowed from the Bengali language.⁴⁷ To consider how such roof form may have gained currency among Santals, when the common practice was to build simple pitched roofs, it is important to fit the *ath-chala* hipped roof within the repertoire of building practices in the region. Given that Santal villagers build their houses themselves, new forms must be adapted to local ways of making both in terms of materials and building knowledge. Thus, the *ath-chala* houses hint at the complexity of factors that influence Santal architectural development and highlight the ways in which building practices incorporate external influences.

It is important to reiterate that the transformation of dwellings, and therefore of dwelling structure, is not proposed as a linear or evolutionary process. The documented roofs themselves have not undergone all the stages outlined above, but when considered together, it is evident that some structural developments must conceptually precede the others. For instance, the idea of the ridge beam being propped by central beam and post

⁴⁶ I discussed earlier that the structural prospects for supporting rafters were limited, that single lengths of wood were used for this purpose, and consequently, the availability of single lengths of wood determined spatial dimensions in terms of the width of Santal houses.

⁴⁷ Bodding (1941, 431) notes that the simple pitched roof house was known as *bangla orak* (literally, Bengal house), while houses with hipped roofs were known as *catom orak* (where *catom* refers to an umbrella like roof, typical of rural dwellings in the Bengal region). While it is not clear which localities, Bodding refers to, this suggests that the influence of the neighbouring Bengal region was found in different parts of Santal geography and affected their building practices in other sites as well.

supports must be located at an earlier point within the trajectory of roof developments given that the hipped roofs and ‘L’ junctions are modifications of that basic idea. Similarly, the wall as a support emerges together with the gradual decline in the use of eaves beams. The operative basis in collating these transformations is that the shifts are occurring in Santal understandings of structure and attendant building practices, which may be considered as the Santal repertoire of making in Singhbhum, rather than in individual buildings.

4.3.4. Continuities in structure

Within the transformations discussed above, certain aspects of structure and constructions appear to remain constant. If these constants are considered as the basis of the architectural, structural and constructional repertoire of Santal ways of making, then one begins to get a sense of how building transformation becomes possible in terms of what Santal builders know, and therefore what they are able to build. In other words, only when the kit of parts in terms of structural understanding and constructional knowledge is identified can one make sense of how the form of the dwellings is conceptualised or becomes possible. With this in mind, I now identify the specific structural and constructional conditions, i.e., typical supporting and joinery details common across the documented roofs, which, I argue, constitute the ‘kit of parts’ of the Santal repertoire of making.

I mentioned earlier that typical Santal roof structures are made primarily of vertical and horizontal members alone (rather than having inclined members, for instance).⁴⁸ With this in mind, one may identify six joinery conditions in roofs considering the geometry of intersection of various roof members.⁴⁹ These are, first, where posts are fit into beams using notches (joint between central beam, post and ridge beam), second, where beams are supported on posts having ‘Y’ or ‘U’ shaped ends (joint between posts and beam, and between beam projections and eaves beam), third, lap joints between two wooden members and four, where wooden members are tied together with rope. A fifth condition is of joints between inclined members resting on each other and made with nails. This is

⁴⁸ Although the rafters are inclined, their basic structural behaviour is similar to a beam that is supported between two points albeit at different heights. Therefore, the rafter does not behave like an inclined structural member.

⁴⁹ Zwerger (1997, 85-86) suggests that there are many ways in which joinery may be classified depending on the purpose for which classification is being done. In this case, since the primary concern for a Santal builder is to ensure load transfer where two members meet, I focus on various points of intersection of roof members.

done, for instance, in places where horizontal wooden members are placed on horizontal supports (such as rafters or battens rest on beams or rafters respectively). A sixth joinery condition is where two inclined members (such as hip rafters) are supported on other rafters and these connections are made using nails. These joinery conditions cover all the intersections between members in a roof across the documented examples. In other words, in more than a century of building, Santal roofs have always been using this range of joinery conditions.

Joint	Geometry	Types of members	Points of occurrence in roof
Y or U shaped post ends	Perpendicular junctions	Used when horizontal member transfers load to a vertical support	Used when beam is to be supported on posts
Notching	Perpendicular junctions	Used when horizontal or vertical members transfer load to horizontal support	Used when posts are to be supported on beams
Lap joint	Extended line	Used when two horizontal members are co-axially joined	Used when two wooden members are combined to form a longer beam
Using nails between layers of horizontal members	Two layers of horizontal members placed one above the other	Used when supporting layer is inclined and nails prevent supported members from slipping; nails have replaced the earlier system of tying with rope	Battens are nailed to rafters
Using nails between inclined members	Intersection of inclined members	Used for instance where hip or valley rafters meet other rafters	
Tying	Perpendicular junctions of junctions between layers of members		

Table 4-2: Categories of joinery in Santal roofs

A question that arises here is about the apparent lack of transformation in joinery itself. What one sees by way of transformation are possibilities of structure based on certain fixed joinery conditions while basic joinery itself has remained limited. This absence of

innovation may be explained in terms of the frequency of building practices and that the fact that building is a general rather than specialised body of knowledge among Santals. Joinery in other contexts has typically evolved when there are specialised guilds of woodworkers who strive to improve ways of joining wooden members and building more efficient structures.⁵⁰ Among Santals, and other Adivasi peoples in Singhbhum, most people build houses themselves and may do so once or twice in their lifetimes; in fact, many Santal adults in the case study villages may have never built an entire house themselves. Given that Santals do not build frequently, the possibility of repeating building practices and innovating or developing more efficient woodworking joineries are limited.

An apparent paradox in the above line of thought is that Santals in the case study areas have been exposed to industrial and urban building practices in the process of their engagements as industrial and construction labourers. The developments in repertoire of building need to be seen as being limited in spite of exposure to other kinds of practices. This is because such exposure may not contribute to the evolution of wooden roof structures, which typically develop in terms of more efficient design of structural members and more sophisticated joinery.⁵¹ For Santal roof building to move towards such developments requires a shift towards specialisation in carpentry. So even though Santals are involved in a number of building trades, this exposure has not significantly influenced the making of wooden roofs. And since the roof remains an important influence on dwelling form, larger architectural transformation has been limited by the structure of roofs as well.

4.3.5. Role of design memory

What I have outlined so far is that the Santal repertoire of building in Singhbhum comprises a set of structural understandings and building practices, which are evident in the ways of making dwellings. There are shifts and continuities within this understanding—basic joints and structural conditions have remained largely unchanged but different configurations have emerged from this general kit-of-parts. I also pointed out that external influences of form (hipped roofs from Bengal) and technique (industrial construction practices) exist but have been co-opted insofar as local conditions of resource and

⁵⁰ For detailed discussion, see Zwerger 1997.

⁵¹ By efficiency of structural members I mean conditions where load is transferred very close to the central axis of members and therefore, thinner wooden sections may be used. Sophisticated joinery on the other hand refers to precise fitting together of wooden members in order to allow load transfer between them (Benson 1995, 36)

knowledge permit. At this point, it is important to discuss architectural form of the four dwellings types to argue that the continuities in ways of making are not just of skill and knowledge but need to be seen in light of design memory as well.

The idea of memory came up in discussing the eaves detail of the roof where I suggested that the wall did not feature as a support for rafters on account of the eaves beam that was a legacy of *kumbaha* dwellings with *jhanti* walls. Over the period of time, the role of the wall transformed from being only an enclosure to becoming a support as well. The point here was that even when faced with a new material, people continue to build in ways that are familiar to them from the past. A parallel case is presented by rafters themselves, which I had already discussed as being similar across the roofs and an important determinant of spatial dimension on account of rafter length and joinery. What is interesting is that bamboo is also available and used as a building material in the region. For instance, split bamboo is often placed above wooden rafters and used as battens to support roofing material. Bamboo comes in much longer lengths compared to wood and, if used as rafters, may permit much larger spans as compared to wood (Fig.4-48).⁵² However, in the few instances where bamboo is used, one finds that the dimensions of the roof, and therefore the spaces, remain similar to those of dwellings built in wooden rafters. The possibility of wider dwellings using bamboo rafters does not exist in spite of the availability and the evidence of technological possibilities of bamboo as a building material. One can only surmise then that spatial dimensions are rooted in a sense of form of dwellings as much as they are products of material and structural possibility and that memories of form play an important role in the material and structural transformation of dwellings.

⁵² The larger spans possible in bamboo are seen in architectural examples from Southeast Asia. See, for instance, Waterson 1989.



Figure 4-48: Bamboo used in roofing. Note both rafters and battens are made of bamboo.

4.3.6. Shifts in labour and introduction of cash economy

In addition to the shifts and continuities outlined above, another factor that must be considered with regards to ways of making is changes in livelihood practices. This is because the labour involved in the making of dwellings is typically contributed by families themselves. Men usually prepare foundations and building materials, both men and women build walls, men build the roof, and finally, women plaster and paint the floors and walls.⁵³ This work is typically carried out between January and April, which is the period of break in the agricultural cycle of paddy in the region. However, many families opt to engage in wage labour since the sustenance drawn from paddy cultivation is uncertain.⁵⁴ The shift in livelihood has two kinds of impacts of building practices – hired labour and the possibility of cash transactions. These two factors are intertwined in that the availability of cash is linked to the villagers' engagements with wage labour, which in turn affects their participation in building activities. Simultaneously, it becomes possible for them to buy materials and hire labour in place of procuring and preparing resources or building themselves. Most of the considerations in the design and making of dwellings structures are discussed above under the premise that people secure building material from their immediate environments and largely, build themselves. One may then discuss the choices and decisions made in terms of these criteria of availability and repertoire of building

⁵³ I have noted an exception earlier when discussing the construction of dwellings, where I pointed out that a young married woman was carrying out these activities herself since, as one of the other villagers' pointed out, she had no choice. So clear divisions between gendered divisions of labour do get blurred under certain circumstances.

⁵⁴ Irregular rains and lack of irrigation affect the paddy crop, or families may have small plots that do not produce enough paddy. Additionally, other financial demands may arise during the year and interrupt a family's cycle of paddy cultivation. For Adivasi societies and wage labour economics see Shah 2006.

knowledge. Hired labour and the possibility of buying things brings about a shift in these relationships. For instance, in the widow's house in Bhagabandh, one finds a new support system for ridge beam (made by intersecting wooden members in place of the more common beam-and-post support) that was possible since hired carpenters, rather than the family members themselves, built the roof.

The idea of hired labour is not new. Hiring potters to make clay tiles for instance was the norm in the past. That however was a context where labour was hired to carry out activities that Santal families could not conduct themselves such as using a potter's wheel to make *khapra*. Recent trends in hiring labour are intended to replace the work that family members would have done themselves. This is not to suggest that entire houses are built by hired labour, but rather, families continue to participate in building and hire labour for some tasks such as roof building. For instance, in a house in Bada Bandua where the roof was being renovated, five men from the village itself were helping with the work in exchange for cash.

One place where the influence of labour and cash economy is distinctly visible is the roofing material. The choice of roofing material made by a family is affected by factors such as raw material, labour on the one hand or cash and access to markets to buy these materials on the other. These in turn depend on family size and people available to labour over preparation of tiles vis-à-vis wage employment that generates the income with which materials may be bought. While thatch, *khapra*, *tali* and roofing sheets have historically emerged as building materials in that order, their usage does not follow the same trajectory on account of the contingencies within which their usage is meshed.

4.4. Conclusion

This chapter examined ways of making of Santal dwellings with reference to the narrative of transformation developed in the previous chapter. I specifically examined different elements of building viz. walls, roof structure and roofing materials, their role within the physical structure of the dwelling, processes of construction, and the socio-economic contingencies that influenced families' choices in the course of making the dwelling. Some of the key shifts may be summarised as follows. First, changes in the wall as a vertical support occur early in the spectrum of dwelling transformation (viz. from *kumbaha* to *orak*) while the roofs transformed at various stages (viz. in the *ath-chala* and the courtyard houses). Roofing sheets show the most transformation as compared to other parts of

dwelling structure, since their changes are more frequent and contingent upon factors such as socio-economic situation of the family and wear and tear of the building itself. In short, in Santal dwellings today, one finds that different levels of the structure have transformed at different times and under different conditions and constraints. Therefore, Santal ways of making are not constituted by a finite set of forms or building practices, but, are best viewed as a body of knowledge and practices, which mediate the contingencies of time and place to produce the architectural forms that one sees today.

This emphasis on the production of architectural forms is not a mechanical focus on how things are put together. Rather, as I mentioned in the beginning of the chapter, from a phenomenological point of view, the architectural object, construction processes, building knowledge and volition (in terms of memories and senses of dwelling) are considered as intrinsic to understanding making. Considering architectural transformation from this perspective, what emerges is the idea of a Santal repertoire of making, a phenomenological whole that incorporates Santal architectural forms, buildings practices, and the social and environmental contexts in which these occur. The repertoire is not merely the set of buildings practices or a set of architectural objects, but a complex, intertwined whole, where buildings practices are conceptually inseparable from the architectural objects they produce, and these, in turn, are meshed within the contingencies of context. This phenomenological whole makes it possible to delineate a Santal repertoire vis-à-vis the similarities of forms and practices across the region. For instance, though the building technology (such as the typical joinery found in Santal roofs) is similar to those of other Adivasi and non-Adivasi communities, the trajectory of dwelling transformation is not the same across communities. This is seen quite clearly in the case of Birhors, who continue to build *kumbaha* type dwellings even today, while Santals have completely different present day dwellings. That different communities have different processes of engagement with the social and economic context of Singhbhum suggests that the same set of building materials and building practices may translate into different kinds of dwellings, and considered as a whole, may constitute dissimilar repertoires of making.

The phenomenological notion of a repertoire of making also allows one to engage with the continuum of past forms and practices and new developments in the making of Santal built environments. Rather than thinking of Santal (or other Adivasi and traditional) environments as being in opposition to industrialization and modernity, one realises the seamless continuum of experience that marks Adivasi life and architecture in the region.

The making of Santal built environments is necessarily an amalgam of past and present developments, and of building technologies and memories together with the circumstantial practices of individual families and communities. An architectural study focused on form or technology alone will necessarily flatten out these many nuances of making. The phenomenological focus on a repertoire, on the other hand, allows an engagement with the dynamism and temporal complexity that mark such environments, and must become the lens through which architectural transformations are understood.

Having addressed architectural layouts and ways of making as gestures and processes of Santal engagements with the environment, in the next two chapters, I employ a different lens to explore senses of dwelling. I focus on two sets of everyday practices – floor plastering and wall painting in the next chapter, and domestic work and gendered roles after that, and in each case, attempt to outline how these practices play a role in the making (and re-making) of the Santal dwelling as a lived space.

5. Practices of floor plastering and wall painting as inscribing domestic spaces

5.1. Introduction: Inscribing domestic spaces

In the previous chapter, I suggested that transformation in ways of making of Santal dwellings must be conceptualised in terms of four interrelated aspects i.e., architectural form, processes of construction, construction knowledge and memories of dwelling form. This four-fold focus is rooted in a phenomenological definition of technology as comprising object, process, knowledge and volition (Ingold 2000, 298-299). These aspects are not conceptually discrete categories, but rather constitute a meshwork within which architectural transformations must be understood. This chapter uses a similar lens to examine floor plastering, *alpana* designs and wall painting as practices that inscribe domestic space. I study these practices in Santal dwellings in terms of the equations between performance, design form, changing contexts and design memory. More specifically, I examine the roles of floor plastering and wall painting within the architecture of Santal dwellings, while also considering tools and techniques, networks of material resources, and villagers own aesthetic evaluation of these practices. By comparing floor plastering, *alpana* and wall painting in these terms across the three case study sites, two foci of analysis are developed – first, I attempt to outline how these practices are informed by their social and material contexts and may embed different meanings in their respective circumstances, and second, I explore how the acts of plastering and painting may be considered as gestures of marking domestic space, but more fundamentally, as the notional making and remaking of the dwelling itself.

Given this two-fold focus of analysis, two different phenomenological perspectives become important here – first, and in continuation with the earlier chapters, the idea that architectural objects and their contexts are co-related, i.e., in a state of being simultaneously shaped by and shaping each other. Ingold, for instance, suggests that things must be considered in relational terms as organisms within an environment and their transformation must be seen as the ‘co-responsive movement of occurrent things along their manifold lines of becoming’(Ingold 2012, 437). In other words, both the forms and significance of plastering and painting practices must be seen in continuation with shifting conceptions of dwelling and in relation to the diversity of Santal experiences in the case

study localities. In examining the similarities and differences in these practices across the sites and by identifying the social, material and historical changes that inform them, one may contend that a new narrative of the contexts of Adivasi built environments is being constituted as well.

The second set of phenomenological ideas that are of significance in this chapter are from a phenomenology of religion where Eliade (c. 1958) discusses the ways in which people conceptually inhabit, consecrate and order their worlds in relation to a surrounding notional chaos. Eliade discusses the interrelatedness of notions such as sacred and profane spaces and suggests that the two categories are inseparable; for it is only in reference to a sacred centre that the rest of the world appears profane, and conversely, it is only from the 'chaos' and 'homogeneity' of the profane world that a sacred place can be qualitatively distinguished (Eliade c. 1958, 21). What is central to this chapter however are Eliade's ideas on the consecration of a place into sacred where a 'territory is occupied' only when it has been 'created anew' through ritual repetition of a 'primordial transformation of chaos into cosmos by the divine act of creation' (Eliade c. 1958, 31-32). From this phenomenological perspective, temporal cycles of plastering and painting may be considered as processes through which domestic space is distinguished and indeed constantly remade in relation to an outside world. As I discuss later, this phenomenological perspective helps frame the significance and persistence of plastering and painting practices through various transformations in the dwelling and context of Santal communities.

5.1.1. Scholarship on domestic art practices

Women's domestic art practices in the general Indian context have been extensively studied but specific scholarship on Santal domestic practices is scant. Discussions of *jadupatua* or the painting of funerary scrolls, that Santal communities in West Bengal are famous for, dominate existing scholarship while other practices such as Santal murals in Singhbhum, for instance, have not been subjects of extensive critical or scholarly enquiry.¹ In such a scenario, this chapter becomes significant on two counts – first, I examine empirical evidence regarding women's domestic practices in Singhbhum, and second, using a comparative perspective, I analyse the complex relationships between practices and

¹ See, for instance, Dutta 1990.

their contexts focusing particularly on how practices transform and become meaningful in different localities.

A useful starting point for this enquiry is provided by Rycroft's analysis of Adivasi indigenous mural aesthetics in the Purulia district of West Bengal.² Rycroft discusses Santal mural aesthetic together with other artistic practices such as tattoos and dance masks in the Purulia district of West Bengal. He examines a range of art practices such as domestic murals, tattoos, ritual events and performing arts. Rycroft also compares Santal practices to that of neighbouring Bhumij and Kurmi communities in order to explore a broader Kheroal aesthetic.³ In the analysis, he focuses on techniques, motifs, and interactions between different Adivasis and Adivasi-Hindu communities respectively. In terms of technique, he suggests that particular gestures of the hand produce particular rhythms of design (D. Rycroft 1996, 71). In terms of motifs, women draw upon their natural environment and make stylized paddy plants or trees common to the area (D. Rycroft 1996, 77). Also outlined are the interactions through which decorative ideas are interchanged; for instance, Adivasi labourers are hired to paint the walls of Hindu families who are at a higher position within the social hierarchy, and in the process bring their own aesthetics of stylized floral motifs to the painting of Hindu dwellings. In short, Rycroft highlights some of the important parameters for examining wall painting practices: forms and motifs of wall designs, symbolic references to Adivasi environments, similarities of aesthetics across different Adivasi artistic practices, and mobility of Adivasi peoples and the spread Adivasi motifs to non-Adivasi dwellings as well. With the exception of issues of symbolism of design forms, which this chapter does not examine in any detail, the other parameters mentioned above form some of the dimensions of analysis in this chapter.

5.1.2. Data and methodology

During fieldwork, a range of practices of inscribing domestic spaces was observed. These included daily and weekly floor plastering, weekly *alpana* (ritual floor drawings), annual wall paintings and some evidences of motifs and symbols such as palm prints and dots above doorways or remnants of particular floral patterns drawn on occasions such as

² Rycroft's paper has two important connections with this chapter are – first, Purulia district lies adjacent to the case study areas in this research and some aspects such as demographic composition are similar in both cases. Second, the communities compared by Rycroft in addition to Santals are Bhumij and Kurmi who shared considerable similarities to Munda and Mahato people respectively. See Rycroft 1996, 67-81.

³ Kheroal refers to a group of communities including Santals, Mundas, Hos and the 'more Hinduized Bhumij' and 'they all traditionally share the same creation myth, believing they evolved from the male and female Kheroal eggs and together they share an extremely vibrant cultural lifestyle' (Rycroft 1996, 67).

festivals or weddings.⁴ These different practices take place at different points in the year and with different frequencies. Given that fieldwork was carried out between January and April, only floor plastering and *alpana* that are done on a weekly basis and took place during that time were personally observed. Documentation of wall painting was carried out differently – here I focused on photographing painted walls and reconstructing processes of plastering and painting through people’s descriptions of the same. In other words, as in the case of the previous chapter, here too, I use both the designed surfaces and forms and ethnographies of practices in order to understand their roles and meanings in the making of Santal domestic space.

An important dimension of understanding plastering and painting was people’s own evaluations of these practices, particularly Santal villagers’ ideas about what good and bad paintings are and their basis for these assessments. For instance, the qualities that women sought in the plastered or painted surfaces came to light through their descriptions of what they considered as good work and this offered some insights into the aesthetic considerations that underlie these practices. This was particularly useful in case of wall paintings where diverse designs were found in each village and they all looked equally attractive to the outsider’s eye but the Santal villagers’ were very clear about which designs were considered good and which bad. These responses played two important roles. First, they helped correlate the performance of painting and plastering with the visual forms produced, which led to an understanding of continuities and differences between practices across the case study sites. Second, they indicated possible trajectories of development and innovation in such practices. In short, villagers’ assessments helped develop the phenomenological focus of examining floor plastering and wall painting as emerging and transforming in relation to contextual changes.

5.2. Floor plastering

Floor plastering is a very important activity in Santal dwellings for two reasons– first, in functional terms because dwellings are made of mud, the floors require frequent reworking to maintain the surface. Secondly, floor plastering is also important in ritual terms because the house is believed to go ‘stale’ with use through the day and night; plastering the house particularly with cow dung then purifies the premises and makes it suitable for habitation

⁴ As mentioned earlier, Rycroft (1996, 72) draws attention to a number of ritual markings on wall – particularly of the *bhitar* – on occasion when spirits and deceased ancestors are worshipped. These practices are not discussed in this chapter since they were not observed during fieldwork.

once again. There are different temporal cycles of plastering in Santal households ranging from the daily to weekly. Beginning with the daily cycles, the first domestic task that women perform every morning is to apply circular patches of cow dung at the entrances to the house and various spaces within the house (Fig.5-1). Mud stoves that are used for cooking in Santal dwellings are similarly believed to go ‘stale’ and require plastering before use each time (Fig.5-2).⁵ In addition to these daily rituals, the entire house and the part of the *kulhi* in front of the house is plastered twice or thrice every week.



Figure 5-1: Circular patch of cow dung applied at the entrance to the house



Figure 5-2: Plaster around the *chulha* (mud stove)

The plastering of the entire house is typically carried out in the morning after the cattle have left for grazing. Women begin by plastering the part of the *kulhi* in front of their

⁵ The term used by Santali women was *basi*, which best translates as stale. One may argue that the notion of becoming stale may suggest that the stove (and the house as I discuss next) are considered as organic entities, which are rejuvenated through the application of a coat of plaster.

house. Small lumps of cow dung are mixed with water by hand and poured onto the *kulhi* surface. This mixture is spread around with a broom to cover the required surface area while ensuring that no puddles of water remain (Fig.5-3). While plastering, women ensure that the edges of the plastered surface are precise and neat. The extent of this plastered surface usually corresponds to the width of the house but subtle differences were observed in each of the case study villages. In the first case study village – Bhagabandh - women plaster half the width of the *kulhi* in front of their houses and when the task is completed nearly the entire *kulhi* is covered with a fresh coat of plaster (Fig.5-4). In the second village Chauda, the *kulhi* has a tarred surface in the centre that is nearly thirty centimetres higher than the mud surfaces on either side. In this case, women plastered the mud surfaces near the entrance to their houses but extended the plastering up to the edge of the tarred road and covered a narrow strip on the tarred surface as well (Fig.5-5). In Bada Bandua, the third case study village, there were two differences from the situations mentioned above – first, it had a mixed population of Munda, Santal and Gop peoples who, as I discuss later, have placed different emphases on plastering practices, and second, the *kulhi* itself was a relatively busy road with vehicles such as trucks and tractors carrying quarried stone through the village.⁶ The *kulhi* surface in being traversed by heavy vehicles deteriorated quickly even after being regularly plastered. Consequently, Santal women and women of other communities restrict plastering activities to their own dwellings only. Irrespective of the extent of plastering in the different villages, the prevalence and frequency of it suggests that it indeed is an important activity in Santal communities.



Figure 5-3: Kulhi being plastered in the morning

⁶ The *kulhi* was the only vehicular connection between a number of villages around Bada Bandua, establishments such as stone quarries in the vicinity of the villages and the nearest highway. Consequently, it saw steady traffic of vehicles plying between these various points and the highway.



Figure 5-4: Plastered *kulhi* in Bhagabandh. Note that each house plasters nearly half the width of the *kulhi*, thereby covering most of the *kulhi* surface.



Figure 5-5: Plastering in Chauda. Note that the plaster has been done until the edge of the concrete road, seen in the front of the image.

With regards to its significance, women suggested that that frequent plastering was important since the house and street have to look good and neat.⁷ One woman pointed out that Santals do not bother much with their personal appearance, but take considerable care to keep their houses well maintained.⁸ It is interesting to note that villagers used terms that broadly translate into good or neat rather than beautiful, suggesting that both plastering and

⁷ Personal conversation with women in Bhagabandh and Chauda in February and March 2013.

⁸ Personal conversation with M. Hansdah in February 2013.

painting served larger purposes of in the maintenance of buildings and were not merely ornamental or decorative.⁹

One may argue here that plastering of the *kulhi*, together with other aspects of the maintenance of the house, such as painting front walls, may be seen as a gesture of participation in the village community through collective upkeep of the built environment of the village. This is seen for instance in Bhagabandh where the entire *kulhi* may get uniformly plastered through the contributions of individual houses. As a corollary, a sense of community solidarity may also be gauged through the appearances of the dwellings and *kulhi*.¹⁰ This became evident in one village Bangoda that I visited during preliminary research visits.¹¹ Bangoda was an economically stressed village since the crops had failed two years in a row due to poor rainfall. There was also conflict over leadership positions within the village community.¹² While one cannot precisely attribute the lack of maintenance of the *kulhi* in Bangoda to the stresses within the community, there is a possibility of such a correlation because if a village community is internally conflicted, the inclination to collectively maintain the *kulhi* or to labour over painting the front wall of the house may not remain priorities for families.

Continuing with the weekly plastering tasks, the interior spaces of dwellings are also plastered along with *kulhi*. There is however a key difference in technique between the plastering of the interior and exterior space.¹³ The exterior spaces are washed with a broom and thin cow dung mixture while the interior spaces are plastered with a piece of cloth dipped in a mixture of cow dung, ash and water, and sometimes even some colour, and applied over all the floor surfaces (Fig.5-6).¹⁴ Cow dung is used for the courtyard while other materials such as ash and colours maybe used for the interiors of individual spaces. It is important to take note of the technique of plastering here – women apply horizontal strokes with their hand and work in nearly square blocks of plaster in order to cover the entire floor surface (Fig.5-7). They take particular care to ensure that the strokes are even and that the edges of the plastered surface are sharply defined. What is interesting to note

⁹ They used *achchha* (good) or *saaf-suthra* (clean and neat) rather than *sundar* (beautiful).

¹⁰ Troisi (1979, 51), for instance, notes that the *kulhi* is an important indicator of Santal unity.

¹¹ Bangoda is one of the eleven villages identified during preliminary research visits as possible case studies for this research project. Of these eleven, three were finally selected.

¹² Personal conversation with B.Sinha in March 2012.

¹³ Interior spaces here refer to the interiors of the built volumes and not the interior of the house as a whole, which may include, for instance, the *racha* (internal courtyard).

¹⁴ These are the range of materials added to the plastering mix. Cow dung is always used while other additions vary.

at this point is that while most communities in the region build houses in similar material i.e. *murrum mati* (locally found clayey soil), only Santal women plaster their floors with such frequency and care. It is widely recognized that Santal houses are easily distinguished from those of other communities on account of the neatness of their appearance.¹⁵ The performance and the resulting plastered surfaces are distinctive on two counts – first, when compared with many other mud plastering practices, one finds that the natural gesture of the hand appears to produce an arc rather than straight lines.¹⁶ That Santal women in Singhbhum work with straight strokes then appears intentional and aimed at producing a particular kind of aesthetic effect.¹⁷ Second, this technique of plastering floors is similar to the technique of painting walls. Both these points are developed when I examine people's evaluation of wall designs (in section 5.4: Wall painting) in order to understand the aesthetic considerations that underlie the painting and plastering practices.



Figure 5-6: Plastering the entrance to the house with a piece of cloth dipped in a cow dung mixture

¹⁵ This was apparent when I spoke to villagers from other communities about my research project. Most people agreed that the plastering and painting in Santal houses displayed much better workmanship than what is done by other communities.

¹⁶ Huyler (1994) has extensive documentation of women's domestic art practices where the texture of the painted surface and design is clearly seen and suggests particular bodily gestures that produce them.

¹⁷ Rycroft (1996, 71) underscores this point but with regards to a different gesture and aesthetic when he suggests that 'curved washes are applied with a specific decorative intent'.



Figure 5-7: Plastered *racha*. Note the even strokes covering the entire floor.



Figure 5-8: Woman in Bada Bandua plastering the floor with mud. In Bada Bandua, cow dung is used as a fuel for cooking and, therefore, mud is used for plastering floors.

In term of materials, I suggested earlier that cow dung was preferred for the plastering of floors since it is considered to purify the surfaces on which it is applied. However, the use of cow dung as a plastering material competes with its other uses, as fuel for instance.¹⁸ This equation becomes important given that cow dung is often scarce and its availability hinges upon a number of factors. To begin with, cow dung is collected from the animal shelters within a dwelling after the cows have been taken away for grazing in the morning. Women clean out the shelters by collecting any dung that may have been deposited through the night. However, many families have small herds of cattle or no cattle at all

¹⁸ The equation between resources and basic domestic needs of Santal families is explored more fully in the next chapter.

depending on the nature of agricultural activities within a family.¹⁹ This was seen in Bhagabandh where, in the absence of their own herds of cattle, women or young girls follow other grazing herds in order to collect dung. In Bada Bandua, the availability of cow dung is further strained since many people in the village are employed in industrial wage labour and very few families have herds of cattle. Women here reserve cow dung for plastering the house for ritual purposes or other particularly auspicious days, such as Thursdays, while they used mud for plastering the floor on other occasions (Fig.5-8).²⁰ Shifts in resource availability bring out some important features of the floor plastering practice, i.e. the practice remains important but the materials used vary according to available resources. This also embeds a shift in the meaning of the practices since with the use of other plastering materials the purifying function is attributed to the act of plastering rather than to cow dung as a material.

Three key points that emerge from this discussion on floor plastering practices in Santal dwellings are - first, the act of plastering the house is consistently significant in all case study villages but the extents of plastering – especially in the *kulhi* - vary. This variation, I suggest, is brought about by factors ranging from nature of *kulhi* surface and patterns of use of the *kulhi* to community solidarity. I also suggested that the frequency and care of floor plastering is unique to Santal families and that the evenness and precision of plastered surface may be attributed broadly to Santal aesthetics. This idea is developed later when discussing other practices such as *alpana* and wall painting. The final point I discussed was the variation in plastering materials - where mud or ash is used when cow dung is scarce – to suggest that though cow dung is considered as a purifying material, the purifying function notionally shifts to the act of plastering when other materials such as mud or ash are used for the same purpose. With this background on frequency, technique and significance of plastering, I now discuss its role in the making of domestic space as a whole.

¹⁹ After repeated divisions of land on account of inheritance, for instance, some families may not have sufficient land to cultivate. Also, in cases where families primarily draw their livelihood from wage labour, they may not be involved in agricultural activities as well. Consequently such families often do not keep herds of cattle.

²⁰ What further stresses the availability of cow dung is that it gets used as fuel for cooking when other fuels such as wood or *gundi* (dried lumps made of mud and coal dust) are not available.

5.2.1. Floor plastering and the making of domestic space

In Chapter 3 (Transformation of dwellings) I noted that since the mid-nineteenth century, Santal dwellings broadly shift from the *jhopdi* type to the more elaborate courtyard dwellings. Not only did the built spaces become more differentiated into spaces with specific functions, but open yards that constitute an important part of domestic space also became distinguished into separate *racha* (courtyard) and *barge* (backyard). What persisted, however, was that interiors were sites of specific functions alone and may almost be considered as storage or repositories while the open yards were sites for social activities and everyday living. These yards were earlier demarcated by plastering a part of the ground near the entrance with cow dung and this was the place where outsiders were met with or other social intercourse took place. In courtyard houses today, the area in front of the house on the *kulhi* continues to be similarly demarcated as a social space and an extension of the domestic realm. This is an interesting continuity given that houses today are much more elaborate and contain courtyards and sometimes even verandahs that act as social spaces. One may argue that even with significant changes in dwelling and in the contexts of Santal settlements, plastering the ground to create yards remains an important component of domestic space.

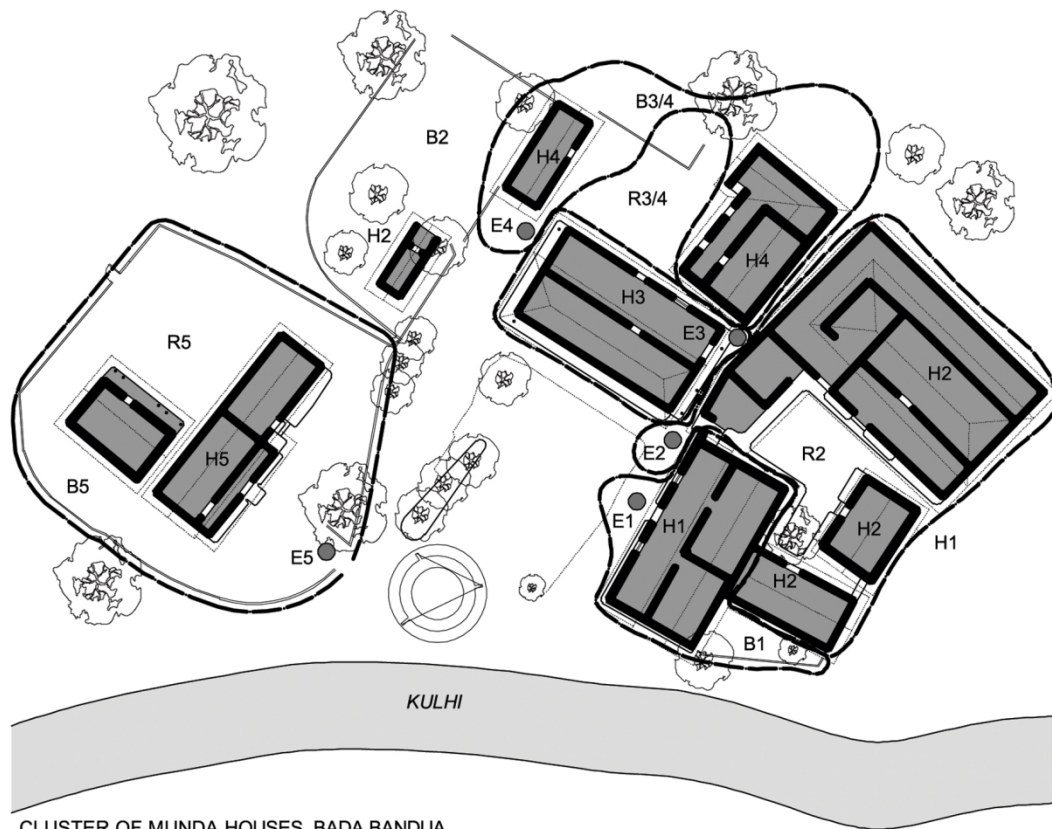
What further establishes the significance of floor plastering is the marking of ritual sites in the *jahira* (sacred grove). As mentioned earlier, the sacred grove is a cluster of trees where spirits are believed to reside. During ritual occasions a patch of ground is cleared beneath the tree and plastered with cow dung, which is known as *khond* (Troisi 1979, 139). Once plastered, the site is considered sanctified and ready for the ritual event. Considered from Eliade's phenomenological perspective, plastering of ground to make a sacred space may be considered as a fundamental gesture of marking a break in the surrounding expanse of profane space. Eliade suggests that to the religious person, neither time nor space is homogenous but that they experience qualitative differences – a sacred space is a 'strong, significant space' while 'other spaces that are not sacred' are 'without structure or consistency, homogenous' (Eliade c. 1958, 20). He further develops this distinction by relating the structure of sacred space to that of the cosmos while everything that is outside, i.e. profane space, is a 'foreign, chaotic space' (Eliade c. 1958, 29). Through repetitive acts such as floor plastering that may be considered as acts of consecration, sacred space is remade, but, taken further, in defining the sacred space as a fixed point in the midst of profane chaos, 'the world is ontologically founded' (Eliade c. 1958, 21). Both the making

of *khond* to mark a ritual site and the repetition of floor plastering within the dwelling, then may be considered as the notional making of ordered worlds within the expanse of landscape that Santals inhabit.

5.2.2. Comparison of floor plastering practices in Santal and Munda dwellings

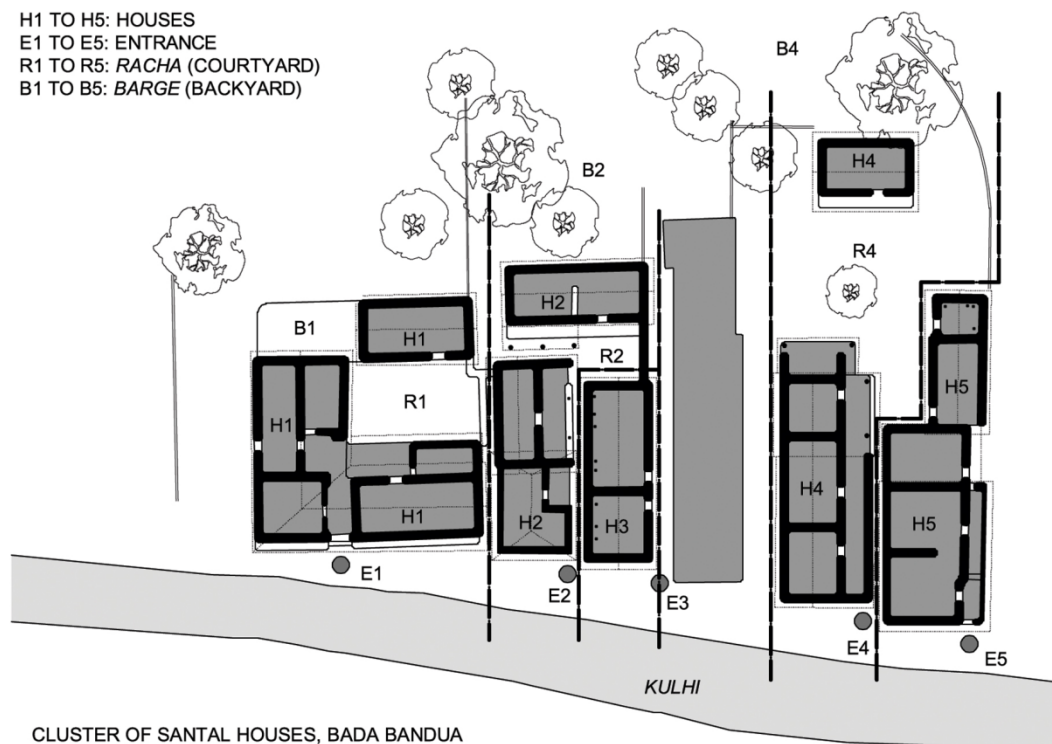
Having established the role of floor plastering within Santal dwellings, it is useful to draw some comparisons with similar practices among other communities such as Mundas. In functional terms, Munda houses require to be plastered since they are built in mud but the role and meanings of the practice within the domestic realm vary. For instance, Munda dwelling clusters²¹ are much more complex in terms of layout and plastered floors serve to establish connections between the front door of individual houses and the *kulhi*. This is seen clearly in Bada Bandua that has Munda, Santal and Gop families residing together in the village where a growing population has led to high building density and complex layout patterns in the settlement. If one examines the relationship between individual dwellings and the *kulhi*, one finds that Santal dwellings are usually directly located, and therefore accessible from the *kulhi* (Fig.5-9). Even with divisions of dwellings on account of inheritance or additions to dwellings due to increasing family size, the orthogonal layout of the dwelling and the relationship of direct access between the dwelling and *kulhi* are maintained as far as possible. In Munda houses, on the other hand, in the course of divisions of property or additions, orthogonal layouts are not always be maintained. Dwelling clusters develop such that houses may be located behind on another and access to the *kulhi* then needs to be established rather than being evident in the layout itself. In such cases, floor plastering becomes a medium for demarcating the entrance to the house rather than an act of ritual purification alone.

