

The Dong Oral Architecture: Carpenter, architecture and phenomena among the Dong people in southwest of China

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**Thesis submitted for
the Degree of Doctor in Philosophy
School of Architecture,
The University of Sheffield, UK
November, 2016**

Acknowledgements.

First and foremost, I offer my sincerest gratitude to my supervisor, Prof. Peter Blundell Jones, who has supported me throughout my thesis with his patience and profound erudition. This thesis would not have been possible without his kindly help and excellent guidance. He gave me the precious opportunity to study as his student. He taught me to return to the thing itself and think it in terms of its own. The knowledge and idea I have learnt from him definitely will be a significant treasure of my life. It is my honour to be his student. However, he passed away on 19th, August, caused by cancer.

During a supervision in 2014, Professor Peter and I were discussing rituals in buildings. He mentioned he was writing something on his mother, after her passing. He said writing this is a way remembering someone, it recalls the memory of this person, and gives people the feeling that this person is still alive in their mind. He said it is good for someone to know there is someplace he or she can go after the death, so people will not be afraid. People hate and fear the feelings of nothingness death brings But through rituals in architecture and writing, people may relieve these feelings and offer a proper farewell to the deceased. As Prof. Peter said, there is someplace the deceased can go. And this place exists through our memorial activities.

Yet for me his continuity lies neither in ritual nor in writing, because he will be remembered in my heart, as a great and beloved mentor of my research and my life. It is a departure, not an end because, whilst a life does end at this time, his thinking still speaks profoundly to me and enlightens me to go forward. As an old Chinese saying: 'One day teacher, whole life father'.

And I must offer my sincere thanks and gratitude to Dr. Stephen Walker. During that sad and hard period, he acted as my supervisor and helped me to finish the rest of my thesis. He spent lots of work and time on my thesis. He showed very patient and detailed supervision, and given many excellent and effective suggestion and guidance. Without his kind, detailed and strong support and supervision, I cannot make this thesis through. Many thanks again.

Next thanks also extend to Prof. Jian Kang, and East-West Studies Group, Dr. Jan Woudstra, Jiang Bing, Chen Jianyu, Hui-ju Chang. You gave me a great help and suggestion on my study.

In the field survey, I have received kindly help and support from local scholar Zhang Yong, Luo Yongchao, Fu Anhui, Wu Dinguo. Many thanks to them. Special thanks to Mr Zhang Yong. He has provided me with many books and knowledge of Dong song and custom, which were very helpful in my study.

Special thanks to the hand-ink master Lu Wenli. Most of my carpentry knowledge are learnt from him. He is an excellent master among Dong carpenters. It has been a

pleasure to work with him and his apprentices. They gave me a joyful memory in Dong village.

Thanks to my relatives and friends who have helped and supported me during my study. I would like to thank all my friends for their support during my time in Sheffield. The joyful memory and sincere friendship with them are my precious treasure. Special thanks to the football teammates for great pleasure, Jiang Dazhi, Wang Jue, Luo Lei, Wang Xi, Tian Yuan, Li Xiaofeng, Huang Xingxing, Ren Xiang, YinTaixiang, Peng Qiaohao, Tian Xiaohe, for the great friendship and I was privileged to be able to spend lots of weekends playing football with you together.

I cannot find words to express my gratitude to my father Kong Lingjun and my mother Yao Huiqiong. Their unselfish support and love have always been the power to me during my study and life. I want to offer my deep gratitude and love to my wife Yang Hui. Her company and support are inseparable parts of my life. Special thanks to my little girl Kong Weiwei who was born during my study, I love you.

At last, I would like to use this space to memorise my beloved grandfather Kong Zhongming and maternal grandmother Yang Xiumei. They passed away during my study and I could not even attend their funerals. May they rest in peace.

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November, 2016
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Abstract

The Dong is a minority mainly living in southwest China. The Dong people do not have written language, the dissemination of knowledge mainly relies on the oral education and practice, forming a unique process and method of oral education, of architectural construction and the use of architecture. In this thesis these three processes are linked together and understood to produce 'Oral Architecture'.

Oral architecture is a process through which the Dong architectural activity is reproduced and passed down through generations, letting people participate and observe phenomena, and thus apprehend the meaning of things and community. It is built on the relationships between people, activity and building. The series of activities that relate to buildings are simultaneously the motivation to construct intra-community relationships, to maintain traditions, and promote the broader process of living closely within their particular environment.

Through field research, interviews, literature review, case studies and other methods, I have collected information about the process and methods of the Dong oral education, of architectural construction, and the use and meaning of their architecture. Informed by architectural phenomenology, the thesis offers a qualitative analysis of this data in order to summarise and understand the mode and concept of Dong oral architecture. The structure of the thesis provides a broad introduction to Dong society and culture, before analysing the education and practice of Dong Carpentry; the construction of the Dong House and the Drum Tower (the most important public building in any Dong village). Concluding chapters focus on how systems of meaning and 'reading' are supported by Dong building and their practices of everyday life, as well as the significant events of birth, marriage and death.

All translations from Chinese are by the author unless otherwise stated.

Key words:

Oral culture, social activity, custom, ritual, construction, oral education, carpenter, the hand-ink master, Dong house, the drum tower, sense, experience, cosmology, phenomenology.

Content

Introduction	1
Chapter 1. Literature review	14
1.1 Previous Dong research and survey	14
1.2 The subjects of literature review	15
1.3 Culture and history	17
1.3.1 Oral knowledge	17
1.3.2 History.....	20
1.4 Social structure and customs	24
1.4.1 Social structure	24
1.4.2 Folk custom.....	25
1.4.3 British village life	29
1.5 Architecture	32
1.5.1 Chinese and Dong architecture.....	32
1.5.2 Material	36
1.5.3 British craft and building	41
1.6 Sociological theory	43
1.6.1 Structure and generative scheme.....	44
1.6.2 Social reality and authentic field survey.....	45
1.6.3 Historical position and dynamic history.....	46
1.6.4 Culture system	47
1.6.5 Knowledge system	47
1.6.6 Custom and ritual system.....	48
1.6.7 Language system.....	50
1.6.8 Life experience within a stable rural life.....	52
1.6.9 Oral mode	53
1.7 Architectural theory	54
1.7.1 People in building.....	55
1.7.2 The role and significance of architecture in life.....	60
1.7.3 Architecture in life.....	64
1.7.4 Construction of building.....	65
1.8 Conclusion	68

Chapter 2. Dong society and oral culture	71
2.1 Dong Society	71
2.1.1 Natural conditions	72
2.1.2 Economy.....	75
2.1.3 Ethnic culture	76
2.1.4 Social structure and system	95
2.2 Oral culture	107
2.2.1 Oral culture system	110
2.2.2 Other symbols.....	124
2.2.3 Use of oral knowledge in social activities	126
2.3 Conclusion.....	127
Chapter 3. Dong architecture and education in carpentry.....	131
3.1 Dong architecture	131
3.1.1 Ganlan building	131
3.1.2 Dong house	138
3.1.3 Drum tower	149
3.2 Content of Dong carpentry	167
3.2.1 Architectural material	167
3.2.2 Carpentry tools	176
3.2.3 Number and form	191
3.2.4 Customs in Dong carpentry.....	194
3.3 Education of the Dong carpenter	195
3.3.1 Education procedure of a Dong hand-ink master	198
3.3.2 Partial efficiency.....	201
3.4 Conclusion.....	206
Chapter 4. The construction of the Dong house	209
4.1 Small community construction, not only for the family.....	209
4.2 The sequence of construction.....	211
4.2.1 Choosing the site	212
4.2.2 Cleaning up the site	213
4.2.3 Design of the house	214
4.2.4 Preparing the material.....	220
4.2.5 Drawing the ink lines, processing timber	222
4.2.6 Pre-assembling	228
4.2.7 Making the Ridge beam	229

4.2.8 Erecting the main structure	231
4.2.9 Raising the ridge beam	234
4.2.10 Completing the construction	237
4.2.11 Moving into the new house	241
4.3 Conclusion.....	243
Chapter 5. The construction of the drum tower	245
5.1 The architectural construction and social construction	245
5.1.1 The construction of the drum tower	246
5.1.2 Social construction	249
5.2 The construction process of the drum tower	251
5.2.1 Consultation over building the drum tower	252
5.2.2 Choosing the site	253
5.2.3 Site treatment	259
5.2.4 Preparation of material	260
5.2.5 Drawing ink lines and timber processing	267
5.2.6 Erecting the main structure	271
5.2.7 Installation of the main beam	274
5.2.8 Construction of the roof.....	275
5.2.9 Other construction.....	278
5.2.10 Consummation of the drum tower	280
5.3 Conclusion.....	282
Chapter 6. Use of building	284
6.1 Customs from birth to death in the Dong house	284
6.1.1 Birth	286
6.1.2 Courtship and marriage	290
6.1.3 Death.....	297
6.2 Customs and daily life in the drum tower	301
6.2.1 Rest, and amusement.....	302
6.2.2 Courtship and marriage	303
6.2.3 Collective activity	304
6.2.4 Festival	305
6.2.5 Kuan activity and village activity.....	306
6.2.6 Representing their identity: honour and disgrace	307
6.3 Conclusion	309

Chapter 7. The reading, construction and cultivation of buildings and village	311
7.1 Reading a building	311
7.1.1 Body movement and sense	311
7.1.2 Common reading and professional reading.....	329
7.1.3 Oral culture	332
7.1.4 Ritual	337
7.2 Construction and cultivation	342
7.2.1 The drum tower.....	345
7.2.2 Village.....	347
7.2.3 Construction, cultivation of the way of life	355
7.2.4 The record of experience	356
7.3 Conclusion.....	358
Conclusion.....	360
Appendix 1. Field Survey	367
Appendix 2. Supplementary data	386
Bibliography.....	423

Figure list

Introduction	1
Figure 1. The drum tower at Zengchong village.	1
Figure 2. Performance of collective singing in the drum tower, at Xiaohuang village.	2
Figure 3. The map of research area.	6
Figure 4. Development process of oral architecture.	11
Figure 5. Stages of oral architecture.	12
Chapter 2. The Dong society and oral culture.....	71
Figure 1. Dong living area in southwest China	71
Figure 2. Dong area geography, Zhaoxing	72
Figure 3. Dong, Tang'an village.....	72
Figure 4. Southern Dong area, Xiaohuang village	73
Figure 5. Ganlan building, Dong house.	74
Figure 6. Zhaoxing village	75
Figure 7. Zengchong village	77
Figure 8. Sai Sui altar at Tang'an village	79
Figure 9. Wells in Dong villages	80
Figure 10. A larger banyan tree at Gaozeng village.....	82
Figure 11. Dong village and china fir.	83
Figure 12. Door hammer,	91
Figure 13. Performance of collective singing around the fire place in the drum tower	94
Figure 14. People eating around the fireplace in a Dong house	94
Figure 15. Dong clan and society system.	96
Figure 16. Ji(pavilion), at Longevillage	98
Figure 17. Zhaoxing village, located in a valley.	104
Figure 18. The river running through Zhaoxing village.....	105
Figure 19.The drum tower and wind and rain bridge at Zhaoxing village	105
Figure 20. Village gate at Tang'an village.....	106
Figure 21. Pavilion at Xiaohuang village.....	106
Figure 22. Structure of a Dong village	107
Figure 23. Tai Moutain Stone.	125

Figure 24. Grass-mark to prevent a ghost entering the house	125
Figure 25. Map of collective experience	128

Chapter 3. Dong architecture and education in carpentry 131

Figure 1. The imaged life scene of Hemudu people.....	132
Figure 2. The ruin of Hemudu.....	132
Figure 3. A wooden component with tenon. Excavated in Hemudu culture period	132
Figure 4. The wooden component with mortise. Excavated in Hemudu culture period	132
Figure 5. Ganlan Building, at Tang'an village	133
Figure 6. Eastern Han dynasty 'ganlan style' pottery model of house.....	133
Figure 7. Ganlan Building, at Tang'an village.	136
Figure 8. Ganlan Building, at Tang'an village.	137
Figure 9. Column-and-tie structure, at Zhaoxing village.....	137
Figure 10. Column base.	138
Figure 11. Jiliang Pan's house at Xiaohuang village.	138
Figure 12. Ground floor in Dong house.....	139
Figure 13. Stair in Dong house	139
Figure 14. Typical Southern Dong house plan, Jiliang Pan's house built in the 1950s at Xiao Huang village in Congjiang County.....	140
Figure 15. Loft plan of Jiliang Pan's house.	140
Figure 16. Section of Jiliang Pan's house and names of the components.....	141
Figure 17. Wide verandah in Dong house.....	141
Figure 18. Wide verandah	142
Figure 19. Fireplace room.	143
Figure 20. People eating around the fireplace.	143
Figure 21. Fireplace	144
Figure 22. Sections of fireplace.	144
Figure 23. Bedroom.....	145
Figure 24. The Bedroom above the stair.	145
Figure 25. The ladder and stair to loft.....	146
Figure 26. Loft in a Dong house.	146
Figure 27. Long house at Zhaoxing village.	147
Figure 28. Plan of a long house of the Wu family at Baoli big village in Rongjiang County.....	147
Figure 29. Northern Dong area, plan and section of Wang Zhezhou's house at Sanmentang village in Tianzhu County.....	148

Figure 30. Central room.	148
Figure 31. Altar to the ancestors.	149
Figure 32. The public hall at Bapia village in Congjiang County	151
Figure 33. The structure of the public hall.....	152
Figure 34. Storied building style.	152
Figure 35. Composite type.	153
Figure 36. Dense eaves style	154
Figure 37. Structure of the drum tower	155
Figure 38. Section and plan of Yashang drum tower at Yutou village in Tongdao County.....	156
Figure 39. Plan and section of Louwu drum tower at Gaoding village in Sanjiang County.....	157
Figure 40. Single column tower at Shudong village in Liping County.....	158
Figure 41. The central column of Shudong single column	159
Figure 42. The structure of Shudong single column tower.....	159
Figure 43. Model of the main structure of Shudong single column tower.....	160
Figure 44. Section diagram of the single column tower and name of the components.	161
Figure 45. Plane of the structure.	162
Figure 46. Section and plan of the drum tower at Tang'an village in Liping County.	163
Figure 47. The drum tower at Tang'an village.	163
Figure 48. The structure of Tang'an drum tower.....	164
Figure 49. The main columns of Tang'an drum tower.....	164
Figure 50. Formative process of the drum tower	165
Figure 51. The knot in a board.	169
Figure 52. Diagram of regular grain alignment in a tie-beam.	170
Figure 53. The grain alignment and knots in a tie-beam.	170
Figure 54. The curve and denser rate of growth in a tie-beam.....	170
Figure 55. Plan and section of the drum tower at Gaozeng, Ba stockaded village, in Congjiang County.....	171
Figure 56. An interlocking tenon made by the carpenter Wendong Lu, at Xiaohuang village, 2010.....	173
Figure 57. Diagram of interlocking tenons.	174
Figure 58. The half-tenon in the hand-ink master Wenli Lu's house, at Luoxiang Town, 2013	174
Figure 59. A finished half-tenon, at Xiaohuang village, 2010.	175

Figure 60. The connecting-tenon, half tenon in a structure, at Xiaohuang village, 2010.	175
Figure 61. The hard-tenon in the structure of an earth altar, at Guima village, 2014	175
Figure 62. Carpentry tools.	176
Figure 63. Axe	177
Figure 64. Saw.	177
Figure 65. Plane	177
Figure 66. Drilling cone.....	178
Figure 67. Chisels.	178
Figure 68. Measurement in Dong carpentry.....	178
Figure 69. Try square.	180
Figure 70. Ink pot	180
Figure 71. Deformable try square	180
Figure 72. Bamboo pen	180
Figure 73. Use of Zhang pole during construction.	182
Figure 74. Diagram of sizes on a Zhang pole transferred during construction.....	183
Figure 75. The code of the hand-ink master Wenli Lu.....	183
Figure 76. Code organisation of the ground floor	184
Figure 77. Codes of a fan structure group, the third row in the structure.....	185
Figure 78. Drawing ink lines.	186
Figure 79. Finished components.	186
Figure 80. Pre-assembling.....	187
Figure 81. Assembling.....	187
Figure 82. The finished model of the main structure of Shudong drum tower	188
Figure 83. The carpenter Wendong Lu processes the mortises in a tie-beam.	189
Figure 84. Simple trigonometry and scale in Dong	192
Figure 85. The three frequently used triangles and their scales.....	193
Figure 86. The growing up of a hand-ink master.....	196
Figure 87. <i>The hand-ink master Wenli Lu (the third from the right) and his apprentices at Xiaohuang village, in November 2010</i>	198
Figure 88. Carpenter uses a chisel to carve timber.....	204
Figure 89. Carpenter uses an axe as hammer.....	204

Chapter 4. The construction of the Dong house 209

Figure 1. Dong dwellings at Jitang village.....	209
Figure 2. The construction process of the Dong house.....	211

Figure 3. The treatments of the site.....	214
Figure 4. Drawing of hand-ink master Wenli Lu’s new house with list of components at side, 2010.....	219
Figure 5. Master Wenli Lu’s Zhang pole, 2010.	219
Figure 6. Stacked timbers.	221
Figure 7. The hand-ink master supervises his apprentice’s work.....	223
Figure 8. Removing the tree bark.	224
Figure 9. Planing the surface of the timber.....	224
Figure 10. The hand-ink master Wenli Lu draws an ink line on a column.	224
Figure 11. Chiseling the mortises on the column.	225
Figure 12. The hand-ink master Wenli Lu’s carpenter code on the fifth row of the front second short column.	225
Figure 13. The hand-ink master Yongcheng Lu uses a series of small bamboo sticks to measure and record the size of the mortises in columns.	226
Figure 14. the hand-ink master Wenli Lu draws ink lines on draft wooden components.	227
Figure 15. Processing the draft component.	227
Figure 16. The hand-ink master Yongcheng Lu draws the size of tenon on the tie-beam.....	227
Figure 17. Processing a tenon.....	227
Figure 18. The hand-ink master Wenli Lu’s carpenter code on the back fifth row of the first tie-beam to connect with the first hanging column.....	228
Figure 19. Finished components	228
Figure 20. Pre-assembling components at Xiaohuang village, 2010,.....	229
Figure 21. Erecting the structure at Xiaohuang village, in Congjiang County, 2010.	232
Figure 22. Erecting the structure at Xiaohuang village, in Congjiang County, 2010	233
Figure 23. The erecting house feast at Xiaohuang village, 2010	237
Figure 24. Erecting the structure and the half finished house, at Xiao Huang village	237
Figure 25. A new house at Xiaohuang village, 2010.....	238
Figure 26. Door and door hammer.	238
Figure 27. Door hammers, village gate at Tang’an village.	239
Figure 28. The pose to hold the bowl and write words, performed by the hand-ink master Wenli Lu.	240
Figure 29. The four words and their order, written by the hand-ink master Wenli Lu.	241

Chapter 5. The construction of the drum tower 245

Figure 1. The drum tower at Tang'an village..... 245

Figure 2. The construction process of the drum tower. 246

Figure 3. Zhaoxing Village..... 256

Figure 4. 'Righteousness' Dou drum tower 257

Figure 5. 'Benevolence' Dou drum tower 257

Figure 6. 'Trust' Dou drum tower 257

Figure 7. 'Wisdom' Dou drum tower..... 257

Figure 8. 'Courtesy' Dou drum tower 258

Figure 9. Worshipping the god of mountain, 263

Figure 10. The Young men convey the log. 264

Figure 11. The hand-ink master uses a drawing to discuss the project with the village elders 268

Figure 12. The hand-ink master Yongcheng Lu draws an ink line on a component. 270

Figure 13. Erecting the structure 273

Figure 14. Section of the desirable-bracket-set at Zengchong village. 276

Figure 15. The desirable-bracket-set, at Zengchong village. 276

Figure 16. The three drum towers at Gaozhen village. 277

Figure 17. Painting in building. 278

Figure 18. Diagram and propitious words on the main beam. 278

Figure 19. Sculptures of the drum tower. 279

Figure 20. The Magic Gourd on the top of the drum tower..... 280

Figure 21. Gift from other village in the drum tower. 281

Figure 22. The drum in the drum tower..... 281

Figure 23. The images of the drum tower. 283

Figure 24. The experience of the drum tower 283

Chapter 6. Use of building 284

Figure 1. Dong house at Xiaohuang village. 284

Figure 2. Rituals and customs in the Dong house..... 286

Figure 3. The grass-mark for the birth of a boy, at Xiaohuang village. 288

Figure 4. The small window of the girl's bedroom. 290

Figure 5. Grass-mark of illness. 299

Figure 6. Grass-mark of new house..... 300

Figure 7. Spring Festival couplets on door 300

Figure 8. Rest and amusements in the drum tower.	302
Figure 9. The wedding feast around the drum tower	304
Figure 10. Collective dancing at the drum tower square, at Xiaohuang village.	305
Figure 11. Villagers singing in Antiphonal style in the drum tower, at Xiaohuang village.	305
Figure 12. Honour certificates and paddy on the main column of the drum tower.	308

Chapter 7. The reading, construction and cultivation of buildings and village.....311

Figure 1. The stool and eating table at Xiaohuang village.	312
Figure 2. The context between cun and figure.....	314
Figure 3. The hand-ink master Wenli Lu's new house at Luoxiang town.	315
Figure 4. The hand-ink master Wenli Lu's old house at Jitang village.....	315
Figure 5. Ground floor.	316
Figure 6. Stairs in Dong house.	317
Figure 7. Daylily life in wide verandah.	318
Figure 8. Abundant sunshine in wide verandah.	318
Figure 9. Fireplace room.	319
Figure 10. Bedroom.	320
Figure 11. The door and its latch.	320
Figure 12. Loft.	321
Figure 13. People chatting in the drum tower.	322
Figure 14. Choral song performance in the drum tower.....	322
Figure 15. Scenes of everyday life in Zhaoxing village.	324
Figure 16. Scenes of everyday life in Zhaoxing village.	324
Figure 17. The wet mud road from Yandong to Gaojing.	325
Figure 18. The Humble Administrator's Garden.....	327
Figure 19. The hand-ink master Wenli Lu's study room at Jitang village.	328
Figure 20. The Xingqian drum tower.	331
Figure 21. The Gaohuang drum tower.....	331
Figure 22. The Xiaohuang drum tower	331
Figure 23. An abandoned house structure.....	332
Figure 24. The village gate at Zhaoxing, 2010.....	338
Figure 25. The restored mountain ridge at Zhaoxing, 2014.	338
Figure 26. 'Tai Moutain stone' and grass-mark on the front door.	339
Figure 27. 'Tai Moutain stone' in front of the house.	340

Figure 28. A tiger statue placed on the wall of the house faces the drum tower....	340
Figure 29. A temple of the field god at the entrance of Jitang village.	341
Figure 30. The main gate of Tang'an village.....	341
Figure 31. The custom of blocking the road.....	342
Figure 32. The Five Dragons temple at Jingtang.	343
Figure 33. The drum tower at Jitang village.	344
Figure 34. The double eaves.	344
Figure 35. The drum tower at the centre of the Tang'an village.	345
Figure 36. The open platform of the drum tower at Zengchong village.	346
Figure 37. The Yin drum tower	346
Figure 38. Zengchong village in Rongjiang County.....	348
Figure 39. Zhaoxing County in Liping County	348
Figure 40. Images of Zhaoxing village	349
Figure 41. Map of Zhaoxing village.....	349
Figure 42. Tang'an village.	350
Figure 43. Map of Tang'an village.....	350
Figure 44. Well at Zhaoxing village.....	351
Figure 45. The drum tower and pond at Zengchong village.	351

Appendix 1. Field survey..... 367

Figure 1. The repairing of Xiaohuang drum tower.....	369
Figure 2. Sketch and notes of Zengchong drum tower.....	371
Figure 3. Steles of Diping wind and rain bridge.....	372
Figure 4. Sketch and notes of Dong carpentry.....	374
Figure 5. 'The Drawings of the Drum Tower'.	377

Table List

Chapter 1. Literature review	14
Table 1. The subjects of literature review.	15
Chapter 2. The Dong society and oral culture	71
Table 1. The main classification of Dong songs.....	113
Chapter 3. Dong architecture and education in carpentry	4
Table 1. The use of the tools at different procedures, the black mark means the use of the tool.	188

Introduction



Figure 1. The drum tower at Zengchong village. Photograph by Derong Kong.

The Dong people are a minority mainly living in southwest China. They have a rich culture, and the impact of nature worship, rice planting culture and collective celebration are all significant. They naturally use intuitive, subjective experience to explore and describe their world. The accumulation of knowledge is built on the basis of the way they understand phenomena. The drum tower is their most important public building, which represents their village and clan, and combines the functions of consultation, law court, wartime command post, meeting place, entertainment place, etc (Figure 1). In this thesis, I am going to analyse the social systems, oral education, architectural construction, and the use of buildings by the Dong, and then link these issues together in order to understand and summarise the mode and concept of Dong oral architecture.

The oral culture

Because Dong people do not have their own written language, oral education and practical demonstration become the main mode of transmission of experience and knowledge. They use oral performance to communicate and transmit their knowledge and information, so this works instead of a textbook in Dong people's life.¹ They grow up with oral exchange, passed down by word of mouth over generations.

Social activity

Social activity is the pivotal point in this process (Figure 2).² Their agricultural production, architectural construction, customs, rites and festivals become ways to transmit their faith and culture, presenting their special cultural customs.³



Figure 2. Performance of collective singing in the drum tower, Xiaohuang village.

Photograph by Derong Kong.

¹ Anhui Fu, *Dong Folk Literature*, (Huhehaote, Distant Place Press, 2009), p. 9. 傅安辉,《侗族民间文学》,(呼和浩特,远方出版社,2009), p. 9.

² *Ibid.*,5.

³ Deqi Luo, *Folk Dwelling of Guizhou*, (Beijing, China Architecture & Building Press,2008), p. 90. 罗德启,《贵州民居》,(北京,中国建筑工业出版社,2008), p. 90.

Interactional process

Oral knowledge and social activity exist through an interactive process. Oral knowledge is generated from social activity, then forms the new rule and procedure of activity. The local oral education, the construction of buildings and the uses of architecture are accomplished in this interactional process. These are the concretised practical activities to make this cultural group exist, and separate them from the natural environment and other groups.

The oral architecture

Dong social construction happens within a community, normally a clan. The main production of agriculture is accompanied by other productions, such as building construction, handicraft, weaving, etc. All these demand human labour, which requires collective work and mutual assistance among the clan. Thus the clan needs to perform multiple functions, including agricultural production, social organisation, building construction, customs, etc, at the levels of individual and clan. Everyone is involved in this process and has their position, while the social relations and mutual relations are generated in the activities. At the community level, villagers work on many things, and because these things are produced, exchanged and used among the community, their value is shared and well appreciated by villagers, in the course of their work, collective participation, observation and use. For instance, in the construction process, people are the members of a construction team and carry through the construction process, so they have a deep understanding of their building and living environment.

During this process and at the community scale, the face-to-face situation is dominant. The oral mode therefore takes a high proportion and leading part, though there also other ways of communication, such as by signs, their emerging written language, paintings, constructions, customs and ritual. Oral communication and bodily performance arise throughout the process. Furthermore, because of this oral mode, many architectural phenomena are limited to a specific time and spatial range, as people and things remain in a close relationship in a face-to-face situation. Thus at the personal level, the sensory perception between people, building and activity is unobstructed, and the detail of building and life can be well experienced. The carpenter especially has a close contact with material, tools, craft, and structure, which leads to a

deep understanding. In daily life and customs in buildings, this leads to a degree of intimacy, for as a house offers shelter, and also a place to settle people's feeling of belonging.

According to the findings from my literature review and fieldwork, I have divided the following considerations of the above process into three main stages: oral education, architectural construction and the use of building, within which there are many specific events. So in short, in this thesis, the series of social and architectural activities based on the oral mode of interaction is called 'oral architecture' as the representation of this social construction process. The isolated events are united in a relation of succession, forming a unique process and mode of oral education, architectural construction and use of architecture. The term 'oral architecture' not only describes the process, but also reveals why and how the process of self-construction is accomplished.

Aim:

Although there have been books and theses written on Dong architecture (more detail can be found in the literature review, 1.5 Architecture) none of them has concentrated specifically on the carpentry process, its social connections, and the procedural nature of it, along with the many roles involved. Attention to the numerous building rituals, and the implied values driving them, indicates that these are not superfluous or decorative attachments, but rather fundamental expressions of social meaning by which buildings are understood, judged and validated. Investigations of the role of space in rites of passage, such as birth, marriage, and death further show the necessary relation between constructed space and the way it is understood. The term 'oral architecture' is adopted to stress the difference between this kind of shared and participative building production and the kind of separated design and construction processes that dominate the modern world.

Objective:

The main objective of this thesis is to follow the time-line of social construction and to describe a coherent and dynamic series of social and architectural events and activities, setting out the development process and methods at different stages of preconception and construction. Analysis of the content and system of oral architecture will outline its principles and significance.

Reasons for research:

1. There is some urgency for this research caused by rapid social development: the customs associated with building, traditional carpentry and architecture are changing and there is a risk of them vanishing altogether. At this transitional stage, research is important for Dong architectural and cultural preservation to record these precious materials and to tell people how life has been lived.

2. Some books and theses have recorded and discussed Dong carpentry and buildings. However, there are still many parts of the record of the carpentry education and skill in the construction process yet to be described. Consequently, this research will collect more detailed materials from field surveys in order to fill these current gaps in knowledge.

3. Previous researchers have recorded much data concerning Dong buildings and carpentry, yet the analysis of this data has been relatively little. Research into oral architecture has supported various kinds of analysis for a rich and deep understanding of Dong architecture and carpentry.

4. Through description and analysis of the mode and concept of oral architecture, and the dynamic relationships between various factors, this research will gain some valuable references to inform current architectural education and architectural design.

Methodology:

A qualitative research approach in narrative form is appropriate and flexible in this study to deal with the complexity and diversity of the development process of oral architecture. It has involved extensive field study, living in Dong villages and taking part in carpentry works, gaining familiarity with their customs and dialect. There were five study periods of three and half months spent in 30 villages, 102 survey drawings were made, photographs taken, and carpentry work observed in detail. The Dong architectural phenomena are shown by different groups and activities at different times and places. According to the quality and character of activities and following the logic of social construction, they are classified and organised into a system. A qualitative research approach also provides following methods to collect and analyse the research data.

Data and information collection:

Research area: according to the geographical and cultural characteristics, this study is mainly located in Rongjiang, Chongjiang and Liping County, Southern Dong area, Guizhou Province (Figure 3).



Figure 3. The map of research area.

Redrawing by Derong Kong from *D. Norman Geary and others, 'The Kam People of China', (London: Routledge, 2003). p. xxii.*

Written material: Dong society, culture and architecture have been studied since the 1980s, so there is much literature about society, culture, custom, history and architecture (there are two books in English, the rest of the books are in Chinese). In this research, first, written material collected was mainly bought from bookshops or borrowed from libraries. Second, in my field surveys, I visited local scholars and research institutions in Guizhou Province, China to collect books and unpublished research data which contains the knowledge of Dong social structure, culture and custom, the structure of building, the construction process of the drum tower, the map of village, etc. These writings focus on social structure and custom, oral culture and history, architectural data, architecture theory, architectural phenomenology, social sciences and humanities. The detailed discussion of these materials is indicated in Chapter 1, Literature review.

Oral material: In my field surveys, I have collected numerous oral accounts from local villagers and carpenters, including history, customs, stories, carpentry knowledge and autobiographical experience. Through visits to local scholars, I collected some oral material about Dong culture, customs, building, and posed to the authors some questions I encountered in reading the books of Dong research.

Field Survey: field surveys were conducted after the literature review. The object was to collect first hand materials to complement the existing research data, and to check the validity of the collected literature. Field surveys could provide deep and accurate understanding of this topic. I have done five periods of field surveys in Rongjiang, Congjiang and Liping Counties, as indicated in Chapter 1, Literature review, and set out in more detail in Appendix 1, Field survey. In the field surveys, the following methods were adopted:

Observation: I visited many villages and used sketches, photographs, sound recordings, and video to record building structures, plans of buildings, form and decoration; relationship between buildings, village and environment; social activities, ceremonies and customs; architectural activities, carpentry education, construction process, and uses of buildings.

Interview: I have interviewed village leaders, village elders, clan elders, the hand-ink master (the master carpenter), the song master (the teacher of the oral knowledge), villagers and local scholars. Through interviews, I collected more literature and oral materials, and gained a further understanding of oral education, local dwellings, the drum tower, and the uses of buildings.

Participation: Because I am a Dong and have grown up in the area, it was not hard to join in their life. Participation offers a direct access to the Dong life. It provides accurate, detailed, in-depth vision from the various aspects of life to understand their thoughts, experiences, customs and buildings, but also ensures the validity and reliability of material.

In my field surveys, I visited many carpenters. Then I chose a famous hand-ink master Wenli Lu, and joined in his work. I worked with him, the local carpenters, and his apprentices for nearly one month. I collected many details about the traditional

education of the carpenter and the construction process. I also gained a lot of live carpentry experience.

At the same time I also lived with local residents and joined in their daily life and witnessed folk-customs like the birth ceremony, wedding, and ceremony of inhabiting a new house. By sharing experiences with local residents, I followed the way that local residents understand and record the scenes and their life. All these precious materials and experiences promoted this research and enhanced the concept of oral architecture.

● Research Strategy:

The previous literature has mainly discussed specific aspects of Dong culture separately. The literature from humanities disciplines mainly concentrated on research about social structure, culture, and customs. Architectural research has focused on structure, materials, construction, form, components, decoration, plan of spatial structure, and distribution of functions. The static analysis of a building tends to neglect the construction process, so what is needed instead is a study of the time-line of the building. This has not been studied before in the form of continuous time; Ling Cai indicates that there has been no continuous comparative study, as this would have required the context of building development.⁴

There have been few analyses of the meaning of architectural activities, and even less discussion about the relationship between people and architectural activities. The experience of people has not been seen as reflected in architectural activities. So the unceasing process of oral architecture has been divided up into a description of the fragments, and the continuity and integrity of oral architecture are missing.

As Xin Ruan says, architecture not only provides a space to fulfill the physical function for people living in it, but also plays a vital role in enshrining the hopes and fears of its inhabitants.⁵ Architecture is the concrete outcome of the construction process, a complex artificiality of people's understanding and construction. When people treat it

⁴ Ling Cai, *Traditional Villages and Architecture of Dong Nationality's Habitation Region*, (Beijing: China Architecture & Building press, 2007), p. 12. 蔡凌, *侗族聚居区的传统村落与建筑*, (北京:中国建筑工业出版社, 2007), p. 12.

⁵ Xin Ruan, *Allegorical Architecture, Living Myth and Architectonics in Southern China*, (Honolulu: University of Hawaii Press, 2006), p. 9.

only as a code to carry meaning, it is too abstracted from the intricate construction process, neglecting other characteristics. In this sense, commentators do not discuss architecture: they are talking only about a part of architecture, an incomplete thing.

In his architectural phenomenology Norberg-Schultz thinks the place is not an abstract site, it is a complex formed of specific things, and the composition of things decides the character of place. The living world is the real phenomenon. It includes all genuine things, the diversity and reality of living place need to be thought of as a whole: one cannot only use merely one aspect to analyse the place.⁶

Architecture always is a complicated thing. In its formation process, the integration of social, cultural, material, and technical aspects influence the form, function, construction, building and meaning. Robert Venturi says that the complexity of forces and demands derived from society determines the complexity of building as a reaction to so many aspects.⁷ The substance of architecture cannot be explained just from one aspect. Nor can it be transmitted only in words, otherwise the meaning of architecture is limited.

Peter L. Berger and Thomas Luckmann deem that among multiple realities, everyday life is the factual basis of society.⁸ A phenomenon contains multiple aspects of things; different objects present themselves as constituents of different spheres of a thing, and detailed phenomenological observation would uncover the various layers of experience to the substance, penetrate the phenomena, return to the things themselves.⁹

The building is called a building because it made by a process of building construction. This is a definition generated in the process of the practice. Through experience of the process, people can know its character and quality. Only after they are familiar with it, could they apprehend its essential substance, give it a meaning, a name.¹⁰ For example, in the carpenter's work, they call a newly felled log 'raw wood', which means it cannot be used directly, because through long practice they are familiar with the quality of wood, and they know the newly felled log contains large amounts of water. It will have

⁶ Christian Norberg-Schulz, *Genius loci : Towards a Phenomenology of Architecture*, (New York : Rizzoli, 1980), pp. 6-8.

⁷ Robert Venturi, *Complexity and Contradiction in Architecture*, 2nd edn, (London : Architectural Press, 1977), p. 16.

⁸ Peter L. Berger and Thomas Luckmann, *The Social Construction of Reality, A Treatise in the Sociology of Knowledge*, (London: Allen Lane, 1967), p. 39.

⁹ *Ibid.*, p. 39.

¹⁰ Martin Heidegger, *Poetry, Language, Thought*, trans [from the German] and intro by Albert Hofstadter, (New York; London: Harper & Row, 1975), p.549.

to be stored for at least three months to dry out its water and allow it to achieve its best performance.

Peoples' activities are elaborated and arranged under the guidance of the premade content and rules. The activity is the motivation of the process and transmission joint of the experience. Architectural activity builds up the relationship between people and building, then it generates the specific phenomena for people to participate in and to observe. As Shen says, the architectural phenomenon is the thing itself and works as a demonstration to show people what it is instead of words.¹¹ The architectural conceptions inherited through architectural activity in this vivid method influence generations.

● **Methods of Analysis**

Classification: first comes material collection and discussion of the data of society, culture, customs and architecture. According to their quality and order in the process of oral architecture, they are assigned into different categories and stages.

Case studies: In order to record the whole process and achieve a complete and systemic study of carpentry education, the construction process, the life in the village and the village's spatial organization, I chose a famous hand-ink master to study with, as I stated earlier. I have also chosen two typical Dong villages to study.

Analysis: through observing and analysing the direct and indirect contexts between various things I have been able to show their mutual relations in the process of oral architecture. I followed Bourdieu's advice that the researcher should pay attention to the dialectical relationships between the different social agencies which they produce and which tend to reproduce them.¹² These relationships are vital in this research to organise things into a system of social construction.

¹¹ Keling Shen, *Architectural Phenomenology*, (Beijing: China Architecture & Building press, 2007), p. 94. 沈克宁, *建筑现象学*, (北京: 中国建筑工业出版社, 2007), p. 94.

¹² Pierre Bourdieu, *Outline of a Theory of Practise*, (Cambridge: Cambridge University Press, 1977), p. 83.

● Research framework:

The development process of oral architecture determines my main research framework. The thesis will be divided into seven chapters, which are the Chapter 1. 'Literature review', Chapter 2. 'The Dong society and oral culture', Chapter 3. 'Dong architecture and education in carpentry', Chapter 4. 'The construction of the Dong house', Chapter 5. 'The construction of the drum tower', Chapter 6. 'Use of building', and Chapter 7. 'The reading, construction and cultivation of buildings and village' required to discuss the oral architecture. In the Dong social construction, everything follows a premade rule or order. Then everything is objectified and organised by this premade rule or order. Its phenomena are prearranged and controlled in patterns, as an outcome of this process.¹³ It is a dynamic and interactional process which is a long-term reproduction of the community life.

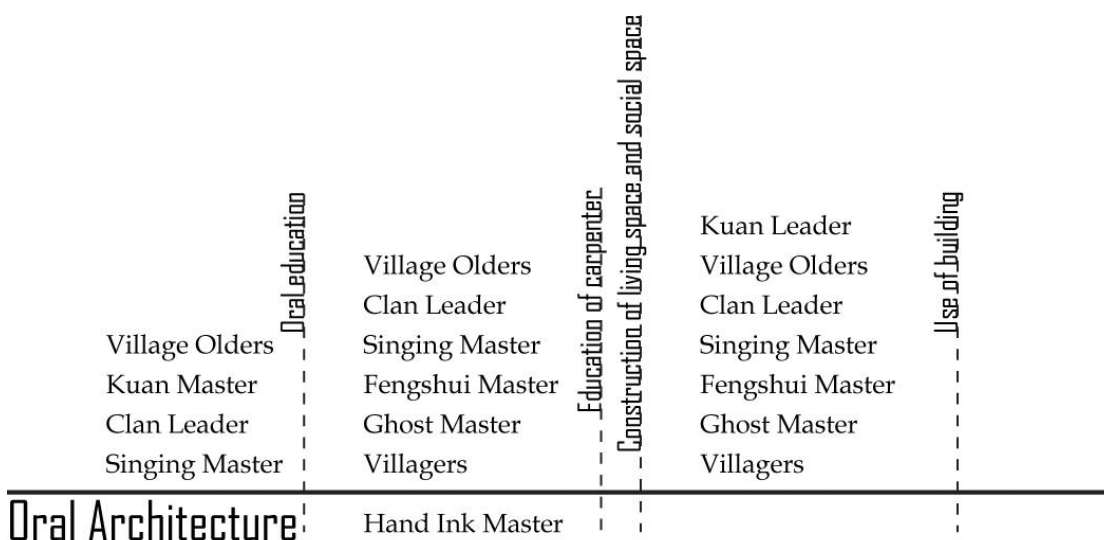


Figure 4. Development process of oral architecture. Drawing by Derong Kong.

The hand-ink master (Dong carpenter) is the key man in control of oral architecture. His education as a carpenter is completed through oral means and through architectural practice. The construction does not require design drawings. The carpenter works under the guidance of remembered patterns and past experience to finish the construction. The Dong carpenter organises the whole architectural process as well as designing and constructing the building, providing space for people to carry out their activities. As Xin indicates, the understanding of architecture lies in this process, for

¹³ Mary Douglas, *Purity and Danger, An Analysis of Concepts of Pollution and Taboo*, (London: Routledge & Kegan Paul, 1966), p.129.

people perceive the concept in social activity and in daily life.¹⁴ The people are the main vehicle of the process, obtaining experience and memory, reinforced by witnessing the construction. They build their life-form and pass it on to the next generation. The customs and activities in the construction process link the relevant groups together. In the use of the building, through specific events and the oral exchange of ideas, people's experience and culture are inherited and exchanged (Figure 4).

Each stage of the oral architecture does not retain the same meaning. Actually each generation is refreshing and accumulating. They construct the life circumstance and status under the given conditions in their age. As Turner indicates, 'Human social life is the producer and product of time'.¹⁵ Dong society is also a new round of self-construction based on the previous society. It shows people the accumulation of the current stage along with previous stages (Figure 5). The time scope of this research is between the 1980s and the 2010s. Because the materials collected and the field surveys produced in this research are limited to that period, it is a society directly inherited from and taught by the last two generations (born between 1910s-1920s and 1940s-1950s), and the accumulation from the people before them.

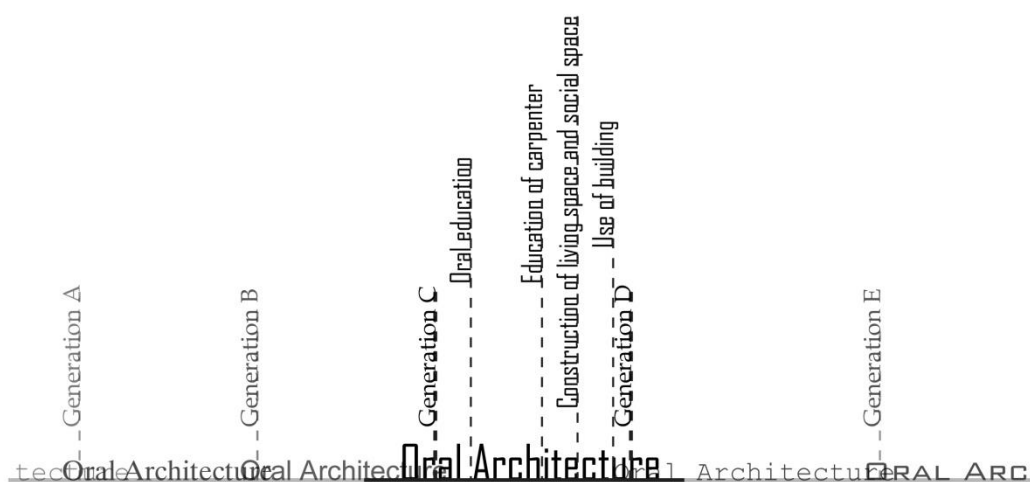


Figure 5. Stages of oral architecture. Drawing by Derong Kong.

The practice of social activity allows people to choose the part they need or agree with, maintaining the foundation and essence of the oral architecture.¹⁶ The feature of oral architecture becomes common knowledge in this process. People's cognition of

¹⁴ Xin, *Allegorical Architecture, Living Myth and Architectonics in Southern China*, p. 135.

¹⁵ Victor Witter Turner, *The Ritual Process: Structure and Anti-structure*, (New York: Aldine de Gruyter, 1995), p. 23.

¹⁶ Fu, *Dong Folk Literature*, p. 7. 傅, *侗族民间文学*, p. 7.

architecture and architectural activity also becomes part of common knowledge. Life experience forms people's spatial conception. This is an outcome of the multiple overlaps of life memories. When these memory fragments are put together, the montage of life memory is formed.

● **Possible outcomes of the study:**

The outcome of this research will be a theory, narrative and explanation setting out how oral architecture is one part of the social construction of reality. Oral architecture is a coherent, holistic and dynamic process involving a series of social and architectural activities. Oral architecture reproduces Dong architectural activity, letting people participate and observe the phenomena to apprehend the meaning of things. Social activity and daily life are represented through the use of public space (drum tower) and living space (local dwelling). The building construction and use of building thereby connect different groups together, sharing the same experience.

Chapter 1

Literature review

1.1 Previous Dong research and survey

Before the main literature review is undertaken in this chapter, it is useful to give a brief introduction to research on Dong society, culture and architecture done since the 1950s, to offer readers a general idea about previous research and to understand the stages and contribution of this research. In the 1950s, the central government organised and proceeded several times with research and surveys on Dong society and culture. However, these researches and surveys were disturbed by the Cultural Revolution. In the 1980s, research into Dong society and culture restarted, like the book '*Dong Brief History*', Editing group for Dong brief history, ed., 1985. However, little research about Dong architecture has been done, an exception being the book '*The Research of the Drum Tower in Dong Village*', Yinshen Mei, 1985. The quantity and subjects of Dong research were increasing with time. In the 1990s, the independent research and survey of Dong architecture started, and became an independent and important subject in Dong research, and much literature was published, such as '*Northern Guangxi Folk Architecture*', Changjie Li and others, 1990; '*The Characteristics of the Drum Tower, Cultural Connotation*', Qianping Du, 1996; '*Old building: Dong Timber Building*', Yuxiang Li, 1996. The contents included records and illustrations about material, structure, technique, function and form of buildings. From 2000 to now, more and more research and surveys of Dong have taken place, such as '*Walking into the Drum Tower, Dong South Community Culture Oral History*', Weiren Yu, 2001; '*The Folkloric Heritage of the Dong Drum Tower*', Jiaqi Li and others, 2006; '*Allegorical Architecture, Living Myth and Architectonics in Southern China*', Xin Ruan, 2006; '*Traditional Villages and Architecture of Dong Nationality's Habitation Region*', Ling Cai, 2007; '*Folk Dwelling of Guizhou*', Deqi Luo, 2008; '*The Chinese Dong Drum Tower*', Yongming Yang and others, 2008. The subjects are broader, each research subject system becomes more complete, and the analysis is richer and deeper.

Meanwhile most of the authors of Dong books are from local minority ethnic group who have grown up in the Dong area. During the time they grew up and were writing, from the 1950s to the 1980s, most of the traditional culture, customs, sculpture, stone tablets

and architecture were still well preserved. There was lots of live evidence which was performed in the old way in their field surveys. More detailed description and discussion about these writings can be seen from the following literature review.

1.2 The subjects of literature review

The literature review in this thesis is classified into five main subjects, which could be termed culture and history, social structure and customs, architecture, sociological theory, and architectural theory. The relevant books on these subjects will be expounded and discussed below, along with other materials collected in each subject, and field surveys that have been done in this research, in order to explicate the influences they have brought to the conception, structure and development of this thesis.

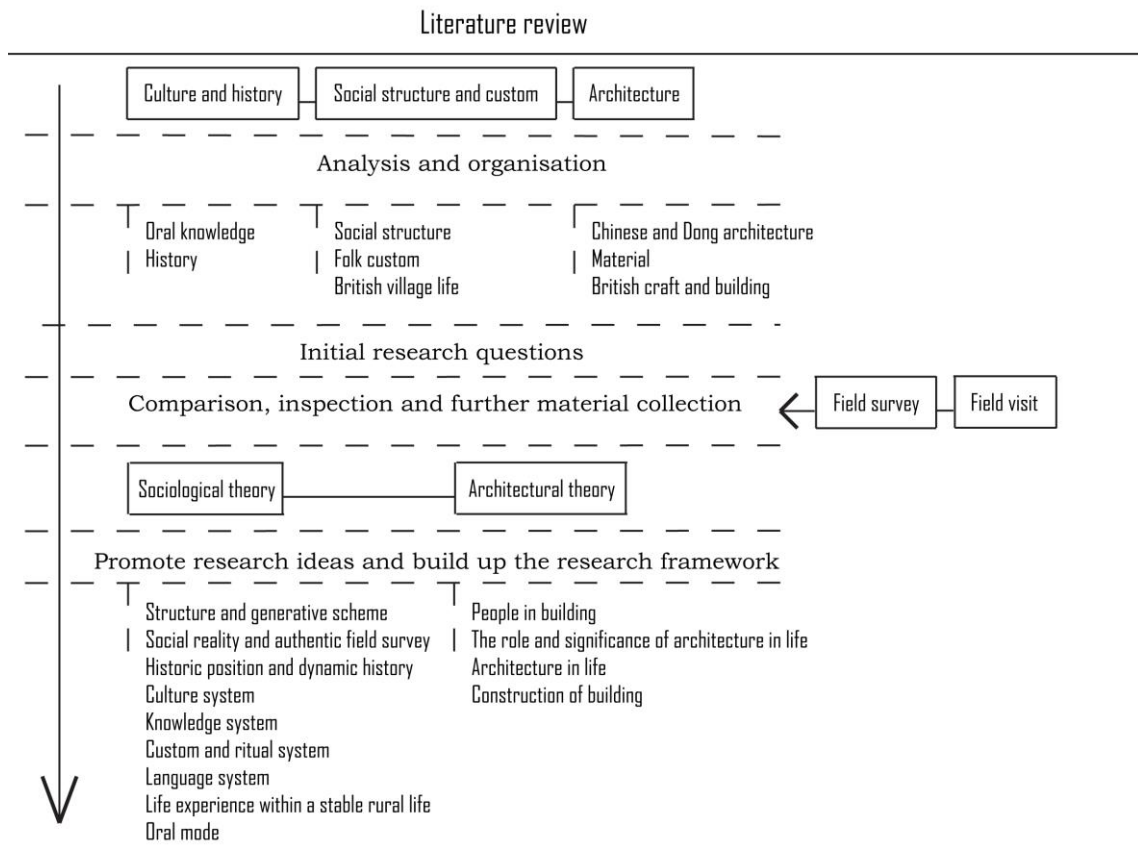


Table 1. The subjects of literature review. Drawing by Derong Kong.

The material collections of culture and history, social structure and customs, and architecture mainly focus on Dong culture, oral knowledge and education, history; social structure, custom, ritual; building structure, building technology, building construction

and use of buildings. There are also British folk material and architecture data collected to expand the material and provide useful comparisons. The sociological theory collected concerns the issues of social schema, social structure, culture, language, custom and ritual. Architectural theory collected here is about architectural phenomenology, the body, perception, significance the remembering of experience in building, significance of architecture; complexity, factors of architecture, architecture in term of itself (Table 1).

Five field surveys were undertaken in the Dong area, on one hand to compare and discuss the ideas in this thesis, to examine the reality and validity of the material, specific knowledge and issues. On the other hand, these gathered more detailed and supplementary material to offer an opportunity for deeper and better understanding of Dong society and architecture. I revisited some important villages several times during the research, and observed the rapid change during these four years. The detail of field surveys and visits can be found in Appendix 1, Field survey.

A field visit to the Weald & Downland Open Air Museum was done to learn about British traditional carpentry and buildings, and to compare the similarities and differences between British and Dong village building. This material broadened the thesis and reinforced the conception of this research.

Through the literature review and field survey, the fundamental data, the contemporary research situation were collected and previous gaps in knowledge identified, so the research questions were raised to promote the research. Then under the guidance of theories, through further organisation and analysis, the general idea of oral architecture was generated, and the research standpoint, issues, content and framework were formed.

This completes a brief introduction to the literature review in this research. There follows the detailed explanation and discussion of the literature review of each subject. The main discussion will focus on the explanation and discussion of how these materials influenced and helped the development of this thesis. Brief notes about the literature will describe the content, features, validity and research background of the literature. The detailed content, especially the culture, social structure, customs, building and theory will be discussed and presented in the corresponding chapters.

1.3 Culture and history

1.3.1 Oral knowledge

Despite the shortcomings of oral culture, it is indispensable to Dong society and provides a foundation for any further explanation of their cultural system. As in the chapter 'Multiple Orderings of Reality' of the book 'Magic, Science and Religion and the Scope of Rationality', author Stanley J. Tambiah deems that people may all live in the same physical reality, and interpret it through multiple psychic realities, yet none of these alternative versions is necessarily superior to any other.¹ Further, he indicates that whether the world is science, religion, magical practices or dream, the difference among them is not 'wrong' versus 'right' or 'irrational' versus 'rational', but rather each tends to be a rational, internally consistent realm with its own cognitive styles and modes of thought.² Following this notion, many cognition or knowledge systems coexist, and they should each be understood and discussed within their background and criteria. This relativistic thinking provides a broad view to understand and analyse the Dong culture and their thought.

The following books provide the key texts in this area: '*Dong Oral Classic*', Anhui Fu, 2012; '*Dong Ancient Song Volume One*' and '*Dong Ancient Song Volume Two*', Min Zhang and others, 2012; '*Exploration of Dong Art and Literature*', Yong Zhang, 2010; '*Dong Folk Literature*', Anhui Fu, 2009; '*The Research of South Dong Traditional Culture Feature*', Xiangjun Liao, 2007; '*The Research of Dong Language*', Yaohong Long, 2003; '*The Notes of Dong Culture Research*', Jianeng Shi, 2000; '*Dong Culture Research*', Zuyi Feng and others, 1999.³ Brief notes on each book can be found in Appendix 2, A.2.1.1 Oral knowledge.

¹ Stanley J. Tambiah, *Magic, Science and Religion and the Scope of Rationality*, (Cambridge: Cambridge University Press, 1990), p. 84.

² Ibid., p. 84.

³ Anhui Fu, *Dong Oral Classic*, (Beijing: The Ethnic Publishing House, 2012). 傅安辉, *侗族口传经典*, (北京: 民族出版社, 2012)

Min Zhang and others, ed., *Dong Ancient Song Volume One*, (Guiyang: Guizhou Nationalities Publishing, 2012). 张民和其他, 编译., *侗族古歌上卷*, (贵阳: 贵州民族出版社, 2012)

Min Zhang and others, ed., *Dong Ancient Song Volume Two*, (Guiyang: Guizhou Nationalities Publishing, 2012). 张民和其他, 编译., *侗族古歌下卷*, (贵阳: 贵州民族出版社, 2012)

Yong Zhang, *Exploration of Dong Art and Literature*, (Guiyang: Guizhou Nationalities Publishing, 2010). 张

These authors are local scholars and researchers; most of the material in their books is collected by each author from their fieldworks, under a long-term work started from the beginning of 1980s among the Dong villages. These literatures describe the types and contents of oral knowledge in Dong culture, and its specific scenes, conditions, reasons and purposes of application in daily life. They also provide the necessary materials to support and guide following classification and analysis of oral knowledge.

The principle and character of oral culture system are well described and analysed in these books. However, they do not develop further discussion or analysis to understand the significance and influence of oral culture in the construction of society, and to other systems. Oral culture is an important and fundamental system of Dong society, it carries people's belief and knowledge. The oral culture records memory, it is the old words of the group, a way of communication. According to the literature review and my field surveys, I found in the education, construction and use of buildings, it is a society still dominated by oral language (face-to-face situations). Yet, this is the external presentation of life, the reasons lead to this life mode also receive influences from other factors and systems, especially the organisation of production and construction. So this literature review will start from the power and significance of oral culture, then make a systemic discussion of oral culture and other systems, and finally discuss how the oral culture cooperates with and influences other systems.

Although in the book '*The Notes of Dong Culture Research*', Jianeng Shi proceeds with a discussion of the relationship between social culture, structure and customs, as well as their influence, his analysis does not form a systematic summary. According the critical review of these books and my field surveys, social structure is the distribution and management of power and rights, and all the social systems (culture system, custom system, social structure, building system, etc) are interlocked, has interactional

勇, *侗族艺苑探寻*, (贵阳: 贵州民族出版社, 2010)

Anhui Fu, *Dong Folk Literature*, (Huhehaote: Distant Place Press, 2009). 傅安辉, *侗族民间文学*, (呼和浩特: 远方出版社, 2009)

Xiangjun Liao, *The Research of South Dong Traditional Culture Feature*, (Beijing: The Ethnic Publishing House, 2007). 廖君湘, *南部侗族传统文化特点研究*, (北京: 民族出版社, 2007)

Yaohong Long, *The Research of Dong Language*, (Guiyang: Guizhou Nationalities Publishing, 2003). 龙耀宏, *侗语研究*, (贵阳: 贵州民族出版社, 2003)

Jianeng Shi, *The Notes of Dong Culture Research*, (Shenzhen: Huaxia Culture Press, 2000). 石佳能, *侗族文化研究笔记*, (深圳: 华夏文化出版社, 2000)

Zuyi Feng and others, *Dong Culture Research*, (Guiyang: Guizhou People's Press, 1999). 冯祖贻及其他, *侗族文化研究*, (贵阳: 贵州人民出版社, 1999)

relations, like oral culture needs the corresponding systems to cooperate with it and manipulate it. They work together to establish Dong society, and enable the social reproduction and transformation. These systems make the identity of people, building, society, and life mode exist. Each system has its structure, procedure and detail. (These issues will be further discussed in the following sections on sociological theory and architectural theory.)

Field survey

Although the authors noted above have done much research and fieldwork, existing materials about oral knowledge and education are insufficient, while other aspects are not recorded. So based on the literature review, I proceeded with my fieldwork and concentrated on the following issues.

1. To search for more and for specific oral knowledge, like carpentry knowledge (which will be illustrated in the later section of the literature review concerning architecture).
2. The educational process of oral knowledge. I further collected data on the steps of learning of oral knowledge, from the aspects of general education (villager) and skilled education (carpenter). I collected the method of learning, the content, system and structure of oral knowledge (see Chapter 2 and 3).
3. The application of oral knowledge in society and building. I further collected data concerning the time, method, organisation, aim, value, and reason for the use of oral knowledge, particularly in carpentry education (see Chapter 3), and in the customs and rituals of building (see Chapter 5 and 6).
4. I interviewed local people to collect more data on oral knowledge, songs and their life stories, in order to support a better understanding of their culture and life than is given in existing literature. I also investigated how the carpenter read the building, the difference between general reading and professional reading (see Chapter 7).

During my first field survey, by visiting local museums, cultural departments, local scholars, I collected more material from local researchers, like their research, journals and books. (More detail can be found in Appendix 1, A.1.1 First survey; A.1.2 Second

survey.) They have worked on their area for about thirty years, and most of them are Dong minority and grown up in this area, accompany with many first-hand material, so their experiences are valuable: from these conversation, I gained unpublished details of their research and surveys, their experience and insights. Fieldwork also allowed me to check the reliability of the books and papers I had read: from the communication with the local scholars, through their explanation of Dong history, social structure, custom, oral knowledge, I gained a comparison and supplement of the books, and have a better understanding of the books. For instance, I interviewed Yong Zhang: he further discussed the procedures, classification and contents of oral culture and education. He told me about the education in oral knowledge (see Chapter 2).⁴

Thus the way the Dong work with things, produce things and educate people within an oral culture is reflected in the organisation of things and people. This influences other system, like education and construction. This will be further discussed in the following sections of the literature review, and in Chapters 2, 3 and 4.

This kind of oral knowledge is admittedly inaccurate, distortable, forgettable, within a limited scope, and parts of it are clearly in conflict with modern science. Like Dong carpentry, knowledge is remembered by each carpenter in their brains, caused by personal attribution, there could be distortions and omissions of remembering. Although they can correct the wrong information by public communication, the knowledge shared by this group is limited.

From these oral materials, an issue is revealed that the Dong are reliant on the oral knowledge to explain their world, history, identity, skill and knowledge. Meanwhile, their production, skill, tools, the way they explore the world also influence their knowledge. All these also create the limitations of their knowledge. This issue will be further discussed in Chapter 2. The following are the historical materials collected in this thesis

1.3.2 History

The following books provide the key texts in this area: 'Exploration of Dong Origin', Min Zhang, 2012; '*The Anthology on Guizhou Ethnic Group Culture*', Caigui Huang, 2009; '*Guizhou Ancient Education History*', Yuqiong Zhang, 2003; '*New Exploration of Yue*

⁴ From my field survey, interview with Yong Zhang, Rongjiang, 12/06-12/07, 2010.

Descendant Relique', Shengxian Wang, 1990; '*Dong History, Culture and Custom*', Tinghua Luo and Shengxian Wang, 1989; '*Dong Brief History*', Editing group for Dong brief history, 1985.⁵

These materials provide a historical comparison of Dong architecture, and support more accurate analysis of different factors, like the history of Dong culture, customs, festival, language, folk art and architecture. They show a comprehensive, coherent and dynamic development of Dong society and building. The references and material used in these books are full and exact, and clearly cited. Authors studied historic materials, such as local history records, national history records, and archaeological finds. Most of the field surveys were produced in the 1980s-1990s, when the buildings and customs are relatively well preserved, so there are abundant references from their field surveys and local history records. Yet because they lack further historical material, some questions remain. For instance, in the book '*New Exploration of Yue Descendant Relique*', there are some arguments on the origin of the Dong people, the social structure in history, and whether the Dong had experienced slave society.

In the book '*Guizhou Ancient Education History*', Yuqiong Zhang provides a comprehensive, exact development history of Guizhou Province, with detailed description of the educational methods, content and development stages in history of different ethnic groups including the Dong. Unlike the education in a city or town, where there are clear written materials that record the history of education, the education in Dong villages does not have many written records. Most of their history is not recorded in books, and fades away with time.

⁵ Min Zhang, *Exploration of Dong Origin*, (Beijing: Chinese Drama publishing house, 2012). 张民, *侗族探源*, (北京: 中国戏曲出版社, 2012)

Caigui Huang, *The Anthology on Guizhou Ethnic Group Culture*, (Guiyang: Guizhou People's Press, 2009). 黄才贵, *贵州民族文化论丛*, (贵阳: 贵州人民出版社, 2009)

Yuqiong Zhang, *Guizhou Ancient Education History*, (Guiyang: Guizhou Education Press, 2003). 张羽琼, *贵州古代教育史*, (贵阳: 贵州教育出版社, 2003)

Shengxian Wang, *New Exploration of Yue Descent Relique*, (Guiyang: Guizhou People's Press, 1990). 王胜先, *越裔遗俗新探*, (贵阳: 贵州人民出版社, 1990)

Tinghua Luo and Shengxian Wang, ed., *Dong History Culture Custom*, (Guiyang: Guizhou People Press, 1989). 罗廷华和王胜先, 编, *侗族历史文化习俗*, (贵阳: 贵州人民出版社, 1989)

Editing group for Dong brief history, ed., *Dong Brief History*, (Guiyang: Guizhou Nationalities Publishing, 1985). 《侗族简史》编写组, 编写., *侗族简史*, (贵阳: 贵州民族出版社, 1985)

The written language record things, events and time on books, it makes the review of history or events available for people. Books can be reviewed by people many times. People do not need to remember contents of the books; they can reread them when they need to know. On the contrary, for Dong people, the oral history only can be remembered in their brain, so they need to remember things and events, while sometimes there is no second chance for the happening of a thing. When a person dies, his memory and knowledge fades away with him. That is why in this circumstance, Dong people need the oral culture (song, verse words, Kuan words, story, lore, etc), recurrent customs, collective activity, symbol, and building in order to make personal knowledge become a collective knowledge, so everyone remembers. Even when one person dies, knowledge will still be passed down by others, with reference to everyone to ensure the accuracy of the knowledge. Meanwhile the material reference like symbol and building also support this process of reminding and recording the history and knowledge. Thus, their ways of remembering history are allegoric, mystic and storied, in their songs, stories, oral knowledge, customs and building. Their history exists, yet needs be to be reintroduced in the way of written language.

And history is not static; it is a stage in time. The reason and logic found from the history cannot be directly applied in current society, because many related factors are changed. So this part will not simply or directly give any principle to suggest current design and construction, the aim of this collection of literature is to discuss what happened and how it happened. Thus it provides the foundation of questions and explanations set out below.

Furthermore, not only in books and buildings, the continuity of history also exists among people, and their conversation and demonstration. People are history, their stories, customs, works and buildings are history, in the form of their oral history. It belongs to that group, and their period. In the book 'Walking into the Drum Tower, Dong South Community Culture Oral History', Weiren Yu, 2001⁶ gives readers an impression that history and community is comprised and constructed by many things and people, it is not only a name or title like the Tudors in Britain or Tang in China, but things that happened and how people lived. People are not figures or objects in history, but a real person who has his feeling and story. It enlightens the idea and writing of this research

⁶ Weiren Yu, *Walking into the Drum Tower, Dong South Community Culture Oral History*, (Guiyang: Guizhou People's Press, 2001). 余未人, *走进鼓楼侗族南部社区文化口述史*, (贵阳, 贵州人民出版社, 2001)

to represent things, people's life and thought in the process of oral architecture.

But some assumptions about the history of the Dong are made that lack solid evidence, and in my visit to Zhang Yong, the author of '*Exploration of Dong Art and Literature*', he agreed that this is a problem in researching Dong history. Because of the lack of further historic evidence, it is hard to substantiate all of those assumptions, so he only can deduce the possible situation in the history based on related historical records from other nations, existing customs, oral knowledge and relics. As a weakness of oral culture, the lack of sufficient historical material is a common problem in the study of history in every Dong research subject including architecture. Only the main culture and the architecture of China have considerable solid historical material to support their research, like the two books below.

In the book '*History of Ancient Chinese Architecture*', Dunzhen Liu, 2003, Dong architecture is described as a branch of Chinese architecture, providing some references to the study like the ancient building style, ganlan.⁷ The book '*History of Chinese Furniture—Sitting Furniture*', Yong Cui, 1994, systematically illustrates and discusses the development of Chinese chairs.⁸ It provides some references to this study, like the ancient living habit and the importation of the chair (see Chapter 7).

However, unlike the main architecture of China, the Dong do not have their own book recording their buildings in history, except through story and song, and until now there is no book that systematically illustrates and discusses the history of Dong architecture. There are few records of Dong buildings in history, the first book to record the drum tower is in '*Chiya*', '*赤雅*', written by Kuang Lu, 邝露 (1604-1650), (record of minority nationality customs in Guangxi and Guangzhou during the Ming dynasty, 1368-1644 A.D.). As with the previous description, only after the end of 1970s did some scholars, institutions and universities start to record and research Dong buildings, so the lack of long-term and solid history materials meant the Dong buildings could not be well dated, and the origin of the drum tower is also hard to find out. The current researches are based on the existing buildings and a few historic records. Some scholars made

⁷ Liu Dunzheng, *History of Ancient Chinese Architecture*, Second edition, (Beijing: China Architecture & Building Press, 2003), p. 1. 刘敦楨, *中国古代建筑史*, 第二版, (北京: 中国建筑工业出版社, 2003), p. 1.

⁸ Cui, Yong, *History of Chinese Furniture—Sitting Furniture*, New edition, (Taipei: Ming Wen Book Co. Ltd., 1994), pp. 93-98. 崔詠, *中国家具史--坐具篇*, 增订新版, (台北: 明文书局股份有限公司, 1994), pp. 93-98.

assumptions about the originality of the drum tower, but there still is no solid evidence to prove their assumptions.

According to this literature review, many scholars have tried to locate each important event to a specific time, and they also offered general descriptions of Dong history. However, the systematic research of Dong history is still going on. They described the history of Dong people, yet caused by the lacking of history material, the change of society, custom, building are vague. The relation of each change between villages, carpentry system, custom and building, are not been systematically recorded. Maybe these are the disadvantage and features of oral history. The time line exists, yet in a blur, it is not rigid, while much oral culture supplements its contents and renders its representation. From my field survey, their history view is more overlapped and layered; in oral history all things are categorised into a large time span without further classification. Oral history has something rich, yet the content needs to be carefully examined: this is one of the reasons that this thesis focuses on the period from 1980s to today, because within this, the cases from books are considerably reliable, and can be investigated by my field survey.

1.4 Social structure and customs

This part consists of two categories of books: one concentrates on social structure, another one focuses on folk customs, yet their contents and structure are cross connected and overlap. So in this literature review they are treated as an entity.

1.4.1 Social structure

These books describe the Dong social structure and social activity. They show the process of the social construction, representation in the building construction, and use of buildings. These data enrich the material to support the research and analysis of the process of the oral architecture. The following books provide the key texts in this area: ‘*The Kingdom without King*’, Minwen Deng and Wu Hao, 1995.⁹ Its content is detailed and vivid with clear citations, accompanied with meaningful discussion and analysis. It is helpful to understand the Dong social structure. The book ‘*Guizhou Six Hills and Six*

⁹ Minwen Deng and Hao Wu, *The Kingdom without King, Dong Kuan Research*, (Beijing: China Social Science Press, 1995). 邓敏文和吴浩, *没有国王的王国, 侗款研究*, (北京: 中国社会科学出版社, 1995)

rivers, Selected Data of National Survey' Rong Wu, Yongrong Pan, and Xu Yang, ed., 2008, is an important and reliable reference book, and many of the cases of customs in this thesis are cited from this book.¹⁰ These authors have done more than thirty years research and field surveys on the Dong since 1980s. Most of them are Dong and grew up in Dong area. Some books also contain the content of social structure, yet have been listed already or will be mentioned below, so I will not repeat them here.

Field survey

During my field survey, I investigated the social structure and management of village by interviewing villagers, villager elders and local scholars. I confirmed the materials from books, and gained a better understanding of Kuan, village history, village organisation, village's self-management, the clans in village, and clan system. I also collated the list of people related to this thesis in Dong society and their role, like during the communication with Yong Zhang, he further illustrated the role of the village elder and song master (see Chapter 1) (more detail can be found from Appendix 1, A.1.1 First survey).¹¹

1.4.2 Folk custom

These folk custom materials provided a comprehensive description of the Dong social etiquette, customs, activities and life. All of these folk customs mainly take place in the folk dwelling and the drum tower. The oral knowledge is practiced through activities. The use and significance of oral knowledge are reflected. These are crucial and important material to understand the relationship between architecture, community and residents. The following books provide the key texts in this area: '*Poetic Life, the Outline of Dong Ecology Culture*', Huizeng Zhu and Zezhong Zhang, 2005; '*The Kam People of China*', D. Norman Geary and others, 2003; '*China Dong People Customs and Paddy Culture*', Fengzhi Liu, 1999; '*Record of Dong Custom*', Zhuhui Yang, ed., 1999.¹²

¹⁰ *Guizhou Six Hills and Six rivers, Selected Data of National Survey*, ed. by Rong Wu, Yongrong Pan, and Xu Yang, Volume of Dong (Guiyang: Guizhou People press, 2008). 贵州六山六水民族调查资料选编, 吴嵘, 潘永荣, 杨旭, 编, 侗族卷 (贵阳: 贵州人民出版社, 2008)

¹¹ From my field survey, interview with Yong Zhang, Rongjiang, March 2010.