²¹ Cluster refers to a number of dwellings located in proximity to each other and forming a group distinct from the next such group.



CLUSTER OF MUNDA HOUSES, BADA BANDUA

H1 TO H5: HOUSES
 E1 TO E5: ENTRANCE
 R1 TO R5: *RACHA* (COURTYARD)
 B1 TO B5: *BARGE* (BACKYARD)



CLUSTER OF SANTAL HOUSES, BADA BANDUA

Figure 5-9: Comparison of Santal cluster and Munda cluster of houses. Note that entrances in Santal houses are located directly on the street, while in Munda houses, can only be identified through circular patches of cow dung plaster (E1 to E5 in Munda house plans above)

It is important here to expand on why it is significant for Santal and Munda houses to be located on the *kulhi* in the first place.²² I mentioned earlier that the *kulhi* is an important collective space in the village and plastering of the *kulhi* by individual houses may then be seen as a gesture towards participation in this collective space.²³ There are also ritual significances that require direct passage from the domestic realm into the *kulhi*. For instance, during weddings, the ceremony takes place in the *kulhi* in front of the house.²⁴ During death rites, the body of the deceased is taken through the front door and out into the *kulhi* on the way to burial or cremation. This clear passage is important given that after the funeral rights have been conducted the deceased will join the pantheon of ancestors worshipped by the family. Should houses be located behind one another, the passage of the dead body may pass through another family's courtyard and this may disrupt the journey of the deceased into the spirit world on account of influence from other domestic realms and spirits.²⁵ In short, a direct relationship between the domestic realm of the dwelling and the collective realm of the *kulhi* is important for both social and religious reasons.

To return to Bada Bandua, given that dwellings – particularly Munda dwellings - are not always directly located on the *kulhi*, and yet need to establish a connection with the *kulhi* for ritual purposes, women do this by plastering a path from the front door to the *kulhi* using cow dung twice or thrice a week (see Fig.9: Munda well cluster and Santal cluster with entrances to houses marked). These paths are often sinuous and may weave their way around other dwellings but they ensure that a notional connection is established with the *kulhi* and that it does not cross the courtyard or entrance of any other house on the way. If this too is difficult, they may just plaster a patch in front of their house such that it is broadly oriented towards the *kulhi*. In Santal houses in the same village however, families attempt to maintain a direct physical connection between the entrance to the dwelling and

²² It is possible that the relationship between the dwelling and *kulhi* is significant to other Adivasi communities apart from Santals and Mundas as well. However, since these are the only Adivasi communities in the case study villages, one cannot comment on the settlements of other communities.

²³ This nature of the *kulhi* particularly in relation to the nature of the dwelling as individual vis-à-vis collective place and as gendered places is developed more fully in the next chapter.

²⁴ M. Hansdah, personal conversation in February 2013.

²⁵ The final stages of the funeral ceremony are as follows. Once the body has been buried or cremated, a piece of bone from the forehead – that is believed to not burn - is sealed in a clay pot with a hole in the lid. This pot contains the spirit of the ancestor. When the family returns to the village with the pot, they stop at the entrance to the village and build a small shed representing a house. The pot is placed inside and offerings are made to the spirit. The shed is then burnt and the family members call out to spirit saying that their house is burning down, and so they should come to reside in their house. In this manner, spirits of deceased ancestors are housed in the *bhitar*. It is important to have a clear passage between the *kulhi* and the house so that the spirit can clearly make the passage. From personal conversation with D. Hansdah in March 2014.

kulhi as far as possible and do not resort to demarcating connections using floor plaster.²⁶ In comparing Munda and Santal floor plastering practices, it becomes apparent that Mundas employ floor plaster to register a physical connection between dwelling and street when dwelling layout fails to directly do so, while for Santals in this locality, plastering the *kulhi* remains an aspect of participation in the collective of the village community since the connection is already established. This idea of the significance of the practice in relation to the nature of entrance is further underscored when one examines *alpana* practices that appear to be similarly varying registers of meaning.

5.3. Alpana

Alpana refers to floor drawings usually made with rice flour and are more often than not understood as a Hindu practice rather than an Adivasi one among academics and in Santal society.²⁷ The practice of making *alpana* was observed in the two multi-community case study villages where Santals lived with Mundas and Mahatos. Both Mahato and Munda families in these villages made *alpana* on a weekly basis. What is interesting is that in one village where Santals lived in proximity to Mahatos, some Santal families had begun to make *alpana* while in another village, where Santal, Munda and Gop families all lived in the same village, Santal families had not adopted the practice. In the third case study village comprised entirely of Santal families no instances of *alpana* were observed. This supports my earlier point that *alpana* may be considered largely as a non-Adivasi practice.

Before comparing the meanings of *alpana* practices to Santal or Mahato and Munda families, it is important to discuss details of the practices in terms of motifs and techniques, which were found to be similar within a village irrespective of the communities that made the *alpana* designs. *Alpana* designs were typically made on the *kulhi* at the entrance to the dwelling and in front of the *tulsi pinda* (mud platform with sacred plant). Two kinds of *alpana* designs may be distinguished – those with ritual significance and those that appeared to largely serve a decorative purpose. Designs with ritual significance are made by dipping a finger in rice paste and tracing lines with that finger while the decorative

²⁶ One instance of a Santal house built behind another one was seen in Bada Bandua village, but it was an exception. In Munda houses on the other hand, complex dwelling layouts were the norm rather than being exceptional cases.

²⁷ It is interesting to note that different Santals themselves have different ideas about *alpana*. A Santal scholar D. Hansdah maintained that *alpana* was a Adivasi practice. This may be on account of the fact that he belongs to a village near Bhagabandh where one finds that Santal families have adopted *alpana* practices. In other areas such as Bada Bandua, as I discuss later, Santals clearly recognize it as a Hindu practice. Personal conversation with D. Hansdah in November 2014 and M. Singh in March 2013.

alpana designs are made by dipping a piece of cloth into a thin rice paste and trailing one end of the cloth on the ground to leave white thin lines on the ground (Fig.5-10 to 5-12). The trailing end of the cloth is just some thread in most cases and this allows very fine lines to be traced on ground. Alternatively, drops of rice flour paste are allowed to drip off the cloth and lines are made as series of these drips. This appearance of drips is primarily because of the lack of a sticky additive, which is procured from plants available in the vicinity of the village.²⁸ The designs traced by finger have thicker lines as compared to those made by trailing a piece of cloth. In terms of motifs too some differences are evident. The ritual *alpana* have motifs such as sets of six concentric circles representing an elephant and triangular or stylised shapes representing the feet of Goddess Lakshmi (Fig.5-13).²⁹ These motifs are believed to be an invitation for Goddess Lakshmi to visit the house. The decorative *alpana* on the other hand present a range of floral patterns and it is interesting that the flowers are always shown as being rooted in the ground (Fig.5-14). Rycroft discusses this motif of rooted flowers seen in the domestic murals of Adivasi communities in the Purulia district as being suggestive of '*bhumi* (the soul of Mother-Earth)' from which plant life grows (D. Rycroft 1996, 79). He further suggests that 'the murals imbue back into the family the revitalizing aspects of the natural cycle' and that such motifs become 'part of the organic and spiritual environment, re-emerging like their physical equivalents year after year after the monsoon months' (D. Rycroft 1996, 80). This preponderance of rooted floral motifs and its reference to the natural environment emerges again in the next section on wall paintings.

²⁸ While it was not possible to identify the plant, women in Bhagabandh said it was easily available in the wooded areas around the village.

²⁹ Both these motifs are commonly found in Hindu ritual practices elsewhere. The four concentric circles refer to the four feet of an elephant while the fifth refers to genitalia of the elephant trailing on the ground and the sixth to the trunk.



Figure 5-10: Ritual *alpana* made with a finger and having thick lines



Figure 5-11: Decorative *alpana* made at the entrance to houses. The trailing end of a cloth, that has been dipped in rice paste, makes the thin lines of the *alpana*.



Figure 5-12: *Alpana* made by dripping dots of rice paste on the ground



Figure 5-13: Triangles in the *alpana* representing the feet of Goddess Lakshmi



Figure 5-14: Pattern of rooted or growing flower. The triangle on the right represents a pot.

Though the motifs and techniques described above were largely similar between the two villages where *alpana* was observed, there were some differences in the overall design and in Santal responses to the practice. To begin with the differences, in Bada Bandua, *alpana* designs were framed within a border that formed part of the design. In Bhagabandh, on the other hand, *alpana* designs were spread out on the *kulhi* (Fig.5-15). This distinction becomes important in light of the discussion on the role of floor plastering in Bada Bandua where I suggested that dwelling clusters - particularly among Munda families - were complex and the relationship between the entrance and the *kulhi* was not a direct one. Consequently, strips of floor plaster become a medium for notionally establishing a connection between dwelling entrances and the *kulhi*. Since *alpana* is made at the entrance to the dwelling which in the case of Bada Bandua are not spatially clearly defined, framing the *alpana* helps frame the space of the entrance as well. This idea of *alpana* and floor plaster as establishing the relationship between *kulhi*, entrance and dwelling is underscored by one particular Munda dwelling where four brothers lived in a single courtyard house

located at a considerable distance from the *kulhi* (Fig.5-16). There was only one entrance to this house but each family needed to distinguish their own space for ritual purposes. Consequently, an *alpana* line was drawn from the entrance into the courtyard of the house. This line then split into three and led to different *tulsi pinda* and doors belonging to each of the brothers. So here it was not the plaster but the *alpana* that served to distinguish between entrances for each of the families living within the same house. In Bhagabandh, on the other hand, dwelling layouts are such that each house is located directly on the *kulhi*. There is no ambiguity regarding the space of entrance to a dwelling and so *alpana* designs are spread out on the *kulhi*. Comparing these two cases of varying contexts for the *alpana* designs, it is evident that when layouts are complex, *alpana* designs help to spatially define entrances in addition to their ritual and decorative roles.



Figure 5-15: Comparison of *alpana* in Bhagabandh (left), which is spread out on the *kulhi*, and *alpana* in Bada Bandua (right), which is framed within a square border.



Figure 5-16: *Alpana* line leading from *kulhi* to the entrance of house. Note a thin white line from the center of the doorway towards the lower half of the image.

Moving now to Santal responses to *alpana* practices, I mentioned earlier that Santals families did not draw *alpana* designs in Bada Bandua where they lived together with Munda and Gop families in the same neighbourhood. In Bhagabandh however, where Santal families lived together with Mahato families but in different neighbourhoods in the village, some Santal families were seen to draw *alpana* designs at the entrances to their houses. This raises some interesting issues about the appropriation of non-Adivasi practices among Adivasis such as Santals and the contexts in which these occur. In Bada Bandua, *alpana* is identified as a distinctly Hindu practice and Santal families have not adopted it.³⁰ Within the *tola* (neighbourhood), the absence or presence of *alpana* serves to distinguish an Adivasi dwelling and family from a Hindu one. This is congruous with the

³⁰ This was mentioned by Munda women in the village who said only Hindus made *alpana* designs while Adivasi families did not. In this case, they were referring to Santals as Adivasis. They further added that they, i.e. Mundas were also Adivasi but they still made *alpana*. Mundas are considered to be more Hinduised in comparison to other Adivasi communities. One must assume here that the term Adivasi has a multivalent register of different kinds of community identities. Even when using the term Adivasi to describe both themselves and Santals, Munda women were clear about the distinction between the two.

earlier idea that floor plastering and *alpana* may be considered as assertions of individual domestic space – or at least asserting the entrance to domestic space - and therefore, by not making any *alpana*, Adivasi families differentiate between themselves and their Hindu and Hindu-ised neighbours. In Bhagabandh, on the other hand, where Santals lived with Mahatos but in different *tolas*, three Santal families were observed drawing *alpana*. Two of these families were of the *manjhi* (headman) and the elected ward member of the village respectively, while the third was a young girl who enjoyed drawing *alpana*.³¹ These women said *alpana* looked beautiful and so they added it to their entrances after plastering the floors. This motivation to make *alpana* is interesting on two counts. First, it is made primarily for its aesthetic considerations though the ritual significance may have been adopted given the motifs of Goddess Lakshmi's feet are drawn for auspiciousness, and second, that not all Adivasi houses choose to do it. Only the families of men who were in leadership positions in the village, i.e. the *manjhi* (headman) and the elected ward member, had adopted the practices and this may be the reason for women to have the license to do so without drawing censure from the wider community.³² When comparing these two villages, it is apparent that in Bada Bandua, the absence of *alpana* becomes a register of Adivasi identity in the midst of Hindu neighbours while in Bhagabandh *alpana* may be considered as an assertion of a privileged position within the community.

5.4. Wall painting

The third practice being considered in this chapter in addition to floor plastering and *alpana* is wall painting, which is a distinctive feature of Santal built environments.³³ As discussed earlier Santal dwellings are built in *murum mati* – a locally available clayey soil - and walls are typically quite thick, ranging from thirty five to forty five centimetres.³⁴ They are protected from rains by the overhangs of the sloping roofs but the smooth plaster

³¹ Compared to the *manjhi* who is the social head of the village community and is a hereditary position, the ward member is an elected member of the ward (administrative unit comprising a few villages) within which the village is located. Both positions were considered important in Bhagabandh and both men were considered as community leaders with considerable social standing. In personal conversation with a group of village boys in February 2013.

³² While it is beyond the scope of this study to elaborate on the range of roles played by community leaders such as those mentioned here, it will suffice to say that they were well respected by other villagers. This was evident during my fieldwork interactions in Bhagabandh for instance when I asked for opinions and was often directed to these men as being the best people to answer my questions. For more on leadership in Santal societies, see Somers 1977.

³³ Both other Adivasis and non-Adivasis I interacted with during fieldwork mentioned that Santal houses were distinctive for their skills in plastering and painting houses, but also that none of the other communities possessed similar skills.

³⁴ The construction of walls is discussed in detail in the previous chapter.

and paint provides additional protection against the rains. In terms of making, once the wall is built and the roofs are added, it is time to put the plaster layer. Plaster is made of very fine *murum mati*,³⁵ mixed with cow dung and bits of straw or rice husk. The straw or husk reinforces the plaster layer and prevents it from cracking. Women apply this mixture on the wall by hand, and while its still damp, scrub it with a stone to make the surface smooth. Once this surface dries, they apply a thin layer of cow dung on the wall after which it is ready for paint.³⁶ Only the exterior walls of the dwelling are painted in colours, the interiors of rooms are usually just painted white. Also, among the exterior walls, women pay particular attention to the front elevation that faces the street. This is the first wall to be painted to ensure that they run short of colours, it is some other, less important wall the elevation of which would be compromised. These walls may be painted with diluted colours or even left plain if they run short. The design scheme broadly comprises horizontal bands of colour with a dark base in the form of a *pide*, which is a plinth used as a seat at the base of the wall, and other colours above (Fig.5-17). The colours typically used are white, ochre, red, black (from burnt straw or even tyres these days) and blue (from mixing chemical indigo with white clay). While these colours naturally occur in the Singhbhum region, they are not all available in the vicinity of every village. Villagers travel considerable distances to procure the necessary colours for their walls.³⁷



Figure 5-17: Design scheme of horizontal bands on walls of Santal houses

It is important to highlight here that painting the wall is not just an act of decoration but becomes an important marker of a family's property. This was seen particularly in cases

³⁵ This fine clay is usually collected from pond beds or beds of other water bodies in vicinity of the village.

³⁶ From conversations with B. Hansdah (Bhagabandh), N. Hansdah (Chauda) and A. Murmu (Bada Bandua) in February and March 2013.

³⁷ This was mentioned by many villagers who specified villages where particular colours were found.

where extended families occupied a single dwelling.³⁸ Depending on the dwelling size and number of family members, extended families typically have some shared spaces and some dedicated spaces for each unit within the nuclear family. In one case in Bhagabandh, for instance, an elderly widowed lady lived with her two unmarried daughters, one unmarried son, and widowed daughter-in-law and her daughter (the elderly lady's granddaughter). Their house had three different cooking and sleeping areas, *tulsi pindas* and mud stoves in the courtyard for parboiling paddy for the widowed lady, widowed daughter-in-law and for the two unmarried daughters respectively. The unmarried son had a separate sleeping area but he ate with his mother. In terms of wall painting, the front wall was painted as a single surface, but the walls facing the courtyard were painted in parts according to the distribution of spaces to different family units. So the elderly lady and her daughters had adjacent spaces within a single built volume, but externally, they had painted their walls differently to highlight the different users of each space (Fig.5-18). In Bada Bandua, the differences in ownership of different parts of dwellings were also marked on external walls. This was evident in the wall surfaces differentiated through paint or in one case, with the use of a thin black strip to divide the wall (Fig.5-19).



Figure 5-18: Differences in painting to mark parts of the house occupied by a different nuclear family unit. Note alternating block of colour on the wall.

³⁸ Extended family here refers to a nuclear family living together with elderly parents, unmarried or widowed siblings or two or three nuclear families (such as two or three brothers and their wives and children) living together.



Figure 5-19: Black vertical plaster line demarcating property boundaries

Moving now to the details of wall designs, two broad categories of designs were observed across the case study localities – first, schemes with only horizontal bands of colour and second, more elaborate designs such as geometric or floral motifs added within the horizontal bands of colour. The first scheme of horizontal bands may be considered as a generic design scheme used by Adivasi and non-Adivasi communities in the Singhbhum region at large. In spite of a generic design scheme what distinguishes Santal wall painting is the use of more colours – where other communities dominantly use red and white, Santal women use a wider palette of colours as mentioned earlier. A major divergence in wall designs becomes evident in the second scheme of more elaborate geometric or floral motifs that were observed in villages in the Seraikela region, but not in any of the other case study localities. Before moving on to the nature and contexts of these two kinds of design developments, it is useful to understand the techniques and aesthetic considerations in each case.

Designs with horizontal bands are made using ropes that are held tight across the wall and the lines marked. Within these bands, colours are applied with a piece of cloth dipped in the clay or paint mixture similar to the plastering of floors in interior spaces. Women work with horizontal strokes to create blocks of colour at a time, which is similar to the manner in which floors are plastered, and they move across the wall by painting vertical sections of colour. Again, as in the case of the floors, women pay particular attention to producing a smooth and even surface of paint, and ensuring precise edges between bands. It is evident

that not only are the techniques of floor plastering and wall painting similar, but women's aesthetic intentions are similar as well.

The continuities between wall painting and floor plastering practices may be accounted for by looking at their relative emergence within dwelling practices in general but is premised on the similarity of technique suggested above. I discussed earlier that in the mid-nineteenth century dwellings were in the form of *kumbaha*. Walls were made of panels of branches while floor plastering was used to demarcate a social space in front of the dwelling. Over the next century mud became increasingly common as a construction material – first through plastering of *jhanti* walls and eventually as a building material in its own right.³⁹ Possibly, then, techniques of plastering the ground were carried on to the plastering of walls as well. Where this continuity becomes even more important is in the nature of design schemes that emerge on walls. Based on the observation that women use horizontal strokes, one may argue that the horizontality of the design and the aesthetics of precision is rooted in the performance of wall painting itself. The larger point to be noted here is that it is only from a phenomenological perspective of seeing things in correlation to their environments that some of these connections become evident.

5.4.1. Design developments in wall painting practices in Seraikela

Compared with the other parts of the Singhbhum where horizontal bands of colour are the dominant design scheme, the villages in the Seraikela region have more elaborate designs painted on their walls. Details such as geometric shapes or floral motifs are added within the basic design scheme of horizontal bands of colour (Fig.5-20 and 5-21). In general, different walls of the dwelling may have different designs but the best design and workmanship is reserved for the front wall of the dwelling facing the *kulhi*.⁴⁰ What is interesting is that it is only Santal houses where such design developments are to be seen while other communities continue to paint their walls in horizontal bands with one or two colours.

³⁹ This point is discussed in detail in Chapter 1.

⁴⁰ Personal conversation with M. Handah in February 2013.



Figure 5-20: Geometric shapes painted within horizontal bands in Chauda



Figure 5-21: Floral patterns and geometric designs added within horizontal bands in Beltad village

In order to account for these design developments, I begin by looking at technique. I discussed earlier that the horizontal bands are painted in horizontal strokes with a piece of cloth. Elaborate designs differ from the horizontal bands on three counts – first, the elaborate designs observed in the Seraikela region however cannot be executed with cloth dipped in colour but require the use of a brush. In some cases the bands of colour that form that background for geometric patterns or motifs are painted with cloth while the details are added by brush. In other cases, the entire wall is painted using a brush.⁴¹ Second, the palette of colours observed here is much wider – and indeed brighter - since I have found that villagers in this region use artificial colours more than in any other case study village. Third, in terms of time, elaborate patterns take much longer to execute as compared to a wall with bands of colour that, as one of the women said, can be completed in two or three

⁴¹ Personal conversations with D. Murmu, Chauda in March 2013.

hours. Consequently, the development of elaborate designs is not just a shift in forms but in the meshwork of resources and knowledge as well.

It is important to note here that horizontal bands of colour remain a dominant and fundamental scheme even within elaborate design developments discussed above. This is seen in the fact that should a painted wall get damaged or if women run short of time for painting on account of their other domestic or social responsibilities, they paint bands of colour as a temporary measure until they can find the time to add details or until the next cycle of painting. It becomes clear that even with transformations in design the horizontal ordering of walls designs remain important.

5.4.2. Contextualising the differences in design development

It is useful at this point to contextualise the differences between the bands of colour and more elaborate designs in relation to the case study localities at large. I mentioned earlier that of the three case study localities, villages in two localities have wall paintings in the form of bands of colour while villages in Seraikela have more elaborate designs. The issue then is to try and account for the developments in the Seraikela region. Beginning once again with technique, a key difference in wall painting in the Seraikela region is the introduction and use of brushes as compared to other case study localities. The use of brushes is both a technical and a conceptual shift – it is technical in that it brings about a number of material changes such as in the consistency of colours to be used and the bodily gesture of painting itself.⁴² It is also a conceptual shift given that earlier memories of painting – both in terms of performance and design – must now be negotiated in terms of the possibilities afforded by the new medium of the brush.

The new medium further raises questions about the conditions under which the use of brushes became commonplace in the Seraikela region. Given the otherwise sparse material culture of Santal communities and the primacy of paddy-cultivating as way of life,⁴³ the brush does not naturally feature in Santal daily life. It is a skill that was obviously acquired by Santal women somewhere beyond the village. One possible explanation is that women may have acquired the skill of using brushes in the many construction sites and small-scale industrial establishments that dot the landscape of Seraikela. While Singhbhum in general

⁴² The gesture of painting with a brush is different because brushes are typically used in vertical strokes while painting with cloth is done in a horizontal motion and produces horizontal strokes.

⁴³ Objects found in Santal houses in the case study areas are typically tools such as knives, axes and spades, agricultural implements such as carts, fishing equipment, and domestic items such as utensils.

has a high concentration of industrial and mining activity,⁴⁴ Seraikela particularly has large numbers of small and medium-scale manufacturing industries. Consequently, Adivasi labourers are employed in construction sites of these industries in Seraikela whereas in other areas they are largely employed in mines or quarries where there is less possibility of exposure to the use of brushes.

As the use of brushes and artificial paint became popular or acceptable, it must have become more easily available as well. Goods used by villagers are typically purchased at weekly markets. For instance, Kolabira is the location of a weekly market nearest to Chauda and salesmen set up stalls selling clothes, vegetables, cosmetics, medicines, tools and households essentials. Such markets are held at various locations on different days of the week and villagers usually visited the market nearest to them. Many salesmen at these markets were Adivasis and earned their living by buying goods from Jamshedpur (the nearest urban centre) and selling them at various weekly markets.⁴⁵ The high mobility of the salesmen allows them to gauge people's requirements quite well and when brushes and paints began to catch up, they would quite quickly become available in weekly markets also.

Returning to the designs themselves, a wide range of patterns was observed across the Seraikela region.⁴⁶ These designs, as I mentioned earlier, include bold geometric forms, floral motifs, and in one example, elaborate sculpted columns as well (Fig.5-22 to 5-24). What is important to note here is that design developments are localised within villages rather than being similar or common across the region.

⁴⁴ See Karan (1953)

⁴⁵ Personal conversation with cloth salesman in Kolabira market in March 2013.

⁴⁶ The analysis focuses on three case study villages visited between January and April 2012. For this discussion however I have also included Mahotabeda - a village from the same region studied by Shah (2009).



Figure 5-22: Geometric designs observed in different houses in Chauda



Figure 5-23: Floral motifs observed in different houses in Beltad village



Figure 5-24: Sculpted columns observed in different houses in Mahotabeda village

To understand this distribution of design, one needs to examine the sources of design inspiration and therefore examine women's mobility since it is they who conceptualise and execute these works. On asking where women drew their inspiration from, they often answered that they painted whatever they liked.⁴⁷ However, seeing that designs are often similar within a village, I contend that the biggest source of inspiration for women is other women in their own village. This is underscored by the fact that women typically spend most of their time in the village on account of their domestic responsibilities. When they do travel outside the village, it is usually to the weekly market, or as in the case of Chauda, to places where they work as labourers. On account of these limited movements, the possibility of seeing new designs is therefore limited to their own village.⁴⁸ Even neighbouring villages may not influence each other because women have no occasion to interact with other villages except on visits to their maternal homes.⁴⁹ Consequently, design developments are largely limited to the vicinity of villages alone.

The relationship between women's mobility and design development also raises questions about the temporality of the development. In other words, given that women draw inspiration from each other but considering also that wall painting is an individual act rather than collective one, over what period of time do designs spread and become popular in a village? Considering the process of painting and women's mobility in greater detail may provide some clues. During a single season of painting (typically in October or November) women begin painting their walls while adjusting their other domestic and agricultural responsibilities. Given that the walls have to be ready before Sohrae,⁵⁰ the window for completing the painting task is quite small. Additionally, prior to the actual painting, women plan the designs and procure necessary material such as colours.⁵¹ So even if women see interesting designs being executed by other women, they are unlikely to

⁴⁷ Personal conversation with women in Bhagabandh and Chauda in February and March 2013 respectively.

⁴⁸ An assumption here is that women draw inspiration primarily from other wall paintings rather than from other visual sources. How other visual stimuli may influence wall designs has not been explored in this study.

⁴⁹ During fieldwork, I observed that women often did not appear to know about houses at the end of their *kulhi*. They questioned me about other houses I visited, and when I asked why they did not know, they said that there had no reason to visit other houses far from their own. Women did however walk into their immediate neighbours' houses and as far as the nearest well or hand pump to fetch water. In short, women's movements within the village are restricted to the vicinity of their own homes or the nearest source of water.

⁵⁰ Sohrae is an annual Santal festival that takes place in October or November each year. It involves decorating and blessing cattle and propitiating ancestral and other spirits, among other things. For a detailed description of Sohrae, see Troisi 1979, 26-30.

⁵¹ As one woman in Bhagabandh pointed out, time for wall painting had to be managed within other domestic responsibilities and in her specific case, as the mother of two young children, she did not find the time to paint the walls before the festival.

be able to modify their own plans and paint new designs immediately. They will typically have to wait until the following year before they can introduce any new designs or elements in their walls. This means that design ideas will require at least two or three annual cycles of painting before they become popular and common in a village.

The possibility of a slow spread of design ideas is particularly true for Mahotabeda, which has unique sculpted columns in many houses in the village (Fig.5-24 earlier). To make this, columns are first built up in square or rectangular forms and are then carved into the desired shapes and painted.⁵² In subsequent years, columns may be repainted but not carved again since that would make the columns weak. In terms of popular building practice, these columns are both unusual, elaborate and time consuming to construct.⁵³ So if one or two families in Mahotabeda decided – at some point in the past - to introduce an element such as a sculpted column and other families wished to adopt the idea, they must have waited until the next cycle of building and painting in order to incorporate it into their own dwellings. In this manner, over a few annual cycles of painting, a complex design idea may spread within a village.

It is useful at this point to look at the aesthetic considerations that underlie the practices and therefore, possibly, influence design developments as well. This may be done through women's own evaluations of wall painting designs. The premise here is that wall painting may be understood as a public gesture by the family, and women – as the practitioners - have a sense of what are considered good or bad wall paintings. In order to get their opinions, I displayed photographs of a set of painted walls (among other images of dwellings and the settlement) in the *kulhi* and invited villagers to pick the wall they considered the best.⁵⁴ The designs ranged from sculpted columns, a pattern with vertical stripes and another one with flowers and a few geometric patterns (Fig.5-25 and 5-26). Villagers were unanimous in their choice of a particular wall painted in pink and green designs on a white background (Fig.5-27). They explained that the design was good since it did not have crooked lines, not too many colours had been used, and that the design resembled blooming flowers. In another instance, watching me photograph a particular wall, it was pointed out to me that the wall was not particularly well painted since the

⁵² As described by villagers in Tirildih village near Chauda, March 2013.

⁵³ Particularly because these columns are usually to the *chali* (verandah). So making such columns goes hand in hand with the addition of a space.

⁵⁴ Displays of my photographs and drawings were a visual research method adopted in all three case study villages. It is discussed at length in Chapter 7.

edges of the blocks of colour were not precise but slightly overlapped each other to create a fuzzy edge. These evaluations suggest that precision in painting may be an important consideration. One may further contend that straight lines and geometric shapes are also preferred given that villagers appreciated the geometric semblance to flowers rather than a design with flowers itself.⁵⁵ The desire for geometric forms is an interesting aesthetic consideration in light of the techniques of wall painting and the proposition of its continuities with floor plastering practices. In other words, even when new patterns emerge as they have in the Seraikela region, an attitude to precision and a preference for geometric forms persists, possibly on account of its continuity to plastering and painting in horizontal bands in the past.



Figure 5-25: Selected photographic documentation displayed in the *kulhi* in Chauda



⁵⁵ It is interesting to note that the wall with flowers was a rear wall. Obviously the woman who painted it did not consider it an appropriate design for the front wall of her house.

Figure 5-26: Images of selected wall paintings displayed in the *kulhi* in Chauda



Figure 5-27: Image unanimously selected by Santal villagers as the best wall painting in Chauda

Having framed the transformation in wall painting designs between memories of past practices and possibilities afforded by new media i.e. paint brushes, it is important to ask why Seraikela alone as compared to the rest of Singhbhum became the site of such developments.⁵⁶ A brief history of the nature of political rule in Seraikela suggests some clues. Compared to Dalbhum and other parts of East Singhbhum that were under colonial governments prior to Indian independence, Seraikela was a royal estate.⁵⁷ It is a well-known fact that the royal family was considered cruel and repressive.⁵⁸ One example of repression was the implementation of a form of tax which decreed that if any subject of Seraikela possessed anything that was better than the ruler's own possessions, the ruler was entitled to claim it as his own.⁵⁹ In terms of dwellings, no one was allowed to build or decorate their dwellings better than the ruler's own palace. With the merger of royal estates and the Indian Union after Independence in 1947, Santals were no longer compelled to paint their houses in a simple fashion and I argue that this was a trigger for elaborate design developments in the region.⁶⁰ This corresponds to a village elder's observation that the elaborate designs seen on walls today are a recent development and were unheard of

⁵⁶ Also, given that all Adivasi communities in Seraikela faced similar circumstances of negotiating design memories and new possibilities, why does one find a profusion of design development among Santals alone? While there may not be satisfactory answer to the question, the design developments among Santal walls paintings definitely does justice to the general belief that Santal craftsmanship in house building is distinctly different from those of other Adivasi communities.

⁵⁷ See Hakim (1953, 1-2)

⁵⁸ Personal conversation with D. Hansdah in November 2014.

⁵⁹ This was known as the Nazrana Tax and is recorded by Hakim (1953, 7-9).

⁶⁰ During discussions with Santal organizations and scholars in March 2014, they concurred with this line of thought and agreed that the repressive rule in Seraikela may have been a trigger for the particular design developments seen in Seraikela.

two or three generations ago.⁶¹ Seen against this background of the political climate of Seraikela, the profusion of elaborate designs may have emerged as a reaction to a history of aesthetic repression in the region.

5.5. Conclusion: Correlating practices, design forms, memories and meanings

Thus far, I have focused on floor plastering, *alpana* and wall painting practices across the three case study locations. I discussed designs, tools and techniques of these practices while also situating them within the material, social and historical contexts of the case study localities at large. This comparative analysis led to a number of observations – continuities between practices such as floor plastering and wall painting, role of these practices as marking domestic space, shifts in meanings on account of different social contexts, and transformation and design developments as in the case of wall paintings in Seraikela. These various observations may be usefully framed within the two analytical foci mentioned at the beginning of the chapter – first, exploring how these practices are informed by their social and material contexts, and second, considering the practices as gestures of inscribing domestic space.

Beginning with the practices and their contexts, I suggest that floor plastering and wall painting may be seen in continuity with each other on account of the transformation of Santal dwellings in the Singhbhum region. The gradual shift from *jhopdi* type dwellings to those made in mud took place in relation to the gradual sedentarization of Santal communities and the transformation of the Singhbhum landscape from a forested to paddy-cultivating one. The transformation of dwellings and of the context of Singhbhum are correlated, and therefore unique to the place and people. The continuity of the floor plastering and wall painting practice too is specific to this trajectory of dwelling transformation. Taking the argument of continuity further, I suggested that the performance of plastering or painting may be related to the dominant horizontality of wall designs and an aesthetic of precision that women consider important in their work. Consequently, the design and aesthetics of wall painting are inextricably tied to the broader architectural and historical changes in the Singhbhum region.

Within these broad similarities of practices across Singhbhum, different localities exert different local influences as well. This is seen in the transformation of wall paintings in

⁶¹ This was pointed out by the *manjhi*'s (headman) father in Chauda who recollects having seen much simpler wall designs when he was a child about sixty years ago. Personal conversation with R. Tudu in March 2013.

Seraikela where the scheme of horizontal bands has further developed with the addition of more elaborate motifs within the bands. These developments may be accounted for when one considers the economic, geographic and historical contexts in Seraikela as distinct from the rest of Singhbhum and consequently, producing a slightly different trajectory of design development. The new elaborate designs, however, are rooted in the earlier practice of painting horizontal bands, which is revealed in an aesthetic of precision that persists as an important consideration. In other words, new conditions presented by different localities are mediated by memories of older practices in the region to create locality specific trajectories of design development.

Locality and village specificities not only produce variation in tools, techniques and design forms but also in the meanings embedded in the practices. As seen in the case of *alpana* practices by Santal families in two different villages, making or not making *alpana* was variously an assertion of a privileged position within a community or of being Adivasi amidst non-Adivasi families respectively. In the latter case particularly, inter-community politics stands out as an important feature of the village – both Munda and Santal families claimed superior status within the village,⁶² and in the sphere of everyday life, this played out in the form of subtle gestures of establishing difference through practices such as *alpana*. It becomes imperative then that assertions of identity through dwelling practices must be contextualised within frameworks of village-level community politics in addition to other local or regional affiliations.

With regards to inscribing domestic space, it is evident that the practices described in this chapter serve to mark entrances through *alpana*, denote extents of property through wall painting, or participation in the collective through plastering of the *kulhi*. These various gestures however are influenced by the various relationships between family units, dwellings and community, and by extension, a family's need to demarcate their own territory within the space of the village. Two conditions particularly serve to illustrate this point – first, high settlement density where extended families occupy a single dwelling and it is imperative for each family to mark their own space; and second, the influence of similar practices of other communities. This is seen in Bada Bandua where in addition to

⁶² Verbal accounts of various villagers suggest that Munda families claim to be the original settlers of the village who then invited *manjhis* or Santal families to do their menial work for them. Santal families however had recently acquired some political patronage and were claiming more participation in village leadership by instituting their own leaders and village council. This situation is not unique since most multi-community villages have their own parallel village council and community jurisdiction system. These parallel systems are not always in conflict as described in the case above.

floor plastering, *alpana* and painting, families use stones placed in the *kulhi* to demarcate the extents of their property. This may have emerged on account of the Munda practice of placing *sasan dhiri* – memorial stones commemorating deceased family members – at the entrances to their dwellings. Though the meaning of stones placed by Santal families is completely different in that it is not commemorative but only marks territory, a semblance between the practices is likely. So while gestures of marking domestic space is an important aspect of Santal families and everyday life, actual practices vary according to contextual conditions.

A final point regarding the processes of inscribing domestic space is the idea that the dwelling is not only marked as a family's territory but is ritually purified and notionally remade through these periodic acts of inscription. Following from Eliade's ideas on the making of sacred space, domestic space may be considered as being created anew with each act of plastering or painting. Floor plastering then not just inscribes a pre-existing domestic space, but serves to notionally make the dwelling with each application of plaster. This notional remaking of dwelling is important in light of the history of Santal dwellings where in the past, the floors of the *jhopdi* type dwellings required to be materially and physically remade in order to maintain the usability of the surfaces. Two aspects of the *jhopdi* type houses made the floor plastering necessary – first, the location of the *kumbaha* within a forested landscape meant that leaves and undergrowth had to constantly be cleared in order to maintain a clean and usable floor. Second, the enclosure of the dwelling made using *jhanti* was considerably porous and domestic animals were often sheltered inside the dwelling. This meant that the interior spaces of the dwelling would get damaged by the animals through the night.⁶³ With the transformation of dwellings however, both the surroundings of the dwelling and patterns of use of the interior spaces changed and floors were damaged much less. However, the frequency of plastering persisted and, I argue, became tied to a sense of a clean and renewed house rather than to any physical requirement.

This chapter focused on three practices of inscribing domestic space and analyzed them in relation to their social and material contexts, their role with the marking of property and the notional making of the dwelling itself. Together with the previous two chapters, I have looked at various aspects of dwelling as a physical construct and as a lived space across the

⁶³ These observations are based on descriptions of *kumbaha* type houses in Bodding (1940) and personal conversation with D. Hansdah in March 2014.

case study sites. The discussions until this point has remained focused on the dwelling alone. In the next chapter, I explore the dwelling in relation to other parts of the settlement, notably the *kulhi*, particularly through the lens of gendered use of spaces. I analyze networks of everyday lives and domestic necessities to suggest how women's lives are centred around the dwelling while the *kulhi* and other institutions may be considered as men's domains.

6. Gender and the structuring of domestic space

6.1. Introduction to gender and space

In the previous chapter, I introduced the idea that Santal domestic spaces are inscribed through various acts of floor plastering and wall painting. The intention was to shift the discussion from Santal dwellings as physical constructs to sites that are temporally defined and redefined through the process of living. The phenomenological enquiry from the earlier chapters took the form of exploring dwelling layouts and its making as instances of Santal engagements with their environment. This chapter carries these lines of thinking further to focus on how senses of place may be experienced and constructed through women's and men's movements and activities, in the course of everyday life. I focus particularly on the activities, mobility and awareness of Santal women, and explore various dimensions of their relationship to the lived environment in terms of networks of everyday life and dwelling thresholds. When juxtaposed against the previous discussions on the physical space of the dwelling and the processes of inscribing the domestic realm, one finds that women's lives are centred on the dwelling in complex ways and are distinctly different from male domains of work and knowledge.

Gender is well recognized as one of the axes (along with associations of space and place) that enable social identity to develop and vary.¹ Anthropological scholarship on gendered spaces for instance has been concerned with 'particular locales that cultures invest with gendered meanings, sites in which sex-differentiated practices occur, or settings that are used strategically to inform identity and produce and reproduce asymmetrical gender relations of power and authority' (Low and Lawrence-Zuniga 2003, 7). Beyond this concern, feminist perspectives call attention to the very production of knowledge as 'embodied, engendered and embedded in the material context of place and space' rather than 'allegedly universal' (Duncan 1996, 1). Feminist scholars ask for reconsideration and re-politicization of key concepts that underlie studies of people and their environments such as 'space, place (...) cartography, fieldwork, the transgression of boundaries, and the public/ private division of space' (Duncan 1996, 1). By 'situating knowledge claims'

¹ Tilley (1994, 26-27), for instance, points out that 'in small scale societies the major axes of spatial domination are usually organized along axes of age, gender, kin, and lineage. Knowledge and experience of particular locales and tracts of the landscape may be restricted and hidden from particular individuals and groups... Features of the settings of social interaction may constitute 'disciplinary' spaces through which knowledge is controlled or acquired in a highly structured manner.'

within ‘social, spatial, political and historical situations’ and by addressing the ‘limitations of one’s knowledge claims,’ ‘intellectual rigour and progressive goals’ of research are more likely to be accomplished. These ideas are starting points for the chapter, I focus on two things – first, Santal men’s and women’s differing perceptions of their environment and the consequent differences in senses of place. Second, I reflect on how my own position as a female researcher can be considered in relation to the specificities of fieldwork engagements and consequently the research project itself. While some of these points have been raised at relevant moments in the earlier chapters, I now exclusively focus on gender and gendered conceptions of place while also interrogating how my position in the field led to this line of enquiry.

6.1.1. Scholarship on gender and space

The relationship between space and gender has been explored in both architectural and anthropological scholarship.² What is of importance in this study is how gendered use of space is rooted in conceptions of place, and conversely, how places emerge through gendered patterns of inhabitation. A useful starting point is provided by Bourdieu’s classic study on the Berber house where he explores dichotomous halves of the house (high/ low, inside/ outside) in correlation to other binaries such as female/ male, fire/ water and light/ dark. He argues that the ‘complementary symbolic oppositions of gender as part of cosmology are expressed in the physicality of domestic space’ and serve to ‘enculturate’ those who move through that space (Low and Lawrence-Zuniga 2003, 129). This idea has implications for my enquiry into the phenomenological and cultural dimensions of Santal dwellings in that they illustrate how spaces become meaningful through patterns of use and how these significances vary according to gender. However, while Bourdieu studies gendered space in terms of binary oppositions, it is important to underscore that these meanings attributed to spaces are not fixed, but ‘are invoked by actors, men and women, who bring their own discursive knowledge and strategic intentions to the interpretation of spatial meanings’ (Low and Lawrence-Zuniga 2003, 10). Moore develops this idea of gendered places emerging through practice rather than as pre-existing entities in her study

² While it is impossible to give an overview of architectural studies in gender, a few dominant strains of enquiry are identified for instance by Rendell, Penner and Borden (2000, 6-7), who discuss gender and space from three vantage points – first, key debates from women’s studies and gender theories, second, thinking about space from other academic positions in which ‘gendered representations can be produced and received in different cultural and social practices, and third, ‘considerations of different architectural practices: design, history and theory.’ As they summarise, they wish to elucidate ‘both the importance of gender to architecture and, conversely, the importance of architecture to gender.’

of Marakwet people in Kenya.³ Moore is concerned with the contextuality and ‘social and strategic production of meaning’ rather than with the ‘internal logic of symbolic systems’ (H. Moore 1986, 5). She particularly problematizes the relationship between cultural forms and social relations to raise questions about ‘the material conditions of existence, the historical aspects of the material and social bases of collective life’ and therefore, the production of meaning (H. Moore 1986, 7). These studies articulate the methodological focus of this chapter, i.e., my looking at objects and practices of everyday life in order to understand gendered conceptions of place, while simultaneously, emphasising the role of social actors, who, as Moore points out, invoke meaning through practice.

That places and meanings emerge through people’s movement and practices finds echo in a phenomenological point of view where ‘the world’ may be considered as being ‘continually under construction’ (Ingold 2011, 141). In cultural geography, for instance, movement, rest and encounter are posited as the ways in which people essentially engaged with the geographic world, which centralises the role of human action in the making of places (Seamon 1979, 17). Ingold adds to this phenomenological discourse by suggesting that paths do not permanently divide spaces into places but rather temporally suggest places in the course of movement itself; the emphasis then being on the paths of movement rather than the surfaces being distinguished (Ingold 2011, 147-148). This phenomenological perspective becomes important in questioning pre-existing dualisms such as male/ female and public/ private, which in architectural discourses, are often accepted as stable spatial overlaps. It also suggests that gendered places might be sensed through women’s activities and movements, rather than assuming these to be physically bound to the dwelling.

6.1.2. Women in Santal societies

In suggesting that one must not assume definite overlaps between women’s movements, the domestic realm and the dwelling, I do not mean to imply that the correlations do not exist or are irrelevant. Rather I contend that various dimensions of the correlation must be examined in terms of specific women’s everyday lives in the case study villages. Before moving onto the case studies, however, it is useful to examine existing scholarship on women in Santal societies in order to frame this particular enquiry. Early studies, for example, positioned Santal women as having a subjugated position in society. Bodding

³ See discussion on Moore in Chapter 1.

analysed that women were bought or sold in marriage and therefore had status as possessions rather than as persons.⁴ While this conclusion pertains to a particular aspect and interpretation of women's role in Santal society, Quinn (1977, 182-183) warns against its universal application. She cautions against thinking of women's status as a unitary construct to suggest that 'it is a composite of many different variables often causally independent from one another' (Quinn 1977, 183). While it is tempting to consider low status or subjugation as 'key explanations' of women's lives, it is useful to remember that women's status may vary in arenas of 'political participation, economic control, personal autonomy, interpersonal equality, legal adulthood, ideological position or other specific indices' (Quinn 1977, 182). This is evident in recent scholarship that looks at kinship and land inheritance, negotiating new economic opportunities, political participation, to development programs and environmental knowledge.⁵ These works build a more diverse picture of women's agency within their communities and in relation to other structures. They help identify various registers through which women's roles and, by extension, their relationship to the built environment and to their senses of place may be studied.

6.1.3. Data and methodology

As I mentioned earlier, my own gendered presence in the field became a focus of enquiry in view of feminist ethnography where ideas such as the 'gendered nature of fieldwork' and 'reflexivity and intersubjective construction of knowledge' are featured (Ganesh 2001, 18-19). The writings of Leela Dube (1986, 18-19), for instance, show 'how the particularities of the ethnographer encounter the particularities of the field to produce a partial, limited, tentative body of knowledge'. In simpler terms, Dube recognizes that as a woman anthropologist, she has access to certain kinds of information (Dube 2001, 81-82). These readings brought into sharp focus the particularities of my own fieldwork engagements, i.e., my inadvertent emphasis on women's daily lives and places and significantly fewer engagements with men and therefore with male domains, such as governance and ritual activities. This direction of enquiry may be linked to my introduction to the fieldwork sites where I expressed an interest in dwellings as a starting point for fieldwork, which channelled my questions to women as the people responsible

⁴ For further reading, see Bodding 1915, 1-24.

⁵ For kinship and land inheritance, see Rao 2002; negotiating new economic opportunities, see Shah 2010; for development programs and environmental knowledge, see Jewitt 2002.

for the dwelling and domestic responsibilities.⁶ Both the key informants i.e. the people who introduced me to the village, and to other men in the village directed my questions to women saying that they could tell me whatever I wanted to know about domestic life. Further, I introduced myself in relation to my family (as a wife, mother, daughter-in-law) and also as a teacher. Based on these descriptions, women rather than men were interested in knowing more about my family and this led to further conversations with them. For instance, women were very curious about how my children were being looked after when I was away for fieldwork, who cooked in my family, and what my husband and father-in-law did for a living. As I developed a more empathetic relationship with women, I had more detailed interactions with them and was able to build a nuanced ethnographic understanding of their domestic lives.

It is important to reiterate here that the minimal documentation of men's lives and practices during fieldwork was unintended. My fieldwork was dependent largely on the nature of initial introductions, and varied across the three case study sites. In Chauda, where my primary informants and subsequent contacts were men, I gained much more information about the ritual realm, i.e. the *jahira* (sacred grove), and community matters such as land ownership and its relation to community solidarity. Both of these realms of activity and knowledge, according to Santal customs, are male preserves. In Bhagabandh and Bada Bandua, where my informants were mostly women, I have less information about male domains as compared to Chauda. Given this range of gendered engagements, it is useful to outline how the differences play out in terms of the data and the analysis that define this chapter. I mentioned earlier that this chapter focuses on women's everyday activities, movements and awareness about their environment in order to understand their senses of place. One cannot, however, exclude men from the discussion. Consequently, I focus on men's activities in terms of what was observed in each of the case studies, such as, some aspects of men's daily routines during the non-agricultural season. The key methodological difference pertaining to gender lies in the fact that women's activities were explicitly focused on and documented while men's activities were observed in collateral terms. What also becomes explicit in the chapter is the relative absence of men from domestic space and domestic activities for most part of the day. In other words, the role of

⁶ Men were also curious about my work and would interact but usually left after asking preliminary questions about who I was and what I was doing. When questioned, however, I rarely got adequate responses from men about places such as the *jahira* or about ritual practices.

men in everyday life was addressed through observations of their absence from particular places.

While my own self-introduction and gendered presence structured my fieldwork engagements in particular ways, it also framed fieldwork experiences in specific terms. Moore points out that ‘experience can and does act ontologically for all of us, but it does so through a process of construction’ and that it must be understood as a ‘form of embodied intersubjectivity’ (H. L. Moore 1994, 2-3). In other words, my presence in the field, the particular circumstances of interaction, and the readings made by others (both ‘with’ and ‘of’ me) were all involved in ‘the taking up of a position or positions that form the basis for the enunciation of experience’ (H. L. Moore 1994, 3). This becomes particularly relevant in this chapter where I highlight the minutiae of women’s work and everyday life in order to understand their engagements with their lived environments. The correlations between women’s work, their relationship to the domestic realm and more broadly, their agency with their community are considerably rooted in my own experiences with domestic life. This is not to say that a researcher’s own experiences must be the only or the most important frame of reference for reflecting upon fieldwork engagements, but in the case of this chapter, my personal experiences served both to highlight women’s roles, especially in the sustenance of the domestic sphere, and to acknowledge the agency this affords them within their life-worlds and their communities.

A final observation here with regards to fieldwork is that it was carried out in all three villages during the break from the agricultural season, i.e. between January and April. Agricultural activities make a difference to cycles of domestic activities, and to the work done by men and women respectively. This does not, however, impact the explorations in this chapter since women’s responsibilities only increase during the agricultural season with work, such as transplanting paddy saplings or threshing paddy, which they carry out in addition to the domestic work outlined here.

6.2. Daily routine in Santal households

I begin by outlining daily routines in Santal households in order to build a picture of the roles and responsibilities of men and women. Some activities were introduced in the earlier chapters but it is useful to look at the range of activities that constitute the domestic realm. The first task, as discussed in the previous chapter, is for women to ritually purify the house by applying a patch of cow dung on the floor at all the entrances. Once this is done,

women collect water from the nearest tap, well or hand pump and begin preparing the first meal of the day. This comprises tea, rice and occasionally some vegetables.⁷ Other members of the family eat soon after the meal is prepared.⁸ The timings of these preparations vary depending upon whether women are employed elsewhere as wage labourers, in which case, they begin these activities before dawn and leave for work by 7:00 am in the morning.⁹ If women stay at home, the next task after cooking and eating is to let cattle out of their shelters and give them fodder and water. By 9:00 am approximately, the cattle are taken away for grazing by another member of the family or an outsider employed for that purpose.¹⁰ Once the cattle leave the dwelling premises, women begin the task of cleaning the house. As discussed in the previous chapter, this includes cleaning of the cattle shelters, the entire house and plastering of the *kulhi racha*; the last task being done twice or thrice a week.

Time of day	Tasks performed by women
4:00 - 8:00 am	Wake up, apply cow dung patches to entrances, collect water, cook morning meals, eat. Leave for work (for women employed as wage labourers).
8:00 – 10:00 am	Let cattle out of shelters and give them feed and water, cattle taken away/ let out for grazing. Clean the cattle shelter and rest of the house; plaster <i>kulhi racha</i> and house twice a week.
10:00 am – 12:00 pm	Varying activities by women in different villages: - Make excursions to collect wood (Observed in Chauda)

⁷ The consumption of vegetables varied significantly depending on a family's capacity to grow or buy them. Rice however was a staple and Santals consumed it in the form of *madh bhat* which is rice cooked with a lot of water resulting in a porridge-like consistency. According to the villagers, this form of rice kept the body hydrated while they went about their work during the day.

⁸ It is useful to note here that men and women do not eat together as it is considered taboo (Troisi 1979, 229). Also, when someone is eating, another person is required to be at hand to serve, since people, typically, do not serve themselves while eating.

⁹ Personal conversation with G. Hembrom in March 2013.

¹⁰ Different arrangements for cattle grazing were observed in each of the case study villages – in Bhagabandh, one elderly couple in the village took the cattle from a few houses to graze collectively and each family paid the couple in cash or kind in exchange. In Chauda, there was no collective arrangement and in each family sent a member – usually young boys – out with the cattle. When no one was available, the cattle were let out into a large fenced area near the house for the whole day. In Bada Bandua also the arrangement was individual with the key difference being that many families did not have cattle and so the responsibility did not arise.

	<ul style="list-style-type: none"> - Gather cow dung (Observed in Bada Bandua) - Prepare <i>handia</i> (rice beer) (Observed in Bhagabandh in the house of M.Hansdah where she ran the village handia shop) - Other preparations such as par-boiling paddy and pounding paddy for extraction of rice.
12:00 – 2:00 pm	Bathing, washing clothes, eating second meal of the day, washing utensils.
2:00 – 4:00 pm	Complete odd jobs around the house/ rest, animals return from grazing and are fed, given water and moved into their shelters for the night.
4:00 – 6:00 pm	Collect water, cook last meal of the day, eat, wash utensils and clean up.
6:00 pm – 8:00 pm	(Not observed) relaxing/ chatting until they go to sleep.

Table 6-1: Daily routine of women in Santal households in the case study villages

During the mid-morning hours (i.e. after cleaning and before noon) women carry out a range of activities and these varied across the case study villages.¹¹ In Bhagabandh, women and young girls followed cattle to collect cow dung, prepared *handia* (rice beer) or went to collect wood from nearby forest, depending upon what their immediate requirements were. In Chauda, among the women who stayed at home during the day, it was common for them to stock up on household essentials such as firewood.¹² This was a time taking enterprise and women had to walk a considerable distance to reach a forest. So they visited the forest during these hours to chop and gather large quantities of wood that they then stored for later use. In Bada Bandua women spent these hours collecting cow dung, carrying out repairs in the house and preparing *handia*. Women in Bada Bandua did not go to gather wood since the forests are very far from the village and require nearly eight to ten hours of travel and work. What is evident is that these hours are used by women to carry out a range of activities pertaining to stocking up on household essentials.

¹¹ During the agricultural season, this may be the time women and children go to the paddy fields to help with the activities there. Men typically leave for the fields soon after eating the first meal of the day in the morning.

¹² When compared to women who worked as construction labourers.

Around noon, women visit the village pond to have a bath and wash clothes. Most villagers are particular about the need to have a bath before sitting down to eat lunch. After this, they typically fetch water for the afternoon and then proceed with lunch and washing. After this is done, and until the cattle return between 3:00 pm and 4:00 pm, women may get some rest or continue with activities that remained incomplete in the morning. Once the cattle return, they are first given some feed and water. After being fed, they are led into their shelters and tied up for the night. Women then begin preparing the evening meal, which once again comprises rice and vegetables. They eat at dusk and after cleaning up, their household chores are completed for the day.

6.2.1. Daily routine of men

As I mentioned earlier, fieldwork was carried out between January and April, which is the break in the agricultural season. Men's activities during these months differed if they were paddy cultivators or labourers. If men were largely involved in wage labour, then the break in the agricultural season did not make a difference to their daily cycles, whereas for paddy cultivators, the months between January and April offered time for miscellaneous jobs or to engage in wage labour to supplement their incomes. In Bada Bandua and Chauda, most men were involved in wage labour and were rarely found in the village during the fieldwork period.¹³ In Bhagabandh on the other hand most families had cultivable land and men were found carrying out repairs to their house or doing temporary jobs for other people within the village itself.¹⁴ Compared to women who had a definite and demanding daily routine, men had vastly varying schedules and often spent large amounts of time on the *kulhi* in conversation with other men. This was a recognized characteristic of men's daily lives, as, during a display of photographs in the village, people pointed to an image of men sitting in the *kulhi* to suggest that this was an activity typically associated with men (Fig.6-1).

¹³ A few men were found in the village but they were often the elderly or those with ill health. A few chronic alcoholics who were not usefully employed anywhere were also found hanging around in the village during the day.

¹⁴ These temporary jobs ranged from cutting wood for a timber supplier living in the village to carrying out construction work in exchange for payment.



Figure 6-1: Photograph of men in the *kulhi* that I displayed in the village

6.2.2. Comparing the routines of women and men

The above narratives suggest two important things. First, women have more physically demanding schedules and spend most of their day in and around the dwelling on account of their domestic responsibilities. This does change somewhat when women work as labourers elsewhere, but the responsibilities in the house remain.¹⁵ Also, although their overall mobility increases with their travel to places of work, within the village their lives remain centred on the dwelling. This is seen later when I discuss women's mobility and thresholds of interaction in and around the dwelling. Men, as I pointed out earlier have a much more flexible routine unless they are involved in wage labour and spend a lot of time on the *kulhi* and in the company of other men. This is in direct contrast with women who in the course of the day rarely gather or intentionally interact with other women.

6.3. Networks of resources in everyday life

Within the daily routines outlined above, some activities entail specific patterns of movement within the village and are particular sites of women's movements. I now examine some of these movements, i.e. collecting water, gathering firewood, collecting cow dung, cultivating the *barge* (backyard) and visits to the *haat* (weekly market) in order to explore the networks that women are part of and which sustain domestic life in Santal villages.

¹⁵ Rao (2002, 139-141) discusses the gendered nature of domestic work in the case of women labourers. She points out that men did carry out some chores if the women were away at work, but as soon as the women returned, the men were less inclined to get involved in domestic work.

6.3.1. Collecting water

Beginning with collecting water, I mentioned above that women fetch water three or four times a day from wells or hand pumps nearest to their homes. Wells and hand pumps are the only source of water in the case study villages and groups of ten to twelve houses may share a well or hand pump between them.¹⁶ In Bhagabandh, the villagers in Jahira Tola¹⁷ – which is the cluster under study – a deep bore well had been dug to supply water to an overhead tank from where water was distributed to different taps in the *kulhi* (Fig.6-2: Taps and well for collecting water). Water was released from the overhead tank twice or thrice a day and women collected it at those times. Additionally, there were two wells located at the two ends of the *kulhi* in Jahira Tola. The taps and the wells were used by specific groups of houses in the immediate vicinity rather than being open to anyone. Further, this allocation of access to water sources was fixed. The only time when the pattern of use changed was when the pump in the bore well broke down for some reason and women had to use the wells until the pump was repaired.¹⁸ In Chauda and Bada Bandua, women used hand pumps and village ponds for collecting water but the rationale of fixed groups of users remained.

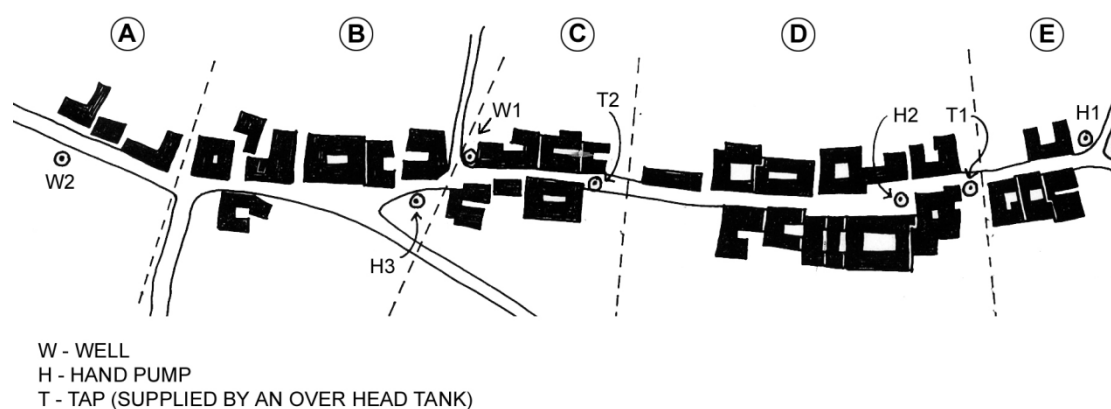


Figure 6-2: Access to water sources within a *tola* (neighbourhood). Note that houses in each section (A-E) only access the water sources in their immediate surrounding and do not collect water from sources in other sections, except during drought-like conditions in summer.

¹⁶ Hand pumps, wells, and village ponds – or combinations of these – are primary sources of water for villages in the Singhbhum region.

¹⁷ Bhagabandh village comprised four *tolas* or neighbourhoods - Jahira Tola, Dangar Kulhi, Mahato Tola and Shankardih. The first two had Adivasi populations while the other two had Mahato families living there. In this study, I focus only on the Jahira Tola and make references to the Mahato Tola where necessary.

¹⁸ In such cases, women collected water from the nearest well or even from wells and taps that were further off depending on the availability of water.

The designation of access to water sources is interesting on two counts – first, women’s mobility in the course of fetching water for daily use is physically restricted in terms of visiting the well or tap nearest to their own house. Second, since a fixed group of women use a particular tap located in the vicinity of their home, a sense of neighbourhood is established. Both these factors have an impact on how women locate/ identify themselves as belonging to a particular neighbourhood and also in terms of what they are (or claim to be) familiar with.

6.3.2. Collecting firewood

I now discuss access to firewood in each of the case study villages in order to outline both the nature of women’s engagements with the physical environment of the village and their mobility around the village. Firewood, or alternative forms of fuel, is a major requirement since it is used for cooking twice a day. Women are responsible for both constructing the mud stove in which they cook and for procuring the necessary fuel. Wood is the preferred fuel but, as I show next, varies in terms of availability because of which other forms of fuel become important. In two of the three villages, Bhagabandh and Chauda, firewood was gathered from forests in the vicinity of the villages themselves. In the third village Bada Bandua, the forest lay at a considerable distance from the village and was difficult to access. Consequently, firewood was used together with a range of other fuels.

6.3.2.1. Gathering firewood in Bhagabandh

In order to illustrate the nature of the wood gathering exercise, it is important to offer a few preliminary comments about the forests around the village first. The village of Bhagabandh comprises four dwelling neighbourhoods that were interspersed with forests (Fig.6-3). The forests do not belong to the village but are reserved by the state forestry department and villagers have limited access to wood and other forest produce.¹⁹ Further, these forests are not densely wooded, but have young saplings that are periodically planted by the state forestry department under various programs (Fig.6-4). In other words, the forest is sparse, villagers have limited legal access, but at the same time, depend entirely on these wooded tracts for their fuel requirements. Within this context, it is interesting to observe the practice of gathering firewood.

¹⁹ Forests in Singhbhum – and in all of Chotanagpur – were reserved by the state in the mid-nineteenth century. Adivasi rights and access to forests were severely curtailed as a consequence of this new legislation. This impacted their sustenance since most Adivasi communities depended upon the forests for firewood and supplemented their diet and daily requirements with forest produce. (Jewitt, 2002)

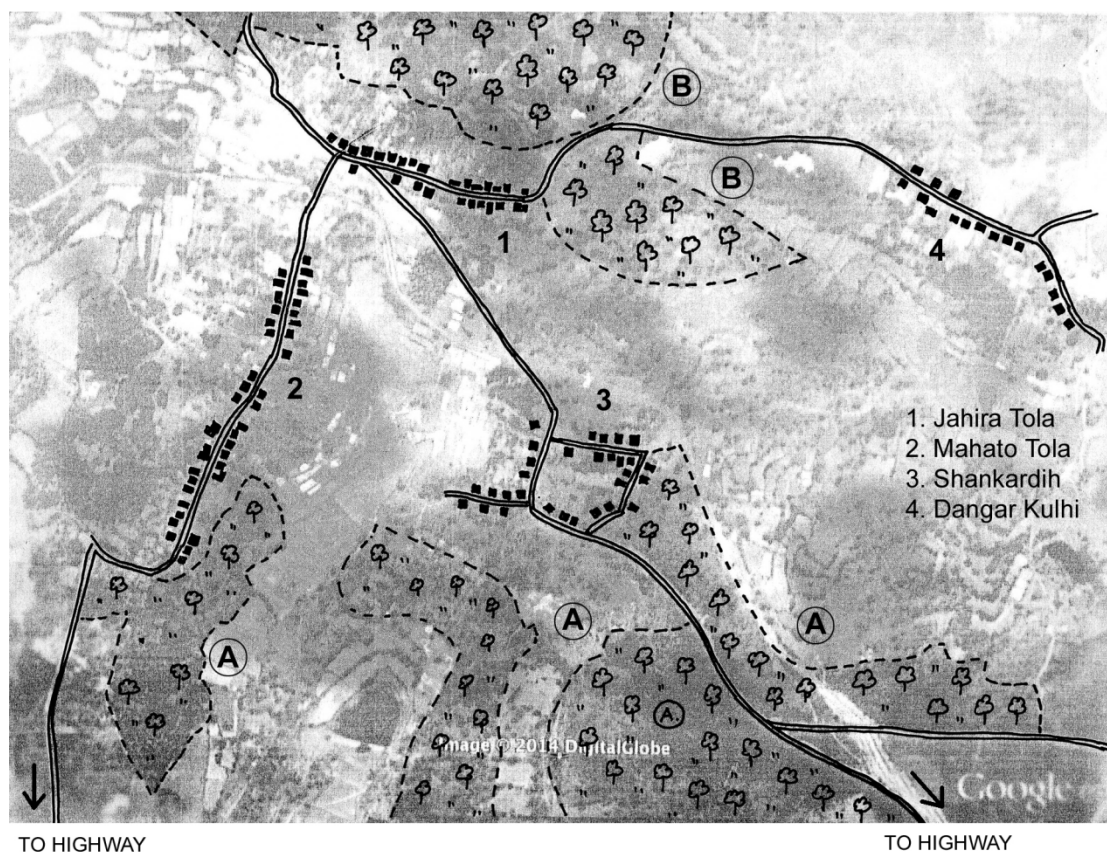


Figure 6-3: Plan of Bhagabandh showing forests in the vicinity of the village. ‘A’ are the forests that the villagers avoid on account of its proximity to the highway while ‘B’ are the forests frequented by villagers for gathering firewood.



Figure 6-4: View of forest typically found around case study villages

Women, and often groups of children, head out in the morning between 10:00 am and 12:00 pm to gather wood.²⁰ Children are able to go unaccompanied by adults since the forested tracts are located very near the dwelling clusters in the village. During one such visit when I accompanied a group of children, they started collecting fallen branches and making individual piles (Fig.6-5 to 6-8). When they had collected enough, they beat the branches on the ground to remove leaves and stacked the branches in a neat pile. They then pulled off a green branch, stripped the bark of the branch and used it to tie their bundle together. After this, they pulled some green leaves and created a bundle to place on their heads. When all the children were ready with their bundles, they returned home.

²⁰ This is soon after the cattle leave for grazing and before midday.



Figure 6-5: Collecting dried branches



Figure 6-6: Thrashing the branches to get rid of the leaves



Figure 6-7: Making a bundle with green leaves to carry the load of wood on their heads



Figure 6-8: Carrying firewood back home

There were some interesting points to note in this exercise. First, women and children visit the forests that are located farthest from the highway that runs next to the village. This way, they remain invisible to forest officials even if they pay a surprise visit. Second,

seeing that I was to accompany the children, the adults asked the children to leave their sickles behind, which would have been used to cut branches off the trees. Given its illegal status, they did not want their children to be photographed doing so. Third, the children were picking up fallen branches, which on reflection seemed at odds with the fact that the trees were all young and it was rather unlikely that one should find as many dried branches as the children did. When they pulled green branches for bark however, the picture became clearer. On each visit, children were pulling off green branches where they would extract the bark and leave the rest of the branch behind to dry and collect it in the next visit. In other words, on each visit, children were ensuring that there were enough dry branches for the next time. In sum, women and children have developed their own methods of negotiating the legislation around forest access while leaving as few signs as possible of their work.

6.3.2.2. Gathering firewood in Chauda

While the modalities of gathering wood in Chauda, in terms of legality and illegality and of women's desire to remain unseen, are similar to what is described above, there are some subtle differences. Primarily, the forests in Chauda are more dense and located further away from the dwelling cluster as compared to Bhagabandh above. Consequently, only women make visits to the forest to gather wood and not children.²¹ The issue of remaining minimally visible, both in terms of their own presence and leaving signs of having chopped wood, is an important concern which the women dealt with by going deep into thickets to chop wood. They chop a few branches from each thicket so that signs of their work are not noticeable. Again, as in the case of Bhagabandh, women were concerned about my presence with a camera suggesting that they are well aware of the illegality of their forays into the forest.

A key difference between Chauda and Bhagabandh is that a large number of women work as wage labourers and do not have the time to gather firewood. This is because labourers leave for work early in the morning (by 6:00 or 7:00 am) and do not return until evening (about 6:00 pm). In such cases, women used *gundi* (made of small lumps of mud mixed with coal dust) in separate, specially designed mud stoves. While mud is easily available,

²¹ Another reason for children's limited involvement in such practices is the fact that nearly all the children in Chauda attend the village school, which is not the case in Bhagabandh.

coal dust is bought from coal kilns in the vicinity of the village.²² This requires both money and transport – usually a cycle – on which the sack is brought back. The use of coal dust suggests that a different spatial and economic network that emerges from the constraints of access to firewood faced by women who work as wage labourers.

6.3.2.3. Firewood and other fuels in Bada Bandua

As mentioned earlier, the use of firewood is much less in Bada Bandua as compared to the other two villages on account of the considerable distance of the forest from the village. Women in the village said they needed an entire day i.e. nearly eight to ten hours to reach the forest, to gather enough wood and return home.²³ While women did go to the forest when possible, *gundi*, dried leaves and cow dung were all used as fuel depending on availability of firewood.²⁴ Dried leaves are gathered from the yards around the house and serve as kindling rather than as fuel for cooking an entire meal while cow dung is pressed into small lumps and used in the stoves. Consumption of cow dung as a fuel however affects the plastering of floors since that is also done using the same material. To summarize, the use of dried leaves and of cow dung as fuel is suggestive of the degree of resource constraints faced by the women in the villages.

6.3.2.4. Gathering firewood as engagement with the environment

In the narratives on the procurement of firewood or other types of fuel, some specific points about women's mobility and engagement with the village and beyond emerge. First, it is apparent that women need to be familiar with the forest areas around the village, but also that they strategize their engagements in light of forest legislation and the fear of running into forest department officials. Second, in the light of the uncertainties with firewood, other networks of interaction and exchange have emerged such as those with coal making establishments. Third, shifts in type of fuel not only entail the procurement of new materials but novel ways of using them as well. So in most villages, women build two stoves next to one another – one for firewood or for cow dung and the other to accommodate *gundi* (Fig.6-9). What is particularly interesting is that the procurement of different forms of fuel appears to be in a constant state of flux, i.e., depending on time,

²² In Chauda, for instance, different villages in the region had communities that specialised in particular things such as metal workers, clay potters, weavers and coal kiln owners. Villages have well-established networks of interactions where these communities served each others' interests. Personal conversation with R.Tudu in March 2013.

²³ Personal conversation with S. Mardi and K. Singh in March 2013.

²⁴ Small lumps of fuel made using coal dust and mud.

other responsibilities, vagaries such as weather and illness, material availability and economic conditions, women switch between different types of fuel. So the procurement of fuel becomes a complex endeavour where women need to straddle spatial, material, economic and political variables in order to be able to cook food. These strategies are an important indicator of the complex nature of women's engagements with places and agencies outside the village, and form an interesting counterpoint to the idea of their lives being centered on the dwelling.



Figure 6-9: Two types of stove that use different kinds of fuel

It is important to note here that men occasionally get involved in cutting wood from forests but this is for purposes of construction, repairs involving wood, or for sale.²⁵ The key difference between men visiting the forest and women doing the same for firewood is that frequency of women's visits is much higher. Some men may never visit the forest to actually cut wood since construction and repairs are occasional needs and people often turn to commercial timber establishments to buy wood for these purposes.²⁶ Women, on the other hand, have to routinely visit the forest and therefore negotiate the possibility of encounter with forest officials while having to procure enough fuel on a regular basis. The key point here is that both men and women are meshed within complex networks in their

²⁵ One of the village men in Bhagabandh has emerged as a timber contractor- he employs other men in the village to cut trees when required. He supplies timber to Jamshedpur, the nearest urban market. Since the cutting of trees in reserved forests is illegal, an alternative system has emerged. The contractor has a contact person in Jamshedpur who telephones when timber is required. Alternatively, the contractor gets in touch with him if any tree has been cut in the village. They also do not cut large numbers of trees since that may attract the attention of the forest officials. They spread themselves out and cut trees at distant locations. When the timber is ready, the contractor makes a phone call to his contact person in Jamshedpur, who sends a truck to collect the timber. Personal conversation with K. Mahato and M. Hansdah in Bhagabandh

²⁶ This was suggested by a number of villagers who mentioned that wood for building the roof of the house is now purchased from commercial establishments whereas in the past they may have procured it directly from the forest. This is discussed in detail in Ch. 2 on 'Transformation in ways of making dwellings.'

everyday environments. However, the demand of negotiating these networks is greater on women on account of the fact that domestic responsibilities, which includes the gathering of fuel, is their sole responsibility.

6.3.3. Collecting cow dung

In the previous chapter, I discussed in detail the role of floor plastering and wall painting in Santal households and suggested that cow dung is the most preferred material since it is considered purifying. Often, the dung that is collected from a family's herd is insufficient, since people rarely have more than five or six cows or, sometimes, when unable to take care of them, keep no cows at all. This was seen particularly in Bada Bandua where large numbers of people had taken to wage labour and consequently found it difficult to maintain herds of cows. In such cases, women have to procure dung from any other family that may have extra, or follow the herd while they graze and collect dung.

Considering these uncertainties in procuring cow dung, and, as I discussed previously, the difficulty in gathering fire wood in Bada Bandua, it is interesting to note the shifting equation between cow dung as a floor plastering material and its possible use as a fuel. Since firewood is difficult to procure given the considerable distance between the forest and the village, some families prioritized the use of cow dung as a fuel and employed mud as a plastering material instead. This in turn affects cooking, for instance, since both the mud stove and cooking times vary depending on the kind of fuel used. In short, the use of either of these materials for various purposes depends on a family's ability to procure them. What is important to note here is that each such shift in material and use entails a shift in women's practices, networks and commitment of time required for domestic activities. More broadly, it suggests that their engagement with and negotiation of their environment, varies depending on the contingencies of domestic requirements and therefore their senses of place must vary as well.

6.3.4. Visiting the weekly market

The weekly market is an important institution in the vicinity of the village because, as one of the women pointed out, this was the place where a range of household items may be purchased (Fig.6-10). Weekly markets are held on different days of the week at fixed places within a locality. While villagers may visit any of the weekly markets in the region, they usually visit the one nearest to their village. None of the three case study villages has a significant shop within the village itself, and women had to visit the weekly market for

vegetables, spices, medicines, cosmetics, tools, and other household miscellany. The weekly market also becomes an important site for women to sell produce from their *barge* (gardens), forest produce and rice beer. These sales are an important source of women's income, particularly for widows or unmarried women who either do not own agricultural land or, if they do, struggle to cultivate it in the absence of men to assist them.²⁷ The village market becomes an important point of contact between women and potential buyers for their products. More significantly, given that women's everyday lives are typically spent in and around their dwelling, the *haat* may often be the only point of contact with people and things beyond the village.²⁸



Figure 6-10: View of village market at Kolabira

Here again, one may make a distinction between women's use of village markets and its use by men. Both men and women frequent the market as sellers. An important difference, however, is that the men who set up stalls are often travelling salesman by profession and usually sell things that are bought in urban markets and sold in rural areas, while the women typically come in from surrounding villages to sell vegetables and *handia* (rice beer). As buyers on the other hand, depending on individual families, men and women may be responsible for buying various household essentials such as vegetables.²⁹ So for women,

²⁷ As Rao (2002, 128-129) notes, cultivation and sale of produce from the *barge* (backyard garden or homestead plot) and producing and selling *handia* are often the only options for sustenance in women-headed or women only households.

²⁸ It must be mentioned here that the scenario is very different for women engaged in wage labour. Given the long hours they spend travelling to sites of work and the different kinds of labour work they typically engage in, their networks and equation with domestic responsibilities are very different. In case of this study, I do not focus on wage labourers because all three case study villages and most of the villagers I interacted with were primarily subsisting through agriculture. Where I did engage with women working as wage labourer, I have made mentioned the differences in their everyday lives. For ethnographic studies of Adivasi women wage labourers, see Shah 2006, 2010.

²⁹ One of my informants, M. Hansdah, mentioned that she did not go to the market herself but paid a young boy to buy vegetables for her family every Saturday. Her husband was one of the important men in the

as both buyers and sellers, the market remains an essential venue for interaction with persons outside the village in order to carry out their various transactions. This underscores my earlier contention that for women, the weekly *haat* may be one of the only occasions for gathering or formally encountering other women or people in the course of their daily lives.

6.3.5. Difference in networks between men and women

In discussing women's daily routines, I suggested that their lives are centered on the dwelling in pursuit of their domestic chores. Through the above narratives however one finds in the course of procuring basic necessities such as water, fuel and cow dung women engage in and negotiate various places and entities. These range from meeting forest officials and going to weekly markets, state agencies and commercial establishments such as coal kilns. The pursuit of domestic activities does expand the range of women's interactions with complex networks well beyond the domestic realm. While this appears to contradict my earlier contention that women's lives are centered on the dwelling, it is important to note that all these other places and people that women engage with, lie outside of the village community. So even though women become part of complex networks in the course of their domestic responsibilities, these do not significantly impact their interpersonal interactions within the community and in the *kulhi* where their movements not only remain focused on the domestic realm but also are limited to the immediate vicinity of their own houses. For men, on the other hand, there is no disjunction between the village and extra-village levels of interaction given that they belong to larger social groups such as the village council. The differences in sites and degrees of women's interactions as I discuss later become an important constituent of their senses of place.

6.4. Movement and thresholds of interaction

Having outlined the various activities that women and men are involved in throughout the day and in the course of sustenance production, I now look at the dwelling and the *kulhi* as the settings in and around which these movements take place. I focus on thresholds of interaction between men and women within the village community and their interactions with people from outside the village. For the latter, I focus on my own presence in the village during fieldwork and my access to the dwelling over time on account of increasing levels of familiarity. This strand of the investigation is important as the correlations

village (an elected ward member) and was also economically well off. This allowed them the freedom to employ someone to buy things at the weekly market for them.

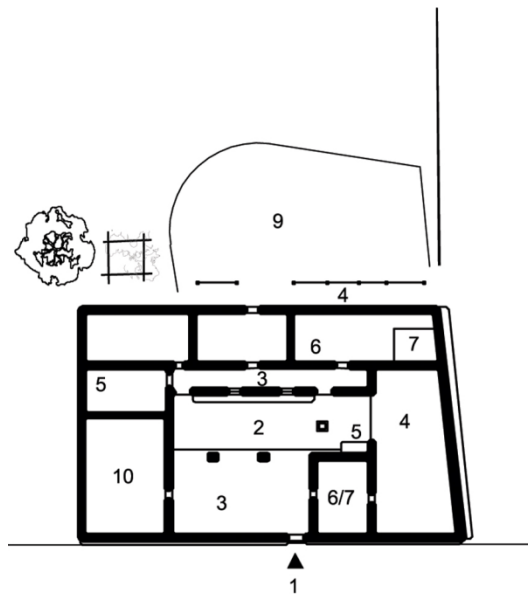
between male/ female, public/ private and inside/ outside that are often accepted within architectural discourses as fixed principles underlying the ordering of space. The following accounts, however, clearly reveal that such boundaries are fluid and are evoked through the interactions of different people.