¹² Huizeng Zhu and Zezhong Zhang, *Poetic life, the Outline of Dong Ecology Culture*, (Beijing: The Ethnic Publishing House, 2005). 朱慧珍和张泽忠等著, *诗意的生存侗族生态文化审美论纲*, (北京: 民族出版社, 2005)

D. Norman Geary and others, *The Kam People of China*, (London: Routledge, 2003)

Fengzhi Liu, *China Dong People Custom and Paddy Culture*, (Beijing: People People's Press, 1999).

刘芝风, *中国侗族民俗与稻作文化*, (北京: 人民出版社, 1999)

In these books, the analysis does not bring deep propositions. The argument, content and analysis are similar to each other. There is little discussion of the significance of the customs in Dong society, and none of the books has separately discussed the customs related to building. For example, in the book '*China Dong People Customs and Paddy Culture*', the author Fengzhi Liu explores and discusses the proposition of the Dong paddy culture from the aspects of Dong culture, productive custom, festival custom, cloth, architecture and craft, and its relation to their customs in general.¹³ There is much useful evidence in this book, yet the theme has not been strong presented, and the analysis does not provide a deep view. Consequently, I will develop discussion in the following section of the literature review, and discuss the significance of custom in education (Chapter 3), construction (Chapter 4 and 5) and use of building (Chapter 6). In the book '*Customs of Nine Stockaded Village*', Anhui Fu and Dazhong Yu, 1997, the authors focus on the village leader, farm work leader, Dong wizard and hand-ink master (master carpenter), arguing that these people are the main body and inheritors of the culture and techniques, and giving detailed descriptions of their work content and principles.¹⁴ They go on to discuss their vital position and significance in the transition of culture and society. These issues are important to this research and inspired the structure and idea of this thesis that focuses on the activity and people in this process in Dong society, there are people in each system, and there are systems they managed, which are vital in this thesis.

And the people, and factors (climate, geography, production, material, technique, culture, etc) in each system are shared or overlapped. Even a single work needs the cooperation of several systems. Just as the description in the book '*China Dong People Customs and Paddy Culture*', in the agriculture, there are so many customs and rituals at each step of production for a specific purpose. The same is true in the construction process: there are oral cultures and custom, and people are assigned to different positions (see Chapter 4 and 5). These systems blend into each other, working together or in turn. Consequently, this thesis is not going to represent one system or factor, but composite systems. They refer to each other and cooperate to accomplish this complex process.

Zhuhui Yang, *Record of Dong Custom*, (Beijing: The Central University of Nationalities Press, 1999). 杨筑慧, *侗族风俗志*, (北京: 中央民族大学出版社, 1999)

¹³ Liu, *China Dong People Custom and Paddy Culture*, 1999. 刘, *中国侗族民俗与稻作文化*, 1999

¹⁴ Anhui Fu and Dazhong Yu, *Custom of Nine Stockaded Village*. (Guiyang: Guizhou People's Press, 1997). 傅安辉和余达忠, *九寨民俗*, (贵阳: 贵州人民出版社, 1997)

As within the book '*From the Soil: The Foundations of Chinese Society*', Xiaotong Fei, 1984, the author calls the village a rural society.¹⁵ Compared to a law-based society, rural society is a customary society. This society is tied to the land. Its relationship between society and people is built on the previous experience system and custom system. Like other agricultural people across the world, their activity is local, in their own community. Its discussion about the social system and the knowledge system has been inspiring to this thesis. As one of many agricultural ethnic groups, Dong people share this bond to land and an earlier social system. So in this thesis, in the aspect of social life, this research chooses the customs that relate to building in order to discuss the function and meaning of architecture in life. And on the subject of the Dong education system, this research focuses on the formation progress of the experience knowledge system.

Field survey

After I collected above literature, I proceeded in my field survey to double check the materials recorded from the above books, and collected more material to supplement my study. The field survey has focused on how the last generation do, and what items helps them to do it. I interviewed local scholars to collect more material on custom and culture from them to complement my material, like during the interview with Yong Zhang, he told me the gods in house, roles of people in village (see Chapter 2).¹⁶

I collected more material concerning the time, place and order of custom in building, like the entering of threshold (see Chapter 6). I joined many customs and ceremonies, and during these events, I asked people about each event and recorded it. I observed how local people interact with life and building. I also lived with them and collected much data on their custom, living habit, songs, grass-marks, the reading and use of a house and the drum tower from them (see Chapter 6). (More detail can be found from Appendix 1, A.1.1 First survey; A.1.2 Second survey; A.1.3 Third Survey.)

According to literature review and field survey, all the customs are imported in small area, among limited people and with strong relationship. On this basis, I will also discuss the power of shared custom and ritual: how it works, and what it means to Dong

¹⁵ Xiaotong Fei, *From the Soil: The Foundations of Chinese Society*, (Hongkong: Joint Publishing, 1984). 费孝通, *乡土中国*, (香港:三联书店,1984)

¹⁶ From my field survey, interview with Yong Zhang, Kaili, February 2013.

people. All these will be further discussed in following section of the literature review, concerning sociological theory, and in more detail in Chapter 6.

Following the above ideas, and according to the critical review of social structure and custom and my field survey, the way Dong people produce and exchange their food and things influences their organisation, relation and specific activities. Their main livelihood is agriculture (without machine power), and this needs to be implemented by particular social organisation. The clan system inherently has the function of social organisation, as the need of agriculture, the clan became a suitable agency to organise production and construction. In this circumstance, the clan afforded multiple functions including the mutual assistance between people. The continuity of the relation between relatives naturally extends to the mutual relation and collaboration within production and construction among the clan.

Although livelihood and work influence their social organisation, it more directly concerns why and how they construct their life, like the construction of building and the use of building (the systems they adopted). Within the Dong area, there are also many other ethnic groups: they share the same environment, material, climate, and the main production also is agriculture. But they are different; the variation between these groups is marked by their social structure, cultural system, custom system, building system, etc.

As Rappaport says, people can live in any kind of building. Referring to his idea, people also can live in different society: the choice is finally made by people. Here again, influenced by oral culture, knowledge is maintained by each person, as mentioned before, their life are local, so there is less chance for them to learn knowledge from other area or import their knowledge to others. So they will give the specific definition, procedure and detail of their custom, according to their own culture and knowledge system. Their subjective variety is where differences emerge. People consist of system, they establish system, and their knowledge influences their choice: this issue will be further described and discussed in this thesis, like the hand-ink master in education and construction (Chapter 3, 4 and 5), villager in construction and use of building (Chapter 4, 5 and 6). The development of these discussions in the main text of the thesis has been supported by related work on British village life. As a part of the literature review, the following section presents comparative material on British village life.

1.4.3 British village life

In the books mentioned below, there are many stories, oral resources and illustrations that record people's life in parts of Britain in the early parts of the twentieth century. These materials provide a comparison to this study and expand the knowledge of this research.

In the book '*Five Miles from Bunkum a Village and Its Crafts*', authors Christopher Ketteridge and Spike Mays describe the life in village from 1914 to 1924 about the construction of a cottage, the making of a mill and work of a miller, other crafts and village life.¹⁷ As with the Dong people, with limitations of transport and ways of production, the village seems rather remote. In his book '*The Farm and the Village*' George Ewart Evans illustrates the generation of people who last practised the old techniques, and their way of life in the village, during the last half of the twentieth century in region of East Anglia of the United Kingdom.¹⁸ There are other three books written by George Ewart Evans in his studies of oral history which are '*Where Beards Wag All*', '*From the Mouth of Men: The Relevance of the Oral Tradition*', '*The Days That We Have Seen*'. In the book '*From the Mouth of Men*', George Ewart Evans describes the life in town, the life of domestic servants, business in the 1900s and the life of the miners in Wales.¹⁹ In the book '*The Days That We Have Seen*' George Ewart Evans unearthed the country folk before 1914, their superstitions, labours, sufferings, enjoyments, tools and custom in East Anglian villages.²⁰ He shows the way in which oral history works and illustrates his point through some valuable records told by old men and women. In the book '*Where Beards Wag: All the Relevance of the Oral Tradition*', George Ewart Evans illustrates such craftsmen as the wheelwright, foundry craftsmen, saddler or leather craftsman, whitening-roll maker, the gardener, the ploughman, agriculture and the village.²¹ Below is a discussion of these books.

The comparison of development in these books provides examples for the study of the Dong. It was a quite similar transforming stage compared to what has happened in the Dong area. As George Ewart Evans indicates 'The old village community was

¹⁷ Christopher Ketteridge and Spike Mays, *Five Miles from Bunkum a Village and Its Crafts*, (Newton Abbot: Country Book Club, 1973)

¹⁸ George Ewart Evans, *The Farm and the Village*, (Newton Abbot: Country Book Club, 1971), p. 14.

¹⁹ George Ewart Evans, *From the Mouth of Men*, (London: Faber and Faber, 1976)

²⁰ George Ewart Evans, *The Days That We Have Seen*, (London: Faber and Faber, 1975)

²¹ George Ewart Evans, *Where beards Wag All: The Relevance of the Oral Tradition*, (London: Faber and Faber, 1977)

dovetailed together by the nature of work'. He says that when the character of the work changed, the rural society also changed.²² Manpower and animal power were essential to the work until they were replaced by machine, and new products and material techniques dramatically replaced the old crafts. The same risk is happening to Dong carpentry: from records of books and my field survey the youngest hand-ink masters are about forty years old, and there are few young people want to learn the old crafts. While Ketteridge and Mays say the tribal feeling of the village is less obvious, this may be caused by the less need to stick together in a modern society.²³ The old village was a communal society based on organisation of production.

Moreover Ketteridge and Mays say in the change of society, the keenest loss is their craftsmen, that these old artificers knew their raw materials and how to use them. And master craftsmen handed down their skills, father to son, for many generations and naturally the sons inherited the feel of tools.²⁴ This society was an experiential society. There is an example in the description of choosing the time to sow seed, Evans says 'One farmer of the old school boasted to me that he could tell the state of his land and whether he could sow simply by crumbling some of the soil in his hand and then walking over the land'.²⁵ People have an in-depth contact with work and things. The skills and lore connect with and exist among people, work and things, and when they are gone, the story and experience also fade away.

The locality of oral history and its systems

Evans indicates that under the conditions of farming, the rural group could be satisfied without moving out of the village as a largely self-sufficient community.²⁶ As he states these foundry craftsmen grow up under the older culture and 'serve the domestic need of the town and also the farm needs of the countryside around it'.²⁷ This is a reason for its locality. At the same time, a village or a region would have its common adopted system of construction to achieve their need (there also could also have been other construction systems). Some construction methods and characters of building only exist in some places. For instance, the local dwellings around Sheffield are different to the local dwellings around Chichester. In the same way, in Dong area the drum tower at

²² Evans, *The Farm and the Village*, pp. 153-155.

²³ Ketteridge and Mays, *Five Miles from Bunkum a Village and Its Crafts*, p. 23.

²⁴ *Ibid.*, pp. 23-25.

²⁵ Evans, *The Farm and the Village*, p. 42.

²⁶ *Ibid.*, p. 154.

²⁷ Evans, *Where Beards Wag All: The Relevance of the Oral Tradition*, p. 36.

Congjiang County is different to the drum tower at Sanjiang County. The carpentry knowledge, structure and treatment are different. These materials show that history has its character of locality or region. In a broad regional extent and over a long time span, some profound and universal principle may be revealed. Yet the specific reason and scheme should be discussed within its conditions, which lead to the specialty of the social group.

As Evans says 'Because it was local, specific and direct: that is, not mediated through print or any other medium. These old people had followed their jobs, kept up the customs, used the tools, exactly as their ancestors had done for centuries;... The tradition inhered in the material culture, the work; and his work had monitored it and had given it a stable context and an unbroken line'.²⁸ Work is vital in society, nevertheless, except for work, as in following discussion of the social schemes in the literature review of sociology theory; there are many subdivision systems to maintain the society. Evans illustrated custom and tools. He cited the example of response from villagers when their village was first connected with electricity. Some of them showed a certain rejection to electric light, because they had already got used to the traditional way as their fathers had lived.²⁹ Even when there was a choice, people still would insist on the old life. It is a resistance of their habitus.

Similarly with building, Evans says the design of the barn itself and the work that went on in it had hardly changed from the sixteenth century to within living memory.³⁰ Thus in Dong life, oral knowledge, existing buildings, customs and artefacts constituted their situation. History was made and could be revealed in these things.

From the above discussion, in the old village community, people lived in a part of history accumulated by many generations, and directly inherited the knowledge from grandfather and father. This is a society with strong cohesion, all the things are valid and reasonable, because 'my grandfather told me', people can rely on and trust other people's experience. It is an inborn obligation to them without their being fully aware of it.

²⁸ Evans, *The Days That We Have Seen*, p. 16.

²⁹ Ketteridge and Mays, *Five Miles from Bunkum a Village and Its Crafts*, p. 63.

³⁰ Evans, *The Farm and the Village*, p. 83.

The review of those old stories is not simple nostalgia. Evans indicates that the study of oral sources as a supplement to historical resource can extend the scope of history, and make history more authentic to the inhabitants of a locality or a region.³¹ Normally historians record main events and the main persons in it, while oral history is both an individual and a communal experience that everyone remembers and takes in. As Evans deems, the historical depth of oral testimony could light particular aspects of history and illustrates the remarkable continuity to complement the idea of a neat progression of history.³² Oral history contains lots of detail, and people's feeling and thinking. From their mouths, things become richer, although there are mixed truth and falsehood (as also with a book). It is impossible to recover the totality of history; people only can gain more understanding and get closer to history.

History concerns two issues: where people came from, and where they may go. As Evans says on the cover of his book 'From the Mouth of Men': 'How much more we should know of our ancestors and how much better we should understand ourselves'. He shows how study of the change of the old village could provide historical evidence and a wide view of the historical scene to present problems in a quickly changing rural society. As he says 'By doing this one cannot escape the contemporary happenings and the feeling that something like this has happened before'.³³ This is another important view from his book. There is a famous Chinese saying 'History is a mirror that reflects the vicissitude' (以史为镜, 可以知兴替). Things keep happening, so does now it is also a stage in history. History is not merely a record; it is a way of thinking. These things, people, systems are the references and coordinates in history, reminding us of what life has been lived.

1.5 Architecture

1.5.1 Chinese and Dong architecture

In these subjects, books and journals collected are about the building history, carpentry, tools, technique, structure, materials, construction, form, components, and decoration,

³¹ Evans, *The Days That We Have Seen*, p. 25.

³² *Ibid.*, p. 42.

³³ Evans, *The Farm and the Village*, p. 155.

plans of architecture, spatial structure, and functional distribution, custom and ritual in buildings. Maybe because the drum tower is the most representative and unique example among Dong buildings, so most of the books and journals record and discuss the drum tower. Thus, the Dong drum tower is the starting and main point of this research. These specific data provided me with valuable information to support the discussion and the analysis of buildings. In this area, the following are the key works: ‘*The Dong Drum Tower Culture Research*’, Kaizhong Shi, 2012. ‘*Hills beyond Hills and Towers beyond Towers*’, Yan Hai, 2011. ‘*Treasures of Ethnic and Folk Arts: The Drum Tower. The Wind and Rain Bridge*’, Kaizhong Shi and others, 2009. ‘*Treasures of Ethnic and Folk Arts: Dong Hanging Column Building*’, Yongbin Ma and others, 2009. ‘*Folk Dwelling of Guizhou*’, Deqi Luo, 2008. ‘*The Chinese Dong Drum Tower*’, Yongming Yang and others, 2008. ‘*Traditional Villages and Architecture of Dong Nationality’s Habitation Region*’, Ling Cai, 2007. ‘*The Folkloric Heritage of Native Architecture*’, Guangrong Li and others, 2006. ‘*The Folkloric Heritage of the Dong Drum Tower*’, Jiaqi Li and others, 2002. ‘*Traditional Chinese Housing-Northern Guangxi Volume*’, Deqi Shan, 1998, ‘*Northern Guangxi Folk Architecture*’, Changjie Li, 1990. ‘*The Research of the Dong Village Drum Tower*’, Yinsheng Mei, ed., 1985.³⁴ Most of the authors are

³⁴ Kaizhong Shi, *The Dong Drum Tower Culture Research*, (Guiyang: Guizhou Ethnic Group Press, 2012).

石开忠, *侗族鼓楼文化研究*, (贵阳: 贵州民族出版社, 2012)

Yan Hai, *Hills beyond Hills and Towers beyond Towers. Qian Xiang Gui Dong Architecture*, (Guiyang: Guizhou Science & Technology Publishing House, 2011). 海盐, *山外青山楼外楼, 黔湘桂侗族建筑*, (贵阳: 贵州科技出版社, 2011).

Kaizhong Shi and others, *Treasures of Ethnic and Folk Arts: The Drum Tower. the Wind and Rain Bridge*, (Guiyang: Guizhou Nationalities Publishing, 2009). 石开忠和其他, *民族民间艺术瑰宝: 鼓楼. 风雨桥*, (贵阳: 贵州人民出版社, 2009)

Yongbin Ma and others, *Treasures of Ethnic and Folk Arts: Dong Hanging Column Building*, (Guiyang: Guizhou Nationalities Publishing, 2009). 麻勇斌和其他, *民族民间艺术瑰宝: 吊脚楼*, (贵阳: 贵州人民出版社, 2009)

Deqi Luo, *Folk Dwelling of Guizhou*, (Beijing, China Architecture & Building Press, 2008). 罗德启, *贵州民居*, (北京, 中国建筑工业出版社, 2008)

Yongming Yang and others, *The Chinese Dong Drum Tower*, (Guangxi: Guangxi Ethnic Press, 2008). 杨永明和其他, *中国侗族鼓楼*, (广西: 广西民族出版社, 2008)

Ling Cai, *Traditional Villages and Architecture of Dong Nationality’s Habitation Region*, (Beijing: China Architecture & Building press, 2007). 蔡凌, *侗族聚居区的传统村落与建筑*, (北京: 中国建筑工业出版社, 2007)

Guangrong Li and others, *The Folkloric Heritage of Native Architecture*, (Guiyang: Guizhou People’s Press, 2006). 李光荣和其他, *图像人类学视野中的乡土建筑*, (贵阳: 贵州人民出版社, 2006)

Jiaqi Li and others, *The Folkloric Heritage of the Dong Drum Tower*, (Guiyang: Guizhou People’s Press, 2002). 李, 嘉琪和其他, *图像人类学视野中的侗族鼓楼*, (贵阳: 贵州人民出版社, 2002)

Deqi Shan, *Traditional Chinese Housing-Northern GuangXi Volume*, (Beijing: Tsinghua University Press, 1998). 单德启, *中国传统民居图说桂北篇*, (Beijing: Tsinghua University Press, 1998)

Changjie Li and others, *Northern Guangxi Folk Architecture*, (Beijing: China Architecture & Building Press, 1990). 李长杰及其他, *桂北民间建筑*, (北京: 建筑工业出版社, 1990)

again local scholars, working in universities or local design institutes. There are many first-hand materials from the authors' many years of field survey. (Brief notes on each book can be found from Appendix 2, A.2.1.4 Architecture.) Some books proposed unique insights and helped the research of this thesis, yet some did not, which can be seen from the following discussion.

In the book '*Allegorical Architecture: Living Myth and Architectonics*', author Xin Ruan synthetically discussed culture, oral knowledge, life and architecture based on the author's field research since the 1990s.³⁵ Ruan claims that in the present, the formal problem of architecture is devoid of any worldly meaning, for any meanings that remain are abstract. The interest in traditional building remains predominantly visual, recording the picturesque and idyllic images of romanticism and nostalgia.³⁶ People think of vernacular building from a single aspect, in terms of function, technique, or form. With no comprehensive, deep and detailed investigation and understanding, the merits of vernacular building also cannot be revealed. He proposes the name 'Allegorical Architecture', which is not merely to represent or symbolise, but rather is a story about its maker and inhabitants. He says the stories about the inhabitants are legible, in their recurrent process of the ritualistic making and inhabiting of their built world.³⁷ Just as in the previous discussion about knowledge and culture, in my field survey, this feeling is strong. The Dong builders follow the social schedule passed down from the last generation, and the direct presentation of life is the answer.

Ruan further raises the question, based on the thinking of habitus and interactive relationship between human beings and their built world, of whether the constitution of a human person is also an essential task of architects, planners, and environmental designers in an anthropological sense.³⁸ These ideas enlightened questions of the role and significance of buildings in social life, and how people construct and cultivate their life, which influenced this research's structure and direction.

There are also other books that illustrate different regional buildings from various ethnic groups in China: they expand the scope of knowledge and provide comparative

Yinsheng Mei, ed., *The Research of the Dong Village Drum Tower*, (Guiyang: Guizhou People's Press, 1985). 梅印生编, 侗寨鼓楼研究, (Guiyang: 贵州人民出版社, 1985)

³⁵ Xin Ruan, *Allegorical Architecture, Living Myth and Architectonics in Southern China*, (Honolulu: University of Hawaii Press, 2006)

³⁶ Ibid., p. 4.

³⁷ Ibid., pp. 10-12.

³⁸ Ibid., p. 12.

references to Dong architecture, including the following: ‘*Cathay’s Idea-Design Theory of Chinese Classical Architecture*’, Yunhe Li, 2005; ‘*The Analysis of the Living Organism of the Guizhou Miao Ethnic Group Architectural Culture*’, Yongbin Ma, 2005; ‘*Traditional Chinese Dwellings*’, Qiming Jing, 1999; ‘*Chinese Traditional Dwelling and Culture Volume Three*’, Changjie Li, 1995.³⁹ Such as, in the journal, ‘*The Use of non-destructive techniques in Chinese traditional timber structures*’, authors Alian Che and others use computer models to calculate the structural performance of a Chinese ancient timber structure pagoda (Yingxian wooden pagoda built in the Liao dynasty, AD 1056, it is 65.86 m high) in earthquake conditions. And from the result, it shows that the reinforcement should be applied to the second floor and third floor where it suffers a large deformation.⁴⁰ This journal provides a comparison to the structure of the Dong drum tower, as the drum tower shares many aspects of structure organisation from the pagoda, like the bundle of columns.

Among these books, especially valuable is the theme of ‘*The Analysis of the Living Organism of the Guizhou Miao Ethnic Group Architectural Culture*’, as the author proposes taking architecture and culture as a live whole to study and analyse. This live whole exists in the form of a small unit, and then it comprises a big operational, absorptive and changeable social and cultural organisation. This is an illuminating perspective for this thesis, because the Miao (a cultural group geographically adjacent to the Dong) and Dong share similar conditions, situation and carpentry skill (both are derived from Han carpentry). Like the oral knowledge and customs that are also widely used, most of the culture and buildings are preserved and applied in life. The structure of this book also influenced the organisation of my thesis.

³⁹ Yunhe Li, *Cathay’s Idea-Design Theory of Chinese Classical Architecture*, (Tianjing: Tianjing University Press, 2005). 李允铎, *华夏意匠-中国古典建筑设计原理分析*, (天津: 天津大学出版社, 2005)

Yongbin Ma, *The analysis of the living organism of the Guizhou Miao ethnic group architectural culture*, (Guiyang: Guizhou People’s Press, 2005). 麻勇斌, *贵州苗族建筑文化活体解析*, (贵阳: 贵州人民出版社, 2005)

Qiming Jing, *Traditional Chinese Dwellings*, (Tianjin: Tianjin University Press, 1999). 荆其敏, *中国传统民居*, (天津: 天津大学, 1999)

Changjie Li, ed., *Chinese Traditional Dwelling and Culture Volume Three*, (Beijing: China Architecture & Building press, 1995). 李长杰, 编辑, *中国传统民居与文化(三)*, (北京: 建筑工业出版社, 1995)

⁴⁰ Alian Che and others, ‘The Use of non-destructive techniques in Chinese traditional timber structures’, *Proceedings of the Institution of Civil Engineers: Structures and Buildings*, 166 (2013), 313-314.

1.5.2 Material

For this study, some journals about timber science of china fir (*Cunninghamia lanceolata*) and timber structure were collected. They use the scientific method and experiment to test the physical and mechanical properties of china fir, for example the journal ‘Decay resistance of China-fir (*Cunninghamia lanceolata* (Lambert) Hooker)’, its tests show that the decay resistance of china fir is similar to west red-cedar. In journals ‘Difference between Wood Mechanical Properties of the Radial and Tangential Sections of Chinese Fir’, ‘Intratree Variability of Cleavage Resistance of Chinese Fir from Plantation’, in the test of cleavage resistance, tangential cleavage resistance is higher than the radial one, and sapwood is higher than heartwood. But sections on the north and the south of the trees do not show obvious difference, nor does the cleavage resistance between the radial and tangential from butt to top log. The journal ‘Intratree Variability of Wood Density and Main Wood Mechanical Properties in Chinese Fir and Poplar Plantation’ shows the same result, and this journal indicates that wood density has a positive linear relation with other mechanical properties. And all these journals show that china fir has a good mechanical performance.⁴¹ These journals offer comparison to the tacit knowledge of Dong carpentry. According to my field surveys, from the interview, observation and work with Dong carpenters, I found none of them have accepted the modern education of mechanics of material or structural mechanics. They have basic knowledge of mathematics and geometry, which are enough for them to deal with the issues in construction they encountered (See Chapter 3). There is no term of modern experiment in their work: instead, only the hundreds of times practices show them the capability, possibility and criticality of material and structure. And in a certain level, this explains why only few carpenters can master the skill and knowledge

⁴¹ Che. A. and others, ‘The Use of non-destructive techniques in Chinese traditional timber structures’, *Proceedings of the Institution of Civil Engineers: Structures and Buildings*, 166 (2013), 307-315
 Freitag, C. and Morrell, J.J., ‘Decay resistance of China-fir (*Cunninghamialanceolata*(Lambert) Hooker)’, *Forest Products Journal*, 56 (2006), 29-30
 Xu, M. and others, ‘Intratree Variability of Cleavage Resistance of Chinese Fir from Plantation’, *Chinese Forestry Science and Technology*, 5 (2006), 27-32
 Ren, H. and Nakai, T., ‘Intratree Variability of Wood Density and Main Wood Mechanical Properties in Chinese Fir and Poplar Plantation’, *ScientiaSilvaeSincae*, 42 (2006), 13-20
 Cai, Z., ‘Difference between Wood Mechanical Properties of the Radial and Tangential Sections of Chinese Fir’, *ScientiaSilvaeSincae*, 32 (1996), 254-259. 蔡则谟, 杉木径面及弦面的木材力学性质的差异, *林业科学*, 32 (1996), 254-259

of the construction of the drum tower, and the wind and rain bridge, which are expensive projects with a long timescale. Unlike the construction of the Dong house, not every carpenter has the chance to participate such projects, the knowledge normally is mastered by several hand-ink master who has been a member of such project and taught by the old master. The practice is an experiment to them, every time when they practicing, it is a learning and adjustment process for the master carpenter to explore and check his knowledge of material, components, joints and structure. However, limited by their way of practice, such as eyes, hands, skin, muscle, chisel, axe, saw, the performance of material, joints and structure are external phenomena. So even if some carpentry knowledge are inaccurate compared to the physical reality, there are no further tools and data to support their further understanding, like pressure test, cleave test, computer analysis. All the above issues will be discussed in Chapter 3.

There are also many other journals and articles providing data about the material, structure, function, custom and culture of the drum tower, such as 'Dong Architectural Art, Culture of The Drum Tower', 'The Characteristics of the Drum Tower, Cultural Connotation', 'Chinese Minority Architecture, Constitution Technology of Dong Nationality's Drum Tower', etc.⁴² Because it is difficult to illustrate all the journals and articles here, the rest of them can be found in the bibliography.

Gap

Because the main study of Dong architecture was started in 1990s, it is in a relatively early stage of research. Most of the books focus on the collection and classification of architectural data. There is little discussion and analysis of Dong carpentry and architecture. So in this thesis, I will proceed with further discussion and analysis of Dong carpentry in Chapter 3; Dong construction in Chapter 4 and 5; the use of building in Chapter 6; and the reading of building, and the construction and cultivation of dwelling in Chapter 7. Meanwhile there is no systematic discussion and summary of the building in Dong people's life and social construction: this is main issue of this thesis, and will be discussed throughout.

⁴² Jin Sun., 'Dong Architectural Art, Culture of the Drum Tower', *South Architecture*, 2(1990), 79-85. 孙静, '侗族鼓楼建筑艺术与鼓楼文化', *南方建筑*, 2(1990), 79-85

Qianpin Du, 'The Characteristics of Drum Tower, Cultural Connotation', *Journal of The Central University for Nationalities*, 1(1996), 62-66. 杜倩萍, '侗寨鼓楼建筑特色及文化内涵', *中央民族大学学报*, 1(1996), 62-66

According to the collection of books, there are lots of descriptions of Dong houses, the drum tower, and the wind and rain bridge. However, there is less material on the detailed construction process, carpenter skills, education of carpenters, and the making of joints. So from my field survey, I collected more detailed and first-hand material to supplement the existing academic knowledge of Dong carpentry, education and construction process. I have lived in Dong villages, and interviewed local Dong people and carpenters. I joined their work and custom. I collected relevant information on custom, buildings, the drum tower and village for the discussion of the significance, function and possibility of building. I also found the use of houses with oral knowledge, and how people deal with different events, and their habits in the use of buildings. In the following section are brief notes of these fieldworks: the more detailed material will be introduced and discussed in each chapter of the main text. Notes and summaries are also contained in Appendix 1. Field survey.

Field survey

During the field surveys, I visited the villages and buildings recorded in books to check their reliability. Some cases are confirmed as correct, but some are inaccurate compared to my field survey. For example, in the book 'The Chinese Dong Drum Tower', the drawings have some failures—some parts of the section drawings of Shudong drum tower are not accurate compared to my field survey, although the main part of the drawing is correct (see Chapter 2), more detail can be found from Appendix 1, A.1.1 First survey. I also visited Yunan Pan's house at Tang'an village (built in the 1950s) which is recorded in Lin Cai's book 'Traditional Villages and Architecture of Dong Nationality's Habitation Region'. I measured and recorded this house, and the sizes were the same (see Chapter 2), more detail can be found from Appendix 1, A.1.3 Third survey.

Regarding Carpentry knowledge, in the field survey, I further collected the tools of Dong carpentry, names and sizes of components, materials, stories of buildings, carpenters' songs and recited words, lore, custom, knowledge, education, appearance and direction of building, and the use of buildings. For instance, I collected the material of Dong mathematics, the use of math and geometry in building construction from Prof. Qichao Luo (Dong) (see Chapter 2). He also told me the story of the reversed column (see Chapter 7). I investigated Dong carpentry tools from the hand-ink master Fenglin Pan. He

illustrated the function and use of tools (see Chapter 3), more detail can be found from Appendix 1, A.1.1 First survey. And I visited hand-ink master Wenli Lu, he taught me the implicit meaning of double eaves (see Chapter 7). He also told me the ritual of 'closing mountain' (see Chapter 7); more detail can be found from Appendix 1, A.1.3 Third Survey.

In the field survey, I checked the material I collected from field surveys and literatures with local carpenters. And through the communication with carpenters, there are more details of carpentry knowledge than the records on books. Like during the communication with Wenli Lu, he told me the choosing and use of timber, and his own education process (see Chapter 2), more detail can be found from Appendix 1, A.1.3 Third Survey.

Concerning construction, I further collected materials about the construction process: site, time spread, material, groups, and roles of people. In order to explain and discuss how they build without drawing. For instance, I observed the construction process of repair of Xiaohuang village drum tower, and interviewed the hand-ink master, carpenters and villagers. I also interviewed Degang Wei (he is the director of the Congjiang County cultural centre). He gave me many materials on the drum tower and its construction process (see Chapter 5), more detail can be found from Appendix 1, A.1.1 First survey. Then I worked and lived with the hand-ink master Wenli Lu and his apprentices for nearly one month, while he and his apprentices were making the components of his new house. Much of my Dong carpentry knowledge and experience were taught by Wenli Lu during this time. Like the construction process of Dong house and the drum tower (see Chapter 4 and 5), the sizes, names and functions of components, making of components, drawing ink lines, structure, carpentry education, carpenter code system, roof forms, function and arrangement of a house (see Chapter 3), rituals and customs in construction (see Chapter 4 and 5), more detail can be found from Appendix 1, A.1.2 Second survey.

I also collected data on Carpenters' customs: for instance, at Xiaohuang village, three carpenters taught me some carpentry knowledge, etiquette of apprentice (see Chapter 2), more detail can be found from Appendix 1, A.1.1 First survey. I also observed and recorded the construction of a new house, and joined the ceremony of it (see Chapter 4). And Wenli Lu taught me, the ceremony for the front gate (see Chapter 4), more detail can be found from Appendix 1, A.1.2 Second survey.

I visited many villages, buildings, such as drum towers, wind and rain bridges, houses, temples. For instance, I visited and measured the oldest single column drum tower (see Chapter 3). People said it is first built in 1636 (yet from the books I have read and researchers I visited, or stele I saw. I did not find further material to support this issue), and had been rebuilt for several times. Current drum tower was rebuilt in 1921. This is agreed by most researchers. During the interview with most of the carpenters and hand-ink masters, they all said, this single column drum tower is the origin of the drum tower. I think there would need more research and material to explore this issue, more detail can be found from Appendix 1, A.1.1 First survey. I also visited earth temple and 'five dragons temple' at Jitang village (see Chapter 7), more detail can be found from Appendix 1, A.1.3 Third survey.

I also measured many Dong houses complement my research materials, like the house of Jiliang Pan at Xiaohuang village (built in the 1950s, see Chapter 2). There are more cases of houses from my fieldwork can be found from Appendix 1, A.1.2 Second survey; A.1.3 Third Survey.

Then I further investigated Zhaoxing village and Tang'an village, and mapped wells, village gates, houses, wind and rain bridges, drama stage, the drum tower, Sa Sui altar, to understand the structure of Dong village, more detail can be found from Appendix 1, A.1.3 Third Survey (see Chapter 6).

And during my field survey and compare to the books of the Dong house and the drum tower, as mentioned before, the oral knowledge has a stronger personal character. To the Dong carpenter, it is an organisation of personal tacit experience based on practice. Meanwhile, more precisely, each carpenter are the member of local carpentry system, while the hand-ink master present the highest skill knowledge and lead the local carpentry system he belongs to. The hand-ink master and other carpenters influence the local making of components, and the construction of buildings. They and their knowledge work together become part of the locality of the building system. The design and construction of a house usually provided by the carpenters lived in the same village, then the design of a drum tower usually provided by a hand-ink master lived in that area, each carpenter group respond and serve to the local needs. For instance, the house and the drum tower in Dali village, Rongjiang County are different to the house and the drum tower in Xiaohuang village, Congjiang County, and the branches of house and the

drum tower could be further classified by villages. There are many ways of making and construction, yet they are finally chosen by the hand-ink master and the host of the building. These issues will be further described and discussed in following literature review and Chapter 3.

1.5.3 British craft and building

Some books about British craft and building were collected for comparison as follows. In the book 'Five miles from Bunkum: a village and its crafts', the description of the charm of the building is quite expressive.

'Yet the 'brick and stoners' have a charm of their own, especially when you live in a pair of them with your parents and grandparents, and they are framed by Keeper's Cottage and Walt's Cottage, both of clay and thatch, and standing at Reuben's Corner; when round the little porches there are trailings of flaming japonica, and round the door and windows old British tea roses, Maiden's Blush, and tendrils of sweet-scented honeysuckle; when they were built by the ancestors of your best friend, and the house martins come and build their clay nest there – over all the years'.⁴³

When a builder finished a cottage, many things emerge in succession, like the people who lived there, the people around them, the building itself, the buildings around it, and the other things surrounding them. And this is the merit of vernacular building. It is maintained in the relationship with surrounding things and the tectonics of the joints. The books noted below will focus on the structure and material.

In the subject of British building, I consulted following books, such as '*Discovering Timber-Framed Buildings*', Richard Harris, 2013; '*Traditional buildings of Britain: An introduction to Vernacular Architecture and its Revival*', R. W. Brunskill, 2010; '*The Village Carpenter*', Walter Rose, 2001; '*Vernacular Architecture: An Illustrated Handbook*', R. W. Brunskill, 2000; '*Building in England Down to 1540: A Documentary History*', L. F. Salzman, 1997; '*Recording Timber-Framed Buildings: An Illustrated Glossary*', N. W. Alcock and others, 1996; '*Vernacular Architecture of the Lake*

⁴³ Ketteridge and Mays, *Five Miles from Bunkum a Village and Its Crafts*, pp. 36-37.

Counties', R. W. Brunskill, 1974; 'The Wheelwright's Shop', George Sturt, 1963.⁴⁴ These books provide references for the comparison and analysis of Dong carpentry. Although British and Dong carpentry are two different systems, they also have much in common. The British tools are quite similar to Dong tools, like chisel, hammer and saw. In the book '*Discovering Timber-Framed Buildings*', there are many examples such as the following. The code system to mark the components shares some principles of coding, like vertical and horizontal coding. The joints share the same principle of interlocking, they both use tenons and mortises, using pegs to lock them, yet the way of connection and making are different. For instance, at the corner of roof structure, the British joint has a main post, wall plate, and tie-beam connected at a joint point (principal rafter is not included), but the Dong joint normally has a tie beam and main column connected at a joint point, then a main column and an upper crossing bay tie-beam (with similar position and function as wall plate, and is below purlin. Purlin is placed on top of main column) connected at an upper joint point.⁴⁵ The structure also shares some common points, like the bay and cross frame (in Dong called fan frame), and those frames are all prefabricated and preassembled.⁴⁶

There are some other examples such as the following. In the construction, Salzman says like the larger house has to be raised separately, first would come the ground-sills.⁴⁷ This may be the reasonable choice around the world, when the structure or component is too large or heavy, the builder has to do it separately and from the bottom. This principle is also applied by Han and Dong builders in construction. Gravity tells them the sequence, and it continues in modern construction. Salzman illustrates a method of preventing damp and rot that a low wall of stone or brick was built under the ground-sills to preserve them.⁴⁸ This method is similar to the method adopted by Han carpentry applied in the timber building by constructing a stone foundation to raise the

⁴⁴ Richard Harris, *Discovering Timber-Framed Buildings*, 3rd edn, (Oxford: Shire Publications Ltd, 2013)
R.W. Brunskill, *Traditional buildings of Britain: An introduction to Vernacular Architecture and its Revival*, 3rd edn, (London: Yale University Press, 2010)

Walter Rose, *The Village Carpenter*, (Ammanford: Stobart Davies, 2001).

R.W. Brunskill, *Vernacular Architecture: An Illustrated Handbook*, main edn, (London: Faber and Faber, 2000)

L. F. Salzman, *Building in England Down to 1540: A Documentary History*, special edn, (Oxford: Oxford University Press, 1997)

N. W. Alcock and others, *Recording Timber-Framed Buildings: An Illustrated Glossary*, 2nd edn, (York: Council for British Archaeology, 1996)

R.W. Brunskill, *Vernacular Architecture of the Lake Counties*, (London: Faber and Faber, 1974)

George Sturt, *The Wheelwright's Shop*, (Cambridge: Cambridge University Press, 1963)

⁴⁵ Harris, *Discovering Timber-Framed Buildings*, 3rd edn, pp. 12-15.

⁴⁶ *Ibid.*, p. 4.

⁴⁷ Salzman, *Building in England Down to 1540: A Documentary History*, special edn, p. 201.

⁴⁸ *Ibid.*, p. 201.

house ground about three steps. Another instance Salzman illustrates is the driving in of wedges under the sill to correct irregularities.⁴⁹ This is also a method used in Dong buildings to adjust the irregularities of the foundation.

However, there are also many differences. For instance, the material in Britain is oak and in Dong is china fir (*Cunninghamia lanceolata*). The texture of oak is harder than china fir, it provides enough strength to make some joints which would be difficult in china fir, like the tenon of the main joint of the tie-beam and column, which could be 3 cm thick in oak, but should be at least 6 cm in china fir.⁵⁰ In Britain people use undried oak called 'green wood', because it will take several years to totally dry out, and fresh oak is less hard and easier to process.⁵¹ On the contrary, in China, the carpenters normally use dried timber to avoid deformation in the following construction. Above are just some instances: there are more interesting common points and differences between this two carpentry systems that cannot be illustrated in this thesis, which could be written as a separate book. The contents above books with their wide knowledge in this subject expanded the view of this thesis.

1.6 Sociological Theory

After I had collected abundant materials of culture and history, social structure and custom, architecture there was a need for theories to guide further analysis. In this subject, the theory books collected are about sociology and humanities, focusing on theories of social structure, ritual and custom that provide references of theoretical guidance to support the analysis of Dong society and its way of operation. This step is the foundation for the following research about the role, signification, phenomena and atmosphere of building in Dong society. The architecture theory related to Dong building system will be separately discussed in the following literature review, 1.7 Architectural Theory.

Building system is an important system to build people's living environment and is the application of their will. However, it is more or less interlinked with many other systems, while other juxtaposed systems are simultaneously functioning. Influenced by previous

⁴⁹ Salzman, *Building in England Down to 1540: A Documentary History*, special edn, p. 201.

⁵⁰ From field visit to Weald & Downland Open Air Museum carpentry course, taught by Joe Thompson, September 2014.

⁵¹ *Ibid.*

reading and discussion, this thesis will progress from the view of humanity and social construction to think about the building system, and its role and signification in life is the main point of this thesis. Thus the discussion will start from the social structure and time that provide a broad theory background for this research, then move into the discussion of the subdivision of systems (culture system, knowledge system, custom and ritual system, language system, building system).

There follows some brief notes on the key contributions in this area, and a discussion and explanation of how they promoted the research for this thesis. Below, Dong systems are presented from the point of view of a social scheme to discuss their function and character.

1.6.1 Structure and generative scheme

The book '*Outline of a Theory of Practice*' was the theoretical starting point of this thesis. This book was based on Algerian fieldwork, in which the teaching is much done through activity, custom and rituals. Author Pierre Bourdieu uses the life of Kabyle people as the case study. He discusses and analyses the symbolic power, order, time, structure, and relationship between groups.⁵² The discussion about structure, habitus and relation inspired the research issue of this thesis as in the following illustration.

In the argument of the establishment of society, Bourdieu uses a word 'Habitus', an agency that establishes social life in practice.⁵³ It is the set of socially learnt dispositions, skills and ways of acting, that are often taken for granted, and which are acquired through the activities and experiences of everyday life.⁵⁴ Bourdieu advocates social class as not simply a population of individuals structured by statistical regularities, but a particular class habitus system.⁵⁵ At this point, the society is a dynamic complex, and similarly Dong society is an organic operational organisation. There are many relations between different events and activities.

Bourdieu further states that human existence is the product of the system of schemes.⁵⁶

⁵² Pierre Bourdieu, *Outline of a Theory of Practice*, (Cambridge: Cambridge University Press, 1977), p. 90.

⁵³ Ibid., p. 21.

⁵⁴ Wikipedia, 'Habitus (sociology)', Wikipedia, *the free encyclopedia*<[http://en.wikipedia.org/wiki/Habitus_\(sociology\)](http://en.wikipedia.org/wiki/Habitus_(sociology))> [accessed 1 June 2011]

⁵⁵ Bourdieu, *Outline of a Theory of Practice*, pp. 83-86.

⁵⁶ Ibid., p. 154.

The scheme, with its loosely systematic products, operates under its principle and logical control through systematization. In its union or separation, concrete practice makes things objectified and gives them existence, confirms the relationship, visible in sight and also apprehended in mind.⁵⁷ Also in the book '*The Social Construction of Reality, a Treatise in the Sociology of Knowledge*' Peter L. Berger and Thomas Luckmann advocate that society is built up by activity that expresses subjective meaning.⁵⁸ In this sense, people's existence could be considered as a systemic being produced by practice, while there are so many systems including building system. Then there is a need to discuss each system and its concrete activity. Thus, the research of this thesis focuses on particular activities, which are education, building construction and the custom related to buildings: these three activities compose the important parts of the system that establish and inherit the Dong society.

1.6.2 Social reality and authentic field survey

Moreover, Berger and Luckmann thought people apprehend objects as constituents of different spheres of reality. They advocate that 'Among the multiple realities there is one that presents itself as the reality par excellence. This is the reality of everyday life', and a detailed phenomenological analysis would uncover the various layers of experience.⁵⁹ This notion offers an idea that what the researcher should focus on in research is everyday life. Especially in architecture research, daily life contains lots of things and implicit principles. It is where architecture was built and engaged. Thus this research started from the subject of society to think about building from the basis of life.

Meanwhile, Bourdieu deems that observers should situate themselves within real activity, such as involving themselves in the practical context with world, instead of simply representing practice or objectifying practice and reducing it to merely an execution.⁶⁰ Following the above ideas, in the field survey, participation is a good way to reach the essentials of practice, as the observer can receive more comprehensive and deep information. This is critical to understanding the complex action and its background.

⁵⁷ Bourdieu, *Outline of a Theory of Practice*, p. 123.

⁵⁸ Peter L. Berger and Thomas Luckmann, *The Social Construction of Reality, a Treatise in the Sociology of Knowledge*, (London: Allen Lane, 1967)

⁵⁹ *Ibid.*, p. 35.

⁶⁰ Bourdieu, *Outline of a Theory of Practice*, p. 96.

Bourdieu also indicates that analysis from one single view could not explore the essentials of things, as neither a single subjective or nor objective view could depart from the object of study and cause a deflection of cognition.⁶¹ So in this research on the analysis of architecture, I tried to study the relevant aspects of the building process, in order to find out the role of building in Dong society.

1.6.3 Historical position and dynamic history

There was a need for some history discussion as broader historical context and background for this research. As Berger and Luckmann say, temporal structure offers historicity and determines people's situation in history.⁶² Thus history offers people a time coordinate, setting where they are in history. While Bourdieu tells us that with the transformation of time and space, the change is not only in the status of time and space, but also in people's status in their society.⁶³ Enlightened by this idea, architecture could be a platform for resident's 'time and space', and also a confirmation, for residents' performance and as their material reference. Berger and Luckmann also indicates, in the history of people's society, they are not limited to contemporaries, but also relate to predecessors and successors.⁶⁴ This makes every generation become an articulation in history, raised up by the last generation and feeding the next generation.

For each generation, the social structure is never a static scheme. As Bourdieu says, the objective structures in society are products of historical practices, and are constantly reproduced and transformed by historical practices.⁶⁵ Social structure refreshes itself, and in some case it evolves, so is always in a dynamic and organic status.

These ideas of history provide a broad historical view to think about each generation's history and their relationship with other generations. History could offer people the answer, reference, a time coordinate: where are they come from and where they may go. This is the long span of time of many generations, and below is a discussion of the concrete organisation of time in society within one generation.

⁶¹ Bourdieu, *Outline of a Theory of Practice*, p.97.

⁶² Berger and Luckmann, *The Social Construction of Reality, a Treatise in the Sociology of Knowledge*, p. 41.

⁶³ Bourdieu, *Outline of a Theory of Practice*, pp. 165-167.

⁶⁴ Berger and Luckmann, *The Social Construction of Reality, a Treatise in the Sociology of Knowledge*, p. 48.

⁶⁵ Bourdieu, *Outline of a Theory of Practice*, p. 83.

Bourdieu says 'practical time' organises social production and customs. He indicates the linear diagram of the agrarian year based on the practical relations which gathers different activities successively and systematically under one time system.⁶⁶ These notions provide important references to the research frame, and also offer specific ideas and theories to support the development of this thesis. As time is important to coordinate architectural activities, all the activities in life are marked by, or follow time. Just as building construction has its practical time for the construction order, so do the rituals and customs in the construction and use of buildings have their procedures. Each thing has its own practical logic, yet, they are organised under the practical logic and succession of a general social construction. After the broad background of social scheme and time are discussed, the discussion can move up to the next level, each having its own system in society.

1.6.4 Culture system

In the book '*Local Knowledge: Further Essays in Interpretative Anthropology*', Clifford Geertz argues that common sense is a cultural system, which rests on an assertion that is just life in a nutshell, the world is its authority.⁶⁷ As Mary Douglas says in '*Purity and Danger, An Analysis of Concepts of Pollution and Taboo*', in the sense of the public, culture is a standardised value of a community, and mediates the experience of individuals. It provides in advance some basic categories, a positive pattern in which ideas and values are tidily ordered.⁶⁸ After the education and mediation of culture, many things become habits. People do not need to get to the bottom of things, as long as their culture system can offer a complete conceptual system to offer a reasonable explanation in their life: day by day, year by year, people live and work in the conventional way.

1.6.5 Knowledge system

Like culture, knowledge also has its limitations. As Berger and Luckmann say, the knowledge that is limited to pragmatic competence in routine performances occupies a prominent place in the social stock of knowledge that dominates everyday life. This is

⁶⁶ Bourdieu, *Outline of a Theory of Practice*, p. 105.

⁶⁷ Clifford Geertz, *Local knowledge*, third edition, (New York: Basic Books, 2000), p. 75.

⁶⁸ Mary Douglas, *Purity and Danger, An Analysis of Concepts of Pollution and Taboo*, (London: Routledge & Kegan Paul, 1966), p. 40.

the schematic typification of the routine of social system.⁶⁹ It is the same in Dong society, for their knowledge system is in a scope. All they need to know is related to the things happened around them within their small world. In this background, they establish an immature knowledge system, which performs more like a technical system to solve problems. They form and obtain their practical knowledge in activity, and will adjust their knowledge to fit the operation of world, not totally corresponding to physical reality, but at least appearing to function well.

1.6.6 Custom and ritual system

In Dong society, custom and ritual are involved in every part of the construction and use of a building, so there is a need to discuss the role and meaning of the custom and ritual system. These activities seem to have the functions listed below:

Performance transition and define boundary: Bourdieu describes ritual as a device to control performance transitions and define boundaries.⁷⁰ It manipulates order, relationships, creates 'passage' and 'threshold' in transitions.⁷¹ These ideas will be further discussed in Chapters 6 and 7 in the application of custom and ritual.

Maintain or manipulate social classification and order: In discussion of how custom and ritual maintain the social order, Mary Douglas uses the words 'mental habit' and 'cherished classification' to describe the system ordering and classification, where and when they should be.⁷² This 'mental habit' and 'cherished classification' show a resistance to change and a desire to keep the social structure.

Bourdieu also says people could recognise the legitimacy of the classification system in activity and ritual.⁷³ In the book '*Rational Ritual: Culture, Coordination, and Common Knowledge*', Chwe explains how ceremony and ritual are to make public, and coordinate authority.⁷⁴ So this legitimacy is given by the group, and gladly or passively accepted by the new members.

⁶⁹ Berger and Luckmann, *The Social Construction of Reality, a Treatise in the Sociology of Knowledge*, pp. 57-58.

⁷⁰ Bourdieu, *Outline of a Theory of Practice*, p. 103.

⁷¹ Ibid., pp. 120-123.

⁷² Mary Douglas, *Purity and Danger, An Analysis of Concepts of Pollution and Taboo*, p. 40.

⁷³ Bourdieu, *Outline of a Theory of Practice*, p. 164.

⁷⁴ Michael Suk-Young Chwe, *Rational Ritual: Culture, Coordination, and Common Knowledge*, (New Jersey: Princeton University Press, 2001), p. 19.

Meanwhile, Mary Douglas says ritual is a way to manipulate social order and system, and in some circumstance it also could change the order. It is more likely to bring benefits, health, prosperity, and supplement the imperfection of personal conformity.⁷⁵ In the book '*The Ritual Process: Structure and Anti-structure*', Victor Turner says, the ritual process in a certain level is to create a system or resist a system, which is a controllable activity to serve the people's interest.⁷⁶ Douglas also indicates that ritual serves to maintain a culture, a particular set of assumptions by which experience is controlled. Ritual expression enables people to know their own society.⁷⁷

These books provide theoretical guidance to explore the principles and system in customs, ritual and culture, a point which this thesis attempts to discuss and reveal throughout the main text. These activities are to control the process to accomplish Dong people's demands in the construction and use of building

The signification of the body

Bourdieu says a person's body works as a geometer to explore and identify space, and rites makes intensive use of the body as a practical operator to practice people's cosmic order and charge it with social significations.⁷⁸ This idea supports the discussion of Chapter 6 (the customs and ritual in building) and works as the starting point of Chapter 7, based on the human body, to discuss how people read buildings and feel space. In Dong rural life, in their sphere of activity, the dimension they need to know is the size of body instead of other measurements. This issue will be further discussed in the following part of the literature review, 1.7.1 People in building.

In the arrangement and organisation of events, Bourdieu further states that movements of the body and practical manipulations are treated as purely logical operations.⁷⁹ Similarly, Mary Douglas argues that the central cultural themes are expressed by rites of body manipulation, so that the physical body works as a symbolic medium in ritual.⁸⁰ In the same sense, in Chapter 6, in custom and ritual Dong People's relationship and status are represented by their position in space, while the building provides the space

⁷⁵ Mary Douglas, *Purity and Danger, An Analysis of Concepts of Pollution and Taboo*, p. 175.

⁷⁶ Victor Witter Turner, *The Ritual Process: Structure and Anti-structure*, (New York : Aldine de Gruyter, 1995), p. 241.

⁷⁷ Mary Douglas, *Purity and Danger, An Analysis of Concepts of Pollution and Taboo*, p. 129.

⁷⁸ Bourdieu, *Outline of a Theory of Practice*, pp. 114-119.

⁷⁹ Ibid., p. 117.

⁸⁰ Mary Douglas, *Purity and Danger, An Analysis of Concepts of Pollution and Taboo*, p. 129.

mark.

1.6.7 Language system

As stated at the outset, oral knowledge is an important part in this thesis. Language is the carrier and a vital factor of oral knowledge, so this section will discuss the language system to understand its function and significance in Dong society. Berger and Luckmann indicate that language has the function of objectification, and transformation to 'translate' the non-everyday experiences back into the reality of everyday life.⁸¹ Thus language makes the experience of transmission between people possible. Culture and knowledge can be told to people who had not directly experienced such things.

Language itself is an object, yet the content it transmits is subjective; that means it carries an objectified subjective intention. In just the same way the carpentry lore is an objectified subjective experience, which is carried as a thing. For instance, Berger and Luckmann indicate that the weapon is both a human product and an objectification of human subjectivity, expressing a general intention and recognisable by anyone who knows it. It is an objective 'reminder' to reveal the original intention in making it.⁸² Following this idea, building also could be employed for a subjective intention, like a temple or a shrine. The building has its character of material and construction. This provides the material reference for people to read the building in the sense of a language. Although architecture has its own tectonic logic and meaning, when people offer an implicit meaning to its material and organisation, building was read in a grammatical way.

Face-to-face communication

In Dong society, because language has to be applied in a face to face situation, so people must be assembled. Or if an activity assembles people together, then language and body performance are the major method of communication. Thus, either way language has to be used in face-to-face situations. As Berger and Luckmann deem, the face-to-face communication affords people the optimal situation to understand one another's subjectivity. Because 'Both of us hear what each says at virtually the same

⁸¹ Berger and Luckmann, *The Social Construction of Reality, a Treatise in the Sociology of Knowledge*, pp. 35-39.

⁸² *Ibid.*, p. 50.

instant, which makes possible a continuous, synchronized, reciprocal access to our two subjectivities, an intersubjective closeness in the face-to-face situation that no other sign system can duplicate'.⁸³ Thus language becomes the ultimate method for communication in Dong society.

Meanwhile, Berger and Luckmann indicate signs and sign systems are all characterized by 'detachability', yet language is more readily detachable from the face-to-face situation than any other.⁸⁴ It is not limited by time or space, and could be told by people at another time and space. And because of its immense variety and complexity, Berger and Luckmann deem language to be capable of preserving massive accumulations of meaning and experience in time and to transmit it to following generations.⁸⁵ Thus language has its vital position in the social generative scheme.

Metaphor

There are many cases of ambiguous or implicit use of language and symbol in Dong. The following theories about metaphor interpret the function and significance of metaphor, providing the theoretical support for further analysis in this thesis. In her book *'Implicit Meanings'*, Mary Douglas discusses the implicit meanings in life.⁸⁶ In the book *'Metaphors We Live By'* George Lakoff and Mark Johnson discuss how our conceptual system is grounded.⁸⁷ In the book *'Dramas, Fields, and Metaphors: Symbolic Action in Human Society'* Victor Turner explains why people use ritual and metaphor to manage order, boundary, power, transformation and transition.⁸⁸

The reason to discuss metaphor is as Lakoff and Johnson state: 'In most cases, what is at issue is not the truth or falsity of a metaphor but the perceptions and inferences that follow from it and the action that are sanctioned by it'. This kind expression delivers the meaning which could be understood, but is hard to describe. Metaphor is also an action to tolerate and permit the intended meaning in the way of another thing. In Dong custom and ritual, there are many actions in the way of metaphor to guarantee a transition or

⁸³ Berger and Luckmann, *The Social Construction of Reality, a Treatise in the Sociology of Knowledge*, pp. 49-52.

⁸⁴ *Ibid.*, p. 51.

⁸⁵ *Ibid.*, p. 52.

⁸⁶ Mary Douglas, *The Implicit Meanings*, (London: Routledge, 1975).

⁸⁷ George Lakoff and Johnson, Mark, *Metaphors We Live by*, (Chicago: University of Chicago Press, 1980).

⁸⁸ Victor Witter Turner, *Dramas, Fields, and Metaphors: Symbolic Action in Human Society*, (London : Cornell University Press, 1974).

transformation, like the rituals at the threshold that will be further illustrated and discussed in Chapter 6.

Above are the discussion of social generative scheme, and its subdivision systems. These systems are local and belonged to the cultural group. It presents the culture of this group, and their character of thinking. There are other systems that have not been mentioned, as they are less connected to the theme of this thesis.

Much research has been done concerning Dong society, yet there are still many issues that have not been raised. According to the literature review above and my field survey, the following ideas about Dong society have been generated. These provide supplementary issues for current Dong research, and also the basis of this thesis, especially the issue of oral mode.

1.6.8 Life experience within a stable rural life

Berger and Luckmann point out that people spatially and temporally experience life in different degrees of closeness and remoteness, and the closest zone to people is everyday life that bodily manipulation can directly access.⁸⁹ This points out the degree of accessibility of experience is based on the scope of the body and depends on the accessibility of the body. Then they indicate that people's knowledge of everyday life is structured in terms of relevance, determined by their interests or situation in society.⁹⁰ Although there could be many factors limiting the accessibility of experience, the obvious two are the body and people's needs and interests. However, people's needs and interests are an important motive that decides the structural relevance of knowledge. Of course this is not to depreciate the importance and significance of the body.

For instance, today, we have planes, trains, and cars, but even in the city there are some places we do not know. At this point, it is not a question of whether people can be there or not, but whether they need or want to go there. As my supervisor Prof. Peter Blundell Jones says, nowadays, in the library there is massive accumulation of

⁸⁹ Berger and Luckmann, *The Social Construction of Reality, a Treatise in the Sociology of Knowledge*, p. 36.

⁹⁰ *Ibid.*, p. 59.

knowledge which is impossible for one person to read in a lifetime. Thus people have to choose what they are going to read.⁹¹ Also as Xiaotong Fei says of the people in a village and the people in a city, that neither of them is smarter than the other, but each has its own knowledge structures, focusing on agriculture or city life.⁹² So Berger and Luckmann say the social stock of knowledge as a whole has its own relevance structure.⁹³ People's knowledge relates to what they are confronted with, as beyond the knowledge is their life structure.

However, the life structure in a rural society is much more stable. Berger and Luckmann say, as long as the routines of everyday life continue and are not interrupted by the appearance of a problem, they are apprehended as unproblematic.⁹⁴ From the above issues, it seems that when a Dong village can support life its systems work well. They would not need to migrate to other place or make a change. This type of life routine has limited the experience.

1.6.9 Oral mode

During the reading of the above listed materials and the field survey, the idea of an 'oral mode' (language and body participation) was generated, as an apprehension of Dong society, because in Dong education, construction and customs in building, language and body performance are representative and have a leading part. This term 'oral mode' may cause confusion about the content of this thesis by suggesting that it only focuses on language, and seem to ignore other ways of social inheritance. However, language is not the only way to communicate in the traditional society. There are also concrete activities, phenomena and bodily perceptions. Nevertheless the 'oral mode' is a main method and runs through the whole process as discussed before, and is an important symbol of this old way of life. For instance, through 'oral education' in daily life, the young generation receives edited and organised knowledge from the last generation by words, while they also obtain tacit knowledge from examples and practice, like the carpentry education.

And this not only happened in Dong society: it also happened in traditional Han and

⁹¹ From a supervising meeting, in November 2014.

⁹² Fei, *From the Soil: The Foundations of Chinese Society*, pp. 10-13. 费, *乡土中国*, pp. 10-13.

⁹³ Berger and Luckmann, *The Social Construction of Reality, a Treatise in the Sociology of Knowledge*, p. 60.

⁹⁴ *Ibid.*, p. 38.

British societies. These two societies have had written language for a long time. However, at the level of the village, there is less need for written language. Most of the time people communicate through language in face-to-face situations. In such situations, people and events are located at the same time and space. This way of education, construction and custom in social process, keeps a close relation to things and phenomena to access the authentic thing. And this process is the core of this thesis. Thus this thesis uses 'oral' as the part of the title to represent the mode of this process.

Based on all the material outlined above, the initial literature review was finished, and preliminarily organised. It analysed the Dong social background including natural conditions, economy, ethnic culture, social structure and system (informing Chapter 2), then moved on to the architectural material and technology, the carpentry system (informing Chapter 3), building function and use (informing Chapter 6), and the drum tower (informing Chapters 3 and 5). The detailed discussion will be added in relation to the corresponding chapters.

In the field survey, more materials about the customs related to building, carpenter tools, education and construction process have been collected. On this basis, through discussion with my supervisor, I raised corresponding research issues, such as the Dong education process, its content, method, function and significance; the carpentry education process, its content, method, function, significance; the building construction process, the use of buildings and reading of buildings. These issues promoted the development of research ideas and questions, confirmed the research direction of this thesis and the subsequent material collection, and the research framework was established in this process.

1.7 Architectural theory

This final section of literature reviews concern architectural theory, which has been used to discuss the building system, the main content of this thesis. There were two main types of architecture theory books consulted, the first on architectural phenomenology, about the body, perception, atmosphere, role and significance of architecture in Dong society, and the reason and aim behind it. These architectural phenomenology books influence the theoretical direction of this thesis. They guided the field survey and

analysis. The second type concerns the theory of the analysis of architecture, such as the complexity of architecture, the factors influencing architecture, the thinking of architecture in term of itself and its construction. These theories not only offered explicit reference and guidance in each subject and corresponding methods of research and analysis to support further discussion, but also provided a more comprehensive understanding of architecture. Under the assistance of these theories, the proposition of this thesis became more explicit, while the research issues and structure were enriched. The following sets out a summary of literature concerning people in building, the role and significance of architecture, architecture in life, and the construction of building.

1.7.1 People in building: architectural phenomenology

In building, people are the constructor and user of building, so the discussion of this subject will first start from the people in architecture. As the need grows for the research into how people read and remember buildings, the discussion responds by introducing concerns with the body, movement, the perception system, as well as the recognising and remembering system. This part provides the main theoretical foundation for Chapter 7.

The role of body in building

While there are many ways of reading a building (as a story, activity, body perception, construction, etc.), no matter how people read buildings in their various ways, the body is not detachable. In the book '*Remembering: A Study in Experimental and Social Psychology*' Bartlett indicates that a sensory pattern provides the physiological basis for perceiving.⁹⁵ The body and its senses are the basis of experiencing a building, such as vision which relies on the eye, touch which relies on the skin, and walking which relies on body movement. Bodily perception makes communication and interaction between built environment and people possible.

Many other authors have developed work around these core connections; key here have been '*Architectural Phenomenology*' by Shen; and Bloomer's *Body*,

⁹⁵ Frederic C. Bartlett, *Remembering: A Study in Experimental and Social Psychology*, (Cambridge: Cambridge University Press, 1932), p. 188.

Memory and Architecture'.⁹⁶ Arthur I. Rubin and Jacqueline Elder deem that the user should be considered as a design participant, an active participant.⁹⁷ An idea developed by Rubin and Elder in '*Building for People: Behavioral Research Approaches and Directions*', where the focus is on the analysis of body perception and movement in design.⁹⁸ This is an important approach that helped establish a research approach and framework for Chapter 7 where detail of body perception in different environments is described and discussed.

In the above books the various authors also discussed the senses in building, and provided a foundation for the understanding and analysis of how people experience building. Rubin and Elder discuss perceptions in building, from well-known senses such as vision and the auditory environment to less explored senses, the thermal environment, the olfactory environment, the cutaneous environment – skin senses.⁹⁹ And Shen has illustrated and discussed vision, audition, olfactory sensation, tactile sensations in response of environment, time and space.¹⁰⁰ Bloomer illustrates several kinds of classification of senses, such as Aristotle's classification around five basic senses: sight, smell, sound, taste, touch, and J.J. Gibson's five perception system within our body: visual system, auditory system, taste-smell system, basic-orienting system, haptic system.¹⁰¹ Each sense has its character to recognise and classify the corresponding quality of the environment.

As a complement to the discussion of the theory of perceptual sense, in the book '*The Eyes of the Skin: Architecture and The Senses*', author Juhani Pallasmaa illustrates and discusses character and significance of vision, touch, light, smell, skin in collaboration of perception. Pallasmaa argues 'Every touching experience of architecture is multi-sensory', the collaboration and interaction between body and senses complement and reinforce the sense of reality.¹⁰² This idea is similar to Bloomer, who indicates that every sense has the function of separation or fusion, such as consciously touching

⁹⁶ Keling Shen, *Architectural Phenomenology*, (Beijing: China Architecture & Building press, 2007), p. 67.
沈克宁, *建筑现象学*, (北京: 中国建筑工业出版社, 2007), p. 67.

Kent C. Bloomer and others, *Body, Memory and Architecture*, (New Haven; London: Yale University Press, 1977), p. 33.

⁹⁷ Arthur I. Rubin and Elder, Jacqueline, *Building for People: Behavioural Research: Approaches and Directions*, (Washington, D.C.: U.S. Dept. of Commerce, National Bureau of Standards, 1980), p. 28.

⁹⁸ *Ibid.*, p. 99.

⁹⁹ Rubin and Elder, *Building for People: Behavioural Research: Approaches and Directions*, p. 211.

¹⁰⁰ Shen, *Architectural Phenomenology*, p. 67. 沈, *建筑现象学*, p. 67.

¹⁰¹ Bloomer and others, *Body, Memory and Architecture*, p. 33.

¹⁰² Juhani Pallasmaa, *The Eyes of the Skin: Architecture and the Senses*, (Chichester: Wiley-Academy, 2005), pp. 41-44.

increases the definition of the boundary, yet haptic experience also offers fundamental meanings to visual experience, while visual experiences communicates those meanings back to the body.¹⁰³ Thus body senses are simultaneous, interlaced, provide mutual evidence, and complement each other.

Pallasmaa criticises how modern design generally satisfies the intellect and the eye, but neglects the body and the other senses, people's memories, imagination and dreams.¹⁰⁴ Pallasmaa argues that vision should not always dominate people, there are other senses continue to have collective importance in behavior and communication, use of space, and our relation to space. He uses Walter J Ong's words in the book 'Orality & literacy' that 'the shift from oral to written speech was essentially a shift from sound to visual space...situational thinking has been replaced by abstract thinking'.¹⁰⁵

Thus the way people read a building, and their relation with it, has changed. Abstraction brings omission of detail: domination of a single sense ignores other senses, one-side recognition detaches a thing from its reality and entirety. Pallasmaa indicates that 'Vision separates us from the world, whereas the other senses unite us with it'.¹⁰⁶ Similarly, in the book 'The Craftsman', Richard Sennett offers the consideration that the 'Craftsman's way of working can give people an anchor in material reality'.¹⁰⁷ Craftsmen work with things, and through the work they have a close relation with things, so does their senses. This makes people able to access a massive tacit experience.

In a related fashion, Gaston Bachelard argued that both room and house are psychological diagrams that guide analysis of intimacy: thus people can read a house and a room.¹⁰⁸ As Bachelard says 'Over and beyond our memories, the house we were born in is physically inscribed in us' which is a group of organic habits.¹⁰⁹ In this sense, the concrete visual, tactile, auditory, olfactory, temperature and movement experiences in memory weave a group of organic habits between the walls.

¹⁰³ Bloomer and others, *Body, Memory and Architecture*, pp. 43-44.

¹⁰⁴ Pallasmaa, *The Eyes of the Skin: Architecture and the Senses*, p. 19.

¹⁰⁵ *Ibid.*, p. 24.

¹⁰⁶ Pallasmaa, *The Eyes of the Skin: Architecture and the Senses*, p. 25.

¹⁰⁷ Richard Sennett, *The Craftsman*, (London: Penguin, 2008), p. 11.

¹⁰⁸ Bachelard, *The Poetics of Space*, p. 38.

¹⁰⁹ Gaston Bachelard, *The Poetics of Space*, (Boston: Beacon Press, 1994), p.15.

The ways of experiencing architecture

In '*Genius loci: Towards a Phenomenology of Architecture*' Norberg-Schulz argues the way people can investigate a thing somehow determines the character people can access.¹¹⁰ So the way of reading a building could be varied according to different attributes. When people read a building environment, there are many influencing factors, such as, the way they read the building in terms of their inner coordinates and external environment. The following parts will discuss activity and inner coordinates.

In '*Analysing Architecture*', Unwin deems that people and their activities are an indispensable part of architecture as contributors and participants.¹¹¹ Previous books about the Dong did not connect people and activity together to discuss this. The above authors' insights enlighten this thesis to present a more complete and lifesome process. Activity plays a vital part in experience of building. The organisation of activity also decides what kind of experience people can receive, and affects their recognition of a place. The body, movement and time are prearranged, as in construction, custom and ritual. Consequently, the main text of this thesis discusses Dong people's experience of architecture in the activities of construction and the use of building.

Returning to Bloomer, he indicates that 'The form of locomotion decides how people connect with environment, how much and how they can experience it'.¹¹² In discussion of the borrowed term 'rhythm' from other arts involving time and based on movement, in the book '*Experiencing Architecture*', author Steen Eiler Rasmussen indicates the 'rhythmic motions give a feeling of heightened energy'.¹¹³ The term 'rhythm' is more suitable to describe the movement in building. The movement and perception pattern locate people in time and space as body references to connect scenes. It is a pattern and rhythm of the organisation of body perception. In recognising their environment, people have their inner coordinates, which influence this process: Bartlett identifies three types of personal tendency which are attitude and emotion, moods and interests, sentiments and ideals. They could be narrow or wide in reaction to situations, as attitude and emotion have restricted temporal limits, moods and interests are between these two

¹¹⁰ Christian Norberg-Schulz, *Genius loci: Towards a Phenomenology of Architecture*, (New York: Rizzoli, 1980), p. 41.

¹¹¹ Simon Unwin, *Analysing Architecture*, (London: Routledge, 1997), p. 16.

¹¹² Bloomer and others, *Body, Memory and Architecture*, p. 94.

¹¹³ Steen Eiler Rasmussen, *Experiencing Architecture*, (Cambridge, Mass. : M.I.T. Press, 1964), pp. 133-144.

groups, and sentiments and ideals have the widest possible chronological range.¹¹⁴ Bloomer, on the other hand, explains the issue of the direction of gravity, and how the human's basic and frontal orienting sense have developed as a psychophysical coordinates matrix to distinguish up/down, front/back, right/left. He indicates people's psychophysical coordinates as internal landmarks with a moral quality.¹¹⁵ In the book '*Architecture and Movement: The Dynamic Experience of Buildings and Landscapes*', Peter Blundell Jones says the body engages with world and bodily movement as the foundation of metaphors, and all this serves to confirm the primacy of embodied experience, of the body in space.¹¹⁶ Thus these attributes of the body influence the recognition and organisation of psychological material. These issues inform the discussion in Chapter 7 about the body and orientation.

Recognising and remembering system

As already discussed at length, societies like the Dong rely mainly on oral knowledge, activity and material reference. Developing the discussion of perception with an additional focus on how people deal with their experience, Bartlett has discussed people's perceiving, recognising, remembering, recall and reproduction. People do not accept the perception experience without thinking or choosing. Everyone has his or her system to deal with perception experience. As Bartlett says people's experience system has the function of classification to arrange massive data in certain broadly distinguishable groups, through structural simplicity or structural regularity to match a perceptual pattern which as a preformed setting scheme or pattern offers the immediate perceptual data meaning and assimilates them.¹¹⁷

However, recognition has its limitations. In the experience of architecture, Rasmussen says the elements of architecture bring effects to people accompanied with different experiences, and these effects are connected with the surface character of materials.¹¹⁸

¹¹⁴ Bartlett, *Remembering: A Study in Experimental and Social Psychology*, p. 232.

¹¹⁵ Bloomer and others, *Body, Memory and Architecture*, pp. 40-42.

¹¹⁶ Peter Blundell Jones, 'The Primacy of Bodily Experience', in *Architecture and Movement: The Dynamic Experience of Buildings and Landscapes*, ed. by Peter Blundell Jones and Mark Meagher, (London and New York: Routledge, 2015), p. 99.

¹¹⁷ Bartlett, *Remembering: A Study in Experimental and Social Psychology*, pp. 39-45. A similar idea is shared by E. H. Gombrich in his book '*Art and illusion: A Study in the Psychological of Pictorial Representation*'. He thinks people have a schema to recognise things across the variation of difference, which allows for changed conditions and adjusts and preserves the framework of a stable world. See E.H. Gombrich, *Art and Illusion: A Study in The Psychology of Pictorial Representation*, (Princeton, N.J. ; Oxford : Princeton University Press, 2000), p. 52.

¹¹⁸ Rasmussen, *Experiencing Architecture*, p. 29.

Moreover, Bartlett argues that sometimes people refer to their original faulty observation, even if there are some changes in the object itself.¹¹⁹ He indicates how 'real' meaning may be substituted by 'conventional' meaning.¹²⁰ In this sense, memory and cognition have their 'inertia' or persistence which refer to their previous experience and cognitive system. The subjective 'reality' is guaranteed from them, as with the Dong knowledge and carpentry which will be further discussed in Chapter 2 and Chapter 3.

Bloomer develops considerations of memory more directly, indicating that bodily memories reflect events in a lifetime that happened outside the psychic body boundary.¹²¹ Similarly, Pallasmaa states 'I cannot remember the appearance of the door to my grandfather's farmhouse in my early childhood, but I do remember the resistance of its weight and the patina of its wood surface scarred by decades of use, and I recall especially vividly the scent of home that hit my face as an invisible wall behind the door'.¹²² People transfer the places that they have visited and recognised into the incarnate memory of their body.¹²³ This involves the material references in life and bodily references stored in body memory. It is the same with craft: Pallasmaa deems that the body knows and remembers, as the essential skills in traditional cultures are stored in the muscular and tactile senses, as well as in the haptic memory which is based on body.¹²⁴ This will be discussed in greater detail in Chapter 3, the education of Dong carpentry. Similarly, the role of preformed sensory patterns and the qualities of a specific detail within an arrangement are important related points concerning the construction of memory as this develops in this thesis.¹²⁵

1.7.2 The role and significance of architecture in life

In the review of building materials and my field surveys, many questions about architecture emerged. Different people read architecture from various viewpoints. As buildings have characters from different aspects, this makes the discussion quite complex. So there was a need to figure out what architecture is for in life? In order to support the development of this analysis, I consulted the following theories to make a

¹¹⁹ Bartlett, *Remembering: A Study in Experimental and Social Psychology*, p. 28.

¹²⁰ *Ibid.*, p. 28.

¹²¹ Bloomer and others, *Body, Memory and Architecture*, p. 45.

¹²² Pallasmaa, *The Eyes of the Skin: Architecture and the Senses*, p. 54.

¹²³ *Ibid.*, p. 72.

¹²⁴ Pallasmaa, *The Eyes of the Skin: Architecture and the Senses*, p. 54.

¹²⁵ Bartlett, *Remembering: A Study in Experimental and Social Psychology*, p.195.

theoretical foundation for relevant aspects of the discussion.

Unwin says that when people organise the world around them into places for various purposes, they begin to make architecture.¹²⁶ This is the simple and basic state of architecture. Before construction, people need to ask what they are building for, the significance of construction. While there are many purposes, in the chapter '*Building, Dwelling, Thinking*' in the book '*Poetry, Language, Thought*', Heidegger says 'The nature of building is letting dwell. Building accomplishes its nature in the raising of locations by the joining of their spaces'.¹²⁷ He indicates that a building is the keeping of dwelling, and the basic character of dwelling is to spare, to preserve, and take care and look after the presence of people within in it.¹²⁸ This notion points out the essential task of building.

Heidegger indicates that dwelling is the manner people live in the world, and he deems that dwelling is accomplished through the activities of cultivation and construction.¹²⁹ In the old rural society, building and cultivating are one. Dong society is one instance of the many such examples around the world. In this sense, the Dong construction is for dwelling. It is a process of creating spaces between the structure and enclosures, and it is an outcome for dwelling, while cultivation is a delicate process to care and develop dwelling, which is accomplished by custom, ritual, and use of building. This is similar to Bourdieu stating that actions make things exist and build specific relations.¹³⁰ Dong society exists in these actions, so does the dwelling.

Shen shares the same idea with Heidegger, he adds only that when people construct with intention, they gain the possibility to dwell and the space could be a place.¹³¹ Christian Norberg-Schulz says that through a systemic construction people gather contradiction and complexity in life, and concretise their world in building. They reveal something which is full of merit, yet poetical, thus man dwells on the earth. He advocates that the vocation of building is to make human existence meaningful, to offer an existential foothold and meaning.¹³² Especially now in China, since the economic

¹²⁶ Unwin, *Analysing Architecture*, (London: Routledge, 1997), p. 14.

¹²⁷ Martin Heidegger, *Poetry, Language, Thought*, trans [from the German] and intro by Albert Hofstadter, (New York ; London : Harper & Row, 1975), p. 560.

¹²⁸ Ibid., p. 555.

¹²⁹ Ibid., pp. 555-557.

¹³⁰ Bourdieu, *Outline of a Theory of Practice*, p. 123.

¹³¹ Shen, *Architectural Phenomenology*, p. 56. 沈, *建筑现象学*, p. 56.

¹³² Norberg-Schulz, *Genius loci : Towards a Phenomenology of Architecture*, p. 23.

boom, the relation between people and land has become detached. The former community is torn apart, people lack a sense of belonging. Thus, this research also focuses on the construction and cultivation process to explore the merits that are contained within it.

Social construction and inheriting

As David G. Saile deems 'Dwelling appears as both a place and a process through which a person understands and accepts a position in the community and the broader world'. In the book '*Building as a Social Process*', authors Peter Hübner and Peter Blundell Jones describe the construction process of a student apartment. In the discussion, they summarise that the project not only engenders a building, but a way of life. As the title states, building is also a social process.¹³³ This issue reinforces the idea of this thesis.

Dong building construction and its customs require collective cooperation and participation. In the book '*House Form and Culture*', Amos Rapoport indicates how the custom of cooperative building helps people finish complex construction, so it also has social implications.¹³⁴ As he says, a house could be a mechanism for shaping character.¹³⁵ Indeed, the Dong dwelling and the drum tower are a long term 'experiment', their character more or less forms in this process. Rapoport deems the vernacular design process to be one of models and adjustments. It has an additive quality, unspecialized and open-ended nature, which contains more individual variability and differentiation. The model of vernacular building is a result of collaboration between many people including makers and users over generations.¹³⁶ Just as culture derives from the past, the whole architecture system and activity come from the past. They are rooted in the last generation and the previous accumulation, a continuous reproduction bred in a succession. This is the life cycle of people that includes the Dong.

¹³³ Peter Hubner, *Building as a Social Process*, ed. and trans. by Peter Blundell Jones, (London: Edition Axel Menges, 2007), p. 23.

¹³⁴ Amos Rapoport, *House Form and Culture*, (Englewood Cliffs, N.J.: Prentice-Hall, 1969), p. 107.

¹³⁵ *Ibid.*, p. 131.

¹³⁶ Rapoport, *House Form and Culture*, pp. 4-6.

Material culture

Turning the discussion more explicitly towards material culture, Unwin, Johnson and Rapoport provide insights as following. Matthew Johnson says the house could be seen as part of a material and symbolic framework for the everyday actions in the creation of history, while the changing social and cultural relations are expressed and structured by the layout of house and farmstead.¹³⁷ Architecture is a material culture, or a representation of people's life. For Dong it is also a vital material reference for their collective culture and memory. Furthermore, Rapoport and Johnson share the same idea that the folk tradition and house relate the culture of the majority in life, while the grand design tradition represents the culture of the elite.¹³⁸ This notion enlightened the structure of this thesis and expanded the writing of it. At the beginning, the discussion of the construction and use of building was only focused on the drum tower. Then the construction and use of the house were included, for the house is the building for an individual family, and represents the constitution of that family. The drum tower is the building for the whole community, and an important part of the construction of the community. Here architecture is a dwelling space and a social space. In this sense, a house unites time, space and people's existence in both physical and psychic senses. It is a way to think and explore the signification and possibility of peoples' existence and building. Also it could be imported into design. As in many other phenomenology and humanities books discussed above, they use people's perception, experience and feeling as complements to discuss and think architecture. And these ideas will also be employed to discuss the reading of building in Chapter 7.

From the above discussion, the significance and aims of architecture in life are clearly complex and multi-faceted; it shelters people from natural forces, also lets people dwell, while it is part of social construction and inheriting, it is a material culture and has its atmosphere, and there are still many other needs and applications that have not been mentioned. In order to make the discussion more clear, thus there is a need for discussion of what is architecture in life.

¹³⁷ Johnson, *Housing Culture: Traditional Architecture in an English Landscape*, p. X. Similarly, Unwin says at the fundamental level, architecture deals with life and identifies place: see Unwin, *Analysing Architecture*, p. 16.

¹³⁸ Johnson, *Housing Culture: Traditional Architecture in an English Landscape*, p. X. Rapoport, *House Form and Culture*, p. 2.

1.7.3 Architecture in life

Complexity and contradiction

In the book *'The Language of Architecture: A Contribution to Architectural Theory'*, author Niels Luning Prak says architecture is like an agency that represents the designer's will and habit of living, and lets the user perceive it. He thinks architectural elements and composition are the function and emotional expression in building.¹³⁹ This is like the ground plan of the drum tower, numbers of columns represent four seasons, twelve months to wish for a smooth and successful year. As Prak says of the middle ages, the symbolic world of architecture stood between man and the outside world.¹⁴⁰ In the symbolic meaning or cultural meaning, building has been employed as a medium or agency.

In the book *'Complexity and Contradiction in Architecture'*, Robert Venturi says architecture has its complexity and contradiction. As an attitude to a complex architecture, he deems, first, the medium of architecture must be re-examined in order to express the increased scope of architecture and the complexity of its goal. Second, the growing complexities in scope or in purpose must be acknowledged.¹⁴¹ This opinion strengthens the questions of why people build and how they build. Because the aims of carpenter and resident are different, this part helped me to think about the specific questions they are facing in the construction. It directly supported the discussion of the construction of the drum tower, which carried so many implicit meanings and functions, while the tectonic construction proceeded. In the creation and activity of people, the original meaning and logic still exist and are superimposed. In a Dong village, building and natural environment coexist, they are a united complex and maintain each other's characters and systems. These resistances and contradictions are virtues of real things when they are gathered, the origin of vigour. And there could be a certain level of tolerance and the compatibility. Even if there is a contradiction, it could be fitted into an acceptable relation. Venturi recommends an architecture of complexity and contradiction, which tends to include "both-and" rather than exclude "either-or".¹⁴²

¹³⁹ Niels Luning Prak, *The Language of Architecture: a Contribution to Architectural Theory*, (The Hague; Paris: Mouton, 1968), p. 23.

¹⁴⁰ *Ibid.*, p. 49.

¹⁴¹ Robert Venturi, *Complexity and Contradiction in Architecture*, 2nd edn, (London: Architectural Press, 1977), p. 19.

¹⁴² Venturi, *Complexity and Contradiction in Architecture*, p. 20.

Design deals with the contradictions of the people concerned. Venturi advocates welcoming these problems and exploiting the uncertainties in architecture, by embracing contradiction and complexity, in order to make building authentic and full of vitality. He deems 'An architecture of complexity and contradiction has a special obligation toward the whole: its truth must be in its totality or its implications of totality. It must embody the difficult unity of inclusion rather than the easy unity of exclusion'.¹⁴³

1.7.4 Construction of building

Attitude towards complexity and contradiction

Venturi says the recognition of complexity in architecture does not deny "the desire for simplicity" described by Louis Kahn, and indicates that this simplification should not be mistaken as an object. Neither do complexity nor contradiction mean only superficial complexity: aesthetic simplicity which satisfies the mind validly and profoundly derives from inner complexity.¹⁴⁴ Simplicity does not directly cause the poor conditions of building, yet, poverty in quality does. In the book '*The Architecture without Architects: A Short Introduction to Non-pedigreed Architecture*' Bernard Rudofsky illustrates many vernacular buildings, people use one or two local materials with simple, reliable and efficient construction method to build many successful buildings.¹⁴⁵ In the book '*Thinking Architecture*' Peter Zumthor uses a series of papers to discuss the material and the building itself which will lead this section of discussion.

For Zumthor material has a meaning in itself, while it also has the meaning that people give to it.¹⁴⁶ The same issue also occurs in Dong carpentry, in which the material has its own quality, for the carpenter has his understanding of it, while the residents find their understanding in culture and use. As Venturi explains, the classification of complexity and contradiction concerns the medium, caused by the juxtaposition of physical fact of a thing and its psychic effect in perception.¹⁴⁷ Zumthor raises the questions of how to think and deal with this contradiction. He advocates that material should be in context with architecture in one building in a specific way, and to perceive the material in one

¹⁴³ Venturi, *Complexity and Contradiction in Architecture*, p. 16.

¹⁴⁴ Ibid., pp. 17-18.

¹⁴⁵ Bernard Rudofsky, *Architecture without Architects: A Short Introduction to Non-pedigreed Architecture*, (New York: Doubleday, 1964).

¹⁴⁶ Peter Zumthor, *Thinking Architecture*, (Basel; Boston: Birkhäuser, 1999), p. 10.

¹⁴⁷ Venturi, *Complexity and Contradiction in Architecture*, p. 20.

building.¹⁴⁸ For instance, in a Dong house, timber is the weight-bearing material, while it presents a touchable, intimate feeling of surface. So it is properly better to separate these related things temporally, and respect each of their own system and principle to trace back to the true quality of things.

Meanwhile as Unwin says, the basic elements are subjective, controlled by the designing mind. Yet the basic elements and the places are modified by light, colour, sounds, temperature, air movements, smells, the qualities and textures of the materials, scale, also by use, the effects and experience of time, etc. These modifying factors may be less compliant and the control of them is a continuing and evolving process.¹⁴⁹ This the resistance and quality of materials is a struggle with people's controlling ability and the scope of their understanding, and which would influence the atmosphere.

From the tectonic view, in the book '*Experiencing architecture*' Rasmussen explains how people experience buildings from their scale, proportion, texture, light, colour, and sound. An attitude repeated and developed by architects such as Peter Zumthor, theorists such as Unwin, and writers such as Gaston Bachelard.¹⁵⁰ All of these insights enrich the idea and content of the discussion of atmosphere in Chapter 7.

Person-environment relationships

Kimberly Dovey indicates there is a deep crisis in modern person-environment relationships, and a symptom is the argument about fakery and authenticity. He says authenticity is a property of process and relationship, not of environmental form.¹⁵¹ People cannot well organise the environment. They are away from things and work. The context between residents and building is weak, affecting the context between architect and building, leading to lack of understanding and caring for things. As Dovey argues, authentic places and things are generated from authentic dwelling practices in everyday life, flowing from bottom to top.¹⁵² Similarly David Seamon says 'In modern world,...

¹⁴⁸ Zumthor, *Thinking Architecture*, p. 10.

¹⁴⁹ Unwin, *Analysing Architecture*, p. 25.

¹⁵⁰ Peter Zumthor, *Atmospheres: Architectural Environments. Surrounding Objects*, (Basel: Birkhauser, 2006), pp. 25-33.

Unwin, *Analysing Architecture*, p. 25.

Bachelard, *The Poetics of Space*, pp. 226-228.

¹⁵¹ Kimberly Dovey, 'The Quest for Authenticity and the Replication of Environmental Meaning', in *Dwelling, Place and Environment*, ed. by David Seamon and Robert Mugerauer, (New York: Columbia University Press), p. 33.

¹⁵² Dovey, 'The Quest for Authenticity and the Replication of Environmental Meaning', in *Dwelling, Place and Environment*, p. 47.

environments are frequently interchangeable, and people less often take part in their place or care for it. Environmental responsibilities are often left to some outside caretaker such as a custodian, administrator or public committee. People experience a tremendous freedom from time and physical environment, but they often misuse this advantage, they often get caught up in titillation, boredom or restlessness'.¹⁵³ All this can be read in relation to the previous discussion of the work in old village communities. The organisation of work has changed, and the separation is increasing. Thus the construction system is weak in both tectonic and social construction.

Bachelard and Bloomer criticise the mechanical house that has no natural surroundings, when the relationship between house and space is artificial, while intimate living flees.¹⁵⁴ They deem successful architectures are those that satisfy the senses of the body and nurture memory.¹⁵⁵ By contrast, today's unsuccessful design over-focuses on a single aspect, like function, one sense, intellect, efficiency, etc. As the notion was raised by Rapoport and introduced earlier, we cannot explain the form of a building from just one aspect.¹⁵⁶ In this sense, neither can the design be successfully done from just one aspect. This thesis intends not only to present Dong traditional life but also is a reference to think how to construct afterwards. As Sennett mentions in *The Craftsman*, it is about how to use skill to build a particular life.¹⁵⁷

The hard core of architecture

Due to the complexity of architecture, its 'real' core becomes less obvious. However Zumthor summarises many of the attitudes held by the various phenomenologically-minded writers introduced here, when he distinctly expounds that the real core of architectural work is construction, which is the art of making a meaningful whole out of many parts.¹⁵⁸ This notion addresses the potential confusion in the research into the complex Dong building process. It is helpful in analyzing the question and clarifying the research structure, especially the different cognition and activity of carpenter and resident.

¹⁵³ David Seamon, Reconciling Old and New Worlds: The Dwelling-journey Relationship as Portrayed in Vilhelm Moberg's "Emigrant" Novels, in *Dwelling, Place and Environment*, ed. by David Seamon and Robert Mugerauer, (New York: Columbia University Press), p. 243.

¹⁵⁴ Bachelard, *The Poetics of Space*, p. 27. see also Bloomer and others, *Body, Memory and Architecture*, p. 105.

¹⁵⁵ Ibid., p. 131.

¹⁵⁶ Rapoport, *House Form and Culture*, pp. 17-18.

¹⁵⁷ Sennett, *The Craftsman*, p. 8.

¹⁵⁸ Zumthor, *Thinking Architecture*, p. 11.

Indeed, Zumthor advocates we progress beyond the symbol, the return to the thing itself: every building has its specific use in a specific place for a specific society and speaks in its own language.¹⁵⁹ Let a thing become itself, and life emerges, representing the order, logic and factual relationships.¹⁶⁰ This describes the Dong very well: their constructions remain deeply rooted in an environment and social background that stretches back for hundreds of years. This construction is valid and works effectively in its way as an inherent part of Dong society: this is the core work of this thesis, to describe, understand, re-inform and summarise their process.

1.8 Conclusion

I have drawn upon the literatures from the subjects of oral knowledge, history, social structure, custom, architecture, sociological theory, and architectural theory. All the sources discussed above provide material and theoretical support to each chapter, and the principal links have been indicated within the above text. However, many of these categories of literature are clearly interconnected, and their broader involvement with the overarching issues and framework of this thesis will be established and developed throughout the text.

The literature has identified certain gaps in previous knowledge and study, which can be identified as follows. 1. Academic research material and detail on Dong carpentry, carpenter education, construction process, use of building, the reading of building is either sparse or simply not recorded. 2. There are still few discussions that address the social system, oral culture and customs, and some issues of carpentry, construction, the use and reading of Dong building, either separately or as a complex whole. 3. The content and significance of the Dong building system (such as carpentry and construction, as well as the uses and readings of building), and practices of dwelling have not been thoroughly described, discussed, summarised or understood. 4. There are few systematic analyses of Dong social systems and building system: existing knowledge remains fragmented, with examples of good scholarship in very focused areas, but nothing that synthesized these works. 5. There is no concept of oral architecture that supports discussion of the role of architecture in social construction. In order to address these gaps in existing knowledge, my research has developed both in

¹⁵⁹ Zumthor, *Thinking Architecture*, p. 26.

¹⁶⁰ *Ibid.*, p. 30.

order to add new empirical knowledge and understanding of Dong building and society, and to synthesise this growing knowledge in a coherent theoretical explanation of Dong oral architecture.

To address these five points in more detail: 1. through my field surveys, I collected more material about songs, stories, religion, custom, village life, social structure, education of carpenters, carpenter tools, buildings, construction, the use and reading of building, and so on. 2. As indicated throughout this literature review, I checked the reliability of existing books, have been able to confirm which are correct and which are inaccurate (in whole or in part) compared to my fieldwork. 3. During my fieldwork, I gained personal experience, becoming educated and working as a Dong carpenter, using authentic material and techniques, and consequently have a better understanding of the practice that is at the heart of my research. 4. From my field survey, through personal practice, participation, and communication, there is far more material available than could be obtained through reading books. Limited by page format and methods of expression of the book, the content and organisation of existing books on Dong carpentry had to be chosen and edited, thus forcing many omissions. The format of my own thesis faces a similar danger, but I have worked to develop representational and communication techniques that are more responsive to the subject of this research. I also encountered more questions from the fieldwork to enlighten my research.

Finally: 5. The above literature review, together with my field surveys, has provided the necessary materials to support and guide the discussion and analysis of oral architecture, such as the general background, social structure, oral knowledge and oral education (informing Chapter 1), carpentry education (informing Chapter 2), the construction of house and the drum tower (informing Chapter 4 and 5), the use of building (informing Chapter 6), peoples' reading, construction and cultivation of building (informing Chapter 7). All these will be applied in further discussion through the main text. In particular, some issues of the social systems introduced above will be further discussed and summarised in following chapters, where my particular supplement to previous research can be clarified. As the main text progresses, I will link each system together, just as the cooperation of social systems operate in social construction, and oral knowledge is applied in carpentry education, oral culture and custom in construction and building. According to the literature review and my field surveys, all the

social systems are united under the development line of social construction, to discuss and summarize the progress of oral architecture.

The next chapter will provide a general description of the social background and oral culture of the Dong

Chapter 2

Dong society and oral culture

2.1 Dong society

The Dong minority mainly live in southwest China: in Gui Zhou, Guang Xi, and Hu Nan provinces (Figure 1). Depending on the fifth census in 2000, the population of the Dong minority is 2.9603 million, and 1.62 million live in Guizhou province. Southeast Guizhou Miao-Dong Autonomous Prefecture has 1.4 million Dong people, about 50% of the population of the whole Dong.¹



Figure 1.

Dong living area in southwest China.

Extract from D. Norman Geary and others, The Kam People of China, (London: Routledge, 2003), p. xxii.

¹ Luo, *Folk Dwelling of Guizhou*, p. 33. 罗, *贵州民居*, p. 33.

2.1.1 Natural conditions

Geography: Guizhou is more than 1,000 m above sea level, adding to its rich mountainous topography. Indeed, as much as 92.5% of the province's total area is characterized by mountains with its world-famous karst rock formations of unique terrain. For Dong people living in this mountainous area, farmland and transport are limited (Figure 2, 3).²



Figure 2. Dong area geography, Zhaoxing. Photograph by Derong Kong



Figure 3. Dong, Tang'an village. Photograph by Derong Kong.

² Luo, *Folk Dwelling of Guizhou*, p. 21. 罗, *贵州民居*, p. 21.

They have a song to describe this complex terrain 'Seven hills one river one farmland, one road and dwelling'. The distinctive high landform prompted people to choose the ganlan type of building, a column-and-tie timber structure, to achieve the needs of the limited land, to maximize the use of terrain, extending the field for living or farming. And due to the obstructions of the geographical environment, the Dong find the land they live in as an isolated area of land, for communication with the outside area is limited. The ethnic cultural development is autonomous. The process is complete and mainly based on self-development. As topographical and dialect divisions, Dong is divided into southern Dong (Rongjiang, Congjiang, Liping, Sanjiang, Tongdao, etc) and northern Dong (Qingkong, Sanhui, Tianzhu, etc) (Figure 1). The northern Dong's terrain is much flatter and close to major towns and the main lines of traffic, so communications with the Han people have been closer and deeper, and the cultural identity of the Dong is weaker. The characteristic buildings, 'drum tower', 'wind and rain bridge', are not so easy to see at the north Dong area. The southern Dong live in the mountainous region, far away from major cities and towns, traffic is inconvenient and less communication with Han. Therefore, indigenous culture is more obvious. Every village in the Southern Dong area has a 'drum tower' and a 'wind and rain bridge'. Therefore, the research will mainly focus on the southern Dong area (Figure 4).



Figure 4. Southern Dong area, Xiaohuang village. Photograph by Derong Kong.

Climate: Because of its high altitude and relatively low latitude which means it is influenced by southeasterly monsoons, the effect increased by the complex terrain, the climate in Guizhou varies greatly in different regions. Generally, however, the weather is mild and humid. Abundant moisture results in chilly temperatures and severe heat is rather rare, with an average air temperature of 5.2°C in January and 24.3°C in July.³ The rainy and humid weather as a factor of architectural formation with other factors influenced people to choose the ganlan-type buildings which were based on earlier nest buildings to elevate the house above the ground. Supported by poles, the living quarters of a ganlan is usually on the first floor high above the ground, while the ground floor is retained for raising domestic animals and storage: in this way a building can ward off moisture, as well as the attack of insects, snakes and other animals (Figure 5).



Figure 5. Ganlan building, Dong house. Photograph by Derong Kong.

Vegetation: The subtropical species metasequoia and pine are widely distributed, with large reserves. The china fir (*Cunninghamia lanceolata*) only needs 8 to 10 years growth before it can be used. The folk song goes: 'a hundred years tree should be china fir, straight and tall'. Because the china fir is widely distributed, it grows fast and is easy to collect, so it provides the material basis for wooden structure of ganlan buildings and is widely used.

³ Luo, *Folk Dwelling of Guizhou*, p. 26. 罗, *贵州民居*, p. 26.

2.1.2 Economy

Production: The main economic production is the farming economy. Rice paddy is the major economic crop. For many years Dong society has been a self-sufficient natural economy.⁴ The farming economy is the foundation of the origination and development of Dong traditional culture, and runs through from its beginning to the present. The characteristics of Dong traditional culture have been shaped by this obvious influence. The farming economy formed its distinctive rice culture which is one important culture of the Dong.

Residence, population: Long ago, caused by the central government's squeeze, the Dong's place of residence was mostly located in the mountainous area which is not difficult to defend. The biggest residential unit of the Dong is the village. There is no urban level residential unit. For example, Zhaoxing village in Guizhou Province is the biggest village among all Dong villages. Zhaoxing village brings together five natural stockaded villages, with 700 households, 3000 people living together (Figure 6).⁵



Figure 6. Zhaoxing village. Photograph by Derong Kong.

In a farming economy the population could be an indicator of the social and economic development. In other parts of China at the same time, such as Guizhou province in the

⁴ Luo, *Folk Dwelling of Guizhou*, p. 37. 罗, *贵州民居*, p. 37.

⁵ Shengjiao Fan, 'Introduction of The Characteristics of The Drum Tower', *Journal of Southeast Guizhou National Teacher's Collage*, 20(2002), 31. 范生姣, '侗族鼓楼特征刍议', *黔东南民族师范高等专科学校学报*, 20(2002), 31.

Ming dynasty (13th—17th century), the population of a big county town was about 50,000, including people and garrison, according to local records. The population of a Dong village is obviously less than the population in a town. In such a limited economy with a low level of residential units, the small number is insufficient to support the functional complexity of public buildings. So a multi-functional, comprehensive type of public building is more in line with the social and economic conditions, and this role is taken by the drum tower. The limitations of resources and labour also require Dong people to work collaboratively, and the form of architecture is influenced.

2.1.3 Ethnic culture

- **Nature worship**

A Dong village's scenery is very beautiful. They live on hills or in the valley. A river flows through the front of the village with a gurgling sound, surrounded by forest with sound of birds and insects (Figure 7). Because the Dong have lived for generations in this beautiful but almost closed ecological space, the culture and art of the outside world are difficult to access. After working, Dong people imitate the sounds of birds and cicadas in natural forests, and carry out their own unique cultural entertainment, such as the famous Dong big song. In this carefree, simple, primitive life, coupled with a long period of living with nature, Dong people use an intuitive, emotional experience of understanding to explore and describe the world. They use this natural understanding combined with the natural landscape and cultural phenomena to comprehend their world, thinking that nature is the most beautiful thing, in pursuit of harmonious integration of mind and nature. Nature worship was generated under this background.⁶

⁶ The word 'Nature', 自然, is borrowed from Han. Dong people have the concept of nature, but this idea is consisted of exactly natural factors, such as the sun, moon, rain, fire, mountain, tree. When this word works as an adjective, it describes the thing progress in the way it should be, like people follow the four seasons to do farm work.



Figure 7.
Zengchong village.
Photograph by Derong Kong.

In the content of worship Dong people think that everything has a spirit, and the things between sky and earth all have spirits attached, such as sun, moon, thunder, rainbow, field, mountain, river, fire, and tree. And these spirits are related to people's life. Things below are the main factors of nature worship.

Sky and earth: in Dong religious conception, as Min Zhang says sky and earth work together as the highest level of spirit, containing and taking charge of the life of the world. In the Dong language, Sky and Earth are called Menl Dih, MeN Dui. The sky and earth are high, vast and boundless, can perceive the minutest detail, maintain justice and principles, distinguish between truth and falsehood, judge good and evil. If someone has received an unfair or unjust treatment, he will paste paper money on his clothes, and put on a coir raincoat bottom to top. He then places a tripod supporting frame on his head containing burning incense. He chooses a proper place, usually close to the sky, then burns paper money and incense, kowtows and swears to sky and earth to explain his innocence, tells the truth of the injustice, and begs for fair judgment to

himself and punishment for the guilty person.⁷ This behaviour is called 'shouting at the sky'. Many Dong people view the sky and earth as a threat, but they also respect them as kinds of God.

Thunder: the thunder god is called Thunder woman, Sa Ba, Sax bias. She is hot-tempered, but can uphold justice, enforce justice on behalf of a heavenly principle, and punish wrongs.⁸ She is a kind goddess who preserves the principle of good and bad. When thunder shows up, people believe she is coming to punish something or someone, so all activities would cease or be re-performed on another day. If a house is struck by lightning, the householder would take this as a warning from the thunder goddess that he needs to correct the wrong thing he has done. When a tree was struck, the carpenter could not use this tree, because this tree has a 'fault'. Dong people connect these natural elements with the bad and good of humanity, gaining a respectful and fearful state of mind.

Field: The field worship concerns both the land they are living on and the farming field. The field god not only protects the safety of the land, but also influences the farm production. The shrine or temple of the field god would be placed at the head, centre or end of the village, by the entry of a road, or in front of the bridge. Before construction, or the opening up of wasteland, people must worship the field god. As Anhui Fu and Dazhong Yu says, according to the traditional Chinese calendar, on the day of the field God, on Wu day (six days in Chinese Old almanac) they are not allowed to break the earth.⁹ From Min Zhang's record, at spring before sowing, the worker leader will perform a rite at the primary farmland to pray that the plants do not suffer from a natural calamity. On 6th June, there will be a ritual at the earliest piece of farmland that was developed by the ancestors, in order to worship the field. At the beginning of each season, villagers will burn money paper and incense to pray for the growth of crops.¹⁰

Every village has at least one earth altar to worship the field god. According to Min Zhang's research, in the beginning, the field god was only related to the worship of the field, then it started to be combined with the production of the farm and became the god of land and harvest. Gradually it also protected the village and ensured the safety of

⁷ Zhang, *Exploration of Dong Origin*, p. 106. 张, *侗族探源*, p. 106.

⁸ *Ibid.*, p. 107.

⁹ Fu and Yu, *Custom of Nine Stockaded Village*, p. 28. 傅和余, *九寨民俗*, p. 28.

¹⁰ Zhang, *Exploration of Dong Origin*, p. 114. 张, *侗族探源*, p. 114.

villagers. In the development of religion, people combined it with another goddess, Sa sui (an ancient female hero, the Great Big Grandmother), so the field god became part of Sa Sui, and the earth altar became the Sa Sui altar. So there are two names for the earth altar: one is the earth and harvest altar, another is the Grandmother altar. The name of the earth god also became double; one is Altar Grandmother with the name of the place in front, another is Great Grandmother, a title of a person (Figure 8).¹¹



Figure 8. Sai Sui altar at Tang'an village. Photograph by Derong Kong.

Fire: Dong people think fire is vicious, and always brings disaster to people. So fire is treated as a ferocious god named Xiang Bei (xang pbul) which means vicious fire, fire disaster. According to the research of Min Zhang, if a fire disaster has happened, at the end of the year they choose a special day, the village buys a little pig, and every family takes a bit of ash from their fireplace or hearth putting into a tiny boat. In the peace of midnight, everyone brings other offerings, and they go to the riverside together, performing a ritual to dispel 'fire disaster', then put the tiny boat on the river letting it flow away with the water, then they eat together. After the meal, they clean bowls and chopsticks and throw away all the left-over food, which represents that everything is clean, and uproots misfortune. During this ritual the village entrances are closed and guarded, no one is allowed to intrude, otherwise the ritual is invalid. If this rule is broken

¹¹ Zhang, *Exploration of Dong Origin*, p. 109. 张, *侗族探源*, p. 109.

the breaker has to afford all the cost and reprocess the ritual.¹² In the fireplace, there is another fire god living. This fire god is the opposite to the vicious fire god Xiang Bei, it is respected by the family, so only clean wood can be used to light the fire, children are forbidden to pee into the fireplace, and people cannot beat the trivet. According to the research of Anhui Fu and Dazhong Yu, at each Chinese new year, the family will set a big fire in the fireplace to show their good wish for flourishing fortune, and people also do this when they build a new house, as it is a symbol of flourishing family fortune: an unceasing fire means long lasting descendants. At Chinese New Year, before the family start eating, they put part of the meal in the fireplace to worship the fire god, and pray for protection from fire disaster.¹³



*Figure 9. Wells in Dong villages.
Photograph by Derong Kong.*

Water: It is generally believed that water has a water god. Some villages have built a small shrine at the side of a well, placing a human shaped root in the shrine to represent the god. From Min Zhang's record, the first time people collect water from a river or well in the first month of the lunar year, they have to bring incense and money paper to burn

¹² Zhang, *Exploration of Dong Origin*, p. 115. 张, *侗族探源*, p. 115.

¹³ Fu and Yu, *Custom of Nine Stockaded Village*, p. 29. 傅和余, *九寨民俗*, p. 29.

at the side of the well or river before they can collect the water and take it back (Figure 9). On the first day of Chinese New Year, women go to the well to worship the well god to express appreciation for providing clean water, then bring the water back home. In some villages during the spring festival, on an auspicious day, one woman from each family brings an offering to the well, worships the well god and they eat together, then dance and sing around the well.¹⁴ From the record of An and Yu, at Nine village area (the name of a big Dong living area which includes several towns and many villages), people should collect the rain after first spring thunder, bring it home and use it to cook tea to worship the ancestors in the central room, in order to pray for blessing from the ancestors and assure abundant rain.¹⁵ In Zhang's record, when a new born baby is one month old, the mother will bring the baby to the well, worship the well god and pray for a blessing from the god to protect the baby and allow it to grow in health. Furthermore, some people will let the child admit the well as his/her 'grandfather' to bless the child and let him/her grow easily. Every festival they bring offerings to the well.¹⁶

Large rock and mountain: A large rock is also regarded as having a spirit inside, and is honoured as a stone god. According to Zhang's research, villagers decide the nature of the stone god between good and evil according to the form and site of the rock, and whether it relates to the fortune of the village. If it has a positive effect on the village's fortune, people worship it and forbid anyone to damage or climb it, and if the rock god lives in the hole of a large rock, throwing rubbish into it is forbidden. Conversely if it is considered as an evil god, villagers destroy it.¹⁷ From my field survey, parents will let the child recognise a large stone as the child's 'grandfather' to bless the child to grow up healthy and strong, by worshipping the stone and pasting pieces of paper money on it. When a mason needs to take stone from among other rocks, he has to burn incense and paper money to 'redeem and buy' from the rock. Then he can start the project with the permission of the rock god and work safely.¹⁸

Mountains have different forms, so people give them names and meanings according to their forms. As with other natural elements, the mountain has a mountain god in charge of its domain. According to Zhang's research, people think a mountain range is where a Dragon is hidden protecting the village, which is known as 'Dragon god geographical

¹⁴ Zhang, *Exploration of Dong Origin*, p. 115. 张, *侗族探源*, p. 115.

¹⁵ Fu and Yu, *Custom of Nine Stockaded Village*, p. 29. 傅和余, *九寨民俗*, p. 28.

¹⁶ Zhang, *Exploration of Dong Origin*, p. 115. 张, *侗族探源*, p.115.

¹⁷ *Ibid.*, p. 116.

¹⁸ From my field survey, Xiaohuang village, March 2010.

position' (Liong xenc dih megx). The mountain god in Dong is called 'Ghost brother' or 'Ghost sister' (Juis Jaix Nungx), because in Dong language brother and sister are the same word, so no one can tell the gender of this ghost. This ghost is very impartial and faithful; nevertheless it would not tolerate any disrespect. Before a hunter, or a carpenter, enters the mountain for their work, they have to fete the god to get permission and ensure their safety.¹⁹

Trees: in the record of Zhang, a Dong folk saying is reported: 'ancient tree protects village, elder manages village'. Every village has a fengshui wood or tree, these are ancient trees or lush woods, and villagers believe these trees can bring good fortune to the village and protect it. Any behavior to damage the trees is seriously forbidden, and people need to maintain the cleanness and safety of trees. These trees are common places for people to worship and pray (Figure 10).²⁰



Figure 10. A larger banyan tree at Gaozeng village. Photograph by Derong Kong.

In the Dong area, no matter whether on the hillside, wayside, outskirts of village or side of a house, once people find rare trees such as metasequoia, or red bean fir, they will attach a grass-mark a bundle of leaves to it to forbid people to damage the tree. Dong people are full of reverence for an old tree, whether it is a china fir, ginkgo, camphor, or sweetgum. People believe these old trees have spirits, which are the authoritative elders inside old trees, and it is taboo to fell them. At New Year, a festival, or the first

¹⁹ Zhang, *Exploration of Dong Origin*, p.433. 张, *侗族探源*, p. 433.

²⁰ *Ibid.*, p. 116.

and fifteenth day of the first month, people will go to an old tree to burn incense and money paper, thereby seeking the blessing of the tree god.

As it takes a long time to cultivate firs, and as they are of direct benefit to people, Dong people have a special feeling for fir, likening it to a tree deity or divine tree. This worship of fir is part of their nature worship. When a child is born, the family used to plant a china fir, in the hope that their child would thrive like the china fir. As a local folk song relates: 'eighteen china fir, eighteen china fir, when children born plant it'. When the girl is eighteen years old and ready to marry, the wood would be used for the dowry accompanying the girl to her husband's family. There is also a custom of calling young men and women, 'eighteen china fir' (Figure 11).



*Figure 11. Dong village and china fir.
Photograph by Derong Kong.*

Nature worship formed the original basis for Dong culture. It shaped the spirit of the Dong and influences the artistic conception of building, with the idea of harmony with

nature, natural form. This is experienced through a state of intuition, comprehended as part of life and life's meaning. According to Jiajun Wang's journal, in an ancient legend the ladder to the sun and moon was made of china fir.²¹ It also influences their life customs. Since a Dong stockaded village is surrounded by many large old china firs, people often put some benches under a tree to sit after working, bringing together crowds of people to enjoy the cool air under the big fir, have a rest, talking, singing, dictating history. This way of life is a factor in the formation of the drum tower, which can be seen to carry on the symbolic meaning of the china fir.

● Other Gods in the living environment

The Dong have the residual character of a matriarchal society and there are many goddesses in their living environment. In Dong custom, these goddesses are named 'Grandmother'. According to Min Zhang's record and the interview with Yong Zhang, there is in the bed a Bed-head grandmother to manage birth and protect the growth of the child. There are also a Gate grandmother to guard the gate, keeping out ghosts and evil spirits, a Smallpox grandmother to protect children from smallpox, and negatively a Stealing grandmother who steals souls and threatens children's health. There are a Courtship grandmother who helps young people succeed in love, a Mountain pass grandmother who blesses people who go out for work, guarding the boundary of the village, a Village patrol grandmother who manages and keeps the village safe, a Bridge head grandmother who protects the bridge and lets people walk through, and who has the additional function to bring babies to people. The Well grandmother maintains the clear water, the Crops grandmother promotes the production of the field, and the Distiller's yeast grandmother helps women to make fine wine. The Village entrance Grandmother guards the entrance of the village.²² Until now, people did not find any male god who takes charge of one job alone. There are also many other gods, like River god, Rain god, Wind god, Fire god, Sun god, Moon god, China fir god, Road god, etc.

Nature is extremely important to Dong people, and not only the natural physical world, for it also engendered an attitude in the Dong about how the world should be. In daily life when people say it should be like this, they say it is 'naturally so', take it as a

²¹ Jiajun Wang, 'The Drum Tower: The Centre of Dong village', *Resource and inhabitant environment*, 3 (2006), 53. 王家骏, '鼓楼: 侗寨人居的凝聚中心', *资源与人居环境*, 3 (2006), 53.

²² Zhang, *Exploration of Dong Origin*, p. 6. 张, *侗族探源*, p.6.

From my field survey, interview with Yong Zhang, Kaili, February 2013.

reasonable and logical process and results. In Dong stories, nature is a rational thing, it performs in the way it should, as a tree grows up, as water flows downwards, and the cycle of life and death never ends. Meanwhile, it is tolerant to different things, lets them be natural. And their production and social activity are restrained by the limitations of the power of human labour. They have to follow the principle of the seasons, the time of day and night, the life cycle of people, plants and animals, and they cannot extend it or shrink it. As Fu and Yu say, in a long term relationship with nature, they know they cannot defy the principles of nature. When they use and reform nature, they respect nature more.²³ People respect and follow the god, because the god represents good will and the principle of the world. On the other hand they fear and flatter gods, because they are overwhelmed by the power of gods, so they have to please the gods to ensure their benefit. The Dong religious system did not emerge as a complete and strict system: these gods and goddess exist and protect them where they live, work, walk, in the local context. The existing of god is based on their life, and their daily and emotional experience within the environment where they need or want it. God is a part of the explanation of their living world, standing there, living and working with Dong people. They need these gods help them to 'maintain' their living environment, to offer them spiritual relief, for the settlement of heart, safety and peace.

● **Worship of ghosts and gods**

Among Dong people with their spiritual living environment, as well as natural gods, there are also ghosts (juis, 鬼) and gods (deity, sinp, 神仙) spread through their lives. According to the research of Fu and Yu, in comparison with natural gods, people fear the ghosts and spirits generate from dead people more. Because natural gods do not directly threaten people's lives, in the Nine villages area the worship of ghosts and gods occupies 80% of its worship system.²⁴ The people create many rituals, ceremonies, symbols and building patterns to cope with ghosts and gods, and to pursue the smooth going and satisfaction of life. Dong people believe that when a person is alive he has a soul (gauenl, 魂), and beyond his life, his soul is still existing, it just goes to another place.²⁵ It is an extension and continuance of life. If an old person has died in a normal way, he becomes the protection god of the family, but if someone has died in an abnormal way, he is thought of as a ghost who possibly brings disaster. Ghosts and

²³ Fu and Yu, *Custom of Nine Stockaded Village*, p. 56. 傅和余, *九寨民俗*, p. 56.

²⁴ *Ibid.*, p. 29.

²⁵ The meaning of god and deity are the same in Han, similar as the English ones. Soul is the spirit of alive people, ghost is the spirit of dead people.

gods are believed to be supernatural powers among Dong people, and can bless or disturb people's lives. When people meet something good, they think this could be the result of a blessing from a ghost or god, so they would invite a Dong wizard or ghost master to perform a ritual to show appreciation to that ghost or god. Conversely, when they meet something bad, they would think the ghost or god is making a disturbing influence, and for that also they invite the Dong wizard or ghost master to perform a ritual to control or dispel the ghost or god.

Ancestor worship

Ancestor worship is the core of ghost and god worship. The ancestral soul is the protection god of the family. It has a direct blood relationship with the descendent, is a memorable symbol, and brings spiritual sustenance as well as comfort and passion. While for the Dong nature-worship explains their environment, ancestor worship is related to the clan and family, it represents their origin. Dong people greatly care about their origin, such as where are they come from, the concern of identity. From my field survey, when a son grows up, and has built his own house, he will bring the fire from the old house to his new home, symbolizing that this fire has its origin. Many things they have done are to construct their identity, to state where they come from, who they are. Just as they celebrate a fete of farmland at the first farmland built by their ancestor, so the fire for the new house must be brought from the old house, and the first soil to build a Sa Sui alter must be brought from their ancestor's land.²⁶ The origin of blood also influences their marriage: some people are called the snake race according to their ancestry, and villagers usually do not enter marriage with them. Ancestor worship shows their instinctive cognition of origin and identity. So they know themselves and started to separate from nature. They have found answers to who they are, where they come from, their identity of origin, the definition of the Dong ethnic group.

According to Zhang's research, Dong ancestors in the Dong language consist of Gong (ongs) grandfather, Bu (bux) father, Kam (gaeml) Dong, in total this makes Gong Bu Kam (ongs bux gaeml), and the direct translation is Grandfather Father Dong, meaning the ancestor of the Dong.²⁷ According to Zhang's research, the Dong's remote ancestors lived in the southwest coastal area, and belonged to the Gan Yue ethnic

²⁶ From my field survey, Xiaohuang village, November 2010. Interview with Yong Zhang, Rongjiang, December 2010.

²⁷ Zhang, *Exploration of Dong Origin*, p. 137. 张, *侗族探源*, p. 137.

group, 干越, at the end of the Warring States Period (475-221 B.C.). They migrated to Guangxi province which borders on Guangzhou province, called West Yue, 西越 and mixed with local people. During the Sui and Tang Dynasties (581-907 A.D.), they formed the new ethnic group of Dong people, 侗民. Around the middle period of the Tang Dynasty (618-907 A.D.), some of the Dong moved along the Liu River and settled at the joint area of Guizhou, Guangxi, and Hunan Provinces, now called Dong (侗) in Chinese, or Kam (gaeml) in Dong language.²⁸ This version of events is accepted by the majority of Dong researchers, based on many history records, the study of language, custom, field survey and anthropology. Even so, there are still some arguments, and further research is going on.

According to Zhang's research, the songs of ancestor worship record the original place of living, environment and life, the reason for migration, and the situation during migration. If someone is ill, people think he might 'lose his soul', so a wizard will be invited to 'call the soul back'. The wizard recites wizard words and talk of place names, villages, one place after another along the route of migration back to the place of the ancestors to bring the soul back, or he will ask for help from the ancestors to bring the soul back.²⁹ After people are dead, they do not go to heaven, but rather back to the ancient homeland, Gao Shun E An (gaos senl ngac nganh), to reunite with their ancestors, singing ancient songs and dancing together.³⁰ To make sure the soul of deceased can to 'return to the ancestor place', family members have to put sticky rice and paper money in the hands of the deceased for him to use 'on the way', or they prepare 'lunch for him'.³¹ In some places in the southern Dong area, after people are dead, things left behind by the deceased should be brought to the side of a river, and burned into ash. This represents sending things back to the remote ancient place, the big lake and the big sea.³²

In the southern Dong area, according to Zhang's record, people set the place for the ancestors in the central position of the fireplace, but without having a symbol for it, as only during festivals is it the custom for the family to put offerings at this place to worship the ancestors.³³ In some places the ancestral tablet is set at the east corner of the

²⁸ Zhang, *Exploration of Dong Origin*, p. 1. 张, *侗族探源*, p. 1.

²⁹ *Ibid.*, p.137.

³⁰ *Ibid.*, p. 7.

³¹ *Ibid.*, p. 138.

³² *Ibid.*, p. 13.

³³ *Ibid.*, p. 139.

fireplace room, which implies that the ancestors came from the east. Before every Chinese New year, the family has to clean this corner, and pour the ash of incense and paper money into the river, letting it flow with the dragon king back to the lake and sea.³⁴ In the research of Fu and Yu, at Nine village area, the place of the ancestor's soul was set at the corner of the fireplace, representing that the ancestor can keep warm from the fire and eat together with people. As a development after the 1940s, in the northern Dong area, the fireplace room is replaced by a central room, where the shrine for the ancestors is arranged in the middle of the central wall.³⁵ This is influenced by Han culture, as very few families are doing this in the southern Dong area now. Dong people also worship the clan ancestor. According to Zhang's research, some worship the clan ancestor at the first place where the clan ancestor settled. In the northern Dong area, clans with the same surname have their own ancestral hall to worship their clan ancestor. In the joint area of Guizhou, Guangxi, and Hunan provinces, the clan of Yang, have in their villages a temple called 'Flying mountain temple' to worship their ancestor 'Yang great-grandfather'.³⁶

Sa Sui

Sa Sui (sax siis), also called Sa Ma (sax mags), Sa Bing (sax bingl), Sa Deng (sax daengc) is the common object of worship for the Dong. In Dong language her name means 'The sovereign holy grandmother': this is an ancient heroine with a high degree of myth. Sa Sui has the highest status and reputation in Dong religion. In history, she led the Dong people against an outside invasion. She is the female ancestor deity, and village protector deity. Dong people believe she can protect the village, blessing the production of the farm and the fertility of the family. Her image is noble and dignified, but also friendly and kind. According to Luo' research, every village has at least one Sa Sui altar to worship this great female hero, and some places influenced by Han culture have built a hall without a roof for it. As mentioned before, her altar is developed from the earth altar, as worship of 'Sa Sui' includes hero and ancestor worship along with worship of land, motherhood, and fertility.³⁷

³⁴ Zhang, *Exploration of Dong Origin*, p. 13. 张, *侗族探源*, p. 13.

³⁵ Fu and Yu, *Custom of Nine Stockaded Village*, p. 31. 傅和余, *九寨民俗*, p. 31.

³⁶ Zhang, *Exploration of Dong Origin*, p. 138. 张, *侗族探源*, p. 138.

³⁷ Luo, *Folk Dwelling of Guizhou*, p. 39. 罗, *贵州民居*, p. 39.

According to Zhang's research, every village has an old person called Deng sa (dens sax, means the person close to Sa), or Deng Bing (biingl xus, means the manager of Sa) to manage the Sa Sui altar. Deng sa is chosen by a Dong priest from old dwellers, according to the Dong wizard's method to calculate whom Sa Sui likes best.³⁸ The Dong wizard not only holds the ceremony related to Sa Sui, but also takes in charge the building and repair of the altar, so at this point, he could be called the altar master. When building a new Sa Sui altar or repairing it, a villager must take a bit of soil from the land where the migrant Dong ancestor first settled, at Deng Hai Mei Ma (daeml neit meix mags, place name) in Long E, Liping County.³⁹ In the song and in the story, Sa Sui originally lived at this place, so the soil is shown as bringing the goddess to this land, to protect and bless the village.

When there was collective activity, or a fight against outside invasion, people would gather at the Sa Sui altar, perform a ceremony to worship Sa Sui and drink grandmother tea, praying for blessing from Sa Sui. The most important time to worship Sa Sui is in February, and some do so on the first day of new year or the spring festival: generally it takes place at the beginning of the year. The content and form of the ceremony vary. According to Zhang's research, at Zhongbao, in Rongjiang County, in February, after having worshipped Sa Sui, the altar master leads the elders to walk around the altar in one circle, then the elders and Deng sa lead adult women to visit other villages. Every time they arrive at another village, the village lights firecrackers to welcome them. They dance and sing on the singing stage or in front of the drum tower, then go back to their own village. At Renli village, during the ceremony, Deng sa leads twelve young men with muskets on their shoulders to walk around the altar three times, then they walk around the village to dispel evil spirits. At Pingjiang, in Congjiang County, twelve unmarried young men and twelve unmarried young women are chosen, the men with swords and muskets, the women with baskets, to walk around the altar three times, then worship Sa Sui and eat together. At Luoxiang, Datuan area, people based on drum tower as their unit go to visit different clans, singing and dancing in front of the other drum tower, then after three or five days, they go together to the altar to worship Sa Sui.⁴⁰

³⁸ Zhang, *Exploration of Dong Origin*, p. 13. 张, *侗族探源*, p. 13.

³⁹ *Ibid.*, p. 113.

⁴⁰ *Ibid.*, pp. 155-157.

In Zhang's record, at Longtu, before New Year's Eve, an elder comes to the altar to worship Sa Sui and prepares for the ceremony. The next morning people assemble at the drum tower, beat drums and gongs, and fire an iron cannon three times. Young men rally at the altar dressed like warriors, holding swords and muskets, and an elder recites ritual words to pray for a blessing from Sa Sui. Under the command of an elder, young men rush out of the village pretending to fight the enemy in the field, firing guns and cannon. The whole village watches this battle, and a cloud of smoke floats over the battlefield. The sound of gongs, drums, and war whoops weaves into the noise of battle which rises to the skies. After they 'defeat' the enemy, the young men come back to the village with their spoils of war, a grass fabric in the shape of a head. People beat gongs and sound drums to welcome them back and to celebrate victory. They hang the grass heads in front of the altar, young men and women hand in hand singing and dancing around it, then an elder leads people to sing an ancient song to eulogize and recall the tremendous achievements of Sa Sui.⁴¹ From my field survey, at Jitang, in Liping County, at the beginning of every year, there was a big ceremony to worship Sa Sui. The ceremony started at the Sa Sui altar, with everyone having a drink of grandmother tea, then Deng sa performed Sa Sui, leading everyone to walk in a circle around the village, at last gathering at the drum tower for group dancing and singing.⁴² It was a statement to remember Sa Sui and the ancestors, reinforcing the conception and boundary of the village.

● Totems

As Zhang states after a long accumulation of time, Dong people's emotional experience formed the worship of Totems.⁴³ Many things are listed as totems in current literature, such as the dragon, phoenix, fish, snake, water buffalo, bird, goose, red-crowned crane, gold spot big spider, gold chicken, gourd, sun, circle, and umbrella. The scholar Min Zhang's criticism of the list of Dong totems is not clear, as with long compacting from culture and religion, some of the nature of the totems has changed, and many characters can not be distinguished. The totem is generated according to relations and blood relationships, and he thinks some of them do not achieve the standard of totems, but most are things about which people have a strong feeling, grand and beautiful

⁴¹ Zhang, *Exploration of Dong Origin*, p. 157. 张, *侗族探源*, p. 157.

⁴² From my field survey, Wenli Lu, January 2013.

⁴³ A symbol of a group and has spiritual significance. Zhang, *Exploration of Dong Origin*, p. 117. 张, *侗族探源*, p. 117.

appearance or other important meanings.⁴⁴ I am not going to join this debate, but have chosen some commonly agreed important totems to exhibit the operation of totems in Dong life.

The water buffalo is an important totem for the Dong. In farm work and festivals it also bears an obvious status. The hard working, kind, tolerant, strong character of the water buffalo is considered to parallel the spiritual character of the Dong. According to Zhang's record, in Cong Jiang County, people think that a water buffalo can be born as human, and humans can be born as water buffalo, which is similar to a human being but just cannot talk. Dong people have a deep emotional context with the water buffalo, and it is widely referred to as an ancestor. In the ancient narrative song from Liping, Congjiang, Rongjiang County, the words run: 'Elder dead left us, water buffalo dead, left horns', so people mention the ancestors and water buffalo together. In Tingdong village, Congjiang County, if the 'protecting family water buffalo' dies, the family should hold a funeral for it, then bury it only leaving the horns.⁴⁵ In the southern Dong area, villages have the custom to hang horns of water buffalo on top of a door or on the columns of houses, and the horns of a fighting water buffalo should be hung on a central column of the drum tower to exhibit its honour. In Sanbao, Rongjiang County, two hammers are inserted into the lintel of the main door (Figure 12).⁴⁶ The part inserted into the lintel is a rectangle six Cuns long, three Cuns wide, and one Cun thick in the shape of a horn. It has the meaning of horns, and is called 'water buffalo horn'.⁴⁷



Figure 12.
Door hammer.
Photograph by Derong Kong.

In Zhang's research, on 8th April and 6th June, Dong people clean the stable and wash the water buffalo, bring offerings to it and worship it in front of the stable to express

⁴⁵ Zhang, *Exploration of Dong Origin*, p. 124. 张, *侗族探源*, p. 124.

⁴⁶ Door hammer is a component to connect the lintel of door and the door frame.

⁴⁷ Zhang, *Exploration of Dong Origin*, p. 128. 张, *侗族探源*, p. 128.

gratitude for its hard work. In the Southern Dong area, some Dong people do not eat beef, and if they have to slaughter a water buffalo, they feel obliged to make explanations, asking for forgiveness, or lie to it and put the blame on others to avoid their guilt.⁴⁸

Also in Zhang's record, in the Dong villages of Duli river middle and upper reaches, if a water buffalo nicks or bites the column or board of its cattle pen, this is considered an omen of disaster for the family. So the family makes a bamboo cage and places it over the mouth of the water buffalo to announce that the omen is ineffective. If a water buffalo uses its body to rub the wall or column of a house, it means the possibility of fire. If a water buffalo enter family's central room, it indicates bad luck, and the owner of the water buffalo needs to prepare offerings to perform a ritual to offset the calamity. A water buffalo also can determine the site of a house. People let it free, and a place where it takes rest and rolls is recognised as a propitious site to build a house. In some places before raising the treasure beam, the song master or wizard will hold a well-decorated water buffalo with a red cloth and enter the house to sing the 'song of the water buffalo', telling the origin of the water buffalo and making blessings for the family and a flourishing harvest.⁴⁹ Snake and water buffalo are totems of the Dong, but people revere and fear the snake, while they honour the water buffalo, these are caused by the natural difference between these two animals. If a snake enters a house, people are not allowed to beat it, for it is considered also to embody an ancestor.

As Zhang says, eggs are recognised as the origin of life, so are protectors. An egg equals life and soul. In the wedding ceremony the offerings must include an egg to represent fertility, and in the ritual to pray for pregnancy, the egg also works as a symbol of fertility.⁵⁰ When an infant is one month old, there is the custom of eating a red egg. According to Zhang's record, If the child has a yellow face, an emaciated body, and a poor appetite, this could be some health or nutrition problem, but the grandmother or mother would also consider it as 'the soul is lost'. So she puts a handful of rice and one egg into a bowl, goes to the border of village, burns incense and paper money and 'asks that the child goes home, does not play outside'. Then when she returns home, she puts the bowl on the side of the pillow, and after it has accompanied the child for three days, cooks the egg and rice, and lets the child eat it. The hatched egg shell has the function

⁴⁸ Zhang, *Exploration of Dong Origin*, pp. 125-126. 张, *侗族探源*, pp. 125-126.

⁴⁹ *Ibid.*, p. 127.

⁵⁰ *Ibid.*, p. 118.

of protection. It has an implicit meaning of surviving, prosperity. People also hang a string of eggshells on top of the door lintel to keep ghosts away, or put eggshells on a branch and stick them into a field of cotton to protect the plants and help them grow well, or they connect the shells with hot pepper, place them inside the tank of dye to dispel ghosts and make cloth of fine colour.⁵¹

● Multiple cultures

Paddy culture: Rice-paddy culture is an experiential social culture established on the basis of farming. It determines that the older person with more social experience has the priority to talk, because their social experience makes them a representative of knowledge and principle. So everyone respects an older person, and every stockaded village has an elder-leader who is honest, fair, and familiar with the ancient rules. As Xiaoguang Xu says the old leader of the stockaded village is a natural leader, but depending on changing circumstances, the number is not fixed. They have a certain voice over most things in the village and some decision-making power, but they do not have privileges, they are just one leader among the equal people.⁵² Paddy culture formed the basis of Dong social structure and culture and constantly it affects their social structure, beliefs and rules. It generates their characteristic staple food. It combines with nature worship to generate the Dong's peaceful, restrained cultural ambience. It is also reflected in the form of the drum tower, as something firm and steady.

Collective conception: The Dong are a peace-loving and united folk, and their various folk activities are generally collective, such as collective hospitality, collective singing, which fully describes friendship, unity and a strong sense of community as the cultural spirit of the Dong. Collective stability is the highest purpose. For example, in Wang's record, when people constitute laws or covenants, they sacrifice a water buffalo as the symbol of success. The water buffalo must have a pair of horns which is ring-shaped and bent inwards, not bent outwards. The intention is that 'people make a concerted effort, and band together'.⁵³ When Dong people build a drum tower, the focus is its cultural morality: that is 'our Dong people

⁵¹ Zhang, *Exploration of Dong Origin*, p. 119. 张, *侗族探源*, p. 119.

⁵² Xiaoguang Xu, 'Drum Tower, the Cultural Field Of Conclusion and Implementation of Dong's Customary Law', *Politics and Law of Analects*, 10(2009), 52. 徐晓光, '鼓楼—侗族习惯法规范订立与实施的文化场域', *政法论丛*, 10(2009), 52.

⁵³ Wang, 'The Drum Tower: The Centre of Dong village', 55. 王, '鼓楼: 侗寨人居的凝聚中心', 55.

unite in the drum tower as fish do in a fish nest'. The drum tower is an important public space, also the production of collective culture (Figure 13.).



*Figure 13.
Performance of
collective singing around
the fire place in the drum
tower.
Photograph by Deong
Kong*

Fireplace culture: The fireplace is a facility inseparable from the lives of every family; it is a place for life, eating, meeting of family and friends, communication, talking history, emotional communication. It is always set in the middle of the room as the centre of the space. People sit around the fire eating and talking, it is comfortable and joyful. The fire sheds light and warmth in an intimate and warm atmosphere. Fireplace culture is family culture, inward culture. The fireplace forms the centre of a family. The fireplace in the drum tower is a natural reflection of the collective conception and of paddy culture, with a direct impact on the central focus and function of space in the drum tower, as well as in the pattern of the local dwelling (Figure 13,14).



*Figure 14.
People eating around the fireplace
in a Dong house.
Photograph by Derong Kong.*

Rite, festival and culture: Because of the mountainous site, people live in what was until recently an isolated environment. They were influenced by what they

could constantly see and hear within their unique culture and life style. Luo says these generated their special rites and festivals, which became one important way to carry their faith and culture, and to preserve their special cultural customs.⁵⁴ Rites and festivals work as inherited activities strengthening ethnic culture. Such activities give a more vivid meaning to the drum tower as a public space, and to the local dwelling as a home. They also enhance the function of rites, festivals, and entertainment at the drum tower as the important public space in the village. These cultural activities of rites and festivals increased the strong local features of the drum tower.

Fengshui: Fengshui was imported into the Dong from Han culture. It is a method to choose the location of a house or tomb, and is supposed to have an influence on the fortune of a family. It works through observation of geomantic omens, which include natural conditions, geography, health, historic experience, traditional culture, and philosophy as criteria. It has a profound impact on Dong building.

2.1.4 Social structure and system

Nature worship, ancestor worship, Sa Sui, totems and multi-cultures formed the Dong's diverse cultural characteristics. This cultural basis provides a guide and leads to the establishment of construction activities, functions, and an architecture system. The clan system is the core of the Dong ethnic group, the social system organising the Dong society, by which different roles of persons in different scopes of life work together to construct the social structure and living environment. As Berger and Luckmann say, social structure is the sum total of these typifications and of the recurrent patterns of interaction.⁵⁵ The architectural activities are based on the above things. There follows a description of Dong society.

● **Clan system—Dou, Ji, Gong, Household**

There are two signs, 'Dou' and 'Surname' to divide Dong ethnic groups. Dou is similar to a branch of a clan, surname is the sign of the clan. According to Qing Shu's research,

⁵⁴ Luo, *Folk Dwelling of Guizhou*, p. 37. 罗, *贵州民居*, p. 37.

⁵⁵ Berger and Luckmann, *The Social Construction of Reality, a Treatise in the Sociology of Knowledge*, p. 48.

'Dou' is the symbolic way to divide the Dong traditional lineage. It means the clan with the same origin, distinguished by blood heritage, rather than by surname. The Dong have the feature of living together since ancient times, basically in a stockaded village, all under one surname. However, sometimes people share the same surname, but not the same Dou.⁵⁶ The surname is the symbol of the clan when they face other people. Dou is a further and essential mark of their identity within the clan. Below is the hierarchy of Dong clan system (Figure 15).

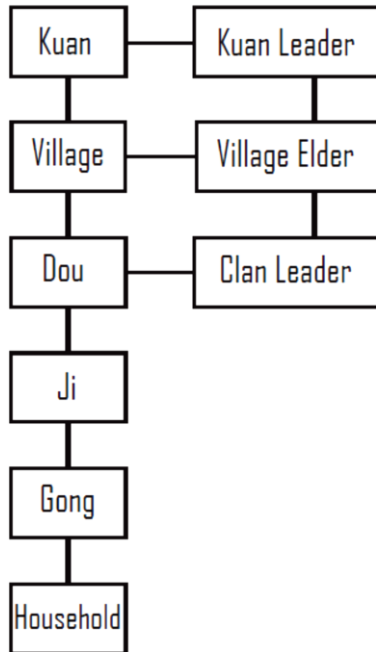


Figure 15. Dong clan and society system. Drawing by Derong Kong

Dou: Dou is the basic unit of Dong social structure, in another words it is Dong clan. According to Ling Xiang's field survey, Dou consists of many families with the same blood relationship. They share the same cemetery, forest and field of sacred ancestor.⁵⁷ The people from the same Dou cannot marry each other.

Ji: Each Dou consists of several Jis. In Xiang's record, when a Dou is split into Jis, this division is called 'separate rice steamer', which means the Ji shared the same rice

⁵⁶ Qing Shu, 'Drum Tower and the Ancient Marriage of the Dong Nationality', *Journal of Huaihua Teachers College*, 20(2001), 36.舒青, '鼓楼与侗族古代婚姻', *怀化师专学报*, 20(2001), 36.

⁵⁷ Ling Xiang, 'Social Organisation and Common Law of Jiudong in Congjiang County', in *Guizhou Six Hills and Six rivers, Selected Data of National Survey*, ed. by Rong Wu, Yongrong Pan, and Xu Yang, Volume of Dong (Guiyang: Guizhou People press, 2008), p. 15. 向零, '从江县九洞侗族社会组织与习惯法', 出自 *贵州六山六水民族调查资料选编*, 吴嵘, 潘永荣, 杨旭, 编, 侗族卷 (贵阳: 贵州人民出版社, 2008), p. 15.

steamer for dining before, but are now separated and do not share one rice steamer for dining.⁵⁸

Gong: Gong in Dong language is 'paternal grandfather', means immediate families with the same grandfather. It consists of several households.⁵⁹

Household: Household is the nuclear family of couple plus their children. The household is the fundamental unit of production in society.

According to the research of Xu, each Dou has its own leader called the Dou elder. If a village only has one Dou, the Dou elder is the leader of the village. If there are many Dous in the same village, the leader of the village is called the village elder, selected on the basis of the Dou elders. The village elder is the highest leader in the village; he will deal with the matters of obeying the rules and customs of the village with the help of other elders.⁶⁰ The household is called 'Ran'. Those people will compose different organisations by their age and gender. For example, in the record of Yao, people aged over 60 make up the group 'Ning Lao' (older person), the 15 to 36 year old males make up 'La Han' (young man), and the unmarried women make up 'La Ban' (same generation person).⁶¹

● Social system—Kuan

The higher social organisation above the village is the Kuan, 款, a local political and military alliance. According to Minwen Deng and Wu Hao, it is the Dong people's legal, political and military institution standing alone under the traditional Chinese central government. The Kuan links geographically nearby villages for their mutual benefit, through the agreement to make a combined social organisation based on villages.⁶²

⁵⁸ Ling Xiang, 'Social Organisation and Common Law of Jiudong in Congjiang County', in *Guizhou Six Hills and Six rivers, Selected Data of National Survey*, ed. by Rong Wu, Yongrong Pan, and Xu Yang, Volume of Dong (Guiyang: Guizhou People press, 2008), p. 16. 向零, '从江县九洞侗族社会组织与习惯法', 出自《贵州六山六水民族调查资料选编》, 吴嵘, 潘永荣, 杨旭, 编, 侗族卷 (贵阳: 贵州人民出版社, 2008), p.16.

⁵⁹ *Ibid.*, p.17.

⁶⁰ Xu, 'Drum Tower, the Cultural Field Of Conclusion and Implementation of Dong's Customary Law', 52. 徐, '鼓楼—侗族习惯法规范订立与实施的文化场域', 52.

⁶¹ Yao, 'The Symbolic Meaning and Identification Ritual of Drum Buildings of Dong nationality', 102. 姚, 丽娟, '侗族鼓楼的象征意义与认同仪式', 26(2004), 102.

⁶² Minwen Deng and Hao Wu, *The Kingdom without King, Dong Kuan Research*, p. 31. 邓敏文和吴浩, 没有国王的王国, 侗款研究, p. 31.

Initial stage

According to the research of Qingpin Du, Dong people live together based on the same consanguinity and surname, in order to facilitate mutual meeting, discussion, to resolve disputes, then construct a 'Ji' (pavilion) in the stockaded village (Figure 16). The meeting is usually convened by a prestigious elder (stockaded village elder, Dou elder). Each household sends a representative, or all the adults participate in the meeting. The meeting involves a small number of people in the 'Ji'. In the middle ground of 'Ji' is a fireplace, surrounded by benches, and people sit around the fire to talk.⁶³



Figure 16.
Ji (pavilion), at Longe village.
Photograph by Derong Kong.