Broadly speaking, there does not appear to be any restriction in terms of women's movements within dwellings or in the *kulhi*. During fieldwork for instance, women and men from the neighbourhood often walked into whichever house that I was sketching or taking photographs in and sat around and asked questions while I carried on with the documentation. These interactions typically took place in the courtyards while rooms were usually locked or at least had their entrances covered with curtains. (Fig.6-11).

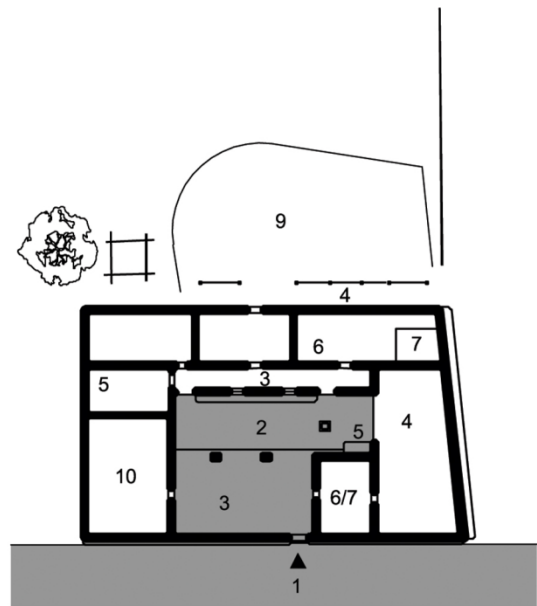
Additionally, women also sit around in the *pide* (plinth alongside the front wall of the house) on the *kulhi racha*, particularly in the afternoons and chatted with each other or with passers-by. Men, on the other hand spend much more time in the *kulhi* as I mentioned earlier. Generally speaking, the *kulhi*, courtyards inside dwellings and backyards seem open in that members of the family and outsiders freely interact with each other in these spaces. That access is unrestricted is underscored by the fact that women, during the interactions in the spaces described above, often breastfed their children wherever they were. This suggests that embarrassment over women's bodies is not a major consideration in Santal society.³⁰ This is markedly different from many cultures, where the distinction between interior and exterior spaces, or private and public space, emerge in terms of restricted movement and lack of visual connectivity between women and other members of the community.³¹ What this also suggests is that notions of interiority must be, then, premised on other factors.

³⁰ One may not, of course, make this claim in absolute terms, but based on my fieldwork experiences in the three case study villages and observing instances such breast-feeding of children in the *kulhi*, it appears that for a majority of villagers, embarrassment over the female body is not a significant concern within village premises. In other places and when interacting with people from outside the village, the condition is likely to be different.

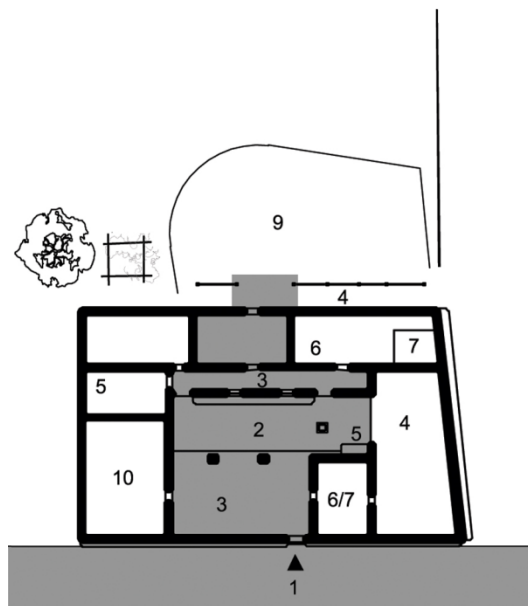
³¹ For a discussion on gender roles and the structuring of domestic space, see Quinn (1977).



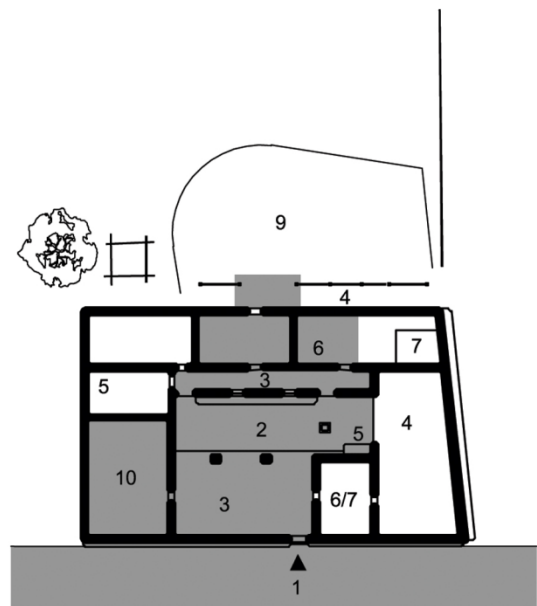
A. Spaces within the house used by the family



B. Spaces where outsiders are usually allowed



C. Spaces that I was shown when I asked to document the house



D. Spaces I was finally allowed to document. Note that in sleeping area (#6) the unmarked corner was the *bhitar*

LEGEND

- 1 ENTRANCE
- 2 *RACHA*
- 3 *CHALI* (VERANDAH)
- 4 ANIMAL SHELTER
- 5 COOKING AREA
- 6 SLEEPING AREA
- 7 *BHITAR* (PLACE OF WORSHIP)
- 8 GRAIN STORAGE
- 9 *BARGE* (BACKYARD)
- 10 SHRINE OF OTHER DEITY

Figure 6-11: Diagram showing different levels of access for family members and outsiders with increasing degrees of familiarity

Two instances give some insight into this question. First, my own patterns of access to different spaces as an outsider, i.e. someone who did not belong to the village community, in the course of fieldwork and, second, restricted access and other prohibitions around some internal and ritual spaces.

While villagers' movements into parts of each other's houses were unrestricted, my own access into the houses occurred in distinct phases. When first introduced, I requested permission to document people's houses and in most cases, I was readily shown around the courtyards. However, if a family was not at home, I was advised to not enter or photograph the courtyard. This occurred when I was walking down the *kulhi* with my informant and listing the different houses that I may eventually document. In some cases my informant readily agreed to introduce me to the family, while in others they suggested that the family may not be in the house and so it would be inappropriate for me to enter. I was also advised against photographing such houses even if they were visible from the street by hinting that the family may not approve. In the houses where I did go into the courtyard, the spaces around the courtyard were usually locked or at least had curtains drawn over the entrances. So when I asked to look inside the rooms, I was first shown the animal shelters and then more reluctantly, the interiors of cooking and sleeping areas. People usually responded that there was nothing worth seeing in the rooms. The restriction on entering the rooms or being able to look inside them was applicable to other villagers who did not belong to the family as well. What is interesting is the fact that the rooms did not contain material objects but were sites for certain activities such as grain storage, cooking and eating.³² In keeping these rooms closed to outsiders, it was these activities that were being protected from people other than immediate family members.

The *bhitar* is the one space within the house that I was never allowed to view or photograph.³³ With regards to the *bhitar*, Troisi points out that only male members of a family are allowed to offer worship within the *bhitar* (Troisi 1979, 91-92). Female members of the family may prepare the *bhitar* prior to rituals but do not participate in the rituals themselves (Troisi 1979, 91). Interestingly, married daughters may no longer enter the *bhitar* in their father's house while their husband – the son-in-law in the family – is

³² This was evident from the rooms that I did manage to visit where only a few things typical of Santal dwellings were to be found. So for instance, the cooking area, as I discussed in the Chapter 1 on 'Transformation of dwelling layouts' has a shelf-like structure along one wall, a mud stove with a platform around it, and various pots and pans.

³³ When I tried discussing this with people, many villagers avoided the question and only two families allowed me a glimpse of their *bhitar*.

allowed to enter (Troisi 1979, 91). This is because a married daughter is believed to belong to the husband's clan and therefore not allowed access to her father's *bhitar* where *bongas* (spirits) and deceased ancestors of a now-different clan lineage reside (Troisi 1979, 91). Similar rules of access are evident in the *jahira* (sacred grove) where only men who own land in the village and are members of the village community are allowed to enter the *jahira* and participate in rituals conducted there.³⁴ What becomes evident here is the relationship between kinship and ritual locations that structure patterns of access and participation in these spaces. In other words, the distinction between interior and exterior spaces is not on account of gender, as I noted above, but is maintained through differential access to sacred spaces between family members and other people.

To contextualise these narratives in relation to the transformation of dwelling layout (discussed in Chapter 1) it is useful to recollect the sense of interiority in Santal dwellings. These have shifted from a distinct dichotomy between inside and outside spaces to more complex layers of interior space marked by multiple entrances and thresholds in courtyard houses. As I discussed earlier, in older *kumbaha* dwellings, the interior spaces were used for cooking and for worship and no outsiders were allowed inside. In courtyard dwellings, two levels of entrance may be distinguished, from the *kulhi* into the courtyard and from the courtyard into specific rooms. What is similar between these two layout types is that the least accessible spaces is the *bhitar* and the only people who are allowed entry are members of the family who participate in ritual activities. One may argue that the *bhitar* has persisted as the most private part of Santal houses, though the rest of the house has become accessible in varying degrees to people such as other villagers. Two arguments may be raised on this basis. First, the persistence of the *bhitar* as the most private space of the house may be attributed to the memory of the *kumbaha* and its particular configurations of inside and outside. This underscores arguments made in the earlier chapters where I suggested that memories of earlier forms and senses of dwelling, such as the sense of ground and dimensions of internal spaces, have persisted in present-day courtyard houses even though the material and social contexts have transformed. Second, one may argue that the underpinnings of privacy thresholds in Santal dwellings are not considerations of gender as I pointed out earlier, but rather, are shaped by degrees of access to ritual spaces. This in turn is linked to questions of kinship given that only members of the family, i.e. along lines of patrilineal descent, may offer worship within the

³⁴ Personal conversation with N. Hansdah in March 2013.

bhitar and are therefore allowed access into it. In short, the structuring of domestic space, and indeed even community spaces as I discuss later, are linked to kinship structures and participation in attendant ritual practices.

6.5. Awareness about the *tola*

Earlier in this chapter, I established that Santal women's everyday lives are centred on the house but their range of movement and interactions vary, both within and without the village, depending on the contingencies of domestic requirements. I also argued that privacy thresholds within dwellings are not premised on gendered divisions of space but on the sacredness and, therefore, the inaccessibility of ritual locations such as the *bhitar*. Yet, it is important to recognise that, even though women's mobility patterns are varied and that privacy within the dwelling is structured along kinship, their lives are inextricably bound to the domestic realm and the dwelling. To make this argument, I now invoke Santal women's awareness about their surroundings, and more specifically, their *tola* (neighbourhood or smaller cluster of houses) to suggest that they lack, or at least claim to, the awareness of things beyond the domestic sphere.

During fieldwork, I visited many houses in each case- study neighbourhood and asked for permission to document the house and daily lives of the family members.³⁵ On the assumption that people I had met may introduce me to other families, I asked the women about other houses where people were at home during the day and may let me document their houses. Women mostly responded that they did not know much about other houses in the village. They mentioned that they were busy with domestic work during the day and did not have the time to visit other houses.³⁶ At the same time, women were curious about other houses that I visited. They asked questions such as: how the other houses were kept, what objects were in the house, or what did I think of the family? Such questions about the immediate neighbourhood were encountered again during the village displays when more women than men asked questions about where particular photographs were taken. These questions were surprising given that women are considerably mobile, as is evident from the narratives on domestic chores, and yet appeared not to know much about houses or places at the end of their own *kulhi*.

³⁵ Each case study village was divided into *tolas* (neighbourhoods) as outlined in the introduction. I carried out fieldwork in one of the *tolas* in each village. What women refer to here are not other *tolas* which they certainly would not frequent but rather houses within their own *tola*.

³⁶ Personal conversation with M. Hansdah in February 2013 and S. Tudu in March 2013.

As my familiarity with some of the village women grew, I realized that women did know a lot about their neighbourhood and often quietly shared with me stories about other people and houses. For instance, one family had been ostracised from the village and their house was locked. Towards the end of my fieldwork period, during casual afternoon conversations with two women, I was given two detailed accounts of a murder that had taken place in that family and the punishment that had been meted out by the village council. While women were not members of the village council, they had heard these details from their husband and brother respectively.³⁷ Initially however, the same women had avoided my questions about that house and had just said that there was no one in the house. Similarly, one woman asked many questions about the headman's wife and said that she did not know her very well. During a later visit, I found that the two women did know each other quite well.³⁸ What emerges here is that women are well aware of their neighbourhood on account of communications that are channelled through the men in a family rather than women themselves. This is because men gather and discuss things much more frequently – in the *kulhi* informally every morning or during meetings of the village council – while the women only have possibilities of chance encounters with each other or when they travel together to gather firewood or visit the weekly market. The apparent contradiction here is important: although women are aware of their neighbourhood they claim not to know much about it. I would further argue that this reticence to share information about their neighbours is not merely a reaction to my status as an outsider but is socially constructed in that women are not expected to know about other houses and families. This contention, however, needs to be qualified in the light both of the sense of dwelling, as an interior space associated with the family, and of Santal beliefs in witchcraft.

I discussed earlier that privacy thresholds within Santal dwellings are structured along kinship. The most private part of the house is the *bhitar*, which is accessible only to the male members of the family (since it is the abode of household and clan spirits and the spirits of deceased ancestors). In general, Santals believe that they co-habit this world with spirits and that places of worship are abodes of the spirits themselves. This idea is evident in many rituals, such as funerals, where the deceased person is invited to take up abode in

³⁷ Personal conversations with D. Hansdah and M. Hansdah in February 2013.

³⁸ This was seen at a girl's engagement in the village when the two women were speaking to each other with considerably familiarity and even visited each other's houses. This degree of conversation is however unusual and took place on account of the event because, as I show later, women do not have many instances of interacting with each other.

the *bhitar* together with other ancestors (Troisi 1979, 193). Additionally, some Santals believe that women are capable of practicing witchcraft and may bring harm to other people in the village.³⁹ That women can become witches to seduce spirits results in a number of taboos concerning women's access and activities in particular places.⁴⁰ The fear of witches and of displeasing the spirits is palpable and became evident in one fieldwork encounter. I had just been introduced to a man who very reluctantly allowed me to enter the verandah of his house. When I asked about the rooms, which were locked, he requested that I don't insist on seeing the room. He feared that if any untoward incident were to occur in the village it may be attributed to my presence in their house and that he will be blamed for it. While he did not explicitly say so, it was evident that an outside female presence was undesirable, since it may upset the spirits in the house who may then cause harm to the village.

It may be useful to briefly discuss how witches cause harm in order to understand the spatial implications on women's mobility and awareness of the *tola*. Troisi (1979, 218) suggests that 'women are, from time to time, regarded as being imbued with strange mysterious powers,' which gives them the power to cause harm. Women are not born as witches but acquire training from a tutor, usually in secret. The important aspect of witchcraft relevant to this discussion is that witches can cause harm from contact but also from a distance, i.e., through long-range influence, which suggests that physical enclosures of the dwelling may not necessarily offer protection against a witch's influence.⁴¹ What physical enclosures can protect from are the adverse effects of an evil eye or bad omens. Witches are often believed to have an evil eye but may also cause other kinds of harm on account of jealousy or hatred (or any other negative sentiment) towards another person in the village. Considered against a background of women claiming to not know much about other families or houses in the *tola*, one may contend that it is the belief in the practice of witchcraft that makes women unwilling to offer information about other houses, since such knowledge about others may be construed as the basis of any mishap that may befall them.

While arguing that the belief in witchcraft appears to limit women's interactions with others and makes them reluctant to appear knowledgeable about their *tola*, it is important to note that this was not a subject that any villager was willing to discuss or admit belief in.

³⁹ For more on witchcraft among Santals, see Troisi (1979, 216-224).

⁴⁰ Troisi (1979, 221) suggests that the seduction of spirits by women is considered dangerous because evil spirits may get seduced and may 'wreck vengeance on their enemies.'

⁴¹ For illustrations, see Troisi (1979, 218-219)

This was seen when I attempted to talk about my limited access to certain spaces such as the *bhitar* or the fact that spaces in Santal houses did not usually have any windows; on such occasions people mentioned that villagers are often afraid of thieves.⁴² On enquiring further, in two instances, village elders mentioned that Santal communities in the past believed in *bhoot-preta* (ghosts and spirits) and so did not build any windows. They did add, however, that such beliefs are in decline in the sense that many Santals no longer believe in such things. What is interesting is that the belief in witchcraft and spirits continues to structure Santal lives and environments and the villagers are not very willing to discuss these with an outsider. However, the facts that women consistently claim to not know much about other families and incidences of women being accused as witches continue to surface give credence to this fear.⁴³ Most importantly for this study, it becomes evident that this influences women's attitude towards and engagements with their environment.

6.6. Conclusion: Exploring women's relationship to dwelling

In this chapter, I outlined Santal women's relationship to the dwelling in terms of activities, mobility and awareness of their environment. These accounts suggest that the dwelling cannot be designated as a singularly gendered and female domain for two reasons. First, even though women's everyday lives are centered on the dwelling and they are not expected to know much beyond their own domestic space, their mobility and engagements extend beyond the dwelling and, in many cases, the village as well. Second, access and thresholds of interaction within the dwelling are not structured only through gender, but more significantly, through kinship and rules of access to ritual locations such as the *bhitar*. In other words, to designate the dwelling as a female domain is to deny the complexity and range of lived experiences that shape the place. One needs to recognize that the dwelling simultaneously shapes and is shaped by social practices, rituals and gender roles in Santal society.

I noted in the beginning that, in architectural studies of traditional environments, dwellings are often characterized by dichotomies such as private and public that map onto social binaries such as gender in an unproblematic manner. What became evident in this chapter, however, is that while the binaries of inside and outside are clearly visible in Santal

⁴² This was a common explanation for the lack of windows in houses. As to the *bhitar*, most people avoided the question and did not respond.

⁴³ One finds reports of women being accused and punished for being witches in local newspapers in Jharkhand, for instance.

houses, thresholds of interaction are contingent upon the social actors and practices in question. For instance, I discussed that the *bhitar* is the most inaccessible and private part of Santal houses. The Santal dwelling may be divided into the *bhitar* as the private realm of the spirits, which is accessible only to the family and selected kin, and the public realm, which is accessible to all others irrespective of gender. However, cooking and eating may be considered as another register of privacy, given that Santals nearly never eat or cook in the open. So, the cooking and eating areas may be considered as another very private part of the house, where no one outside of the family is allowed to enter or participate on account of the fear of witchcraft or someone causing harm to the family through the food. Therefore, in addition to the *bhitar*, the cooking areas form a part of the private realm of the house, except that the rationale for privacy is different. In short, binaries such as private and public are not fixed or static, but are invoked through different forms of practice and by different sets of actors.

The fluid and multivalent privacy thresholds in Santal houses also became evident on account of my gendered presence within Santal dwellings. I noted earlier that my interactions and access to spaces varied depending on the relationship I developed with various informants. Consequently, I was variously allowed to access different degrees of interior space. Some people did not mind my presence in the room where a corner was demarcated as a *bhitar*, and yet, others refused to even let me glance inside certain spaces. These incidences clearly illustrate that notions of privacy and access vary greatly depending on the particularities of interaction between the family members and outsiders like myself. It becomes clear that domestic domains such as private and public are not sharp, pre-existing boundaries, but are temporally established through the practices of Santal men and women.

While recognizing that the dwelling is the intersection of movements and practices of both men and women and of the social and ritual aspects of Santal lives, it is important to reiterate that men and women have different degrees of agency with the dwelling and the village. In simple terms, women's mobility and knowledge is restricted to domestic space, while men are not. Even if one considers the belief in spirits as an important principle structuring people's movements and access to different spaces, it applies more particularly to women. This belief in spirits and witchcraft translates into a gendered spatiality given that it is women's mobility that is curtailed on these grounds. However, as discussed earlier, even these restrictions become apparent through the range of women's activities

and interactions rather than being explicitly and spatially defined, as architectural discourses often suggest. In short, the dwelling is not a container of women's lives but, rather, it is a site where their everyday lives and senses of place are rooted.

7. Structure of settlement and senses of community

7.1. Introduction: Settlement, community and senses of place

In this chapter I examine the changing relationship between settlement and the three Santal communities to explore how distinct groups of people locate themselves within a shared landscape. I particularly focus on the morphology of Santal settlements, which prompts an ethnographic and architectural analysis of the relationship between built forms, topography, access and participation in institutional spaces, and people's perceptions of various social and spatial groupings within the village. The analysis aims to understand how different spatial units (such as *tola* or neighbourhood clusters vis-à-vis groups of proximal dwellings) and social units (such as village and intra-village groups based on administration or ethnicity) emerge and correspond to each other. In the earlier chapters, I discussed conceptions of space and place at the scale of dwellings and looked at transformation of architectural layout, ways of making, ways of inscribing domestic space, and gendered movements and the structuring of spaces. I now broaden the scale to consider Santal settlements as a whole. This whole refers not merely to what lies physically within the administrative boundaries of a village, but more importantly to the set of interrelations that bind groups of villagers to their surroundings, landscape and to each other.¹ Similarly, with regards to people, I shift from a consideration of the movements of individuals to an examination of family, kinship and neighbourhood groupings. In the other words, this chapter explores the correlations between social and spatial ordering of Santal settlements at successive scales such as family with dwellings, kinship with dwelling clusters or *tola* (neighbourhood clusters), and the village community with the village settlement as a whole.

One of the central discussions in phenomenological studies of place, as discussed in previous chapters, pertains to a dialectic relationship between people and place. Casey (1996, 18-19) suggests that places are constituted through people's perceptions, while simultaneously, perception is rooted in specific places and is particular to groups of people who inhabit those places. He outlines the essential traits of places as the following: first, that places are animated by 'lived bodies'. People, i.e., living-moving bodies are the

¹ Villages are located within administrative boundaries defined by the government. These administrative units become the basis for revenue collection, but may have complex social groupings and traditional governance structures that transcend these boundaries.

medium through which places are sensed and dialectically, places need bodies to ‘sustain and vivify’ them (Casey 1996, 21-22). Second, Casey points out that ‘places gather’. Gathering here refers not a physical ‘amassing’ but to ‘having a particular hold over what is presented (as well as represented) in a particular place’ and in this sense, places gather a wide range of things such as people, ideas, memories, histories, languages (Casey 1996, 25). In the presence of someone who belongs to that place, these things become animated (Casey 1996, 25). Third, he argues that ‘even if place does not function as a formally or substantively universal concept, it is nonetheless a concrete and relational general term that contributes to the constitution of an entire region’ and its status in the lives of people is ‘genuinely general, that is, pervasive in its very peculiarity’(Casey 1996, 32). In short, Casey’s discussion highlights how – conceptually and phenomenologically – places and people are related to each other, how places become sites of meaning and association, and finally, how being emplaced in particular ways may become registers for identity for individuals or groups of people under question.

These ideas form the basis of ethnographic methods employed by Feld and Basso (1996, 7) (and the contributors to their edited volume) who discuss ‘detailed cultural processes and practices through which place is rendered meaningful’. Feld and Basso make a strong case for ‘careful, concerned ethnography’ through which meaning and experience may be evoked (Feld and Basso 1996, 7). Other contributors to this volume by Feld and Basso take these ideas further in different ways. Basso’s chapter for instance focuses on ‘the multiple lived relationships that people maintain with places, for it is solely by virtue of these relationships that space acquires meaning’ (Basso 1996, 54). His ethnographic account of a Western Apache landscape focuses on people’s conversations that are laden with metaphors of stories of particular places within the village and the surrounding landscape. What makes Basso’s account particularly interesting is how these stories are brought into conversations in everyday life and serve as lessons or reminders on leading a wiser, smoother, more resilient and steady life (Basso 1996, 75). The location of these stories within the landscape and their being invoked in conversation suggests that ‘knowledge on which wisdom depends is gained from observing different places’ and these Apache relationships with their environment are meshed into everyday living. In another example from the same volume, Blu (1996) explores negotiations of place in multi-community contexts. She suggests that ‘the way socially significant Lumbee places get construed turned out to confound any assumptions that they would be presented primarily as visual

images. Instead, they were visually vague – vital centres with blurry borders’ (Blu 1996, 198). The visual vagueness was further compounded by the fact that the term community was used in multiple ways to variously include Lumbees, other Indians or even ‘Black and White neighbours’ of the Lumbees. Both these ideas resonate with my own fieldwork experiences where notions of community were sensed in my interactions with Santal villagers rather than physically defined or made evident, and were multivalent depending on the context and instances of interaction between different villagers (for instance, whether they were men, women or younger people) and myself. These ideas become central to this chapter for two reasons. First, they raise questions about how one may explore the correlations between social and spatial groups given the multifarious nature of senses of place and second, that spatial definitions may be visually vague. To this end, I have attempted to glean meanings and definitions through practices of everyday life rather than through morphology of the built environment alone.

Compared to the anthropological discourses discussed above, architectural studies on settlements have tended to focus on the form and structure of settlements rather than on place making. This is largely on account of an inherent disciplinary bias of studying built environments rather than people’s associations with those environments. Nonetheless, recent writings on place recognise it as a mental and physical construct and attempt to correlate these two aspects to each other. In focusing on mental constructions of place, Menin (2003, 12) suggests that ‘place is conceived through a process in which something of oneself, one’s beliefs or values, is ascribed to a setting one inhabits’. She (and the other contributors to the volume) then explores place as evoked through the physical construct of buildings by ‘teasing out from the physical place, the creative intent (be it philosophical, psychological or artistic) of the architect, and the deep layers of character and meaning in the buildings’ (Menin 2003, 26). Menin’s work is note-worthy within architectural discourses of place since it considers both places evoked through people and their lives in various settings and architectural works and their potential to create places.² A main point of divergence with this study, however, is the persistent conceptual divide between the mental and the material and the implication that they may be different epistemological operations in discussing senses of place. What I explore in this chapter is how social units

² In saying this, I compare Menin’s work with Christian Norberg-Schulz, for instance, who is renowned for his interpretations of Heidegger’s writings and for propagating a phenomenology of architecture. As Haddad points out however, Norberg-Schulz’s writings on place and *genius loci* presume – rather than critically examine and thereby realize – attributes of places in different built environments.

emerge and are bound by spatial configuration and proximity and conversely, how senses of place emerge through people's practices. So rather than considering the social and the spatial as conceptually divided, they are considered as inextricably intertwined and evident only in relation to each other.

7.1.1. Data and methodology

Given the phenomenological focus of how people are emplaced within a landscape, I examine the physical layout of the settlement together with everyday practices and oral narratives that suggest senses of belonging and the relations of social groups to places. I pay particular attention to people's descriptions of movement and access to places, suggestions of what constitutes being inside or outside, particular places such as neighbourhoods, and various place names. This methodological focus relates to the point raised earlier about the social and spatial aspects of the notion of place being considered as analytically intertwined rather than as discrete areas of enquiry. The larger aim is that these different narratives overlap to produce senses of settlement and community that are not always visually or formally evident or neatly geographically bounded, yet, are embedded in people's everyday lives and generate structures for these. This focus is not necessarily new given that the earlier chapters have similarly explored places, practices and perceptions in conjunction with each other to produce narratives about Santal conceptions of space. The key shift in this chapter is of scale. So the methodological emphasis of earlier chapters now comes into play in relation to the settlement as a whole, which as I discussed earlier, is concerned with different social groupings and their relationships to spatial units such as *tola* and the village settlement.

In terms of the methodological similarity between earlier chapters and this one, two points of interest are the scope of enquiry and the content of this chapter. While the built forms and everyday practices at the level of the dwelling pertained largely to the domestic sphere, at the level of the settlement the issues are of community and take on a distinct socio-political turn. I discussed in an earlier chapter that on account of my gendered presence in the field, I developed an empathetic relationship with women in the case study villages. This led to greater interaction with them and to more detailed ethnographies of domestic work both of which were primarily women's responsibilities. In documenting the settlement, however, I asked questions about issues such as land division, institutions and the sacred geography of the village all of which are male domains of knowledge.

Consequently, I had some conversations about everyday practices at the settlement level, the distribution of land and other resources and specifics concerning religious practice. While these insights are not as detailed as the ethnographies of domestic life and place, when supplemented with other forms of mapping they help understand some aspects of the correlations of community and structure of the built environment. The other forms of mapping mentioned here refer to two things – architectural documentation of Santal settlements and satellite images of the case study villages.³ These processes of documentation build a picture of the morphology of the village. An understanding of the physical form of the village becomes vitally important for understanding the spatial settings of activities and people's associations, and by extension, of how they locate and see themselves within the landscape. In short, documentation of the physical structure of the village settlement and conversations with men and women about places and practices beyond the dwelling are both considered and correlated to each other in this chapter.

In addition to the above-mentioned processes of documentation, during fieldwork, I was explicitly interested in what places villagers considered important within the village and why. With the idea of generating such information, I employed a number of participatory visual methods during fieldwork. These included guided photography, drawings of houses and the village by children and a public display of my architectural drawings and photographs in the village. While the participatory methods and the analysis of the visual material are detailed in the next chapter, I refer to these engagements and materials in some places in this chapter. This is because the participatory material usefully supplements both the oral narratives and architectural documentation of the village with particularities of what people consider important, or, in the case of children's drawings, how they see the elements and ordering of the village settlement.

7.2. Morphology of settlement

I begin by describing the morphology of the case study settlements before moving onto the processes of settlement and the social and spatial units that comprise the three case study villages and the communities. Santal villages are typically linear in layout with houses located on either side of the *kulhi* (central street). Houses located in proximity to each other comprise *tolas* (neighbourhoods) and villages usually have more than one *tola*. For

³ A detailed field study of Devghar – a Santal village near my case study sites - was done with a group of students from the Faculty of Architecture, CEPT University, Ahmedabad in India under the auspices of their academic Related Study Program. I am grateful to the Faculty of Architecture, CEPT University, for allowing me to use the architectural drawings produced during the program.

instance, Bada Bandua village has three *tolas* (Bada Bandua, Bhegnadih and Saloidih), Bhagabandh has four *tolas* (Jahira Tola, Mahato Tola, Shankardih, and Dangar Kulhi) and Chauda has four *tolas* (Jahira Tola, Baru Tola, Bulin Tola and Achut Tola) (Fig.7-1). Within one village, the same *kulhi* winds through the different *tola*. The *tola* and the *kulhi* are important organising elements within the settlement and, as I discuss later, through place names, they become synonymous with a notion of settlement itself.

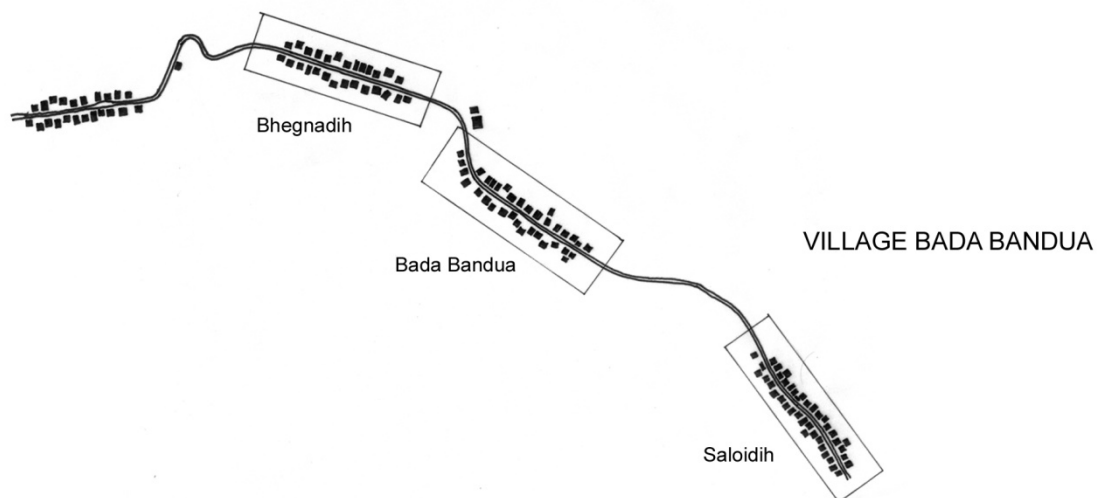
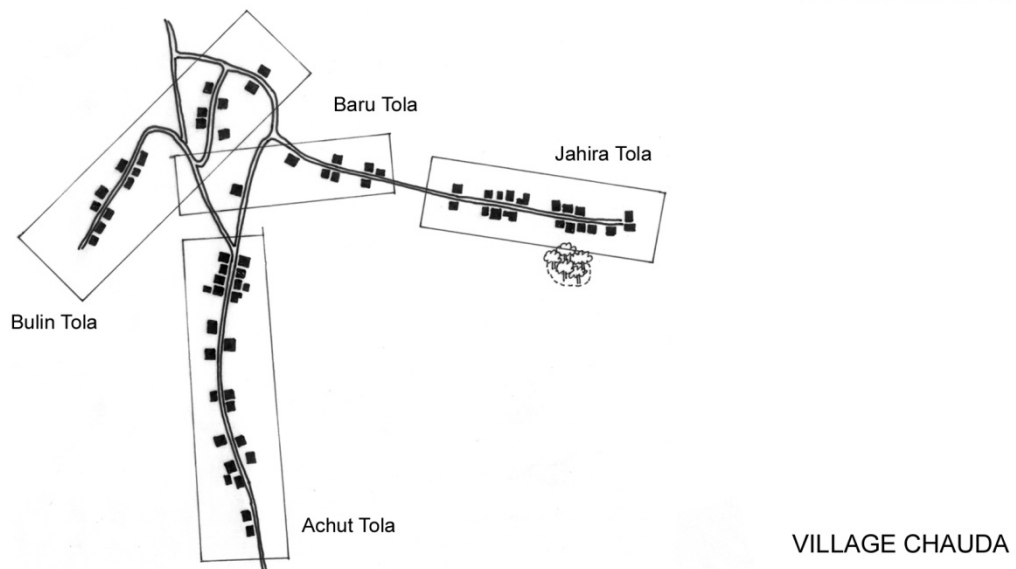
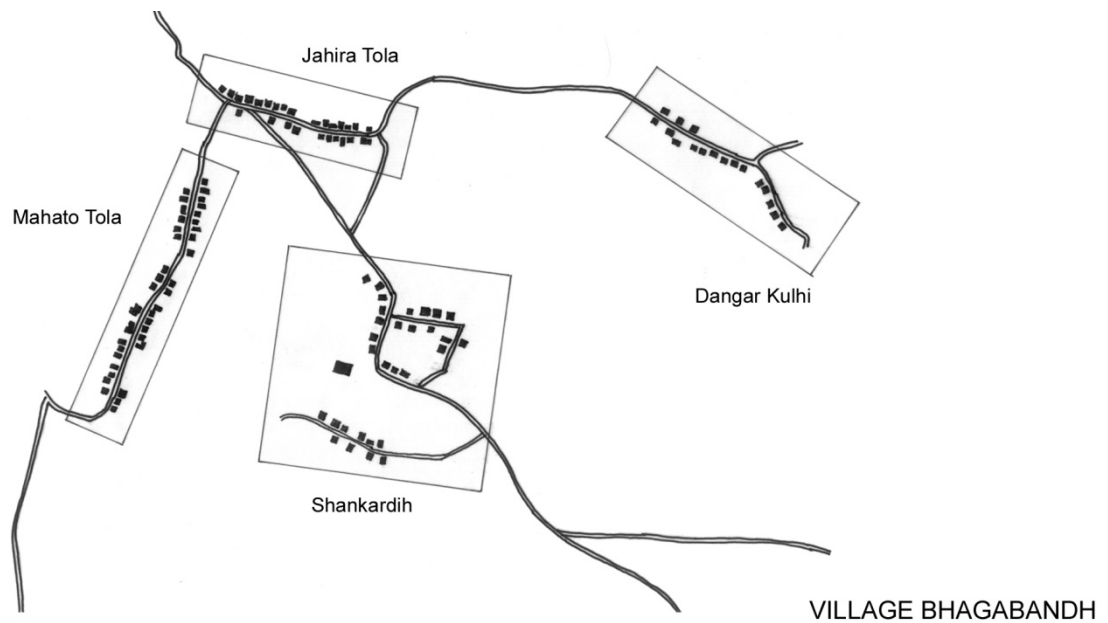


Figure 7-1: Different *tola* in case study villages. Note the *kulhi* winding through the settlements.

Linear geometry is a distinct characteristic of Santal settlements and requires further discussion since other Adivasi and non-Adivasi rural communities in the region have clustered rather than linear layouts.⁴ Some other communities such as Mundas also have linear geometry at the level of the *tola* but the *kulhi* may not be a single straight line. One *kulhi* may fork into two and two or more *kulhi* may intersect each other at various points within the village. In Santal settlements however the linearity of the *kulhi* is strictly adhered to and one does not find any branching or intersecting *kulhi*. This pattern may be accounted for by looking at the land ownership of the homestead plots among Santals.⁵ Each family in Santal villages typically owns a stretch of land extending from the *kulhi* to some limit beyond their houses and backyards.⁶ Considering a transverse section through a family's land, one finds the *kulhi* at one end, followed by the house, the *barge* (backyard) and a stretch of land covered in trees (Fig.7-2). Beyond the stretch of trees usually lies the agricultural land.⁷ With this distribution and sequence of spaces, it become imperative for every dwelling to be located adjacent to each other in order that they may all have similar access to the *kulhi*.⁸ In the case of intersecting or branching *kulhi*, the corner houses will have truncated *barge* and may not have spaces that extend beyond the *barge*. The point here is that the linear form of Santal settlements rather than being the primary intention, may have emerged on account of the system of land ownership and in the importance given to dwellings – and therefore families - having direct access to the *kulhi*.

⁴ Clustered refers to a settlement organized along a branched street network as compared to Santal settlements that are organised along a single central *kulhi*.

⁵ Homestead plot refers to the plot of land on which the house is built together with the *barge* (backyard) space. Families may also own agricultural land elsewhere within the village precinct.

⁶ The precise extents of land ownership could not be determined as it lay somewhere beyond the backyard. People usually mentioned that families owned land extending from the *kulhi* and then beyond the backyard of the house. No precise markers or any signs of boundary were visible.

⁷ In the case study villages, depending upon the population densities the number of houses and the pressures on agricultural land, the extent of tree cover beyond the *barge* varied. Bada Bandua had houses built very close together and the surrounding areas had been converted into agricultural land to the maximum extent possible. Consequently, the agricultural land extended up to the *barge* in some cases. In Bhagabandh, a different condition was seen. A road was constructed behind Jahira Tola and formed the edge of people's properties. So trees occupied whatever space existed between the *barge* and the road.

⁸ The importance of Santal dwellings being directly connected to the *kulhi* is discussed in Chapter 5 - 'Inscribing domestic spaces.' I discussed the ritual practices associated with the entrance to Santal houses and how families were particular about a direct physical connection between the *kulhi* and the dwelling.

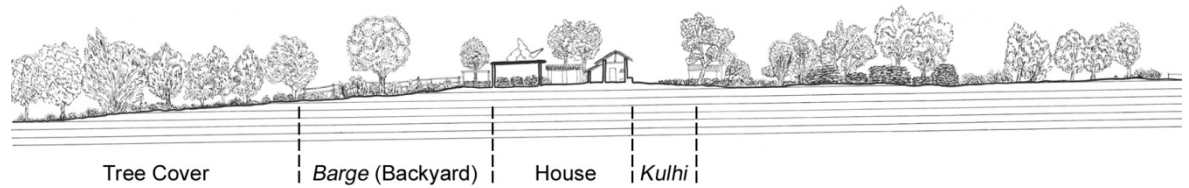


Figure 7-2: Section showing the land owned by a family

While discussing the morphology of the village settlements, the relationship between dwellings, agricultural land and forests must also be explored. In terms of spatial distribution, agricultural land is not attached to homestead plots and families may have plots of land located in different places within the village precinct (Fig.7-3). In villages that have more than one *tola* (neighbourhood) agricultural land is spread across the village and families from one *tola* may own land located near another *tola*. In other words, the spatial distribution of agricultural land does not correspond to the spatial and social groupings of the *tolas*. One may argue that this spatial distribution of agriculture land and the senses of community that emerge are discussed further when discussing the relationship between settlement and topography and the notions of boundary of the village.