Kuan Society

Deng and Wu claim, according to historic records and field survey, that in order to form a powerful social group and to prevent internal centrifugal tendencies, there was a need to enhance social cohesion. In that situation, the power of the central government is weak, so the Dong minority established the 'Kuan' as a unique social organisation. It is present in official records of the central government since the Song Dynasty in the story

⁶³ Qianping Du, 'The Characteristics of Drum Tower, Cultural Connotation', *Journal of The Central University for Nationalities*, 1(1996), 64. 杜倩萍, '侗寨鼓楼建筑特色及文化内涵', *中央民族大学学报*, 1(1996), 64.

of a battle against central government, written by Yong Li, 李勇, in *'The Record of the Platform of Surrender'*, *'受降台记'* (1176 A.D.).⁶⁴

Kuan have four levels: a small Kuan represents only one village; a medium Kuan consists of several small Kuans; a big Kuan consists of several medium Kuans. The highest level is a united Kuan, consisting of several big Kuans. A Kuan has a Kuan principal, a Kuan council, a Kuan convention, Kuan statutes, and Kuan soldiers. Each Kuan has a Kuan leader elected from village elders, and the higher level Kuan leader is elected from the Kuan leaders of the next level down. According to Xu's research, the Kuan leader takes charge of Kuan activity, in which they are otherwise equal to ordinary people. The Kuan council is the highest power agency.⁶⁵ It consists of elders. The Kuan leader within the Kuan council is responsible for managing the village against outside enemies. As Zhuhui Yang indicates, since then, Dong's social structure has been a village-based model of social organisation, the Kuan (Figure 15).⁶⁶

Kuan convention and statutes

Kuan conventions and statutes are commonly concerned with the major issues within the village, through the enactment of specific rules and laws. The conventions and rules are drafted by the Kuan council, then discussed by people, and after most people have agreed, the customary law has its authority. They compose the legal system of the Kuan. As Shu illustrates, Dong ancient customary law has Concerted Statutes: Statute of War, Statute of Heroes, Statute of Customs, Statute of Ethnic Origin.⁶⁷ According to the research of Xiaoguang Xu, the content of the conventions or statutes relates to different aspects of life. One is a limit on the price of food. Offenders not only have food confiscated, but also bear different responsibilities according to the situation. When public facilities in the village are constructed, the rule is that each household must pay and provide labour. There is a standard of compensation if livestock cause losses to others. The Kuan deals with a variety of local security issues and wrongful acts, and deliberates over big issues about the survival and development of the village.⁶⁸

⁶⁴ Deng and Wu, *The Kingdom without King, Dong Kuan Research*, p. 181. 邓和吴, *没有国王的王国*, p. 181.

⁶⁵ Xu, 'Drum Tower, the Cultural Field Of Conclusion and Implementation of Dong's Customary Law', 52. 徐, '鼓楼—侗族习惯法规范订立与实施的文化场域', 52.

⁶⁶ Zhuhui Yang, *Record of Dong Custom*, p. 10. 杨筑慧, *侗族风俗志*, p. 10.

⁶⁷ Shu, 'Drum Tower and the Ancient Marriage of the Dong Nationality', 73. 舒, '鼓楼与侗族古代婚姻', 73.

⁶⁸ Xiaoguang Xu, 'Evolution of 'the Stone Law'', *Guizhou Social Sciences*, 9(2009), 102. 徐晓光, "'石头法"的嬗变', *贵州社会科学*, 10(2009), 102.

Transmission of Kuan conventions and statutes

The transmission of Kuan conventions and statutes is through compiled words, which codify Kuan decisions for oral recitation. According to the research and field survey of Xu, every Kuan holds a rite to 'preach Kuan' at the drum tower to give publicity to Kuan conventions and statutes. This takes place twice a year, during the rice planting and the harvesting.⁶⁹ Until 1413, the central government had its Chief Secretary in Guizhou, China's last established province. Then the central government set up education in the region, after which Dong people could speak and write Chinese, so Kuan conventions and statutes were recorded in writing. According to the research of Deng and Wu, there are more than ten steles of Kuan conventions and statutes discovered. In Gaozeng village, Guizhou province, in the drum tower there are still preserved several steles of Kuan conventions and statutes, the earliest carved in 1672.⁷⁰

Kuan activities

Important activities of the Kuan are often carried out in the drum tower. Kuan people usually convene their meeting in the drum tower or at the drum tower square, presided over by the Kuan leader. The Kuan has a special correspondent, called 'Kuan leg', who is customarily responsible for the firewood for the fireplace, the maintenance of the drum tower, transmitting information, assembling people, and as representative of the village to negotiate with an enemy when war is happening.

The 'Kuan leg' beats the drum to assemble people. When adult men hear the drum they have to attend. Since all members are required to abide by it, the drum is also known as the 'Law of the Drum'. Every Kuan has a square called Kuan square to gather people, that is the drum tower square at the front of the drum tower. According to the research of Xu, a rock set in the drum tower square is a 'planted rock', which the Dong call 'Jin Pal'. It is a ritual that help people to remember a village convention or thing by song or recited words, as there are no written words on the stone. For example at Zhaoli village the stone defines the permitted marriage area, while at Qingyun village the stone is about the protection of the forest.⁷¹

⁶⁹ Xu, 'Evolution of 'the Stone Law'', 100. 徐, "石头法" 的嬗变', 100.

⁷⁰ Deng and Wu, *The Kingdom without King, Dong Kuan Research*, p. 145. 邓和吴, *没有国王的王国*, p. 145.

⁷¹ Xu, 'Evolution of 'the Stone law'', 101. 徐, "石头法" 的嬗变', 101.

According to Xu, the executives of the law are the stockaded village elder, the Dou elder, the Kuan leader, and Kuan man. Any minor trespass is dealt with by persuasion and education from the stockaded village elder, and further admonition from relatives and friends. It is mainly based on moral constraint, in relation to group domination. In the case of a more serious fault, the village elders, Kuan principal and related people must decide on the nature of the crime in a meeting at the drum tower according to Kuan convention and statute. If beyond this there is still an objection, it should pass up to the 'Kuan council', the highest arbitration agency. Then the verdict becomes the final decision, it has legal effect, and no one can change it. Once the final decision has been made, a nail is hammered into the drum tower column deeply, as the mark of authority. It represents the unchangeable authority of the final decision. So the Dong have the proverb 'the proved guilty, the hammered nail'.⁷²

In general, the punishment of minor trespass is carried out at the Kuan square, and the death penalty in a special execution ground outside the village. Execution was traditionally by relatives of the criminal, which from the view of modern concepts of justice is inhumanity, but the objective of village punishment is to maintain a stable and harmonious interpersonal relationship. As Xu indicates, first the punishment of the criminal must be recognised by the relatives with no doubt, so having relatives as the executioners shows that they agree with the verdict. In such a small social group, if the relatives were dissatisfied with the verdict, and thought it lacked impartiality, this would disrupt the harmonious, sustainable village relationship, and remain as a latent danger in the village. Second, in Dong history, the village community has not established the true sense of a judiciary institution. Implementation by relatives can avoid revenge and other private activities of enforcement. Such a practice existed in the ancient clan society.⁷³

After the 1950s, Dong traditional social structure and function shrink considerably. The majority of criminal cases were referred to the State judiciary. However, a number of disputes in village life are still considered and decided by village elders according to village conventions and rules. Just as I saw during my field surveys, Xu says that as part of the continuity of Dong culture, and the specific nature and functionality of the drum tower, the enactment of village convention and rule has also been carried out in the

⁷² Xu, 'Drum Tower, the Cultural Field Of Conclusion and Implementation of Dong's Customary Law', 53. 徐, '鼓楼—侗族习惯法规范订立与实施的文化场域', 53.

⁷³ Ibid., 53.

drum tower so that everyone can share common recognition. Thus making 'legitimacy' would be the stipulation of an agreement written on people's hearts. It would play a positive effect in Dong social life. The drum tower has continued to the present day as the place of enactment for village conventions and rules.⁷⁴ The Kuan as the social structure and system forms the rule of Dong life, and has a far-reaching impact on society.

● Social roles

Dong people cooperate to create and transmit oral culture, thereby constructing Dong society. The personal roles listed below are the vital agencies in traditional custom. They inherit the most knowledge, and are the holders of specific kinds of oral knowledge. In different ways in Dong life, they play a leading position in social life and transmission of oral knowledge. These persons are also the transition points of Dong culture, as they learn different kinds of knowledge from other ethnic groups then teach it to their own people; for instance carpentry and fengshui were learned from Han culture, and some spells of the ghost master were imported from Daoism, while Dong drama was enlightened by Han Drama.

Wizard (Dong priest): A man taking charge in the important ritual and ceremony of village, dispelling ghosts. Zhang says Dong people believe he has the most supernatural power and he has a high reputation. Some wizards are the leaders of clan or village.⁷⁵ In the record of Fu and Yu, in Nine village area, the wizard also plays the role of Daoist priest, and at the same time, the content of Buddhism is used and transmitted through him.⁷⁶

Ghost master: He serves at the level of the individual family, to dispel ghosts and pray to gods. When a villager is sick or has lost something, they come to the ghost master asking him to perform a ritual. He also performs some regular rituals as part of family custom, from birth and marriage to death, such as counting the appropriate day and time of the ritual, as well as organising and performing it. He is also involved when people construct a new building, deciding the time, and performing rituals at the

⁷⁴ Xu, 'Drum Tower, the Cultural Field Of Conclusion and Implementation of Dong's Customary Law', 53. 徐, '鼓楼—侗族习惯法规范订立与实施的文化场域', 53.

⁷⁵ From my field survey, interview with Yong Zhang, Kailli, February 2013.

⁷⁶ Fu and Yu, *Custom of Nine Stockaded Village*, p. 39. 傅和余, *九寨民俗*, p. 39.

different construction stages. His social status is lower than the wizard and song master, but the villager respects and fears him at the same time. Because his magic arts and spells apply not only to ghosts, they can also be implemented on people.⁷⁷

Daoist priest: He is originally from Han culture; he has a similar role to the ghost master, working for the family during their customs.

Hand-ink master: He is the chief of the carpenters, responsible for design, management of the project, and also keeping up a vital role in education of carpentry. For the construction, carpenter, mason, bricklayer and painter are working with the hand-ink master, but the whole project is under the supervision of the hand-ink master. Only the hand-ink master has the ability to design and construct the drum tower and the wind and rain bridge. Because these two important buildings in the village require more knowledge and skills to build, the structure and details are far more complex than with the folk dwelling. The drum tower and wind and rain bridge represent the status of the village, so it is a great honour to design a drum tower, or a wind and rain bridge, So the hand-ink masters have a high reputation among people, like Wenli Lu of Ji Tang village, who has built many famous drum towers, wind and rain bridges, and is also a village elder.⁷⁸

Fengshui master, geomantic master: these are alternative names for one person. When people build a house, drum tower, or tomb, he helps people to choose the best site according to geomantic omens and counts the propitious day to start the construction. He can also help people to count the propitious day for weddings and funerals. In this sense, the ghost master's knowledge and duty overlap with his. As I observed in field surveys, and also as Zhang indicates, in a Dong village this is common, because in such a small village people always learn from each other, and some kinds of knowledge are shared by people with a similar work area. None of them are totally dedicated to their professional title, for they are also farmers, but with more specific knowledge. Ghost master, geomantic master, and Daoist priest are different names, but their division is not very strict.⁷⁹

⁷⁷ From my field surveys, many villages, April, November 2010; January 2013, more information could be found from Appendix 1. Field survey; mainly from the interview with Yong Zhang, Kailli, February 2013.

⁷⁸ From my field survey, interview with Wenli Lu, Jitang village, January 2013.

⁷⁹ From my field survey, interview with Yong Zhang, Kailli, February 2013.

Herbal medicine master: he is respected by people, and uses herbs to heal people or take care of wounds.

Song master: As Zhang indicates he or she is the core master of Dong culture; Dong people use songs to carry and transmit knowledge and information. The song master knows well most songs. In some important village and family customs, the song master will lead the singing. He or she also has the duty to teach songs. The song master is always welcomed by people in different customs.⁸⁰ With their abundant knowledge and high reputation, some song masters are elected as village elder.

Kungfu master: A person good at fighting, skilled in martial art. In folk stories he helps poor people, holds justice and punishes the bully. Because of his contribution, people respect him and promote him as a village elder.

Work leader: the most experienced farmer, familiar with crops, weather, seasons, who tells villagers the principles of farm work, and leads them to start the spring ploughing, to plant rice seedlings, and in harvesting.

Mason, silversmith, Ironsmith: they are skilled in particular crafts and tools. But as with other jobs, they are also farmers at the same time.

- **Structure of a Dong village**



Figure 17. Zhaoxing village, located in a valley. Photograph by Derong Kong.

⁸⁰ From my field survey, interview with Yong Zhang, Kailli, February 2013.



Figure 18. The river running through Zhaoxing village. Photograph by Derong Kong.



Figure 19. The drum tower and wind and rain bridge at Zhaoxing village. Photograph by Derong Kong.

A Dong village is normally located in a valley (Figure 17), or halfway up a mountain, and usually has a river surrounding it or running through the village (Figure 18). The drum tower, drama stage and drum tower square create the village centre (Figure 19). The drum tower is the symbol of village and clan, the centre of the village, and most public activities occur there. It is similar to a church, court or town hall in western settlements. Folk dwellings are built around the drum tower to enclose the central public space. The main structure of Dong buildings is a column-and-tie structure, though some parts of the framework are a post-and-lintel structure. The upper structures are composed of columns and tie-beams, using mortise and tenon joints to connect components. Ponds, wells and granaries are loosely spread between dwellings to form the main body of the village, while road and river are the framework of the village. The village gate is the building marking the boundary of the village, dividing inside from outside (Figure 20). The wind and rain bridge is built within a village or outside to connect the road, and sometimes it acts also as a conjunction of village gate and bridge (Figure 19). Pavilions are also built at the edge of a village for people to have a rest (Figure 21).



Figure 20.
Village gate at Tang'an village.
Photograph by Derong Kong.



Figure 21.
Pavilion at Xiaohuang village.
Photograph by Derong Kong.

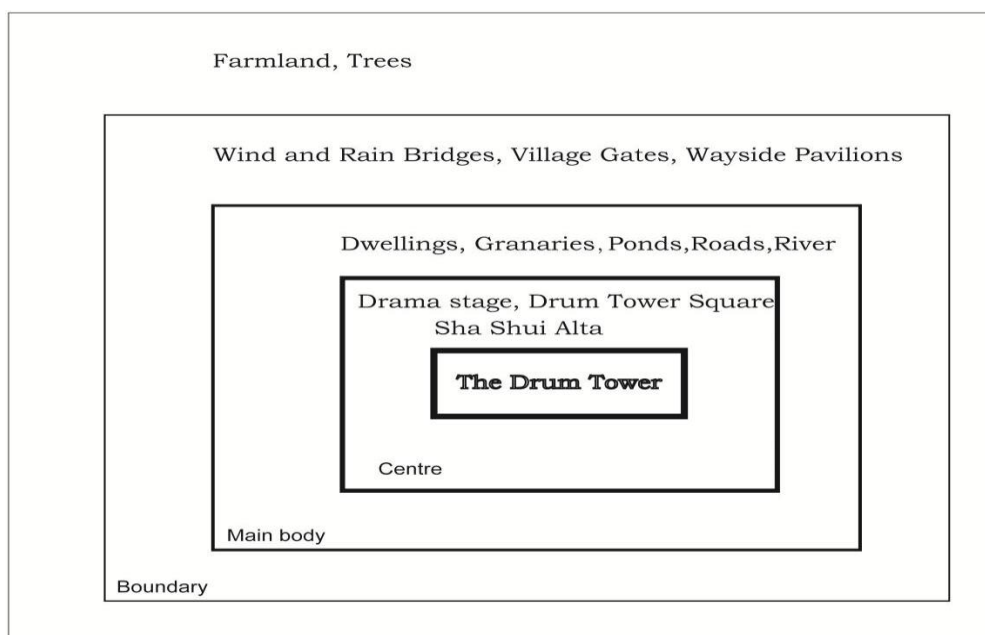


Figure 22. Structure of a Dong village. Drawing by Derong Kong

The farmland and trees surround the village. The scale is very local: farmland regarded as remote could be only 5 km away. Villagers also plant some china fir, trees and bamboos around the village as fengshui trees to change the microenvironment. Outside the village, tea oil trees, tung trees and china firs are planted. Tea oil tree provides one resource of edible oil, while the tung tree provides oil to make umbrellas impermeable and is applied in construction against rot, china fir provides construction material for buildings. Beyond the farmland and trees is the forest, the place for people to collect firewood, herbs and fruit, and hunt wild animals or graze on pasture (Figure 22).⁸¹

2.2 Oral culture

Because the Dong do not have their own written language, spoken language works as the main tool to transmit Dong culture. As Fu indicates, oral knowledge and demonstration have been traditionally the main method of transmission of experience and knowledge. Dong people grow up with oral knowledge.⁸² And as Prof. Blundell Jones says, 'Because the brain is the main storage, old people are valued for their wisdom, but their experience is filtered

⁸¹ Fu and Yu, *Custom of Nine Stockaded Village*, p. 13. 傅和余, *九寨民俗*, p. 13.

⁸² Fu, *Dong Folk Literature*, p. 9. 傅, *侗族民间文学*, p. 9.

by their memory, and only in a limited sense stored externally in other ways, so it dies with them unless passed on orally'.⁸³ Thus most of the knowledge is taught through oral education over generations.

The Dong oral culture research relies on material recorded in other documents, such as central government records of past dynasties, local history records, scholars' works of history, a few books written by Dong people (to be explained in a following part), and existing song and custom. However, because of a lack of written material and other hard evidence, it is difficult to ensure the time, event and thing in history, and the history sequence and relation between events and things, so the history of oral culture is still under debate. There are many inferences, compared with many books, I adopt Yong Zhang's inference, because he is a representative researcher on Dong oral culture and has done more than thirty years research and field survey. The following kinds of oral knowledge still exist and are applied by the Dong, yet their origin in history is difficult to prove. They consist of Ye, Ga, Lei, and Nian.

Zhang's inference is that at the primitive stage (before 681. A.D.), ancient Dong people created Ye (song and dance), Ga (folk song), Lei (verse) and Nian (myth). At the initial stage of feudal society (618-1368 A.D.), the central government increased control of the Dong area, and Dong society transformed itself from a primitive society to a feudal society, but under loose control from the government. The main function of Ye was transferred from sacrifice to entertainment. The content of Ga increased to include love songs, custom songs, narrative songs, etc. At a mid-late period of feudal society (1368-1949 A.D.) the central government enhanced the control and management of the Dong area, and lots of Han culture and instruments were imported to the Dong area, so I guess the Han carpentry could have been imported in this period or earlier: the oldest existing Dong drum tower was built in 1672. In the record of '*Chiya*', 赤雅, written by Kuang Lu, 郎露(1604-1650), there is a description of a single column drum tower. The singing of songs developed in various ways, including multiple tone, rap, etc, and many musical instruments were imported. These included the Pipa (a plucked string instrument with a fretted fingerboard), a Dong flute, etc. The Dong drama and Dong quyi (Dong folk art forms,

⁸³ From supervision, Peter Blundell Jones, November 2014.

including ballad singing, story telling, rap, etc.) were generated.⁸⁴ So the original Dong oral knowledge mainly consisted of song, verse, and stories.⁸⁵

Before the Dong developed their written language in the 1950s, they also used Chinese characters to record things or to mark the pronunciation of the Dong language. However, education was then regarded by normal villagers as a luxury, so very few people understood Chinese characters, and written language was used only in limited areas. For example the Dong wizard, geomantic master, some song masters, carpenters, would use Chinese characters directly to record their knowledge or represent the pronunciation of songs. There are a few books written by song masters or Kuan masters, yet, these books are no more than two hundred years old: for instance, a Kuan book found by Deng and Wu is over 170 years, but books older than one hundred years are rare.⁸⁶ Considering a specially the Dong wizard and geomantic master, they would be reluctant to show their books to others, for this knowledge was their knowledge capital, their power of authority. In 2012, when my family was choosing a site for the tomb of my grandmother, I met a geomantic master and saw his book. On the cover was written: 'anyone who steals this book will die without descendants', or 'one who peeps into this book will die without descendants'. So the use of written language had a very limited scope, and most people relied on oral culture and practical demonstration to learn knowledge. The oral culture system still plays a vital role in Dong oral education.

In 1956, national departments organised professional group to investigate the Dong language. After a survey and research, they decided to use the southern Dong dialect as the foundation for the Dong standard language, and Latin letters as letter symbols to compose Dong written language. It was available from 1958 until now, but few people use it.⁸⁷ From the 1950s, especially after the 1970s, more and more children accepted a modern education, and Chinese characters are now widely used. Now the village school teaches children both modern knowledge and traditional oral knowledge at the same time, especially

⁸⁴ Yong Zhang, *Exploration of Dong Art and Literature*, p. 222. 张勇, *侗族艺苑探寻*, p. 222.

⁸⁵ Fu, *Dong Folk Literature*, p. 16. 傅, *侗族民间文学*, p. 16.

⁸⁶ Deng and Wu, *The Kingdom without King, Dong Kuan Research*, p. 140. 邓和吴, *没有国王的王国*, p. 140.

⁸⁷ Zhang, *Exploration of Dong Origin*, p. 2. 张, *侗族探源*, p. 2.

at Xiao Huang village, which is famous for its choral tradition. Although people do not now use oral knowledge as the main way to educate children and record things, the oral knowledge still plays an important role. As discussed in the literature review, as an important system of social generative schemes, Berger and Luckmann indicate how a knowledge system supplies people with the typification schemes of events and experiences for the pragmatic competence in routine performances.⁸⁸ In this thesis, I am going to investigate the original oral culture system of Dong as it was before the wide use of Chinese characters and invention of the Dong written language, as the base and starting point of the following social construction

2.2.1 Oral culture system

- **Oral education**

No matter what form oral knowledge takes, it has three general parts: the elder teaches, young people sing and speak, and children learn. But the content of song and stories are general and limited. If young people want to study some specific oral knowledge, they must learn from a particular master, such as the song master, Dong priest, or hand-ink master. Each step is based on the previous step. The word evokes other possibilities. It is a foundation of oral architecture. Social activities have been pivotal in this process: songs, stories and verses are learned at home and practised in social activity. The study of oral knowledge starts from general education, moving on to specific education. In this process, some of the knowledge is used, transmitted and overlaps between different professional scopes. For instance, when building a new house the ghost master and hand-ink master have to work together on some rituals, and after a long period of cooperation, the hand-ink master also knows how to perform the ritual.⁸⁹ Another example is between the Dong wizard and the song master, because both play important roles in Dong society and are capable of most oral knowledge, so some of their knowledge is shared, like the genesis verses.⁹⁰

⁸⁸ Berger and Luckmann, *The Social Construction of Reality, A Treatise in the Sociology of Knowledge*, pp.57-58.

⁸⁹ From my field survey, Wenli Lu, Xiaohuang village, November 2010.

⁹⁰ From my field survey, interview with Yong Zhang, Rongjiang, December 2010.

Zhang's research claims that Dong song is mainly taught by the song master. Some song masters are also village elders, because they know much recorded in songs that make them qualified to be a village elder. Other elders also can teach song. Some of the songs are short, only with a few lines, but some have a length of hundreds or thousands of lines. Another oral performance, Dong drama, marks a high level of Dong folk art. It is mainly based on singing, with speech as a complement. The performance of action is less prominent, the so called 'sing Dong drama', 'listen Dong drama'. It was invented by the Song master and elder Wu Wencai (about 1798-1845) between 1828-1838.⁹¹ Every village has a drama stage next to the drum tower.

Dong verses are only recited instead of singing. The Dong verses and song always alternates, so the kind of song will have a corresponding kind of Dong verse. It consists of rhythmic words, the style is free, and some only have a few sentences, but some may have hundreds of sentences. The Dong verses can be taught by elders or village elders. Some of the verses are taught by particular masters. For instance, the branch of Dong verses called Kuan word, which is about the origin of the Kuan and Kuan law should be taught by the Kuan master. The story of genesis inverse, sacred poetic words should be taught by a Dong priest and applied in village ritual for worshipping the ancestors.⁹²

A Dong story does not have a specific person to teach it, for anyone can recite it. It is usually told by an elder, village elder or Kuan master. In some Dong areas, the story telling and verses are still held as a reciting competition, involving two people at a time, usually in their mid-teens, who each endeavor to demonstrate superior ability in relating folk stories. The following are the illustration and discussion of the Dong songs, verses and stories: the exact contents of these oral materials are collected in the Appendix 2, A.2.2 Supplementary data for Chapter 2.

⁹¹ Zhang, *Exploration of Dong Art and Literature*, p. 121. 张, *侗族艺苑探寻*, p. 121.

⁹² From my field survey, interview with Zhang Yong, Rongjiang, December 2010.

● **Song**

The Dong have a proverb (see Appendix 2, A.2.2.1, Proverb):

As rice feeds the body, so singing feeds the soul.

Rice sustains a person's life and singing opens a person's heart.⁹³

When a child is learning to talk, he or she is starting to learn singing for different custom situations and activities. When I was a child, my grandmother often sang many songs, some funny, some telling stories and principles of how to be a good person. She also sang lots of drinking songs, for there is a custom in my hometown, that when you are drinking with someone, there would be a singing competition, singing songs to persuade your 'opponent' to drink the wine. This is a pleasant custom, everyone is joyful and laughing, no matter who wins or loses, and song is a 'catalytic agent' for this festive atmosphere.

According to Zhang's research, if the child is interested in singing he can learn further songs from the song master. The general time span for specific study of songs is from 13 to 22 years, but it varies with different situations, so this time is not strictly fixed. 8-12 year old children constitute a children's singing team, under the guidance of a song master, brother and older sister, to apply an initial training. The main songs they sing are children's choral songs, and as they grow they start singing some short choral songs to cultivate their interest. Based on their ability, the song master starts to choose the best child to sing the high tones. 12-16 year old teenagers can join the reserves of the choral song team, under the guidance of the song master. With a brother or older sister, they start comprehensive training, learning a large number of songs and different arias. This stage of study prepares a solid base for singing in the antiphonal style. When a visiting singing team arrives, they can observe the process to accumulate experience. 17-22 year old young people make up the main body of the singing team. Under the guidance of the song master, a brother and an older sister, they already master many songs and different ways of singing, and are capable of many singing skills. Sometimes they visit other villages to sing with another singing team. 22-35 year old people constitute the

⁹³ Geary and others, *The Kam People of China*, p. 237, cited in English.

adult singing team. They usually help the song master to train the teenager singing team, and help and give advice to the young people's singing team.⁹⁴

The song master is the organiser and leader of the singing team. As Zhang says, the song master has a high reputation among Dong people and is usually above 35 years old, along with the following conditions: he or she was an excellent singer at young age, capable of many songs and singing skills, can write a song instantly related to a new situation, and is honest and upright. The Song master has the ability to sing alone as the leader of a singing team. It is a representation of his accumulated knowledge.⁹⁵

There are many ways to classify Dong songs. In this thesis the category of songs is classified according to the song's content and function, because the content is the standard to decide the substance of the song (Table 1). The content and substance of the song will not be changed by the form. The main classification of songs is Ancient song, Narrative song, Custom song, Love song, Work song, and Children's song. According to their branch of content, the Ancient song includes Genesis song, Migration song, etc; Narrative song has Principle song, Expostulation song, etc; custom song has Drinking song, Mourning song, Stepping onto the stage song, Blocking road song, etc; love song has Sitting at night song, Playing on mountain song, etc; A work song is decided by specific work and will include different types of specific Work songs.

Main classification	Branches of Song
Ancient song	Genesis song Migration song
Narrative song	Principle song Expostulation song
Custom song	Sacred song Benedictory and Praiseful song Drinking song Mourning song Stepping onto the stage song Block road song
Love song	Sitting at night song Playing on mountain song
Work song	
Children's song	

Table 1. The main classification of Dong songs. Drawing by Derong Kong.

⁹⁴ Zhang, *Exploration of Dong Art and Literature*, p. 3. 张, *侗族艺苑探寻*, p. 3.

⁹⁵ From my field survey, Yong Zhang, Rongjiang, December 2010.

Ancient song

The Ancient song is the song of ancient people. It records the history of ancient life and represents the ancient social production, life and way of thinking (see Appendix 2, A.2.2.2 Dong song, Ancient song).

Genesis song

The Genesis song is to record and explain the origin of the world, mankind and all things (see Appendix 2, A.2.2.2 Dong song, Genesis song).

Migration song

Just as with the earlier migrations of the Dong ancestors, many other people have migrated to live in the present-day Dong areas and eventually joined with the Dong nationality, through the original inhabitants of present-day Dong territories were probably Dong. The migration songs record the names of the original homes of some of the Dong ancestors, together with the geographical conditions pertaining there. They explain why the ancestors wanted to migrate and which places they passed through on their journeys (see Appendix 2, A.2.2.2 Dong song, Migration song).

Narrative song

The narrative song describes the events, personages, story, legend, and principle, and it can offer interpretation and advice (see Appendix 2, A.2.2.2 Dong song, Narrative song).

Principle song

Many truths of life, life experience, production experience, and views of things rely on songs to transmit them, so Dong people have a lot of songs about principles. Principle songs reflect the truth of things, the method of production, the way of nature (see Appendix 2, A.2.2.2 Dong song, Principle song). As Fu says, in passing on knowledge and technical skill to people, they let people know

the principle, reason, or justice of things, enriching their knowledge, thinking and consciousness, but they do not directly require the listener to do anything, only to accept enlightenment.⁹⁶

Expostulation song

Expostulation song persuades people to reconcile themselves with others. It persuades people with reason, makes people obey (see Appendix 2, A.2.2.2 Dong song, Expostulation song). It is a unique example in Dong song, reflecting the world view of the Dong. As Fu indicates it mainly represents Dong people's ideas about morality, value and establishment of social norms. The social function is to counsel people and give them commandments. It persuades people through reason, engages them towards good behavior and has the function of social instruction. In other words, it has an important effect to manage a good human relationship, ensure the harmony of the family, maintain peace and stability in society, and promote social civilization and development.⁹⁷ The effect of expostulation song for the Dong community is immeasurable. It actually becomes the 'educational textbook' to teach people their social, moral, and family ethics. The expostulation song is applied to two situations. One occasion is when a conflict has happened, when the expostulation song is used to solve actual problems; another occasion is during social activity, to avoid the circumstance before it happens, using the occasion of assembly to persuade people what they should do or should not do. When there is a conflict, only the person with higher prestige and morality is qualified as an appeaser, for the parties to be convinced. The parties in conflict can then be persuaded through necessary moral and ethical instruction. The primary goal is not a solution or an agreement to the dispute, but the restoration of a harmonious relationship. If there is no need to settle disputes with many people, one song master or singer sings several expostulation songs among the parties, then the problem might be solved and the contradictions be dissolved.⁹⁸

⁹⁶ Fu, *Dong Folk Literature*, p. 28. 傅,《侗族民间文学》, p. 28.

⁹⁷ *Ibid.*, p. 34.

⁹⁸ *Ibid.*, p. 35.

Custom song

Through a long-term development process, Dong people have formed a lot of customs, rituals and ceremonies. And with these kinds of customs, there have been corresponding custom songs. Commonly the song sung for ceremonial activities is called custom song by people.⁹⁹

Sacred song

Sacred song is used in sacred activity to fete ancestors or pray to spirits for blessings, or to express good will towards life. For instance, every year when the time of spring ploughing arrives, the leader of farm work with village elder and other people will choose a place in the fields. Putting an oblation, a plow or harrow, and a water buffalo-whip in front of the God of farm, they play instruments and sing the sacred song of spring ploughing (see Appendix 2, A.2.2.2 Dong song, Sacred song).

Benedictory and praiseful song

Benedictory and praiseful song is sung in social communication. It involves songs of benediction and songs of praise, sung on specific occasions with a specific content (see Appendix 2, A.2.2.2 Dong song, Benedictory and praiseful song). A song of benediction is to express the good will, benediction, and congratulation to other people, such as on the building of a new house, when the hand-ink master will sing the song of benediction to express benediction to host.¹⁰⁰ For example in the ceremony of installing the main beam when building a house, the hand-ink master will sing a 'climbing beam song' to show his good will to the host. Songs of praise aim to praise people's kind hearts, enthusiasm, friendship, ability, beauty, village, drum tower, house and family.

Blocking road song

When an important group of guests visits a village, the young woman use benches, branches, bamboos, etc., to block the road leading to the village or

⁹⁹ Yang, *Record of Dong Custom*, p. 184. 杨, 侗族风俗志, p. 184.

¹⁰⁰ Fu and Yu, *Custom of Nine Stockaded Village*, p. 185. 傅和余, 九寨民俗, p. 185.

village gate, forcing the visitors to stop. While guest arrive, they sing the blocking road song, then after antiphonal singing they let the guests into the village.¹⁰¹

Drinking song

The drinking song is usually sung during meals and when drinking rice wine to welcome guests. Most of the content is to show respect, compliments, congratulations, thankfulness, praise.

Stepping onto the stage song

Stepping onto the stage song is sung during the festival of Stepping onto the singing stage or at a party of collective guests (see Appendix 2, A.2.2.2, Dong song, Stepping onto the stage song).

Mourning song

Mourning songs are sung when people feel sad, mainly on sorrowful occasions such as funerals. They believe that dead people cannot hear any talking, only singing.¹⁰²

Love song

The Dong people hope to attract a partner mainly through singing. If they are satisfied with each other, they use singing to do further communication and establish a love relationship. There are many love songs and in terms of timing, the love songs are mostly sitting at night song and playing mountain song.¹⁰³

Sitting at night song

The sitting at night song is a love song at night, a custom of the southern Dong area. When dusk is failing, after dinner, the young men of the same clan will go

¹⁰¹ Fu, *Dong Folk Literature*, p. 81. 傅, *侗族民间文学*, p. 81.

¹⁰² *Ibid.*, p. 85.

¹⁰³ Yang, *Record of Dong Custom*, p. 177. 杨, *侗族风俗志*, p. 177.

together to look for girls to play to, carrying a lantern or flash light and a Chinese lute, playing and singing. The girls from another clan are already gathered in a public hall or drum tower, waiting for the young men to sing their song. This collective activity of singing at night is called 'Sitting at night'.¹⁰⁴

Playing mountain song

The playing mountain song is the love song of the daytime in the northern Dong area. When men and woman see each other from afar on the hills, the men sing at first with great gusto, and the women reply in song. Slowly they move towards each other and sit down facing each other at about 3m' distance, and sing love songs until dusk.¹⁰⁵ Alternatively, in the market men and women separate into several groups each of three or five people, looking for a playmate.¹⁰⁶

Work song

Work song is a common rhythmical song sung to accompany repetitious work. It works as an order to coordinate collective work in the same tempo, and also as a song to relieve the pressure of the work. A typical example is that used when people pull heavy timber (see Appendix 2, A.2.2.2, Dong song, Work song).

Children's song

Dong people all start with these songs to learn singing and accept initial oral education. There are many interesting children's songs, to form a happy childhood for children and enlighten their life (see Appendix 2, A.2.2.2, Dong song, Children's song).

¹⁰⁴ Fu, *Dong Folk Literature*, p. 50. 傅, *侗族民间文学*, p. 50.

¹⁰⁵ Geary and others, *The Kam People of China*, p. 248.

¹⁰⁶ Fu, *Dong Folk Literature*, p. 51. 傅, *侗族民间文学*, p. 51.

● Dong Verse

According to Zhang's research, verse in Dong language is called 'Lei Ci', 垒词 (composed by piling up words). It is composed of rhythmic words with various contents. Dong verse (piled words) developed on the basis of primitive work, 'Ye' (Yeeh, work song).¹⁰⁷ Ye was the spoken part to serve as a foil to folk collective dance and song, and as time went by people used this particular word to name this form of dancing and singing.¹⁰⁸ Ye is an art form of dancing and singing with poetry, music and dancing all in one. It is the origin of Dong song, Dong verse, and dance. Then Ye became 'Lei', only recited as a new style of verse. Dong verse and Dong song are used by turns on different occasions such as singing at festivals, rituals, marriage, death and public meetings, so the content of Dong verse is similar to Dong song. It is also an important way to pass on and spread knowledge, express goodwill, and resolve conflict.¹⁰⁹ The Dong verse can be classified as genesis words, sacred words, lyric words or didactic words, according to the content and aim.

Genesis words

Dong genesis words recite the history of origin of heaven and earth, mankind, the world, and are used both to cherish the memory of ancestors and to educate future generations (see Appendix 2, A.2.2.3 Dong verse, Genesis words). Only a few people are capable of this, among them the Dong priest, as the heritage of this knowledge is taught by a Dong priest to his apprentice. There are many Dong genesis words concerning, 'Origin of the World', 'Origin of Things', 'Origin of Mankind', 'Where Mankind Comes From', 'Where Dong Ancestors Came From', 'Mankind's Root', etc. For example, the 'Origin of the World' consists of the 'Making of Heaven and Earth', 'Dong Ancestor', 'Kuan'.¹¹⁰ It broadly describes ancient Dong people's life, and reflects the Dong ancient ancestor's view of the world.

¹⁰⁷ Zhang, *Exploration of Dong Art and Literature*, p. 182. 张, *侗族艺苑探寻*, p. 182.

¹⁰⁸ *Ibid.*, p. 175.

¹⁰⁹ Fu, *Dong Folk Literature*, p. 102. 傅, *侗族民间文学*, p. 102.

¹¹⁰ *Ibid.*, p. 104.

It involves the explanation of various natural phenomena, as well as depicting the of evolution of social life, including the origin of mankind, the flood, the migration and settling down, the marriage system, customs, national relationships, village rule and folk agreements. It edits together creations of different periods to represent a complete, grand, coherent long historical scroll of Dong history with rich contents. The first part has is a wide-ranging myth, but the other two parts are comparatively close to the historical facts. So it has both literary value and the value of historical science.¹¹¹

Sacred words

Sacred words are used in sacred activity. Dong people not only revere heaven and earth and ancestors, but also revere different spirits. Because they believe a spirit inhabits all natural creation, so all natural creation should be revered. Many sacred words are generated in the sacred activity of worshipping all spirits. Reciting sacred words is intended to please the spirit, then to pray for the blessing of the spirit to dispel disaster and obtain welfare. Therefore, sacred words is a spiritual creation from a time when the ancient Dong productive forces were very low, and Dong people attempted to overcome the natural forces to achieve better life and development, with an obvious utilitarian purpose. From the perspective of content, the ancient sacred words represent the life in ancient times, reflecting ancient Dong people's thought, feeling, hopes and ideals.¹¹² It mixed deities and mankind, history and legend, fantasy and reality, all woven into an organic spiritual creation. Dong sacred words can be said to be the primitive oral religious scripture of the Dong.

When a village builds its drum tower, before erecting the main structure the hand-ink master holds a ceremony to pray for safety and success in construction. The hand-ink master will sacrifice a red cock and incant the sacred words, 'Words of killing cock', '杀鸡咒' (see Appendix 2, A.2.4.2 'Words of killing cock').

¹¹¹ Fu, *Dong Folk Literature*, p. 104. 傅, *侗族民间文学*, p. 104.

¹¹² *Ibid.*, p. 113.

Lyric words

Lyric words developed from sacred words. This form of verse is only used in the North Dong area. In the activity of courting between a young man and a young woman, they sing love songs and recite lyric words by turns to express a favorable impression.¹¹³

Didactic words

The main content of Dong Didactic words is to explain reason and truth. The content is very rich: the aim is to discern the way of the world, find out rights and wrongs. Didactic words present a clear, lively description of reason and truth, very touching and easy to understand. Such verses are always used to inspire people's minds, teaching them reason and truth, therefore making people obeys the rule with both ability and good morals.¹¹⁴ There are three main kinds of didactic words; they are the Kuan word, the Principle word, and Congratulation and eulogy.

Kuan word

Kuan word is to record and explain the history of the Kuan, the Kuan law and rule (see Appendix 2, A.2.2.3 Dong verse, Kuan word). Kuan word is the most important way of promulgating the Kuan law and rule. There has to be a specific person to recite the Kuan word, who is familiar with Kuan law and rule, and is called a Kuan Master. They have high prestige and some of them are Kaun leaders.¹¹⁵

Principle word

Principle word adopts an exaggerated means of expression, trying to find out and record the principle of a thing, object, people and world to reveal the truth and reason behind nature and society. Because there are many principles,

¹¹³ Fu, *Dong Folk Literature*, p. 120. 傅, *侗族民间文学*, p. 120.

¹¹⁴ *Ibid*, p. 125..

¹¹⁵ Deng and Wu, *The Kingdom without King, Dong Kuan Research*, p. 68. 邓和吴, *没有国王的王国*, p. 68.

Dong people have many principle words to guide their life and production, such as proverbs, or pithy formulae.¹¹⁶

Dong people like to live together, so have the proverb: 'living alone will bring disaster'. The house must have water around it, because 'having a water source will bring a money source'. From the record of Fu and Yu, the hand-ink master has a pithy formula for house design as follows: 'The height of the house meets eight, prosperity for ten thousand years'; 'The depth of the house meets eight, prosperous family both economically and demographically'.¹¹⁷

Congratulation and eulogy

Congratulation and eulogy are part of social etiquette, showing good will to other people, expressing the sense of social communication (see Appendix 2, A.2.2.3 Dong verse, Congratulation and eulogy). As Fu says, this is because people want to receive from others well-wishing or praise, and it is also good manners to wish, and to praise other people. This is human nature in social communication, which is close to life.¹¹⁸ For example, in the construction of a house, when the main beam is installed the hand-ink master will throw the prepared candy, glutinous rice cake, and red envelopes to the ground and say words of congratulation.

● **Dong story**

Dong people grow up with stories. Children usually spend the long night by sitting around the fireplace or gathering in the drum tower to listen to old men telling stories. Various themes recur in Dong folktales: diligence, courage, intelligence, resourcefulness, loyalty and helpfulness are extolled. Selfishness, backwardness, an indiscriminate scorn of the poor and a deference to the rich, also an undiscerning admiration of what is new and a rejection of what is old, are deprecated. People are urged to be kind-hearted, thus traditional Dong oral knowledge reflects and supports the kindness that characterizes Dong society,

¹¹⁶ Fu, *Dong Folk Literature*, p. 130. 傅,《侗族民间文学》, p. 130.

¹¹⁷ Fu and Yu, *Custom of Nine Stockaded Village*, p. 176. 傅和余,《九寨民俗》, p. 176.

¹¹⁸ Fu, *Dong Folk Literature*, p. 145. 傅,《侗族民间文学》, p. 145.

and despises wickedness.¹¹⁹ Through telling of stories Dong people gain knowledge. This is one part of the oral education, thus enhancing their cultural and moral nurturing.

Legend of people

Legend of people narrates stories of famous people with great strength, courage, and intellect, who have led people against aggression and helped develop the homeland (see Appendix 2, A.2.2.4 Dong story, Legend of people). The legend of Sa Sui tells that she led the Dong people against outside invasion. She is brave and brilliant, and has defeated enemies many times. After she died, people revered her as a female ancestor deity, and village protector deity.

Myth

Dong myth reflects the explanation of Dong ancestors about the origin of the world, heaven and earth, and mankind. It represents the Dong ancestors' exploration and thinking about the world, also their struggle and compromise with nature. Dong people create the story according to their understanding of nature and their needs in the process of remarking nature. As Fu says, on one hand, it shows the unbreakable will to struggle with nature and courage to conquer nature, on the other hand it represents their naive understanding and compromise with nature.¹²⁰ When their productive force is low, the natural phenomena dominate far beyond their maximum limit of body and technique. They have to use their imagination to fill the blank part of the world which they cannot touch, so imagination becomes mixed with real life in experience of the world. The story 'swallow and china fir' addresses where the china fir came from.

Love story

Dong love story often highlights a struggle for freedom of choice in marriage, but also praises steadfast love, expressing a wonderful hope for love.

¹¹⁹ Fu, *Dong Folk Literature*, p. 151. 傅,《侗族民间文学》, p. 151.

¹²⁰ *Ibid.*, p. 151.

Story of customs and things

In the process of life, Dong people rely on the natural environment and create a lot of things and customs. Based on this they create a lot of fantastic stories. Fu indicates how these stories show wonderful and fanciful thoughts, representing an interesting and colourful image of culture.¹²¹ There are also many stories about the drum tower (see Appendix 2, A.2.2.4 Dong story, story of custom and thing).

2.2.2 Other symbols

Language is a powerful and basic tool to define and promote development of other symbols. As an outcome of other sensible and creative abilities of humans, there are also other symbols to accompany oral culture, or for when people are absent and there is no chance to sing and talk. They use other symbols for transmitting meaning and have many kinds, like symbols of natural material, acoustic codes, codes of behavior and symbolic artifacts. These also are systemic symbols with their own meaning and logic.

When elders need to rally people at the drum tower, the Kuan leg would beat the drum to announce it. If the affair is an emergency, the tempo is hurried and strong. If it is a common affair, the rhythm of the drum is low and slow. But as the time closes towards the start of the meeting, the rhythm of the drum becomes quicker and stronger to hasten people to join the meeting. Since the political organisation Kuan constitutes the law, they erect a stone as the symbol of the law, meaning the law is unshakable, and everyone should obey it. The drum tower can be regarded as a multiple symbol, representing china fir, clan, village, and social centre.

An artificial symbol can last a long time and dominate a place. When the ghost master dispels an evil spirit, he hangs a mark on the lintel of the door to prevent a ghost entering the house. At the cross roads, people think there are not only many people passing by, but also many ghosts walking through, so there is

¹²¹ Fu, *Dong Folk Literature*, p. 234. 傅, *侗族民间文学*, p. 234.

potential danger. They hire a ghost master to place a stele called 'Tai Mountain Stone is brave to be here' (泰山石敢当) to suppress vicious Qi (air) (Figure 23). In daily life, if a farmer is busy with his work and has to leave his firewood beside the road for a while, he will use grass to make a 'grass-mark' and put it on the firewood. The grass-mark represents that this bundle of firewood is belonging to someone, so no one should take it. People's birth, marriage, death, and illness, also have a corresponding grass-mark to hang on the door (see Chapter 6). It is an artificial symbol to express information or intention (Figure 24). These signs also designate some rules to obey when people intend to step across the threshold. For instance, when someone is ill or a new infant has been born, there would be a grass-mark on the front door to remind people not to disturb the family or enter the house.



Figure 23. Tai Mountain Stone.
Photograph by Derong Kong.



Figure 24.
Grass-mark to prevent
a ghost entering the
house.
Photograph by Derong
Kong.

After Dong people learned the above oral knowledge and symbols, they had their own ideology (culture, religion, social construction, etc) and ability (skill, technique, knowledge, tools, etc). On this foundation, Dong people have a way to define, limit, construct, read and use their living space and social space. This ideology forms their conception of space, stating the pattern, order, classification, and meaning of space. With the same conception people are free to communicate on the same cognitive platform. This ability lets Dong people make symbols and construct space. The spatial activity in their space is the external expression of their culture and custom; the place is platform for their activity which represents their conception of space. In this article the living space is the vernacular dwelling, the social space is mainly relevant to the drum tower, and the rest of the village spaces which relate to their custom are also involved.

2.2.3 Use of oral knowledge in social activities

Activity of production: production of agriculture, construction of architecture, etc. In the construction of the drum tower and dwelling, there are many rituals and rules which need to be followed in the construction process, and at each stage the oral culture is practised and inherited (see Chapter 4 and 5). The study of a Dong carpenter is also involved in a live project, when the apprentice makes a wooden component under the supervision of the hand-ink master, the pithy formula is taught with the progress of design and construction of the building. During the construction of the building, through close contact with the project, the apprentice can absorb much detailed information, through spoken words from the master. Compared to this, a text book cannot record such detailed and vivid information and experience (see Chapter 3).

Activity of custom: Social communicational activity, religious activities, festivals, customs of life, entertainment, etc, Dong songs, piled words and stories are applied in many activities and customs. The style of expression represents the basis of Dong social activity, such as choral song, antiphonal song and single song. Antiphonal song and choral song are sung as a collective communication of social groups, so becomes the joint of social connection. In the ceremony of a new drum tower or a new house, the guest sings songs to

show goodwill to the host, and the host sings songs in acknowledgment.¹²² Collective singing provides experience through all senses and becomes the basic activity to reinforce and transmit collective consciousness. This is an important part of Dong social education, letting the children and young people participate in social life through social activity, which bonds the crowd together (see Chapter 6 and Chapter 7).

Kuan activity: Political activity, judicial activities, military activity. For instance, the establishment of Kuan law and rule is working together through the Kuan leader, village elder, Dou elder and villager in the drum tower, so that everyone can share the common recognition (see Chapter 6).¹²³

2.3 Conclusion

As discussed in Chapter 1 Literature review, 1.3.1 Oral knowledge, the gaps in current research are identified. In order to fill these gaps, I collected more materials from my fieldworks and checked the reliability of the books. Then I made systematic analyses of oral knowledge and the education process. I also developed new discussion to understand the function and significance of oral culture in the construction of society, and its cooperation with other systems and influence to other systems. All these works have been presented in this chapter, such as the social structure, role of people, classification of oral culture, education process, other symbols, the use of oral culture, etc. Below is a summary of key issues from this chapter.

Collective experience

All oral communication, no matter in what form, plays an important role in the circulation of knowledge. The songs and verses are the summing-up of life experience, transforming the abstracted experience to logical, typical and readable oral knowledge.¹²⁴ The creation of Dong oral knowledge brings

¹²² Fu and Yu, *Custom of Nine Stockaded Village*, p. 194. 傅和余, *九寨民俗*, p. 194.

¹²³ Xu, 'Drum Tower, the Cultural Field Of Conclusion and Implementation of Dong's Customary Law', 52. 徐, '鼓楼—侗族习惯法规范订立与实施的文化场域', 52.

¹²⁴ Victor Witter Turner, *Dramas, Fields, and Metaphors : Symbolic Action in Human Society*, (London : Cornell University Press, 1974), p. 25.

together individual experience and collective experience. Individual experience is like a single experiential line. In social life different people would have a different curve and character of experiential line, according to their own condition, and when external conditions make differences in choice and action, people remember the familiar experience, and record what they think is important.¹²⁵ Also as Prof. Blundell Jones says 'the tradition and all its supporting knowledge gradually changes as it is carried down, and the parts that are no longer useful are abandoned, while new experiences are introduced'.¹²⁶ The oral knowledge has undergone continuous transformation in the process of being passed on. Each time songs are sung; lines may be omitted or added, depending on the singer and circumstances. Keeping close context with things, the continuous flow from things brings confusion, newness, surprise, transformation.

Caused by the Dong clan and social system, most of its customs and activities require the relevant group of people to participate. In the process of public and collective activities, individual experiences are shared, and thus confirmed as a collective experience.¹²⁷ When multiple experiential lines overlap and are positioned with the same nature as coordinates, in the experiential map there might be some strong points or a weak points, different curves of lines. This could be read as a map of the collective experience (Figure 25). These collective experiences are the thinking and standard explanation of the world.¹²⁸ It forms Dong people's initial worldview.

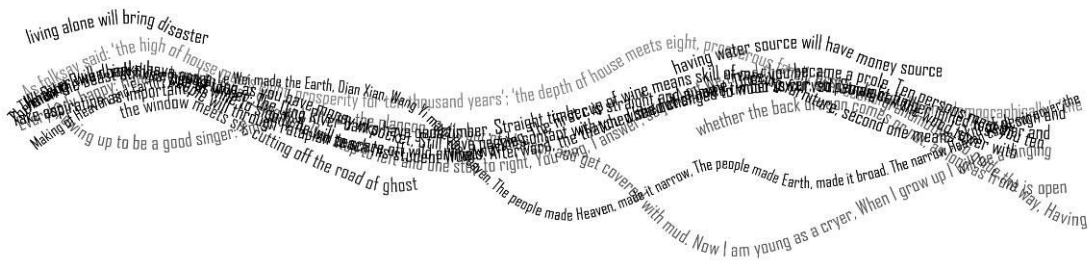


Figure 25. Map of collective experience. Drawing by Derong Kong.

¹²⁵ Berger and Luckmann, *The Social Construction of Reality, A Treatise in the Sociology of Knowledge*, p. 57.

¹²⁶ From supervision, Peter Blundell Jones, 3rd November 2014.

¹²⁷ Chwe, *Rational Ritual: Culture, Coordination, and Common Knowledge*, p. 22.

¹²⁸ Geertz, *Local knowledge*, p. 28.

Oral culture has been established by Dong people through long social practice. The oral culture passed by mouth transcends the limitations of space and time to follow generations.¹²⁹ Many generations' choices and collective experiences overlap to, form a typical pattern of culture. Their lives have been contained in a limited world, every generation living in a similar environment, so what they face is cycles of seasons and lives, with no big change or development in their life. They believe their own experience, but also can trust the experience from their fathers and grandfathers.¹³⁰ When the descendants live on the land where their ancestors used to live, they just need to fit their lives into old experience, and fit into the preformed scheme or setting, following this preformed pattern of life which implies the principles and rules of daily life.¹³¹ They were ensured a life the same as their father and grandfather without any worry.

Interactional process

Oral knowledge and social activity exist in an interactional process. Social activity is a pivotal joint in this process, as oral knowledge is generated from social activity, then learned and practised in social activity.¹³² Peoples' production, architectural construction, customs, rites and festivals became one important way to transmit their faith and culture, to present their special cultural customs.

After oral knowledge becomes a narrative interpretation system, people also take this knowledge as the principle and rule to guide all following social activity. The experience and knowledge form the procedure and rule for activity, and then the activity is the application of oral knowledge.¹³³ They depend on each other. Every year, every season, when they use oral knowledge and follow the custom, they repeat and confirm it, so the oral culture and system are perpetuated and become classic.¹³⁴ In the activity their shared knowledge and collective conception becomes deeper, also inherited in this process.

¹²⁹ Berger and Luckmann, *The Social Construction of Reality, A Treatise in the Sociology of Knowledge*, p. 54.

¹³⁰ Fei, *From the soil: The Foundations of Chinese Society*, p. 51. 费孝通, *乡土中国*, p. 51.

¹³¹ Bartlett, *Remembering: A Study in Experimental and Social Psychology*, p. 20.

¹³² Fu and Yu, *Custom of Nine Stockaded Village*, p. 147. 傅和余, *九寨民俗*, p. 147.

¹³³ *Ibid.*, p. 198.

¹³⁴ Berger and Luckmann, *The Social Construction of Reality, a Treatise in the Sociology of Knowledge*, p. 59.

This is the oral culture for all Dong people; it is the basis for following education of specific knowledge and activity. Oral culture as a cultural system helps the Dong people to choose an appropriate way to conduct their life. In the next chapters, the implementation of oral culture and knowledge in carpentry education will be presented and analysed (see Chapter 3). In the construction process, there are also many cases of the application of oral culture, which will be examined in detail in Chapters 4 and 5. Finally, oral material will also be involved in the analysis of use and reading of building set out in Chapters 6 and 7.

Chapter 3

Dong architecture and education in carpentry

3.1 Dong architecture

3.1.1 Ganlan building

Dunzhen Liu's research indicates that since the later Neolithic period (about 3000-1500 B.C.), ganlan structure (made of bamboo or wood, using column-and-tie structure, connected by mortise and tenon) was used in the lower reaches of the Yangtze River according to archaeological excavations, such as Wuxing and Qianshanyang ruin (吴兴, 钱山漾, about 2700 B.C.), and ancient pottery in form of a roof discovered at Yingpan, Jiangxi Province (营盘, 江西省, later Neolithic period).¹ Liu's book was finished in 1965, then in a water conservancy project (1973), the Hemudu culture, 河姆渡文化, 4360-3360 B.C. was discovered. In a following archaeological excavation (1973, 1977), many remains of building foundations and components of wooden mortise and tenon joints were found in the second (about 3600 B.C.), third (about 4000 B.C.) and fourth cultural layers (about 5000 B.C.) according to C14 tests (Figure 1-4).² This is the earliest remains of a ganlan building yet discovered. After 1980s, there were more archaeological discoveries. In the research Ling Cai, reporting on recent archaeological excavations, she says ganlan building was used in the middle and lower reaches and south of the Yangtze River (South of China) from the middle and later Neolithic period (about 5000-1500 B.C.) up to the Han dynasty (202 B.C.-8 A.D., 25-220 A.D.).³ And Liu says that the ganlan structure also has been used in Japan, Vietnam, Malaysia peninsula and islands of south Asia until today.⁴ In her research, Cai also says ganlan was widely used by many nations, which included the ancestors of the Dong.⁵

¹ Liu, *History of Ancient Chinese Architecture*, Second edition, pp. 26-28. 刘, *中国古代建筑史*, 第二版, pp. 26-28.

² HEMUDU SITE MUSEUM, 'The ruins of Hemudu' <<http://www.hemudusite.com/CN/yz-43.aspx>>[accessed 15 March 2014]. 河姆渡遗址博物馆, '河姆渡遗址' <<http://www.hemudusite.com/CN/yz-43.aspx>>[accessed 15 March 2014]

³ Cai, *Traditional Villages and Architecture of Dong Nationality's Habitation Region*, p. 125. 蔡, *侗族聚居区的传统村落与建筑*, p. 125.

⁴ Liu, *History of Ancient Chinese Architecture*, Second edition, p. 1. 刘, *中国古代建筑史*, 第二版, p. 1.

⁵ Cai, *Traditional Villages and Architecture of Dong Nationality's Habitation Region*, p. 125. 蔡, *侗族聚居区的传统村落与建筑*, p. 125.



Figure 1. The imaged life scene of Hemudu people.

Extract from Hemudu Site Museum.⁶



Figure 2. The ruin of Hemudu.

Extract from Hemudu Site Museum.⁷



Figure 3. A wooden component with tenon. Excavated in Hemudu culture period (fourth culture layer, about 5000 B.C.), at the ruin of Hemudu, in 1977.带榫木构件, 河姆渡文化一期, 1977

年河姆渡遗址出土. Extract from Hemudu Site Museum.⁸



Figure 4. The wooden component with mortise. Excavated in Hemudu culture period (fourth culture layer, about 5000 B.C.), at the ruin of Hemudu, in 1977.带卯木构件, 河姆渡文化一

期, 1977 年河姆渡遗址出土. Extract from Hemudu Site Museum.⁹

⁶ Hemudu Site Museum, 'The scene of daily life-1', *Hemudu Site Museum* <<http://www.hemudusite.com/CN/p-44.aspx>> [accessed 15 March 2010]. 河姆渡遗址博物馆, '日出而作场景-1', *河姆渡遗址博物馆* <<http://www.hemudusite.com/CN/p-44.aspx>> [accessed 15 March 2014]

⁷ Hemudu Site Museum, 'The ruin of Hemudu', *Hemudu Site Museum* <<http://www.hemudusite.com/CN/yz-43.aspx>> [accessed 15 March 2014]. 河姆渡遗址博物馆, '河姆渡遗址', *河姆渡遗址博物馆* <<http://www.hemudusite.com/CN/yz-43.aspx>> [accessed 15 March 2014]

⁸ Hemudu Site Museum, 'The wooden component with tenon', *Hemudu Site Museum* <<http://www.hemudusite.com/CN/p-159.aspx>> [accessed 15 March 2014]. 河姆渡遗址博物馆, '带榫木构件', *河姆渡遗址博物馆* <<http://www.hemudusite.com/CN/p-159.aspx>> [accessed 15 March 2014]

⁹ Hemudu Site Museum, 'The wooden component with mortise', *Hemudu Site Museum* <<http://www.hemudusite.com/CN/p-158.aspx>> [accessed 15 March 2014]. 河姆渡遗址博物馆, '带卯木构件', *河姆渡遗址博物馆* <<http://www.hemudusite.com/CN/p-158.aspx>> [accessed 15 March 2014]

Most researches indicate that Dong is one branch of the Baiyue (百越) nation. From Jing sun's research, she deduces that the Dong retain many similar aspects of life to the ancient Baiyue people, so the nest dwelling of the Baiyue has also been inherited by the Dong.¹⁰ According to drawings on books written by Han sources and archaeological excavations, Luo also claimsthe earlier ganlan building seems to have the character of a nest dwelling, then the Dong people developed the storied ganlan building (Figure 5). For instance, an Eastern Han dynasty (25-220 A.D.) 'ganlan style' pottery model of house, excavated at Hezhang County, and kept at Guizhou Province Museum, 东汉'干阑式'陶屋模型, 赫章县出土, 收藏于贵州省博物馆, provides a reference for the study of Dong ganlan building (Figure 6).¹¹



Figure 5. Ganlan Building, at Tang'an village. Photograph by Derong Kong.



Figure 6. Eastern Han dynasty 'ganlan style' pottery model of house. 东汉'干阑式'陶屋模型. Extract from Luo, *Folk Dwelling of Guizhou*, p. 84. 罗, *贵州民居*, p. 84.

¹⁰ Jing Sun, 'Dong Architectural Art, Culture of The Drum Tower', *South Architecture*, 2(1990), 80. 孙, 静, '侗族鼓楼建筑艺术与鼓楼文化', *南方建筑*, 2(1990), 80.

¹¹ Luo, *Folk Dwelling of Guizhou*, p. 84. 罗, *贵州民居*, p. 84.

From the aspect of language, the name Dong has a close relationship to their ancestor's dwelling. 'Gaeml' is the name of the Dong in Dong language, and has the implicit meaning of a fish nest. According to one Dong folk saying collected from my field survey: 'The Dong have a tower (louc), and the fish have a nest (gaeml)'.¹² From Min Zhang's research, 'gaeml' also has the similar pronunciation to 'gungle', the bird's nest. And it has a similar language structure to 'gongc', storied building, as both share the same origin of sound. He found that the pronunciation of 'gaeml' is the original sound, and that 'gungle' and 'gongc' have developed from it. 'Kam', 干 is the sound translation of 'gaeml'. So the name of Dong contains the implicit meaning that Dong ancestors were people who lived in nests.¹³ This is similar to the records of ancient books about the ancient people's living mode. In the book 'Zhuangzi. Daotuo Chapter', '庄子. 盗跖篇', written by Zhou Zhuang, 庄周 (about 389-286 B.C.), it is recorded: 'At ancient age, beasts are many, people are less, so people all have nest dwellings to avoid beasts, collect nut and grain at daytime, stay on tree after sunset, so are called the people of 'Youchao-shi'. (古者禽兽多而人民少, 于是民皆巢居以避之, 昼拾橡栗, 暮栖木上, 故名之曰'有巢氏'.) Also in the book 'Hanfeizi. Wudu', '韩非子. 五蠹', written by Fei Han, 韩非 (about 280-233 B.C.), it is recorded: '...they built timber to be a nest, in order to avoid harm'. (构木为巢, 以避群害.) In my field survey, the scholar Yong Zhang told me that the name of Dong 'gaeml' also has the implicit meaning of the people enclosed by a fence, or hidden people.¹⁴ Yet there is no ruin or existing nest dwelling for further study.

Then Dong ancestors as part of the Liao (an ethnic group later than Baiyue) have been recorded in many history records written by the Han, and their house also been recorded as 'ganlan', 干栏. And these are also the books consulted by Luo and Cai.

'The Book of Wei. collected biographies eighty-ninth volume. Liao' written by Shou Wei in 551—554 A.C., '魏书.列传第八十九.獠', 魏收, recorded: '...piled up wood around tree, with people living in it, called 'ganlan', the size of ganlan depends on the size of the family' (...依树积木, 以居其上, 名曰'干兰', 干兰大小, 随其家口之数.).

In the *'History of the Northern Dynasties. collected biographies eighty-third volume. savage Liao'* written by Yanshou Li in 643—659 A.C., '北史. 列传第八十三. 蛮獠', 李延寿, the house is recorded as 'ganlan', '干阑'.

¹² From my field survey, Wenli Lu, Jitang village, January 2014.

¹³ Zhang, *Exploration of Dong Origin*, p. 20. 张, *侗族探源*, p. 20.

¹⁴ From my field survey, interview with Yong Zhang, Kaili, February 2013.

In the *'Old Book of Tang. collected biographies one hundred and forty-seventh volume. southern barbarian southwest barbarian'* written by Xu Liu in 941-945 A.C., '旧唐书.列传第一百四十七.南蛮西南蛮',刘昫, it is recorded that 'people live together in storied buildings, climbing a ladder to the floor, called 'ganlan' (人并楼居,登梯而上,号为'干栏'). There also has many other records, most of them called the Dong house, '干栏' or '干阑'.

Above are the names of Dong ancient houses recorded in Han history in Han written language, as '干栏', '干阑', '干兰', but their pronunciations are the same, with the sound 'ganlan', which is the formal name to indicate the style of Dong house now, the ganlan building.

Also from Min Zhang's research, the name of a Dong dwelling in Dong language is 'yanc gongc' '然共' which means storied building house. 'Yanc' house, 'gongc' storied building, or 'yanc gaeml' '然干' means Dong house, also 'yanc' house or 'gaeml' in Dong.¹⁵ He also says, in ancient times, the pronunciation of 栏 was 'lan', its initial consonant was 'l', but its compound vowel 'an' and the tone were the same as 'yanc'. The word 'lan' probably was the sound translation of 'yanc'. And these two words share a similar meaning, the protection of things. As explained before, the ancient Dong house developed from the ganlan building. And because the term 'yanc gaeml' in Dong language is in reversed order compared with the Han language, so the sound translation of Dong house is 'ganlan',干栏, in Han language.¹⁶ The Dong people inherited the ganlan building which probably derived from living in a nest, and they still use the old name, 'yanc gongc' '然共' or 'yanc gaeml' '然干'. In my field surveys, I found people use Han written words to record the sound of Dong language which has an obvious disadvantage, as some pronunciations are missed or distorted. I think this is why the records from history books use similar words but differing from the Dong language. This concludes the descriptions of Dong ancestors' living status as preserved in language and books.

However due to by fire losses, building aging and other reasons, the existing Dong dwellings are normally no more than 200 hundred years old. The oldest known drum tower is at Zengchong village, built 1672 (according to literature review and field surveys). So this caused difficulty for research into Dong building. Current research can

¹⁵ Zhang, *Exploration of Dong Origin*, p. 34. 张, *侗族探源*, p. 34.

¹⁶ *Ibid.*, p. 20.

only rely on the above materials and existing buildings, thus many questions are still under exploration, like the origin of the drum tower, the development relation between different types of drum tower, the relation between the nest dwelling and ganlan building, and the development of earlier Dong building.

Nowadays ganlan building is the basic mode for the Dong, influencing the form and structure of all their buildings. Some places directly use ganlan building as one kind of drum tower, and ganlan structure was an important factor in the formative process of the drum tower, which is why the ground structure of the drum tower is still essentially that of a ganlan building. In Luo's research, he says the ganlan building achieves the need to adapt to the mountainous landform, with a limited availability of land, to maximize the use of terrain, expanding the fields. Without modifying the original landform, ganlan buildings can be supported by different heights of columns to elevate the floor, creating a level space for use along the slope (Figure 7, 8).¹⁷



Figure 7.
Ganlan building, at Tang'an
village. Photograph by Derong
Kong.

¹⁷ Luo, *Folk Dwelling of Guizhou*, p. 77. 罗, *贵州民居*, p. 77.



*Figure 8.
Ganlan building, at
Tang'an village.
Photograph by
Derong Kong.*

Column-and-tie structure

Ganlan building uses the column-and-tie structure. Its structural joint is manageable, flexible to provide excellent adaptability to this area's climate and geography as discussed before (Figure 9). When the foundation is hard to deal with, the carpenter only needs to place a pad stone as column base, so it is called 'house without base' (Figure 10). As Luo says, the structure also provides the possibility of variable form, and structural mode for further development.¹⁸



*Figure 9.
Column-and-tie
structure, at
Zhaoxing village.
Photograph by
Derong Kong.*

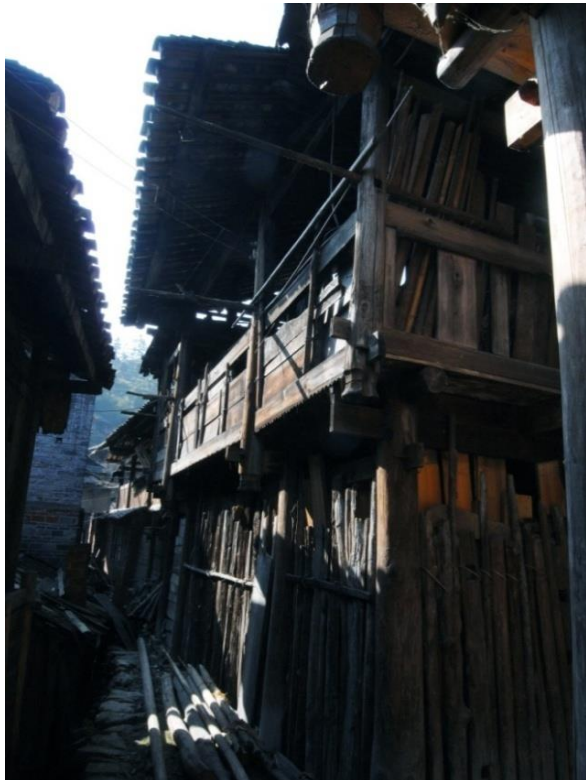
¹⁸ Luo, *Folk Dwelling of Guizhou*, p. 136. 罗, *贵州民居*, p. 136.



*Figure 10.
Column base.
Photograph by
Derong Kong.*

3.1.2 Dong house

In the southern Dong area, The Dong house is normally on three levels, with each floor extending 36-40 cm further out to expand the space for use (Figure 11). The ground floor is used for raising pigs, water buffaloes and chicken. There also is a storeroom to keep firewood, animal manure, and other items (Figure 12). The front door is on the ground floor. A stair at one side of the ground floor leads up to the first floor (Figure 13).



People live mainly at first floor level within their bedrooms, the fireplace room (which is both kitchen and living room), and a wide verandah (Figure 14).

*Figure 11. Jiliang Pan's house at
Xiaohuang village. Photograph by
Derong Kong.*



Figure 12. Ground floor in Dong house. Photograph by Derong Kong.

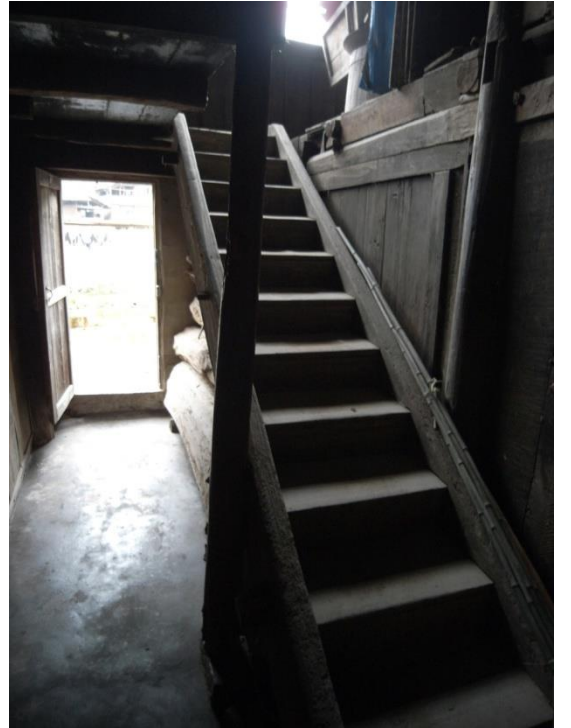
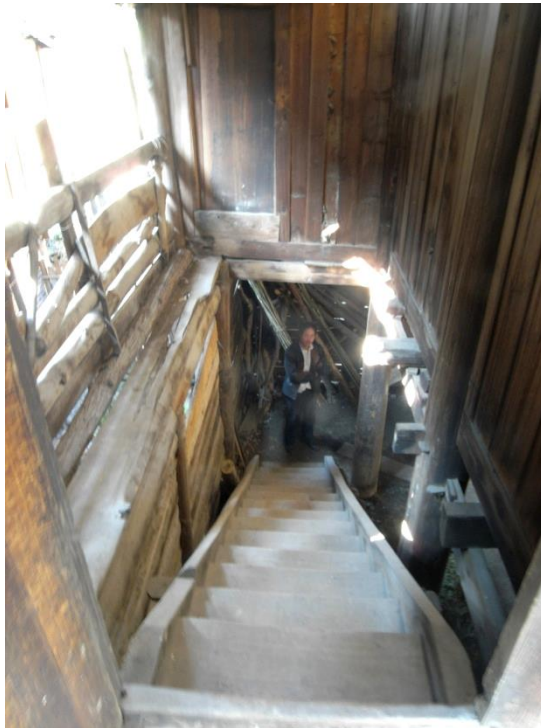


Figure 13. Stair in Dong house. Photograph by Derong Kong.

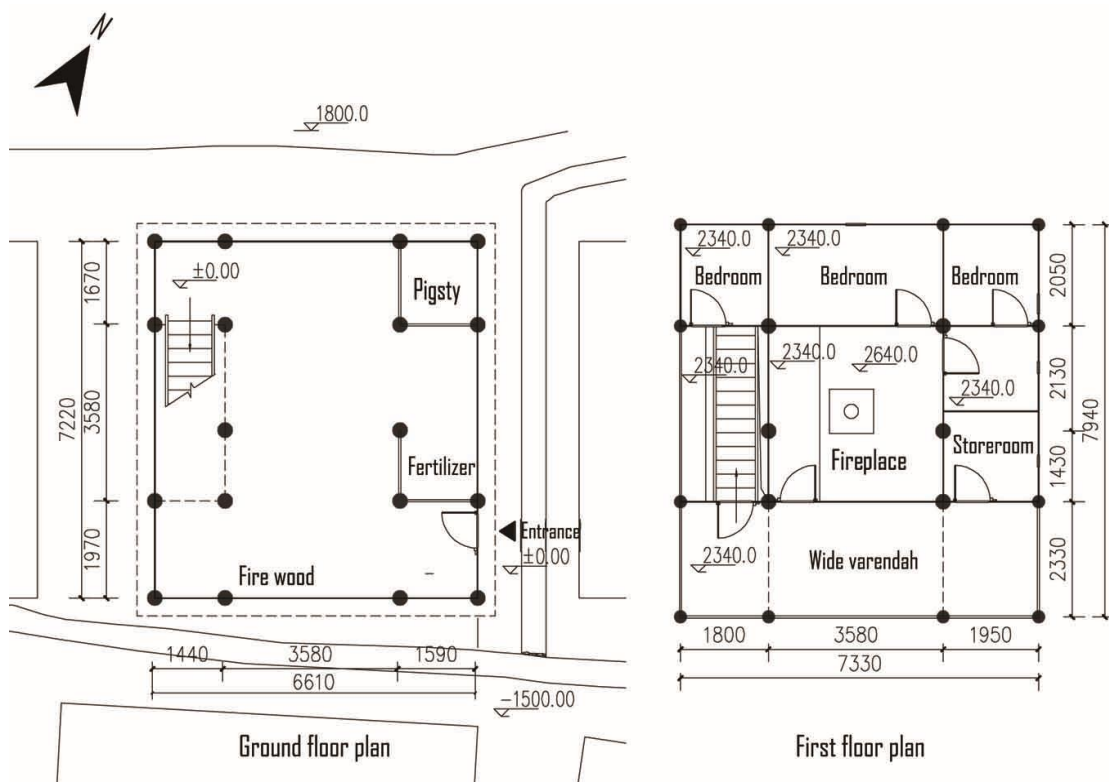


Figure 14. Typical southern Dong house plan, Jiliang Pan's house built in the 1950s at Xiao Huang village in Congjiang County, Guizhou Province. Survey and drawing by Derong Kong.¹⁹

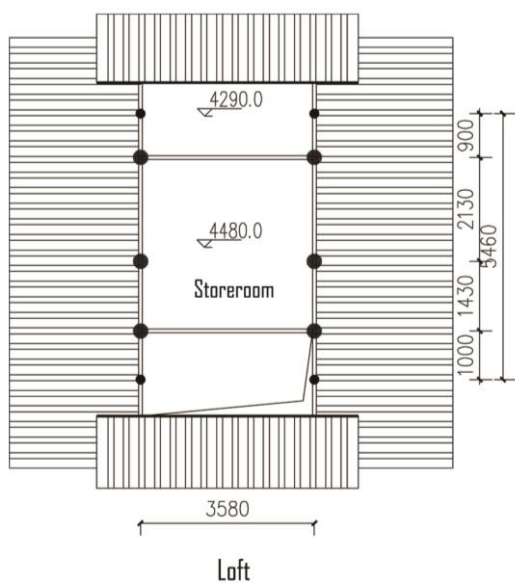


Figure 15. Loft plan of Jiliang Pan's house. Survey and drawing by Derong Kong.²⁰

¹⁹ From my field survey, Xiaohuang village, November 2010.

1. 中柱
Central column
2. 边柱
Eave column
3. 吊柱
Hanging column
4. 瓜柱
short column
5. 千斤枋
Thousand Jins tie-beam
6. 楼枕
Floor pillow
7. 过间枋
Crossing bay tie-beam
8. 双枋
Double tie-beam
9. 槽枋
Grooved tie-beam
10. 挑枋
Hanging tie-beam
11. 瓜枋
Short column tie-beam
12. 檩子
Purlin
13. 椽子
Rafter

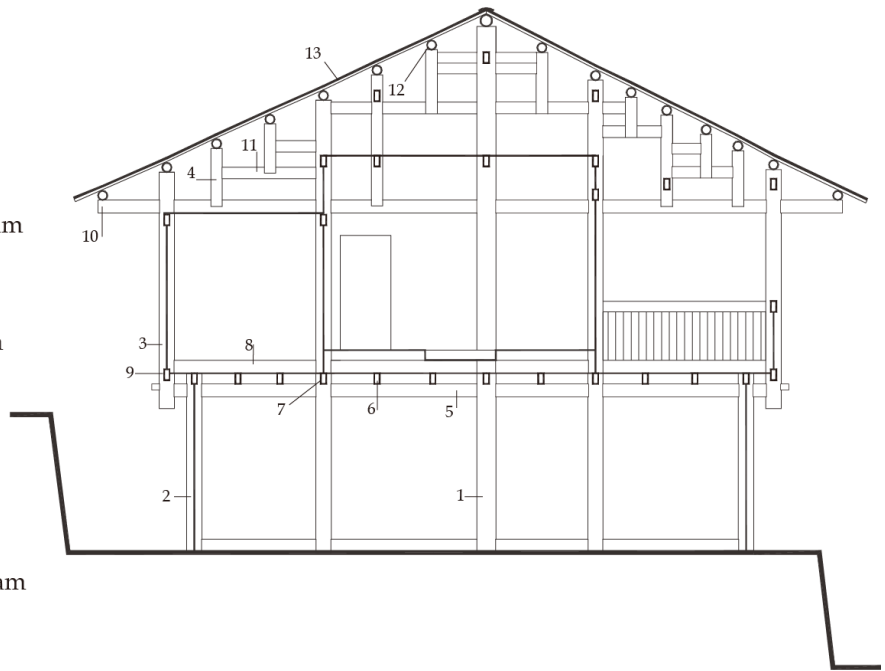


Figure 16. Section of Jiliang Pan's house and names of the components. Survey and drawing by Derong Kong.²¹



Figure 17. Wide verandah in Dong house. Photograph by Derong Kong.

The wide verandah, 宽廊, is a half open space at the front of the first floor reached by the stairs from the ground floor. It is an important space for the family, serving as a living area to meet and entertain guests in summer, a place for children to play and women to weave and work during daytime. During the hot weather of the summer, people sleep on

²⁰ From my field survey, Xiaohuang village, November 2010.

²¹ Ibid.

the verandah in a bamboo bed to enjoy the shade and breeze. At their leisure, people sit on the verandah smoking and chatting while they bask in the warm sunshine with a pleasant view in front of the verandah. One or two bamboo poles are placed on the rails of the verandah for drying washing and freshly dyed clothes. It also works as a transport space to connect the living area, the ground floor, and the loft (Figure 17,18).



Figure 18. Wide verandah. Photograph by Derong Kong.

The fireplace room is accessed by a door from the verandah. It is the most important room in a house. It is the centre of the house. It is also the centre of family life, and a fireplace represents a family. In the middle of the room is a stone or clay-made fireplace like a basin, locally called 火塘, fire pond (Figure 19). The pattern of a fireplace is a square about 1 m on each side, with some ornaments carved on the side stone slabs, like fishes or flowers. The whole fireplace is supported by a wooden frame installed in the house structure. This frame can be seen from the ground floor. Some fireplace frames are built above the beam and the floor boards are raised about 30 cm except for the entrance area, in which case the frame is hidden between the beam and the floor boards (Figure 21, 22).



*Figure 19.
Fireplace room.
Photograph by Derong
Kong.*



Figure 20. People eating around the fireplace. Photograph by Derong Kong.



Figure 21. Fireplace. Photograph by Derong Kong.

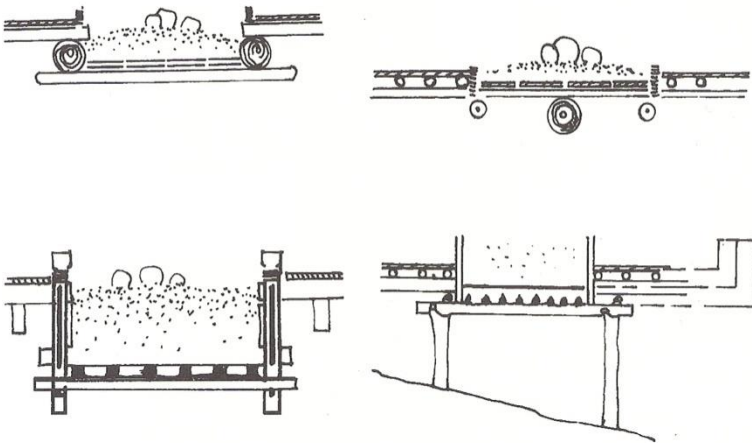


Figure 22.

Sections of fireplace.

Extract from Luo, *Folk Dwelling of Guizhou*, p.

111. 罗, *贵州民居*, p.

111.

The place of the ancestors is in the fireplace room at the side of the fireplace or the corner of the room. People usually cook and eat at this room (Figure 20). Most family communication and activity take place in this room. During the winter people spend most of their time sitting around the fire to chat and keep warm. Above the fireplace is a wooden hook or a rack to hang smoked meat or to dry other things. Old family members can sleep in this room, and it is their priority to choose this warm place.

Through the fireplace room, people can gain access to the bedrooms surrounding it. The bedrooms are of a limited size, merely enough for sleeping. The bedroom has a very small window, sized usually around 40cmX40cm and the light environment is gloomy. But the small window can reduce the thermal exchange with outside. The bedroom at the central back of the fireplace room is for an unmarried young girl (Figure 23), and the room next to the fireplace room also has a door that connects with the verandah. There is a bedroom above the stairs, accessed through a 30 cm wide plank installed beside the top of the stairs (Figure 24). This room is usually for a young boy.



Figure 23. Bedroom. Photograph by Derong Kong.



Figure 24. The Bedroom above the stair. Photograph by Derong Kong.

The loft can be reached from the wide verandah via a ladder or a stair (Figure 25). It maybe built with bedrooms for young men or storerooms to keep grain, cotton, and other miscellaneous items. The exposed structure and open floor provide an adequate ventilation and sunlight for drying grain (Figure 26).



Figure 25. The ladder and stair to loft. Photograph by Derong Kong.



Figure 26. Loft in a Dong house. Photograph by Derong Kong.

As the family grows, the house can be extended to either side. Many generations can live under one long roof with a long open veranda to connect the family groups, but each family has its own fireplace room. This house is called 'long house', 长屋 (Figure 27, 28). After several generations, some families may use boards to divide the long verandah in order to enclose their own verandahs. (The drawings and photos used in this chapter are mainly from Luo's book, Cai's book, and my field survey as referenced, as discussed in the literature review. The materials from Luo's book, and Cai's book and journal are

fairly reliable, based on their field surveys, housesurveys and drawings under cooperation with local design department and university, for example, the drawings of dwellings and the drum towers in Cai's journal and book.²² I also visited some buildings in my field surveys to check the reliability of their material.)



Figure 27. Long house at Zhaoxing village. Photograph by Derong Kong.

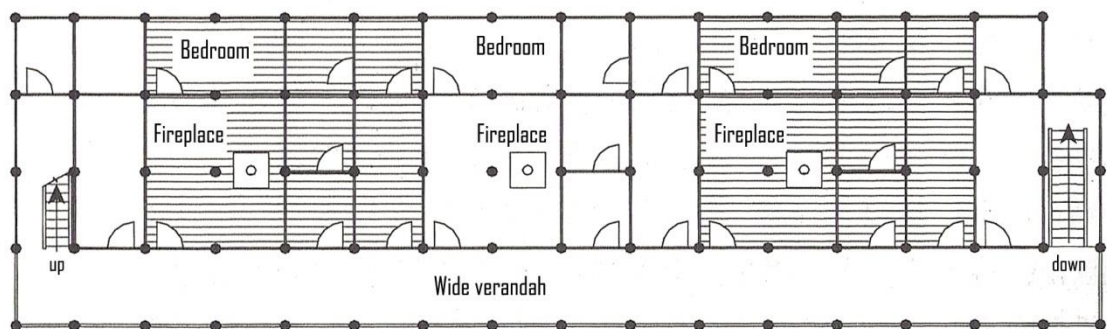


Figure 28. Plan of a long house of the Wu family at Baoli big village in Rongjiang County. Extract from Cai, *Traditional Villages and Architecture of Dong Nationality's Habitation Region*. Redrawing by Ling Cai, original from Deqi Luo, *Guizhou Dong Ganlan Building*, p. 37, p. 136. 蔡, 侗族聚居区的传统村落与建筑, p. 136, 蔡凌改绘自, 罗德启, 贵州侗族干阑建筑, p. 37.

²² Answered by Ling Cai in an email, August, 2010. And also from the appendix of her PhD dissertation. Ling Cai, 'The Research of Traditional Villages and Architecture of Dong Nationality's Habitation Region', (unpublished PhD dissertation, South China University of Technology, 2004), pp. 260-266. 蔡凌, '侗族聚居区的传统村落与建筑研究', (未出版博士论文, 华南理工大学, 2004), pp. 260-266.

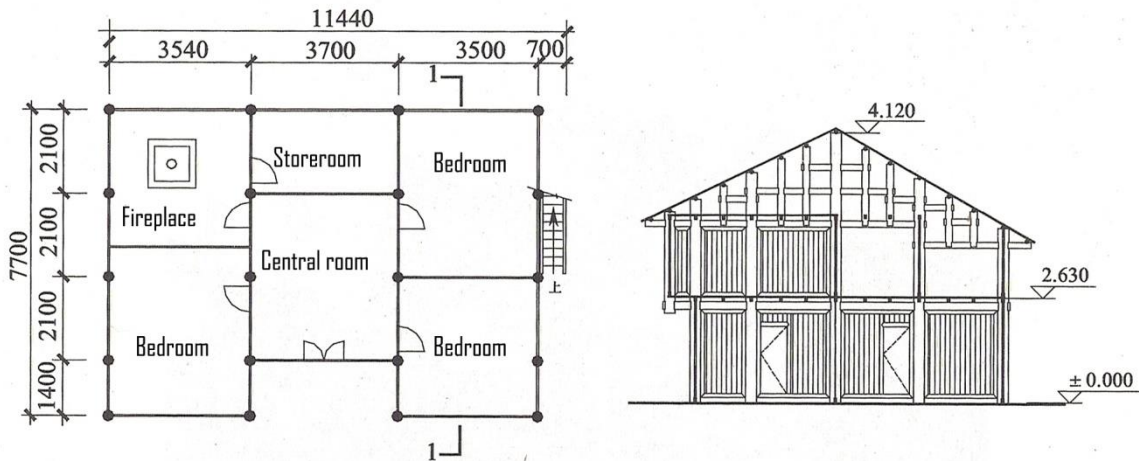


Figure 29. Northern Dong area, plan and section of Zhezhou Wang's house at Sanmentang village in Tianzhu County. Extract from Cai, *Traditional Villages and Architecture of Dong Nationality's Habitation Region*, p. 71. Survey and drawing by Ling Cai and others. 蔡侗族聚居区的传统村落与建筑, p. 71. 蔡凌及其他测绘.

In the Northern Dong area, the Dong house is influenced by the Han house, which normally has two levels, with people living at ground floor level. It has no verandah, the fireplace room is replaced by a central room to connect with other rooms, and the main entrance is in the middle of the central room (Figure 30). In the central room, people place an altar to the ancestors in the middle of the wall opposite the entrance, and many family rituals take place there (Figure 31). A fireplace room is found at the back or side of the house. Where it has a raised platform with a fireplace in the middle, it works as both kitchen and living room. Bedrooms are on the two sides or at the back of the house. The upper floor is connected by a stair and used for bedrooms or storage. A separate building is located on the left side of the house to raise pigs or water buffaloes.



Figure 30.
Central room.
Photograph by Derong Kong.



Figure 31.
Altar to the ancestors.
Photograph by Derong Kong.

3.1.3 Drum Tower

Symbol of consanguinity, surname

The drum tower is the symbol of a Dong village. It represents the Dou and the surname. Generally speaking, each clan has a drum tower, if a village has several 'Dou', it has several drum towers to represent different 'Dou'. So the surname and consanguinity decide the construction of the drum tower. People who live around the same drum tower cannot marry each other. As Fei says, blood relationship is the power of stability, in a stable society, geographical relation is the projection of blood relation.²³

From Lijuan Yao's research, the drum tower is built under the following four conditions: in the first kind, the village only has people of one surname living in it, and builds one drum tower, for example the Duimen small stockaded village, in Goudong village, Liping County, Guizhou Province. Most villages are like this. A second kind of village shares one surname, but has several Dous, so each Dou has its own drum tower. For example, Zhaoxing village has five Dous called 'benevolence' 仁, 'righteousness' 义, 'courtesy'

²³ Fei, *From the soil: The Foundations of Chinese Society*, p. 101. 费, *乡土中国*, p. 101.

礼, 'wisdom' 智, and 'trust' 信 (these names show their principle and attitude to life). Each Dou has its own drum tower, but their surnames are all Lu. A third kind of village has persons with two or more surnames living there, but uses one surname in relations with the outside. For example, Zhanli village, in Congjiang County, Guizhou Province, has Wu, Pan, Shi and other surnames, but they all use the surname Wu to external observers and have built one drum tower together. The fourth kind of village has two surnames, but they still use their own surnames in external contacts and build one drum tower together. Goudong big stockaded village, in Liping County, Guizhou Province, is an example, with more than 200 households with the surnames Pan and Shi, each making up about half of the population. They built one drum tower together and do not marry each other; indeed they call each other brother.²⁴

Building standards

The drum tower is a reflection of the hierarchy between villages. Originally, the size of the drum tower related to the village's size and status. According to the records in the Qing dynasty (17th—20th century) of Zhongfang Li's 'Qian Record', 李宗昉,黔记 (1813) and Pu Lin's 'Guzhou Miscellanea', 林溥,古州杂记 (1799), in Dong villages, the small stockaded villages often leached on to the big stockaded village. A big stockaded village was called 'grandad head', and a small stockaded village 'Dong son'. The drum tower in a small stockaded village cannot be higher than that of a big stockaded village. In the southern Dong area groups are called 'La Ka' (the earlier local resident), 'La Geng' (the later arrived resident). When 'La Geng' builds a drum tower or house, its height must not exceed that of 'La Ka'.²⁵

Categories of drum tower

In the Dong area, there are many styles of drum tower. They are built in different areas with various structures, in different forms. They represent different stages of the development progress of the drum tower, function and construction differences. Below are the categories of drum tower.

²⁴ Lijuan Yao, 'The Symbolic Meaning and Identification Ritual of Drum Buildings of Dong nationality', *Journal of Guangxi university for nationalities (Philosophy and Social Science Edition)*, 26(2004), 102. 姚丽娟, '侗族鼓楼的象征意义与认同仪式', *广西民族学院学报(哲学社会科学版)*, 26(2004), 102.

²⁵ Qianping Du, 'The Characteristics of Drum Tower, Cultural Connotation', *Journal of The Central University for Nationalities*, 1(1996), 65. 杜倩萍, '侗寨鼓楼建筑特色及文化内涵', *中央民族大学学报*, 1(1996), 65.

Hall style

In his research, Luo infers that the single floor or multiple eaves building is an early stage of development of the drum tower, as the labour resource, material resource and financial resource were not enough to build a tower. However, for their social functions, people still needed a public place for meeting, to discuss events. So they built a 'public hall', Dong people call it 'Tang Wa' or 'Tang Ka' ('Tang' means everyone, 'Wa' means talk, 'Ka' means room), as the public place for clan members and clan chief for meeting, discussion, ancestor worship, ritual sites, and fete.²⁶ According to Sun's study, this 'public hall' is a square pavilion, equipped with fireplace and benches. Some villages use a one-storey house as a 'public hall' (Figure 32). The structure of a 'public hall' is the same as a ganlan building, with column-and-tie structure (Figure 33).²⁷



Figure 32. The public hall at Bapia village in Congjiang County. Photograph by Derong Kong.

²⁶ Luo, *Folk Dwelling of Guizhou*, p. 89. 罗, *贵州民居*, p. 89.

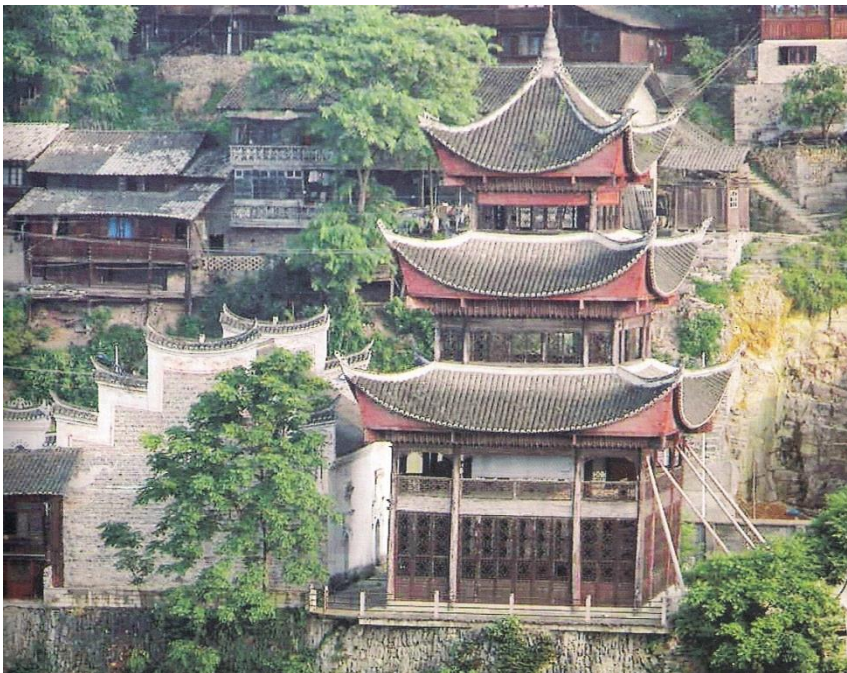
²⁷ Sun, 'Dong Architectural Art, Culture of The Drum Tower', 81. 孙, '侗族鼓楼建筑艺术与鼓楼文化', 81.



*Figure 33. The structure of the public hall.
Photograph by Derong Kong.*

Storied building style

In this type the space between the eaves is wide, and as with a Han storied building with multiple floors, people can go upstairs and look at the view far away. Luo says there are very few of this storied building style of drum towers, and they only can be seen in the northern Dong area. This type was obviously affected by the Han culture, as the style is directly borrowed from Han storied building (Figure 34).²⁸



*Figure 34. Storied building style.
Extract from Luo,
Folk Dwelling of
Guizhou, p. 91. 罗,
贵州民居, p. 91.*

²⁸ Luo, *Folk Dwelling of Guizhou*, p. 90. 罗, *贵州民居*, p. 90.

Composite type

This is a building complex integrated with other kinds of building. According to Luo's study, some drum towers are located at the village gate and integrated with the gate, combining the space of the drum tower and the traffic aisles into one (Figure 35). This is rarely seen. There are also some drum towers combined with drama stages. These building complexes enrich the form and space of the drum tower. Their structure is 'column-and-tie', or composition of 'column-and-tie' and 'post-and-lintel'.²⁹



Figure 35. Composite type. Extract from Luo, *Folk Dwelling of Guizhou*, p. 91. 罗, *贵州民居*, p. 91.

Dense eaves style

This the dominant form of drum tower: it has the features of pagoda, storied building, and pavilion. It can be divided into three parts: roof of pavilion, body of tower, and base of pavilion (Figure 36).

²⁹ Luo, *Folk Dwelling of Guizhou*, p. 90. 罗, *贵州民居*, p. 90.



Figure 36. Dense eaves style, Tang'an. Photograph by Derong Kong.

The form is diverse, its main features are that the bottom of the drum tower is firm and massive, while the top is cuspidal and neat. From Luo's study, the plan can be rectangular, hexagonal, or octagonal with multiple eaves, and the distance in height between eaves is very short, between 0.8 and 1m. The number of layers is odd, usually from three to twenty one. The interior space has two floors: the ground is for meeting with a fireplace in the middle, while the top floor is empty and called the drum pavilion, in which to place a drum. Its special roof is pyramidal and decorated with a sculpture of 'Magic gourd' (宝葫芦) or a gable and hip roof decorated with sculptures of dragons or other cultural symbols. The body of the tower is not enclosed with a wall but left open. The staircase to the drum pavilion is a single piece of wood, with a mortise chiseled out every foot to insert a wooden stick.³⁰ The structure is a 'bundle-structure of column-and-tie', and can be divided into two styles, 'single-column style', and 'multi-column style'.³¹

● Structure of the drum tower

The main structure of the drum tower is a column-and-tie structure, though some parts of the framework are a post-and-lintel structure. The upper structures are composed of columns and tie-beams, using mortise and tenon joints to connect components. The

³⁰ Luo, *Folk Dwelling of Guizhou*, pp. 96-99. 罗, *贵州民居*, pp. 96-99.

³¹ *Ibid.*, p. 94.

structural analysis is based on the main structure of different types of drum tower, construction analysis focuses on the main aspects of its construction (Figure 37).

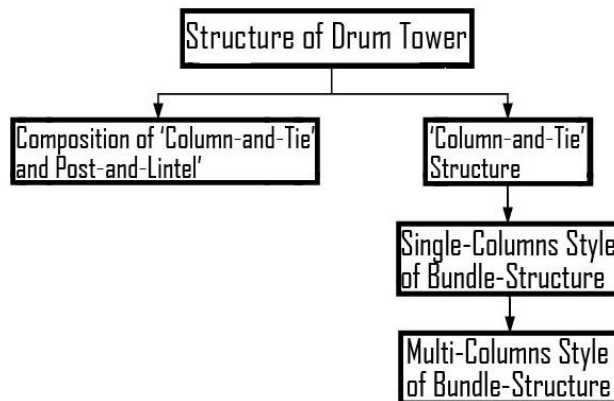


Figure 37.

Structure of the drum tower

Drawing by Derong Kong.

Composition of 'column-and-tie' and 'post-and-lintel'

Composition of 'column-and-tie' and 'post-and-lintel' is the structure of the hall style, and dense eaves style of drum tower. The volume of the drum tower created by this structure is not large.

From the research of Cai, this structure uses tie-beams to connect eave columns on two sides or hypostyle columns. Then a short column is erected on the tie-beam to support a 3-purlin beam or a 5-purlin beam, which forms a partial 'post-and-lintel structure' for the top of the roof. Thus the purlins are supported by beams instead of columns. But the connection between eave column and hypostyle column still uses 'column-and-tie structure'. For instance, the Yashang drum tower in Yutou village, Tongdao County, Huilan Province, shows how this type of structure can form a relatively commodious space between the hypostyle columns (Figure 38).³² The plan of this type is a rectangle, the roof is an overhanging gable roof or gable and hip roof, and the raised beam becomes the decorative focus.

³² Ling Cai, 'Chinese Minority Architecture, Constitution Technology of Dong Nationality's Drum tower', *Huazhong Architecture*, 22 (2004), 131. 蔡凌, '中国少数民族建筑, 侗族鼓楼的建构技术', *华中建筑*, 22 (2004), 131.

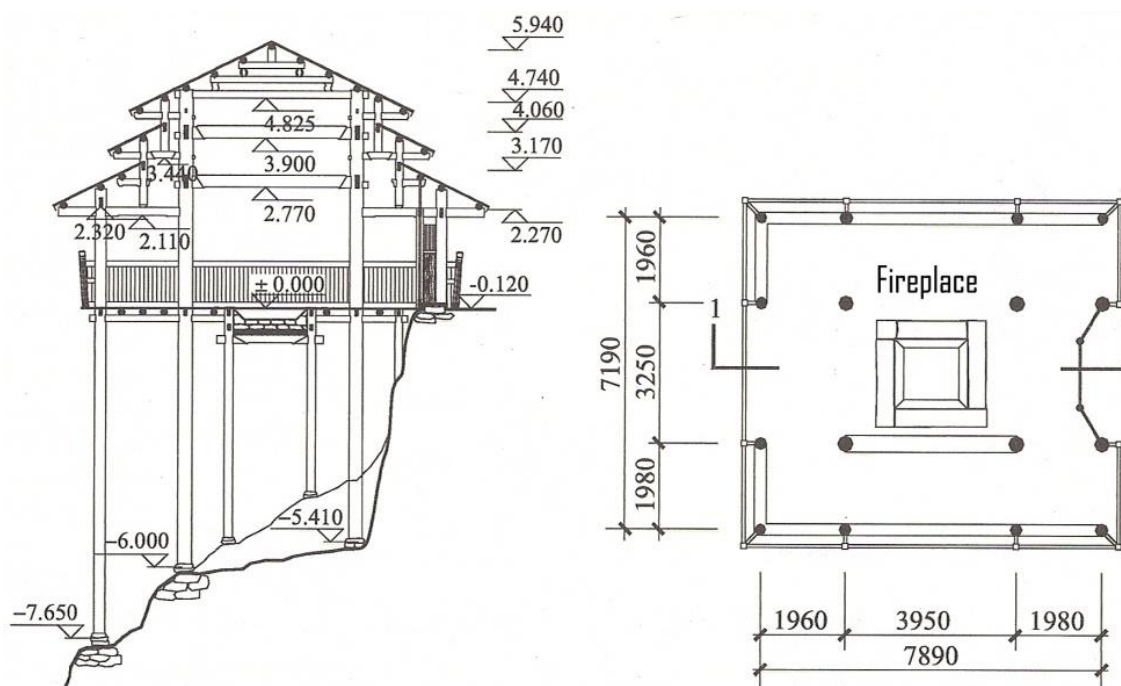


Figure 38. Section and plan of Yashang drum tower at Yutou village in Tongdao County. Extract from Cai, *Traditional Villages and Architecture of Dong Nationality's Habitation Region*, p. Survey and drawing by Ling Cai and others. 189. 蔡, *侗族聚居区的传统村落与建筑*, p. 189. 由蔡凌及其他测绘.

Style of 'column-and-tie'

A 'column-and-tie structure' is used in the hall style of the drum tower. As Cai says, the character of the structure is that all the purlins are supported by heads of columns instead of by beams. Carpenters use ground columns and short columns to bear purlins. They use tie-beams to connect between columns. The structural members are connected by tenon and mortise joints. The frame of the roof is connected by vertical short columns, horizontal tie-beams and eave tie-beams as a whole.³³

In Cai's research, she says the early hall style of drum tower is simple. It only has an overhanging gable roof. In the late Qing dynasty (17th—20th century), the hall style of drum tower made some progress in volume, and the roof changed into multiple eaves of overhanging gable roofs or compositions of overhanging gables (Figure 39), or a gable and hip roof. The ground wooden frame bears short columns and they shrink inward

³³ Cai, 'Chinese Minority Architecture, Constitution Technology of Dong Nationality's Drum tower', p. 131. 蔡, '中国少数民族建筑侗族鼓楼的建构技术', p. 131.

layer upon layer, through the connection of penetrating tie-beam and hypostyle column. The top roof is usually composed of five short columns and eave tie-beams.³⁴

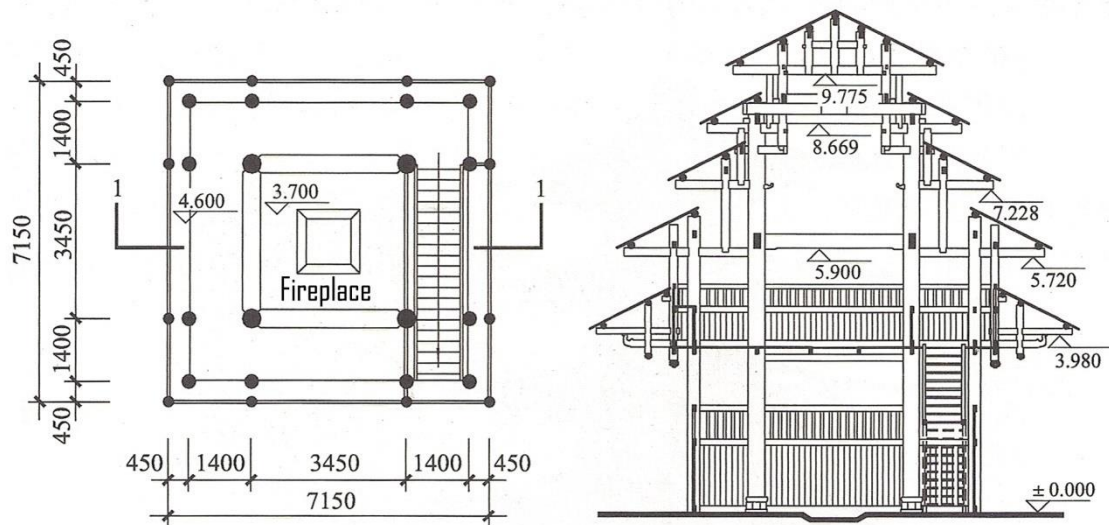


Figure 39. Plan and section of Louwu drum tower at Gaoding village in Sanjiang County. Extract from Cai, *Traditional Villages and Architecture of Dong Nationality's Habitation Region*, p. 199. Survey and drawing by Ling Cai and Yi Deng. 蔡, *侗族聚居区的传统村落与建筑*, p. 199. 由蔡凌和邓毅测绘.

Bundle-structure of column-and-tie

Bundle-structure of column-and-tie is the drum tower structure of dense eaves style. The ground plan is square or a regular polygon, and there is a central column or a suspended column in the centre of the structure. Most roofs are multiple pyramidal roofs, the external appearance is tall, imposing, naturally becoming a landmark in a Dong village. As Luo says, the structure 'bundle-structure of column-and-tie', can be divided into two styles, 'single-column style', and 'multi-column style'.³⁵

Single-column style

A Dong village is surrounded by many large old china firs, and after work people often sit on benches under a tree, making crowds, enjoying the cool air under the big fir, having a rest, talking and singing. Sun infers that inspired by the ganlan building, and

³⁴ Cai, 'Chinese Minority Architecture, Constitution Technology of Dong Nationality's Drum tower', p. 131. 蔡, '中国少数民族建筑侗族鼓楼的建构技术', p. 131.

³⁵ Luo, *Folk Dwelling of Guizhou*, p. 94. 罗, *贵州民居*, p. 94.

promoted by social development, Dong people transferred this natural outdoor public place into an indoor place.³⁶ In Dong language it is called ‘single foot tower’ ‘Louc Dinl Dugh’, 独脚楼, or ‘Single column tower’, ‘Louc Laot Dugh’, 独柱楼 (Figure 40). And from Yong Zhang’s research, people believe it was inspired by the big china fir, using one big tree as the central column, so the form of the drum tower also looked like a china fir.³⁷ This version has been widely spread in Guizhou Province. This kind of drum tower was recorded in the book ‘Red Elegance’赤雅 in the Ming dynasty (13th—17th century), called ‘Luo Han tower’, which means single young men’s tower, because it was a place for single young men to assemble and perform courtship with young girls.

As Cai describes, this structure has a central column surrounded by a circle of eave columns. They are all connected by tie-beams. The tie-beams carry the short columns and overhang to support the eaves. Then carpenters repeat this construction from bottom to top to form a unit of wooden framework.³⁸ This wooden framework is repeatedly used in construction, rotating the unit of the wooden framework around the centre of the plan to form the polygonal bundle-structure (Figure 41-44). The number of eave columns corresponds to the number of the polygonal sides.



Figure 40.
Single column tower at
Shudong village in Liping
County. Photograph by
Derong Kong.

³⁶ Sun, ‘Dong Architectural Art, Culture of The Drum Tower’, 81. 孙, ‘侗族鼓楼建筑艺术与鼓楼文化’, 81.

³⁷ Zhang, *Exploration of Dong Art and Literature*, p. 189. 张, *侗族艺苑探寻*, p. 189.

³⁸ Cai, ‘Chinese Minority Architecture, Constitution Technology of Dong Nationality’s Drum tower’, 138. 蔡, ‘中国少数民族建筑侗族鼓楼的建构技术’, 138.



Figure 41.
The central column of Shudong
single column tower.
Photograph by Derong Kong.



Figure 42. The structure of Shudong single column tower. Photograph by Derong Kong.

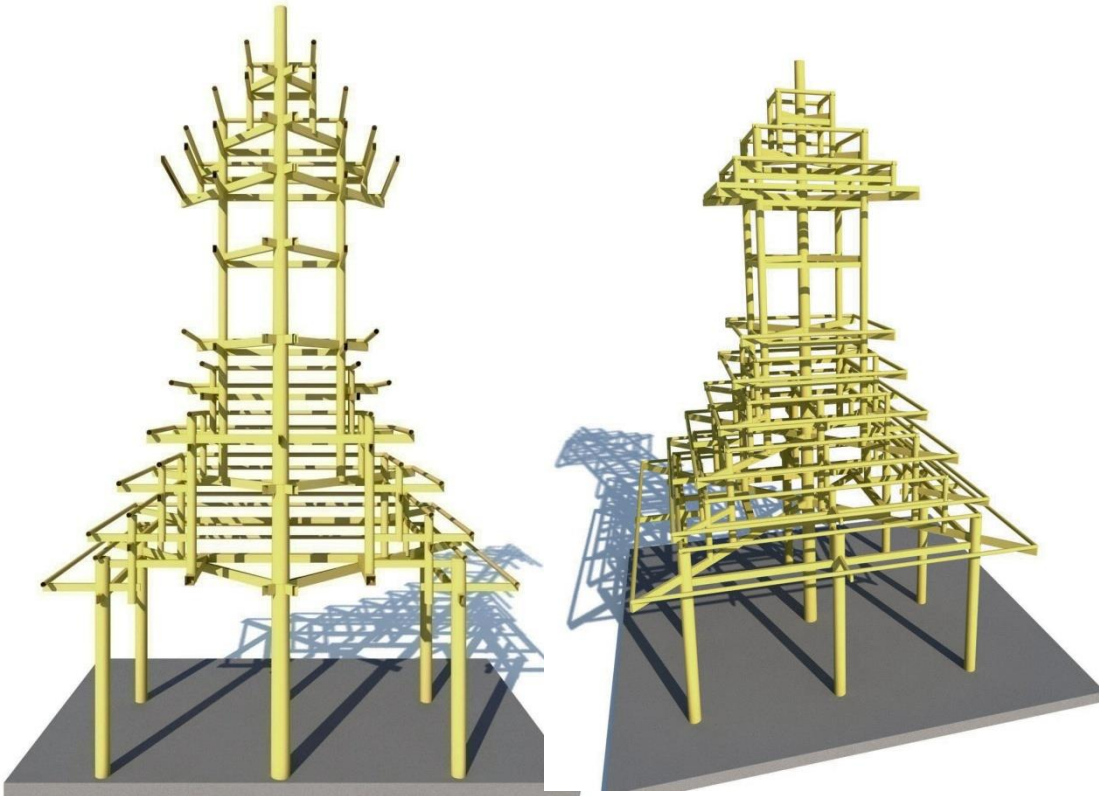


Figure 43. Model of the main structure of Shudong single column tower. Computer model by Derong Kong.³⁹

³⁹ From my field survey, Shudong village, April 2010. I also consulted the drawing from Cai, *Traditional Villages and Architecture of Dong Nationality's Habitation Region*, p. 201. 蔡, *侗族聚居区的传统村落与建筑*, p. 201. Yang and others, *The Chinese Dong Drum Tower*, p. 145. 杨和其他, *中国侗族鼓楼*, p. 145. Comparison with my field survey shows that neither of their drawings of Shudong drum tower are totally accurate.

1. 中柱
Central column
2. 边柱
Eave column
3. 主大枋
Main tie-beam
4. 瓜柱
Short column
5. 挑枋
Hanging tie-beam
6. 围枋
Surrounding tie-beam
7. 封檐枋
Sealing eave tie-beam
8. 檩枋
Purlin tie-beam
9. 椽子
Rafter
10. 格枋
Tie-beam of lattice window
11. 格子窗
Lattice window
12. 格柱
Column of lattice window
13. 如意斗拱
Desirable-bracket-set
14. 蜂柱
Bee column
15. 宝鼎葫芦
Treasure roof gourd
16. 火塘
Fireplace

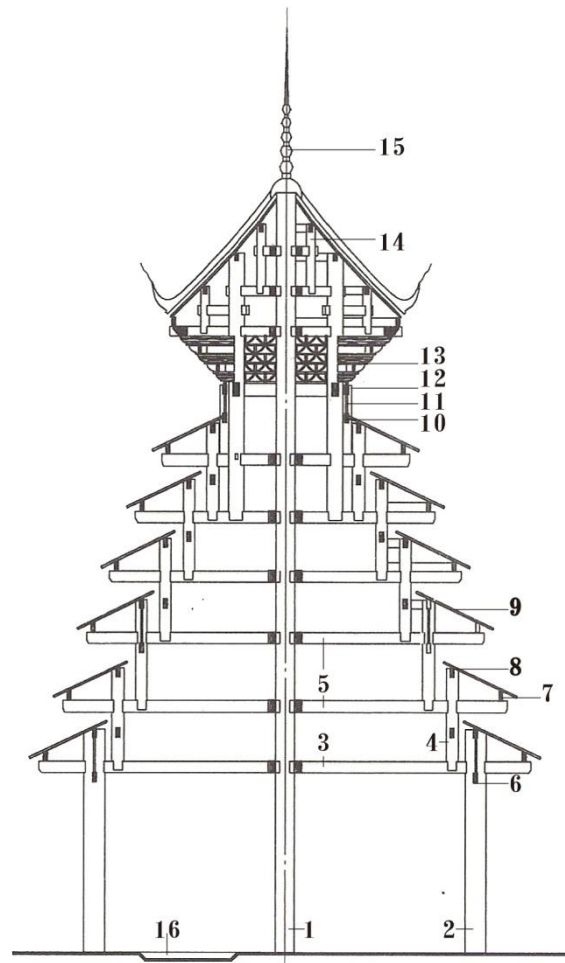


Figure 44. Section diagram of the single column tower and name of the components. Extract from Cai, *Traditional Villages and Architecture of Dong Nationality's Habitation Region*, p. 201. 蔡, *侗族聚居区的传统村落与建筑*, p. 201. Edited by Derong Kong.⁴⁰

Multi-column style

Cai infers that the single-column style has two spatial centres, the fireplace and the central column. For the functional development of the drum tower, the inner space needs to be a big, complete space without the central column, so that the fireplace can be in the centre of the space and conveniently placed for people to gather around it.

Based on the single-column style of bundle-structure, the multi-column style uses several hypostyle columns to compose an inner column ring (four sides, six sides, or

⁴⁰ This drawing offers the section the single column tower, I added the codes and numbers of components to this drawing.

eight sides) to replace the centre column (Figure 45). The central column has been raised to become a suspended column. And the height of the drum tower can be increased without the limitation of the central column.⁴¹ The plane of the inner column ring is the same as the eave column ring, and the number of hypostyle columns corresponds to the number of polygonal sides.

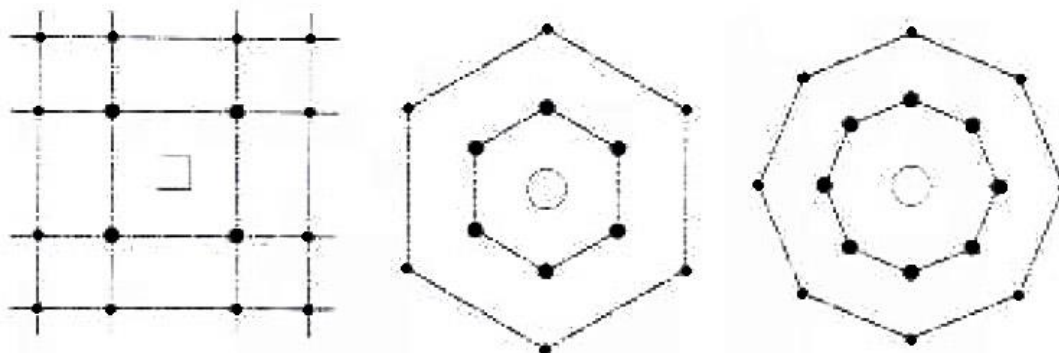


Figure 45. Plan of the structure. Extract from Cai, 'Chinese Minority Architecture, Constitution Technology of Dong Nationality's Drum tower', 148. 蔡, '中国少数民族建筑侗族鼓楼的建构技术', 148.

As Cai illustrates, the hypostyle columns and eave columns are separately connected by tie-beams to construct an inner column ring and eave column ring. Then these two column rings are connected by penetrating tie-beams to compose a double bundle-structure. The penetrating tie-beam carries the short column and overhangs to support the eaves. The upper short column is supported by a penetrating tie-beam. Then carpenters repeat this construction from bottom to top to form a unit of wooden framework. This wooden framework is repeatedly used in construction, rotating the unit of the wooden framework around the centre of the plan to form the double polygonal bundle-structure. At the top of the wooden framework, the suspended column is connected to the short columns or hypostyle columns by a penetrating tie-beam (Figure 46-49).⁴² Thus, the whole double bundle-structure is connected together, and is made more stable.

⁴¹ Cai, 'Chinese Minority Architecture, Constitution Technology of Dong Nationality's Drum tower', 138. 蔡, '中国少数民族建筑侗族鼓楼的建构技术', 138.

⁴² Ibid., 138.

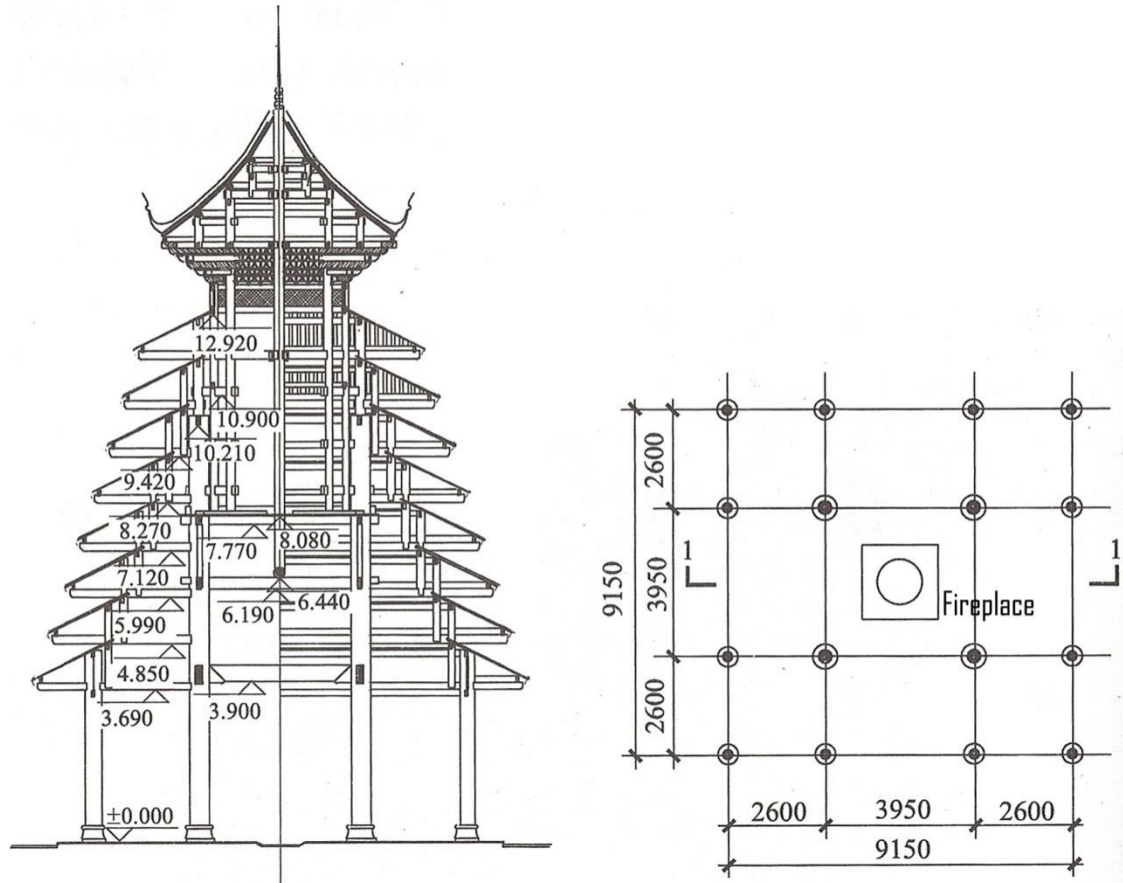


Figure 46. Section and plan of the drum tower at Tang'an village in Liping County. Extract from Cai, *Traditional Villages and Architecture of Dong Nationality's Habitation Region*, p. 204. Survey and drawing by Ling Cai and Yi Deng. 蔡,侗族聚居区的传统村落与建筑, p. 204. 由蔡凌和邓毅测绘.



Figure 47. The drum tower at Tang'an village. Photograph by Derong Kong.



Figure 48.
The structure of Tang'an drum tower.
Photograph by Derong Kong.

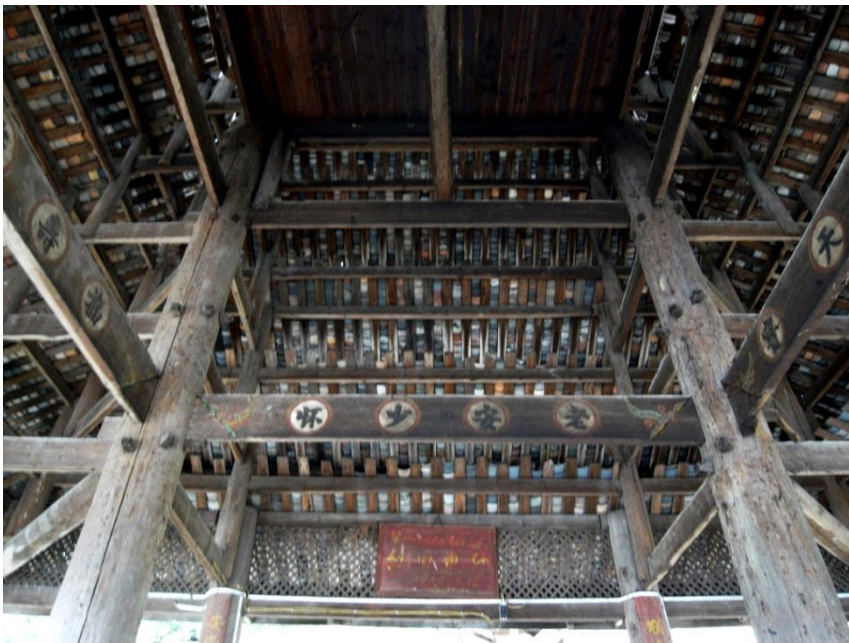


Figure 49.
The main columns of Tang'an drum tower.
Photograph by Derong Kong.

According to the above study and field surveys, I infer that the drum tower may have developed from the ancient 'public hall', then combined with local custom and nature worship to generate the 'single foot tower'. In a third stage, promoted by the social, cultural, and architectural development, the current form of drum tower evolved.

Structure and construction are important factors to reflect and record this progress. The external appearance of the drum tower develops with the change of construction. It is not just a change of structure or form, as this process also reflects the progress of architectural function and architectural development. It is also not a clear linear development process, as there are multiple lines of development. The drum tower is a complex outcome affected by multiple factors (Figure 50).

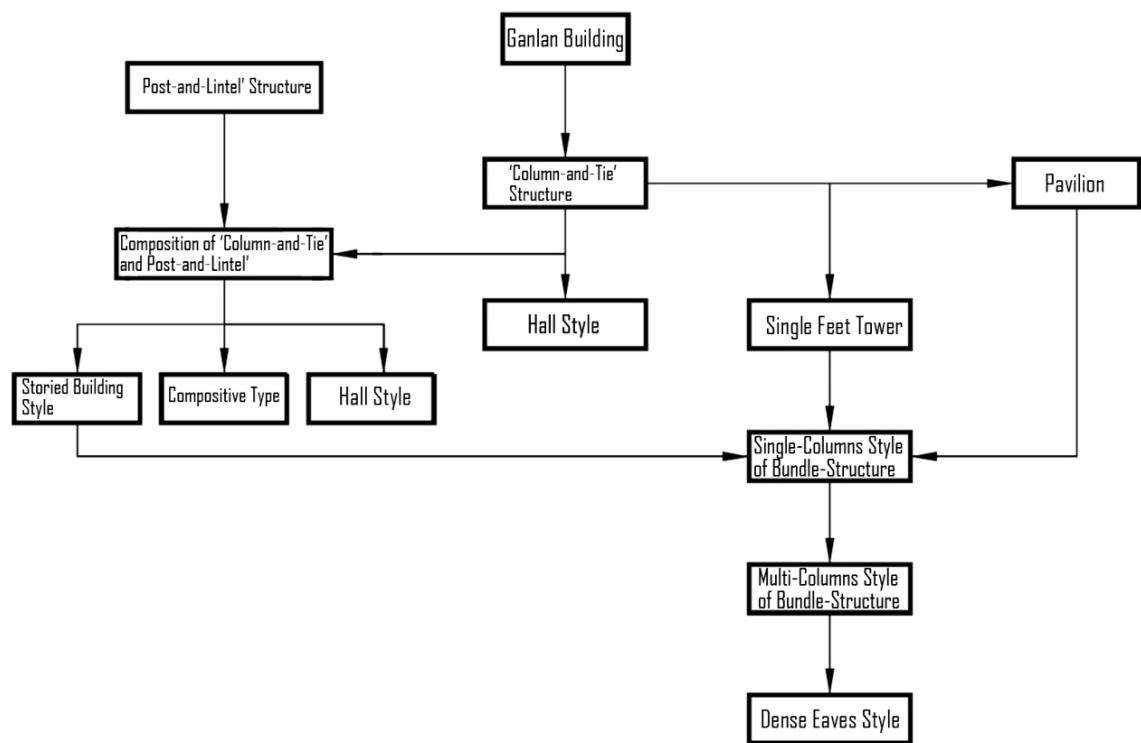


Figure 50. Formative process of the drum tower. Drawing by Derong Kong.

Naming of the drum tower

Except from the above names of the drum tower, now at different places the drum tower still has different names as used in the past.

In the Dong language, the pavilion is called 'Ji'. It also has the meaning of a drum tower, and this shows the context of origin, as Du says now most ground floors of drum towers have the same form and structure as a ganlan pavilion.⁴³

According to Yang's research, in the Chejiang area, Rongjiang County, people call the drum tower '百', 'bengc', which means piled up.⁴⁴ An old story says that long ago a Dong village suffered invasion from outside, so the village elders and clan elders met and discussed how to defend against the intruders, then they made a plan, and used timber and stone to pile up an observation post at the side of the village or on the high ground in the village, and arranged for people to guard the post in turn. If they saw any enemy they would alert the villagers to prepare for fighting. Since then, Dong people would not only go to the post to discuss military affairs, but also to discuss production and other affairs. As time went by, the post became a place for consultation of village affairs and entertainment.

In Linxi area, Guanxi Province and Linan village, local people call the drum tower, 'Liang pavilion', '亮亭', and 'public shed', '公棚'. 'Liang' in Dong language has the meaning of beautiful, capable, so 'Liang pavilion' has the alternative title of 'young people's pavilion'. At an earlier stage, 'Liang pavilion' was used for courtship of young people, as social development, then other functions were also imported into it. The 'public shed', means a building built by the public for public activity.

In Longpin, Pinao area, Guangxi Province, the drum tower is called, 'Zhang tower', '长楼', which means old people's tower. In ancient time this was a simple tower for old people to meet, rest and chat. As the affairs of village were normally decided by elders, village activities were moved into this building.

In Shijin, Shijia area, Guangxi Province, the drum tower is called, 'Jieshed', '街棚', which means the shed at the side of the village. In ancient times Dong people built a grass shed on the high ground in their residential area to guard against attack from wild animals. As society developed, people built up a wooden building at the original place of the Jie shed and it became a place for people to rest and discuss.

⁴³ Du, 'The Characteristics of Drum Tower, Cultural Connotation', 64. 杜, '侗寨鼓楼建筑特色及文化内涵', 64.

⁴⁴ Zhang, *Exploration of Dong Origin*, p. 7. 张, *侗族探源*, p. 7.

In Pindeng, Guangnan area, the drum tower is called, 'Wu tower', meaning the tower built on high ground.⁴⁵ From the above examples, we see that the different names of the drum tower are influenced by the different stages of development, construction and functions of the drum tower at different places.

3.2 Content of Dong carpentry

As mentioned in literature review, 1.5 Architecture, I collected more detailed and first hand material to supplement the knowledge of Dong carpentry and education: all these materials are used in the following sections on architectural material, number and form, tools, custom, the education process of Dong carpentry. There is little discussion or analysis of Dong carpentry in previous research, so discussion and analysis of Dong carpentry set out in this remainder of this chapter provides significant new knowledge

3.2.1 Architectural material

The Dong area has abundant china fir (*Cunninghamia lanceolata*). As Luo describes, this tree has a straight trunk with little change of diameter from bottom to top, and with a tough, symmetrical texture. It can be used for building houses without any oil to decorate the wood to maintain its colour, has a high resistance to decay, and is also the material supplied for construction of royal palaces. The china fir provides the material basis for the wooden structure of a ganlan building and is widely used.⁴⁶ According to the hand-ink master Wenli Lu's description, depending on the growing place and quality of the china fir, the china fir can be classified into three types for carpentry, white china fir, red fir, oil fir. The white fir grows at the bottom of the mountain, and it takes 20 years before it can be used. Its quality is light and soft for processing, and the trunk is white. It suffers from the possibility of cracking and warping. The red fir grows half way up the mountain, and needs 30 years before it can be used. Its quality is heavier and tougher than white fir, and the centre of the trunk is red. The best china fir of all is the oil fir, which grows at the top of the mountains, goes through many winters and frosts, and takes 40 years before it can be used. It is very heavy and tough, can bear heavy loads, the annual rings are close, and the texture is denser than white fir and red fir. It does not

⁴⁵ Yang and others, *The Chinese Dong Drum Tower*, pp. 8-10. 杨和其他, 中国侗族鼓楼, pp. 8-10.

⁴⁶ Luo, *Folk Dwelling of Guizhou*, p. 37. 罗, 贵州民居, p. 37.

easily crack or warp. But now there are few oil firs available, and most of the buildings are constructed of white fir, while red fir is expensive and used in public buildings or good houses. Only when people are building an important drum tower, would they spend lots of money and labour to use oil fir for the main columns.⁴⁷ There are also some other trees around Dong villages, like maple, pine and cypress tree, *fagus longipetiolata*. The maple tree contains lots of water, and easily gets moist. Pine and cypress trees are straight, but warp more easily than china fir. *Fagus longipetiolata* is often used to make tools, since after it has dried it is hard and heavy as a piece of iron. The handle of an axe, the frame of a saw, or the body of an inkpot are made of it.

Choice of material

Size of timber

In the book '*Guizhou Folk Dwelling*' the upper diameter of the wood for a column or a short column is recommended to be more than 15-30cm to ensure a top diameter of not less than 8-10cm.⁴⁸

During my field survey, hand-ink master Wenli Lu said that the top diameter of the wood for a short column should be bigger than 17cm to ensure the top diameter of the column be not less than 17 cm, so it could have enough resistance to support the purlin and control deflection. For a tie-beam, the diameter of either end of the wood should be between 18 and 22 cm, in order to provide at least 14 cm depth of section.⁴⁹

Grain alignment

In my field survey, Wenli Lu and other carpenters said, the more knots a tree has, the more strength and stiffness it has, so the carpenter prefers timber with many knots or branches, although these parts are harder to process. Yet this is based on their practice experience, and the knots they adopt are small and the grain alignment is not totally blocked. So from the appearance of timber performance, it is all right. But according to timber science, the knot would reduce the mechanical properties of timber.

⁴⁷ From my field survey, interview with Wenli Lu, Jitang village, January 2014.

⁴⁸ Luo, *Folk Dwelling of Guizhou*, p. 142. 罗, *贵州民居*, p. 142.

⁴⁹ From my field survey, Wenli Lu, Xiaohuang, November 2010.

Among Dong carpenters, a knot in timber is called an eye. For the division board of a room, the direction of a board should be upward, and the evidence to place it so depends on the 'eye'. At the top of the knot there is a dark pattern that looks like an eyebrow, so if the eyebrow is at the top of a knot, means it follows the original direction of the tree (Figure 51).



Figure 51.

The knot in a board.

Photograph by Derong Kong.

The angle of the grain in the timber is an important reference for the carpenter to choose timber and determine how to process it. The angle of the grain is of little concern with a column, but it is a vital factor in the making of a tie-beam. As Wenli Lu says, when carpenters are making a component they need to care about the grain, which on the one hand is concerned with strength. The depth of the joint should be the full depth of the beam to provide the necessary shear strength. Otherwise the joint is more likely to break.⁵⁰

On the other hand it is important to avoid damaging the component. In my field survey, I learned that when the carpenter cuts a timber, it is better not to cut it along the grain line, so if he has to, he should cut it gently, to avoid leading a tendency to split the rest of the timber along the grain line. While he is cutting across the grain line, he should cut clear and sharp to avoid rough edges.⁵¹

The carpenter always makes the main direction of the grain in the section of the tie-beam lie along the direction of force, because when the grain line follows the force direction the timber is less likely to fail. For instance, as Lu describes, in a tie-beam section, the grain lines are along the deep direction of the beam section, so it can bear

⁵⁰ From my field survey, Wenli Lu, Jitang, January 2014.

⁵¹ From my field survey, Xiaohuang, November 2014.

more load. On the side of the tie-beam, the grain lines should be parallel to the long direction of the tie-beam and perpendicular to the force direction (Figure 52, 53).⁵²

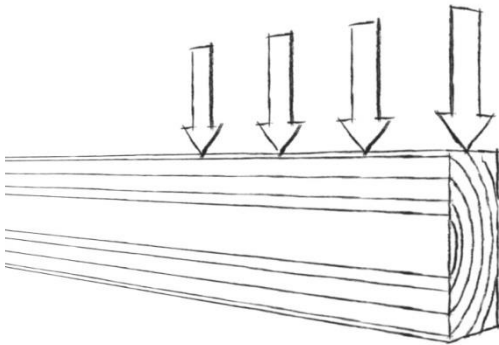


Figure 52.

Diagram of regular grain alignment in a tie-beam. Drawing by Derong Kong.



Figure 53.

The grain alignment and knots in a tie-beam.

Photograph by Derong Kong.

If the grain alignment is not regular, part of it is curved, or rate of growth is denser than another part, the timber with a denser rate of growth is less likely to warp, and has more strength and stiffness. In Li's work, the denser rate of growth is used at the tenon of the tie-beam or in the middle of the tie-beam to reinforce these points. Curved grain in a tie-beam should be used so that the convex part, its outward part, should face against the load (Figure 54). This is similar in principle to today's prestressed beams.⁵³

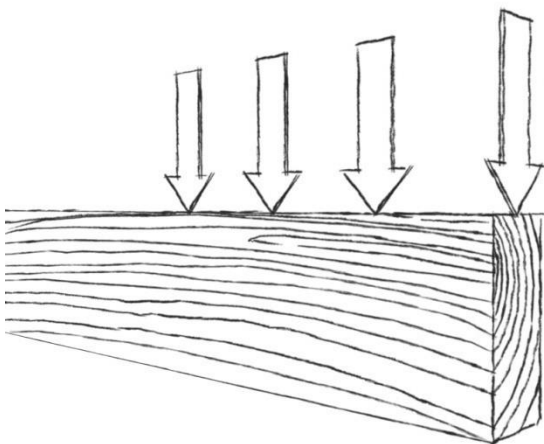


Figure 54.

The curve and denser rate of growth in a tie-beam. Drawing by Derong Kong.

⁵² From my field survey, Wenli Lu, Jitang, January 2014.

⁵³ Ibid.

Compared with straight grain, sloping grain is a weak part of the tie-beam. It can easily break and should be avoided for use as a tenon. But if the carpenter turns it upside down, it would show a good performance to bear load. For instance, in Lu's work, with a projecting tie-beam, its shape should have a reversed slope. Thus, they know a principle, that the curved grain and trunk can afford more load than a straight one, but it easily fails when used in the reversed way.⁵⁴

Lu says a curved tree trunk can be used for a column, but the outward part should face towards the inside of the structure.⁵⁵ When all the columns are inclining toward the centre of the structure, this uses their natural gravity tendency to form a stable structure to restrain deflection. From Cai's research, in construction of the drum tower, this principle is applied, called 'inclining feet', 侧脚.⁵⁶ The method is inward inclining the main columns at the same angle. The main columns are vertical closely arranged or follow the angle from bottom to top. So the structure is very stable, and can avoid shifting of the drum tower, while the external appearance is more thin, tall and straight relative to other drum towers. This method can be seen at Gaozeng town, in Congjiang County, Guizhou Province (Figure 55).

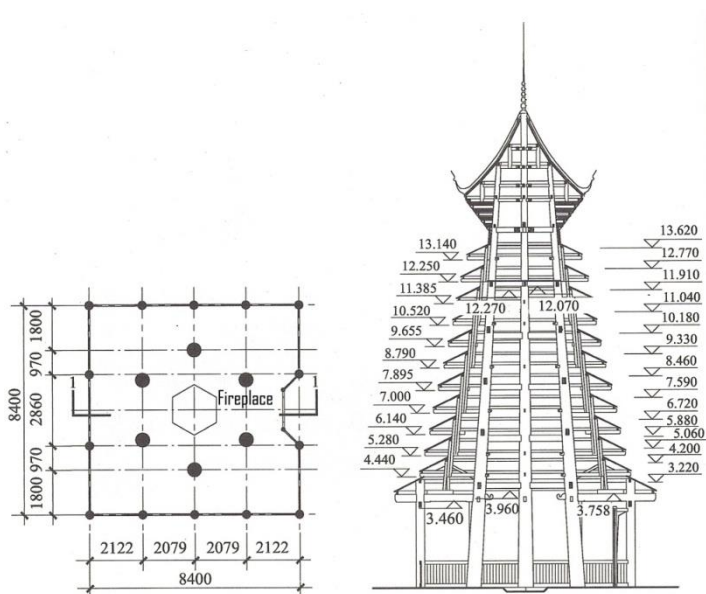


Figure 55. Plan and section of the drum tower at Gaozeng, Ba stockaded village, in Congjiang County. Extract from, Ling Cai, *Traditional Villages and Architecture of Dong Nationality's Habitation Region*, p. 212. 蔡凌, *侗族聚居区的传统村落与建筑*, p. 212. Survey and drawing by Ling Cai and Yi Deng.

⁵⁴ From my field survey, Wenli Lu, Jitang, January 2014.

⁵⁵ Ibid.

⁵⁶ Cai, *Traditional Villages and Architecture of Dong Nationality's Habitation Region*, p. 212. 蔡, *侗族聚居区的传统村落与建筑*, p. 212.

A curved trunk also can be used as a beam using curved grain if its outward part faces against the load forming a natural arch. In Lu's project, this also has been applied in the construction of the wind and rain bridge, with a long span set against bending strength. When the load is applied on the curved beam, according to the elastic properties of timber, it deforms from curved to straight.⁵⁷

Size of component

When a carpenter becomes a hand-ink master, he has to decide the size of the components to achieve enough strength. Every hand-ink master has his own rule depending on experience; for instance, according to my fieldwork, the hand-ink master Wenli Lu has listed a series of sizes of components. In the house, the bottom diameter of a 10 m long central column should be 35 cm, the top diameter no less than 20 cm. An 8 m long eave column should have a bottom diameter of 30 cm and the top diameter should be no less than 22 cm. A 3 m long hanging column should have a bottom diameter of 20 cm, the top diameter no less than 17 cm. A one and half m long short column should have a bottom diameter of 20 cm and the top diameter should be no less than 17 cm.⁵⁸

The length of a tie-beam varies, according to its position and function, and the section of the timber has the following sizes. The thousand Jin tie-beam works as the main loading beam in the structure, which is why it is given this name affording one thousand Jin (500 kg). The width of the section could be 7-8 cm or more, the depth of the section 18 cm or more. The crossing bay tie-beam is used to connect the two adjacent fan structures, and only supports the floor or wood partitions, so its load is not so heavy. The width of this section could be 7 cm, the depth of the section 14 cm. The grooved tie-beam has a horizontal groove for installation of the floor boards, and is used to connect two adjacent eave columns. The width of its section could be 7 cm, the depth 15 cm.⁵⁹

The above dimensions of the components are the basic size guide. In a real project, the hand-ink master decides the size based on the height and span of the structure. For instance, in most of the drum towers I have seen, the main columns are 50 cm or more,

⁵⁷ From my field survey, Wenli Lu, Jitang, January 2014.

⁵⁸ From my field survey, Wenli Lu, Xiaohuang, November 2010.

⁵⁹ Ibid.

and the section of the tie-beam can be 28 cm deep and 12 cm wide, or even more if the load of the tie-beam is heavy.⁶⁰

In the structure, Dong carpenters create many joints, which vary in size and form, but all share the basic principle, interlocking and block. From my field surveys, there are three basic and representative joints: the connecting-tenon, half tenon, and hard tenon. Generally, using just these three tenons, the carpenter can build a structure. These tenons determine the stability of structure, and are elaborate. So when people install a tie-beam, they are forbidden to hammer the tenon, because it is easy then to break it. They have to strike it in some other firm place or pull and push the tie-beam.⁶¹

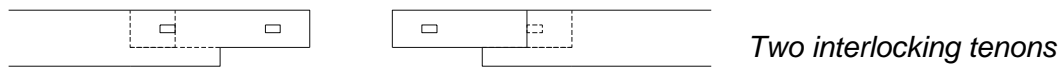


Figure 56. An interlocking tenon made by the carpenter Wendong Lu, at Xiaohuang village, 2010. Photograph by Derong Kong.