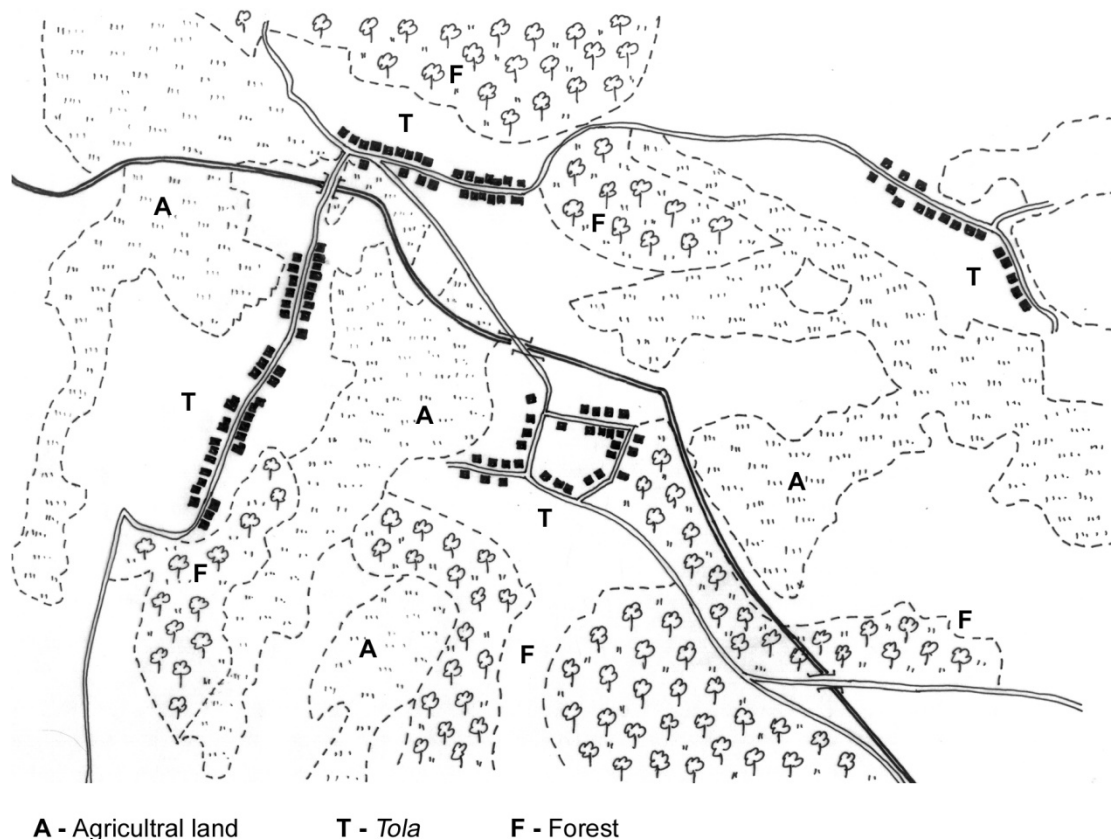


Figure 7-3: Settlement level plan of Bhagabandh showing location of dwelling units (marked in black) vis-à-vis forests and agricultural land

The linear structure of the settlement described above is closely linked to the nature of the topography in the Singhbhum region at large. The landscape of Singhbhum is a gently undulating one comprising elongated ridges on which the villages are typically located. Within this landscape the *kulhi* and dwellings are located on such ridges while paddy terraces are cut according to the natural slopes of the land to ensure the flow of water and flooding of the fields. The higher elevation is required for the dwelling areas since Singhbhum is a high rainfall region and the mud dwellings need to be protected from the natural flow of water.⁹ Dampness is a serious concern for Santal dwellings as was seen in the case of Chauda, where the entire village shifted from a lower to a higher location nearby. Villagers mentioned that in the past the walls of their houses became damp and this led to an unhealthy living space. The village then decided to shift the entire *kulhi* elsewhere. The older *kulhi* is visible as a trace in satellite images of the surroundings of the village (Fig.7-4). Along the length of the *kulhi*, the highest point lies somewhere in the middle while land begins to slope downwards towards the two ends (Fig.7-5). Similarly, considering a transverse section through the *kulhi* and the dwelling, one finds that the *kulhi* and dwelling are elevated as compared to the *barge* or the thickets of trees or agricultural land beyond. I now explore the significance of the higher elevation of the *kulhi* in relation to memories of settling the village in the past and it becomes clear that location within a landscape is not just a matter of functional logic but a process that permeates Santal senses of settlement more broadly. As such, the relationship between topography and settling begins to reveal itself as an important theme within Santal senses of place.

⁹ Personal conversation with R.Tudu (former *manjhi* [headman] of Chauda village) in March 2013.

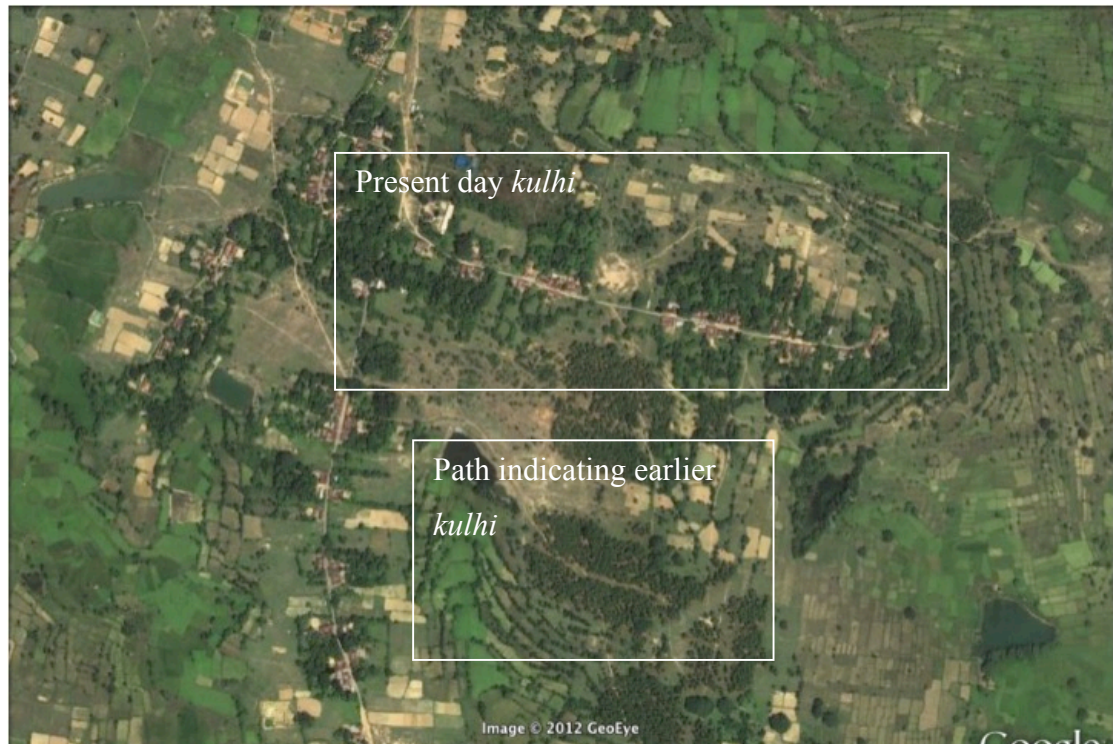


Figure 7-4: Satellite image showing present-day *kulhi* and the older abandoned *kulhi* in Chauda

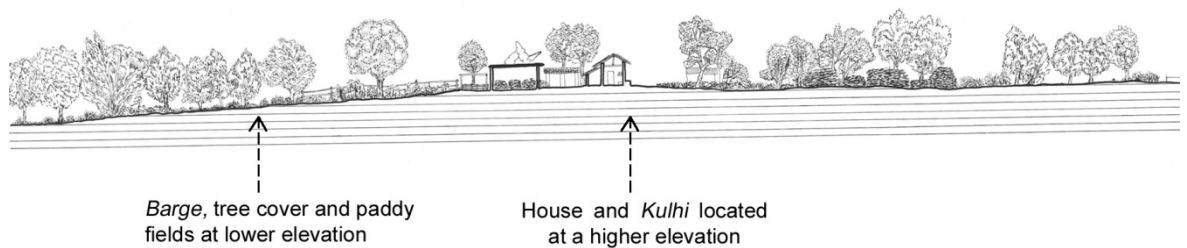


Figure 7-5: Section through the *kulhi* in Devghar village. Note the slope of the land, which suggests that the *kulhi* and houses are built on a higher elevation as compared to the surrounding landscape.

7.2.1. Establishment of village

According to villagers, in the past groups of men or families set out to find a place to settle and after due ritual processes, identified the location to establish a village.¹⁰ If a place was found to be satisfactory i.e. good omens were observed, then the group decided to settle there.¹¹ The leader of the group typically built the first house and became the *manjhi* (headman) of the village (Bodding 1940, 430). The *kulhi* was cleared in the middle of the site that is selected for the village and a *jahira* is established near the *kulhi* (Bodding 1940,

¹⁰ It must be mentioned here that in the case study villages, there were no recent memories of villages being newly settled. The processes discussed here refer possibly to the nineteenth century when Santals and other Adivasi groups were relatively mobile and then, as discussed in the earlier chapters, since the mid-nineteenth century, these communities in general began to be sedentarised.

¹¹ For rituals associated with the settling of a village, see Bodding 1940, 429-430.

430). This was done through a ritual process involving the priest who invites *bongas* (spirits) to take up residence at a location of their choice, which then becomes the *jahira*.¹² A *manjhithan* was established in front of the *manjhi*'s house and other members of the founding group or new families occupied locations along the *kulhi* and built their houses (Bodding 1940, 430-431). When the present day morphology of villages is juxtaposed on the broad sequence of events described above, it becomes evident that the early settlers first located themselves at the highest point in the landscape. Further, the *manjhi*'s house - together with the houses of the other founders of the village - were among the first houses to be built in the course of settling the village.¹³ In the villages today, one may observe that the *manjhi*'s house is typically located at the highest point of the *kulhi*, which slopes down from that point onwards.¹⁴ The correlation between higher elevations and the act of settling a village is underscored by the use of the term Upor Tola (*upor* meaning higher and *tola* referring to the cluster) to refer to the area around the *manjhi*'s house. Upor Tola is also understood to imply the oldest part of a village. I discuss the senses of place evoked by place names later in this chapter but it suffices to underscore here that higher locations within the landscape were places of functional and ritual significance, and this significance has been reflected in the establishment of the village. The commemoration of the location is another important facet, through which terms of reference for the site and its original settlement were invoked.

It is important to mention here that the elevated location of the *manjhi*'s house is common to villages of other Adivasi communities as well. For instance, in Bada Bandua, the *manjhi* of the village is a Munda and the cluster around his house is referred to as the Upor Tola as well. What distinguishes Santals however is that the settling of the village is further commemorated through the *manjhithan*. The *manjhithan* is one of the most important locations in the village and is a shrine dedicated to ancestral headman i.e. ancestors of the *manjhi*'s lineage and is located in front of the *manjhi*'s house on the *kulhi* (Fig.7-6).¹⁵ The position of the *manjhi* (headman) is hereditary, i.e. it continues along the male line of first

¹² This was done through men who went into a trance and were believed to speak the wishes of *bongas* in that state (Bodding 1940, 430).

¹³ Bodding (1940, 430) mentions that, when a site had been selected as appropriate for settling, the men first put up a small shelter to mark the house of their leader, who would become the *manjhi* of the village.

¹⁴ This is true for most rather than all villages, given that the *manjhi*'s house is the first location to be decided in the village (see footnote #18). However, through time, successive *manjis* may not belong to the same lineage and may therefore have houses in other locations in the village. This was encountered, for instance, in Bangoda, where the *manjhi* had changed and his house was located at a lower point in the *kulhi*.

¹⁵ This was underscored by responses during the village display, where together with the *Jahira*, the *manjhithan* was pointed out as one of the most important locations within the village.

manjhi of the village. Given these circumstances, two attributes of the *manjhithan* are that it is located at higher elevation together with the *manjhi*'s house, and second, that if subsequent generations of *manjhis* belonged to the same family and occupied the same house, then the *manjhithan* may remain at the same location as well.



Figure 7-6: Manjhithan in different villages

In some villages, however, it was evident that the *manjhithan* was not at a high elevation. In Chauda, for instance, the *manjhithan* had been intentionally shifted to a location that was more central in relation to the different *tola* of the village. The new location was adjacent to a large ground rather than to any house to allow people to gather for community level ritual activities (Fig.7-7). In another village Bangoda, the community elected a new *manjhi* from a different lineage in place of the person who inherited the position from his father and ancestral kin. Consequently, the *manjhithan* was shifted to the front of the new *manjhi*'s house, which lay somewhere along the *kulhi* rather than at the highest point. In Bada Bandua village, there was a sizeable population of Santals who lived together with Mundas and Gops but there was no *manjhithan* in the village. This is because the original settlers were Mundas who claim that they invited Santals to settle in their

midst.¹⁶ In recent years, Santals have appointed their own *manjhi* in addition to the Munda *manjhi* of the village and have also established their own *Jahira*. They have not, however, established a *manjhithan* on account of the fact that they are not the first people to settle in that place.¹⁷ These narratives suggest that both the act of settling of the village in the past, and the lineage of the founding families, i.e. the ancestors of the *manjhi*, are enshrined through the *manjhithan*. However, the act of settling is commemorated only if Santal families were the first to settle at a particular location rather than being later migrants. Also, given that the *manjhithan* shifts with the appointment of a *manjhi* from a different lineage, one may argue that it marks the protective influence of the ancestors of the incumbent *manjhi* rather than the founding lineage in particular. This point about the ritual significance of the *manjhithan* acquires further importance when I discuss its influence on ritual practice and modes of behaviour in the *kulhi* and therefore in the neighbourhood.



Figure 7-7: *Manjhithan* in Chauda. Note its location near an open field, which is because it was shifted from its original location near the *manjhi*'s house.

Based on the discussion above, it is interesting to note that the *manjhithan*, as a register of establishing a connection with a place and with the past, is very different to Munda registers of belonging. Munda villages have a place known as *sasan dhiri* where the bones

¹⁶ According an elderly person in the village, Mundas were themselves later migrants and the village had originally been settled by Ho people. The politics of original settlers vis-à-vis later migrants is discussed later in terms of its impact on senses of settlement and community.

¹⁷ Orans (1958, 422-445) makes a similar point regarding Santal families living in urban areas and occupying housing provided by their employers. In such cases, he found that Santal families did not designate a space as a *bhitari* since they were not sure of the spirits who may have resided in those houses in the past. One may argue that the act of settling and invoking the protection of spirits and ancestors is only done when a community settles in a place that was previously unoccupied.

of deceased members from a particular lineage are buried (Fig.7-8). The *sasan dhiri* comprises large slabs of stone below which the bones are buried. *Sasan dhiri* may be of two kinds – a large place with a number of stones and bones of many members of a particular lineage buried there, or a single stone placed at the entrance of individual Munda houses where bones of an immediately deceased member are buried.¹⁸ The collective *sasan dhiri* particularly becomes an important point of connection and reference for belonging to a place on account of the fact that subsequent generations of Mundas may be buried there.¹⁹ In comparison, Santal ways of establishing a connection with a place are primarily premised on the successful invocation of the protective influence of spirits and deceased ancestors, and having access to the shrines where the spirits are believed to reside. This point is developed further when I discuss spatial definitions of *tola*-level community through the idea of protective spirit domains.



Figure 7-8: View *Sasan dhiri* in Bada Bandua

In saying that Santal senses of place may be premised on being able to invoke the protective influence of spirits, it is useful to elaborate on an earlier point about Santals not establishing shrines at places that have been previously settled in by some other community. This was the case in Bada Bandua where Santal members of the village built

¹⁸ It is important to note here that lineage among Mundas is traced in the male line but belonging is premised on birth. So Munda women continue to belong to their father's lineage even after marriage. In case of death, the body is cremated but the bones returned to the paternal village to be buried in the *sasan dhiri* there. This is very different from Santals where belonging to a lineage depends upon the relationship to male relatives; so Santal women belong to the father's lineage while single, and then to the husband's lineage after marriage. Unlike the Mundas where women remain connected to the paternal *sasan dhiri*, married Santal women do not have access to the *bhitar* in their father's house. Personal conversation with D. Hansdah in July 2013.

¹⁹ According to D. Hansdah, Mundas assert their right to land on account this fact of burial i.e. they claim belonging to a particular place given that many generations of their ancestors are buried at such *sasan dhiri*. Personal conversation in July 2013.

their own *jahira* but not a *manjhithan*. I suggested that this was on account of a fear of other spirits who may be residing there and who may or may not be benevolent towards the new settlers. This idea resonated with stories of people's movements and settling of villages that were shared by a number of villagers during fieldwork. One of the most common terms people used to describe settling in a place was that it 'suited' the families.²⁰ In Bada Bandua for instance, people remember that Hos as being the first settlers of the village.²¹ The *devi* (goddess worshipped in the *devisthal* or the most important shrine in the village) did not suit the Hos. They all eventually left the village and Munda families gradually moved in. That the *devi* is protective towards Mundas is expressed through incidences such as an attack by a colonial official in the past who came on horseback with a battalion of soldiers. As the officer tried to enter the village precinct, he was thrown off his horseback and the villagers believe it was the *devi* who made this happen in order to protect them.²² Similarly, in two other villages that have only Santal families as residents, villagers believe that the village does not suit people from other communities.²³ In both cases they mentioned that when people from other communities tried to settle in this village, they were warned away by an old man who troubled them in their dreams.²⁴ It is interesting to note here that different communities mark their connections to place in different ways as discussed earlier but invoke divine sanction as legitimising their presence in a particular location on one hand and the absence of other communities on the other.

7.2.2. Place names and senses of place

Through this discussion on histories of settling in a particular place, I have attempted to establish the significance of the memory of settling, and how the act is commemorated and becomes a register for attachment with a particular place. Another dimension of attachments with places is seen in names of places and terms of description used by people. I discussed earlier that a higher elevation within a landscape was first settled and that it is not just a functional decision but a gestures of positioning oneself within a

²⁰ The fieldwork conversations typically took place in Hindi, but people used the English word 'suit' to describe people's affiliations to places they settled in.

²¹ In personal conversation with two village elders in Bada Bandua in March 2013. They showed me large memorial stones in one location and suggested that these were left behind by Ho people. This is likely since Hos are known for having a megalithic culture, at least in the past (Sen 2012, 35).

²² Personal conversation with elderly Munda villager in Bada Bandua in March 2013.

²³ In personal conversations with D. Soren in Kacha in July 2012 and R. Tudu in Chauda in March 2013.

²⁴ In narrating these beliefs, villagers mentioned that they could not precisely identify what these powers were or why others could not settle in particular places; in fact, they maintained that there was something inexplicable about such incidences. Personal conversation with R. Tudu in Chauda in January 2012 and D. Soren in Kacha in March 2012.

landscape more fundamentally. This is seen in names for settlements that are usually suffixed with ‘-dih’, which literally means elevated place within a landscape.²⁵ This resonates with the use of the term *dhipa* for a small elevated mud platforms built as a place of worship in some houses.²⁶ *Dhipa* is synonymous with *dih* and both refer to elevated places.²⁷ That these terms – ‘-dih’ and ‘*dhipa*’ are synonymous may suggest a possible correlation between elevated place, senses of sacred place and notions of settlement more broadly.

Place names reveal other associations of people and their environments in that villages were often named in terms of particularities of the natural environment around the village. In Bhagabandh for instance, the four *tolas* are named Jahira Tola, Dangarkulhi, Mahato Tola and Shankardih. Jahira Tola is the oldest and is so named on account of its proximity to the *jahira*, while Mahato Tola is the neighbourhood of Mahatos. Dangarkulhi takes its name from a large number of *dangar* (tamarind) trees in the area while Shankardih refers to the place where people who worship Lord Shankar have settled.²⁸ In Bada Bandua village the two *tolas* of Bhegnadih and Saloidih take their names from *bhegna* and *saloi* trees that were found in large numbers in the region respectively.²⁹ Bada Bandua itself gets its name from a myth about a magical tree. In the story, a woman was carrying fish as lunch for her husband working in the fields. On the way, it began to rain heavily. She took shelter under a *bandua* tree and drops of water from the tree fell into the basket with the fish. When the woman reached the fields and opened the basket, she found that the fish had come alive because of the water that fell from the tree. The village gets its name from the miraculous Bandua tree.³⁰ As Basso (1996, 57) suggests, such stories and place names give a sense of the ‘textures of association’ between people and the places they belong to or are settled in. What is particularly interesting is that characteristics or mythic associations with the natural environment particularly find their way into place names. The recurring references to trees for instance resonates with a point I raised in an earlier chapter where

²⁵ Personal conversation with D. Hansdah in July 2013.

²⁶ This was revealed in a response to a display photograph at the end of my fieldwork in Chauda. Speaking about an image of a small mud platform with vermillion dot, a villager mentioned that the platform was known as *dhipa* and it was a place for worship. Personal conversation during village exhibition in Chauda in March 2013.

²⁷ Personal conversation with D. Hansdah in July 2013.

²⁸ Personal conversation with P.C. Mahato and B. Hansdah in February 2013.

²⁹ Personal conversation with village elder in Bada Bandua in March 2013.

³⁰ Personal conversation with village elder in Bada Bandua in March 2013.

floral motifs and the relationship of Santals (and other Adivasis) with the natural environment was marked out as an important dimension of their sense of place.

While names for villages are constant and mythologized as discussed above, the names for particular *tolas* vary in everyday usage. The case of Bhagabandh serves to illustrate this. Jahira Tola is the oldest *tola* in Bhagabandh and the *manjhi*'s house has remained there for generations. Since villages were founded on higher locations, the Jahira Tola lies at a higher elevation and is referred to as Upor Tola by the residents. What is worth noting is that there are a number of other names to describe this *tola*. In addition to being called Jahira Tola and Upor Tola, it was also known as Manjhi Tola in reference to the headman whose ancestors had first settled the village, or Murmu Tola in reference to the lineage of the headman.³¹ Further, the suffix of *tola* was used interchangeably with *-kulhi* referring to the central street, or *-basti* referring to the Hindi term for settlement. So Jahira Tola was variously referred to as Jahira Basti, Manjhi Kulhi and Upor Kulhi among other things. Similarly, Dangar Kulhi is referred to as Dangar Tola or Dangar Basti by the villagers. These varying names point to two things. First, the inter-changeability of the terms *tola* (neighbourhood), *kulhi* (street) and *basti* (settlement) suggest that these may be conceptually synonymous. In other words, the central street, the neighbourhood and the act of a group of people settling (through the term *basti*) are all suggestive of similar senses of settlement. Second, one may argue that attributes of places or some memories of the early days of settling become embedded in terms of reference for places and this serves to articulate and perpetuate particular relationships between people and the places they live in. What is important to note here is that through the varying terms used to denote the oldest part of the settlement i.e. the Jahira Tola, the act of settling the village remains within active recall and informs Santal senses of place even today.

7.3. Dwelling clusters and social groupings

Having discussed the establishment of a village and relationships to the environment as suggested through commemorations of the past and place names, I now explore the *tola* and its constituent parts as social and spatial groups. I suggested earlier that a village comprises different *tolas* located along a single *kulhi*. Each *tola* comprises houses that are located closer to one another and physically suggest a cluster. Within each *tola* however, further sub-groups of houses may be distinguished. What I attempt to explicate now is how

³¹ These different terms were noted in the course of fieldwork conversations in February 2013.

these sub-groups, and therefore social groups, emerge and become important units within the *tola*. I then move on to discuss the *tola* as a social group that emerges through shared significances and practices in the *kulhi*. This discussion is conducted through two sets of information. First, I compare the morphology of the three case study settlements that have different building densities and different evidences for identifying groups and sub-groups, and second, I examine oral narratives about expansion and division of houses across generations through which clusters of residences develop along the *kulhi*. Both of these sets of information help understand the formation of social groupings, on one hand, and how they may be registered through architectural forms and everyday practices on the other.

In comparing building densities, it is evident from mapping the Jahira Tola in the case study villages that Chauda has the lowest building density while Bada Bandua has the highest (Fig.7-9).³² Jahira Tola in Chauda has fewer houses that are located at considerable distances from each other while Bada Bandua has a much larger number of houses located in proximity to each other. Looking at present day examples of sub-division of houses and property within a family provides some insight into how building densities increase. In Chauda for instance, three brothers lived together in one house and at some point in the past, one brother built his own house next door. Of the two brothers that continue to live together, one has grown-up children and in anticipation of them getting married and requiring more space, the other brother decided to build his own house. What was in the past a single house located on a large stretch of land along the *kulhi* is now three houses built adjacent to each other. Bhagabandh presents a different case with an empty stretch of land in the middle of the *kulhi* where all other houses are built adjacent to each other. The empty stretch and house adjacent to it all belong to the same family comprising an elderly man and his two married sons. However, the man and his older son are now deceased and the younger son occupies the house. With no other male members of the family, the need to subdivide the land and build more houses does not arise and consequently, the stretch of land along the *kulhi* remains unoccupied. What these narratives importantly suggest is the manner in which dwelling clusters emerge along the *kulhi*. Rather than houses being built next to each other from a centre (which may be the *manjhi*'s house or cluster of houses first built) towards peripheries (which may be the ends

³² I compare the Jahira Tola in each case since it is the oldest part of the settlement as I discussed earlier. Building density here refers to the number of houses located along the *kulhi*.

of the *kulhi* as evident today), large tracts of the land are divided and occupied by families across the length of the *kulhi*. In the initial days of settlement, houses may have been located on these stretches of land and may be distant from each other. As families grew, the plots were internally subdivided and more houses built. Over time, the *kulhi* develops continuous rows of houses on either side as one sees in the villages today. What this pattern of growth also suggests is that groups of adjacent houses belong to families belonging to the same lineage, i.e. they may share the same last name.³³ For instance, one may find a group of houses all having the last name of Murmu and the people in the houses also referring to each other as belonging to the same family.³⁴ Putting the pattern of growth and familial relationships together, I argue that these groups of dwellings form important social units within the fabric of the *tola*.

³³ According to myth, all Santals trace their ancestry to seven septs or clans who are believed to have descended from seven siblings of a mythical ancestral couple Pilchu Hiram and Pilchu Budhi. Each clan has a totemic animal that they do not harm. Members of the sept all carry the same last name and do not intermarry. Troisi 1979, 28-29.

³⁴ For instance, women in one house may refer to a man in the other house as their uncle-in-law i.e. their father-in-law's brother. While these relations were never made explicit, one may construe on the basis of the pattern of growth and subdivision of families and property that neighbouring families may be related to each other through siblings in earlier generations. Personal conversation with A. Murmu in March 2013.

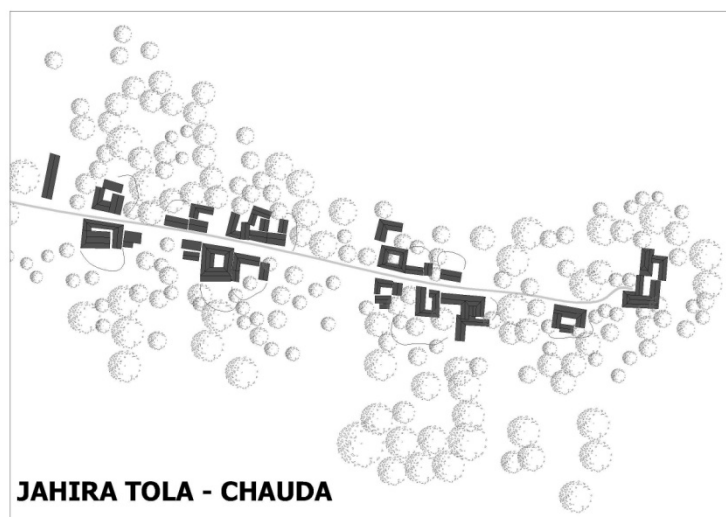
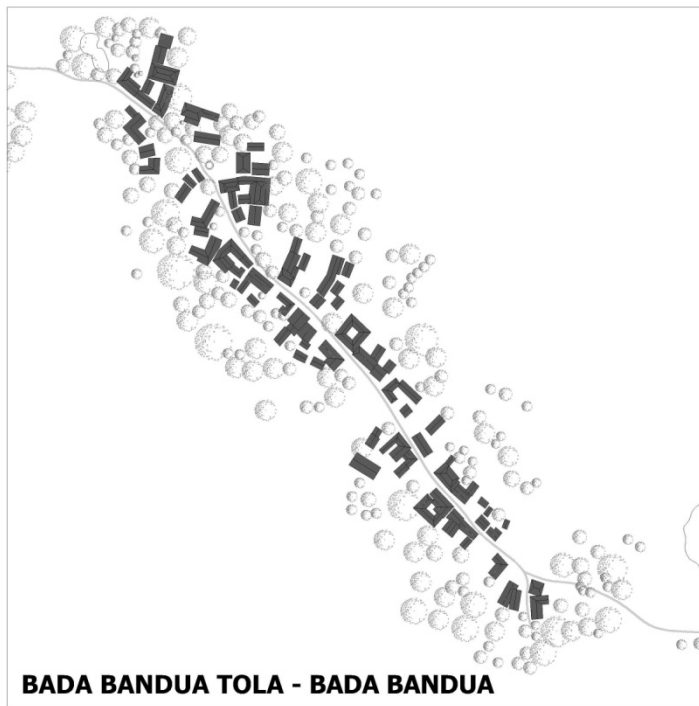


Figure 7-9: Comparing building densities of Bada Bandua and Chauda. Note the houses in Chauda are further apart from each other as compared to Bada Bandua.

The significance of dwelling clusters as social groupings within the *tola* is evident in that they become spheres of everyday interaction, particularly for women and children. This is seen in Chauda where children playing outside their homes appeared to not know or interact with children living further down the same *tola*.³⁵ This is particularly intriguing given that unlike women who, as I discussed in the previous chapter, had limited mobility in everyday life, children did not have restrictions on their movements. They roamed around the entire village and walked past each other's houses on their way to school. So when children claimed to only play with other children from the immediate vicinity of their own homes and not with children who lived within their own *tola* but a little further away, one may argue that sub-groups of dwellings within the *tola* become arenas for interaction and form social sub-groupings within the *tola* as a whole. The dwelling sub-groups and the *tola* appear to form successive and concentric social and spatial groups, with the lineage level clusters as spheres of everyday interactions while the *tola* becomes a community on account of the practices on the *kulhi*.

That *tolas* are important social-spatial units within the village and the community is underscored by drawings of the villages made by children.³⁶ For instance, when children have drawn the entire village or picked a view that shows more than one house, the *kulhi* is the key organising element in the drawing and all the other elements of the drawing are positioned in relation to the *kulhi*. In one example, bends in the *kulhi* have been made to indicate different *tolas* and in each bent segment, the child artist has written the name of one of the *tolas* in the village (Fig.7-10). Given that children invent 'pictorial equivalents' or 'structurally adequate forms which can stand for a complex object' one may argue that in these drawings, the child artist demarcates and labels segments of the street to indicate *tola* (Golomb 1993, 14). This reading of children's drawings underscores the proposition

³⁵ This difference in children's interactions was observed in the course of a participatory research method where I asked children to make drawings about their environment. In distributing paper and drawing material, children would not gather at one place and I had to typically move from one group of dwellings to another to hand out the material. When I asked the children why they did not come together in one place, they replied that they did not know or interact with the other children. This was surprising since the groups of houses where the children played were located less than a hundred meters from each other and children in these villages are used to travelling great distances across the landscape to various parts of the village. Personal conversations with children in Chauda in March 2013.

³⁶ These drawings were made as part of a participatory visual method used during fieldwork where I asked children to make images of their house and/ or village. The instructions were intentionally broad to allow children to interpret and draw what they considered as constitutive of the house and village, and things they considered important in their environment. Not all children made drawings that distinguished *tolas* but some drawings clearly did so. It is those drawings that I discuss here.

I now develop this idea by examining other aspects of physical structure such as direct access between *kulhi* and dwelling and other practices pertaining to the *kulhi*.

Before moving on, however, it is useful to reiterate a point about the significance of the *kulhi* varying across Adivasi communities. In an earlier chapter, I discussed the practice of plastering the *kulhi racha* across the case study sites and suggested that the frequency of plastering and the regular maintenance of the *kulhi* as a shared space was characteristic of Santal communities alone. When Santals lived together with other Adivasi and non-Adivasi families some of the key traits of Santal settlements, i.e. house being directly accessible from the *kulhi*, orderliness of dwelling layouts in terms of orthogonal organisation of *kulhi racha*, courtyard, rooms and backyard, and plastering of *kulhi* on a regular basis, are modified or no longer present. In Bada Bandua for instance, a few houses are located behind each other and women plaster only a small area demarcating their *kulhi racha* rather than their entire street as is the practice in other villages such as Bhagabandh. On the basis of such differences, one may argue that the *kulhi* as a collective space is an important notion among Santals and is expressed in the manner in which individual houses physically relate to the spaces and the practices and taboos that underscore its particular significance for Santal communities.

Given that the *kulhi* is understood as a public place, the layout of the house is such that each family has direct access. Each family owns a strip of land starting from the *kulhi* and extending to a fixed point beyond and the house is built near the *kulhi* end of this strip. In other words, the homestead plot owned by each family is linked to the *kulhi* and therefore the houses built on these plots are linked as well. It is important to distinguish between the two types of plots owned by Santals. The first is the homestead plot on which Santal families build their houses and have *barge* (backyards) where they may cultivate a vegetable garden. The second is the agricultural plot in which they cultivate paddy. Homestead plots are linked to the *kulhi* while agricultural plots maybe located anywhere within the village precinct.³⁸ One may argue that the premise of such an organizational structure of the homestead plots is that the community may be linked together through the *kulhi* as a public space. This idea is underscored by terms such as the *kulhi durup* for village council, which suggest that the *kulhi* plays a central role in the social life of the village as well.

³⁸ Personal conversation with B. Hansdah in February 2013.

Occasionally one finds houses built at a distance from the *kulhi*. These houses may belong to people who have been ostracised from the community.³⁹ If living on the *kulhi* is a marker of membership in the village community, then conversely, the house being located away from the *kulhi* may be considered as being outside of the village community. In cases where families are ostracised but their houses are already part of the *kulhi*, other forms of sanction are imposed. This was seen in two cases in Bhagabandh. In the first case, a man was polygamous and had remarried five times in spite of repeated injunctions to not enter into such marriages from the village council. However, the man was a timber contractor, was relatively wealthy and employed many men from the village. His economic position within the community made it difficult to ostracise him completely or to ask him to move out of his home. Consequently, he was punished by not being allowed to participate in ritual activity in the *jahira*.⁴⁰ In another example, a family was accused of murder and even after due legal process against the two accused members, it was decided that other members of the community will not interact with the family as a whole. The family left the village soon after this incident and returned a year later, but the sanctions on interacting with them remained in force.⁴¹ The important point here is that living on the *kulhi* is an important marker of membership within a community, and the proximity binds families into consensual norms of behaviour and practice.

Another dimension of the significance of the *kulhi* lies in the *manjhithan* as an important shrine located within that space. In addition to its commemorative role discussed earlier, the *manjhithan* is an important place in everyday life in that it is considered the abode of *manjhibaba* who extends protection to those living in the *kulhi*. For instance, villagers believe that if someone is travelling at night, *manjhibaba* accompanies them as they walk along the *kulhi* up to the edge of the village.⁴² On ritual occasions such as marriage, the wedding party or the returning groom and bride seek the blessings of *manjhibaba* upon

³⁹ Such houses were observed during fieldwork but when I asked about the people living there, villagers did not give any clear answers. The typical response to my question was that the person living there was ‘mad’, they may not interest me and I should ignore the house. That these houses may belong to ostracised families is suggested on grounds of literature on Santal rituals of *bitlaha* or ostracization. In *bitlaha* events, the house of the family to be ostracized is broken into and defiled in various ways such as by breaking and burning and the family is made to leave the village (Somers, 1977, 243) These days however the punishments are less severe and families are typically prohibited from having any interactions with other members of the village community. In personal conversation with D. Hansdah in July 2013.

⁴⁰ Personal conversation with M. Handah in February 2013.

⁴¹ This was found on a return visit to Bhagabandh nearly one year after the incident. Personal conversation with M. Hansdah in March 2013.

⁴² Personal conversation with elderly man in Bangoda village in March 2012.

their entry into the village.⁴³ Apart from these ritual occasions, there are a number of taboos on particular kinds of activities in the *kulhi* on account of the fact that it is considered as a domain of ancestral headmen and other spirits.⁴⁴ These practices and taboos relate to the *manjhithan*, which, I argue, notionally demarcate the *kulhi* as a domain under the protective influence of spirits.

If one considers the *kulhi* as a sphere under this protective influence of spirits with the *manjhithan* being a centre, one must also examine the limits of this protective domain. In other words, how far does the protective influence of *manjhibaba* extend and where does a *kulhi* end? One other indicator for the limits of the *kulhi* is suggested through rituals of departure from the village. During wedding ceremonies for instance, when the groom and his family leave for the bride's village, other villagers accompany them as they move through the village along the *kulhi*. At one point, which is considered as the end of the *kulhi*, the *manjhi* sits down and the wedding party seek his blessings. One may argue that this moment and place is suggestive of the end of the village and the gesture of seeking blessing is to ask for protection from the *manjhi*, and by extension, from the ancestral spirits since the wedding party is now moving beyond their protective sphere. Similarly, in case of deaths, there are certain marker and rites specific to the end of the village. In case of somebody's death in the village, an upturned cart is placed at one end of the *kulhi* to inform visitors that the village is now ritually polluted. In case of funeral rites that I discussed in the previous chapter, I mentioned that a small house is made for the deceased spirit at one end of the *kulhi*. In the course of the ritual, this house is burned and the spirit is exhorted to leave its burning dwelling and take up residence in the house of its descendants in the *kulhi*.⁴⁵ In all these cases, it becomes clear that there is a distinction made between an inside and an outside of a village. The threshold between the inside and the outside is not clearly marked but becomes established through practices as discussed above. In other words, the end of the *kulhi* is not a physically marked location but emerges through ritual events that mark a person's departure from the sphere of protective influence of *manjhibaba*.

It is important to point out here that the end of a *kulhi* is different from the limits of *tolas* since the same *kulhi* winds through different *tolas* in a village. The limits of a *kulhi* as

⁴³ Personal conversation with D. Hansdah in July 2012.

⁴⁴ For examples of taboos regarding the *kulhi*, see Troisi 1979, 227.

⁴⁵ Personal conversation with D. Hansdah in March 2014.

discussed above corresponds to what may be considered as the end of the village while the limits of a *tola* define the extents of a smaller social group within the village community. I discussed earlier that dwelling clusters within the *tola*, often comprising families that belong to the same lineage, may be considered as distinct social units on account of women's and children's interactions being limited to these clusters. The *tola* itself is a more complex entity in terms of definition. I mentioned earlier that in terms of built form, the *tola* is identifiable as a cluster of houses located at a distance from other clusters along the same *kulhi*. However, the sense of a *tola* level social unit is not entirely defined by the physical proximity of the houses located within that cluster. For instance, in the Jahira Tola in Bhagabandh, a row of houses extended for a considerable distance but women referred to a point approximately midway - and suggested by the location of a well - as being the end of the *tola*. How this constituted a social unit was suggested by the fact that the families considered as part of the *tola* had reciprocal relationships with each other i.e. families who belonged to the *tola* community were obligated to invite and attend events such as weddings in each others' families.⁴⁶ Other families, such as those living beyond the point suggested by the women were physically proximal to other families in the *tola* and were part of the village as a whole, but were not considered as part of the *tola* community. What this suggests is that physical proximity of houses within a cluster or presence in the *kulhi* does not automatically imply membership of a community at the level of a *tola*. Rather, there are multiple registers through which senses of community are fostered.

Thus far, I have outlined various aspects of the relationship between the *tola* and the families that reside in the *tola* as constituting various social groups within the settlement. I showed that the groups get variously formed and defined through physical proximity, shared spaces and codes of practice. For instance, clusters of dwellings within the *tola* become a spatial and social unit on account of their formation through inter-generational property divisions and since they act as limits for interaction of women and children. The *tola* itself is a distinctive unit within the settlement as the families living here appear bound by codes of practice and taboos concerning the *kulhi*. I further suggested that the *kulhi* maybe considered as a domain under the protective influence of *manjhibaba* who is the spirit enshrined in the *manjhithan*. These various beliefs and practices serve to define multiple and overlapping social and spatial units within the village as a whole. I now return to the village to examine wider relationships between and within the different groups of

⁴⁶ Personal conversation with M. Hansdah in March 2014.

residents, and the spatial registers of membership through which senses of community are invoked.

7.4. Notions of a village community

I mentioned earlier in the discussion on morphology that the definition of the village is a complex one and must be explored between administrative boundaries, social groups such as different Adivasi communities or a number of small groups of the same community, and histories of settling and the equations between settlers and later immigrants. I now discuss this further by exploring the distribution of agricultural land, the administration of the village, and village level participation in the *jahira* as being sites for tracing community membership in the village.

7.4.1. Land ownership and senses of community

In discussing the morphology of Santal settlements, I mentioned that homestead plots are located along the *kulhi* while agricultural lands are distributed at various places within the village precinct in relation to topography. Though senses of a village boundary are not apparent in everyday life, it becomes important considering that it is the only container of distributed agricultural and other lands that comprise the village as an administrative unit. However, that these definitions are important and a sensitive issue for villagers became very clear when I enquired about land ownership during fieldwork. While general descriptions about the nature of agricultural lands and their relative productivity were offered, no specific information about land ownership was given. In two instances, people showed me revenue maps of the village but declined my requests to copy the information.⁴⁷ I was told that this was sensitive information and villagers were reluctant to share it with outsiders. This reluctance may be attributed to the tumultuous history of dispossession of Adivasis from their lands in Singhbhum and the Chotanagpur region at large. Villages remain cautious even in more recent times because of instances of illegal purchase or occupation of Adivasi lands by non-Adivasis.⁴⁸ One instance of this was seen in Chauda village where some land from the neighbouring village of Bholadih was sold to an industrial establishment, who began constructing a factory on the site. The residents of Chauda were deeply concerned since similar developments in the past led to factories being developed through land acquisitions that were in violation of the Chhotanagpur Tenancy Act. Such establishments typically continued to acquire more land for further

⁴⁷ Revenue maps are legal documents indicating administrative units demarcated by the state.

⁴⁸ For further reading on land provisions and legislation, see Shah 2010, 14-16.

development and large numbers of Adivasi families were left without agricultural land, and therefore without any means to earn a livelihood.⁴⁹ While Adivasi land ownership and politics is a considerable subject in its own right, it becomes relevant to this study on account of the fact that the question of village boundary and land ownership binds the villagers into a whole that is protected from and not discussed with outsiders. In other words, the question of village boundary and land ownership imposes a sense of community among the villagers in relation to an outside world.

Within the village too, land ownership provides insights into understanding the nature of the village community on two counts. Different Adivasi communities have different systems of land ownership and legislation. Santals for instance follow a Manjhi Parganait system while Mundas follow the Munda Manki system.⁵⁰ While the details of land ownership and legislation are beyond the purview of this study, it will suffice to point out that in the case of multi-community villages where non-Adivasis and Adivasis live together, different land ownership and legislation systems may coexist. This has an impact on both the community and the landscape of the village. This was seen in Bhagabandh for instance where Santals live together with Mahato families who do not come under the purview of the Chotanagpur Tenancy Act. Consequently, these families are able to sell their land to other non-Adivasis. In Bhagabandh, two families had converted their paddy fields into brick kilns. Similarly in Bada Bandua, one of the villagers had established a brick kiln in his own paddy fields. Such changes in the agricultural landscape, though limited to specific paddy fields, affect paddy cultivation in general since the fields are in the forms of terraces and interconnected through water flows across the terrain.

Another dimension of the above mentioned developments is that establishments such as brick kilns often employ other villagers who may not have agricultural land of their own or whose cultivation may be insufficient for their financial needs. In such cases, the kilns become places of considerable economic importance within the village community. A similar instance of high economic status was seen in the case of a man involved in illegal timber trade in the forests around Bhagabandh, but provided employment to a number of people in the village. He was accused of polygamy and was censured by the village

⁴⁹ According to R. Tudu (*manjhi* of Chauda) Adivasi families struggle with other forms of livelihood such as industrial labour and self-employment businesses while agriculture provides Adivasi families with some degree of food and economic security.

⁵⁰ For further reading on traditional governance systems among different Adivasi communities, see Sharan, Singh and Sahu 1999, 287-301.

council. Given his economic position however they could not completely ostracise him from the village, i.e. ask him and his family to leave their house on the *kulhi*. So he continued to live in the *kulhi* but was prevented from participating in ritual events in the *jahira*. The point here is that differences in land legislation and the economic opportunities afforded by the sale or industrial development of land is leading to shifts social dynamics within village communities.

7.4.2. Participation in the *jahira* and sense of community

While the village boundary and notions of property evoke a certain sense of community in relation to outsiders, one important register of community within the village is participation in the *jahira*. In simple terms, all men who own land within the village must participate in ritual events in the *jahira*.⁵¹ In Chauda, villagers defined participation as making monetary contributions towards and participating in ritual events in the *jahira*. They further mentioned that when families migrate but continue to own agricultural property in the village, they remain obligated to making contributions towards *jahira* events.⁵² In Bhagabandh, in the account of ostracization that I mentioned earlier, the accused man was prohibited from participating in rituals in the *jahira* as being notionally equivalent to leaving the village, which is often the consequence *bitlaha* (ostracization) rituals. What becomes apparent in these accounts is that membership in the *jahira* is an important marker of village community, and that this membership is traced not only through physical presence in the village and participation in ritual events, but a notional presence on account of land ownership in the village.

In case of villages where different communities live together, the issue of more than one *jahira* needs to be addressed. In Bada Bandua, where Mundas are considered as the original settlers while Santals came later, both Mundas and Santals participate in ritual activity in the Munda *devisthal*, which is considered as the primary place of worship in the village. Santals have a separate *jahira*, which is used exclusively by the Santal families in the village.⁵³ This difference in use is attributed to the fact that the Mundas were the original settlers and therefore their place of worship became the most important ritual

⁵¹ Personal conversation with N. Hansdah in March 2013. It is not clear, however, whether it is ownership or cultivation of land by Santal men that entitles them to participate in events in the *jahira*. The distinction to make here may be that if a Santal man owns land within the village, then he must necessarily partake of *jahira* rituals but that this does not preclude landless Santal labourers who also participate in ritual activity.

⁵² Personal conversation with N. Hansdah in Chauda in March 2013.

⁵³ Personal conversation with A. Murmu in March 2013.

location and the marker of community membership as discussed above. In another example, the area under Chauda village became divided into two revenue villages of Chauda and the neighbouring Tirildih in the course of administrative reorganization.⁵⁴ Since both villages have Santals families, a new *jahira* was established in Tirildih. However, since all families earlier belonged to Chauda and offered worship in the Chauda *jahira*, they continued to do so even after the formation of Tirildih. Even today, families in Tirildih contribute to and participate in both the Chauda and Tirildih *jahira*. However, families in Chauda are not involved with the Tirildih *jahira* in any way. Two points may be highlighted here. First, even within the *jahira* being a marker of community, the primary affiliation lies with the first *jahira*, *devisthal* or other ritual locations established within the village. Second, one may argue that the notion of tracing community affiliation through the *jahira* is stronger among Santals as compared to other Adivasi communities. This was seen during the village displays where in two case study villages Santals chose the image of the *jahira* as one of the most important places in the village. In the third village, which was Bada Bandua, villagers did not select images of the Munda *devisthal* or the Santal *jahira* as being one of the five most important places in the village.⁵⁵ This was in spite of the fact that all villagers – Mundas and non-Mundas alike – were obligated to participate in ritual activity in the *devisthal* on account of being part of the village community. One may argue then that other ritual locations are recognized as having the same level of significance as markers of community as the Santal *jahira*.

7.5. Conclusion: Santal villages as social and spatial entities

This chapter focused on the interrelations between social and spatial groupings in Santal villages. I began by examining memories of settling of the village to suggest that they inform the subsequent growth and morphology of the settlement and through acts of commemoration such as place names and the *manjhithan*, become ingrained in Santal senses of place within the landscape as a whole. I further examined place names to highlight natural features of the landscape as recurring motifs in Santal perceptions of the environment. Stories of settling in particular places revealed that different communities invoke divine sanction in order to validate their residence in a particular location. Through

⁵⁴ According to the villagers, Chauda was a large village and the division occurred when a railway line was constructed through the village and divided the village in two parts. These parts became Chauda and Tirildih respectively.

⁵⁵ I asked both Munda and Santal visitors to choose which images were most representative of their life, culture and the village. While people enquired after the photographs of the *devisthal* and *jahira*, it was not identified as an important place in the village. This is discussed in further detail in Chapter 7.

these discussions, I suggested that Santal senses of settlement are formed and re-formed in the interplay of memories of settling in the past and exigencies of present day structures of locality and community. The sense of settlement here is not on account of a visually or spatially defined entity, but is invoked through registers of memory and practice.

In the next part of the chapter, I explored social groups and their correspondence with spatial units within the village. I suggested that dwelling clusters belonging to members of the same lineage become a unit on account of physical proximity to each other and in acting as a notional limit to everyday mobility and interaction among women and children. The *tola*, which comprised a number of such dwelling clusters and may be considered as a neighbourhood unit, was again formed through proximity of houses creating a distinct spatial entity. A sense of community at this scale emerged through codes of practices in the *kulhi* and through ritual significance and practices at the *manjhithan* that families within a *tola* subscribed to. Finally, at the scale of the village, I suggested that property boundaries for the village as a whole was an important binding factor on one hand, while participation in the *jahira* was an important marker of community among Santals on the other.

It is interesting to note here that each of these social and spatial conglomerates emerge through practices of different groups across different scales. At the dwelling cluster level it is the women and children whose movements suggest a social group, at the *tola* level the practices in the *kulhi* and the *manjhithan* become important for Santals, while village level notions of community pertain to Santals and other resident communities as a whole. It is important to reiterate however that these notions have emerged in the interplay with various other factors such as practices of other communities, intra-village politics, and administrative organisation and reorganisation. In other words, Santal senses of settlement are a complex network of affinities that include responses to topography, establishing protective domains of spirits, tacit limits of mobility and the *kulhi* as a shared public place. This ties into Casey's propositions, discussed earlier, where he suggests that places are animated by 'lived bodies,' that they 'gather' people, ideas and memories, and play an important role in the lives of people, and highlights the inextricability of landscape, people and practices in the analysing senses of place. Most significantly, however, this line of thinking strengthens the plausibility of settlements as an analytical concept in anthropological as much as in architectural terms. It is clear that morphology of built environments alone can offer only partial understanding of how communities settle and establish relationships with their surrounding landscape. Similarly, registers of social

groupings such as *tola* and community must be discussed in relation to the spaces that these groups occupy and inscribe.

Having discussed various aspects of Santal dwellings and settlement, the next chapter moves on to a more direct engagement with what Santals themselves consider significant in their built environment. I examine a number of participatory visual methods through which people in the case study villages engaged with this issue and with my research project as a whole. Through a critical examination of people's narratives, I reflect on the processes by way of which this study was carried out and highlight the epistemological differences between people's perception and articulation and the architectural history that I have attempted to construct.

8. Evaluating Santal perceptions of built environments using participatory visual methods

8.1. An event in the village

8 February 2012

It was about 9:00 am in the morning and the *kulhi* in Bhagabandh was buzzing with excitement. It was the last day of my fieldwork in the village and I was setting out a display of photographs and drawings in the *kulhi* for the villagers to see and discuss what I had been doing those past few days in the village. I produced and framed forty five photographs including images of the surroundings of the village, institutions such as the central street, the sacred grove of worship and the village school, as well as important everyday places such as paddy fields, grazing pastures, water sources, dwellings and interior spaces. As I set the framed images out against the wall of one of the houses, people began gathering to take a closer look. The excitement was palpable and slowly building - people jostled for space in front of the frames and exclamations could be heard when something familiar had been spotted.

Soon a large crowd gathered. Taking a cue from popular television programs where people vote for their favourite contestants, I asked people to choose five of their favourite photographs. I suggested that they consider what places were most important or representative in their everyday lives and culture. I moved through the crowd and started noting people's responses.

The first, and nearly unanimous choice was the *jahira* (sacred grove). People pointed out that this was the most important place in the village since this is where they offered worship and carried out prayers and ritual activity. They compared it to Hindu temples and said that to them, this was the equivalent of a temple. Another popular choice together with the *jahira* was the *manjhithan*, which is a shrine dedicated to ancestral headmen of the village. All auspicious events in the village begin and end with seeking the blessings of the ancestors at the *manjhithan*. The *manjhithan* and the *jahira* were the 'No.1 places in the village'.

The other image commonly chosen was that of the village school. If the shrines were unanimous first choices, then the image of the school was nearly always selected next. In

explaining this choice one person pointed out that [the school] “shows we study, we are not backward.” Others also suggested that they liked it because it was a nice and clean place. Yet, the choice of the village school as an important place in the village was ironic given that it was not a particularly well-run institution when compared to other schools in neighbouring areas and the city, for instance, and during my fieldwork stay the village children spent a lot of time with me rather than attending school.

The next two choices – images of cattle and water sources such as the hand pump and the village pond – were identified as being essential for everyday life in the village and therefore very important. In both cases, villagers said they ‘give us everything’ and so their images must be selected. Images such as fields ready for harvest or trees in the vicinity of the village also drew appreciative comments from most villagers. These were considered as ‘beautiful sights’ and were pointed out as the things worth photographing in the village.

What was conspicuously absent from this list of chosen images were houses. Listening to people make their choices, I grew concerned that the house did not seem to feature in people’s cognition of important places within the village. I began to ask why they were ignoring images of the houses and things within the house. I added that they were remarkable objects in that they revealed a penchant for craft and a remarkable aesthetic sense. Villagers agreed with my assessment but maintained that other things they had pointed out were more important. One woman simply said that houses were not that special. She said “everyone knows people in the village live in mud houses and have thatched roofs... that they have fishing traps and brooms... nothing remarkable about that.”

The responses were disconcerting. More specifically, it was the lack of responses to images of the dwelling and interior spaces that troubled me. For the dwelling to not feature in the villagers’ list of important places although it was well-known as a Santal craft beyond the local community seemed antithetical to the premise of my enquiry that the dwelling – and other architectural forms – were important registers of Santal relationships to their environment. The villagers were clearly pointing to sites other than dwellings as being significant for them. The doubt that grew in my mind was that in studying Santal perceptions of space and place had I picked the wrong sites to study? If I had begun this study by asking Santal villagers what they considered significant, would a different narrative have emerged?

8.2. A call for reflexivity

The event of the village display described above was an important revelation that there were some obvious differences between villagers' perceptions of what was significant in their environment and my own architectural gaze that focused on built forms. The event questioned something that I had taken for granted i.e. the centrality of architectural forms in Santal perceptions of the environment. Though my initial impulse during the display event was one of concern at having picked the 'wrong' site of study, it was more constructive to reflect upon the nature of the architectural historical gaze rather than to deny its very plausibility. Reflexivity of this kind is an important trope within anthropological discourses on ethnographic fieldwork but remains unexplored in discussions of architectural fieldwork.¹ As Kellett points out, architectural researchers 'rely on short visits [to the field] in which hard, 'factual' and visual data is collected' and in the range of skills employed to collect this data 'objectivity' is privileged over personal responses' (Kellett 2011, 341). Consequently, our analyses and interpretation of fieldwork data tend to consider the material in absolute terms. In practice of course, the 'field' is 'not an autonomous and bounded set of relationships and practices which exists independently of the fieldwork through which it is revealed' but is constructed through the researcher's immersion in and engagement with the myriad relationships, spaces and social worlds that constitute it.² Reflecting on the processes of knowledge production not only becomes imperative but, as I show later, may lead to more situated and nuanced narratives as well.

While this specific reflexive stance emerged in the course of planning and carrying out fieldwork, I was, from the very early stages of the project, concerned with explicitly articulating what the villagers considered important in their built environment and why. This focus panned out in two ways. First, during fieldwork, I not only sought information from people in the case study villages but also their opinions and evaluations that built towards framework of analyses. This is seen for instance in the chapter on 'Inscribing domestic space' where I discuss wall paintings and suggest that people's emphasis on creating straight lines and sharp edges becomes instrumental in correlating the performance of painting with an understanding of Santal aesthetics. Second, I used a number of participatory methods in order to understand what the villagers consider important in their built environment and why. This material too has been referred to in the

¹ This is seen for instance in the fact that an entire section is dedicated to reflexivity in ethnographic fieldwork in Robben (2012).

² Vered, Amit as quoted in Kellett 2011, 341

earlier chapters in order to support particular points of argument. In this chapter, I focus particularly on the participatory methods in order to highlight what villagers marked as significant in their environment. In analysing and contextualising the participatory visual material, and as suggested from the display event described at the beginning of this chapter, I attempt to posit the findings as a voice different from my own, though obviously put into operation and therefore mediated by my presence. Recognising the differences between villagers' perceptions and my own emphasis in this study becomes a provocation to think critically about the respective epistemological orbits of our choices of sites and architectural history narratives. In short, I conclude this study on explorations of Adivasi architectural histories by reflecting on the differences between people's perceptions and my academic inquiries into conceptions of space and place and the interdependencies between the two in the production of this narrative.

8.3. On participatory methods

It is useful to start with some notes about participatory visual methods that inform subsequent analyses in the chapter. Participatory methods of research are well recognised 'as one answer to recent calls for more relevant, morally aware and non-hierarchical [research] practice.'³ As Pain points out 'participatory approaches lend themselves to research where people's relations with and accounts of space, place and environment are of central interest. (...) [Participatory approaches are] designed to be context-specific, foregrounding local conditions and local knowledge, and producing situated, rich and layered accounts' (Pain 2004, 653). It is with this broad understanding that participatory methods were proposed as part of the fieldwork to be carried out for this project. The visual nature of the proposed methods however requires further consideration. Pink (2001, 97-98), for instance, points out that visual research must be analysed in relation to both the researcher's and participants' negotiation of visual media and more broadly, in relation to the processes of production of the visual material. In this study, this translates into a critical examination of the fieldwork engagements through which the participatory methods were operationalized and the visuals produced. The intention here is not to analyse the visual material for its own sake, but quite specifically, in terms of how the participatory visuals offer insights into people's representations of spatial experience. In

³ For a brief history and the various trajectories of development in participatory methods in the past three decades, see Pain 2004.

the following sections, I discuss the intentions behind particular visual methods, modes of engagement in the field, and analyse them in relation to these two factors.

It must be mentioned here that participation was designed and imagined in particular ways prior to fieldwork, but additionally, other forms of participatory visual engagement evolved in through the fieldwork encounters. For instance, prior to fieldwork, I proposed participatory photography where volunteers from the villages will be requested to take photographs of things they considered important in their environment. I further proposed to conduct interviews with the volunteers about their choice of images in order to understand the nature of associations with those places and objects. This exercise was to be followed by an attempt at collectively curating an exhibition of images for public display in the village. Through the display other villagers could engage with self-representations of their environment. The actual turn of events, as I discuss next, was quite different during fieldwork. The participatory photography was unsuccessful and became an exercise in guided photography instead while the public display was developed using people's suggestions rather than their actual photographs. These contingencies are brought into description and analysis of the participatory visual methods at relevant points in the following discussion.

8.3.1. Children's drawings of dwellings and the village

One visual method that emerged in the course of my interactions with village children was their drawings of their environment. During a typical day in the case study villages, I was often accompanied by groups of children who became my guide and accompanied me on my visits to different parts of the village. In response to seeing me sketch, one group enquired about what I was doing and then asked if they may make some sketches as well. The following day, I distributed some drawing books and colouring material among the children who made a number of drawings and shared them with me (Fig.8-1).⁴ More such requests followed and soon, I was distributing drawings books and colours to children everyday. When they asked what they should draw, I suggested that they select things they considered important or interesting from their surroundings, particularly the house and village since that was the focus of my study. Inspired by the things drawn by children, I conducted the same exercise in the other two case study villages as well. These drawings became vital cues for pointing out aspects of the built environment that had escaped my

⁴ This took place in Bhagabandh, which is the village where I first carried out fieldwork.

notice. For instance, most children drew a house together with a hand pump next to it (Fig.8-2). Further, they always added some grass and plants around the hand pump. This drew my attention to plants that grew around the drain that carried excess water away from the hand pump. In Bhagabandh, most families built a bamboo frame and planted gourds next to this flow from the drain to ensure that the gourd plant was constantly watered. In drawing the tube well with plants around it, children highlighted an important understanding between water flow and plants that had been developed into an important element in Santal backyard gardens. The children's drawings also drew attention to elements of infrastructure around the village that I had not paid any attention to during my own documentation efforts. They drew hand pumps, electricity poles, solar lights and even a transformer in one case (Fig.8-3). Given that these elements were often drawn quite large when compared with the other elements of the drawing, and did not really function very well, one may argue that children conceived of these objects as iconic elements of the landscape. Some of these highlights resonate with findings from the other participatory methods and are discussed later. I do not, however, exclusively analyse the body of children's drawings as a whole because there are a large number of drawings and vary considerably in terms of content.⁵ So rather than digress from this study by analysing all the drawings, I draw them into the argument where relevant.

⁵ I collected a total of eighty five drawings from the three case study sites. Since the brief given to the children was broad i.e. to draw what they found interesting or important in their house or village, the range of things drawn by children vary greatly as well.

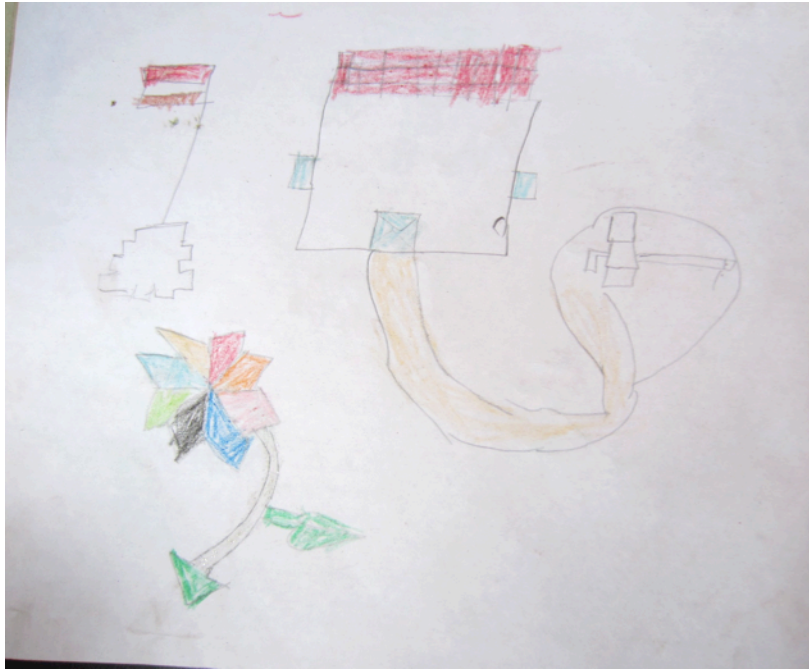


Figure 8-1: The first few drawings made by children in Bhagabandh. The image above shows a house with a winding road leading to a hand pump. The image below shows trees beside a black road.



Figure 8-2: Drawing with details such as plants growing around the hand pump (right) and roots of trees (left)



Figure 8-3: Drawing showing the village of Bada Bandua. Note the poles and electrical wires drawn between the houses, a solar street light at the top right of the image, and railway tracks visible behind the houses at the bottom of the image.

8.3.2. Participatory photography

Having established that children's drawings form supplementary visual material in this study, I return to the analysis of guided photography and the public display event. I examine how these participatory methods played out in the field in order to establish a context for their analysis. Each participatory encounter used different media and different modalities of conversation between the participants and myself.⁶ Consequently, it becomes imperative to analyse the content of the visual material in relation to these circumstances of production. The narratives that emerge from these visual materials are situated against my own architectural gaze and the architectural history narratives that I construct in order to explore the epistemological differences between the two ways of looking.

While preparing for fieldwork, I proposed participatory photography as a method where, compared to my photographs of architecture and architectural elements, residents may focus on other things. This method was premised on the idea that the act of framing something through the act of photography from within the continuum of experience of a place may be a marker of that thing being significant. This was supported by my earlier study on perceptions of slums where I found striking differences between my photographs of the slum and those by slum dwellers themselves.⁷ The four volunteer photographers rendered the slum as a place of development by focusing on infrastructural elements, a place of familiarity and community by photographing friends and acquaintances, a place of poverty through portraits and commentary on the difficulties of slum residents and as a place of some architectural interest by focusing on buildings. These difference were not just of choosing to represent different parts of slums, but was rooted in deeper differences in the ecologies of relations within which the residents were embedded, which influenced how they constructed the slum as an environment through their photographs. In this exercise, it became apparent that my own architectural representation of the slum one of the many possible partial renditions of the complex realities that slums are. The participants' photographs were similarly partial renditions of the slum. With this background in mind, I attempted to carry out participant photography in Santal villages.

⁶ This is seen in the case of children's art, for instance. The effect of a medium and its impact on representation was emphasised in the work of Rudolf Arnheim and investigators who followed in his footsteps 'varied two- and three-dimensional media, varied tasks and instructions, and demonstrated quite conclusively that the notion of a single underlying concept that determines representation has to be laid to rest (Golomb 1993, 17).

⁷ See Bharat 2007.

In the field however, the participatory exercise was met with great reluctance on the part of the villagers. I requested people to take photographs for me; people of different age groups, both men and women. I explained that I was taking photos of things that I considered important, whereas as residents, they may select different things to photograph. I also mentioned that in my project, this would help contribute their point of view in terms of what is important or significant in the built environment. But people did not come forward to take pictures. People told me that they would do it later, after bathing and having lunch, or mention some other time, but it never happened. I slowly realised that no one would clearly refuse to participate and take photographs, but that no one would hold the camera either.

Though refusing to take photographs for my project, people were happy to be photographed themselves and were further excited when I showed them their photographs on the camera screen. I offered to print pictures out for people, and from then on, more and more requests started coming in. People wanted pictures taken in their best clothes, against particular backgrounds and in groups such as families. So everyday, for the duration of my fieldwork, I brought photo prints back for the villagers. One of the women mentioned that these photos were precious since the nearest photo studio where they could go and get themselves photographed was 20 kilometres away and cost money that many families could not afford. A sense of how these photographs were important to the recipients emerged in subsequent field visits. In one case, a woman wanted her daughter's photograph printed with a border of flowers around it while the girl herself insisted that I photograph her wearing two of her best dresses. On a later visit, I found out that these photographs were to be shown to prospective grooms and therefore a certain aesthetic was being asked for.⁸ In another case, one woman carried the photographs of her house (that I had given her copies of) to her maternal home. In a third instance, one elderly man asked for a large print of his portrait, because, he wanted his family to have a large photograph. These accounts suggest that the photographs went beyond being a trace of the photographic encounter and became precious objects in their own right. This idea is underscored by Edwards (Edwards 2010) who argues that the 'materiality' of photographs places them within 'subjectivities and emotional registers,' which go beyond 'visual apprehension of the image' (Edwards 2010, 24). In other words, photograph as image and photograph as object become different kinds of registers in which 'photographic meanings

⁸ Personal conversation with M. Hansdah in July 2013.

are negotiated' (Edwards 2010, 23). This distinction between the various ways in which photographs matter is important since the very method is premised on exploring people's perceptions of space and place through the photographic event and object. These issues surface again when I discuss people's responses to the public displays of photographs in the village street.

To return to people's preferences of photographs, the villagers liked specific kinds of portraits - for instance they did not like candid photographs of themselves but preferred full frontal views while standing erect. They also did not like pictures where they were seen smiling.⁹ When people expressed satisfaction at their pictures, it was usually the ones where they had sombre expressions (Fig.8-4). In some cases, people, especially women, put on their best clothes and wanted to be photographed. One of the women brought out her ceremonial sari and two neighbours joined her in getting dressed up for a photograph. It is evident that being photographed was considered a formal and almost ceremonial event. Further in the chapter, I argue how the formal nature of photography was played an important role in the lack of success of participatory photography.

⁹ One may argue here that smiling was associated with frivolity and generally not accepted in formal settings. This is further evident in a description of trees within the village. An elderly person pointed out that *peepal* trees (*Ficus Indica*) were rarely located within a *tola* because the leaves of the *peepal* shake in the wind and appear to be smiling and poking fun at people. Such behaviour was not considered appropriate and therefore the *peepal* tree was not planted along the *kulhi*. Personal conversation with B. Singh in Bada Bandua in March 2013.



Figure 8-4: Portraits of villagers taken during fieldwork

8.3.3. Guided photography

Since participatory photography was proving unsuccessful in the field, I began asking if they could suggest to me what was worth photographing. To help get clearer suggestions, I said people could suggest what was important in the daily life of the village, what was most representative of life and culture of the community and village, or things they considered beautiful in the village. The most common response was that nothing in the village was worth photographing. On prodding further, I got a variety of responses- the first, and most common one was that the most beautiful things in the area were trees and flowers, but that was not in village but in the hills and forests beyond. Second, one of the village elders pointed at that the characteristics of indigenous rural life were the things people did, but that was not possible to capture in photographs. A third response was that the dwellings in the villages were not worth photographing at all. The dwelling as a subject worth photographing was downplayed and suggested that it was not necessarily an important aspect of the village environment. This was in complete contrast to my own impression of the dwellings as architecturally interesting entities. This was further endorsed by the choice of images suggested by the five volunteers who participated in the guided photography exercise that I discuss next.

Given that people in all three case study villagers were reluctant to take photographs or suggest what was worth photographing, it is not surprising that only five people volunteered to guide me through the village and suggest places or things to photograph. Three volunteers in this were residents of Bhagabandh while the fourth was a group of teenage boys in Chauda and the remaining volunteers were two sisters from Bada Bandua. It is interesting to note that of these volunteers, the three people from Bhagabandh were Mahato while the group of young boys and the sisters were Santals. However, it remains worthwhile to discuss the images that each of them suggested on account of thematic similarities between their choices. I then discuss these choices in relation to pan-ethnic conceptions of space and place using cues from earlier chapters as well.

The procedure followed for this exercise was to walk through the village with the volunteers to places that considered worth photographing. Once they pointed to something, it was photographed and the image shown to them on the camera screen. If they approved then we moved on to the next location. During the guided photography walks, it became evident that people's choices were dominated by images of flowers and trees, water sources and to a lesser extent, animals (Fig.8-5). Nearly all volunteers explained that flowers and trees were beautiful things and therefore worth photographing. In an earlier chapter, I pointed out that the preference for natural motifs is seen in decorative arts such as murals and *alpana* and body tattoos among many communities in this region. Further, as Rycroft points out, the motifs of trees and plants points to a deeper embedding of natural features within cognition of the environment among the local communities. This was also seen in children's drawings of their environment where many children took care to distinguish between various kinds of trees in the village and their specific locations. Wherever possible, children detailed trees and plants or, drew a generic tree and wrote its name in order to specify what kind it is. It is interesting to note that the same specificity of type and location is not extended to houses, which are nearly always drawn as a number of generic objects within the drawing (Fig.8-6). The point here is that trees and flowers are readily recognised as important elements in the village landscape in the guided photography exercise and this concurs with a wider recognition of natural elements as an important part of the villager's perception of their environment.



Figure 8-5: Photographs suggested by K. Mahato in Bhagabandh



Figure 8-6: Drawing with houses and trees. Note the houses are typical, while the tree in the center has a label (reading *aam ka ped*), which identifies it as a mango tree.

The other highlight of the guided photography exercise were sources of water that people highlighted as essential for their lives. Different volunteers pointed to hand pumps, wells

and a river as things to photograph. This is interesting because, in the drawings of houses made by children, they nearly always added a hand pump connected to the house with a path (see Fig. 7-2 earlier). Similarly, in drawings of the village, many children drew ponds and other water bodies as important places within the village (Fig.8-7). It is evident that places and objects associated with water are marked out as important since water is essential for the sustenance of the community. One may argue here that water is essential for human life more generally, but what makes the choice significant in this case is that water is sourced from the natural landscape features such as rivers and ponds, and therefore becomes embedded within senses of place.¹⁰ The point here is that though water is essential for human life in all societies, it become articulated as an important feature of the environment only when it has a spatial dimension such as being a landscape element, and, I further contend that this notion of the significance of natural sources of water carries over to elements such as hand pumps, which are then also marked out as being important.

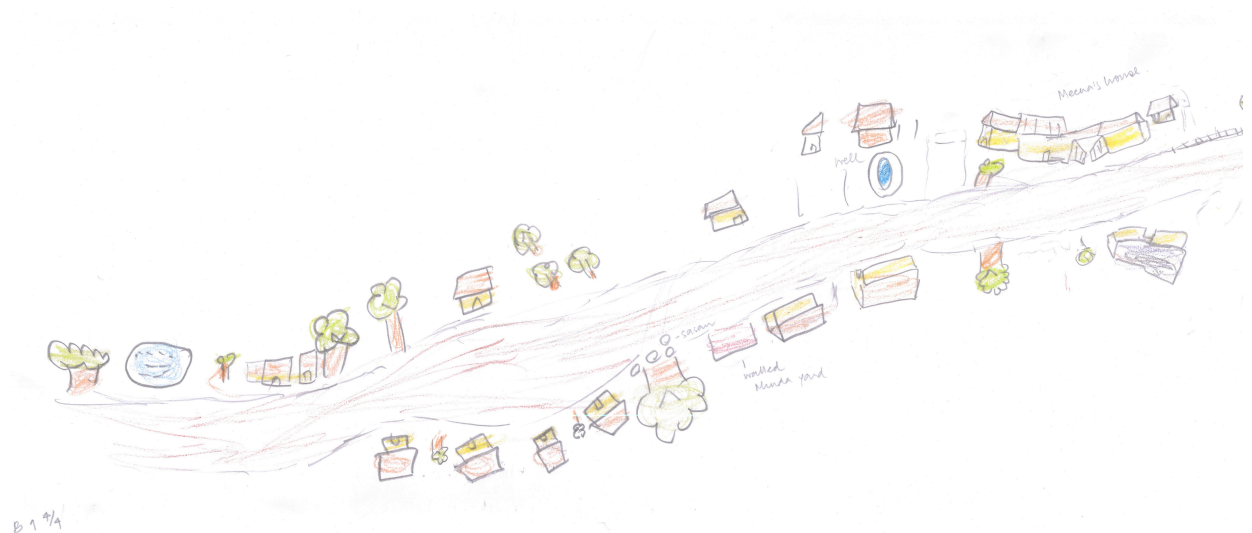


Figure 8-7: Drawing of Bada Bandua. Note the blue circles to the left – indicating a pond - and at the top right – indicating a well.

A third set of images that the volunteers recommended for photography were of animals and I photographed chickens, pigs, goats and cows as per people's requests. The importance of animals and particularly cows emerges again in the village displays when

¹⁰ One incident put the choice of images such as hand pumps into perspective. During a public event organised by the University of East Anglia, I displayed a poster about the participatory visual methods and materials that I used in my research project. Responding to one child's drawing that showed a house with a hand pump, one visitor wondered if her own children who lived in Norwich would draw taps in their house as significant elements within their environment. This raised an important point that though things may be significant in everyday life, it was their spatial presence that made led to particular kinds of associations, which I was exploring in through the participatory visual methods.

photographs of cows are selected as being one of the central aspects of Santal everyday life. This correlates to the earlier discussions on dwelling, where, together with the *bhitar*, cooking and sleeping areas, a cattle shelter remained an essential part of Santal dwellings in the course of its transformation since the mid nineteenth century. The importance of cattle for Santals is not merely as a resource, but as a living being that is part of Santal social life.

8.3.4. Public displays of visual material

As I mentioned earlier when discussing methods, participatory photography was to lead to a discussion with the volunteers and to the curating of a display for other villagers to engage with the representation of the village. Though the participatory photography was unsuccessful, I decided to proceed with the displays using a combination of photographs based on my interest and those suggested by the volunteers during guided photography. I developed and framed between forty and fifty photographs for four displays events - two in Bhagabandh in the Mahato Tola and Jahira Tola respectively, and one each in Chauda and Bada Bandua.

In choosing images that were significant, there was considerably similarity across villagers' responses to the displays at the different locations. I recounted at the beginning of the chapter that from the forty or fifty images displayed, people nearly always chose the *jahira* and *manjhithan*, i.e., sacred locations, the village school, images of water sources, of cattle and trees, fields and flowers around the village. These choices were made on the basis of them being central to Santal village life and culture, essential for people's survival, or as the most beautiful places and things in the village. While these were broad themes and explanations for people's choices, it is useful at this point to draw out some subtle differences between responses at the different locations. Three things became apparent in the types of responses – gendered differences in responses, differences within case study locations and third, similar responses, albeit with different explanations for the choices, at different locations.

Beginning with the gendered differences, it quickly became apparent during the displays that it was the men who were willing to choose which images they considered significant. Women on the other hand typically remarked that all the displayed photographs were

beautiful or interesting and therefore it was nearly pointless to try and choose five.¹¹ When they did select however, the choices were similar to those made by men. I discussed in an earlier chapter that there are considerable differences in mobility and the everyday experiences of men and women but these did not appear to influence their choices in the display.¹² I argue that this is because the nature of the display event and the process of articulating self-representation that were seen as belonging to the public realm of village life and community rather than being rooted in individual experience. Second, the differences between people's display choices across the case study locations were marked between Bada Bandua – where Santal families are later settlers compared to Mundas, who settled earlier in the village and continue to be social leaders in the village – and Chauda or Bhagabandh that have *tolas* dominated by Santal families. The obvious difference was that the *jahira* was a unanimous choice in the Santal *tolas* while the similar Munda sacred place, i.e. the *devisthal* was not selected as significant by anybody during the display in Bada Bandua. I develop this point in the next section when I contextualise people's choices as sites of meaning. Finally, the similarity of choices across the case study sites does not imply a similarity of significance as well. This was most pronounced in Bhagabandh where displays were done in both the Santal and the Mahato *tolas* of the village. While Mahatos did not select the *jahira* for the obvious reason that it is not their place of worship, the other choices of the school, water sources and photos showing trees and fields were in common with the choices made by Santals. What set the Mahato choices completely apart was their interpretation of the scenario that I had constructed. When I asked people to choose five images as being significant or important from the display, in order to aid the process I asked people to select the images that they would display if they had to put up an exhibition about their lives, culture and village in Jamshedpur – the nearest city. With this in mind, when people selected images such as those of water sources, they said the water is essential but a very scarce resource and repeatedly spoke of their problem is procuring water. Similarly, while they selected the image of the school, the comments focused on how the school was far from their *tola* and therefore difficult to access. It is interesting to note that the general tenor of responses was to highlight problems. Santal narratives, in contrast, highlighted these places in terms of them being an integral part of their everyday lives. These nuances gain further importance when I posit people's choices in relation to

¹¹ The Hindi term used by women was *accha*, which may be interpreted as good, beautiful or interesting.

¹² In Ch. 4 where I argue that women's everyday lives are centred on the dwelling even though they move extensively in and around the village in the course of domestic work.

my own architectural narratives and argue that people's choices in these various participatory encounters are not absolute statements of significance but negotiations of various factors.