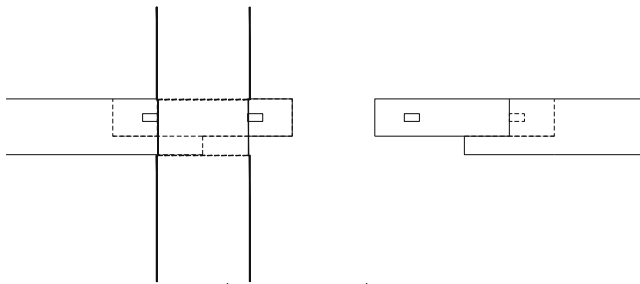
⁶⁰ From my surveys, Liping, Congjiang and Rongjiang Counties, 2010, 2013, 2014.

⁶¹ Ibid.

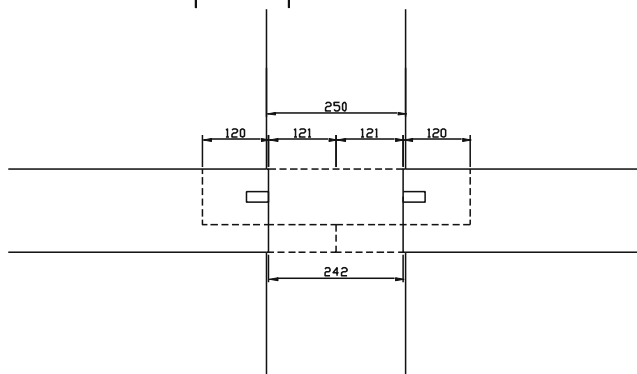
The first of the three types is the connecting-tenon, used to unite two tie-beams. The tenon is partially removed to create a groove, while another part keeps the original form, and part of the extended tenon shares the same shape of groove. The carpenter can copy and reverse it in another tie-beam, thus these two mutually complementary tenons can join to make one solid joint. Two holes are chiseled in the tenon, and after the two tenons are in position, two small pegs are inserted to lock the joint (Figure 56,57).



Two interlocking tenons



Assembly of interlocking tenons



Assembled interlocking tenon

Figure 57. Diagram of interlocking tenons. Drawing by Derong Kong.



The second type is the half-tenon, The section of the front part is the same as the tie-beam, then the rest of the tenon only has half the depth of the tie-beam and goes through the column. It is usually used to connect the eave column or support the hanging column (Figure 58).

Figure 58. The half-tenon in the hand-ink master Wenli Lu's house, at Luoxiang Town, 2013. Photograph by Derong Kong.



Figure 59.
A finished half-tenon, at Xiaohuang village, 2010.
Photograph by Derong Kong.



Figure 60.
The connecting-tenon, half tenon in a structure, at Xiaohuang village, 2010.
Photograph by Derong Kong.

The third type is the hard-tenon, in which the whole tenon goes through column. As hand-ink master Wenli Lu, Wendong Lu and other carpenters say, the size of the tenon is called ‘big enter small out’, 大进小出, as the entering section of the tie-beam is the same as the tie-beam, then at the outer end, the size of the section shrinks in depth and width, in order to block the tenon from moving outward.⁶² It is usually used to connect and support the hanging column and eave purlin (Figure 61).



Figure 61.
The hard-tenon in the structure of an earth altar, at Guima village, 2014.
Photograph by Derong Kong.

⁶² From my field survey, Xiaohuang, November 2010.

3.2.2 Carpentry tools

The Dong people also learnt from the Han culture to enrich their architectural techniques. Migration and communication brought new architectural techniques and tools, prompting their local development. The research of Luo suggests that Dong people used Han architectural techniques and tools earlier than other minority groups nearby.⁶³ Dong carpenters used Han techniques and woodworking tools earlier in construction, therefore the Dong building's columns, beams and other structural members were standardized. This provided the technical foundation of Dong building. Below is a set of tools commonly used by carpenters among Dong area. These tools belong to the hand-ink master Fenglin Pan, at Xiaohuang village (Figure 62).⁶⁴



Figure 62. Carpentry tools. Photograph by Derong Kong.

Cutting tools: axe, saw.

In woodwork, the carpenter uses an axe to cut timber, and also uses it to make wooden components, such as to remove the bark from timber, cut tenons, and sometimes he uses its back as a hammer to knock the tenon into the mortise and to adjust the position

⁶³ Luo, *Folk Dwelling of Guizhou*, p. 44. 罗, *贵州民居*, p. 44.

⁶⁴ From my field survey, interview with hand-ink master Fenglin Pan, aged 65 years, Xiaohuang, March 2010.

of wooden components. The axe is used throughout the whole process of the construction, and as a tool for performances in constructional ceremonies (Figure 63).



Figure 63. Axe.
All photographs by Derong Kong.



Figure 64. Saw.

According to the framework type, frame saws are divided into big or small frame saws. The big frame saw is for two men to cut big wooden components, while the small frame saw is for one man to make small components (Figure 64).

Planing tools: these consist of long plane, short plane, plane, line of plane.

A plane is used to process the surface of timber, making it smooth and flat for drawing ink lines on, and it is used in making rough components smoother (Figure 65).



Figure 65. Plane. Photograph by Derong Kong.



Figure 66. Drilling cone.



Figure 67. Chisels.

All Photographs by Derong Kong.

Chisel tools: these consist of drilling cone, file, flat chisel, gouge, and skew chisel (Figure 66, 67).

Carpenters use these tools to cut away part of the timber, to chisel mortises in a column, make tenons on a tie-beam or drill a hole in a tie-beam or a door.

Units of measurement



Figure 68. Measurement in Dong carpentry. Drawing by Derong Kong.

The Dong measurement system is imported from the Chinese traditional dimension system which was generated from the size of different parts and movements of body. For instance, the Cun is derived from the width of a pressing finger, and the Chi is derived from the length of the forearm (See Chapter 7). In an actual project, sometimes the carpenter uses his thumb as a reference to measure the size of a component, but it is only applied in a small part of the construction.

Zhang 丈, a unit of length (1 zhang=3 1/3 m)

Chi 尺, a unit of length (1 chi=1/3 m)

Cun 寸, a unit of length (1 cun =1/3 dm)

Fen 分, a unit of length (1 fen=1/3 cm)

Li 厘, a unit of length (1 li=1/3 mm)

Standardization of architectural measurement is one criterion of the architectural system, indicating that Dong building has its own architectural system. The following describes the independent, unique feature of Dong building architectural measurement.

Lu Ban Ruler 鲁班尺

When the hand-ink master constructs a building, he uses a Lu Ban Ruler to measure the size in order to achieve good luck and wealth. In Changjie Li's research, the Lu Ban ruler has eight marks: 财 treasure, 病 illness, 离 apart, 义 loyalty, 官 officer, 法 principle, 害 harm, and 本 origin. The distance between each word is 'one Cun eight' on the ruler, but actually is equal to one Cun.⁶⁵ In the design, according to tradition there are 'Eight words for good or ill luck' (八字吉凶), and the hand-ink master chooses the size. These sizes are usually applied to the door, window, hearth and furniture. As hand-ink master Wenli Lun says, the dimension is especially important for the front door, so that the door can be a 'Treasure door', 'Good fortune and virtue door', 'Officer door', 'Righteousness door', etc. So this ruler is also called 'measure door heaven ruler' (量门天尺).⁶⁶

Matching the white ruler(压白尺法)

The 'Method of pressing the white ruler' (压白尺法), connects the scale of the ruler to the Chinese traditional Nine Star Diagram, matching each star and applying them to the design of the building. This ruler is called the 'Nine square rule'. In this method the auspicious sizes are six Cun and eight Cun. From my field survey, as Wenli Lu says, since some of the sizes end with eight or six, based on the rational and appropriate size, the hand-ink master just needs to add a small number at the end of the total size to achieve an auspicious number. It is quite flexible in application to his design.⁶⁷ But

⁶⁵ Li and others, Northern Guangxi Folk Architecture, p. 353. 李和其他, 桂北民间建筑, p. 353.

⁶⁶ From my field survey, Wenli Lu, Xiaohuang village, November 2010.

⁶⁷ From my field survey, Wenli Lu, Jitang village, January 2013.

nowadays these two methods of applying the ruler are less used in the Dong area, and few people know about them, even among carpenters.

Measurement tools: folding ruler, deformable try square, try square, ink pot and line, bamboo pen, Zhang pole (a piece of bamboo), plumb line.

A Dong carpenter uses the try square to measure the size or to adjust the angle, to draw a straight line or a right angle. The shape of the try square is like the capital letter 'L', consisting of one long board and one short board, and connected by mortise and tenon at a right angle. Wenli Lu says, the short board is thick and has calibrations on it, and it is called the handle of the ruler; the long board is wide and thin without calibration, and is called the wing of the ruler (Figure 69).⁶⁸



Figure 69. Try square.



Figure 70. Ink pot.



Figure 71. Deformable try square.



Figure 72. Bamboo pen.

All Photographs by Derong Kong.

⁶⁸ From my field survey, Wenli Lu, Xiaohuang village, November 2010.

A Dong carpenter has a big try square and a small try square, the length of the big try square's handle of ruler is one Chi and the wing of the ruler is two Chis; the length of the small try square's handle of ruler is five Cuns and the wing of the ruler is one Chi.

The ink pot consists of an ink container, a reel with ink thread, and a pin made of horn or wood (Figure 70). From my field survey, when a carpenter uses it, he needs to insert the pin into one end of the timber, then he walks back and releases the ink thread of the reel. The thread goes through the ink container, and gets soaked in ink. When he reaches the planned point, the carpenter lifts the thread above the surface of the timber in tension, then releases it to snap an ink line onto the timber. The thread can be rolled back to the reel in preparation for the next drawing. The ink pot is made by the carpenter himself using valuable timber such as, *fagus longipetiolata*, walnut, mahogany, or red bean fir. The ink container usually is carved in various shapes, like a fish, or dragon and has ornaments as a representation of the carpenter's skill, and carpenters enjoy this celebration.⁶⁹

The plumb line is also used for drawing an ink line. It can guarantee that the ink line is vertical. When assembling components, it also can serve to adjust the column to assure that it is vertical. A bamboo pen can also be used to draw the ink line.

Making the Zhang pole

The hand-ink master can use a diagram or a model to explain the design, because the ground plan of a building is usually regular, so he only needs to draw one corner of the building to explain the whole design. From my field survey, as Wenli Lu says, the design mainly focuses on the section, and for a regular house he only needs to design half of the fan structure, because the rest of the structure is the same. The design of the drum tower has the same character, for after he has designed half the fan structure, he just needs to rotate the unit of wooden framework around the center of the plane to form the whole structure.⁷⁰

For a project, the model and plan are not necessary for the hand-ink master: what he really needs is the 'Zhang pole'; which some call 'Fragrant haulm'. After the design project is agreed with the host, the hand-ink master draws all the sizes for the wooden

⁶⁹ From my field survey, Xiaohuang village, November-December 2010.

⁷⁰ From my field survey, Wenli Lu, Xiaohuang village, November 2010.

components on the 'Zhang pole' (a piece of bamboo) and marks the sizes with his own secret letters. As Sennett says of craftsman's handwork this defines the possibility and it becomes ingrained in the mind, so before a thing is constructed the idea of it is made complete in conception.⁷¹ This is a way they organise and present their experience (Figure 73).



Figure 73.

Use of Zhang pole during construction.

Photograph by Derong Kong.

The 'Zhang pole' is a measuring tool to record distance, but it is also the equivalent to the Dong of an architectural plan, recording the sizes of all wooden components. The Zhang pole is a half piece of bamboo. After scraping off the cyan husk, the quality of exposed golden bamboo is slippery, non-stick, easy to write on, but also easy to erase. As Luo describes, the Dong carpenters use a try square and a bamboo pen to draw codes, recording the sizes of various columns, tie-beams and structural components on this piece of bamboo (Figure 73).⁷²

The two sides of the bamboo strip will record the size of a column or tie-beam separately, including the length of column and tie-beam, and the sizes and positions of mortises on the column (Figure 74). But the sizes of tenons are recorded on another series of bamboo sticks. After the all the columns have been made, the hand-ink master

⁷¹ Sennett, *The Craftsman*, pp. 40-42.

⁷² Luo, *Folk Dwelling of Guizhou*, p. 45. 罗, *贵州民居*, p. 45.

uses a series of small bamboo sticks to measure and record the sizes of the mortises in the columns.



Figure 74.
Diagram of sizes on a Zhang pole transferred during construction.
Photograph and drawing by Derong Kong.

From my field surveys, each hand-ink master has his own codes, written in ‘Luban letters’ to define the different components, so that each component has its own code. The various sizes on the Zhang pole are accompanied with corresponding codes to identify which component each belongs to. These codes represent names of components: column, short column, tie-beam, purlin; position of component, up, down, middle, front, back; number of structural units to which the component belongs: first, second, third, fourth. Because the Dong do not have a shared written language, each carpenter learns from a different master, the codes being created according to their own experience or habit, so the specific code can vary, although they share similar principles and some commonalities (Figure 75).⁷³ Below is the illustration of a code and the corresponding coordinate system of the hand-ink master Wenli Lu.⁷⁴

丿 Tie-beam	1	2	3	4	5
⊥ Column	6	7	8	9	10
フ Hanging column	11	12	13	14	15
ε Short column					
∟ Front					
	16				

Figure 75. The code of the hand-ink master Wenli Lu. Drawing by Derong Kong

⁷³ From my field surveys, Liping, Congjiang and Rongjiang Counties, 2010, 2012, 2014.

⁷⁴ From my field survey, Wenli Lu, Xiaohuang village, November-December 2014.

Coordinate system of the hand-ink master

The whole structure coordinate system is based on personal construction experience. Construction experience is the principle to organise and edit the code system. According to my fieldwork, and just as Wenli Lu says, the system works in any way as long as it is convenient to remember and manage.⁷⁵

The code system is established on the precondition that the hand-ink master is thoroughly conversant with the structural context and the construction sequences. It has a close relationship to the construction context of the structure. So he can use components as references to mark other components which have mutual structural context. Every component either supports or is supported by connected components. The organisation of the code also follows the construction sequence from bottom to top, and from inside to outside.

Based on the structural relationship and construction sequences, the carpenter determines the code system step by step. The following is the coding procedure described by Wenli Lu.⁷⁶ All of this design starts from the ground floor. When the hand-ink master plans the use of site, according to the size and the host's demands, he arranges the ground column grid. This is the first step to establish the whole building coordinate system. He uses two mutually perpendicular coordinates, abscissa and ordinate, to locate the position and code of the ground columns (Figure 76).

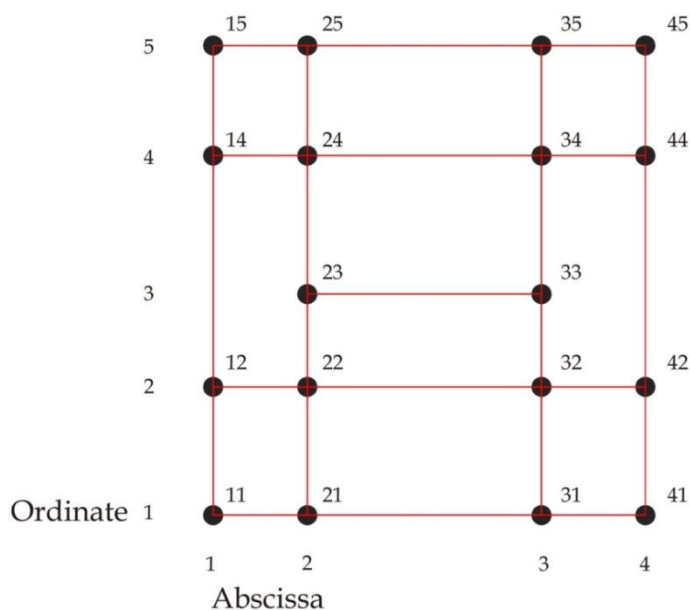


Figure 76.
Code organisation of the ground floor. Drawing by Derong Kong.

⁷⁵ From my field surveys, Wenli Lu, Xiaohuang village, November 2010.

⁷⁶ Ibid.

After the ground column grid is determined, it is time to design the fan structure group (a flat frame or gable). The design includes the size of each component and also has a code to classify its position in the structure. At this time the code of the structure divides into up and down, front and back, using a particular column as coordinate to define the position of other components. The column types are ground column, hanging column and short column. The positions of these columns are defined by the vertical and horizontal coordinates. The system and coordinates of the ground columns are the reference for hanging columns and short columns, to define which row they belong to and the order of the columns (Figure 77).

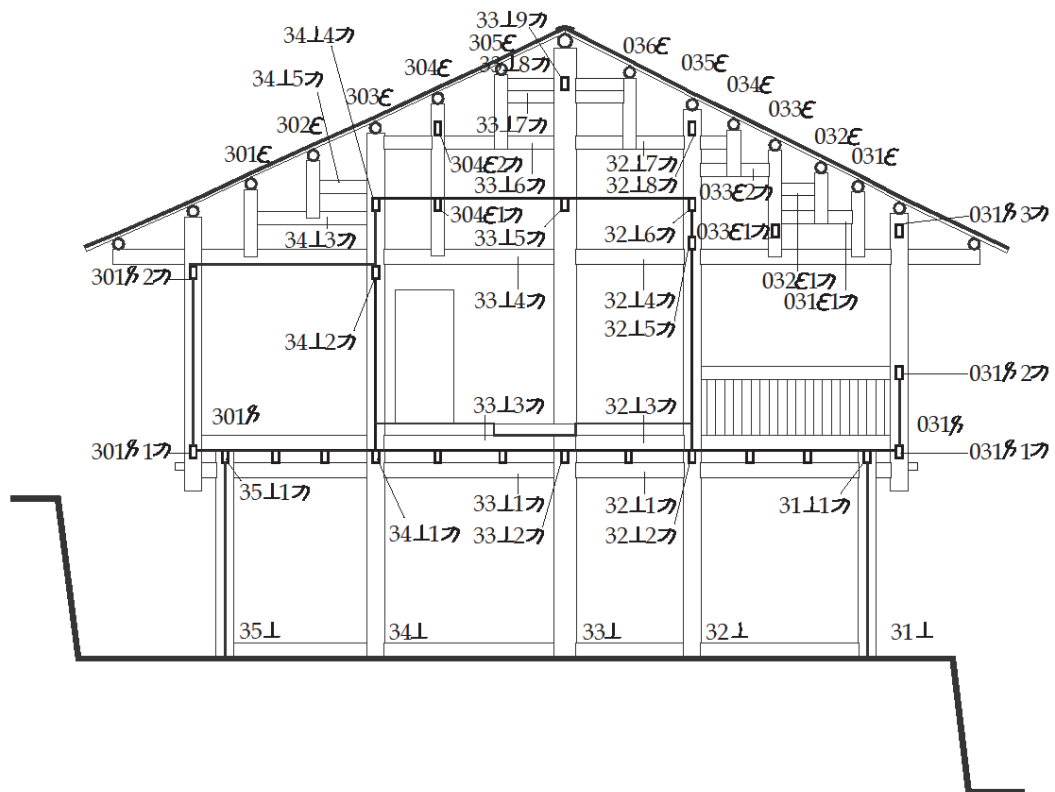


Figure 77. Codes of a fan structure group, the third row in the structure. Drawing by Derong Kong.⁷⁷

Each hanging column is located in a particular row unit of structure, and the code organisation of ground columns works as a reference to define to which row it belongs. The hanging columns are divided into front and rear, up and down. The name presents its structural character and position in the structure. The hanging column is the outer structural component. The hand-ink master counts it from bottom to top to determine

⁷⁷ From my field survey, taught by Wenli Lu, Xiaohuang village, November 2010.

which hanging column it is, first or second. And he counts from front to rear to determine if it is in the front or the rear part of the structure. When the position and code of hanging column are decided, from bottom to top, according to front and rear, left and right, the hand-ink master can record the position and code of the tie-beam connected to the hanging column.

The order of installing the short columns is from bottom to top, and moving inward layer upon layer. On the basis of its structural context and assembly order, the code of short columns runs from outside to inside. So the outer short column is the first short column, in this sequence, and the columns are so numbered. The ground column decides which row the short column belongs to. Then according to the front and rear direction of the structure, it is recorded as a rear or front short column.

After each short column has received its code, the hand-ink master uses the short columns as coordinate references to define the code of the short column tie-beams connected to the short columns. The way is the same as with the tie-beam of the hanging column.

The processing of joints presents the order of making components and connection of components. Every mortise has a small bamboo stick to record its exact dimensions and is marked with a code corresponding to the tenon of the tie-beam. So the code also classifies the position and direction of the tenon in the structural system (See Chapter 4).

A Module

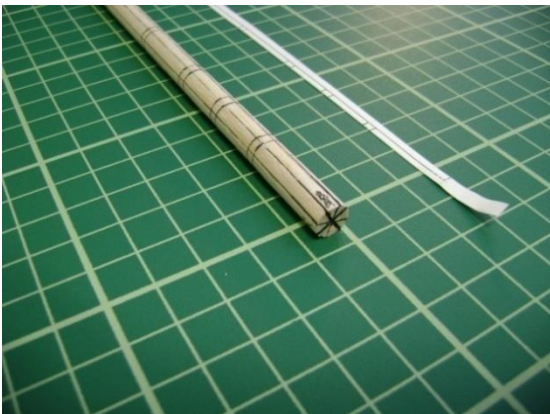


Figure 78. Drawing ink lines.

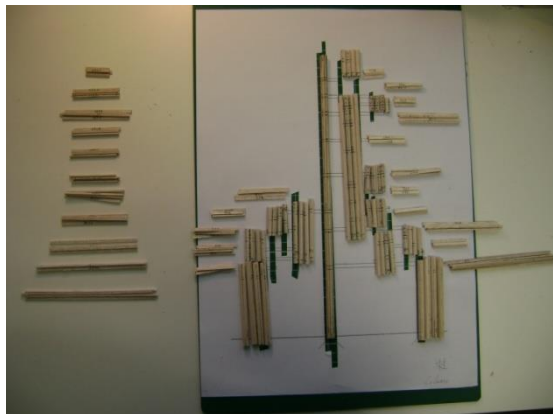


Figure 79. Finished components.

All Photographs by Derong Kong.

As a practice and test of my knowledge of Dong carpentry, I made a model of the single column drum tower at Shudong village, in the way of the hand-ink master. First I chose the material for the columns and tie-beam, then I drew ink marks on the materials and cut them into the length of the components. Next I drew ink lines on the components to indicate the sizes and positions of mortises and tenons (Figure 78). Following this came a massive handcraft work to process the components. After 3 weeks, I finished all components (Figure 79).

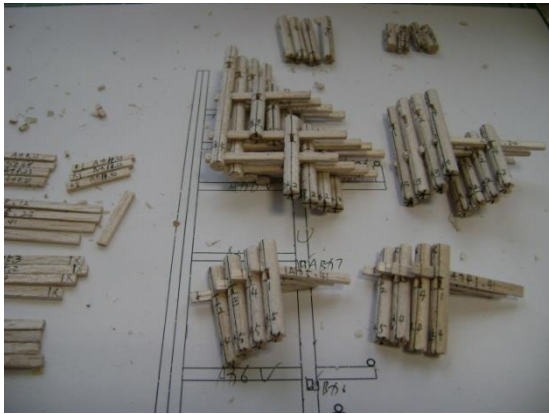


Figure 80. Pre-assembling.

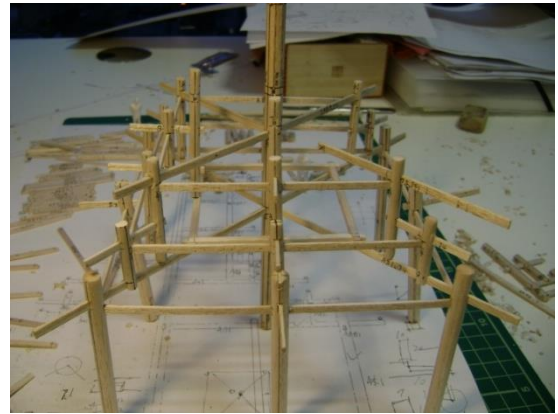


Figure 81. Assembling.

Photographs by Derong Kong.

The order of assembly is from bottom to top, and from inside to outside. In this process the structural relationships are clearer, and the way to install or preinstall components is tested and improved (Figure 80, 81). It is a process of testing and comparing with previous construction experience, making construction more efficient and proper, and exploring the possibility of construction. The new experimental practice, as compared with former experience, refines the memory.

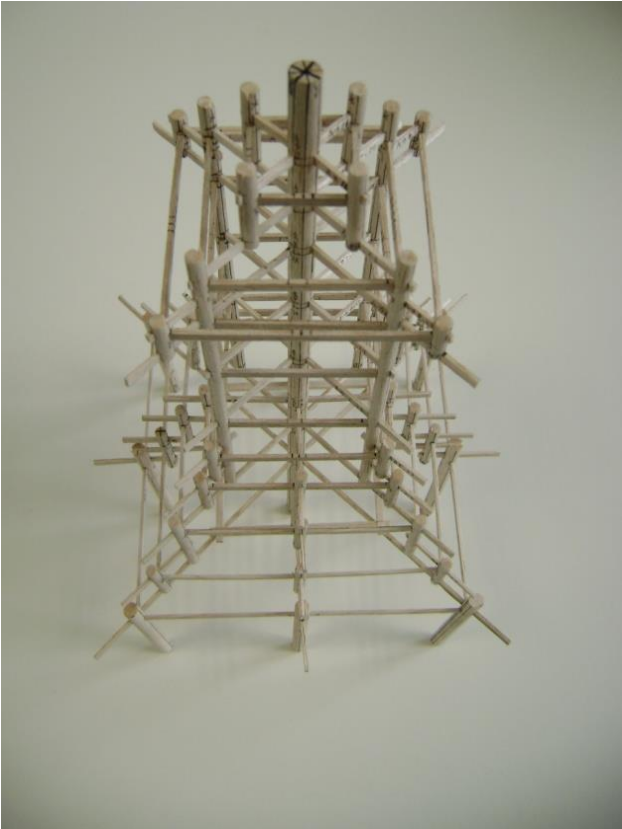


Figure 82.

The finished model of the main structure of Shudong drum tower.

Photograph by Derong Kong.

Use of the Tools

Procedure Tools	Record of the design	Felling timbers	Making rough components	Drawing ink lines	Making columns	Drawing ink lines	Making tie-beams
Axe, Saw		●	●		●		●
Plan			●		●		●
Chisel					●		●
Ruler, Ink pot, Zhang pale	●			●		●	

Table 1. The use of the tools at different procedures, the black mark means the use of the tool. Drawing by Derong Kong.

Producing high quality components, cutting the wooden component to the right size, especially with accuracy of mortise and tenon, are the key points of timber processing. When assembling the components, high quality components can join smoothly, cost less time and improve the stability of the structure. I have seen a new folk dwelling in my hometown of Kaili which only has the main framework assembled and is already out of true. People said that the woodwork is not good, so it has gradually moved.

In my field survey, I found the Dong carpenters to be very skilled with different tools, such as using the long saw to cut an even surface of timber. It looked easy, but afterwards I had a try, and found I only got a curved surface. The hand-ink master Wenli Lu told me that when the saw goes into the timber, it suffers pressure from both sides, and these pressures disrupt its movement, so you need to adjust your work by slowing the saw and pulling it back when you feel it been disrupted, then after it has regained the right direction, you can increase the speed. With this knack they make an even surface by hand.⁷⁸

In my field survey, the carpenter Wendong Lu demonstrated the processing of mortises, based on the area defined by ink lines on column (Figure 83). First he chiseled a rough hole in the area, then he used a fine chisel to shave off the rest of the wood inside the area: this is the crucial part in making a mortise. He had to stand in front of the unfinished mortise and move his head above it, making sure by eyesight that it was vertical to the ink line of the mortise, in order to ensure that the surface of the mortise through the column is straight and aligned with the ink line predicted. When chiselling the edge of the mortise, the direction of cut should be towards the hole to avoid crossing the ink line and damaging the component. After one side of the mortise is finished, it is turned around to another side and worked again by the same procedure. The ink lines on both sides also provide a reference to adjust the inner surfaces of the mortise. Before finishing, he left about 1-2 millimeters on the inner sides of the mortise, in case of error, and shrinkage of wood.⁷⁹



Figure 83.
The carpenter Wendong Lu processes the mortises in a tie-beam. Photograph by Derong Kong.

⁷⁸ From my field survey, Wenli Lu, Xiaohuang village, November 2010.

⁷⁹ From my field survey, Wendong Lu, Xiaohuang village, November 2010.

The above is just part of their work. Through long practice, they have gathered much skill and experience in making components. Their level of skill and experience directly determine the quality of the building.

The skilled use of the tools can be shown in many aspects. In the book '*The Village Carpenter*', author Walter Rose described that 'the sound of tools properly used is in a pleasing tune.'⁸⁰ The same can be found in Dong carpentry, when the sound represents the carpenter's rhythm in using the tools. From the observation of carpenters' works, when a carpenter chisels a mortise, he strikes the chisel with a hammer. The first strike sounds light. Then when he thinks the chisel is going in the direction he expects, so he speeds up and increases the strength creating a regular sound, bang, bang, bang.... The sound is short and clear with an echo, which is the reaction from the timber, except the last strike, when the chisel goes through the column, which sounds like a relieved breath without an echo. A proficient carpenter uses a saw to cut timber. The movements of the saw generate a uniform sound. He propels the saw forward, the saw's teeth glide through the timber and it does not bite too deep, the sound is smooth. However, when he pulls it back, the sawtooth cuts across the timber with timber dust, the rasping sound is long lasting and heavy. When the timber is finally cleaved, the last sound is like a speeded-up cut.⁸¹

The carpenters are adept in control of direction and level of strength with repeated application of tools. To compare their works and test the tools I tried different ones. The first time I tried a plane, I thought it easy to handle as I saw. I pushed it hard and expected it to run forward, but it was stuck, feeling and sounding like a car which has suddenly braked. A carpenter told me, I should push it forward along the surface of the timber, not press it down. Because I pressed it down too hard, the blade of the plane cut into the timber and got stuck.⁸²

Sennett says a carpenter has his own rhythm.⁸³ It can be heard from his tools. A skilled carpenter creates a regular, clear and relaxed sound. In the field survey, when I observed carpenters' works, I liked to hear the stroke of the hammer and saw. The carpenter swings the hammer and strikes the chisel, his arm is tight, but his forearm is relatively relaxed, especially his wrist. So the strike is elastic and the sound is loose, not

⁸⁰ Rose, *The Village Carpenter*, p. 55.

⁸¹ From my field survey, Xiaohuang, village, November 2010.

⁸² Ibid.

⁸³ Sennett, *The Craftsman*, p. 9.

so sharp. The carpenter controls the hammer, wielding it at a comfortable tempo. The gap between two strikes is slack. Another carpenter also pulls and pushes the saw at his comfortable tempo, he decides the time to stop or start, slow down or speed up. The work site is bathed in sunshine. The sounds of the tools made by skilled carpenters compose their own melody. However, the most awful sound is when a tool cracks the timber.⁸⁴

In a field survey, in 2010, at the work site, I saw a carpenter's plane that did not work properly, creating a disordered sound, like something being torn open. He stopped his work and checked the plane. Other carpenters also turned to look at him to see what had happened. He found that the blade in the plane was loose, and its position had shifted, no longer parallel with the bottom of the plane. So the blade received unbalanced force and scratched the timber. Other carpenters said this is easy to fix and continued their work. The carpenter had taken the blade out and sharpened it. Then he put it back, knocked and secured the blade into position. Finally the plane was back to its proper function and worked smoothly again.⁸⁵

The machine-saw has now replaced the old long saw to cut timber and boards. The machine-plane has also replaced the traditional plane. It seems that most carpenters like these machine tools, as they think they save a lot of labour and time. They said that if a skillful carpenter uses a traditional saw and plane to do all the work, he can make about four tie-beams per day, and after that his back and arm are extremely sore and tired. Now they use the machine tools to do most of the rough work, then use the traditional tools to process the timber further, as they say the delicate woodwork only can be done by hand. So now a skilled carpenter can make about eight tie-beams per day, and he will not feel so tired after the work.⁸⁶

3.2.3 Number and form

Dong do not have the conception of the decimal fraction. But from Yongchao Luo's study (He is a mathematics professor in Kaili Collage and is also a Dong person), they have the conception of fraction, when they count numbers, they use fractions to divide numbers, such as $1.5=1\frac{1}{2}$, $0.75=\frac{3}{4}$. In terms of geometry, they have polyline, triangle,

⁸⁴ From my field survey, Xiaohuang village, November-December 2010.

⁸⁵ From my field survey, Xiaohuang village, November 2010.

⁸⁶ Ibid.

right square, rectangle, circle, polygon. They do not have the conception of an ellipse. In Dong language they call the ellipse flat round. They did not use regular triangles. They know about corner and slope, but they do not have a term for angles. However, the right angle, angle of 45 degrees, 67 and 1/2 degrees, 60 degrees and 135 degrees are all applied in construction, being the corner of a right square, right hexagon and right octagon.⁸⁷

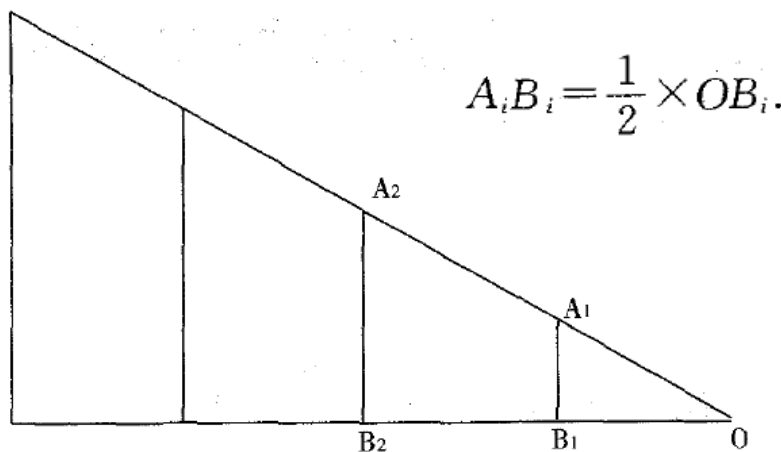


Figure 84. Simple trigonometry and scale in Dong. Extract from Luo, '2 and 1/2 in Dong mathematics culture and relevant calculation', 13. 罗, '侗族数学文化中的2与1及相关计算', 13.

The Dong have an initial conception of simple trigonometry, such as that the slope is the proportion of two lines (gradient), $A_1B_1/OB_1=1/2$. This is used in counting the slope of a roof. In the design when the carpenter knows the length of the tie-beam he can work out the height of a column (Figure 84).

In Yongchao Luo's research, they know scale, and can process basic scale calculations. The multiples of 2, 1/2, 10 are widely used in the design of buildings. In the building many sizes follow the same scale, such as $A_2B_2=1/2 OB_2$, so through scale calculation, the carpenter can know the size of a component.⁸⁸ This is very useful in calculating the heights of short columns and the length of the tie-beam for short columns. While a hand-ink master is designing a building, if he does not have the knowledge of simple trigonometry, he can draw a plan at small scale, then multiply the length by the scale to get the size of the component.

⁸⁷ From my field survey, interview with Yongchao Luo, Kaili, March 2010.

⁸⁸ Longchao Luo, '2 and 1/2 in Dong mathematics culture and relevant calculation', *Journal of Kaili University*, 26(2008), 14. 罗永超, '侗族数学文化中的2与1及相关计算', *凯里学院学报*, 26(2008), 14.

There are three frequently used triangles in the horizontal or vertical pattern of the building (Figure85).

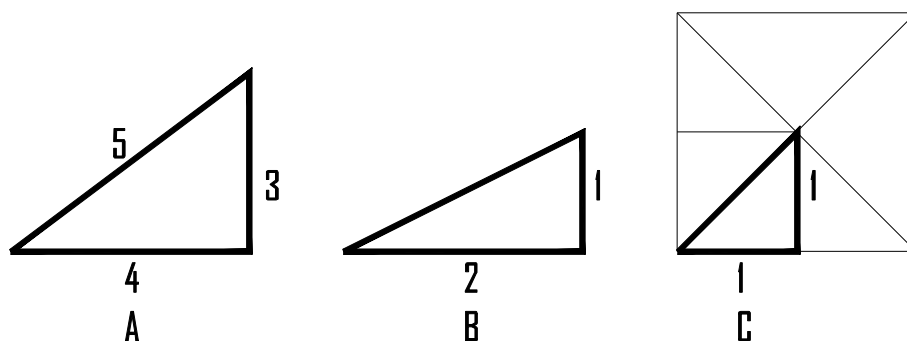


Figure 85. The three frequently used triangles and their scales. Drawing by Derong Kong.

According to Luo's research, the triangle A is used in the section of the top roof of the drum tower. The slope is $3/4=0.75$, and some multiple eaves of the drum tower also use this slope. Sometimes if the hand-ink master wants the top roof to look steeper, he can rotate the triangle in a clockwise direction through 90 degrees to attain a slope of $4/3$. The interesting thing is the scale between the length of the slope and the other two lines, which is 5:3:4 as in the Pythagorean theorem. Some hand-ink masters know this scale, thus they can count the length of the slope instead of measuring. The triangle B is widely used in the section of a house roof, with a slope of $1/2=0.5$. The triangle C is used in planning a building's corner and the top roof section of the drum tower. Its slope is 1. There are also other triangles, but as long as the hand-ink master knows the perpendicular two lines, he can accomplish the design.⁸⁹

In the design the scale and slope is decided by the hand-ink master, who controls the scale between components and the slope of roof to achieve the form of the building he expects. This is a factor in determining the geometrical form of the house and the drum tower.

⁸⁹ Luo, '2 and 1/2 in Dong mathematics culture and relevant calculation', 15. 罗, '侗族数学文化中的 2 与 1 及相关计算', 15.

3.2.4 Customs in Dong carpentry

Etiquette of Woodworking

As discussed in literature review (1.4.2 Folk custom, and 1.5 Architecture), and from my field surveys, a particular etiquette always accompanies the activities through the whole educational process and the construction process. From the conversation with carpenters, when the hand-ink master accepts a young man as his apprentice, the apprentice usually brings some gift for the hand-ink master, such as rice, wine and a cock. The master drinks three cups of wine to signify that he will teach his student woodworking. The first cup of wine means skill in making furniture, the second one means skill in design and making houses, the last one means skill in designing and making adrum tower.⁹⁰

When the host invites the carpenters for a banquet, he should have prepared red meat, white meat, chicken or duck, pumpkin and vegetables. The condiments include spicy condiment and bitter condiment, placed around the table. In the middle of the table is the soup of sweet pumpkin. The hand-ink master will first eat the spicy condiment and bitter condiment, which means the hand-ink master and other carpenters will toil to finish this project. Then they eat the soup of sweet pumpkin to express the idea that although the task is toilsome, when they see their job finished, their heart will be sweet. With the first cup of the wine, the host will toast the hand-ink master to show his thanks, and the hand-ink master will offer a cigarette as respect. With the second cup of wine, the hand-ink master toasts the host to appreciate the generous treat, then the host offers a third cup of wine to appreciate the hand-ink master again. According to this order, the host will drink with everyone around the table.⁹¹

In the dinner, eating chicken or duck also follows a special rule. The leader of carpenters has the qualification to eat the head of the chicken or duck, which means he is the leader of the team. The second leader can eat the feet, which marks his place in the team. The third leader can eat the rump as the third in the team. After this other people can eat any part of the chicken or duck.⁹² As Sennett says, work rituals glue

⁹⁰ From my field survey, local carpenters, Xiaohuang village, March 2010.

⁹¹ From my field survey, a banquet at village elder Chen's house, Xiaohuang village, March 2010.

⁹² Ibid.

people together.⁹³ A master craftsman is perceived as a sociable expert, and the rituals among the craftsmen build a social bond within a small community.⁹⁴

Taboos

The Dong taboos may originate from ancient Dong people's fear of the natural environment, or be an action to avoid artificial damage to the natural environment which caused crop reduction and natural disasters. At that time, people could not make a reasonable explanation of these phenomena, so they put it down to a "deity", hoping through ceremony and taboos to strengthen people's ecological values, constraining their actions to maintain an ecological equilibrium. The taboos of the Dong are spontaneous, comprehensive and accumulated through long-term social development. They are an outcome and reflection of the demands of society, culture, life and production. Taboo has also become the base line and rule of Dong people's lives. It regulates production and daily life.

There are many taboos during the construction of Dong building. For example, they abstain from saying 'break', if the column is broken, and they can but say 'the column is open'. They abstain from throwing stuff down when erecting a house, and even wasting a small dowel is forbidden; they abstain from treading on the wooden horse of the hand-ink master; they abstain from trampling on the main beam; etc.

3.3 Education of the Dong carpenter

As the Dong do not have their own written language, the heritage of workmanship relies mainly on oral explanation and demonstration. But it is hard to explain by word or text, so it demands excellent personal perception and long-term practice and experience to understand and master it, especially some key technologies. The education of Dong carpentry was originally learned from the Han (They worship the same founder of carpentry, Lu Ban master, 鲁班. He was a Han, who probably lived in 507-444 B.C.), and their carpentry 'course' involved real projects.

⁹³ Sennett, *The craftsman*, p. 73.

⁹⁴ *Ibid.*, p. 246.

The hand-ink master is a naturally generated artisan, growing up in the social activity of production. He is educated within the live projects which is a more vivid experience than dry theory. The traditional teaching process is not as complete or clear as the modern architectural teaching system, but still follows certain procedures.

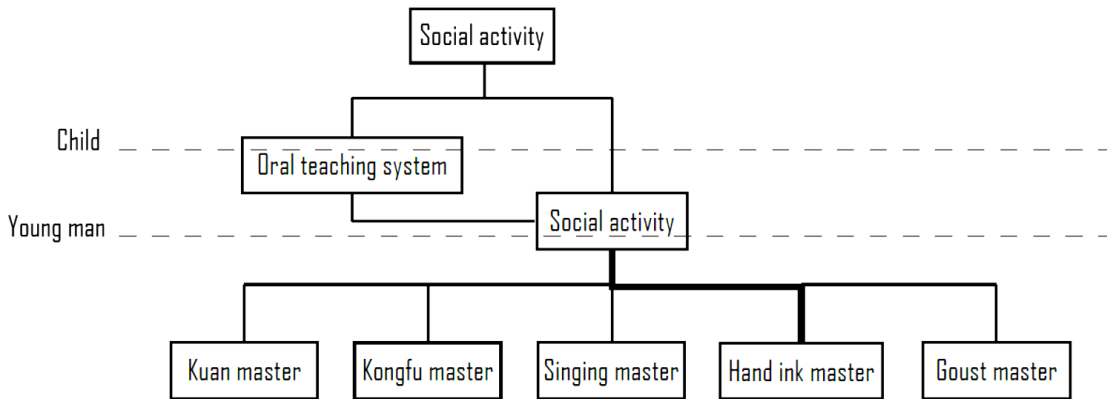


Figure 86. The growing up of a hand-ink master. Drawing by Deong Kong.

The growing up of a hand-ink master can be divided into three parts, child, young man, and apprentice (Figure 86).

Child

Oral teaching:

From the Village elder, Kuan master----- Dong verse, story.

From the Singing master---- songs

They grow up within folk custom, stories and activities.

The folk custom activity is organized by the village elders, and participation is obligatory. During this period of their upbringing, Dong people form their initial ideology, world view, cultural conception, faith and rule.

Young man

Takes part in the activity of production and the activity of custom; also in Kuan activity.

Through practice of social production and activity, the initial ideology, world view, cultural conception, faith and rule become enhanced in this period, generally shaped by collective experience. The young man has also

shaped his own experience and character. He starts to choose the profession that interests him.

Apprentice

Teaching process:

In the first year the apprentice learns to make furniture

In the second year he learns to build a folk dwelling

In the third year, if the master thinks he has a good character, qualifications and enough experience, he will teach him the method and skill to build a drum tower.

The hand-ink master Wenli Lu has described his learning experience. He was born at Jitang village, Liping County, on 15th March 1940. He accepted primary and middle school education at Zhaoxing village. He had an interest in carpentry since he was a child, and he liked to watch and learn how carpenters made furniture and buildings. When he was studying in middle school, his house was destroyed in a fire. His family had to rebuild it, and because he knew some carpentry, he borrowed some tools from a carpenter and started to make his own furniture. From age 17, he began to work as a carpenter, working for and learning from others. At age 20, he was apprenticed to his uncle, also a hand-ink master, to learn carpentry. In this process, he practiced carpentry work, learnt how to draw ink lines, etc. Every year there are two or three months available to learn carpentry, but the rest of the time the whole village is busy in farm work without construction projects.

After one year, he worked as an assistant for his uncle, and by that time, he already could design and build a house. In his third year, he was qualified to design a drum tower. After that he started to do projects alone as a hand-ink master and to teach apprentices. He has built numerous houses, drum towers, and wind and rain bridges across the Dong area. The famous Diiping wind and rain bridge destroyed in a flood of 2004 was repaired by him in 2007. He also built several drum towers at the national culture garden, park of Beijing, Shanghai, Guangzhou, and Shenzhen. Now he still teaches local carpenters the knowledge of Dong carpentry, while providing advice for new projects. And in 2007 he was honoured as 'distinguished inheritor of Chinese folk culture' by the Chinese Folk Literature and Art Association.⁹⁵

⁹⁵ From my field survey, Wenli Lu, Jitang village, January 2014.

3.3.1 Education procedure of a Dong hand-ink master



Figure 87. The hand-ink master Wenli Lu (the third from the right) and his apprentices at Xiaohuang village, in November 2010. Photograph by Derong Kong.

The hand-ink master Wenli Lu explains the detailed education process of apprentice as follows:

If the hand-ink master thinks the character and qualifications of a young man are good enough, he will accept the young man as an apprentice.

Stage 1. As an apprentice, the first task is to learn how to use the tools, and understands the uses of them. He must develop skills with various tools.

Stage 2. Then there are three levels of apprentice before he becomes a qualified carpenter, first level apprentice, second level apprentice and third level apprentice. A first level apprentice studies how to make wooden component. First, he has to make the rough wooden component. Second, he learns to process the rough wooden component into an exact wooden component. The hand-ink master will recheck the wooden

component and modify it as necessary till it becomes a qualified wooden component. The second level apprentice learns to use tools for making tenons and mortises. The third level apprentice learns to carve the detailed components and decorations. After this, the apprentice can be a qualified carpenter. This is also the main process to make wooden components.

Stage 3. The examination takes place within the working process. The master needs to see the progress of each step learned by the apprentice, until the master thinks that the apprentice is qualified. He then teaches the apprentice the next step in the woodwork. The teaching works through live projects. In a live project, the apprentice usually stands beside the master, helps him, and observes what the master has done. If there is anything the apprentice cannot understand, he can ask the master. The master is obliged to give an answer to the question. They are taught and learn in this interactional process. At each step, the apprentice is familiar with materials and components, and he begins to gain a general idea of structure and clear understanding of the uses of tie-beam, column, short column, hanging column, etc. He knows the components' names, functions, forms, and their positions in the structure. And he understands the structural relationship between components. For example, a tie-beam is the connection component between columns, so it also can support other columns.⁹⁶

To explain the above educational process. I have worked and lived with them for one month, recorded nearly the whole process of making all the components of the hand-ink master Wenli Lu's new house, during November-December, 2010 (*Figure 87*).⁹⁷ Here are 3 days record of a Dong carpenter's education demonstration during this field survey:

Day 1.

Master Wenli Lu told me the name of each component. I worked with him and his apprentices, recording how they make the different components.

Day 2.

Still working at the same place to process different components, I asked master Lu how they arrange the work according to seasons. He said the carpenter also works on the farm, and when the farm work is not so busy they can take the job of building a building.

⁹⁶ From my field survey, Wenli Lu, Xiaohuang village, November 2010.

⁹⁷ From my field survey, Xiaohuang village, November-December 2010.

He said the time for construction is usually after planting rice, in May. But there is still little work to do, because at that time people do not have much money or time to support big project. Only after the harvest in October do people have more money, food and time to afford a big project. It stops in the next spring, when it is time for spring ploughing. Then the order is repeated as last year.

Day 3.

I asked Lu master the meaning of the mark on the long bamboo (Zhang pole). He told me it is the mark to record the size of the component on bamboo. Then he showed me some signs.

In the afternoon, I walked around the work place and watched their work. Different apprentices were doing different works. Each component was divided into three or two parts of the work, and each apprentice was assigned a work procedure. Master Lu told me the apprentices should be divided into three classes; first class can only remove bark from a tree and turn it into a rough wooden component, then there is the fine wooden component; the second class apprentice can make the tenon, wooden joint, and mortise; the third class apprentice can do the delicate work of decoration. Each step should be based on previous work, only when the master thinks you are good enough, can you join the other work. Above are the examples during the carpenter's education.

Stage 4. Master Lu said after the apprentice becomes a carpenter, if he wants to learn more, he can follow the hand-ink master to learn how to design buildings and absorb the relevant knowledge. The first task is to learn how to draw the ink line and the code. This also includes the structure coordinate system, which is very helpful and important for a hand-ink master to design and construct the building. Then come the structure and dimensions of components. These two procedures do not have a regular teaching order. They could be carried out at the same time or be learned in turn. Because the function of the code is to classify the components and help the hand-ink master to remember the structural system, at the same time the structure coordinate system is established based on structural context and construction experience.

Once the carpenter has the ability to design a house, the hand-ink master lets him design and manage a real project alone. If the carpenter can build the house alone, he is honoured as a hand-ink master.

Stage 5. At last, if the master thinks the carpenter is of good character, well qualified and has enough experience, he teaches him the method and skill to build a drum tower. This is also done as a live project, including the examination. When the carpenter can design and manage the project well, the hand-ink master will let him construct a drum tower alone as the final examination. If the project is accomplished in good quality, at this point, the carpenter is qualified as a high-level hand-ink master.⁹⁸

3.3.2 Partial efficiency

This oral education is limited by time and space. So it demands an instant and direct contact with people and things. As with the learning method of Stradivari, Sennett says in demonstration 'directive language can make the process of osmosis more concrete and definite', while tools in the workshop enable instructive expression.⁹⁹ In scene narrative, the tacit knowledge is transferred which could be better understood in face to face communication.

Also Rose says that craft lore could be readily understood by anyone that practiced it. In this method, it is understood in practice and examined through the adjustment of carpentry work.¹⁰⁰ I agree with this idea, as it was clearly borne out according to my fieldwork and personal practice, where carpentry was live material knowledge. In order to achieve a better method, people should work through practice and thinking to explore the possibility. Making is also a thinking process. So as Sennett says of all work, the understanding of a thing only slowly appeared after actually doing it.¹⁰¹ Further discussion of Dong carpentry experience and knowledge will proceed as follows.

The thing itself

Material, structure and joint

The material has its own physical character, and in the construction process, people put their subjective cognition onto the material. As Sennett says, the physical character and

⁹⁸ From my field survey, Wenli Lu, Xiaohuang village, November 2010.

⁹⁹ Sennett, *The Craftsman*, p. 75, pp. 179-181.

¹⁰⁰ Rose, *The Village Carpenter*, p. 54.

¹⁰¹ Sennett, *The Craftsman*, p. 199.

experience of identification are mixed.¹⁰² The character of the timber and structure are known by the carpenter from their appearance and performance: this cognition is an external experience of the identification and possibility of material and structure.

However, materials and structures retain their character, sensitive to force and gravity with a low flexibility, resistant to dishonest modification. In the structure, different components are assigned specific functions. And they all have to respond to gravity, in their own weight or loading from other parts.

The character of the material limits the possibility of the structural composition which the carpenter wants to have. He is forced to honestly follow the character of the timber, knowing how to choose timber, process it, and use it in construction. Otherwise, as Sennett says, the material will just not work, its reality will talk back.¹⁰³ Also as Zumthor says, the resistance of natural character in architecture reflects the tasks and possibilities which are inherently its own, as it speaks its own language.¹⁰⁴

Rasmussen says that through practice, as the carpenter runs his fingers again and again over the materials, he is able to sense the quality of texture, the possibility of the material, close to the essence of the material.¹⁰⁵ In his daily practice, the carpenter constantly reads and refreshes his sense of the capability and possibility of the material, the connection methods and the structure. Even if he is repeating an old step, he makes a more proficient fit according to the previous experience, and achieves a deeper understanding of material and structure. When he faces a new question, the recognition and possibility are expanded and tested.

A carpenter has his own experience of the load-bearing ability of component and structure. For instance, according to the position and function of the tie-beam in the structure of a house, the section is different. Wenli Lu says, the tie-beam to support the floor could be 18 cm deep and 8 cm wide, while the tie-beam to support the roof structure could be 20 cm deep and 8 to 10 cm wide. For the tie-beam of a short column, if it only supports one short column, its depth could be 14 cm, its width 6 cm. If the tie-beam supports two short columns, its section could be 17 cm deep and 7 cm wide.¹⁰⁶

¹⁰² Sennett, *The Craftsman*, p. 10.

¹⁰³ *Ibid.*, pp. 138, 272.

¹⁰⁴ Zumthor, *Thinking Architecture*, p. 26.

¹⁰⁵ Rasmussen, *Experiencing Architecture*, p. 177-178.

¹⁰⁶ From my field survey, Wenli Lu, January 2013.

Gravity and load determine the section, and the carpenter's long practice experience records these matters. The carpenter reads and adjusts the structure and component for the load. The same with the column: the more load it bears, the thicker the trunk must be.

In the making of components and construction process, Dong carpenters understand the different actions of force, such as to lock, press, block, squeeze, etc, and use them to interlock joints. So they create many joints to provide specific performance of force, and when they meet a new problem, they use their proficient experience to respond and deal with the demand. Every joint and structural function are responses to the question. As Zumthor says, the joint presents the quality of building as an object's statement to present the work.¹⁰⁷ The construction shows a simple and straightforward structural relationship.

Also, for instance, in the transition from a single column drum tower to a multiple column drum tower, the single column is replaced by multiple columns, from a component to a space enclosed by columns. In some places a Chinese carpenter uses timber to build an arch for a large span (Hong bridge, 虹桥), so this kind of carpenter expands his understanding of the material and structure. Nowadays, the exploration of the possibilities of the material, of the way to process material and organise the structure, still challenge the carpenter's mind.

The possibilities in tools

Axe, saw, chisel and plane are the basic tools of Dong carpentry. These are generated from the way of making the components, following certain patterns of action, for instance, cutting, chiselling and planing.

After thousands of times in use, the character and possibilities of tools are tested and expanded. Sennett says that since tools are made to fit specific purpose of construction, they send clear messages about which task should be done with which thing.¹⁰⁸ For instance, the weight and the long blade of an axe makes it more suitable for chopping, while the lightweight and short blade of the chisel are easily controlled by the carpenter's hand. But some features of tools are common and can be fitted to more than

¹⁰⁷ Zumthor, *Thinking Architecture*, p. 14.

¹⁰⁸ Sennett, *The Craftsman*, p. 195.

one pattern of action, such as the sharp blade that can both cut and carve timber (Figure 88). In the construction process, a carpenter can also use an axe to carve part of a component. The weight and form of the axe can fit into the action of hammering something (Figure 89). These stimulate the imagination and competence of the carpenter. The tool is the extension of the hand, and as the potter uses his hands to transform clay into pottery or china, timber is too hard for hands alone, so the carpenter needs to use tools to process timber. His hands manipulate the tool to transform timber into a component.



Figure 89. Carpenter uses an axe as hammer. Photograph by Derong Kong.



Figure 88. Carpenter uses a chisel to carve timber. Photograph by Derong Kong.

Drawing the ink line

The hand-ink master has his unique skill in reading the timber. Every time he draws an ink line on the timber, he determines how the timber will be processed. For instance, Wenli Lu says, a piece is thick but not very long, so he chooses it to be one of the eave columns. The position of the timber in the structure is decided. Before he starts to draw, he has to look at the timber, and carefully checks the grain, section and shape of the trunk. According to the above factors he needs to think about the best way to utilise the timber, making the column thick and strong with less labour. He compares this timber with the other column he has made, as he knows that the dense grain can bear more

load. The two longest centre lines can define the biggest diameter of the trunk when the section of a tree is irregular. The curved part of the trunk can resist more strength, so the curved part of the column is set towards the centre of the structure, and the direction of the timber is confirmed. Subsequently, he thinks of the tie-beams the column will connect with, and figures out the size, position and direction of the mortises. Thus the position, direction, and mortises of this column are confirmed, and in his mind the piece of timber is transformed into an eave column. He knows where and how to draw the line. The lines are the answer to his reading.¹⁰⁹

Handcraft

The combination of hand and craft forms the word handcraft. Craftwork is combination of art and craft. In these two words, the hand presents how the work is done. After long practice, the carpenter's hands become familiar with tools, materials, components and structure, and these experiences are recorded in their mind and body. As Pallasmaa says, the essential knowledge and skill in traditional culture are stored in the muscular and tactile senses.¹¹⁰

Just as Lakoff and Johnson say, the spatial concept 'up' arises out of our spatial experience.¹¹¹ There are some words that relate to the experience of handcraft, like 拿捏, 'take pinch', 推敲 'push knock' 把握 'grasp hold' are used in thinking how to manage the balance or way in doing things. Sennett indicates that a good craftsman proceeds by communication between concrete practices and thinking, and has his habits of communication evolve into 'a rhythm between problem solving and problem finding'.¹¹² Thus every touch and practice coordinate the balance between the carpenter' hand, eye and mind to find the proper way of work, his own rhythm and attitude of construction.¹¹³

The carpenter processes the material in his way, following his understanding of the material. Handcraft leaves the carpenter's visible work trace on the component, also an objectification of his work experience. The ways of his work are brought into the

¹⁰⁹ From my field surveys, Wenli Lu, Xiaohuang village, November-December 2010; Jitang village, January 2013, January 2014.

¹¹⁰ Pallasmaa, *The Eyes of Skin*, p. 60.

¹¹¹ Lakoff, *Metaphors We Live by*, p. 61.

¹¹² Sennett, *The Craftsman*, p. 9.

¹¹³ *Ibid.*, p. 176.

component and environment through construction, presenting a special rhythm and pattern.

After many steps of education in carpentry, the hand-ink master has a deeper understanding of the building. The comprehensive conception becomes more detailed. Every component has its own property, size, position, direction and name. The logic and order of construction begin to emerge, the experiential dimension becomes more stable and reliable. Their work become more and more regular, as a routinized behavior, a complicated repertoire of such procedures.

Thus the hand-ink master is so proficient in arranging the structure because he has practice in projects and thoughts in his mind over many jobs. He becomes familiar with the property of the structure, and he can extend or divide the house as he wants. When he walks through the site, he recalls his old experiences, when he walked into a building, and he thinks how wide the new house could be. He reviews his memory of walling in a room, so he can figure out the depth and width the house should be. When he designs a ladder, he remembers many ladders he has climbed, and whether it is comfortable to walk on a ladder with 18 steps or 15 steps. He looks at a timber with a 30 cm diameter at the bottom of trunk, he has chosen many timber with this similar size to be columns, and every column works well for many years. So this time he decides to choose this timber for a column as he has done before.

3.4 Conclusion

As discussed in literature review, 1.5 Architecture, the gaps in current research are identified, and in this chapter I have drawn on my fieldwork to add to the available materials on Dong carpentry, such as building material, tools, techniques, oral knowledge, carpenter custom, and the detail of Dong carpentry education. During the field survey, I visited villages and buildings recorded in books to check their reliability: some cases are confirmed as correct, but some cases were inaccurate compared to my field survey: all the materials have been presented in the various sections of this chapter. And as discussed above, I also made further analysis of Dong carpentry to discuss its content and education, such as the mathematics, material, size of component, tools,

oral education, the character of Dong carpentry. There key points are summarized and compared below.

Compared with the modern world's separation of things and the pursuit of efficiency, this pattern of activity bonds people with things, creates a close relationship between building and people. Dong people are influenced by what they constantly see and hear: they grow up in this architectural environment. The organisation of spaces, material, colour, light, sound, smell, and temperature, offer them a comprehensive impression of building. The practice of handcraft also makes a transaction between skin, eyes, hand, thinking, material, tool, skill possible. These lead to a deep understanding of building factors, details and joints, both are comprehended and adjusted in carpenters' body and mind. It is not only a method of making, but also a way of thinking and exploring.

The oral culture also has its limitations, as Yong Zhang says, for it cannot record as much knowledge as written language, the content is limited.¹¹⁴ The accent sometimes also could cause misunderstanding and distortion of information. For instance, the recited words for starting construction I learnt from hand-ink master Lu Wenli, is originally from Daoism: 'Washing land spells'. Most of the words are understandable, but some I do not understand, and even the master himself does not know their meaning. He said this was learned from his master, and he also just knows the pronunciation, nevertheless he does understand part of the spells. I have compared his recited words with Daoist 'Washing land spells', and I found out the exact meaning of the unclear words. The difficulty of meaning was caused by a distortion of accent.

It is also limited by time and space. The last generation cannot hear the old generation's way of speaking. Sennett says the master's head is stuffed with information, so unless he can see the points and insights of information, once the master dies, the work he produced can not be reconstructed.¹¹⁵ Limited by the means of expression, the conceptions in people's minds are not easily appreciated by others. Like the education of the hand-ink master, with few drawings, the learning all relies on talk and demonstration. It is really hard to understand and to remember so much knowledge, so in the old time, over twelve qualified carpenters only had one hand-ink master. This situation is similar in other aspects of oral culture. It makes a high demand on people's

¹¹⁴ Zhang, *Exploration of Dong Art and Literature*, p. 15. 张, *侗族艺苑探寻*, p. 15.

¹¹⁵ Sennett, *The Craftsman*, p. 78.

experience and talent. The hand-ink master now also uses drawing to teach apprentices, as he said, there could be three hand-ink masters in ten apprentices.

In the higher stages of skill, Sennett claims that the tacit knowledge serving as an anchor for understanding has a foundation and makes work possible, while 'the explicit awareness serves as critique and corrective'.¹¹⁶ Dong carpenters have rich tacit knowledge, yet limited by Dong knowledge and technique, and the way they work with things they lack explicit knowledge. Like the knot as has been discussed, their experiences are not right.

Also as Prof. Blundell Jones says, their knowledge is transmitted by action as a skill, untheorised.¹¹⁷ Dong carpentry has a common knowledge foundation, while it also has a strong character of locality and personal insight. It is local knowledge or a carpentry system that responds to local factors and needs. Moreover this system is consisted of local carpenters. And some knowledge is shared across an area or among a carpenter's group, but unlike modern knowledge, it has not been standardised and widely adopted. In a certain level, it is also a personal knowledge, like the organisation, treatment and cognition towards a factor or need could be varied among carpenters. These key summary points concerning Dong carpentry will be employed and developed further in the following Chapter on the construction of Dong house, and that on the drum tower (see Chapter 5).

¹¹⁶ Sennett, *The Craftsman*, p. 50.

¹¹⁷ From supervision, Peter Blundell Jones, November 2014.

Chapter 4

The construction of the Dong house

4.1 Small community construction, not only for the family

The construction of a house usually happens after October, because after this time the busy work of harvest is finished. People are free and have enough money and food to support the construction. At this time, the host's relatives and friends also can help and offer some gifts to the host. Otherwise the host makes trouble for the villagers.



Figure 1. *Dong dwellings at Jitang village. Photograph by Derong Kong.*

Mutual relations

In Dong custom, Dong people usually help each other in daily life, especially in building a house, as it is such a big and important project. As for relatives, neighbours or close friends, if they do not help the host, there could be a high possibility that the host would have less contact with them. In return when they have any issues, they would not receive any help from the host. At some level, this becomes comparatively an obligation.

On the other hand, if the host does not ask people for help, or if he invites other people, he is seen to be cutting the connection with local people himself, because other people would think 'we are not that close, or he might look up down on me', or 'that is why he did not ask me for help or invite me'. This commonly accepted custom integrates people within a small community. This small community is based on many relations, of which mutual assistance is one. In this process emerge the following roles: host, relative, friend, geomantic master, hand-ink master, carpenter, mason. The core man is the host with professional assistance of the above persons. They built up a dwelling. The construction process locates everyone's position in the system, assigning them their job, responsibility and obligation. The host is responsible for the main body of the dwelling; psychical space is constructed by the hand-ink master and the carpenters, divinity is imported by the geomantic master. From beginning to end, the host is always involved in the construction, so he has a close context to the house, accompanied with deep experience.

Group participation and construction

The custom of participation is an important part of the social structure. As Rapoport says, 'The custom of cooperative building not only helps overcome complex building tasks, but also has social implications'.¹ The social structure, culture, and custom itself are carried forward in practice. The construction process people join in is impressive, rational and complete, so easy to remember. Through the ritual process, the meaning and signification of a house are understood by people.

Group participation constructs a small community. Each time they build a new house, people repeat what their last generation has done, their memories recording events that happened before. The real thing maintains rules and principles, and people use events to explain and compare cases, then through comparison they conclude what is the proper principle. This event will be a reference for following generations when they are building a new house. The form of house, the custom of the community, and the house culture are so decided. In the project, the small community observes the construction process of the house, they know they live in this kind of house, and that their children will live in this kind of house, then in the future their grandchildren will live in this kind of house too. As Chwe says, there is open communication hence the publicity, thus people

¹ Rapoport, *House Form and Culture*, p. 107.

are embraced under the same knowledge system.² Thus, this small group is bonded with mutual relations, shares common culture and customs, lives in the same kind of house, and becomes a small community.

4.2 The sequence of construction



Figure 2. The construction process of the Dong house. Drawing by Derong Kong.

² Chwe, *Rational Ritual: Culture, Coordination, and Common Knowledge*, p. 24.

In my conversation with the hand-ink master Wenli Lu, he listed the general procedure for building a house (Figure 2). The hand-ink master manages all the procedures of construction and is responsible for the whole project. This is also the live project for a Dong carpenter's education. Different levels of apprentices and carpenters are involved and assigned jobs during separate procedures of construction. Compared with the construction of the drum tower, many rituals are the same, and the procedure to make components is also similar.³

4.2.1 Choosing the site

The first task is choosing a site. It could be the host's old site or bought from someone else. After the house is built, the family would live there for several generations, so the choice of the site is extremely important. According to the research of Fu and Yu, people would not move their home easily, and there is a proverb about it: 'Move a fire three times, and the fire will be extinguished. Move home three times, and the family will be poor'.⁴

There are some criteria for choosing a site. The front of the house should be open to let abundant light enter the wide veranda. As a proverb says: 'no matter whether a Dragon comes from the back or not, the eyes in the front must be open'. There should also be a source of water close to the house. It could be a well, a river, a water channel or a pond. These water resources are indispensable facilities for life, but they also have the function of fire fighting, which is extremely crucial for a wooden dwelling. The fear of fire also influences the choice of site. During my field survey, I discovered that if the site has suffered a fire disaster in the last three years, it cannot be used. Even after three years, a ritual should be performed before this site can be used again for building.⁵

The site should be close to the road, convenient for arrival and departure. In the record of Fu and Yu, in Nine village area, people usually choose the right side of the road for the entrance, and the right side should be low, convenient for walking. 'Do not be afraid of Green Dragon even if he is ten thousand high, only be afraid of the White Tiger who raises his head and looks'. Dong people call the hill on the left side 'Green Dragon', that on the right side 'White Tiger': the left hill must be higher than the right hill, if the family is

³ From my field survey, Wenli Lu, Xiaohuang village, November 2010.

⁴ Fu and Yu, *Custom of Nine Stockaded Village*, p. 177. 傅和余, *九寨民俗*, p. 177.

⁵ From my field survey, Xiaohuang village, November 2010.

to flourish.⁶ Dong people do not only plant Fengshui trees around the village to adjust the conditions, they also plant bamboos and banana trees around houses to improve the micro-environment.

And the site should not be far away from the village, because living alone could bring disaster, especially in former times, when bandits came, for only if a community worked together could it defeat intruders. Most of the farm work needs help from neighbours, so if a family lives alone, it is not easy to maintain a solid relationship with others and to receive the necessary support. After the site is chosen, the host will invite a geomantic master to check the orientation and land conditions. By calculating in relation to the host's date of birth, the geomantic master can tell whether it would bring good or ill luck to the host, and what are good days to start the construction, and erect the structure.

4.2.2 Cleaning up the site

Then comes cleaning up the site, making the site flat. The host needs to hire masons to sort out the site. Wenli Lu says there could be a ritual for laying the stone base performed by the mason.⁷ The site treatment could be different, as for a flat site, it only needs a little treatment. According to the record of Changjie Li and others, for a site on the slope of hill, there are five ways to deal with it. The first method is to dig out the front part and make it flat to create a space for the ground floor, then to pile a stone base over the rest of the site for the first floor. The second is to build up a stone base along the front part of the site, then dig out the rest of the site to create a flat ground. The third is to dig the entire slope to make it flat ground. The fourth is to pile up a stone base to cover the entire site to achieve a flat ground, but this costs lots of money and labour. As a final method, if the site under some extreme geographical condition, it also can be organised in the following design discussion: the hand-ink master only needs to adjust the heights of the ground floor columns to adopt the land form, and places pad stones under the columns (Figure 3).⁸

⁶ Fu and Yu, *Custom of Nine Stockaded Village*, p. 177. 傅和余, *九寨民俗*, p. 177.

⁷ From my field survey, Wenli Lu, November 2010.

⁸ Li and others, *Northern Guangxi Folk Architecture*, pp. 266-268. 李, *桂北民间建筑*, pp. 266-268.

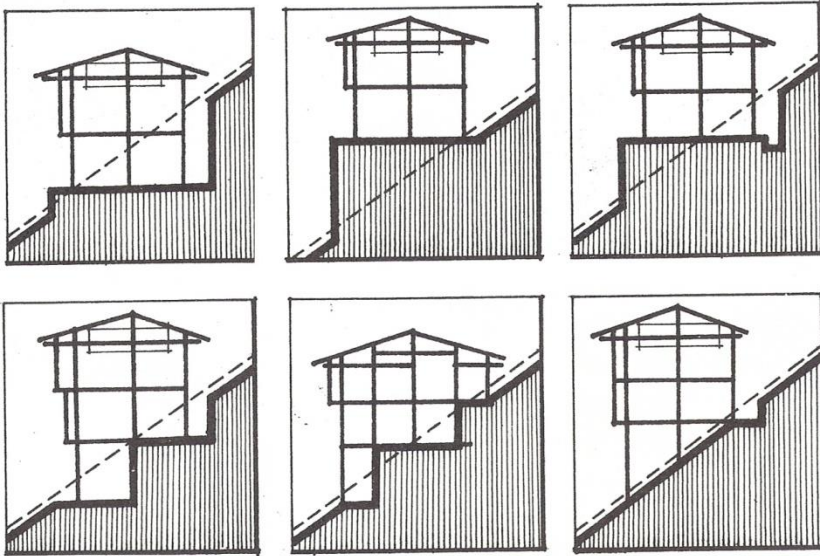


Figure 3.
The treatments of the site. Extract from Changjie Li and others, *Northern Guangxi Folk Architecture*, p. 266. 李长杰及其他, *桂北民间建筑*, p. 266.

4.2.3 Design of the house

Directional alignment of the house

In the record of Fu and Yu, the host needs to invite the geomantic master again to decide the direction of the house, which is called 'Drive direction' 驾向: using a compass, it refers to the remote mountain from the house will be facing. Different hills imply different fortunes, and the family always wishes for a direction that would bring good luck.⁹ It is their custom to express good will for their future life. This would be a reference for the hand-ink master's design. Lu said, before the geomantic master decides the direction of the house, he needs to perform a ritual called 'washing land' to dispel the evil spirits, just as in the ritual for construction of the drum tower (see Chapter 5).¹⁰ However, this only slightly changes the direction of the house.