8.4. Contextualising people's choices

Before moving onto how people's choices may be understood as sites of meaning, it is useful to critically examine the processes of participation to frame people's choices. Reflecting on the guided photography exercise, one needs to first question how the villagers perceived photography in the first place, in order to understand what they considered worth photographing in their environment. Considering the kinds of formal portraits they preferred, I argue that villagers may have considered the act of photography as a formal and almost ceremonial event and photographs as precious objects. Photographs were intended to convey seriousness of demeanour and so photography was not a frivolous activity. This may account for why the villagers always found it amusing when I took pictures of their domestic worlds. From the villagers' point of view, domestic and other everyday spaces may have appeared mundane and therefore not worth photographing.

The difference between villagers' perceptions and my own intentions behind the participatory photography exercise is also evident. I imagined the act of framing certain aspects of the environment through photographs as a way highlighting significance. To me as a researcher and outsider, through this act of photographing certain elements, aspects of Santal built environments could become 'ethnographic' by the act of detaching them from their original cultural contexts' and get 're-contextualised' into a participatory architectural history narrative (Kreps 2012, 284). To the residents, however, the environments were lifeworlds from which specific elements could not be easily isolated or framed as singular images, in order to represent their environments as an 'abstract totality.' Kreps suggests that the ethnographic gaze turns specific objects/ images to stand in for abstract totalities. Kreps (2012) discusses a similar case of Museum Balanga in Kalimantan, Indonesia, where the collection of objects representing Dayak culture were 'seen as ordinary by the staff and local people.' Further, this 'quotidian perception' influenced the way the museum staff handled and managed the collection and in the fact that the locals did not consider the museum as a place to visit.¹ This narrative illustrates my own lack of success with participatory photography for precisely the same reasons.

In the guided photography exercise, volunteers pointed to elements of the natural environment in and around the village. One may argue that these choices are rooted in popular conceptions of what many Adivasi communities considered as important within their environment. I noted in an earlier chapter that motifs of elements of the natural environment are commonly found among *alpana* designs made by many Adivasi communities and suggested that these motifs are an important part of Adivasi conceptions of the environment.¹³ So when attempting to articulate what aspects of their environment are important, it is not surprising that the volunteers suggest similar natural elements as worth photographing. It is useful to note at this point the differences between participatory and guided photography that led to the former being unsuccessful and the latter revealing particular notions. A key difference between the participatory and guided photography exercises lay in the negotiation of the photographic event and object. Since participatory photography required this negotiation with the medium, it was unsuccessful considering that photography itself was perceived as formal. Guided photography on the other hand did not require people to handle a camera but articulate what they thought was important and to do so, the volunteers referred to popular Adivasi notions of beauty as found in the natural environment.

Compared to the participatory and guided photography, which were mediated by perceptions of photography and popular notions of beauty in the natural environment, the public displays of photographs in the village street operated at a different ontological level. There the villagers were encountering images from their everyday environments that were already selected and framed. When encountering the images, the first reaction of most villagers was to try and orient themselves to what the images were of- they asked where certain photographs were taken, looked for familiar faces, and were excited to find them. In responding to the display, the central concern was not to ask why I had taken these pictures, but, having taken them, that they made their everyday surroundings look very beautiful. As one of the villagers described it, I had made the village look nicer than it had previously appeared to them. Issues of the mundane-ness of the everyday environment or preconceptions of beauty were not longer mediating people's responses since the act of

¹³ It is important to point out here that it is not only Santals but other Adivasi communities as well who consider elements of the natural environment as important motifs and use them for decorative purposes such as *alpana*. As mentioned in an earlier chapter, this point is underscored by Rycroft's analysis of domestic murals among different Adivasi communities where he highlights the wide spread use of natural motifs (1996).

framing images and the event of the display had removed the built environment from the orbit of everyday experience and presented them a afresh for villagers' to engage with.

Another aspect of the display event as an encounter was that in putting these sets of images together, I had constructed a village based on my experiences during fieldwork. Had I carried out fieldwork during a different time of the year such as the agricultural season, some of the images may have been different, and the village as seen through the images would have been different as well. The 'village' in the display was a phenomenologically constructed entity rather than a representation of an objective totality that lay beyond experiences, and when people were making choices about which images were representative of their environment, the encounter was unavoidably mediated by how I had experienced and constructed their environment. Of course my construction drew from cues gathered during fieldwork as I discussed earlier, but what needs to be emphasized is that the display was not the village as people experienced it but a constructed entity that they now had to consider and evaluate. In a similar example, Moutu (2007:96-97) discusses an exhibition about a tsunami disaster in Papua New Guinea and says that the exhibition did not merely represent people's experiences of the disaster, but added another layer to their memories of the event. What becomes apparent is that the display, at least temporarily, removed the places within the village from the continuum of people's experiences and framed it as something for them to consider. In other words, though the places and objects in the display belonged to the everyday environment of the villagers, in framing them as photographs and asking people to choose which places were more representative than others, I was adding another dimension to their own experiences of those places. In fact, I was imposing a hitherto alien conception and evaluation of the built environment, for when else would villagers have considered the significance of a pig-farm vis-à-vis the sacred grove of worship or the fishing net? These elements will have typically belonged to different arenas of life in the village where questions of a comparative evaluation may never have arisen. The key point here is that people's choices from the display cannot be seen in absolute terms as revealing what is important in the built environment. Rather, they need to be thought of as windows that each open up new horizons of association and meaning between people, objects and places, each of which are mediated by the very nature of the participatory encounter.

8.4.1. People's choices as sites of meaning

Having established that people's insights into significant aspects of their built environment were influenced by the nature of the participatory encounter, I now critically examine the choices themselves. Broadly speaking, people's choices across the participatory encounters were of three kinds. First, people focused on sacred locations (the *jahira* and the *manjhithan*) as being the most important places in the village. Second, natural elements were chosen and two reasons were given for these choices – usefulness in the case of water and cattle for instance and being beautiful in the case of sites such as forests and fields. Finally, people highlighted various developments in the village ranging from the village school to infrastructural developments such as electricity poles and solar lights. I now discuss each of these responses in terms of what they may reveal about Santal conceptions of their environment.

In order to understand the choice of the *jahira* and *manjhithan* as the most important places in Santal villages one must first understand the nature of Santal religion and ritual practice, which are premised on the idea of synchronic continuities between human and spirit worlds and diachronic continuities between generations of ancestors and people themselves. So, on one hand, Santals believe they cohabit this world together with ancestors and spirits and this relationship permeates ritual practices and everyday life in equal measure.¹⁴ On the other hand, ancestral connections are established through funeral rituals where the spirits of deceased members are invited to reside in the dwellings of the family and are believed to have a protective influence as long as they are appeased.¹⁵ In fact, much of Santal ritual practices focuses on appeasement of spirits and deceased ancestors in order they continue to remain benevolent towards the villagers.¹⁶ One may argue then that a central aspect of Santal life is the connections with the spirit world, and consequently, it is places of worship that get singled out as the most important places in the village.

What further underscores the significance of ritual locations within Santal cognition of the environment is the fact that though other Adivasi communities such as the Mundas have similar beliefs in spirits and ritual locations similar to the *jahira*, these locations were not

¹⁴ This is seen for instance, in an earlier chapter, where I pointed out that one of the important factors structuring mobility and access in Santal villages is belief in witchcraft and the presence of spirits, which translates into gendered norms of space use. See Chapter 4: Gender and the structuring of domestic space.

¹⁵ This is discussed earlier in Chapter 5.

¹⁶ For further reading on Santal religion, see Troisi (1979).

singled out as being important during the village displays for Munda audiences. In Bada Bandua that has Santal, Gop and Munda families, all these communities participate in ritual activity in the Munda *devisthal* (shrine for worship of an important Munda goddess), but this place was not identified as important or even remarked upon during the village display. On further enquiry, people agreed that the *devisthal* is a powerful place and the well being of the village depended upon the continued benevolence of the *devi*.¹⁷ It becomes apparent that both communities have similar beliefs in the presence and potency of spirits, but it is Santals rather than Mundas who consider the ritual locations as one of the most important part of their environment. One may argue that in spite of similar places, beliefs and practices, sacred locations as important registers of association with the environment are a uniquely Santal notion.

The next category of choices i.e. images of fields, trees, cattle and other aspects of the natural environment were selected on grounds of usefulness and as beautiful places. I discussed earlier that motifs from the natural environment are common in murals and *alpana* designs made by many Adivasi communities in the region. These motifs are evidently an important part of Adivasi conceptions of their environment. In addition to selecting these images during the display, people mentioned places such as forests and hills as beautiful and the only things worth photographing around the village. One may argue that these preferences may be rooted in memories and mythic imaginations of their forest dwelling past.¹⁸ Additionally, elements of the landscape are evoked in political and institutional narratives of Adivasi identity through phrases such as *jal - jangal - jameen* (water, forest, land) that frame Adivasi relationships to the region.¹⁹ These multivalent associations with the natural environment arguably lead to its inclusion as an important place within the village environment. What is important to note here is that as compared to the shrine locations that are distinctive of Santal senses of places, the natural environment forms part of wider Adivasis conceptions of place.

¹⁷ In the previous chapter on settlement and community, I discussed memories of early settling in Bada Bandua where people suggested that it was the blessings of the *devi* that kept them protected against various hostile outsiders. One such story involved a colonial official who attempted to attack the village but was thrown off his horse each time he tried to enter the village precinct, and this was attributed to the protective influence of the *devi*.

¹⁸ Mythic imaginations here refers to histories of migration that form an important part of Santal histories. See (Bodding 1916).

¹⁹ For further reading on the subject, see Damodaran 2007.

In contrast to the natural environment that becomes important on account of mythic imaginations, memories of the past and other narratives of Adivasi identity, the choice of elements of infrastructure and the village school register a different trajectory of significance. I argue that they stem from a desire to be seen as modern and developing, which was evident in the people's explanations of their choices as discussed earlier. These choices are further particularly interesting because the elements of infrastructure marked out in the different visual material are all nearly inadequate for the villagers' actual needs. For instance, the village school in the three case study sites was selected irrespective of the functioning of the institution and the quality of education it offered. Similarly, elements of infrastructure such as electricity poles and hand pumps were highlighted in spite of the fact that water and electricity were scarce in the village. In other words, elements of infrastructure become important places within the built environment of the village on account of an almost iconic status as indicators of development.

To summarise, I contend that in responding to a question like what is important or representative in their environment, people were negotiating issues of identity in relation to places/ objects that comprise their everyday environment. The chosen sites were variously significant as establishing continuities with ancestors and drawing from past identities on the one hand while drawing from imaginations of development and trajectories of future identities on the other. In other words, when the villagers chose to represent their built environment, they straddled both past and the future imaginations, and pointed out to some things that had completely missed my architectural gaze.²⁰ This is congruous with current scholarship on heritage and identity where people's relationship with the past is framed in the following ways.

It is useful to briefly dwell upon the context in which Santal identities were being articulated. As Lovell (1998, 53) points out, any articulation of belonging, which in this case was in the form of places that people considered as significant and representative of themselves, are 'inherently tied to notions of identity, to a differentiation between 'us' and 'them' [and] is multifaceted and stratified: who 'we' are depends on context.' The context here is the participatory encounter between the villagers and my research project but also my presence as a researcher. That the villagers were responding to my presence was evident from the various frames of reference people used to describe themselves. In Bada

²⁰ This is discussed in terms of the past, heritage and identity in Graham and Howard, 2008, 5-6.

Bandua for instance, people referred to both Mundas and Santals as Adivasis, but maintained that there were differences between the two communities.²¹ Similarly in Bhagabandh, when discussing arrangements for the public display, I was informed that all the people in the *tola* were ‘ST’ i.e. Scheduled Tribe, which is the classification of Santals according to the government and not ‘SC’ or Scheduled Caste, which is the category to which Mahato people belong.²² In both cases, people were referring to themselves as Adivasis or as a Schedules Tribe and were using terms that essentially set them apart from outsiders like myself. One may argue then that all participatory encounters were responding to this context of engagement between the villagers and my own presence as a non-Adivasi urban outsider. By extension then, had my own ethnicity, gender and background been different, the nature of the encounter and the visual material that will have emerged may have been different as well.

8.5. Conclusion: Subjectivities and the possibility of different architectural histories

In this chapter, I discussed how Santal villagers imagined their own built environments through the analysis of participatory visual methods used during fieldwork. By analysing the visual material in relation to the participatory encounters, I suggested that people’s choices highlighted shrines as places of continuity with ancestors and spirits, natural elements considered as beautiful places and the village school and elements of infrastructure as icons of development. I further argued that in making these choices, people were negotiating notions of identity and their choices drew from past, present and future imaginations of themselves. While the participatory processes were part of a larger intention to engage people in my research project, the findings present stark differences between my own emphasis and people’s perceptions. While villagers attempted to articulate aspects of the environment that they consider important or representative, my own research focused on exploring the shifts in relationship between people and the environment by studying transformation of built forms and practices of everyday life. In being concerned with the existential immediacies of Santal environments, both points of view explore being-in-the-world, but in different epistemological orbits. People’s participatory choices negotiated issues of identity while I attempted to construct an architectural history.

²¹ In conversation with A. Murmu in March 2013.

²² In personal conversation with B.C. Murmu, *manjhi* of Bhagabandh village in February 2013.

It is important to reiterate a central aspect of this difference, which is of the conception of time. My own arguably modern anthropological consciousness led me to focus almost exclusively on the past in order to rationalise the architectural present. As Chakrabarty (2008, 239) points out, ‘if historical or anthropological consciousness is seen as the work of a rational outlook, it can only “objectify” – and thus deny – the *lived* relations the observing subject already has with that with which he or she identifies as belonging to a historical or ethnographic time and space separate from the ones he or she occupies as the analyst’ (emphasis in original). In other words, I was interested largely in the past so that I may understand the built environment and more broadly, their perceptions of space and place as shaped by key historical shifts in the Singhbhum region. For Santal villagers on the other hand, perceptions of the environment were rooted in lived experience, were temporally fluid, and variously informed by the social, natural and historical worlds they are part of. While recognising that the architectural history narratives I was constructing were informed by many subjectivities, the participatory encounters were important reminders that there were other ways of looking.

9. Conclusion: An architectural history in a world in flux

This study explored Santal built environments as both sites and processes in order to understand Santal senses of space and place and how these have transformed since the mid-nineteenth century. I analysed Santal dwellings and settlements, everyday practices, memories of the past, together with the processes of social, political and environmental change in the Singhbhum region. Operating from a phenomenological perspective where built forms, practices and perceptions constitute an analytical whole, I explored the meshwork of factors and influences within which Santal built environments are produced and transformed. The study had three broad objectives. First, I aimed to contribute to the growing body of interdisciplinary scholarship of vernacular/ indigenous/ traditional built environments by going beyond object-oriented analysis and engaging with processes of architectural production and representation among Adivasi communities. Second, the study reflected on architectural knowledge production and explored interdisciplinary enquiry, i.e., how architectural, anthropological and participatory research methods complement each other to produce nuanced and reflexive narratives. Third, by focusing on Adivasi everyday lives, I contributed to the field of Adivasi studies by locating domestic lives and individual experiences within the dominant historical narratives of Adivasis and the Singhbhum region.

The analysis of Santal built environments had four foci, each of which contributed towards understanding Santal conceptions of space and place in different ways. The first part examined the physical built form of Santal dwellings in terms of spatial configuration and building materials and technology. By identifying shifts in plan configuration and changes in building material, I developed a trajectory of dwelling transformation between the mid-nineteenth and the twentieth centuries. I suggested that, over time, Santal dwellings became internally differentiated with complex multiple thresholds of interiority, while also becoming more permanent in terms of construction materials and technology. This shift correlated to a wider process of sedentarization among Santals and other Adivasi communities on account of demographic and political transformation of Singhbhum in this period. The changes in Santal domestic environments revealed how Santal dwellings and ways of making were closely correlated to a larger transforming social, environmental and political context. More importantly, most previous understandings of Adivasi histories had focused on narratives of rebellion, heroes or mythic pasts, whereas the architectural

analysis of dwellings gave texture to the nature of Santal everyday life and domestic environments in the past.

The next analytical focus (spread over two chapters) examined how domestic spaces were inscribed and structured through everyday practices. I analysed floor plastering and wall painting, domestic activities, and gender-based perception and mobility to show how domestic practices were rooted in the past but also mediated by various contingencies of time and place. For instance, in the case of wall paintings, shifts in women's mobility brought about a change of practice in the form of new techniques and innovations in design. In case of the structuring of domestic spaces, increasing mobility among women for livelihood purposes and the consequently larger sphere of movement both within and outside the village problematized the idea that Santal women's lives are physically centred in and around the dwelling. Both chapters clearly suggested that domestic practices and their meanings cannot be viewed as static forms with unchanging values but rather form parts of a dynamic historic continuum with constant shifts and innovations. Most importantly, these chapters established that one must take into account the agency of individual Santals as social actors who produce domestic space and make it meaningful. By focusing on variations in individual practices and perceptions, one constructs a narrative that is not driven by essences but highlights the patterns of historical change in indigenous societies and built environments.

The third area of focus in the study combined the analysis of architectural forms and everyday practices at the scale of the physical settlement and village community as a spatial and social whole. I analysed the spatial and social constitution of the village and the ways in which a sense of the collective is established and practiced. As in the previous segment of analysis, here too I found similarities in how settlements develop in relation to topography, systems of nomenclature, and the roles of social and religious institutions as marking membership within the village community. While agricultural land ownership underpinned these aspects and was an important driver of how the case study Santal communities identified themselves, migration for livelihoods and changing local economies (in the form of land market) were having an impact on senses of community. Further, considering that most villages in the region are multi-community settlements, practices and notions of a collective varied depending on intra-village and intra-community politics, i.e., most villages presented a composite of social, religious and spatial practices based on the particular relations of power between the different groups that make up the

village community. In short, while agricultural land ownership, subscribing to the norms of the *kulhi* and participation in collective rituals in the *jahira* can be identified as registers of Santal village communities, economic and political conditions of each village present variations in the ways in which these registers operate.

The last part of the analysis took a distinctly reflexive turn and I examined the ways in which Santal communities represented themselves and how the self-presentation was different from my own architectural gaze. Focusing on the participatory visual encounters and the resultant visual material, I juxtaposed the Santal villagers' evaluation of their built environment upon the narrative that I had constructed to draw out the subjectivities of both points of view. This revealed the differences between the epistemologies of an architectural-historian and the inhabitants. The recognition and reflections on the difference in perspective was an important reminder that 'the discipline of history ... is only one particular way of remembering the past. It is one amongst many' (Chakrabarty 1998, 22). It brought out a simple yet critical fact that other histories may be possible (such as an exploration of the sites and meanings suggested by the villagers during the village display event) and that the architectural analysis revealed only some aspects of the relationship between people and their environment.

In addition to bringing out the subjectivity of historical narratives, the analysis of the participatory visual encounters led to reflection on the nature of architectural fieldwork and thereby, on the inherent interdisciplinarity of architectural historical knowledge production itself. This was amply evident in the inextricability of ethnographies and architectural representation for the purposes of documentation and analysis. While these methods were initially proposed as a way of mitigating the inadequacy of built forms as an archive, their inter-relations signalled a wider dependence of architectural historical analysis on other sources and methods, particularly in the case of indigenous built environment. In other words, the interdisciplinary nature of the study cannot be seen in a positivist sense of providing supplementary information to a primarily architectural study. Rather, in the case of societies such as Santals where historical record is sparse and the built forms are ever changing, the anthropological present may be an important, and possibly only route to engaging with an architectural past.

In conclusion, it is important to outline the key features of the architectural history narrative that emerged from this interdisciplinary and multi-sited study. The central

concern in this study i.e., to examine built environments as gestures of Santal relationships to their social, environmental and historical worlds, panned out in two ways. First, it translated into an exploration where the relationships between Santals and their worlds were not just viewed as overlapping social or spatial configurations, but in better measure, as a meshwork of places, practices and perceptions. The narrative wove together the strands of architectural design and making, resources, sustenance and livelihood, social aspects such as kinship and gender, religion and rituals, together with contextual changes in the environment, the state and nature of regulations and the demography of Singhbhum. Second, these strands were compared and discussed across three sites to highlight the particularities of Santal lives and architectural production under these different conditions. What emerged was that there are clear points of similarity in Santal built environments across the region and, yet, there are differences on account of how the contingencies of time and place have shaped built forms as sites and processes in each locality. Factors such as local historical conditions, environmental changes, patterns of economic and geographic development, and proximity to and interactions with other communities have shaped Santal built forms and their processes of making and significance in each of the case study sites. In short, the architectural history narrative that emerges through this study goes beyond the physical forms or a nominal exploration of context as a causative influence on architecture, to address the relationships that define Santal architectural production.

The emphasis on production and the focus on relationships - rather than on forms and motifs - is an important epistemological shift in the construction of Adivasi architectural histories. The built environment, across the various scales of enquiry, is framed as a series of negotiated decisions made by the inhabitants themselves. The study showed how Santal built environments are produced through negotiations between design memory and present-day practice, resources and need, socio-religious norms and changing individual and collective circumstances, among other things. This approach highlights two things – first, it presents both temporal continuity and constant change as characteristic of Santal and other Adivasi built environments, and second, it emphasises the centrality and agency of inhabitants as social actors, producers and users of built environments. The architectural history that emerges is one where processes of continuity and change – rather than a linear evolution of form or motif – become the central theme, and the narrative is epistemologically rooted in the experiences of the inhabitants themselves, rather than in any external aesthetic or visual frames of reference.

Framing the built environment as a process of negotiations and emphasising the individuality of architectural, environmental and social gestures, problematizes the idea of a 'Santal architectural history' as a singular, teleological construct. In place of an architectural tradition imagined as being driven by essences, Santal built environments are framed as varied dynamic processes shaped by the contingencies of time and place. This is a departure from older vernacular architecture approaches that employed the 'theme-and-variant' framework where, for instance, the similarities within Santal architectural production would be brought together to constitute a thematic core, while the difference across the site of Santal habitations would be positioned as variations. This framework was inadequate, however, since it is premised on delineating an abstract but fixed set of rules and practices as being the defining feature of Santal architecture while simultaneously rendering all differences as aberrations to the imagined, essentialised whole. This framework also implicitly valorised the thematic core as timeless and unchanging, and often also as the custodian of a group's identity. The variations, on the other hand, got positioned as corruptions of the traditional core. Departing from these binaries, this study focused on a collective set of practices and places, without implying that the individuals comprising the collective were identical or bound by a fixed set of rules. Rather, the collective was imagined as a group of individuals whose processes of self-identification, architectural forms, practices and perceptions were reasonably similar, while the differences revealed how the contingencies of time and place affected places and practices. This approach aligns itself with developments in the discourse about indigenous peoples that increasingly recognise the range and diversity of this group. This also influences the imagination of Adivasi architectural histories as the diversity of places and practices that constitute Adivasi/ indigenous built environments rather than abstracting some aspects and constructing an essentialised, reductive notion of an architectural tradition.

It is important to conclude with a few thoughts on the nature and texture of architectural history that was developed through this research. The narrative presented here is defined by its emphasis on flows of people and trajectories of influence as the meshwork within which Santal architectural production takes place. The trajectories of influences range from local histories of settling (across the spectrum of forest dwelling, settled agriculture and industrial labour), policies and regulation that shape a community's access to resources and relationships to land and forest, and proximity to other communities and intra-village politics that frame identity formation and structures of significance. Rather than searching

for a parity of architectural forms and practices, the study identifies patterns and trajectories of influence within Santal architectural production in Singhbhum. In this way, the collective and individual mobility of Santals becomes an important parameter of study as their practices and perceptions form the interface between global flows, i.e., larger contextual forces, and local immediacies in order to produce the built environments. In this narrative, Santal sense of place as a collective entity is defined and redefined as an accumulation of individual negotiations with the environment. Had the sites under consideration in this study encompassed a wider geography, and therefore a wider set of places, practices and contingencies, both the trajectories of influence as well as the nature of individual and collective mobility informing Santal architectural production may have differed. Architectural histories of Adivasi built environments cannot be fixed in historical time or place on account of their temporal and geographic continuities, nor can they be dismissed as being purely localised entities to be discussed anecdotally. There are clear overlaps in the thematic relationships that shape architectural production in different Santal communities, and focusing on the relationships and the diverse local practices and perceptions that constitute this dynamic architectural tradition may lead to new Adivasi architectural histories.

This call to think of Adivasi built environments in relational terms by foregrounding lines of influence and flows of people, knowledge and practices allows the construction of contextual and dynamic histories. From this perspective, two avenues for further research seem imminent. The first, as suggested by the participatory exercises, is to share the research findings in different Santal (and other Adivasi for a) in order to generate discussion on notions of heritage and the role that architectural histories may play in the complex processes of collective identity formation. The second direction for future research is to ask how the line of thinking developed in this study may contribute a global history of indigenous built environments, i.e., how indigenous communities and their built environments are part of a broader network of economics, movements, representations, knowledge transfer, and politics. This is not to suggest that one needs to search for or assume parity in architectural processes among different indigenous societies. Rather, the emphasis on relational thinking may be an opportunity to consider how a global history may be written about diverse local architecture and societies.

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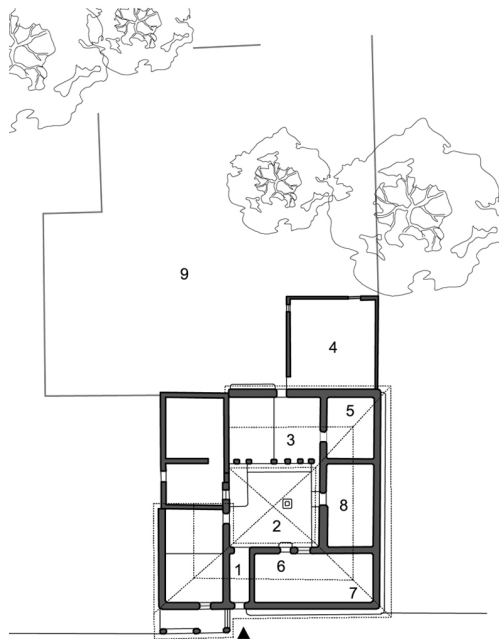
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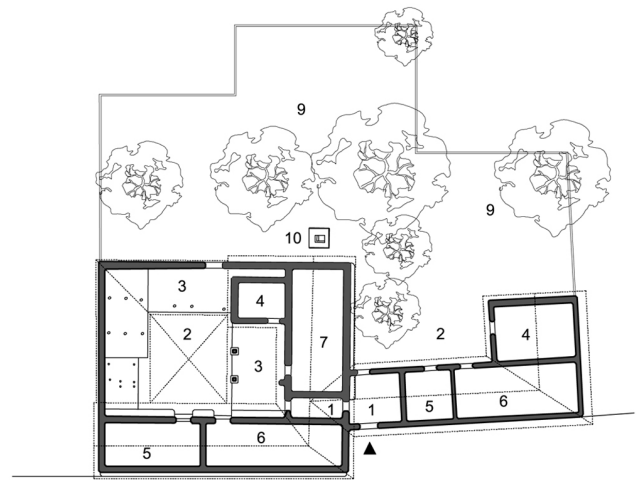
Appendix 1: Houses documented for this study

For this study, I conducted preliminary fieldwork in eleven villages, of which, three were selected for detailed study. The process of architectural analysis, however, drew from examples in all eleven villages. While architectural drawings of specific houses are incorporated within the chapters, it was useful to see all the documented houses together as the first step to visualising architectural similarities and differences. This appendix presents the layouts of 36 houses that formed the data set for architectural analysis. Sectional and three-dimensional drawings were also used in specific cases such as the analysis of physical structure of the dwellings, but these drawings were made for some houses and are included in the chapters are relevant places.

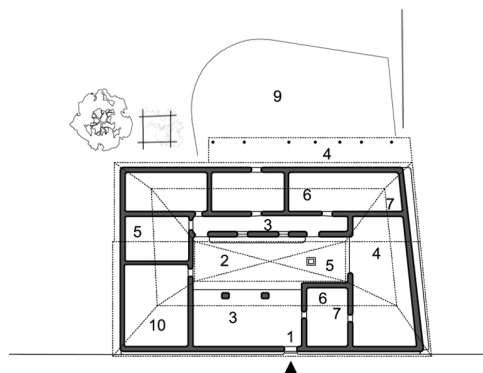
The layouts in the following plates are drawn at the same scale. Activities within spaces are marked and labelled. All plans are oriented in relation to the access from the *kulhi*, which is the general guiding principle for dwelling orientation in Santal villages. This, however, means that the orientation towards the cardinal directions varies across the examples. Please note that spaces without any labels indicate parts of the house that could not be accessed. The examples, unless otherwise mentioned, are Santal houses.



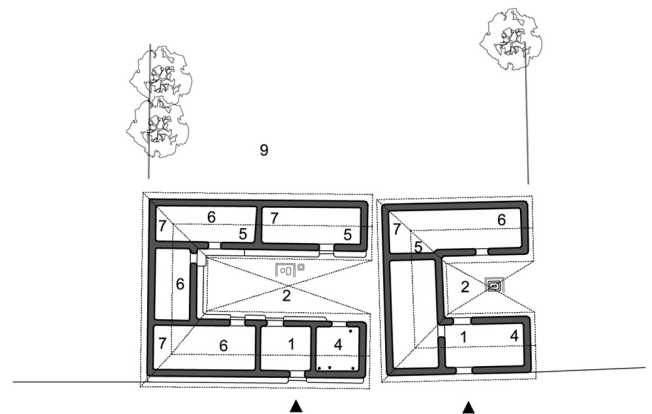
HOUSE 1: B C MURMU



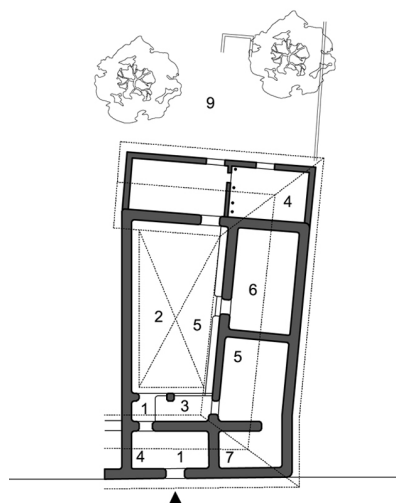
HOUSE 2: R TUDU



HOUSE 3: M & B HANSDAH



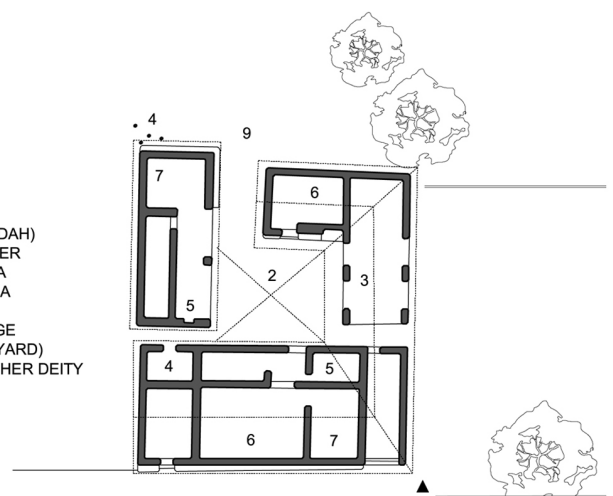
HOUSE 4: S MURMU AND EXTENDED FAMILY



HOUSE 5: P TUDU

LEGEND

- 1 ENTRANCE
- 2 RACHA
- 3 CHALI (VERANDAH)
- 4 ANIMAL SHELTER
- 5 COOKING AREA
- 6 SLEEPING AREA
- 7 BHITAR
- 8 GRAIN STORAGE
- 9 BARGE (BACKYARD)
- 10 SHRINE OF OTHER DEITY

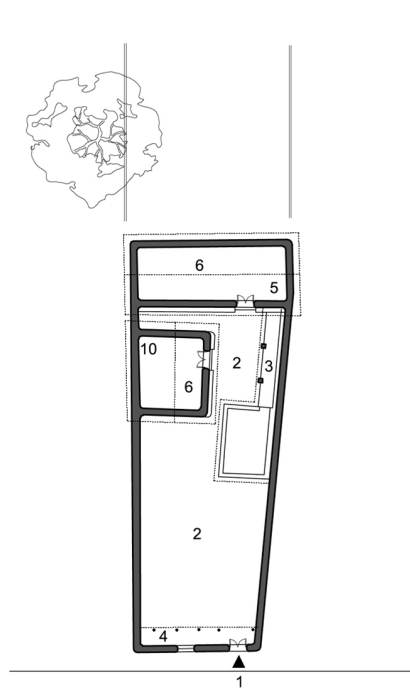


HOUSE 6: M C BASKE

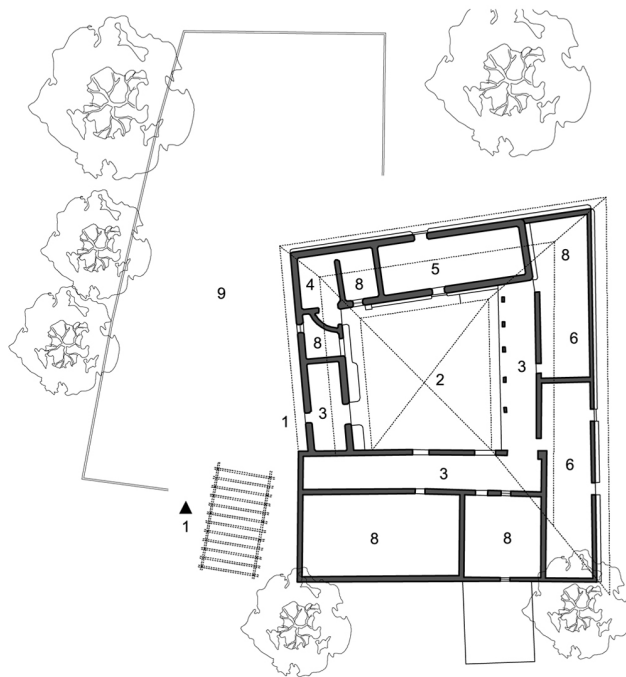
PLATE 01:

HOUSES IN BHAGABANDH

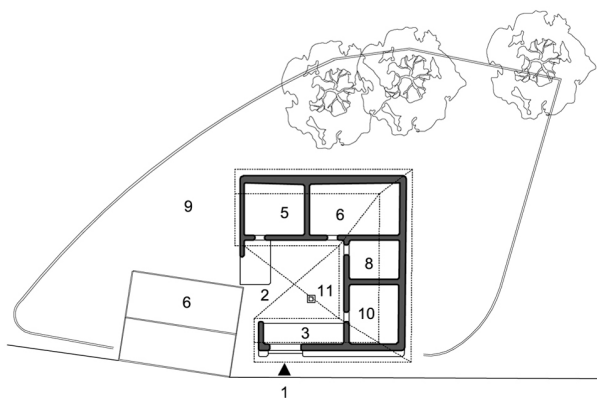




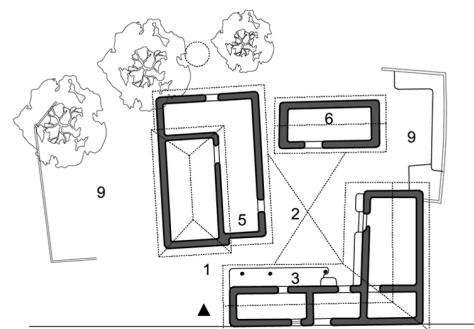
HOUSE 7: K MAHATO



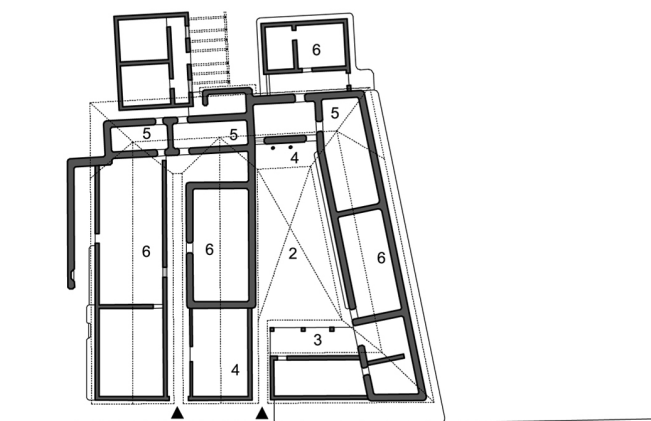
HOUSE 8: S MAHATO



HOUSE 9: S KALINDI



HOUSE 10: A R MAHATO



HOUSE 11: P R MAHATO

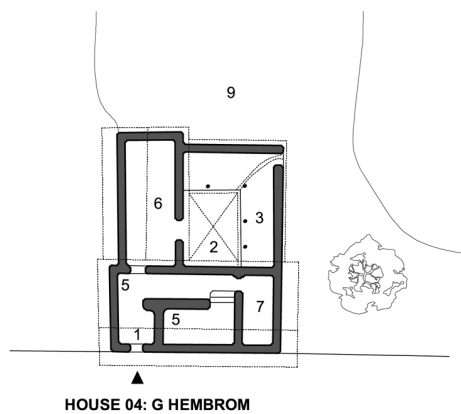
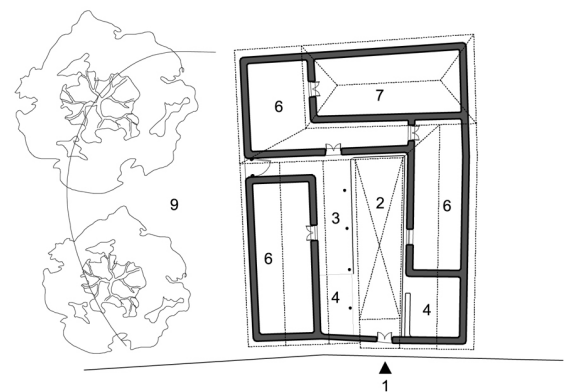
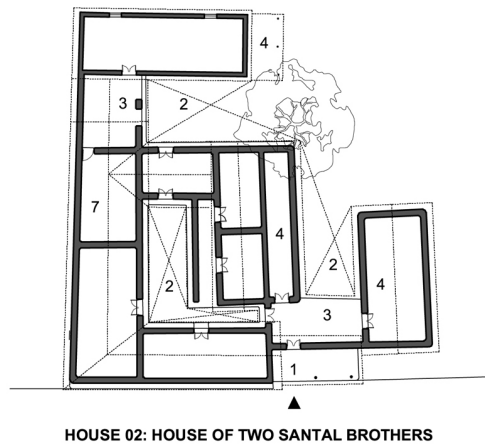
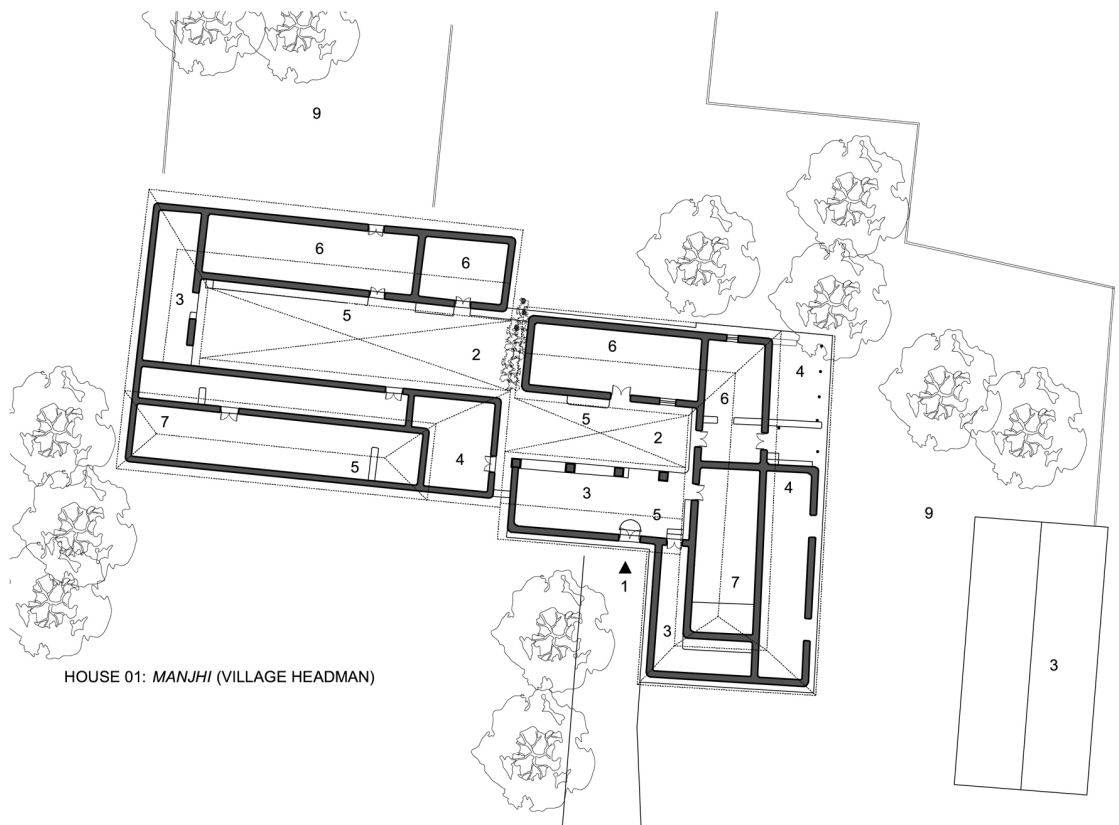
LEGEND

- 1 ENTRANCE
- 2 RACHA
- 3 CHALI (VERANDAH)
- 4 ANIMAL SHELTER
- 5 COOKING AREA
- 6 SLEEPING AREA
- 7 BHITAR
- 8 GRAIN STORAGE
- 9 BARGE (BACKYARD)
- 10 SHRINE OF OTHER DEITY
- 11 TULSI (SACRED PLANT)

PLATE 02:

HOUSES IN BHAGABANDH





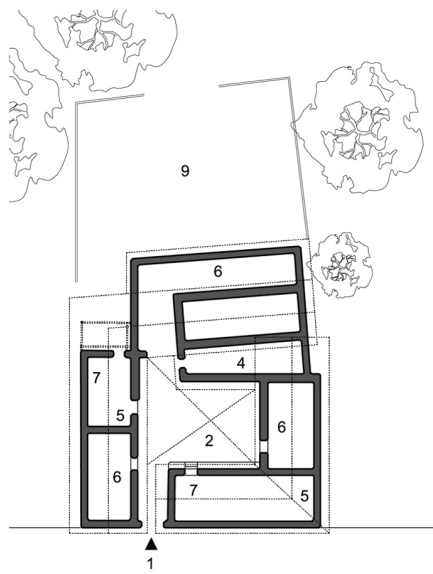
LEGEND

- 1 ENTRANCE
- 2 RACHA
- 3 CHALI (VERANDAH)
- 4 ANIMAL SHELTER
- 5 COOKING AREA
- 6 SLEEPING AREA
- 7 BHITAR
- 8 GRAIN STORAGE
- 9 BARGE (BACKYARD)
- 10 SHRINE OF OTHER DEITY

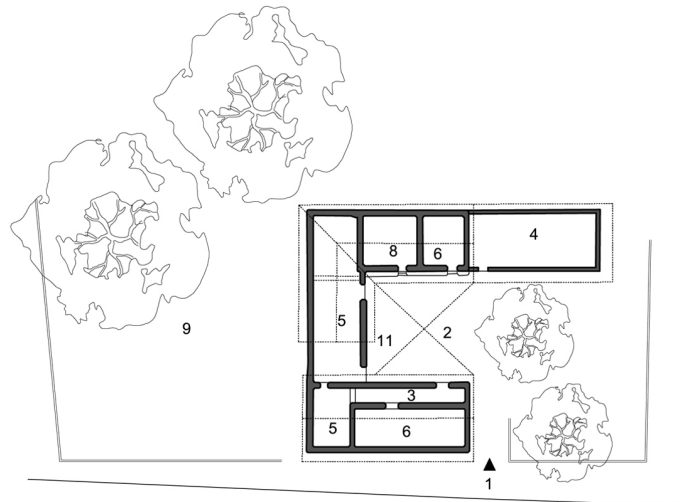
PLATE 03:

HOUSES IN CHAUDA

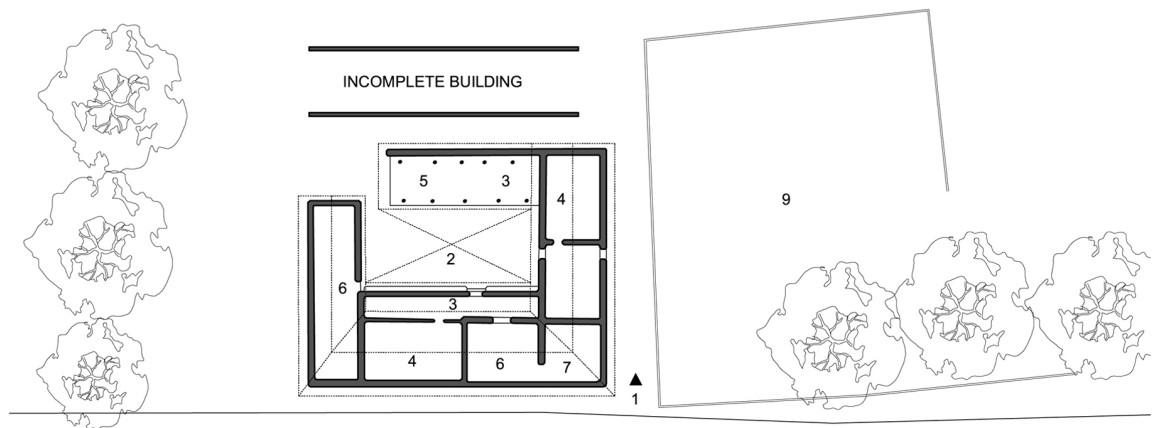




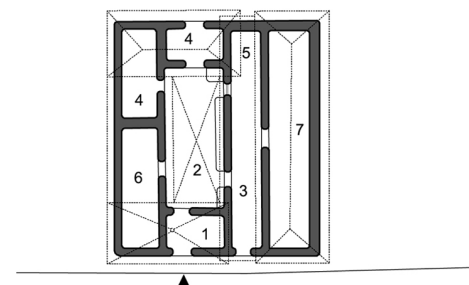
HOUSE 05: S HEMBROM



HOUSE 06: MAINO HOUSE



HOUSE 07: B KISKE



HOUSE 08: A HEMBROM

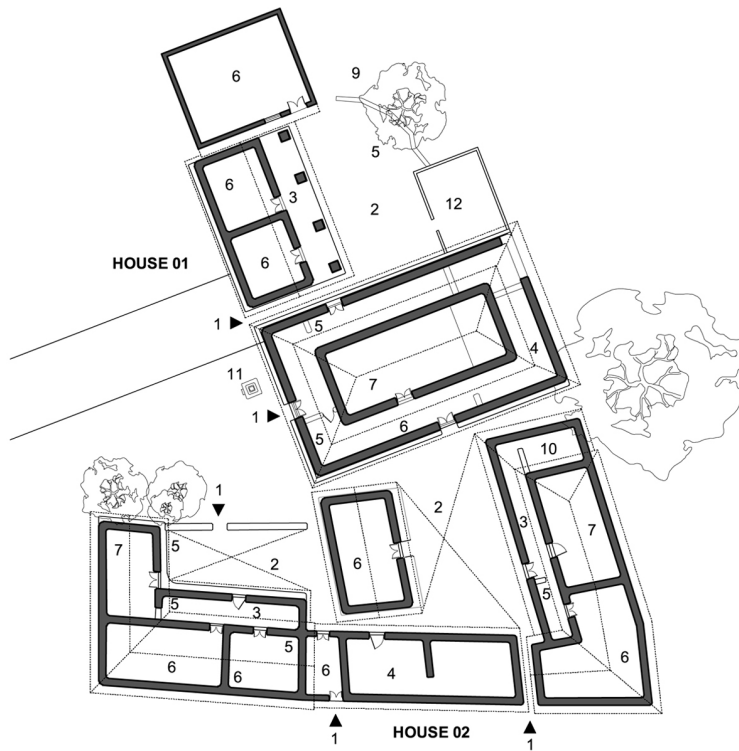
LEGEND

- 1 ENTRANCE
- 2 RACHA
- 3 CHALI (VERANDAH)
- 4 ANIMAL SHELTER
- 5 COOKING AREA
- 6 SLEEPING AREA
- 7 BHITAR
- 8 GRAIN STORAGE
- 9 BARGE (BACKYARD)
- 10 SHRINE OF OTHER DEITY
- 11 TULSI (SACRED PLANT)

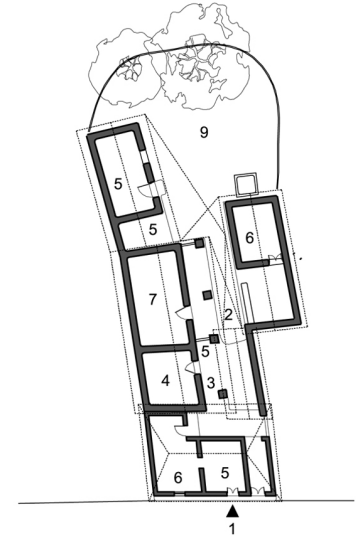
PLATE 04:

HOUSES IN CHAUDA





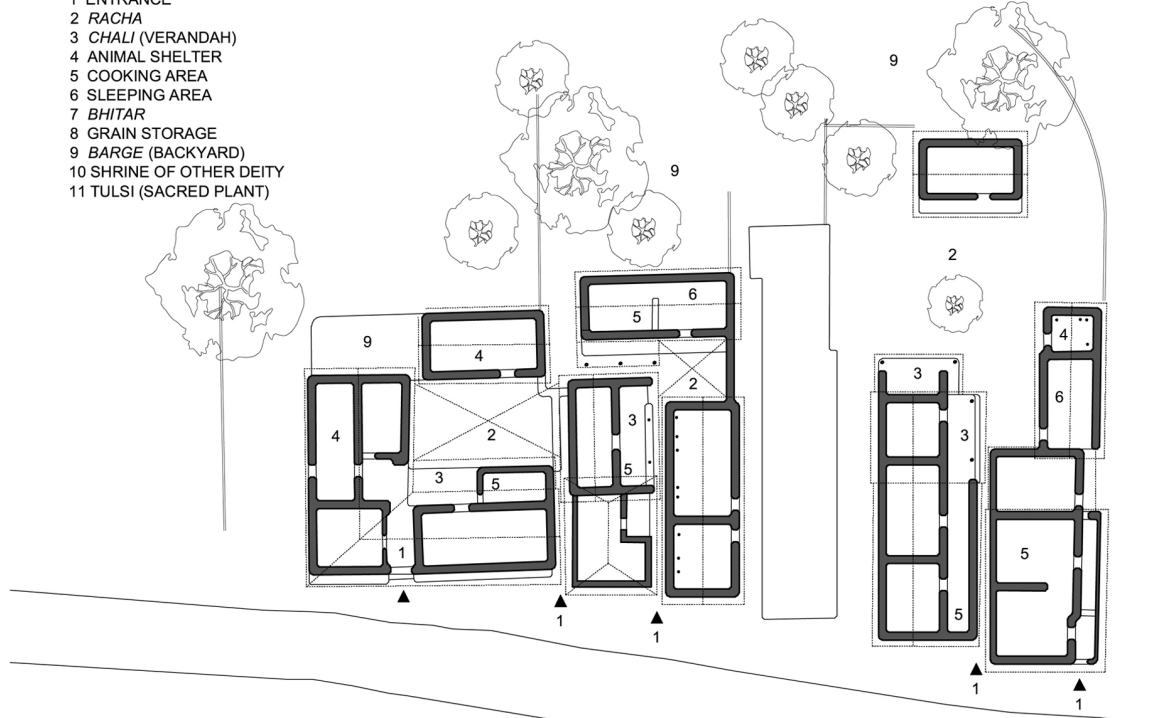
HOUSE 01: A MURMU, HOUSE 02: MARDI EXTENDED FAMILY



HOUSE 03: G HANSDAH

LEGEND

- 1 ENTRANCE
- 2 RACHA
- 3 CHALI (VERANDAH)
- 4 ANIMAL SHELTER
- 5 COOKING AREA
- 6 SLEEPING AREA
- 7 BHITAR
- 8 GRAIN STORAGE
- 9 BARGE (BACKYARD)
- 10 SHRINE OF OTHER DEITY
- 11 TULSI (SACRED PLANT)

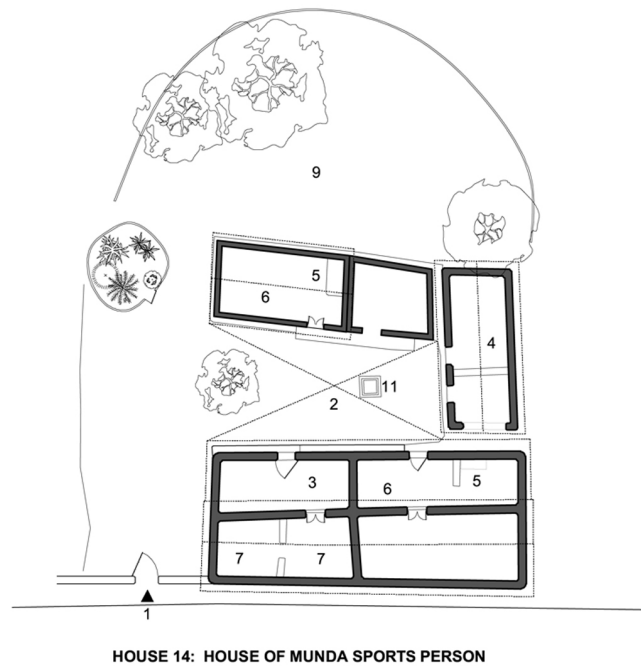
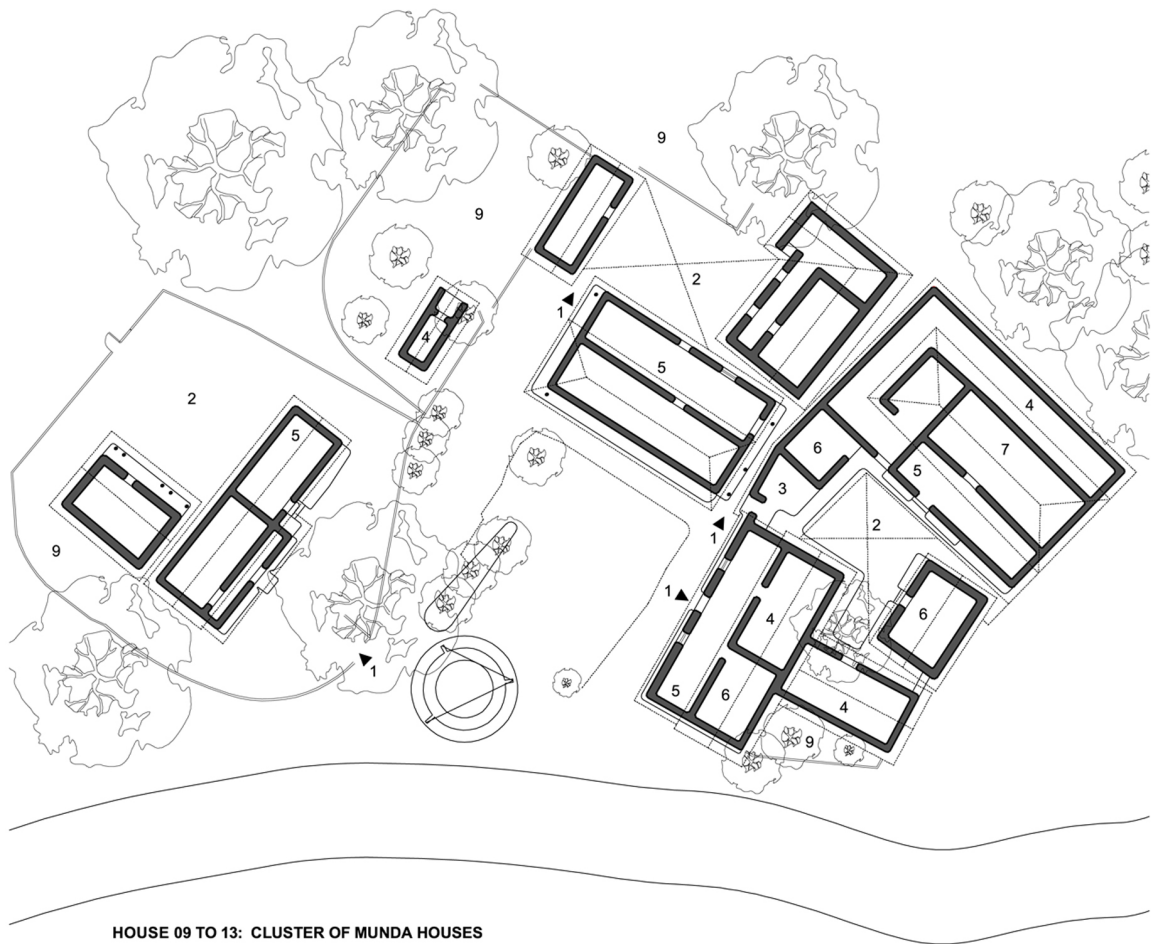


HOUSE 04 TO 08: CLUSTER OF SANTAL HOUSES

PLATE 05:

HOUSES IN BADA BANDUA





LEGEND

- 1 ENTRANCE
- 2 RACHA
- 3 CHALI (VERANDAH)
- 4 ANIMAL SHELTER
- 5 COOKING AREA
- 6 SLEEPING AREA
- 7 BHITAR
- 8 GRAIN STORAGE
- 9 BARGE (BACKYARD)
- 10 SHRINE OF OTHER DEITY
- 11 TULSI (SACRED PLANT)

PLATE 06:

HOUSES IN BADA BANDUA



Appendix 2: Summary of interviews and fieldwork interactions

The fieldwork for this study was carried out through eight visits to the case study villages and the city of Jamshedpur over a period of three years. It began with preliminary field visits through 2012, primary field work in early 2013, and return visits for discussing and sharing findings in late 2013 and 2014. The interactions were largely in the form of semi-structured and unstructured conversations in all cases. Listed below, in the sequence in which fieldwork was conducted, is a summary of the key topics covered in each instance of interaction. The list is organized in terms of the individuals that I interacted with. It serves, primarily, to indicate the range of information and evaluations generated through fieldwork conversations rather than from other sources.

1. Preliminary fieldwork visits

Preliminary visits were carried out in the first year of study. I visited eleven villages across East Singhbhum and the Seraikela-Kharsawan districts in an effort to identify potential case study villages. I spoke with a number of people in each village and to others who provided information and insights into Santal life in the region. The intention was to get some specific information about social, economic and historical conditions in each village. It is also important to note that this was the first round of interactions in the villages and therefore, I spoke to all the people who were willing to respond to my questions, i.e., rather than working with a predefined idea of participants, I spoke to many Santal villagers and other people working among Santals and other Adivasi communities in order to develop a nuanced sense of Santal life in the Singhbhum region.

Please note: Given in brackets next to each participants name is information of their sex, age and position within the community where relevant. Since the exact age is not known, I have indicated it using ‘>’ and ‘<’ arrows. The right arrow indicates greater than the given age and the left arrow indicates less than the given age.

JANUARY 2012	
People	Topics covered in conversations
Dr. C. R. Sardar – Officer, Tata Steel Rural Development Society (TSRDS)	General information about Santal and other Adivasi communities in and around Jamshedpur Differences between villages in the region

R. Tudu (M, >60) and N. Hansdah (M, >45), Chauda	Stories of Santal settlements – about divine protective influence of village spirits over Santals History, social life, and economic life in Chauda
L. Soren (M, 55) - field worker for TSRDS	Distribution of Santal villages and communities around Jamshedpur
B. C. Murmu (M, 40) - <i>manjhi</i> of Bhagabandh, and P. C. Mahato (M, >50) – fieldworker for TSRDS	About Bhagabandh Other Adivasi communities in Bhagabandh and the Ghatsila region
M. Hansdah (F, 28), Bhagabandh	Everyday life in Bhagabandh
Elderly man (>50), Gitibeda	About Gitibeda village Problems and opportunities provided by neighbouring forests Fear of forest officials among villagers
MARCH 2012	
D. C. Murmu (M, 65), Karandih – President of International Council for Santal Welfare	Local customs and practices in different Santal <i>disoms</i> Divisions in Santal geography
A. Murmu (F, >45), Bada Bandua	About Bada Bandua village Demography, social life and economic conditions in the village Routine of everyday domestic life About <i>ath chala</i> houses
B. Sinha (M, 48) – field worker, TSRDS	Politics in Bangoda village Relationship between Bangoda and other non-Santal villages in the vicinity
Elderly man (>70), Bangoda	About the <i>manjhithan</i> and powers of <i>manjhibaba</i> . Agriculture and irrigation in Bangoda – about the drought-like conditions since 2010 Trouble with elephants due to the location of the village within an elephant sanctuary – village responses to elephant attacks
D. Soren (F, 23), Kacha	Everyday life in the village Rituals and beliefs Stories of spirits and their protective influence over Santals in Kacha
B. Mahato (M, 46) - field worker, TSRDS	Differences and interrelations between Santals and Mahatos
<i>Manjhi</i> (headman) of Balrampur village	Differences in local geography, water and agricultural between the Subernarekha River valley and the Seraikela region
D. Hansdah (M, 78), Karandih – Santal scholar	About Santal life and culture around Jamshedpur Differences between Santal communities in Seraikela, Potka and the Ghatsila areas
JULY 2012	

D. Hansdah (M, 78), Karandih – Santal scholar	Distribution and interrelation between Adivasi communities in the region. Significance and ritual practices in <i>manjhithan</i> .
D. Soren (F, 23), Kacha	Stories of Santal settlements – about divine protective influence over Santals.
G. Singh (M, 58), – Headman of Bhilaipahadi village	About Munda houses Similarities and differences between Santals and Mundas
A. K. Sen, Chaibasa – Retired History professor	Documented/ published histories of Adivasi communities in the Singhbhum region
FEBRUARY 2013	
L. Hansdah (F, 16) and P. Hansdah (F, 15), Bhagabandh	Economic condition of poor families in village. Patterns of livelihood and income generation.
M. Hansdah (F, 28), Bhagabandh	Pattern of worship and distribution of <i>bhitar</i> in Bhagabandh. Belief in witchcraft. Wall painting practices. Women's everyday life and activities. Ritual practices in and around Santal houses.
B. Hansdah (M, 32) – Elected ward member from Bhagabandh	About processes of construction of dwellings. Details of wall painting practices. Distribution of agricultural land in the village.
D. Hansdah (F, >45), Bhagabandh	About the murder in Bhagabandh village and subsequent action by village council and other villagers.
B. C. Murmu (M, 40) - <i>manjhi</i> of Bhagabandh	About the differences between Adivasi and non-Adivasi villagers.
P. C. Mahato (M, >50) – fieldworker for TSRDS	About Bhagabandh village and its surrounding areas.

2. Primary fieldwork visits

From the eleven villages identified during preliminary fieldwork, I selected three as primary case studies based on architectural features (as discussed in Chapter 1) and on account of the rapport established with the villages and their willingness to allow me to carry out further enquiries and documentation in the village. Also, based on the preliminary fieldwork and developing architectural and ethnographic foci of analysis, I went to these villages with a specific focus to document built forms, construction process, networks and practices of everyday life, livelihood practices, governance and ritual

locations and practices. Compared to the preliminary fieldwork, the primary fieldwork conversations were more focused in nature. Listed below, in the sequence of how fieldwork was conducted, are the topics covered in the various interactions with people in the village.

a. Bhagabandh

The first village where I carried out fieldwork was Bhagabandh. The following interactions took place over a period of one month in January and February 2013.

FEBRUARY 2013	
M. Hansdah (F, 28)	About Santal dwellings in Bhagabandh – making, use and painting About distributions of spaces within dwellings and range of domestic activities Employment of labourers for construction of house Ritual practices in the <i>bhitari</i> in Bhagabandh Ritual practices in <i>jahira</i> Provision and access to water About the weekly market About the significance of photographs to the villagers
B. Hansdah (M, 32) – Elected ward member from Bhagabandh	History of Bhagabandh Land documents and ownership in the village Relationship between administrative structures of the state and traditional Santal governance Distribution of land and agricultural practices Details of construction process – materials, technology and labour
Group of children	Process and details of gathering wood About the surroundings of Bhagabandh village About their drawings of Bhagabandh village About the village school
Elderly lady (>50) who sells vegetables in Jamshedpur	Modes of travel to the city of Jamshedpur
S. Karmakar (M, 31)	Life of non-Santals in Bhagabandh village Agriculture and irrigation in the village His thoughts of regional and national events Ritual locations and practices in the village
D. Hansdah (F, >45)	About <i>alpana</i> About cooking practices About murder incident in Bhagabandh and action taken by village council
L. Hansdah (F, 16) and P. Hansdah (F, 15), Bhagabandh	Economic difficulties of poorer families About keeping cattle Daily wage livelihood options around the village
K. Mahato (F, 18)	About the forest and dangers faced by women in the forest Ritual practices among Mahatos and Santals

	Differences between Santal and Mahato houses Details of <i>alpana</i> – process and significance of symbols
Elderly woman (>70)	Santal dwellings in the past Bhagabandh village in the past
<i>Manjhi</i> 's sister (>20)	Wall painting practices – design inspiration, procurement of material and painting process

b. Chauda

Fieldwork was conducted in Chauda for twenty days in February and March 2013. Overall, I spoke to fewer people since many villagers were involved in daily wage labour and were typically unavailable throughout the day. These conversations, though fewer in number, were more detailed and revealed the nuances of a number of everyday practices in the village.

MARCH 2013	
R. Tudu (M, >60) - former <i>manjhi</i> of Chauda	Adivasi labourers involved in construction of industries in the region in the past century Transport networks in and around Jamshedpur in early 20 th Century Everyday life in villages in early 20 th century Relationship between the villagers and Seraikela royal family Livelihood and interdependency of basic needs between villages in a region Location of Santal villages in relation with topography History of Chauda
M. Murmu (M, >60) – member of Chauda village council	Introduction to village. Conversation about engaging with outsiders Design and layout of houses Toilets and other services in village houses Division of houses and property from one generation to the next
N. Hansdah (M, >45)	Layout of Santal houses Construction practices in Chauda – use of stone, labour networks, timing and sequence of activities Participation in <i>jahira</i> and its relation to land ownership History of division of Chauda into two villages Ritual practices among Santals in Chauda Governance structure in Chauda
M. Murmu (F, >45), Chauda	Personal history of her house and family
Two potters, Chauda	Process of making clay tiles – material procurement, detailed process, labour requirements and time taken Networks of travelling potters
N. Hansdah (M, >45), Chauda	Details of wall painting practices. Involvement of Santal men in <i>jahira</i> History of Chauda and its split into two separate villages.
D. Murmu (M, 24)	Details of wall painting practices Uniqueness of Santal wall painting practices
P. Mardi (F, 26)	Details of gathering firewood

<i>Manjhi's</i> sister (F, 37)	Designs in Santal houses in the Seraikela region
Elderly man (>50) in Tirildih village, next to Chauda	Details of house construction – materials, making of walls, making sculpted columns Strength of mud as a building material Ritual practices at entrances of Santal dwellings
Cloth salesman, Kolabira market	Networks and practices of weekly markets
G. Hembrom (F, 28)	Daily lives of women who work as labourers
S. Tudu (F, >30)	Women's everyday life and practices
Group of children	Awareness of the neighbourhood About the village school

c. Bada Bandua

The final case study village was Bada Bandua, which comprises Mundas and Santals living in three *tolas* (neighbourhoods). Compared to the other two case study villages where I spoke to a number of different people in the village, in Bada Bandua, my interactions were limited to three groups of villagers, i.e. the neighbours and acquaintances of A. Murmu, M. Singh and D. Singh respectively. I became good friends with these three women, and they in turn introduced me to their neighbours and relatives. Consequently, these groups of people were such that they were related to each other or lived next to each other. In the other case study villages, on the other hand, I spent more time wandering through the village and met and spoke to more people from different parts of the settlement.

This focused interaction may have also inadvertently occurred on account of the fact that Bada Bandua was the last case study village. By the time I began fieldwork here, I had already begun to organise my notes and visual documentation of the previous two case study villages, and certain analytical foci had already begun to emerge. So while I had more open-ended conversations in Bhagabandh, the interactions in Chauda were geared towards getting more detailed information about practices, and Bada Bandua became a site for filling in the gaps in the accounts thus far. This is not to say that the fieldwork in Bada Bandua was limited in any way, but the questions I asked and the information I sought was much more focused on account of the experiences in the two previous case studies.

MARCH 2013	
Elderly Munda villager 1 (>60)	History of Bada Bandua - early settlers, myths, encounters with colonial forces
Elderly Munda villager 2 (>75)	Significance of trees in Munda villages
A. Murmu (F,	Details of wall painting practices

>45)	Everyday domestic practices Subdivision of Santal houses Agricultural land types and practices Santal – Munda politics and institutions in Bada Bandua Ritual practices in houses and the village as a whole Communities in the village in the past – particularly, displacement of certain communities such as Muslims from the village
M. Singh (F, >30)	About building materials <i>Alpana</i> practices in Bada Bandua Differences between Santals and Mundas in the village Objects in and around Munda houses Significance of <i>sasan dhiri</i> among Mundas Tarred road and vehicular traffic in the village
Elderly Gop villager (M, >60)	Details of constructing mud walls About brick kiln in the village
Men at a brick kiln	The workings of a brick kiln
L. Hansdah (F, 17) and P. Hansdah (F, 19)	About the surroundings of the village Water sources River based livelihoods in Bada Bandua Vegetable cultivation in Bada Bandua Mobility and transportation around the village
Men thatching a roof	Process of laying thatch roof Comparison of thatch and tiled roofs Differences in construction materials in the past and the present day
S. Mardi (F, 14) and K. Singh (F, 14)	Surroundings of the village Information about different families Everyday domestic activities About <i>alpana</i> designs
Munda woman (F, >30)	About family structure and dwelling divisions among Munda families Everyday domestic practices in Munda houses On cultivating paddy around Bada Bandua – quality of land, irrigation and sequence of activities

3. Return visits for discussions with fieldwork participants

In the latter half of this research project, I returned to the fieldwork villages and to Jamshedpur to discuss the key ideas emerging in each chapter of the thesis. While it was not possible to visit each village and speak to all participants, I attempted to meet those who had been most involved in my fieldwork and who appeared interested in having further discussions. While actual inputs are referenced in the chapters at appropriate, the list below provides a brief overview of the number and kind of interactions at this stage of the study. Specific points in different chapters were discussed in detail with different people, and their feedback was incorporated into the thesis. As discussed in Chapter 1, the

process of discussing thesis findings was an important methodological and ethical choice and considerably shaped the final narrative.


JULY 2013	
D. Hansdah (M, 78), Karandih – Santal scholar	<p><i>Discussion about Ch. 2 – Transformation of Santal dwellings:</i></p> <p>Connections between villages and Jamshedpur in the past century – clarifying the differences between case study localities</p> <p>Linkages between communities in different parts of Santal geography</p> <p>Detailed description of early Santal houses – corroborating the trajectory of transformation</p> <p>Belief in witchcraft and its role in structuring Santal built environments</p> <p>About Munda villages, practices and relationship with land</p> <p>About Santal village names</p> <p>Cleanliness as an important Santal trait</p>
G. Singh (M, 58), – Headman of Bhilaipahadi village	<p><i>Discussion about Ch. 2 – Transformation of Santal dwellings:</i></p> <p>Adivasi everyday life and mobility in early 20th century.</p> <p>About <i>ath chala</i> houses</p> <p>Connections between Singhbhum and neighbouring Bengal.</p> <p>Information about Munda houses and their customs.</p>
P. C. Mahato (M, >50) – fieldworker for TSRDS	About Birhor and Sabar houses and communities
M. Das (M, 75) – Lawyer in Jamshedpur	<p>Adivasi life in early 20th century</p> <p>Traditional customs and land legislation in the Singhbhum region.</p>
D. Hansdah (M, 78), Karandih – Santal scholar	<p>Discussion about <i>Kumbaha</i> – early Santal houses</p> <p>Discussion and corroborations of key arguments in chapters 2 and 3</p> <p>Funeral practise among Santals as providing insights into conceptions of dwelling</p>
B. Hansdah (M, 32) and M. Hansdah (F, 32), Bhagabandh	Discussion on chapters 2, 3 and 4 – particularly on gender and structuring of space, nomenclature of building elements
D. C. Murmu (M, 65), Karandih – President of International Council for Santal Welfare	Discussion on chapters 4, – particularly on gender and structuring of space, regional variations in domestic art practices, significance of motifs used in <i>alpana</i> and wall paintings
M. Hansdah (F, 28), Bhagabandh	<p>About the murder in Bhagabandh village and subsequent action by village council and other villagers.</p> <p>Practices in the <i>kulhi</i>.</p>
D. Hansdah (M, 78), Karandih – Santal scholar	<p><i>Alpana</i> practices and Adivasi identity</p> <p>Local histories of Seraikela and Dalbhum.</p>
B Hansdah (M,	Discussion and suggestions on visuals illustrating Santal architectural

32) and M Hansdah (F, 28), Bhagabandh	history
D. Tudu (M, 31), Jamshedpur	Narrative of Santal architectural history as bolstering/ articulating a contemporary Santal identity

Appendix 3: Exhibitions in the village

One of the participatory visual methods used in this study was to display samples of my architectural and photographic documentation of the case study villages in the *kulhi*. As discussed in the chapters earlier, this offered the villagers an opportunity to engage with my representations of their environment, and, more importantly, offer opinions and evaluations of the architectural focus of my study. While selected images and people's responses are discussed at relevant places throughout the thesis, presented below is an example of one complete set of images as displayed in Chauda village. This overview and explanation is important for two reasons. First, this set of images represented the range of things that had interested me in the course of fieldwork. Second, this totality was also the context within which people made their choice of the most important and representative places in the village, as discussed in Chapter 7.

It must be mentioned here that there were different images displayed in each village. This was because each display experience helped develop a more nuanced range for the next event. The images below are from the third display event held in Chauda. By this time, four basic guiding principles for the village exhibitions had become clear. First, as mentioned above, the range of images had to be representative of my architectural and anthropological interests in the village. Second, I also included things that had been suggested by people as being important in the village. Third, I realised that seeing the images in front of them often prompted people to offer more information about the visual than they had during earlier interactions. For instance, I included images of a small platform, which was evidently a site of worship (#48) but I did not know anything about it. During the display people described what it was and what ritual practices took place there. Finally, the display was also an opportunity for villagers to offer evaluations of their built environment. This was particularly true in the case of wall paintings for which I had detailed information about the practice already. Putting a number of images of wall paintings together offered an opportunity to ask the villagers which designs they preferred and which one they liked less, and why. Given below are brief descriptions of each image and the rationale behind its choice for display. The images were displayed in the sequence in which they are listed below.

IMAGE	DESCRIPTION RATIONALE
	<p>1. RAILWAY CROSSING AS A BOUNDARY BETWEEN CHAUDA AND NEIGHBOURING TIRILDIH</p> <p><i>To register the sense of boundaries in the village since it was described as a divider between the two villages.</i></p>
	<p>2. FACTORY CONSTRUCION SITE NEAR CHAUDA</p> <p><i>I hoped to get some reaction/ response to industrial activity – the image drew much attention and villagers described the conflict over land acquisition in this site.</i></p>
	<p>3. BIRBANS RAILWAY STATION</p> <p><i>Selected after observing women carrying baskets of fruit heading towards railway station to catch a train to Jamshedpur – intended to generate response to transport network used by villagers.</i></p>
	<p>4. KOLABIRA WEEKLY MARKET</p> <p><i>As an important place in the village.</i></p>



5. FOOTBALL GROUND IN THE VILLAGE

Children's drawings showing electricity towers suggested that these may be seen as important elements of the landscape; also, sports was an important village institution.



6. VIEW TOWARD 'BADA TALAB' [LARGE POND]

Included since the pond was described as an important watering hole for cattle.



7. JAHIRA

From pervious displays – the most important place in the village.



8. VIEW OF KULHI AT NIGHT

For a response on electricity provision in the village – inspired by children's drawings of electricity poles and light bulbs.



9. SOLAR PANEL

Inspired by children's drawing of solar panels as important things in the village



10. SOLAR STREET LIGHT

Inspired by children's drawing of solar panels as important things in the village



11. HAND PUMP

The primary source of water – an elderly villager offered comments on difficulties of water provision in the village.



12. VIEW OF VILLAGE SCHOOL

After the Bhagabandh displays where villagers' chose the school as an important place.



13. LADY MAKING *GUNDI* (TYPE OF FUEL)

For response on fuel and women's lives.



14. VIEW OF *KULHI*

Following from Bhagabandh reactions to kulhi showing typical village life and activities.



15. TRAVELLING SALESMEN

As representing an important network for buying household essentials.



16. ARCHERY GROUND IN THE VILLAGE

Responses to important of sport in the village or to the naming of the ground after Santal hero Baba Tilkhe Manjhi.



17. VILLAGERS LEARNING ARCHERY

For the archery coach who wanted photographs of his students.



18. MANJHITHAN

After Bhagabandh responses identifying the manjhithan as an important location.



19. PALASH TREE IN FULL BLOOM

A prominent feature of the regional landscape and was in full bloom during fieldwork – children drew attention to all flowering trees in the village during a guided photography walk.



20. MAHUA TREE

For responses on the imminent Mahua flowering season and uses of Mahua.



21. SCHOOL BUILDING

Following from Bhagabandh responses where the school was a popular choice in the village display.



22. VILLAGE SHOP

Owned by manjhi's sister, possibly an important institution in the village.



23. COWS IN ENCLOSURE

Cows kept in enclosures when people were unable to take them grazing – image included in the hope for some response on cow grazing patterns.



24. COWS IN KULHI

Following from Bhagabandh, cows were a popular pick as being important in the village.



25. HOUSE WITH SCULPTED COLUMNS

Responses on these columns since they were unusual in the village; for understanding design preferences.



26. WALL PAINTING

For understanding design preferences.



27. PAINTING ON REAR WALL

For responses on differences in design on different walls.



28. WALL PAINTING

For understanding design preferences.



29. WALL PAINTING

For understanding design preferences.



30. WALL PAINTING

For understanding design preferences.



31. WALL PAINTING

For understanding design preferences.



32. MANJHI'S HOUSE

Following from Bhagabandh, marking the manjhi's house as an important location.



33. RITUAL ACTIVITY PRIOR TO LAYING FOUNDATIONS FOR THE HOUSE

With a view to get some response on ritual practices before building a house.



34. DIGGING FOUNDATIONS

Sequence of house building.



35. BUILDING WALL

Sequence of house building.



36. KNEADING MUD

Process of making clay tiles.



37. KNEADING MUD

Process of making clay tiles.



38. POTTERS MAKING CLAY TILES

Making of clay tiles, which is becoming increasingly rare.



39. PILE OF STRAW

Example of things found in most Santal houses.



40. WOODEN STAND FOR THRESHING PADDY

Example of object found in most Santal houses; I hoped the image would prompt information on paddy cultivating and storing.



41. BROKEN BICYCLE FRAME AGAINST PINK WALL

Looked very attractive but I did not know what it was. I found out during the display that it was a broken bicycle frame.



42. FISHING BOX

Example of object found in most Santal houses.



43. VIEW OF *KULHI* WITH *GUNDI* (TYPE OF FUEL)

For reactions to a slightly dirty kulhi.



44. *DILI* – STRAW BASKET FOR STORING GRAIN

Example of object found in most Santal houses.



45. BROOM

Example of object found in most Santal houses.



46. FISHING TRAP

Example of object found in most Santal houses.



47. CHULHA

As an important place in Santal houses.



48. PLATFORM FOR WORSHIP WITHIN THE HOUSE

For more information on ritual practices in dwellings.



49. DRAIN BELOW THE FRONT DOOR
OF A HOUSE

Houses typically did not drain into the kulhi, so was this unusual; some response to importance of water drainage at village level was hoped for.



50. AN OLD ROOF

For more information about roofs.