The direction of the house is primarily decided by the sun, then by the environment that surrounds it. If the site allows, the house should 'sit against north and face south', so that through the whole day the house can receive abundant light. Meanwhile, it can avoid strong west sunshine in the afternoon. No, this is a common knowledge in my hometown.

However, if it is restricted by the surrounding environment, most of the time the direction

⁹ Fu and Yu, *Custom of Nine Stockaded Village*, pp. 177-178. 傅和余, *九寨民俗*, pp. 177-178.

¹⁰ From my field survey, interview with Wenli Lu, November, 2010.

of the house is determined by the river, the contour lines of the hill, the road and the pond. If the house built along the river, its front should face the river; if the house is built in the slope of the hill, it usually lies along the contour lines of the hill. When set against the hill it should face the open side.

The river and hill also influence the organisation of the road. In a Dong village, the roads are mainly built along the river, following the contour lines, like the pond. If the site lies along the main road, the house should face the road. The interesting thing is that dwellings compose the pattern of the village, thus naturally between them decide the direction of the whole village. The dwellings follow the trace of sun, the pattern of the river, the contour lines of the hill, and so does the village. The drum tower working as the village centre also follows this tendency.

Design process

Lu said that according to the site conditions, the hand-ink master will discuss the function, arrangement, size, and structure of the house with the host. This is an important part of the host's participation, as his demands and family conditions will be directly reflected in the design. Their construction and social life come together, because they have to deal with their life needs, available material and techniques, limited money, climate and site environment, etc. As Rapoport and Johnson say, the folk tradition and house relate to the culture and life of the majority.¹¹ Under these social conditions, they have to make an efficient low-cost construction to respond to the factors related to building. This response is sensitive, and relatively accurate. As Rapoport deems, the vernacular design process has an additive quality, unspecialized and open-ended in nature, that contains individual variability and differentiation.¹²

All of this design starts from the ground floor. Lu said, that first of all the hand-ink master needs to think through the size of the site, the host's demands, such as how many rooms the host wants, sizes of rooms, wide veranda and fireplace room; how many attached outhouses. He synthesizes the restriction of the site to decide the column grid distribution of the ground floor. Basing his calculations on the ground column grid, the hand-ink master can think about the vertical structure and roof structure. Acting in

¹¹ Johnson, *Housing Culture: Traditional Architecture in an English Landscape*, p. X.
Rapoport, *House Form and Culture*, p. 2.

¹² Rapoport, *House Form and Culture*, pp. 4-6.

accordance with the host's demands, such as how many floors and the height of each floor, the hand-ink master will design the floor structure, usually with the height of the floor steadily decreasing from the ground floor upward. For instance, in a three storeys house, the ground floor would be 3 m high, first floor would be 2.6 m high, and second floor would be 2.4 m high.¹³

From the description of Lu and other villagers, half a century ago, restricted by economic development and climate, the floor height was lower and the number of storeys was two. Dong people were poor. They did not have abundant money and resources to support a big building. And during the winter the temperature was colder than it is now, for forty years ago the snow in winter was over peoples' knees, but is now usually not more than 30 cm. So the windows were small, only 40 cm high and wide, in order to keep the room warm, but now windows areas big as in modern buildings to obtain more light. And the height of the house was low to keep the room warm, now this is also higher.¹⁴ For instance, from my field survey, the house of Kunxiang Lu, at Zhaoxing village, built in the 1800s has two storeys, the height of ground floor is 2.2m, first floor is 2.2 m. The house of Jiliang Pan, at Xiaohuang village, built in the 1950s, has two storeys, the height of the ground floor is 2.14 m, first floor is 2.34m. Now, the house of Buge Wu, at Xiaohuang village, built in 2009, has the height of the ground floor at 2.9 m, first floor is 2.45 m, the second floor is 2.13 m. The house of Buzhong Wu, at Xiaohuang village, built at 2010, has its height of ground floor at 2.8 m, first floor is 2.4, second floor is 2.2 m.¹⁵ Yet, according to Rapoport's theory, there are many modifying factors which together influence the form of the house.¹⁶ Maybe the climate and economy are the most obvious factors to them during this process, but there are many other reasons.

In the record of Yu and Fu, in the Nine village area, outside the internal threshold is the stair leading from ground floor to the outside of house, while inside the threshold is the central room, where the whole family can work, rest, and meet guests. The width and length of the central room are preferably the same, like a square seal, as in the saying: 'if the central room is like a seal, evil spirits cannot enter'.¹⁷ However, varying with living needs, in fact the central room is often a rectangle. In their record, the height of the

¹³ From my field survey, Wenli Lu, November 2010.

¹⁴ From my field survey, Xiaohuang village, November 2010, Zhaoxing village, January 2013.

¹⁵ Ibid.

¹⁶ Rapoport, *House Form and Culture*, p. 17.

¹⁷ Fu and Yu, *Custom of Nine Stockaded Village*, p. 192. 傅和余, *九寨民俗*, p. 192.

house used to be one Zhang seventy-eight, one Zhang eighty-eight, while the depth of the house used to be two Zhang eighty-eight, three Zhang eighteen, three Zhang seventy-eight, etc. The sizes of ladder, window, and hearth were usually chosen ending in six or eight as the last number of size. In the Nine village area the proverb goes, ‘the height of house meets eight, ten-thousand years clear on road’, ‘the depth of house meets eight, flourishing of family and people’, ‘the ladder meets six, shouldering grain to upper floor’, ‘the hearth meets six, bright fire shining ten-thousand autumns’, ‘the window meets six, blocks the road of the ghost’, etc.¹⁸ This numerology probably derives from the ‘Lu Ban Ruler’. It also relates to the ‘Method of pressing the white ruler’ (压白尺法) (see Chapter 3).

After the floor structure is designed, it is time to design the roof. Lu said, the hand-ink master will ask the host what kind of roof he wants, as there are two optional roof forms, one is the character 人 (person) shape, another is the character 八 (eight) shape. The difference is that the angle of character 人 shape is steeper than that of character 八 shape. The character 人 roof is six Fen water, the character 八 roof is five Fen water. Fen water, 分水, 分 (Fen, a Chinese traditional decimal unit, one Fen equal to one-tenth) 水 (water), a carpentry term to describe the steepness of the slope of the roof in a scale. It is calculated by finding the ratio of the height of the roof column to the length of the roof, for different parts of the roof, determined by the ratio of vertical spacing between purlins to horizontal spacing between purlins (步架).¹⁹ In terms of Chinese traditional carpentry it called, Raising the purlin or Pitch and curvature of roof, 举架 or 举折: 举, raising, means the height of roof frame. 架, structure or frame. 折, the section of slope of roof is not a straight line, it is composed of many poly lines.

Five Fen water means the slope is 1/2: for instance, if half of the roof is 3 m long, the roof column should be 1.5 m high. Four Fen water means the slope is 2/5, for instance, if half of the roof is 3 m long, the roof column should be 1.2 m high. Six Fen water is 3/5, but hand-ink master Wenli Lu has given a different definition. He said that the Six Fen water is based on Five Fen water plus an additional 20 cm to achieve the steeper slope. This is generated from his own construction experience and it worked well in all his designs. If the slope were steeper than five Fen water, the tiles would not be secured, if the slope were less than four Fen water, the rain might flow backwards. So the pitch and curvature of roof (举架) is changing in different parts of the roof, by raising the purlin and

¹⁸ Fu and Yu, *Custom of Nine Stockaded Village*, p. 177. 傅和余, *九寨民俗*, p. 177.

¹⁹ From my field survey, Wenli Lu, Xiaohuang village, November 2010.

changing the distance between purlins. The top of the roof uses five Fen water, while the eave uses four Fen water.²⁰

After the roof structure is designed, the hand-ink master can figure out the fan structure group, called Shan, 扇. The fan structure group is a flat frame or gable. It is the structural unit of a building, and two fan structure groups compose a bay. People can simply copy the fan structure groups to achieve as many bays as they want. Then they use tie-beams to connect the structure units together to finish the house structure.

Coordinate system

The hand-ink master has a coordinate system to help himself to remember the structure. He can use components as references to mark further components which have a mutual structural context (see Chapter 3). The following is an example of the carpenter's code.

34 15カ *The third row, fourth column, fifth Tie-beam*

Record of the design

A model or a simple drawing can be used to explain the design (Figure 4). The hand-ink master draws all the dimensions of components on the Zhang pole to record the whole design (Figure 5). Each size has a specific code to represent the component it belongs to, as explained in the code system (see Chapter 3). Some Zhang poles are fastened to the central beam or one central column after the house is built. The Zhang pole also needs to be well placed to avoid any damage and smears on it. Lu said the size of the tenon of the tie-beam is worked out in a following stage, because the shape of the column can vary, so the exact size of the mortise of the column cannot be decided in advance. Only after the mortise of the column has been decided can the hand-ink master measure the exact size the tenon of the tie-beam should be.²¹

The hand-ink master counts the exact number of components, then makes a list of timber and tiles for the project. The host must prepare to obtain the material. Depending

²⁰ From my field survey, Wenli Lu, Xiaohuang village, November 2010.

²¹ Ibid.

on what property he has, the host can gain these materials from his own hills or buy from others.



Figure 4. Drawing of hand-ink master Wenli Lu's new house with list of components at side, 2010. Drawing by Wenli Lu, photograph by Derong Kong.

Figure 5. Master Wenli Lu's Zhang pole, 2010. Photograph by Derong Kong.

Preparing for construction

When the site is ready, the hand-ink master goes to the site with thread, wooden sticks and Zhang pole to locate the ground columns. This is for the installation of the structure, and works as an auxiliary method to make sure the columns are placed correctly.

4.2.4 Preparing the material

Felling the first timber

The host chooses an auspicious day to cut the timber for the first central column. Before they start, the hand-ink master has to worship the mountain God for permission, then they can cut the first tree. There are some rules about cutting down the first timber. Lu said, 1. The woodcutter must be properly dressed. 2. The first three cuts must be clean and sharp. 3. The tree must fall towards the top of the hill, and there must be pre-placed support to keep it off the ground.²² Referring to these rules, if the process goes well, they can continue to cut the tree, otherwise they have to stop the lumbering and choose another day to start it again.

After the first timber has been cut down, they use an iron hook to lift it and carry it back to the village, and on their way they must not shake the iron hook. Lu said, more important is that no one should step over or on the timber. Then they can collect the rest of the timbers.²³

In Nine village area, the hand-ink master has to seek a symbolic tree, usually used as the central column. In the record of Fu and Yu, it must be straight and big, called 'twin tree' or 'mandarin duck tree' as it has two trunks connected together. There should be a small tree alongside it to 'accompany' it. A tree that grows up alone cannot be used, no matter how big or straight it is. After the 'mandarin duck tree' has been found, people come to the tree, and clean the grass around it. Then the hand-ink master burns incense and paper money at the bottom of the tree, worships the mountain god and the tree, and loudly recites: 'This tree is not a secular world tree, just as good to use for a jade column'. He holds an axe and chops the tree hard three times, while each time everyone shouts together to assist him: 'first chop of golden axe, happy atmosphere arrives at the host's home!', 'second chop of golden axe, the host's family will be rich!', 'third chop of golden axe, they will be prosperous and flourishing!'. After the three chops, everyone chops the tree in turn to bring it down, then they divide to search for acceptable trees for the rest of the timbers.²⁴ At Jingtang village, Liping County, the hand-ink master Wenli Lu said they do not use 'twin trees', because the old people said

²² From my field survey, Wenli Lu, Xiaohuang village, November 2010.

²³ Ibid.

²⁴ Fu and Yu, *Custom of Nine Stockaded Village*, p. 178. 傅和余, *九寨民俗*, p. 178.

a 'twin tree' has two branches, and each branch's height is not equal. They thought this not good, and now many people still have the same opinion. They prefer to choose a straight tree with a thick trunk. Only when the two branches' heights are the same, in a pair, would they use it.²⁵ From these two cases we see that branches may indicate the flourishing of family, and the same tendency in choosing timber is also reflected in the construction of the drum tower. This relates to the china fir's growing character. If the conditions are proper, a single branch inserted into soil or a stump can simply grow up. Here branches gives people an impression of strong life, and these also could refer to the branches of a family. So on the one hand it represents the flourishing of the family, while on the other hand I guess it may show the equality, unity and complete organisation of family, the relationship between family members. Some places have the custom that the central beam should be donated by the host's uncle, to indicate that this uncle is the closest relative, the original blood relationship.

Storage of wood

After all the timbers have been collected, the hand-ink master will check the timber, according to the use and size of the components to choose the appropriate piece for each. He asks the apprentices to remove the tree bark and branches from timbers, and hires carpenters to process the timber into rough components. Lu said these timbers must be stacked for at least three months to dry off, so that there will not be too much warping when the structure is assembled (Figure 6).²⁶



*Figure 6. Stacked timbers.
Photograph by Derong Kong.*

²⁵ From my field survey, Wenli Lu, Jitang village, January 2013.

²⁶ From my field survey, Wenli Lu, Xiaohuang village, November 2010.

4.2.5 Drawing the ink lines, processing timber

The ground breaking Ceremony

After the basic materials have been prepared, the hand-ink master performs ceremonies called 'inviting wooden horse' and 'drawing the first Ink line' to start the construction, then the preparation of the components begins.

Before construction begins, carpenters need to set up the wooden horses on which to place timbers. As with the construction of the drum tower, the hand-ink master needs to dress in new clothing and new shoes. Before the construction begins, the hand-ink master stands in front of a pair of wooden horses, burns incense and paper money to worship the wooden horses, then moves them to the work place, which is called 'inviting wooden horse'.

Then carpenters put the timber of the left central column onto the wooden horses. The hand-ink master uses the Zhang pole to measure the timber, cutting it down to the size of the central column. A carpenter uses a plane to clean the surface of the timber, then the ritual of 'drawing first ink line' can start. In the record of Fu and Yu, the hand-ink master holds an ink pot, releases the ink line and lets the host hold the other end of the line. The hand-ink master and the host hold the ends of the ink line, standing at either end of the central column, lifting and tensing the ink line in the air. The hand-ink master starts reciting auspicious words: 'Flip ink line for one time, blessing and longevity complete in both respects'. Thus they release the tensed ink line, and with a snap a black and clear line is printed on the central column. Then they print the ink lines on the other three sides of the central column in succession. The hand-ink master recites precious words to bless the host: 'ink pot is fragrant, ink line is long. Draw ink line on the Jade column, everything goes well. Flip ink line for one time, line releases glorious light. Ink line flips four directions, family increases in honour and wealth, land increases in grain. Congratulate the host as auspicious and prosperous. Build wooden house, secured for ten thousand years. The red sun is bright and high, the magnificent hall is splendid!' After this, the hand-ink master chisels the mortise into the central column, processes it carefully and puts it in a secure place, so that nobody can walk over it or damage it. After the ritual the host prepares a banquet to serve the hand-ink master and

the other carpenters with six meals, which means consigning the family's clothing, income and food to the hand-ink master, hoping he builds the house conscientiously.²⁷

Making the components

All the components are premade: usually the components of the whole house need two or three weeks to produce. The hand-ink master draws ink lines on the rough components according to the recorded length and size of columns and tie-beams, following the sizes and positions of mortises for columns indicated on the Zhang pole. These ink lines are the design drawing of the house printed on the components. Thus, obeying the ink lines on rough components, other carpenters can produce the columns and tie-beams.

The hand-ink master not only has to control the central line of a component, drawing the right ink line, but he also needs to supervise other's carpentry work (Figure 7). The hand-ink master uses a bamboo ruler to check and supervise the process and quality of work.



Figure 7. The hand-ink master supervises his apprentice's work. Photograph by Derong Kong.

Columns

To make a column, after he has selected the timber, the hand-ink master will ask an apprentice to remove the tree bark and branches (Figure 8). Next, he will observe the timber again and draw a central line on both ends to determine the centre of the column. The midpoints of either central line on two ends of timber should be vertically connected by the central line on the trunk, which is a straight line through the trunk. Because some trunks are not totally straight, the master has to draw the central lines in the best position

²⁷ Fu and Yu, *Custom of Nine Stockaded Village*, p. 178. 傅和余, *九寨民俗*, p. 178.

to get the column straight and thick. Using the midpoint of the central line as centre, he draws two circles on the ends of the timber to determine the top and bottom diameters of the column. The central lines and circles are initial ink lines for drafting a wooden component. If the master draws the central lines well, he can maximize the use of the timber.



Figure 8. Removing the tree bark.



Figure 9. Planing the surface of the timber.



Figure 10. The hand-ink master Wenli Lu draws an ink line on a column.

All Photographs by Derong Kong.

After he has drawn the initial ink lines on the column, he asks an apprentice to plane the surface of the timber to make the base for the first ink lines (Figure 9). Then he use a bamboo pen, try square, and ink reel to snap a line down the length of the column, he goes on to mark the sizes and positions of mortises on the draft wooden component, according to the size record on the Zhang pole (Figure 10). Finally, the other carpenters or apprentices follow the ink line to saw the initial wooden component and chisel the mortises on the column (Figure 11).



Figure 11.
Chiseling the mortises on the column.
Photograph by Derong Kong.

The hand-ink master writes down his carpenter codes on the finished column to categorize different columns and represent the positions and directions of columns in the structure, such as the first row of the second column, the front second eave column, or the fifth row of the front second short column (Figure 12). This is preparing for the final assembly and following the measurement of the tenon of the tie-beam.



Figure 12.
The hand-ink master Wenli Lu's carpenter code on the fifth row of the front second short column.
Photograph by Derong Kong.

Tie-beam

After all the columns have been made, the hand-ink master uses a series of small bamboo sticks to measure and record the size of the mortises in the columns, for length, depth and height. Lu said, because the diameter and shape of column (caused by the irregularity of timber) is not entirely regular, the size of each mortise may be slightly different, but for mortise and tenon structures it is very critical, for column and tie-beam are connected by mortise and tenon, demanding an accurate, tight joint. These small bamboo sticks have ink lines on them to record the exact size of the particular mortise for making the tenon of tie-beam, and the master will write down the carpenter code on it to indicate the position and direction of the tenon on which tie-beam (Figure 13).²⁸



Figure 13. The hand-ink master Yongcheng Lu uses a series of small bamboo sticks to measure and record the size of the mortises in columns. Photograph by Derong Kong.

The size of tie-beam is drawn on the Zhang pole; the hand-ink master will draw ink lines on draft wooden components to mark length, width and height (Figure 14). After that the apprentice processes the draft component to shape it further, which only needs the tenon of the tie-beam (Figure 15). The master will use the corresponding bamboo stick to draw the size of tenon on the tie-beam, then the apprentice can work on this tie-beam again and complete it (Figure 16, 17).

²⁸ From my field survey, Wenli Lu, Xiaohuang village, November 2010.



*Figure 14. The hand-ink master Wenli Lu draws ink lines on draft wooden components.
Photograph by Derong Kong.*



*Figure 15. Processing the draft component.
Photograph by Derong Kong.*



*Figure 16. The hand-ink master Yongcheng Lu draws the size of tenon on the tie-beam.
Photograph by Derong Kong.*



*Figure 17. Processing a tenon.
Photograph by Derong Kong.*

The hand-ink master also writes his series of carpenter codes on the finished tie-beams to record the positions and directions of tie-beams in the overall structure, preparing for the final assembly (Figure 18). The rest of the wooden components are produced after the main structure is erected.



Figure 18. The hand-ink master Wenli Lu's carpenter code on the back fifth row of the first tie-beam to connect with the first hanging column. Photograph by Derong Kong.

4.2.6 Pre-assembling



Figure 19. Finished components. Photograph by Drong Kong.

After all the components are finished, the hand-ink master asks the host to erect a scaffold for installing the house structure, and the order of assembly is from bottom to top, and from inside to outside. Lu said, the hand-ink master commands the carpenters and apprentices to preassemble the fan of house structure, called *Pai Shan*, 排扇, and uses penetrating tie-beams to connect the main columns in a row (Figure 20). Two fans of structure form a bay of a house, and if the house has three bays, they need to preassemble four fans of structure. This is an easy way to preassemble the components on the ground to avoid the danger of installing components in the air. It also can save time and labour. In the following stage of erecting the structure, people just need to erect the preassembled fan structures, then use tie-beams to connect to the adjacent

fan structures.²⁹



Figure 20. Pre-assembling components at Xiao Huang village, 2010, in Congjiang County, Guizhou Province. Photograph by Derong Kong.

There is a ritual before preassembling the fan structure, called ‘starting with the mallet’. In the record of Fu and Yu, the hand-ink master stands in front of the central column and recites words of ‘starting with the mallet’. Meanwhile the hand-ink master uses a mallet tied with a red cloth to strike the central column three times (see Appendix 2, A.2.3.1 ‘Starting with the mallet’). After this ritual, people start to assemble the fan structure.

4.2.7 Making the ridge beam

The central beam on the top of the central column is called the ‘treasure beam’. Before erecting the main structure, every component is premade, except for this treasure beam. It must be ‘stolen’ from others at the right moment, and cannot be premade in advance. This behaviour brings auspiciousness. It means borrowing timber from another hill to be the ridge of this house, and has the implicit meaning of ‘bringing treasure and blessing’. There is an interesting story about this custom, concerning a competition between master Lu Ban and his apprentice Zhang Liang. In the record of Fu and Yu, after Zhang Liang had been learning carpentry from Lu Ban for three years, Zhang Liang thought he was better than his master. So he proposed a match, building a house in three days, to see who could finish first. On the second day, Zhang Liang’s arms were tired, his back sore, but he had completed all components and was ready for Pai Shan (preassembly). At this point, he was so proud of himself that he went to Lu Ban’s work site to check the progress of the master. When he arrived, he was astonished to find no man at the work

²⁹ From my field survey, Wenli Lu, Xiaohuang village, November 2010.

site, for the master had not only preassembled the components but also prepared the stone bases, and was just waiting for the next morning to install the whole house structure. Zhang Liang was depressed and afraid of losing the match, so he cut the master's ridge beam in the middle. Lu Ban though was prudent, for in the middle of the night, he woke up and visited the site to double check everything. He found the broken ridge beam, and knew this must be done by Zhang Liang, but time was urgent, and he had to make a new beam. So he took an axe with him and went to a hill, then 'stole' a tree to make a new bridge beam. At daybreak, Lu Ban master had erected his house, while Zhang Liang was still busy assembling the structure. So Zhang Liang failed the match and he decided to continue to learn from the master. He asked the master: 'Master, you have not taught me how to connect a broken beam'. The master smiled and said: 'I do not know how to connect a beam, that beam was stolen'. Because the master said so, since then, the timber for the ridge beam has to be stolen.³⁰

The 'Stealing' process

Stealing ridge beam is carried out at midnight of the day before erecting the main structure. In the record of Fu and Yu, four young men set off, one of them carrying a Lu Ban axe, one man bringing a small bag. The tree and road have been pre-explored. After they have recited some auspicious words, they cut down the tree. They keep the leader branch at the very top of the tree, remove and discard the other branches, and take the trunk. This means they have brought the whole tree from top to bottom. Fastening a red cloth around the middle of the trunk, they then carry it back to the village. Before they leave, they need to leave a red envelope with money equal to the value of the tree, then light firecrackers around the stump. When the owner of the tree hears the sound, he knows that some people are stealing a ridge beam. So he will not rush to catch them but let them take it. Later, he will go to the stump to collect the money and pretend he is angry, 'scolding' them in a joyful way.³¹

Opening the hole of the beam

After the ridge beam is made, the hand-ink master chisels a hole into the middle of the wood. From the description of Lu, The hand-ink master puts rice, tea, cinnabar and

³⁰ Fu and Yu, *Custom of Nine Stockaded Village*, p. 181. 傅和余, *九寨民俗*, p. 181. Translated by Derong Kong.

³¹ *Ibid.*, p. 182.

money into the hole and uses the piece cut out to seal the hole. Then, the hand-ink master places the bamboo pen used by him, two bricks of ink, one brush pen, a Chinese calendar, a copper coin and a wisp of coloured thread on top of the hole, using a piece of red cloth one Chi long (1 Chi=1/3 metre), two Cuns (1Cun=1/3 decimetre) wide to fasten these things onto the hole. A copper coin is placed on each of the four corners of the red cloth and a nail hammered through each to attach the cloth to the trunk, which is called 'wrap the beam'. While the hand-ink master wraps the beam, he recites auspicious words. On the exterior of the red wrap, he places a pair of chopsticks, which have been obtained from a shop with good business, to pray for prosperity, and he uses a red string to fasten them to the ridge beam. Some masters fasten the Zhang pole onto the beam. The hand-ink master then writes down the time of the project and his name on one end of the beam, the host's name on the other end. This treatment of the ridge beam also happens when building adrum tower, wind and rain bridge, drama stage or other buildings. In public buildings, the difference is in the writing which records the group that built it instead of the host's name.³²

4.2.8 Erecting the main structure

The construction ritual

The geomantic master will specify the correct time to erect the house structure. Before erecting the main structure, the hand-ink master has to perform a ritual called 'dispelling evil spirits' before daybreak. It is in the way of a superstition to remind people to pay attention to safety and give them a feeling of security. This ritual is the same as the ritual enacted while erecting the main structure of the drum tower (see Chapter 5). The hand-ink master just needs to replace the word 'village' with 'host family' in the recited words. For instance: 'first print host family (or village) has more wealth and offspring, second print host family (or village) has riches and honour completed at both aspects, third print host family (or village) has many auspicious things...'. After the ritual, they can erect the main structure.

Erecting the structure

The time for the ritual and erecting of the structure usually starts before daybreak,

³² From my field survey, Wenli Lu, Jitang village, January 2013.

because this, the start of the day, is regarded as the most vigorous time of day. People hope they can bring vitality into the project by working at this time, but of course this is just a good wish. Lu said the important reason to do so is to avoid children and women seeing this dangerous work, because when they see it, they cannot properly behave themselves. They might scream and shout out how dangerous the project is, and this would distract the carpenters from their work. There is another reason why they do not want some people to see it, which is the risk of theft. Because they have prepared some offerings which could be very attractive to thief, if the project has been seen by this kind of person, it would create a bad feeling for the host at this important time.³³



Figure 21. Erecting the structure at Xiaohuang village, in Congjiang County, 2010. Photograph by Derong Kong.

After the ritual, they can erect the preassembled fan structures, using crossing bay tie-beams to connect the adjacent fans of the structural group (Figure 21). Then they install the short column and short column tie-beam to construct the roof structure from bottom to top, outside to inside.

The order of erecting the fan structures varies. Lu said, some projects start from the first fan at the left side of the house, then erect the rest of the fan structures. Or they start from the fan at the left side of the central room, then erect the right fan of the central

³³ From my field survey, Wenli Lu, Xiaohuang village, November 2010.

room, using crossing bay tie-beams to connect these two fan structures. After the main structure of the central room is finished, people can erect rest of the fan structures. However, the order in erecting the fan structures is mainly determined by the situation of construction, such as the size of the site, the organisation of the structure, and the number of bays of the house.³⁴



Figure 22.

Erecting the structure at Xiaohuang village, in Congjiang County, 2010.

Photograph by Derong Kong.

The hand-ink master takes charge of this. Other people are arranged in different positions. Lu said, when erecting the first fan structure under the command of the master, some pull ropes to help lift the fan structure, some shoulder wooden sticks fastened to the columns of a fan structure to move and lift it, and some hold long forks to support it. After the fan structure is vertical, people slowly and continuously lift it to its correct position, then people hold the structure in place with long forks and wooden sticks. In succession, people erect the adjacent fan structure into its position, and they need to use crossing bay tie-beams to connect these two fan structures to form the structure of a bay. Some crossing bay tie-beams are pre-assembled into one fan structure, but it is half finished waiting for final installation. Some are installed after the two fan structures are erected. Either way, some people need to climb up on each fan structure and stand on the columns or tie-beams near the mortise where the crossing bay tie-beam will be installed. Rope is tied onto each crossing bay tie-beam, and people stand on the column or tie-beam holding the other end of the rope to pull the crossing

³⁴ From my field survey, Wenli Lu, Xiaohuang village, November 2010.

bay tie-beam, while people on the ground use long forks to support the crossing tie-beam, then the people standing near the mortise use one hand to hold the tenon of the tie-beam to guide it towards the mortise. People at the other end of the tie-beam swing a wooden mallet to knock the tie-beam towards the mortise, until the tenon and mortise are closely connected (Figure 21, 22). Following the above method, they can install the crossing tie-beams one by one, or install all of the tie-beams at the same time which is more difficult and dangerous. If the master wants to install all of the tie-beams at the same time, people have to assemble one end of the crossing bay tie-beams into position, placing the other end on the tie-beam, then slowly slope the fan structure with crossing bay tie-beam outwards, until the tenons of the crossing bay tie-beams held by many hands all correctly face the mortises of the columns. At this moment, the master commands people to slowly move the leaning fan structure back into position, and people who are standing on the structure use their hands to guide the tenons into the mortises. Then they use the wooden mallets to knock in the tie-beams, making the joints secure.³⁵ After this, two fan structures are connected. People can then erect and assemble the rest of the structure.

After the main structure is finished, carpenters need to install the short columns and the short column tie-beams to complete the roof structure. The order of installing the short columns is from bottom to top, and moving inward layer upon layer, using the short column tie-beam to connect the columns and support the upper short column.

4.2.9 Raising the ridge beam

Because the ridge beam is thought of as the dominating component in the house, its installation is arranged in a separate stage with many rituals. First comes 'fete the beam', then the installation, and finally throwing treasure beam rice cakes.

Fete the beam

The geomantic master chooses a propitious day and time. Then the hand-ink master performs the ritual for raising the ridge beam to the top of the central columns. The first stage is to hold a 'fete the beam' ceremony. This ritual is the same as the ritual described in the construction of the drum tower for feting the beam (see Chapter 5).

³⁵ From my field survey, Wenli Lu, Xiaohuang village, November 2010.

Install ridge beam

Then a rope is attached to each end of the beam, while the hand-ink master performs the same ritual 'dispelling evil spirits' as in the erection of the main structure. It could be performed at any stage of the installation of a structure or component.

In the record of Fu and Yu, then two people standing at the top on each side of the house slowly draw up the ridge beam, waiting for the hand-ink master to install it; and firecrackers are let off at the same time to create a flourishing vision.³⁶

Throwing treasure beam cakes

When the ridge beam has been put on the tie-beam and the firecrackers are finished, the hand-ink master puts on his new shoes and says auspicious words which are the same as in the ritual of the construction of the drum tower. Then he climbs the structure to install the treasure beam. While the hand-ink master is climbing the structure, he chants some auspicious words as with the construction of the drum tower, he just needs to change the word 'village' to 'family'.

'First step on scaling ladder, second step is going on, pig, sheep, cattle,
horse fill the barn full.

Thousands come out of the barn in daytime, ten thousands come into
the barn at night.

Second step on scaling ladder, third step is coming, a good many
auspicious things arrive.

A thousand guests come to present treasure in daytime, ten thousand
head for the lamp at night.

Third step on scaling ladder, fourth step is going on, wealth from four
sides and eight ways belong to you.

East meet wealth, west meet treasure, bullion and property come to
the family...³⁷

³⁶ Fu and Yu, *Custom of Nine Stockaded Village*, p. 185. 傅和余, *九寨民俗*, p. 185.

³⁷ *Ibid*, p. 187, translated by Derong Kong.

When he has arrived at the top of the structure, with assistance from the other carpenters, the hand-ink master installs the ridge beam in the top groove of the central columns. After installing the beam, he asks the host: 'host, what do you want, riches or honour?'. The host replies: 'Riches and honour together, people and wealth both flourishing...'. The master continuously recites auspicious words, while he throws prepared candy, glutinous rice cake, and red envelopes to the crowd.

Throw glutinous rice cake to east, every generation of posterity will have a hero.

Throw glutinous rice cake to west, no need to worry about food and clothes.

Throw glutinous rice cake to south, good luck and safety to the whole joyous family.

Throw glutinous rice cake to north, golden and lucky rays around tower...³⁸

People try to catch the lucky candy, glutinous rice cake, and red envelopes in a happy atmosphere. All these customs and rituals not only entertain the host family and others, they are also the 'service' offered by the hand-ink master that transfers the power of the symbol into their life, delivering their good wishes and happy mood to satisfy their spiritual fulfillment.

Eating the 'erecting house feast'

On the day of raising the ridge beam, all the relatives, friends and villagers who come to congratulate and help are given two feasts. In the record of Fu and Yu, one is before the raising of the beam at noon, and is a normal meal. Later, following the raising of the beam comes the main feast, including all the above people, and all others who come to celebrate. The site of the feast is usually the host's old house, the new house site or a neighbour's house near the new house (Figure 23). People sing 'erecting house drinking song', and the hand-ink master, carpenters and singing master take main seats as honoured guests. The singing master sings a drinking song to praise the hand-ink master's technique. Then the singing master sings to host to offer his congratulations. In return the host sings to the hand-ink master and the singing master to express his

³⁸ Fu and Yu, *Custom of Nine Stockaded Village*, p. 189. 傅和余, *九寨民俗*, p.189, translated by Drong Kong.

thanks.³⁹



Figure 23.
The erecting house feast at Xiaohuang village, 2010.
Photograph by Derong Kong.

4.2.10 Completing the construction

After the main structure is finished, the household will ask masons to install the stone bases of the ground columns. The hand-ink master checks the whole structure. From bottom to top, carpenters install floors, wall, and purlins, then nail down the rafters and pave with tiles. They then decorate the fireplace room and one or two bedrooms, lay



floors for the above rooms and install the front door. The family can now move into the new house, living in the uncompleted house while the rest of the construction is slowly finished (Figure 24).

Figure 24.
Erecting the structure and the half finished house, at Xiao Huang village , 2010. Photograph by Derong Kong.

³⁹ Fu and Yu, *Custom of Nine Stockaded Village*, p. 189. 傅和余, *九寨民俗*, p. 189.

Doors and gates

Following the completion of the main house, and according to the owner's requirements, there can be a ceremony to set up the front gate. From my field survey, if there is a river in front of the house the gate is usually built in the 'upstream direction'; if there has a road in front of the house, the gate is built facing the high end of the road (Figure 25).⁴⁰ The door is an important joint of inside and outside, of start and finish, of private space and social space, etc. Its vital position determines its important meaning to Dong people's lives and it is accompanied by many implications.



Figure 25. A new house at Xiaohuang village, 2010. Photograph by Derong Kong.



Figure 26. Door and door hammer. Photograph by Derong Kong.

⁴⁰ From my field survey, Xiaohuang village, November 2010.

The doorframe has two door hammers fixed to the lintel of door which are covered with red cloth. Lu explained, the door hammers are carved with flowers, decorative linear ornament, or inscribed with two Chinese words 三 (three), and 王 (King) to left and right. Left is three, here representing heaven; right is king, here representing earth (Figure 27). They write symbols of heaven and earth to pray for a blessing. The top of the door must be wider than the bottom after the saying 'wide sky, narrow earth', so that treasure can easily fall from the sky. The wooden tie-beam for the threshold must be stolen in the same way as the treasure beam.⁴¹



Figure 27. Door hammers, village gate at Tang'an village.

Photograph by Derong Kong.

The threshold is one wooden component of the doorframe. Stepping on the threshold means disrespect to the household. People need to step across the threshold to enter or leave the house. It is a wooden component dividing between inside and outside even when the door is open. In the record of Fu and Yu, the threshold is regarded as 'the Dragon of the gate'. It is the tutelary deity of this wooden house. In order to prevent 'gate Dragon' from escaping, the middle of the threshold has hammered into it an iron nail, for people believe an iron nail can force 'the Dragon of the gate' to stay. But they cannot use a copper nail, because in legend the dragon is not afraid of the fire from sky

⁴¹ From my field survey, Wenli Lu, Xiaohuang village, November 2010.

or earth, only of a copper nail hammered into its waist, cutting it off.⁴²

The ceremony for the front gate

The time to perform this ceremony is specified by the ghost master. The hand-ink master presides and performs the ceremony. Lu said, the hand-ink master must dress in clean clothing to show respect. Pregnant women are forbidden to watch, because local people call a pregnant woman a 'person with four eyes', but the baby in her body is not complete, especially the baby's eyes which are not really opened. If the baby sees you or an event, it might cause some danger and harm. After people have taken up their positions, the ceremony can start and a table is placed beyond the door, on which are placed the offerings (see Appendix 1, A.1.2 Second survey, 11/09---12/05, 2010). Door panels are put up on both sides of the gate, covered with red cloth. After everything is arranged, the hand-ink master stands in front of the table, and burns incense and paper money. Then he uses water to clean the site, dispelling the evil spirits and 'dirty things'. His left hand holds one bowl of water, and he uses the little finger of his right hand to write four words in the air (Figure 28,29). While he is writing each word, he recites the incantation 'Divine water' (see Appendix 1, A.1.2 Second survey, 11/09---12/05, 2010), so repeating it four times.⁴³



Figure 28.

*The pose to hold the bowl and write words, performed by the hand-ink master Wenli Lu.
Photograph by Derong Kong.*

⁴² Fu and Yu, *Custom of Nine Stockaded Village*, p. 191. 傅和余, *九寨民俗*, p. 191.

⁴³ From my field survey, Wenli Lu, Xiaohuang village, November 2010.

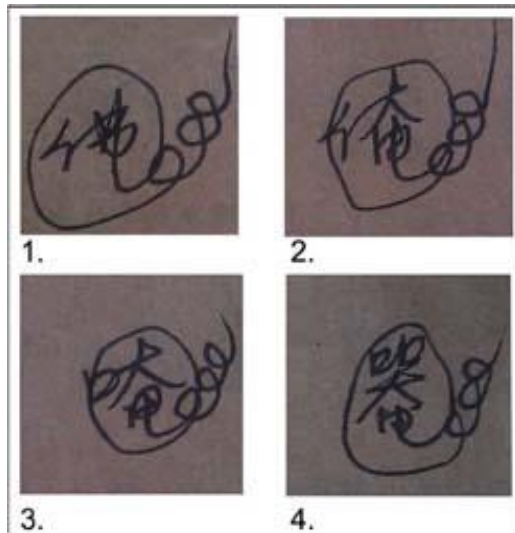


Figure 29. The four words and their order, written by the hand-ink master Wenli Lu.

Photograph by Derong Kong.

This incantation actually is from Daoism and called ‘淨水咒’, ‘cleaning water incantation’. It has been used in many rituals to dispel evil spirits, not only in the construction process. Lu said, at any construction stage, the hand-ink master can perform this ritual, for example at the beginning of a project, while erecting the structure, installing the bridge beam, etc. He does it when he thinks it is necessary and the host can afford it. After the ritual, he pours rice wine into three cups, then inside the house he kneels in front of table and faces outside, saying:

Yin (dead) master, Yang (live) master, ancient master (Lu Ban master).

Today is (such a) year, (such a) day, we invite you to come here, and offer you these gifts, and money, we ask you to bless us.

After worship of the masters, people set off firecrackers and set up the door panels. Then the ceremony is complete.⁴⁴

4.2.11 Moving into the new house

When the family moves into the new house, at midnight, they burn incense and paper money, and place some offerings by the left central column of the central room to worship the earth god, praying to the earth god to bring blessings to the family and to protect the house and people living in it. They then hold the ceremony of ‘open wealth door’ and ‘light the fire to enter house’. These ceremonies express a hope for prosperity.

⁴⁴ From my field survey, Wenli Lu, Xiaohuang village, November 2010.

As Mary Douglas claims, ritual is intended to bring benefits, health, and prosperity.⁴⁵

Open the wealth door

In the record of Fu and Yu, for this ceremony, the household must find a middle-aged man to perform as Wealth Star deity who has good luck, and he should have a son and a daughter. He carries a long bag, holds an umbrella, and stands outside the front door. The carpenter who built the front door plays master Lu Ban. People stand around them to see their performance of 'open the wealth door' (see Appendix 2, A.2.3.2 'Open the wealth door').⁴⁶

After the performance, when Wealth Star enters the house, the householder approaches Wealth Star with a smiling face, then Wealth Star speedily takes out the money of one Yuan and two Jiaos wrapped with red paper from his long bag, giving it to householder, the so called 'gaining wealth'. Master Lu Ban kills a cock and spreads the blood on the door, representing the occurrence of a red happy event. The one Yuan and two Jiaos mean red luck for twelve months. After the host has taken the money, he respectfully invites Wealth Star and master Lu Ban to sit on the chairs already prepared in the central room to have a rest. The host fervently offers them tea and cigarettes. Then this ceremony ends and gives way to the next, which is 'introducing the fire into the room'.⁴⁷

Lighting the fire in the room

First, the host needs to put all sorts of cooking pots in the fireplace room, then he puts a bundle of firewood into the fireplace. Hot coals are taken from the fireplace of the old house and kept in a fire bowl, waiting for Wealth Star to light the fire in the room. After Wealth Star and master Lu Ban have had a rest, the host invites them to light the fire in room. Wealth Star walks to the side of the fireplace and kneels down, blowing up the fire in the fire bowl to make a flame, which lights some firewood which he puts into the fireplace. As a result, the fireplace flares up with a hot fire. Wealth Star sings:

God of fire was invited into the fireplace, the house is auspicious all the time.

⁴⁵ Douglas, *Purity and Danger, An Analysis of Concepts of Pollution and Taboo*, p. 175.

⁴⁶ Fu and Yu, *Custom of Nine Stockaded Village*, pp. 190-193. 傅和余, *九寨民俗*, pp. 190-193.

⁴⁷ *Ibid*, p. 193.

Lighting fire for thousands of years, fire cooks food for thousands of years.
Every meal has a meat dish, every meal has wine for taste.
The family and business are prosperous and developing,
Every generation is flourishing.⁴⁸

Then, the master Lu Ban solemnly takes out the wooden shavings from the work on the treasure beam which have been carefully preserved, pouring this wooden residue into the fireplace to burn. The fire flares up, and everybody, master Lu Ban and Wealth Star cheer together: 'Vigorous fire, vigorous fire, family and business are flourishing!'. Then, using iron trivets to support the pot over the flame to cook dishes, they make a banquet. Master Lu Ban, Wealth Star, the relatives and family members take their seats at the table, and drink 'riches and honour wine' together. If there are more people, they assemble two or three tables into one long table.

Drinking 'riches and honour wine' is the last time to offer auspicious words to the host. Generally the Lu Ban master and the Wealth Star propose the toast to the host together (see Appendix 2, A.2.3.3 Drinking 'riches and honour wine'). At this time, the host raises a glass in thanks for the auspicious words, then everybody talks and laughs and eats together, until late at night. Thus the whole ritual process starting with the construction of house and ending with dwelling in it is finished.

4.3 Conclusion

In this chapter I added materials about the construction process (site, time, material, specific details of making, custom, groups, and roles of people) to the gaps identified, in the literature review (see 1.5 Architecture) in order to explain and discuss how the Dong build without drawing. I have made further analysis of the construction of Dong dwelling to illustrate its significance in Dong community. Below is a summary of key points from this chapter.

This chapter has presented what a Dong dwelling is, how they continue to be built through a construction process that is composed of both the technical process and the ritual process. It is not only a live project for the education of carpentry, but also a vivid

⁴⁸ Fu and Yu, *Custom of Nine Stockaded Village*, p. 193. 傅和余, *九寨民俗*, p. 193, translated by Derong Kong

exhibition to the Dong people. This is also a representation of the social construction. These complex activities also inherit the collective experience from the previous generation. Folk dwelling is an integral part of Dong traditional culture, a strong example of the material form of Dong culture. It is a carrier to transmit and disseminate Dong culture, and as has been shown here, the construction and use of the house are key links in this process.

The hand-ink master plays a pivotal role in both the technical and ritual aspects of the construction process. He is the designer of the house, and an organiser of architectural construction and social construction. He also acts as a continuator and disseminator of social culture and development. Again as Sennett says, a master craftsman is a sociable expert, in the custom and ritual that further cements sociability.⁴⁹ This is the end of this chapter; next will focus on the construction of the drum tower, and discuss it at the scale of clan and village.

⁴⁹ Sennett, *The Craftsman*, p. 246.

Chapter 5

The construction of the drum tower

5.1 The architectural construction and social construction



Figure 1.
The Drum tower at Tang'an village. Photograph by Derong Kong.

The drum tower is the most important public building in a Dong village (Figure 1). This place used to be a public space for political and military activity; it could be an assembly site, a wartime command post for organisation of the Kuan (Kuan is a self-organised local political and military alliance between villages, it could be consisted of several villages or even a hundred); or a court of the Kuan to establish customary law, settle lawsuits, or intercede in quarrels. It is also a public place for rest, amusement, meeting, and discussion. It is the important village centre to welcome guests, perform antiphonal singing, and to hold festivals and rituals. As Luo says, it is the symbol of the village and the Dou, representing their identity, honour and disgrace.¹

¹ Luo, *Folk Dwelling of Guizhou*, p. 89. 罗, *贵州民居*, p. 89.

5.1.1 The construction of the drum tower

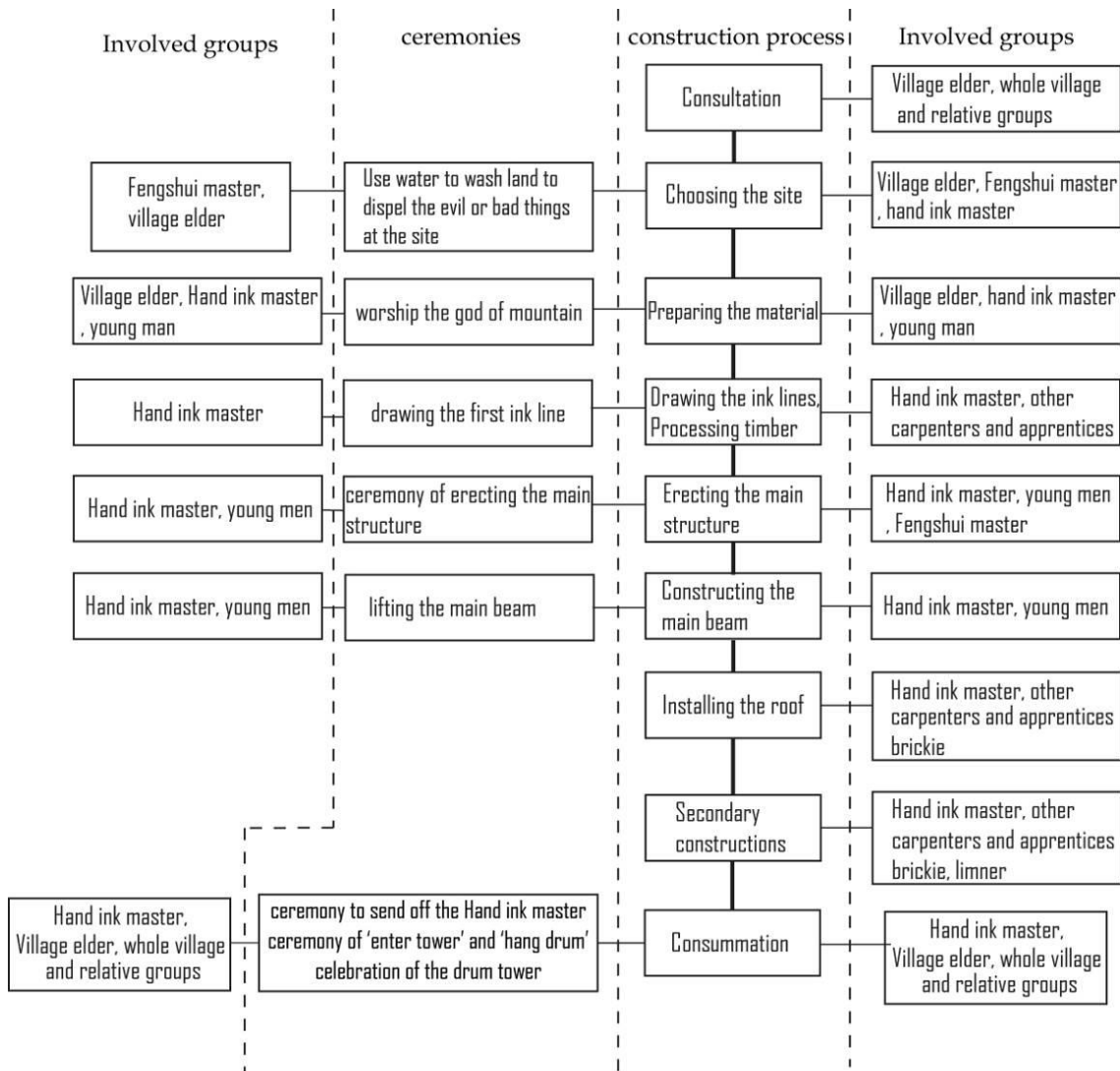


Figure 2. The construction process of the drum tower. Drawing by Derong Kong.

According to the records set out in books (see Chapter 1, 1.5 Architecture) and my field survey, to build a drum tower requires a general procedure of consultation, choosing the site, preparing the material, drawing the ink lines and processing timber, erecting the main structure, constructing the main beams, installing the roof, then adding secondary constructions (constructing the eaves, applying tiles, installing other wooden components) (Figure 2). The whole process can take up to 3 years (for example a drum tower with 17 layers of eaves).

Construction

Heidegger says technique, in Greek *techne*, means neither art nor handicraft, but rather to make something appear.² Following this conception, as an application process of technique, construction is the use of skill and method to build something. In Chinese the word 'architecture' (建筑, *Jian Zhu*) is composed of the words 'build' and 'construct'. It is a description of a construction process, the original meaning of architecture. But Dong people do not have the written language, so even if they can apprehend the meaning of architecture, it is still limited by the issues of everyday life.

Part of social construction

The construction of the drum tower is accompanied by a social construction that is simultaneously processed. Compared to the construction of Dong house, the drum tower concerns the spatial scale of village and the construction of a community, and as a public building to represent its clan. When different groups join in the construction process, the drum tower's construction works as a joint to connect different groups together, and to create an interaction between the drum tower and local people. The experience also leads to exchange and inheritance of social activity.

The promised land

Architecture is a corner of life, a fragment of thinking. Our prefabricated definition of architecture has developed through accumulation over many generations; the observation of an original meaning is precluded by the overlapping of many layers. Also the observer is limited by his own time and space, so it is hard to see the whole process of construction; what most people have seen is the outcome of the construction process, maybe a building from one period, a typical building, or a fragment of building.

Construction is a process, architecture represents the outcome of people's thinking process; architecture is the demand of social activity; it is spatial construction of social structure; it is construction of technique and mind.

² Heidegger, *Poetry, Language, Thought*, p. 549.

What kind of building do Dong people need?

The Dong people have many other names for its nation. One is Kam, in Dong language (Gaeml) which means 'to cover and conceal', the autonym may refer to people who 'hide', removing themselves to remote areas to avoid invasion and keep self-preservation. In the record of Geary and others, they are also called Xidong (溪峒, means stream and grottoes) which in Chinese history described the area beside river and mountain where people live.³ These two names declare where they live and their life status.

They ponder the ideal social life, and construct their living territory that explicitly distinguishes them from others. They cultivate their life, confirm their habitus of life, construct the building, and establish social structure and rule. All this culminates in a building called the drum tower. Architecture is part of social construction and reflects social life, also presenting a section of social life, Xing says that among Dong people, built form and architecture are commonly considered a reflection of conceptual ideas.⁴ Architecture construction coexists with construction of social structure and order, as people through architectural and social construction accomplish their built world, as Zumthor says they make their statement, in order to inhabit the place where they intend to be.⁵

Buildings locate the position of people in the built world, allow space for the habitus, as Heidegger said: 'The nature of building is letting dwell. Building accomplishes its nature in the raising of locations by the joining of their spaces'.⁶ Because building produces locations in space, it connects the spaces together, the dweller's built world with the natural world.

Construction expresses information through physical construction with the intention of making a site became a place, transferring force to form a territory. As Bourdieu says construction is a way to construct and perceive a place.⁷ Also as Shen says, people in the spatial environment choose a site to construct with the intentional idea for living, so

³ Geary and others, *The Kam People of China*, p. 3.

⁴ Xing, *Allegorical Architecture, Living Myth and Architectonics in Southern China*, p. 7.

⁵ Peter Zumthor, *Thinking Architecture*, p. 13.

⁶ Heidegger, *Poetry, Language, Thought*, p. 549.

⁷ Bourdieu, *Outline of a Theory of Practice*, p. 104.

that through construction the site becomes a 'place' for people.⁸ They construct to define their area and repeat the activity to reconfirm the area and identity. As Bourdieu says, it transfers their identity to the world, it applies their order and identity to the world; it defines the location, and the identity of place. Then this world can be understood.⁹ Through construction people communicate with the world and provide themselves with a place to live in the world. Just as Shen states, the relationship between people and site is obtained in the process of constructing and living in a place.¹⁰

5.1.2 Social construction

Before people settled in the natural world, they saw the natural world as homogeneous, so that although everything had its own character, the universe seemed to work within its law. The land was neutral without artificial order, without emphasis, the space of average distribution, equal and open to everything, and compared with people's built world it was empty.

Solidarity is the highest principle of Dong culture, and the drum tower is the highest reflection of their collective culture. It represents the social centre in the social development process. It is the embodiment of collective cohesion, and reflects the emergence of the social centre.

When there is no order and centre, the dwelling is homogeneous, without focus, the spatial context is neutral and equal. When the public centre is generated as a reflection of the collective conception, the village is not an unordered, average spatial structure: instead it is a public centre enclosed by dwelling, becoming a settlement which is organised by the central drum tower.

The complexity of construction

Social construction includes different aspects, such as the social structure, culture, and architecture. These different spheres of construction coexist, keep their characters and overlap in social construction and in the life lived. Architecture working as itself and as the spatial construction of social construction faces many demands from different

⁸ Shen, *Architectural Phenomenology*, p. 22. 沈, *建筑现象学*, p. 22.

⁹ Bourdieu, *Outline of a Theory of Practice*, p. 167.

¹⁰ Shen, *Architectural Phenomenology*, p. 25. 沈, *建筑现象学*, p. 25.

aspects. As Berger and Luckmann say, because the building construction is part of social construction, is the extension of people's mind and body, so it inevitably carries some meaning.¹¹ It inevitably becomes the carrier of technique, working experience, and artistic feelings. The carpenter wants to experience the building for itself, as construction, while the inhabitant needs the building and other things that do not belong to building but are relevant to it. In the end, building becomes a complex of multiple demands and factors.

Venturi says, the building technology is hard to learn, but the demand and function is clear, in other words the logic is tangible and efficient. But as part of the social construction, architecture has to deal with different demands and react to different factors.¹² These forces determine the architectural construction as an entangled process. Zumthor says construction is the art of making a meaningful whole out of many parts, those different factors which construction has joined together in context.¹³ When you put them together, through comparison their different characters will gradually emerge, and they will find their positions in the context. The complexity of the construction process, its different demands and the architecture itself, embarrass this process, followed by a contradiction of potential.

Ritual

The reality of a thing is in the thing itself; the thing has its resistance to maintain its hard core. The phenomenon is the way people can see the thing. Social and architectural constructions bring the observable phenomena which are the direct description of architectural and social construction. Phenomena are the substance of their information. People try to give exact definition to specific phenomena in order to distinguish them from other phenomena. Dong people transmit knowledge based on observed phenomena and practice.

Ruan says that by sharing a view of the drum tower, each house, and hence every Dong, is empowered to be a member of their society.¹⁴ It is also caused by the limitation of memory, the time scale and the incomplete or tangled knowledge of the development

¹¹ Berger and Luckmann, *The Social Construction of Reality, A Treatise in the Sociology of Knowledge*, p. 50.

¹² Venturi, *Complexity and Contradiction in Architecture*, p. 19.

¹³ Zumthor, *Thinking Architecture*, p. 11.

¹⁴ Xing, *Allegorical Architecture, Living Myth and Architectonics in Southern China*, p. 40.

process. They have to use recurrent cultural activity to reproduce phenomena; it assembles people in the same time and space to observe the phenomena in order to maintain the culture. Chew indicates that ceremony creates common knowledge, a teaching method to increase the total audience. When many people can be assembled at the same place and time, you see other people join the ceremony, and other people also see you, so everyone knows everyone.¹⁵

Each part of the construction has a corresponding ritual from beginning to end. In the ritual people confirm who they are, where they live, what is the drum tower. In the construction process, people join in both the construction and rituals, which represent their agreement with this construction, handing over their right to public authority, and confirming it. As Douglas says, the ceremony is to make public; more precisely, what is public is common knowledge generated in cultural practice, to enable people to know their own society¹⁶ Submitting to authority is a coordination problem, and successful communication ensures power and belief, producing a way of communication to link progress, to gather people together to solve problems, and to form common knowledge. It helps social integration. As Chwe says, open communication brings publicity; it reduces hidden knowledge which might threaten the public good.¹⁷ Cultural practice is a publishing process.

The process of making, as well as inhabiting, a Dong drum tower, thus works in a beautiful way both for the Dong and others, and indeed becomes legible to them. As Ruan says, through the ritual and related activity, the drum tower is symbolic capital full of stateliness and Dong social culture.¹⁸ The oral culture is transferred to the symbolic capital of the drum tower, and the power of that capital powers the Dong cultural life. Symbolic power penetrates various levels. In the ritualization of the construction and dwelling process, Dong people apprehend the poetic meaning of the drum tower.

5.2 The construction process of the drum tower

The construction of a Dong building has 'three long phases and one short': first is the preparation of material, second is the processing of components, third is decoration and

¹⁵ Chwe, *Rational Ritual: Culture, Coordination, and Common Knowledge*, p. 20.

¹⁶ Douglas, *Purity and Danger, An Analysis of Concepts of Pollution and Taboo*, p. 129.

¹⁷ Chwe, *Rational Ritual: Culture, Coordination, and Common Knowledge*, p.28.

¹⁸ Ruan, *Allegorical Architecture, Living Myth and Architectonics in Southern China*, p. 135.

paneling; the short phase is erecting the framework which needs only a few days.

5.2.1 Consultation over building the drum tower

Drum tower construction council

Before construction the village will establish a 'drum tower construction council' to organise and manage construction. In Yongming Yang and others' record, the council consists of village elders and villagers, and is presided over by village elders.¹⁹ The council needs to determine the site, prepare materials, allocate labour and wages, discuss the construction plan, and then the most important thing: hire a good hand-ink master.

Yang and others recorded that after the construction council has reached agreement in all matters, taking the advice of the hand-ink master and the fengshui master, the council will designate three to five people to draw up an implementation plan, including the site, building materials, budget, arrangement of labour, time plan, employment of carpenters, food supply, safety and other affairs, then assign work, money, and provision of building material to all villagers, depending on their name, gender, health condition and family condition. Finally the council announces the implementation plan to the whole village.²⁰

All villagers offer material, money or labour. The payment is the average afforded by the Dou families. It not only includes money, but also rice, wine, meat and cloth as payment to the hand-ink master, but there are no uniform criteria. When the project is started, each family in the village takes turn to serve the hand-ink master with good food and wine. From Caigui Huang's survey, there is no obligatory demand. If someone thinks he or his family cannot afford it, the council will reduce or cancel his assignment, but people try their best to join the construction, no matter if it is less or more.²¹ Because the drum tower is the symbol of the Dou, as a member of the Dou it is a great glory to dedicate work or resources to the construction. Nearly the whole village joins in the construction,

¹⁹ Yang and others, *The Chinese Dong Drum Tower*, p. 32. 杨和其他, *中国侗族鼓楼*, p. 32.

²⁰ *Ibid.*, p. 33.

²¹ Caigui Huang, 'Investigation of Dong Drum Tower in Zhaoxing Village, Liping County', In *Guizhou Six Hills and Six rivers, Selected Data of National Survey*, ed. by Rong Wu, Yongrong Pan, and Xu Yang, Volume of Dong (Guiyang: Guizhou People press, 2008), p. 283. 黄才贵, '黎平县肇兴乡侗族鼓楼调研', 出自 *贵州六山六水民族调查资料选编*, 吴嵘, 潘永荣, 杨旭, 编, 侗族卷 (贵阳: 贵州人民出版社, 2008), p. 283.

so no one is concerned over the gain or loss. If there is shortage of labour, relatives from another village come and help.

5.2.2 Choosing the site

Environment

Before the construction council chooses the site, they have to consider environmental factors such as topography, traffic, and whether it can avoid natural disasters, such as flood, rainstorm and landslides. Lu said that if there are big trees around the site, it means the place is safe, and that a natural disaster did not occur before or has not been strong enough to destroy the trees, so it could be a good site for the drum tower. Some sites do not have trees around as protection, so must have buildings around to keep off the influence of strong wind.²² In the city Kai Li where I grew up there used to be a drum tower. It was built on the top of a hill in a park, and after many years, unfortunately, it collapsed during the strike of a tornado. It was built by the hand-ink master Wenli Lu, and he had insisted that the drum tower should not be built at that site, because the wind is stronger on the top of hill. He thought it better to build the drum tower in the centre of the city, where the terrain is lower and has lots of buildings around it, for lesser height can avoid big winds and the buildings around protect the drum tower from extreme weather.²³

Most drum towers built at the centre of the village stand for the central status of the drum tower. If there are many Dous, drum towers will be built at each centre of a Dou residential area, accompanied by a main road, to increase the accessibility of every member and to connect the whole residential area.

From the view of the landscape, the site for a drum tower should match the harmonious relationship of environment and village, bringing beautiful scenery to the village and reflecting the magnificent vision of the drum tower. Most drum towers have a pond or square beside them. A pond can provide water to stop a fire, and a square will offer a commodious place for people's activity. A commodious site for a drum tower is indeed indispensable, so residents can build a pond or square around it.

²² From my field survey, Wenli Lu, Xiaohuang village, November 2010.

²³ Ibid.

In Yang and others' record, some drum towers are built at the head of village as a landmark to dominate the area. The rules of the village are always displayed at the drum tower, so that when people enter the village they will be aware that they are in this village and they should obey the rules and customs. In contrast, some drum towers are built at the end of the village, a location to remind people after they leave the village, that no matter where they go, they must behave the same as here, not do anything against the rule and conscience.²⁴

In general, the location of the drum tower in a Dong village is decided by the spatial relationship and environment of village, always at a wide, beautiful, important location, with the best environmental and Fengshui conditions. It shows the important position of the drum tower in spatial structure of Dong village, as a sacred place for the Dong people.

Selection method:

From Yang and others' record, after the discussion of construction council, an 'entire blessing elder' (an elder who is wise and respected by people, concerned about the village, with a healthy body, longevity, good fortune, with male and female children and grandchildren, and whose family situation is good) will invite several elders in a similar or the same situation as him to search for the site for the drum tower around the village. After a detailed and thorough survey, each elder finds one site which he thinks is the best place for building the drum tower, then digs up a mass of soil, putting it into a black bag with a label number. During this process the soil should not be exposed to light. The elders meet again and everyone brings their soil in black bags, and in a dark room, they put the soil into the same bowl in the same volume and measure the weight. The heaviest soil represents the location where it been taken from as the most desirable, then several members of construction council will investigate the site, and if they agree that there is no other problem, the location of the drum tower will be set as this place.²⁵

The starting day of project must be worked out by the Fengshui master, choosing a propitious day. Yang and others recorded that to invite a fengshui master, the people must prepare a certain number of gifts: generally a grown cock or drake, one or two litres of rice, a jug of wine, and twenty to fifty Yuan in money.²⁶

²⁴ Yang and others, *The Chinese Dong Drum Tower*, p. 26. 杨和其他, *中国侗族鼓楼*, p. 26.

²⁵ Ibid., p. 32.

²⁶ Ibid., p.32

If there has already been a drum tower before, but it was damaged by fire or natural disaster, people rebuild it at the former address. Most of the Dong villages have put apart the site for the drum tower when establishing the village. In the record of Jiaqi Li and others', the ancient Dong song tells people to: 'build a drum tower before establishing the village...the drum tower is the warm nest of the village, and with no drum tower there is no place for happy life'.²⁷ Some villages consist of different households from different places, and as time passed it became a certain level village, but with no site for a drum tower. Under this condition, they had to hire a Fengshui master to choose the best site (usually the centre of the village). No matter where the site is, the people who hold the site must offer it for public use and choose another place for their own use with the help of the whole village.

Fengshui

From the viewpoint of custom, fengshui is an important consideration in choosing a site. It has a profound impact on Dong building. The drum tower is usually built at an auspicious site in the village, the best place for fengshui. Dong people call the undulating mountain range an 'Artery of Dragon'. The place where a mountain range meets rivulet, being flat, so that it stops there, is called 'Head of Dragon'. The 'Head of Dragon' must face south in order to gain more sunshine; the 'Artery of Dragon' must face north, so it can prevent the cold north wind. 'Head of Dragon' faces a moderate, endless rivulet and open flat land, backed by 'Artery of Dragon', the line of a long, high undulating mountain. The village is built at such a 'Head of Dragon'. In Wang's record, the Dong people call it 'sitting at the Mouth of Dragon', which means 'Already facing down the Dragon and possessing the vitality of the Dragon'. Then they plant a fengshui forest at 'Artery of Dragon' of back mountain to squash terrible evil, build a wind and rain bridge above the rivulet in order to lock in the source of wealth, so forming the precious land of fengshui for the Dong village. The drum tower is built at the point of the 'Mouth of Dragon', as expressed in the old Dong song 'the drum tower built at Dragon nest'. This is the environmental origin of a Dong village, also the centre of public life.²⁸

²⁷ Li and others, *The Folkloric Heritage of The Dong Drum Tower*, p. 143. 李和其他, *图像人类学视野中的侗族鼓楼*, p. 143.

²⁸ Wang, 'The Drum Tower: The Centre of Dong village', 54. 王, '鼓楼: 侗寨人居的凝聚中心', 54.



Figure 3. Zhaoxing Village. Photograph by Derong Kong.

For example, the location of Zhaoxing village in Guizhou Province is a narrow valley (Figure 3). The village has five Dous called ‘benevolence’ 仁, ‘righteousness’ 义, ‘courtesy’ 礼, ‘wisdom’ 智, and ‘trust’ 信. Each has its own drum tower. In Fan’s record, in folklore Zhaoxing valley is a ship: the high mountain to the southeast is the ship’s high-pole, northeast side is the ship’s scull, the east side is its bow, the western side its stern. The folk house is the ship’s sail. The river in the village flows from east to west, so the ship would face from west to east. The drum tower in the bow needed to be short, the drum tower of the stern to be high, in order to ensure that the boat moves from west to east. The drum towers on the sides that are the high pole and the scull must be higher than the folk house, but cannot be higher than the drum tower of the stern. So of the five drum towers in Zhaoxing village, the East one (‘benevolence’ Dou) is the shortest with 7 layers, the West one (‘trust’ Dou) the highest with 13 layers, at 28.9m (Figure 5,6). The side ones are middling high with 11 layers (‘righteousness’ Dou) and 13 layers at 23.1m (‘courtesy’ Dou), while the middle drum tower (‘wisdom’ Dou) has 9 layers (Figure 4,8,7).²⁹

²⁹ Fan, ‘Introduction of The Characteristics of The Drum Tower’, 32. 范, ‘侗族鼓楼特征刍议’, 32.



Figure 4. 'Righteousness' Dou drum tower



Figure 5. 'Benevolence' Dou drum tower



Figure 6. 'Trust' Dou drum tower
All Photographs by Derong Kong.



Figure 7. 'Wisdom' Dou drum tower



Figure 8.
'Courtesy' Dou drum tower.
Photograph by Derong Kong.

Washing land

In important projects like the drum tower and wind and rain bridge, because they are important to the village and have a sacred, inviolable status, people are influenced by the powerful status of building and consider it with an awed mood. People think the construction process is uncertain and dangerous unless they can gain some magic protection from ritual, performed by the hand-ink master or the fengshui master.

When the site has been decided, a ritual should be held using water to wash the land to drive off the evil or bad things in the land. This ceremony is performed by the Fengshui master, and it is the same as the ritual in the construction of house (see Chapter 4).

Before construction starts, in Huang's record, the hand-ink master and the fengshui master must use water to dispel evil, in a ritual named 'take back body and cover land', to ensure the safety of the hand-ink master, the builder and the whole village, making the sunshine always shine on the world, and the drum tower shine forever like the sun and the moon.³⁰

³⁰ Huang, 'Investigation of Dong Drum Tower in Zhaoxing Village, Liping County', p. 287. 黄黎平县肇兴乡侗族鼓楼调研', p. 287.

When everything is ready, the Fengshui master burns the spirit money (paper made to resemble money and burned as an offering to the dead), and at the same time loudly says his incantation (see Appendix 2, A.2.4.1 'Take back body and cover land'). After the Fengshui master has finished reciting his incantation, he takes the middle joss stick and middle cup of wine, using the joss stick to dip in the wine to draw the word 'dragon' in the air, then with spilling of the wine on the ground, the ceremony is ended.³¹

This ritual also can be performed at the beginning of the following stages of construction, but is not so necessary as at the first stage of construction; It is a routine, common ritual, that can be enacted at the beginning of other building constructions, such as folk dwelling or village gate,

5.2.3 Site treatment

Foundation stone laying ritual

According to Yang and others' record, the first step, on the auspicious day chosen by Fengshui master, takes place before dawn, when the entire blessing elder brings a big cock, wine and meat to the site to perform the ceremony, under the condition that no one knows, to avoid the possibility of dishonest people seeing it, which would be detrimental to the dignity of the drum tower. A pit 1.5 m deep, of length and width both 1m, is dug at the centre of the site. Then a small hole is dug at the bottom of the pit, and a small crock of wine, one Jin (half kg) pumpkin, one Jin eggplant, one Jin cucumber and one Jin fish are put in the hole. It is covered with a stone slab and covered with soil. Next step, a vat filled with clean water is put in the pit, usually containing twenty buckets of water. Then lime is used to seal the vat: it is covered with a stone slab and then with two or three Chi of soil.³² All of these works should be finished before daybreak, and after this ritual the construction can start.

Treatment

The base treatment work is done through excavation and fill, to achieve a level ground surface to support the columns. Hand-ink master Wenli Lu taught me to place a bowl of

³¹ Fu and Yu, *Custom of Nine Stockaded Village*, p. 178. 傅和余, *九寨民俗*, p. 178.

³² Yang and others, *The Chinese Dong Drum Tower*, p. 34. 杨和其他, *中国侗族鼓楼*, p. 34.

water on the site to check whether the base is level. In the base treatment he will use a ruler to measure the height of the corner points where columns will be set, nailing a wooden stick into these positions and using a thread to connect the sticks at the same height, in order, by means of the thread, to adjust the base. Because of the flexibility of the column-and-tie structure, sometimes if the base is not flat, the carpenter can freely adjust the length of columns to adapt to the base, or add a stone at the bottom of a column, which are common methods in column-and-tie buildings.³³

The direction of the drum tower:

The direction of the drum tower varies, generally determined by village, and depending on the direction and environment of the village. If the village lies along a hill, the drum tower will face the open side of the hill, in the same way as the folk dwellings; if there is a main road beside, the drum tower will face the main road.

The time of construction can also determine the direction of the drum tower, for the fengshui master, considering the situation of village, calculates the best direction for the drum tower at that period, wishing through the chosen direction to bring good luck.

The shape of the distant terrain is also an important issue in choosing direction. The auspicious sculpture or symbol on the top of drum tower works as the coordinate. In the record of Yang and others, if the auspicious sculpture faces towards a Saddle-shaped Mountain, it means the village would breed Champion fighters; if the auspicious sculpture faces towards a Penholder-shaped Mountain, this village would breed great scholars; if the auspicious sculpture faced towards an Official seal-shaped Mountain, it would produce an officer in central government in the future.³⁴ These all reflect people's wishes for a good outcome.

5.2.4 Preparation of material

Material supply and symbol

If the drum tower is constructed by one Dou, the material is supplied by the whole Dou,

³³ From my field survey, Wenli Lu, Xiaohuang village, November 2010.

³⁴ Yang and others, *The Chinese Dong Drum Tower*, p. 27. 杨和其他, *中国侗族鼓楼*, p. 27.

while the other group who are relatives would also offer to help; if the drum tower belongs to the whole village, then the whole village shares the cost, labour and material.

As Yao recorded, the timber for the drum tower is donated by each member of the village, as an indication that the drum tower is the symbol of the village and constructed by the whole village or clan; so everyone is part of the drum tower.³⁵ This custom connects the whole village together, classifies their relationships, confirms their role in the village, and makes evident their clan.

In the preparation of material, it is important who supplies the main column and central column. From Huang's field survey, it should be contributed by the oldest Dou or the oldest household in the Dou, and other residents cannot substitute for them. It indicates that the village Dou was developed by the old residents. The drum tower is the symbol of the village Dou, and they are the main body of the village and Dou, so the main load-bearing columns can represent them as the main body of the drum tower. The people who donate the central column also need to provide the offerings for the ritual. If the descendants of the oldest Dou cannot afford it, this honour can be undertaken by others. Before cutting down the tree for the central column, the host will kill a pig to serve to the young men who will to fell the tree, and after they carry back the tree, the host will serve them the same meal.³⁶

The eave columns, small timbers, and other building materials for the drum tower, are usually donated by the remaining members of the Dou. As for people unable to donate the timber, after discussion by the whole group, the construction council would allow them a remission on the timber.

For instance, in Huang's record, in Jitang down village, at Congjiang County, Guizhou, there are three Dous: Dou Pai, Dou Jing Ge, and Dou Ding Bao. The timber for the drum tower and the salary of hand-ink master are shared between them. The Xubin Lu family has the hereditary qualification to donate the central column. When erecting the central column, the Xubin Lu family should offer one cock and several joss sticks and paper to buy the earthen bowl and crock to make the sculpture on the top of the drum

³⁵ Yao, 'The Symbolic Meaning and Identification Ritual of Drum Buildings of Dong nationality', 102. 姚, '侗族鼓楼的象征意义与认同仪式', 102.

³⁶ Huang, 'Investigation of Dong Drum Tower in Zhaoxing Village, Liping County', p. 283. 黄'黎平县肇兴乡侗族鼓楼调研', p. 283.

tower, and provide a covering of Dong fabric in length of one Zhang two Chis on the central column. When the drum tower was completed, Xuebin Lu wrote a couplet carved on a board and hung it on the front eave columns of the drum tower. The inscription reads: ‘climbing the mountain, fell tree to build Dragon tower to glorify the mansion of dignitary, Si Shui (Si Shui, a place in China of many famous people) makes obeisance and assigns to this gallant pavilion a training literator’.³⁷ This fully reflects the drum tower’s social utility for the people.

The brother village or Dou which has a blood relationship will often also contribute some wooden component, such as a column, or the four benches around the fireplace. From Huang’s field survey, undertaken in 1981, Justice Dou, at Zhaoxing village, Liping County rebuilt their drum tower. It has four central main columns; the left front column was donated by Puchengfu Lu hereditarily; the right front column was contributed by Lingmo brother village; the left back column was a hereditary contribution from Puyuexin Lu; brothers Qingyu Lu and Qingzheng Lu followed the practice of the older generation and donated the right back column. The top central column and beam-column were donated by Bingwen Lu and Guangyi Lu’s families for generations. Bingwen Lu was expected to pay for the ritual offerings, but not for the meal to serve the labourers when felling the tree: instead this was free work contributed by villagers. The person who donates the main beam has to offer one cock, three Jins of wine, and more than twenty Jins of ‘Treasure beam cake’ made of glutinous rice. The cost of timber for the whole drum tower, amounting to about 80 m³ excepting the big timbers, was donated by the families of Dou Long, Dou Mian, Dou Man, according to the ability of each family to pay.³⁸

Choosing timber and felling

The timbers for the main columns and the tie-beams are selected by prestigious elders. Yang says, these timbers must be old trees with excellent texture, straight, thick trunk, almost the same diameter all the way up.³⁹ From Li and others’ research, the height of wood for the main column could be 18 to 20 m, thus the diameter at the bottom of the main column would be about 50 cm, the diameter of the top about 30 cm. People also demand that the growth of the tree should be normal, that it has not been damaged by

³⁷ Huang, ‘Investigation of Dong Drum Tower in Zhaoxing Village, Liping County’, p. 283. 黄, ‘黎平县肇兴乡侗族鼓楼调研’, p. 283.

³⁸ Ibid., p. 283.

³⁹ Yang and others, *The Chinese Dong Drum Tower*, p. 31. 杨和其他, *中国侗族鼓楼*, p. 31.

natural disasters, such as rain and wind, or struck by lightning. If damaged trees were used it would bring doom to the village.⁴⁰ A bifurcated tree cannot be used, because people think it cannot be whole in the end, and will separate midway. This has the implicit meaning that people will separate, which is against the emphasis of the drum tower, solidarity.

In Yang and others' record, tagging the trees with red cloths announces that these trees are reserved for the drum tower and cannot be taken for any other use.⁴¹ The other timbers should be straight, according to the different demands of the wooden components.

Worship mountain god

When people have chosen the trees, the first component to be prepared is the central column. From Li and others' record, using the Lunar calendar to choose a propitious day and time, the village elder will lead the young men to the tree chosen from three biggest firs, located at twenty Lis (10 km) from the village. There follows a ritual to worship the god of the mountain, the ghost master brings some wine and food, then he burns joss sticks and spirit money in front of the tree intended for the central column in order to propitiate the god of the mountain, while saying some words to pray for a blessing from him, from the god of land and the ancestors (Figure 9). Dong people revere the tree, they think that the tree has a soul, especially a centuries-old tree, which has become a powerful spirit, and is not to be carelessly offended. So before felling, the ghost master

must be asked to invite it, as only after permission from it can people invite it to be the column of the drum tower.⁴²



Figure 9.
Worshipping the god of mountain, author:
Tongrong Yang

⁴⁰ Li and others, *The Folkloric Heritage of The Dong Drum Tower*, p. 158. 李和其他, *图像人类学视野中的侗族鼓楼*, p. 158.

⁴¹ Yang and others, *The Chinese Dong Drum Tower*, p. 31. 杨和其他, *中国侗族鼓楼*, p. 31.

⁴² Li and others, *The Folkloric Heritage of The Dong Drum Tower*, p. 158. 李和其他, *图像人类学视野中的侗族鼓楼*, p. 158.

After the ritual, the village elder uses an axe to chop the fir three times, then the young men take turns to cut it down. It must fall along the mountain and cannot touch the ground, being given temporary support with branches of fir. So the china fir maintains its previous direction, treetop towards the sky, roots towards the earth, and it is also implied that in the drum tower it must keep the same direction.⁴³

Because Dong people believe in Qi (energy/breath/wind) from Daoism which is the inner dynamic power of a thing, they think that if the tree made contact with the ground, the Qi would be released by the contact, and it would be rendered imperfect.

Then the young men will use their shoulders to convey the tree. From the record of Huang, on their way back to the village, they cannot switch places with other men, for that would mean a change of host. Because this timber will be the main part of the drum tower, such action would carry the bad meaning of a change of owner for the drum tower. The young men have to go straight back to the village without changing their shoulder. If they switch to the other shoulder, the timber would make contact with different Qi from the other shoulder, which would break the process, leading to imperfection (Figure 10). There are many demands on the young men, that their parents, brothers, and sisters are all still living and in good health, and that the family had suffered no unusual death.⁴⁴



Figure 10.

The Young men convey the log.

Author: Tongrong Yang

Next, the other main columns and firs can be

⁴³ Li and others, *The Folkloric Heritage of The Dong Drum Tower*, p. 158. 李和其他, *图像人类学视野中的侗族鼓楼*, p. 158.

⁴⁴ Huang, 'Investigation of Dong Drum Tower in Zhaoxing Village, Liping County', p. 283. 黄, '黎平县肇兴乡侗族鼓楼调研', p. 283.

cut down. After the china firs are cut, they are stripped of their bark and cleaned up, then conveyed, the central column carried first. From the record of Li and others, the tree bark from the timber of a drum tower cannot be used to cover a barn for keeping cattle, it cannot be trampled on, it can only be used to cover a dwelling or a granary.⁴⁵

In this process people are trying to pursue the perfect action, in order to make things correspond to the natural order and social order, following the preexistent system and its rules, because that is the only criterion of perfection, the way they can achieve a satisfactory outcome. So they have to stand at their position, keep the line, and live accordingly.

● Materials

Timber:

China fir is the main material in carpentry work, as it is easy to saw or plane by hand to make wooden components, and because it is lighter than other woods, so is easier to transport. From Geary and others' research, in local history records from the early 1500s, the china fir had not only been used for local building, but also been transported as tribute to the capital, Beijing, for the construction of the emperor's palace, and was referred to as 'the emperor's wood'.⁴⁶

Bamboo:

From Ruihua Hao's research, the carpenter uses bamboo to make a small model to explain the design to the construction council, and it also has the function of a reference while the carpenter is making a wooden component or people are assembling them. Bamboo-nail: carpenters use bamboo-nails to peg on the small blue tiles, this is the only place in the Drum tower where they do not use mortise and tenon.⁴⁷ Bamboo is also the main material to make the Zhang pole and bamboo stick.

⁴⁵ Li and others, *The Folkloric Heritage of The Dong Drum Tower*, p. 158. 李和其他, *图像人类学视野中的侗族鼓楼*, p. 158.

⁴⁶ Geary and others, *The Kam People of China*, p. 140.

⁴⁷ Ruihua Hao, 'A Technical-Anthropology Research on the Architecture of the San Jiang Dong Race', (unpublished master thesis, Guangxi University, 2006), p. 19. 郝瑞华, '三江侗族建筑的科技人类学考察', (未出版硕士论文, 广西大学, 2006), p. 19.

Tung oil:

In Ruihua Hao's record, Tung oil is used for processing wood and bamboo, as it increases the durability and corrosion resistance of the material, and improves resistance against worms and termites.⁴⁸

Clay:

Clay is used to make the small blue tiles for the roof. First, the clay and water are mixed together, then formed as a tile, then fired at high temperature. In Luo's record, the tile is 180 to 200 mm in width, 120 to 50 mm long, and about 10 mm thick.⁴⁹ Clay is also used in making the sculpture of the Drum tower.

Sticky Rice and kiwivine:

Dong people use these materials to make the roof ridge of the drum tower and its sculpture, the decoration on the roof ridge. From the record of Hao, first the kiwi vine is mashed and soaked in water; then the water from the mashed kiwi vine is used to soak sticky rice and steamed in a pot. Finally the steamed sticky rice, lime, and kiwi vine slurry are mixed together to be the Dong unique material to make the roof ridge and sculpture.⁵⁰ It is sturdy and durable, but now people replace it with concrete.

Stone:

Local stone is used for the base, retaining wall, column bases. The stone in Guizhou is massive; the problem is how to save time and labour while mining and collecting it. Luo says, when leveling the base, they expect to use the necessary large square blocks, but other stones can be big cobble stones collected from river, in order to decrease the amount of labour. The base and retaining wall is laid almost dry, with only some important parts strengthened with lime cement.⁵¹ The masons are experienced in choosing and using stone, skilled in which piece should be used where.

⁴⁸ Hao, 'A Technical-Anthropology Research on the Architecture of the San Jiang Dong Race', p. 9. 郝, '三江侗族建筑的科技人类学考察', p. 9.

⁴⁹ Luo, *Folk Dwelling of Guizhou*, p. 158. 罗, *贵州民居*, p. 158.

⁵⁰ Hao, 'A Technical-Anthropology Research on the Architecture of the San Jiang Dong Race', p. 19. 郝, '三江侗族建筑的科技人类学考察', p. 19.

⁵¹ Luo, *Folk Dwelling of Guizhou*, p. 157. 罗, *贵州民居*, p. 157.

5.2.5 Drawing ink lines and timber processing

Design

The hand-ink master's first responsibility is to cooperate with the construction council, considering the site, material, money, and the demand to discuss the size, form, and structure of the drum tower. Then he would have to determine the construction procedure, and establish a construction plan. The third issue to be resolved concerns the topography and geology to determine the construction programme for the base.

Dong people have built many drum towers, and after many years development, based on their observation, some regular styles of the drum tower have arisen. The size of the drum tower also has some regular pattern. From Hao's research, when the hand-ink master knows the size of the drum tower, he can calculate the sizes of the columns.⁵²

Luo says, when designing one drum tower, the hand-ink master should choose the appropriate timber to match the components, maximize the use the timber to save material; determine the size and position of the mortises and tenons on columns, beams, tie-beams; the position of each component and the structural relationship between components; the construction sequence, and so on.⁵³

In my interview with him, hand-ink master Wenli Lu told me that for himself, he does not need a model or a drawing, because everything is already in his mind. Through long practice and his long accumulation of working experience, he has obtained reliable experience about the components, joints and structure. When the site is wide and material is good, the space of the drum tower can be wider and higher, while in the opposite conditions the space should be narrow and lower. In the actual situation, the height of the drum tower is not decided by pre-design, but determined after people find the appropriate four big china firs for the main columns.⁵⁴

⁵² Hao, 'A Technical-Anthropology Research on the Architecture of the San Jiang Dong Race', p. 18.郝, '三江侗族建筑的科技人类学考察', p. 18.

⁵³ Luo, *Folk Dwelling of Guizhou*, pp. 158-159. 罗, *贵州民居*, pp. 158-159.

⁵⁴ From my field survey, Wenli Lu, Xiaohuang village, November 2010.

Making samples and drawing plans

Before construction the hand-ink master would discuss the design project with the village elders, using simple section plan, or model to explain the design project, including the structure, form, size, list of components and material, cost and labour of the drum tower (Figure 11).



Figure 11. The hand-ink master uses a drawing to discuss the project with the village elders. Author: Tongrong Yang

The model has the same form and structure as the designed drum tower, but in a small scale. The section plan usually is only a single drawing which consists of half section and half elevation, because the framework is composed of the same structural unit, so workers only need to copy the structural unit and rotate it around the centre of the plan to complete the whole structure.

Making the Zhang pole

After the village elder and other people agree over the design project, the hand-ink master draws all the size of wooden components on the 'Zhang pole' (a piece of bamboo) and marks the sizes with his own secret letters. It is the construction guide, and also is a measuring tool to record the sizes. When assembling the components, the

carpenter can also use the Zhang pole to check whether the installation of wood components is accurate.

The length of a Zhang pole is usually the same as the central column of the building in order to facilitate measuring and marking dimension. If the central column is very long, the length can be half or a smaller fraction of the central column.

Drawing the first ink line

On many occasions, the people have a sense of awe towards the hand-ink master. From Huang's record, people think that every ink line the master has drawn is related to the fortune of the village, especially the first ink line on the central column, and what he says is also important. Before the master draws the first ink line, the host must give him three pickled fishes, one package of sticky rice, and money within one red envelope.⁵⁵

In Fu and Yu's record, when the material is ready, according to the Chinese traditional calendar and 'method of choosing day', the hand-ink master chooses a propitious day and time to draw the first ink line, as this means the start of construction. This is very important and sacred, so the hand-ink master must dress in new clothing and new shoes. He must burn spirit money in front of a pair of 'wooden horses', a ceremony named 'invite wooden horse'. Then the hand-ink master sings, burns joss sticks and spirit money, and puts the top central column on the wooden horses. He planes the top surface of the central column, then uses the ink reel to draw a black line along it, at the same time saying: 'Flip ink line for one time, blessing and longevity complete in both respects'.⁵⁶ This marks the start of construction.

The hand-ink master will inspect the quality of timber to check for rot, worm, knurr, crack or damage, then based on the size of components, choose the appropriate pieces for each component.

Timber processing:

When the Zhang pole is complete, the hand-ink master draws ink lines on the draft

⁵⁵ Huang, 'Investigation of Dong Drum Tower in Zhaoxing Village, Liping County', p. 287. 黄, '黎平县肇兴乡侗族鼓楼调研', p. 287.

⁵⁶ Fu and Yu, *Custom of Nine Stockaded Village*, p. 180. 傅和余, *九寨民俗*, p. 180.

wooden components according to the recorded length and size of columns and tie-beams, following the sizes and positions of mortises for columns on the Zhang pole (Figure 12). In this procedure, the construction plan is drawn on the wooden component. Other carpenters and apprentices obey the arrangement of work in preparing and machining the structural components and other parts.



*Figure 12.
The hand-ink master
Yongcheng Lu draws
an ink line on a
component.
Photograph by Derong
Kong.*

Drawing ink line and timber processing are the important procedures in construction, and may cost three-quarters of the time of the construction process. The level of carpentry proficiency determines the quality of component and the stability of the whole structure.

The procedure of making components is the same as making the components of a house. The first job is to make the columns and chisel the mortises into them. Then the hand-ink master uses a small bamboo stick to measure the size of the mortise, writing down the corresponding code on the tie-beam. The second job is making tie-beams, while it is the hand-ink master who draws the ink line. After other carpenters have finished the tie-beam leaving two unfinished tenons, the master draws the ink lines of the two tenons on the corresponding tie-beam with two codes to identify the positions and directions of the two tenons. Following the ink lines, carpenters can reprocess the exact sizes of tenons of tie-beam, so that tenon and mortise can join close and tight.

This is just a general introduction to the making of components, the detailed description is in Chapter 4. During this process, the hand-ink master walks around the working site,

using the Zhang pole and ruler to double check the size of components. He also supervises how the carpenters and apprentices process components and regulates the quality of the work.

5.2.6 Erecting the main structure

When all columns and tie-beams have been finished, the wooden components can be assembled under the guidance of the codes already written by hand-ink master on the wooden components. The assembly process only needs a few days, but it is also a crucial and dangerous part of the construction.

Before this procedure the hand-ink master checks each component in detail, confirming that the production of the components is completed as required, in case some components do not match the demand or are missing. As Hao says, all the positions and directions of mortises must be accurate; otherwise the joint will not fit which would create trouble during installation, and could endanger the stability of the drum tower.⁵⁷

The components must be installed at the positions and in the directions of the carpenter's codes marked on them. It is important not to change the position of any component, for otherwise it could not connect with its partner component firmly and might cause disaster.

The order of assembly cannot be wrong. Wenli Lu said that if some part is placed wrongly, people have to disassemble them, which would be considered an unlucky thing. For the main framework, the first element to be erected is the central column, and then comes the tie-beam, then the other components. The installation has a basic order that is started from the inside component and proceeds to the outside component (for example first the central columns then the eave columns); and they work from lower components to upper components, such as installing the lower tie-beams first, then installing upper tie-beams one by one. In the assembly process, as each part is installed, carpenters do not rush on into the next step of the installation; they check the positions of components and their joints, adjust any errors, and use scaffolding to fix components.⁵⁸

⁵⁷ Hao, 'A Technical-Anthropology Research on the Architecture of the San Jiang Dong Race', p. 26. 郝, '三江侗族建筑的科技人类学考察', p. 26.

⁵⁸ From my field survey, Wenli Lu, Xiaohuang village, November, 2010. Jitang village, January 2013.

Ritual of erecting the structure

Before the assembly of components, the hand-ink master will choose a propitious day and time to hold a ritual ‘dispelling evil spirits’ that brings safety and success at the site. From the record of Fu and Yu, the ritual is accomplished before daybreak. The hand-ink master holds in his left hand a red cockerel, in his right hand the Lu Ban (the ancestor of carpenters) axe. He stands in front of a squared table set up at the centre of the site. Putting a plate of meat on the table, after burning three joss sticks and spirit money, the hand-ink master recites the incantation (see Appendix 2, A.2.4.2 ‘Words of killing cock’). Then using the Lu Ban axe he cuts the neck of the cock, and immediately takes the live and struggling cock once around the site and sprinkles its blood on the ground and incants: ‘Five directions, devils from five ways, quickly retreat! The blood falls to the ground, evil spirits keep away from here!’.

And spreading the blood on the column, he incants: ‘The blood falls on column, evil spirits go away!’ at the same he uses the axe to knock the column several times. Then he goes back to the table to spread the blood on it and recites the incantation (see Appendix 2, A.2.4.2 ‘Words of killing cock’). After he has finished the incantation, he throws the cock out of the site, and at this moment the ritual is over. Then construction can start.⁵⁹

Erecting the structure

Before assembling the main structure, there is a need to build up scaffolding support for the main columns. The scaffolding is erected inside the main columns, with a form and height nearly the same as the distribution of main columns, so the main columns can be placed alongside the shelves when erecting them. Then the different main columns are put into position, using tie-beams to connect them (Figure 13).

⁵⁹ Fu and Yu, *Custom of Nine Stockaded Village*, p. 183. 傅和余, *九寨民俗*, p.183, translated by Derong Kong.



Figure 13.

Erecting the structure

Author: Changhuan Yang

From my interview with Yonghui Luo, the young men are divided into four groups. Group one pulls the rope (the rope is fastened at the top of the main column, the rope put through the roller on the top of scaffolding to hoist up the column). Group two put up the bases of the main columns. Group three stand on the scaffolding to fix the hoisted column, and group four, with four or two men, use a fork of more than ten metres in length to control the direction and support the column. In this arrangement, under the command of the hand-ink master, all pull at the same time to erect the main column, repeating this process until all the columns are in place. After all the main columns are set up, a tie-beam is added to connect each pair of columns. Some men stand on the scaffolding to catch the tie-beam and place it in the correct position. The stages of installation start from the top to down, fitting the tenons at either end of the tie-beam towards left and right sides of mortises in columns respectively, then using a wooden hammer to knock the tenon of the tie-beam into the right position in the mortise of the column and integrate the joint exactly, until all tie-beams are installed. Next the third main column is laid close to the two main columns already connected together. Following the same method the tie-beam is installed, using the tenon of the tie-beam to connect with the mortise of the first or second main column. In this way the third main columns is installed, then the fourth main column, repeating this process until all the main columns are connected by tie-beams. After emendation of the position of main columns, the inner bundle-structure of the drum tower is basically complete.⁶⁰

⁶⁰ From my field survey, interview with Yonghui Luo, Rongjiang County, March 2010.

From Wang's record, the erecting of the structure must take place at night, and the young men in the construction, their parents, brothers and sisters must all be still living and in good health. The family must have had no unusual deaths. During the evening of erecting the structure, unmarried children must leave their houses. While erecting the structural skeleton, people must work without any sound in accordance with master's gestures. The whole process must be accurately completed before daybreak. At this moment when the sun has just risen, it becomes a symbol of 'life' with blooming vitality, growing with every day and flourishing.⁶¹

Subsequently the eave columns are erected in their respective positions, installing the tie-beams, the beams connecting between eave columns, the eave columns and main columns. The eave columns form the outer bundle-structure of the drum tower. The different arrangement of eave columns follows different plans of the drum tower. The penetrating tie-beam between main column and eave column bears a short column and overhangs to support the eaves, and this construction is repeated to the upper structure to form the multiple eaves. The main columns and eave columns are connected by tie-beams to compose the inner and outer bundle-structures as a whole structure.

5.2.7 Installation of the main beam

Installing the main beam is an important procedure in construction of the drum tower and of the folk dwelling of the Dong. After the main structure of the drum tower is finished, the main beam is lifted to the top the structure, and set up to connect the main columns. The main beam supports the floor that carries the drum.

Ritual of lifting the main beam

The Fengshui master chooses a propitious day and time, then the hand-ink master performs the ritual for raising up the main beam to the top between the main columns. The first stage is to hold a 'fete the beam' ceremony, placing a square table on the site, on which is placed a pig's head, and beside the pig's head, eight bowls, two dishes of candy, five cups of wine, one litre of rice in which is inserted three bunches of joss sticks, each bunch having three joss sticks, nine joss sticks in all. There must also be a pair of new shoes put in front of the pig head, prepared for the hand-ink master to wear when

⁶¹ Wang, 'The Drum Tower: The Centre of Dong village', 54. 王, '鼓楼: 侗寨人居的凝聚中心', 54.

he climbs up the structure and installs the beam. With all this in place, with the wooden horse in front of table and the beam on the wooden horse, the ceremony of 'fete the beam' can start.⁶²

The hand-ink master stands in front of table and loudly says the words of feting beam (see Appendix 2, A.2.4.3 'Words of feting beam'). As the hand-ink master says each sentence, everybody responds and answers: 'Yeah!' Then a rope is attached to each end of the beam, while the hand-ink master incants the words and performs the same ritual 'dispelling evil spirits' as in the erection of the main structure on the beam before it been raised up, and fastens a red cloth, with rice in it. Then two people on the top of drum tower on two sides slowly draw back the main beam, put it on the tie-beam between the two main columns waiting for the hand-ink master to install it; and light firecrackers in the same time for a flourishing vision.⁶³

When the beam has been put on the tie-beam and the firecrackers are finished, the hand-ink master puts on new shoes and says the words of raising the ridge beam (see Appendix 2, A.2.4.3 'climbing beam words'). Once the hand-ink master has put on the new shoes, he climbs the structure to install the precious beam. While he is climbing the structure, he says the words of raising the ridge beam (see Appendix 2, A.2.4.3 'climbing beam words').

When the main beam reaches the top and is installed between the main columns, he throws the prepared candy, glutinous rice cake, and red envelope to the ground and says auspicious words (see Appendix 2, A.2.4.3 'climbing beam words'). People try to catch the lucky candy, glutinous rice cake, and red envelope in a happy atmosphere.

5.2.8 Construction of the roof

There are many styles of roof, the most common being a pyramidal roof. This is a wooden framework composed of column-and-tie and a desirable-bracket-set (locally called honeycomb). The wooden framework is supported by hypostyle columns and a tie-beam underlayer. From the research of Ling Cai, the eaves of a pyramidal roof is made higher than the distance between the other layers, by using the

⁶² Fu and Yu, *Custom of Nine Stockaded Village*, p. 184. 傅和余, *九寨民俗*, p. 184.

⁶³ *Ibid.*, p. 185.

desirable-bracket-set to overhang the eaves and adding lattice windows to enclose the structure. The eave purlin is supported by the desirable-bracket-set, while other purlins are supported by short columns. The central column or suspended column is to support the top of the roof. The central column or suspended column and short column are connected by tie-beams to construct a complete wooden framework. The basic unit of desirable-bracket-set is composed of a long bracket-arm and short bracket-arms with some inclination, then this unit contact is repeated as a whole, with overhanging long bracket arm layer upon layer to support the eave purlin, forming the dense, ornate decoration (Figure 14, 15).⁶⁴

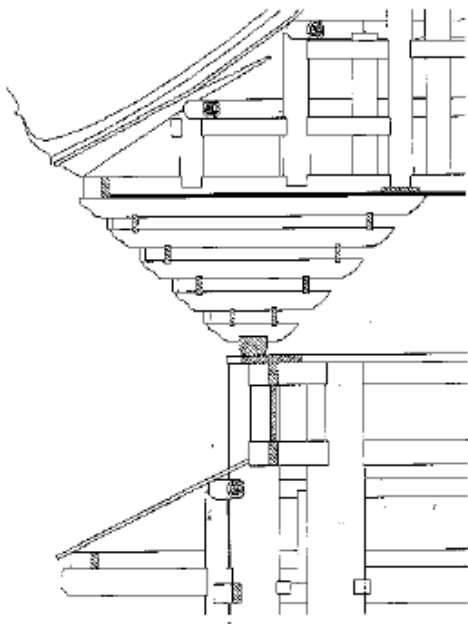


Figure 14.
Section of the desirable-bracket-set at Zengchong village. Extract from Cai, 'Chinese Minority Architecture, Constitution Technology of Dong Nationality's Drum tower', 141. 蔡, '中国少数民族建筑侗族鼓楼的建构技术', 141.



Figure 15.
The desirable-bracket-set, at Zengchong village. Photograph by Derong Kong.

⁶⁴ Cai, 'Chinese Minority Architecture, Constitution Technology of Dong Nationality's Drum tower', 138. 蔡, '中国少数民族建筑侗族鼓楼的建构技术', 138.

Different forms have different meanings. From my field survey, one example is the three drum towers at Gaozhen village, Chongjiang County. The upper village is 'father', so the roof is the 'hat' of an officer; the lower village is mother, so the roof is an 'umbrella' to collect people together, the small village is the son, so the roof there is a small 'hat' (Figure 16).⁶⁵



Gaozhen upper village's drum tower



Gaozhen lower village's drum tower



Gaozhen small village's drum tower

Figure 16. The three drum towers at Gaozhen village. Photograph by Derong Kong.

After the structure is finished, the carpenter uses bamboo pegs to fix the rafters on the framework, and to place the tiles on the rafters.

⁶⁵ From my field survey, Gaozhen village, March 2010.

5.2.9 Other construction

The rest of the construction to complete the drum tower includes constructing the eaves, laying the tiles, installing other wooden components (baluster, door, floor, etc), sculpture, and painting. These works may take two or three months to finish. The decoration usually relates to people's lives and is not much limited by rules, so it is homely, brisk, positive, and humorous.

Decorative patterns are usually painted on the eaves, ceiling or main beam to narrate a story, religious events, or to describe the local life, with elements from nature, such as trees, mountains, farming, birds, or dragons (Figure 17). Modern examples have cars or rockets for the theme. The main beam usually has a Taiji diagram painted on it, which implies that things are changing all the time (Figure 18).



Figure 17. Painting in building. Photograph by Derong Kong.



Figure 18.
Diagram and propitious words on the main beam.
Photograph by Deong Kong.

The sculpture as one important decoration of the drum tower is usually placed at the top of the roof, making the roof ridge. The sculpture is made of clay, sticky rice, and mashed kiwi vine. The theme of the sculpture can be various. In former times people made sculptures of heroes, warriors, dragons, lions: now they may make something related to modern life, like policeman (Figure 19). The sculptures of animals have dragons, tigers, leopards, monkeys, cats, lions, elephants, deer, tortoise and other animals, which are believed useful in the suppression of different sides of evil. Sculptures have cultural meaning, such as the sculpture of a cloud means good luck. The most common decorative sculpture in the drum tower is the flying dragon, or two dragons looting treasure (Figure 19). Because the dragon is a sacred animal, it represents power, right, justice, and luck, so people hope this pattern will bring good luck to them and suppress evil.



Figure 19.
Sculptures of the drum tower.
Photograph by Derong Kong.

The Magic gourd is the sculpture on the top of the drum tower, combining several earthen bowls and crocks. It is the most important sculpture reflecting the idea of a cycle of universal principle (Figure 20).



Figure 20. The Magic gourd on the top of the drum tower. Photograph by Derong Kong.

Compared with the physical limitations of construction, decoration as symbol to reflect architectural culture is more freely chosen and obvious. Fengshui, ethnic culture, and totem culture are directly represented in decoration. These enhance the cultural particularity of the drum tower.

5.2.10 Consummation of the drum tower

When the drum tower is finished, the village holds a ceremony to send off the hand-ink master, whose payment not only includes the red envelope with money, but also a pig's head, cloth, food, wine and so on. Villagers play music on the lusheng (musical instrument) and ignite firecrackers to send off the hand-ink master at the gate of the village.

Having seen off the hand-ink master, the fengshui master will decide the propitious day and time to process the ceremony of 'entering the tower' and 'hanging the drum', the elders will drink and eat inside the drum tower, and young people will play the lusheng and sing Dong songs. After the ceremony, the drum tower is open to people, and other villages can play the lusheng and sing Dong songs in the drum tower.



Figure 21.
Gift from other village in the drum tower.
Photograph by Derong Kong.

The happiest and warmest ceremony is the day celebrating the completion of the drum tower. The fengshui master having chosen the propitious day and time, the whole village gets all dolled up, and nearby villages and relatives come to congratulate them for finishing the drum tower, offering steles, red envelopes, propitious words, and other gifts to show their blessing (Figure 21). Between villages there follow competitions of singing, drama, dancing, and playing of the lusheng. People drink, eat, and sing inside or around the drum tower until the next morning.⁶⁶ At this point the construction of the drum tower is all finished.



Figure 22.
The drum in the drum tower
Extract from Luo, Folk Dwelling of Guizhou,
p. 89. 罗, 贵州民居, p. 89.

⁶⁶ Yang and others, *The Chinese Dong Drum Tower*, p. 36. 杨和其他, *中国侗族鼓楼*, p. 36.

5.3 Conclusion

As discussed in literature review, 1.5 Architecture, where the gaps in current research were noted, I confirmed the materials I collected from other books and have used them specifically in this chapter. From my fieldworks, I also collected many materials to add greater detail of the construction of the drum tower, such as the specific making process and associated customs. They come together become the material sources of this chapter. Also as discussed in literature review, there is less discussion of the construction and custom, and where these are addressed they are not synthesized as a systematic whole nor analysed together. Consequently, I proceeded in this chapter to analyse and summarize the significance of this construction in Dong community, in order to unite it as a part of the social construction. Below is a summary of this chapter from these three aspects: construction, design and custom.

Construction

Compared to the construction of the Dong house, this construction of the drum tower is a collective practise, and confirmation of community (clan). It follows the same construction stream from many generations, with similar form and idea. The social organisation and classification, and village spatial centre are also reinforced during this process.

Design

The design of the drum tower belongs to the hand-ink master. This is a procedure that transforms abstract experience into specific experience. It is the builder's conception of what a drum tower is and how it should be built. Thus it has a strong character of personal organisation and treatment, even though drum towers are similar in a general style: for example, according to my field survey, the drum tower in Tang'an designed by Peifu Lu, and the drum tower at Zhaoxing designed by Wenli Lu, are different in structure and form.⁶⁷ This input is a vital factor that influences the character of the drum tower, while there are many other factors that provide more nuanced variation. Meanwhile, it has the participation of village elders. They also contribute to the design. What they represent are the local resources, needs and ideas, etc. Thus the drum tower

⁶⁷ From my field survey, Tang'an, Zhaoxing, March 2010, January 2013.

is overlapped with images that receive influences from many aspects and people (Figure 23).

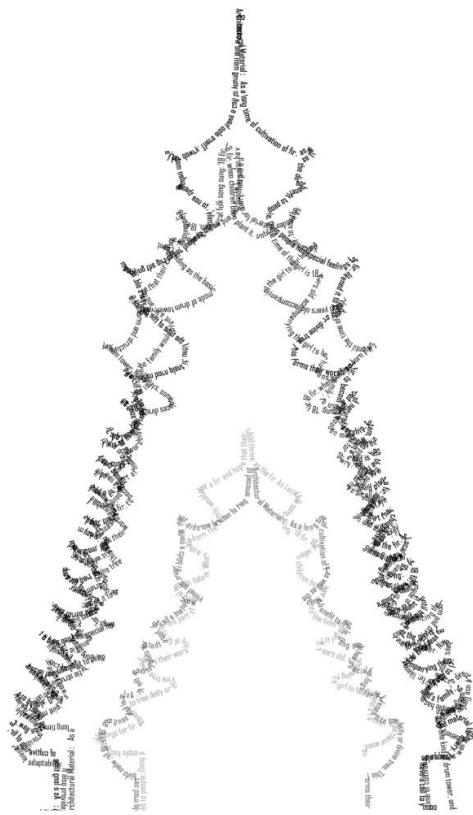


Figure 23. Images of the drum tower. Drawing by Derong Kong.

Custom

The custom activities evident in the account of the construction process described in this chapter link the relevant group together. Through specific events and use of oral culture, people's experience and culture are inherited and exchanged: consequently, the drum tower is full of peoples' experience, common knowledge, and agreement (Figure 24). The activities and customs are also significant in the use of Dong buildings, which will be discussed further in Chapter 6.



Figure 24. The experience of the drum tower. Drawing by Derong Kong.

Chapter 6

Use of building

6.1 Customs from birth to death in the Dong house

In the living customs in buildings, from birth to death, people construct their group culture, relationships and order. Just as Unwin claims, 'people and their activities are an indispensable component of architecture, but as contributors and participants'.¹ Also as Pallasmaa claims, architecture strengthens the existential experience, as architecture provides 'the ground for perception and the horizon of experiencing and understanding the world', and also gives 'a conceptual and material structure to societal institutions, and the conditions of daily life'.² As the previous two chapters have explained, among Dong people, the dwelling is a family construction, while the broader social construction is executed in the drum tower. The dwelling is where the family cultivates and inherits family culture, while the drum tower is where the village coordinates and unites group culture. So this chapter will illustrate and discuss the customs and activities in the Dong house and the drum tower in order to understand how they accomplish the above issues, and the significance of the use of building in social construction, as a part of social development.



Figure 1. Dong house at Xiaohuang village. Photograph by Derong Kong.

¹ Unwin, *Analysing Architecture*, p. 11.

² Pallasmaa, *The Eyes of the Skin: Architecture and the Senses*, p. 41.

Living arrangement

I found from my field survey, in Xiaohuang village, that the old man or woman lives in the centre of the house close to the fireplace, warm and convenient. The adult couple lives in the bedrooms at the sides of the fireplace room. The unmarried young girl lives in the bedroom at the central back of the fireplace room. It is a horizontal order of living. In a family the older brother is given priority in choosing his room, and usually the oldest brother lives in the leeward direction while a younger brother lives in the windward direction to block the wind. As for children, the younger children live in the leeward direction and older children live in the windward direction. Or from left to right, the older children live on the left, and the younger children on the right. The vertical order is use of the ground floor for older children, first floor for medium age children, and second floor for young children. As they increase in age, the children move to the lower floor.³

In the process of using buildings, the culture, people's rights, relationships, and order are reflected in the structure of space and carried out in forms of architectural activity. Every custom has its special way and order in use. As Johnson says, according to criteria of function the activities in the house were drawn in, rationalized and divided. The social relationship was mapped out by architecture.⁴ Also as Prof. Blundell Jones says, 'ownership of territory is by group right, passed down through clan and family'.⁵ In this sense, Bachelard says, 'order is not merely geometrical, it can also remember the family history'.⁶ In a building, customs organise behaviours in sequences of time and space. After participating and experiencing the customs, a person understands the meaning of the space, knows where his position is, what behaviour is adequate in his position. The process of using the building is a social education and construction process.

For example, the funeral actually is for the people who can see and hear it, for the living to express their sorrowful mood, show respect to the deceased and their reluctance to be separated. All the rituals, ceremonies and customs have this character. Another example is the worship of a god or ancestor; it will not bring you any benefit or harm, no matter what you have offered. Because the world has its principle, it is inevitable and independent of man's will. Turner says that in ritual the form of expression is conventionalized and obligatory: people express what moves them most, and the

³ From my field survey, Xiaohuang village, November-December 2010.

⁴ Johnson, *Housing Culture: Traditional Architecture in an English Landscape*, p. 103, 108

⁵ From supervision, Peter Blundell Jones, November 2014.

⁶ Bachelard, *The Poetics of Space*, p. 27.

values of the group are revealed in this process.⁷ As Fu and Yu say, the function of these customs is to help people come to terms with events, with death, human existence and the way people live.⁸

Following on from the above discussion, we can add that Bourdieu sees custom as a system of generative schemes. He says, in the analysis of it, we could build up a synoptic diagram of the cycle of life as structured by the rites of passage.⁹ In this sense, the following customs and rituals in Dong building emphasise each important stage in life and help ‘transmit’ people to the next stage (Figure 2).

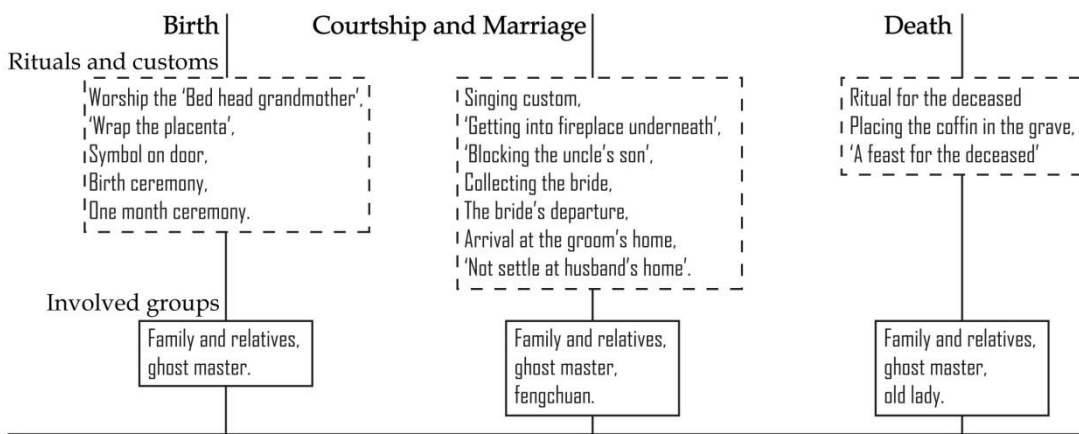


Figure 2. Rituals and customs in the Dong house. Drawing by Derong Kong.

6.1.1 Birth

Dong women give birth in their bedroom or fireplace room. An old woman who knows how to deliver the baby is invited to guide and help the pregnant woman. Before the birth of a baby, some families worship the ‘Bed head grandmother’ (a female god to manage the birth and protect the growing of the child) to pray for safety of the birth, and they burn incense at the bed. In the record of Dingguo Wu, after the birth, the old women uses a specially prepared kind of yellow mud to wrap the placenta, and places it at the side of the central column. The placenta of each following birth is piled up backward according to the order of birth. Then she uses the yellow mud to seal the placenta, which means enclosing the baby’s ‘house’. As long as the baby’s house is at

⁷ Turner, *The Ritual Process: Structure and Anti-structure*, p. 241.
⁸ Fu and Yu, *Custom of Nine Stockaded Village*, p. 159. 傅和余, *九寨民俗*, p. 159.
⁹ Bourdieu, *Outline of a Theory of Practice*, p.153.

home, the baby's soul will not go anywhere. So the baby will be healthy, less ill.¹⁰

From my field survey, I learned that in Xiaohuang village, when the baby is one month old, people use white paper to cut out a figure in the shape of person. They then place this paper figure in the middle of the central room or beside the fireplace, then set up pieces of bamboo to both sides and three paddy grasses in middle like a door. Blessing the baby ensures good health and makes it easy to bring up.¹¹

Symbol on door

A person's birth, marriage, death, or illness, is announced by the corresponding grass-mark hung on the top of the door. The grass-marks are not taken down but accumulate on the door. A grass-mark is a bundle of grass, rice grass or other material.

In the situation of a birth, a stranger walking into the house is called 'strange tread', because the local residents think the stranger will bring 'strange air', which is harmful to the infant. So any stranger, when he sees the grass-mark, should not enter the house without the agreement of the household. The host, in order to prevent someone 'treading strange', will hang a grass-mark or orange leaves to prohibit strangers from entering the house. Once people see the grass-mark on the front door, they know this house has a newborn baby and will also know the gender of the baby. In Wu's record, in Liping County the grass-mark for a boy is made of one chilli and rice grass, for a girl it is a cruciform grass-mark and eggshell. The logs are symbols of the male and female reproductive organs. The orange leaves mean blessing the infant in an auspicious way, making it easy to bring up.¹²

From my field survey, in Xiaohuang village, I found that if the infant is a boy, the grass-mark should be made of chilli and rice grass: if the infant is girl, the grass-mark should be made of eggshell, red cloth and rice grass (Figure 3).¹³

¹⁰ Dingguo Wu, 'GuizhouLiping 'Tian Fu' Dong Birth Custom', in *Dong History Culture Custom*, ed. by Tinghua Luo and Shengxian Wang, (Guiyang: Guizhou People Press,1989), p. 98. 吴定国, '贵州黎平'天府'侗族生育习俗', 出自 *侗族历史文化习俗*, 罗廷华, 王胜先, 编, (贵阳: 贵州人民出版社, 1989), p. 98.

¹¹ From my field survey, interview with Chungui Pan, Xiaohuang village, November 2010.

¹² Wu, 'Guizhou Liping 'Tian Fu' Dong Birth Custom', p. 99. 吴, '贵州黎平'天府'侗族生育习俗', p. 99.

¹³ From my field survey, Xiaohuang village, November 2010.



Figure 3. The grass-mark for the birth of a boy, at Xiaohuang village. Photograph by Derong Kong.

Stepping over the threshold person

In the record of Wu, if a stranger accidentally enters the house within the first three days, only after the household has told him to drink some water can he leave. If he is a familiar person, the household lets him have a meal then leave. In addition, within three days, the newborn child's father cannot go to others' houses arbitrarily, and must even avoid walking under other's eaves. This is to avoid the 'bloody air' tarnishing others, but in turn, it will also make the baby lose good fortune or receive retribution.¹⁴

A relative is free to enter. If a villager has the permission of the household, he or she also can enter the house. The stranger not only needs permission from the household, but also must cross a fire brazier, and people who have recently met with misfortune also need to do this to remove the 'strange air' or bad luck.

In Geary and others' record, the first visitor to come through the door of a home is called the 'stepping over the threshold person'. It is thought that this person will influence the new infant's future personality, temperament and status. Whoever the person is, he is treated as the guest of honour with utmost respect. The host first offers him a bowl of

¹⁴ Wu, 'Guizhou Liping 'Tian Fu' Dong Birth Custom', p. 99. 吴, '贵州黎平'天府'侗族生育习俗', p. 99.

sweet fermented rice with eggs, then entertains him to a banquet.¹⁵ In general a woman in this role is not very popular, but in the case of a person who has a son and a daughter, and has ample food and clothing, is smart and strong or official, then he is welcomed.

Birth ceremony and custom

On the third day, there is a ceremony. In Wu's record, the master places a long branch covered with new Dong cloth in the central room, one end towards the gate, the other end towards the inner room. The infant's father stands beside the end of the branch closest to the inner room, the ghost master and others stand at other sides. While the ghost master burns incense and paper money, he recites congratulatory words. He picks up the infant from the inner room, lets people on each side hold the baby one by one, symbolically letting him walk along the length of Dong cloth, and praising the health of the infant, then finally hands over the baby to his father. The 'walking cloth' means the baby will grow smooth like new cloth, and that life on the road is flat and less bumpy.¹⁶

There is also a rite of holding the baby: if the infant is a boy, they find a boy to hold him; if the infant is a girl, they find a girl to hold her. The boy and the girl should come from another clan, and their parents must be alive. The host will give three eggs, a roll of sticky rice, and a box of salted fish as thanks. After this rite, other people can enter the house.

For the last day of the first month, the baby must live at a grandmother's house. In Min Zhang's record, in Wujia village, the grandmother gives the baby a haircut and throws the hair into the ash of the fireplace, and they believe this stops the baby from being frightened. These behaviours may be the outcome of matriarchal rights. Although the daughter is married to another clan and becomes a member of that clan, her blood relationship comes from the mother's side. So when a baby is born, it must be taken care of by the mother's side, as an indication that the daughter originally belonged to the mother's side.¹⁷

¹⁵ Geary and others, *The Kam People of China*, p. 96.

¹⁶ Wu, 'Guizhou Liping 'Tian Fu' Dong Birth Custom', p. 101. 吴, '贵州黎平'天府'侗族生育习俗', p. 101.

¹⁷ Min Zhang, 'Congjiang County, Xiangdi Township Marriage Investigation Report', in *Guizhou Six Hills and Six rivers, Selected Data of National Survey*, ed. by Rong Wu, Yongrong Pan, and Xu Yang, Volume of Dong (Guiyang: Guizhou People press, 2008), pp. 172-173. 张民, '从江县信地乡的婚姻调查报告', 出自《贵州六山六水民族调查资料选编》, 吴嵘, 潘永荣, 杨旭, 编, 侗族卷(贵阳: 贵州人民出版社, 2008), pp. 172-173.

6.1.2 Courtship and marriage

In Yang's record, in Rongjiang County, during courtship, the young man must avoid meeting the girl's parents and brothers, otherwise it is considered to be extremely rude. Therefore, the young man has to wait until the night, then takes his instrument the pipa, and carrying a wooden ladder, comes quietly to the girl's house. He places the ladder to reach the girl's bedroom window, and then climbs up the ladder to sing a soft love song. When the girl's heart has been touched by the song, she opens the small window and sings the song with the young man (Figure 3).¹⁸



Figure 4.
The small window of
the girl's bedroom.
Photograph by Derong
Kong.

Engagement

In the record of Min Zhang, the engagement in Dong has various names including, 'dini saenc pugt', 'laens dees ngangc', of which the direct translation is 'putting feet into ash', 'stepping on ash', or 'getting into fireplace underneath'. The words vary, but all have the meaning of entering the fireplace, entering the place of the ancestors.¹⁹

¹⁸ Yang, *Record of Dong Custom*, pp. 108-109. 杨, 侗族风俗志, pp. 108-109.

¹⁹ Min Zhang, 'Rongjiang County, Sanbao, Dong Marriage Investigation', in *Guizhou Six Hills and Six rivers, Selected Data of National Survey*, ed. by Rong Wu, Yongrong Pan, and Xu Yang, Volume of Dong (Guiyang: Guizhou People press, 2008), p. 189. 张民, '榕江三宝侗族婚姻调查' 出自 *贵州六山六水民族调查资料选编*, 吴嵘, 潘永荣, 杨旭, 编, 侗族卷(贵阳: 贵州人民出版社, 2008), p. 189.

In Zhang's record, the correct time is usually 7th February or 6th March. Some also take place on 8th April, or 8th August. It is said that these times are traditional times, so do not need to be selected and are auspicious. First the new couple go to the groom's house, burn incense and paper money, and set up meat and wine to worship the gods and ancestors, and then they go to the bride's house, setting off firecrackers to announce it. The bride's family also burns incense and paper money, and prepares meat and wine to worship the ancestors, setting off firecrackers to announce to the neighbors that their daughter is engaged to someone.²⁰

The uncle's son has the priority to marry the aunt's daughter. If the aunt's daughter wants to marry others, she needs to gain agreement from her uncle, and sometimes her husband has to pay money for this marriage. Zhang says this is because in past times a girl was also a source of valuable labour, and matriarchal right has not totally vanished. But as time passes by this custom is becoming weaker in life and concept. The uncle's son no longer has the priority to marry his aunt's daughter. The aunt's daughter no longer needs permission from her uncle, and does not even need to tell her uncle or give him any gift or money. Only when the aunt's son-in-law gives a gift to his aunt, if the uncle's son has an interest in sharing the gift, he can invite several friends of the same generation to go to his aunt's home. This is an indication of the ceasing of marriage relationship by sharing food. When the uncle's son is on the way, he and his friends play the lushen or light firecrackers and dress in ragged clothing with dirty faces or strange dress like a beggar. The aunt's family then, in a form of entertainment, block them in front of the gate and 'make difficulties' for them.²¹

The sister's side sing songs to ask the brother's side questions, and the brother's side sings songs in answer. Not until they have made the right answers can they go into the house with the sister's side, sharing the gifts, eating, drinking and singing.

The matriarchal right in marriage is on the edge of collapse, as is the custom of 'do not stay at husband's home'. Zhang reads this as a presentation of the struggle over matriarchal rights, trying to preserve those rights, and just in the form of entertainment, but actually it already succumbs to the patriarchal rights.²²

²⁰ Zhang, 'Rongjiang County, Sanbao, Dong Marriage Investigation', p. 189. 张, '榕江三宝侗族婚姻调查', p. 189.

²¹ Zhang, 'Congjiang County, Xingdi Township Marriage Investigation Report', p. 165. 张, '从江县信地乡的婚姻调查报告', p. 165.

²² *Ibid.*, p. 166.

After engagement

After a man and woman are engaged, they can help each other in work and life. But the woman can only do the housework in a wide veranda or other work, and cannot go into the main room. Otherwise, she would be laughed at for being too keen to join her fiancé's family. In this sense, the entering of the main room is the representation of a family member.

● Marriage

Collecting the bride and the bride's departure

In the record of Yang, in Nine Village area, Xiaojiang, in Lingping County, on the afternoon before the wedding day, the groom's family sends a group of ten to twenty people to the bride's home in order to escort her to the wedding. When they arrive, they light firecrackers to announce they are there. The bride's relative and friends close the gate, using benches and tables to block the way and singing songs to ask who they are, where they come from, why they are here. The group has to sing songs in reply to the questions. After the bride's companions are satisfied, the groom's group can go through the gate, but they have to pay 'opening gate money', dozens of Yuan or other tokens.

When the auspicious time is up, the groom's group lights firecrackers to urge the bride to depart. The bride weeps aloud, telling of her gratitude for the grace of parenting and showing her reluctance to leave. The bride is led to the gate by an old lady. She wears bride sandals, opens a red umbrella and recites auspicious words. The bride's brother carries her on his back through the gate, then the bride and her companions march to the groom's home.²³ At Hekou, Wendou, in Jingping County, in the morning, the bride's brother carries her on his back through the gate to the bridal sedan-chair.²⁴

At Layou, in Rongjiang County, the bride's departure has to be set at an auspicious time. There are many forms of departure custom: one is that the brother clings onto the bride and does not let her go, another is that the brother carries the bride on his back through the door, a third is that the bride calls her parents then goes, a fourth that before departure, the bride kneels on the ground and kowtows to her parents. When the bride

²³ Yang, *Record of Dong Custom*, pp. 119-120. 杨, 侗族风俗志, pp. 119-120.

²⁴ *Ibid.*, p. 122.

steps over the threshold, she must not touch the threshold and either side of the gate, or it will bring bad luck to her brother.²⁵ There are more examples, please see Appendix 2, A.2.5.1 Collecting the bride and the bride's departure.

Arrival at the groom's home

In Yang's record, in Nine Village area, Xiaojiang area, before the bride enters the house, the ghost master lights a fire in front of the gate, saying spells and panegyrics to avoid evil spirits and pray for auspicious things. A person called fengchuan, who has a son and a daughter, holds the bride's hand as she steps over the fire and he gives her a pigs' feeding bucket. While the bride is entering the house, she treads on the threshold to indicate that she does not want to go into the gate. After she enters, she puts the bucket in a corner, which means pigs grow fast and big. Then the fengchuan washes the bride's feet and changes them into a pair of new shoes for her, and with the accompanying bridesmaid, the bride enters the bridal chamber.²⁶ While the bride enters the house, the groom and his parents must hide away above, they must not be present, to 'avoid hot face'. This has the meaning of preventing difficulties in living together in future. When it is the time to drink six conjunction wine, the groom and his parents can meet the bride, using the wine to express greeting. The bride's female companions will go back home when dawn comes. The next afternoon they bring gifts to the groom's home again. In front of the groom's gate, the groom's companions set up a barrier and demand that the bride's female companions sing songs to open the door. Then comes the feast for the wedding.²⁷

From my field survey, I found that in Xiaohuang village, when the bride arrives at the groom's house, all the family members including the groom must go out to avoid meeting the bride. A man who has a son and a daughter will lead the bride to sit beside the fireplace. The groom's elder brother slaughters a chicken, cooks it, and gives a chicken leg to the bride to eat. Then he pours three cups of wine and after the bride drinks these she can move.²⁸

²⁵ Caigui Huang, 'Rongjiang County, Layou Commun, Dong Social Investigation', in *Guizhou Six Hills and Six rivers, Selected Data of National Survey*, ed. by Rong Wu, Yongrong Pan, and Xu Yang, Volume of Dong (Guiyang: Guizhou People press, 2008), p. 52. 黄才贵, '榕江县腊西公社侗族社会调查', 出自《贵州六山六水民族调查资料选编》, 吴嵘, 潘永荣, 杨旭, 编, 侗族卷(贵阳: 贵州人民出版社, 2008), p. 52.

²⁶ Yang, *Record of Dong Custom*, p. 120. 杨, 侗族风俗志, p. 120.

²⁷ *Ibid.*, p. 121.

²⁸ From my field survey, interview with Chungui Pan, Xuejing Wu, Xiaohuang village, November 2010.

In Zhang's record, in Congjiang County, Xingdi Township, before they enter the groom's house, everyone should leave the house. It is said that this is done to avoid the new person stepping on old people. At this moment, a dustpan is placed in front of the gate, containing a bunch of cereal crop. The bride brings it into the house, and puts it on the shelf of the fireplace, means abundant food. Then the man and woman who escort the bride enter the house, followed by the ghost master. The bride sits facing an auspicious direction assigned by the ghost master, and others sit beside her. The ghost master places salted fish, sticky rice, and wine beside the fireplace, then burns paper money and incense to worship the ancestors. Then he gives these foods to the bride, the man and the woman to eat, and the ghost master also eats a little and announces that the rite is finished. At this time, the groom's family can enter the house. The bride can now join in the family activity, as a member of the family. On the second day the bride goes back home to her parents with sticky rice and salted fish for a gift, escorted by three women. The bride can stay at her parents' home or go to husband's home as she wishes.²⁹ There are more examples: please see Appendix 2, A.2.5.2 Arrival at the groom's home.

Entering a house or leaving a house is an objective behaviour that we do everyday. But in this case, it is a transition from one family to another family, from one group to another group. People greatly care about this process and worry that something might disturb this transition. This is part of their life, of the world they live in. The world is uncertain, and there are many things people cannot control and explain. The Dong boil it down to 'Air', a concept borrowed from Han culture (气, Qi), which is capricious, and cannot be clearly seen and explained. Although in Daoism, the 'Air' means motion or power of the world, it is abstract and has the ability to be almost anything. Dong people do not really understand the meaning of 'Air' in terms of Daoism, but its abstract and elusive form is just like the changeable world. The Dong have a similar feeling, but it is beyond expression and they do not have this kind of explanation. The conception of 'Air', this abstract idea, matches what they feel and think. In this way they can explain the motion of the world, at the same time in limited scope they can control the 'Air', no matter whether bad or good.

²⁹ Zhang, 'Congjiang County, Xingdi Township Marriage Investigation Report', pp. 168-169. 张, '从江县信地乡的婚姻调查报告', pp. 168-169.

Divorce

Before pregnancy, the relationship of the new couple is considered unstable. The new couple still can join in the singing activity. If either side disagrees with the marriage, they can stop the relationship. From my field survey, at Xiaohuang village, if it is the wife she will add water to the vat until it overflows, or shoulder a load of water and place it in front of her husband's gate. As for the husband, he will shoulder one load of firewood and place it in front of his wife's gate, to express the intention of divorce. After the other partner sees this, he or she understands and the relationship is ended.³⁰

After the wedding

Before pregnancy, after the wedding the bride goes back to her parents' house. As Wu says, only for a festival, or if something special happens, or her husband chooses an appropriate time, will he send someone to bring her back. But if she goes, only a few days later, the wife returns to her parents' house, so it is called 'not settle at husband's home' (不落夫家). Pregnancy to the new wife is a turning point, which represents that the marriage becomes stable.³¹ Only after pregnancy will the wife's parents give her the entire dowry, including the money or timber for their new house. She will finally settle down with her husband and really become a member of the family.

There may be many reasons for this delay in settling down. According to Zhang's research, it can be that: 1. The age of marriage is too young on both sides, and body development is not mature. 2. Many friends are not married, but they like each other, so they want to stay together for longer time. 3. The new wife is also an important provider of labour to her own family. 4. If she stays with her husband too early, people would laugh at her, saying she is too desirous of her husband, and she loses self-respect.³² 5. It could also be phenomenon of the matrilineal right. After the marriage, the wife will adhere to the husband, so she tries to maintain her independence and rights, also it is a good way to keep more benefits from the marriage.

The time to pick up a new wife is various in different places. In the record of Zhang, in

³⁰ From my field survey, interview with Chungui Pan, Xuejing Wu, Xiaohuang village, November 2010.

³¹ Wu, 'GuizhouLiping 'Tian Fu' Dong Birth Custom', p. 104. 吴, '贵州黎平'天府'侗族生育习俗', p. 104.

³² Zhang, 'Rongjiang County, Sanbao, Dong Marriage Investigation', p. 195.张, '榕江三宝侗族婚姻调查', p. 195.

Xiabao it is the Chinese New Year. In Zhongbao it is in the Chinese calendar between January 26th and 30th. At this time all the women are forbidden from weaving, but the courtship activity is free, and it is a good time to get married. It might be the remains of an ancient marriage time. At this time the new husband chooses an old woman and three young girls to bring meat and to collect the new wife. If the new wife lives in a far away village, it usually succeeds. However, for a marriage in the same village it will be more difficult and humorous, more like a 'hide and seek' game. Before the departure of the new husband's group, some elder may tell the group of the need to be smart, clever, and teaches about previous experiences. The new wife also understands the situation, and before the night comes, she has finished her dinner in advance or left it. Then she hides behind in a haystack or in a gap between walls, or in another's house, or an alley or lane: all in all there are many ways to hide. Even if the new wife is found, she can still escape with the help of her friends, or refuse to meet her husband. So the husband's group needs to spend lots of time seeking the new wife, and sometimes they do not succeed.³³

If they succeed, they use the meat they bring with them to worship the new wife's ancestors, then go with her back to the husband's house. But the new wife will not spend the night with her husband: instead she will sleep with the husband's sister. On the second morning the new wife goes back home. In Xiabao, the new wife opens the door and goes away at dawn. If the husband's family do not know or cannot persuade her to stay, they have to let her go. In Shangbao, the new wife must be escorted halfway by her husband, then with a wave of the hand they say goodbye.

Usually, after two more meetings, the new couple can sleep together. During festivals and busy times of farming, the husband sends a group to collect his wife again, and the tension eases as time passes. It proceeds from 'catch' to 'meet', 'meet' to 'free contact', 'free contact' to 'long stay', until she becomes pregnant, and then she will permanently stay with her husband.³⁴ As Wu says, this custom is to represent the honour and respect of the bride's family.³⁵ There are more examples: please see the Appendix 2 A.2.5.3 After the wedding.

³³ Zhang, 'Rongjiang County, Sanbao, Dong Marriage Investigation', p. 195. 张, '榕江三宝侗族婚姻调查', p. 195.

³⁴ Ibid., p. 195.

³⁵ Wu, 'Rongjiang County, Renli Township, Tongdao Village, Dong Culture Investigation', p. 154. 吴, '榕江县仁里乡通倒村侗族文化调研', p. 154.

6.1.3 Death

When people die from unnatural causes or die outside their village, their corpses are not allowed back into the village and have to be buried at the outskirts, to prevent bringing bad luck to the whole village. Every village has its own slight variations of the funeral.

In the record of Geary and others, usually, the first thing with a death at home is to clean and clothe the corpse, then place it on the 'dream bed'. The 'dream bed' consists of three long boards side-by-side resting on two long benches, one at each end, covered with a wide cloth over the boards. Burning incense is stuck in a bowl of rice, placed with an oil lamp at the foot of the bed, which is thought to help light the way after death.³⁶ The deceased's head should be towards the shrine, where the gods and ancestors are located, and his or her feet towards the gate. The bed is placed in the living room or fireplace room, which is the centre of the house and of the family. Birth, marriage and death are parts of family development, and all these customs are related to the centre of the house, which for the northern Dong is the central room, for the southern Dong the fireplace room, both of which are the place for the ancestors. The increase, recruitment or loss of people makes the family structure change, and through ceremony, ritual and custom, the family members renew the structure. For these readjustments of the family, people need to assemble at the centre of the house to take part in worshipping ancestors, so they have ancestor witnesses to approve this process. So the family development is continuous in this way.

In Yang's record, in some places after the coffin is lifted out, people stick a red paper on the door lintel, slaughter a cock and spread its blood beside the threshold, then use fire to smoke the house to eliminate sick air.³⁷ In Lingping County, in the record of Dingguo Wu, along the road or lane where the coffin will pass by, every house is hung with leaves or white cloth to avoid evil spirits.³⁸

From the illustration of Bin Xiao, on the day of placing the coffin in the grave, the

³⁶ Geary and others, *The Kam People of China*, p. 106.

³⁷ Yang, *Record of Dong Custom*, p. 132. 杨, 侗族风俗志, p. 132.

³⁸ Dingguo Wu, 'Li Ping Dong Funeral Custom', in *Dong History Culture Custom*, ed. By Tinghua Luo and Shengxian Wang, (Guiyang: Guizhou People Press, 1989), p. 113. 吴定国, '黎平侗族丧葬习俗', 出自 *侗族历史文化习俗*, 罗廷华, 王胜先, 编, (贵阳: 贵州人民出版社, 1989), p. 113.

deceased's family changes the white antithetical couplet on the front gate to red antithetical couplets, and hangs three Chis of red cloth on the lintel of the gate. This means bad luck is fading away and good luck is coming. It also encourages people to restrain their grief and change the sorrow into the power of live, making life flourish and go on.³⁹ At Xinghuang, in Jinping County, people place a plate of water with tea and rice in front of the gate for people who attend the funeral to wash their hands, in order to dispel evil spirits and bad luck.⁴⁰

Three days after the burial of the coffin, people in Rongjiang County symbolically prepare a table with a feast in the central room, inviting the souls of deceased relatives and friends to a dinner for the new dead person. At this time, no one should stay at home, only an old lady lights a half-light oil lamp. Then she leaves the gate ajar, and calls the names of ancestors and deceased people in front of the gate. After she has called all the names, she chooses a quiet place to hide. One hour later she can go back and clean the table, and the whole funeral is ended at this time.⁴¹

The threshold of transition

Just as birth and marriage are the ritual of arriving, death is the ritual of departure. The transition is a struggle between the two sides. As Bachelard says, such surface between inside and outside is painful on both sides.⁴² Bourdieu says 'the transitional periods have all the properties of the threshold, a sort of sacred boundary between two spaces'. In such transition, people try to maximize profit, and ensure the concordance of time, facilitating the passages.⁴³ This why there are so many rituals and customs performed at the gate and threshold: they want to make sure every transition is well operated.

In these rituals and customs, the practice makes the subjective conception operable, visible and readable. As Bourdieu says, in spatio-temporal organisation, each category has its place and time, according with subjective principle to make objective division.⁴⁴ People confirm and concretise the boundary in the material form of wall, door and

³⁹ Bin Xiao, 'Saying Dong Funeral', *Dong Custom and Culture* <<http://www.dongzu8.com/forum.php?mod=viewthread&tid=46260>> [accessed 30 September 2010]. 小兵, '话说侗族丧事', *侗族风* <<http://www.dongzu8.com/forum.php?mod=viewthread&tid=46260>> [获取于 30 号 9 月 2010]

⁴⁰ Yang, *Record of Dong Custom*, p. 134. 杨, *侗族风俗志*, p. 134.

⁴¹ *Ibid.*, p. 135.

⁴² Bachelard, *The Poetics of Space*, p. 218.

⁴³ Bourdieu, *Outline of a Theory of Practice*, p. 129.

⁴⁴ *Ibid.*, p. 165.

threshold. Their rights, benefit and property are secured by these boundaries.

Meanwhile Bourdieu indicates that in the ritual, in order to establish relationship between the universes of practice, the symbols function as "switchers", so the objectified path of these passages in the ritual is sometimes marked out by sayings which state the analogies between the different series.⁴⁵ Lakoff says, symbols applied in the custom have the same function as metaphor, materializing something and making it visible and operable.⁴⁶ As described before, Dong people's birth, marriage, or death, are announced with the corresponding grass-mark hung on the top of the door. The Dong also have many signs set on the front door of the house to express different information, such as grass-mark of illness or new house, or Spring Festival couplets.

From my field survey, I found that if a family member is ill and people could not find the cause, the family invites a ghost-master to perform a ritual and they hang a grass-mark upon the door to dispel ghosts and illness (Figure 5). The grass-mark is made of bamboo, grass and one wooden stick, with a small stone sandwiched in the wooden stick. The small stone symbolises that the patient's body should become as strong as stone. When a new house is established, the household ask the ghost-master to use bamboo, one wooden stick from a local tree called Mei Wen, and paper to make a grass-mark. When the ghost-master hangs it on the door, it means to prevent evil things entering the house, and praying for peace (Figure 6).⁴⁷



Figure 5.
Grass-mark of illness.
Photograph by Derong Kong.

⁴⁵ Bourdieu, *Outline of a Theory of Practice*, p. 123.

⁴⁶ Lakoff, *Metaphors we live by*, p. 39.

⁴⁷ From my field survey, Xiaohuang village, November 2010.



Figure 6.
Grass-mark of new house.
Photograph by Derong Kong.

At the time of Chinese New Year, Spring Festival couplets are pasted on top and at both sides of the front door. People write propitious words on the red paper to express good will for the New Year (Figure 7). From my field survey, I learned that for the first two days of New Year people do not visit other families, but stay at home or play at the drum tower. On the first day the front door is closed, called 'close treasure door' which means the treasure will stay. Any used water cannot be poured outside, but should be kept in a bucket, and not cleaning the floor also means keeping the treasure. On the third day, after people worship the gods and ancestors, they open the front door, pour out the water, and clean the floor.⁴⁸

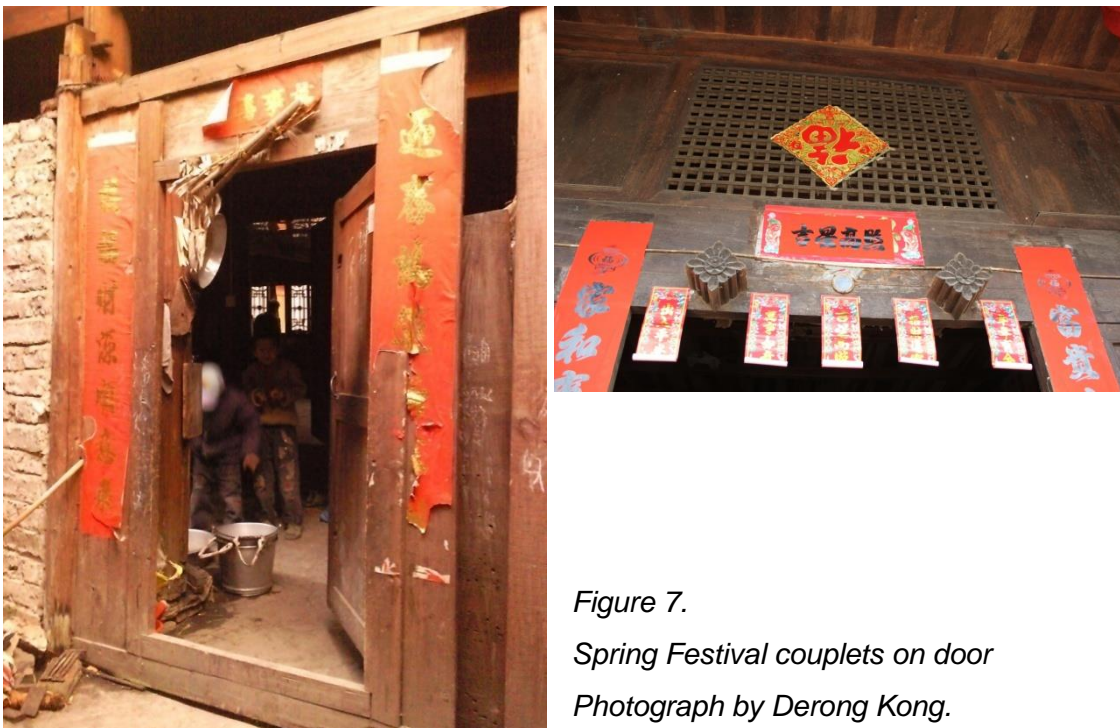


Figure 7.
Spring Festival couplets on door
Photograph by Derong Kong.

These signs also generate some rules to obey when people intend to step across the

⁴⁸ From my field survey, Xiaohuang village, November 2010.

threshold. They enhance the boundary of two realms, and the door is a perfect place for them to make their statement. On this basis, people can communicate with each other, using this symbol system to represent specific things. Meanwhile we see from the above illustration, that the use of symbols has its locality, just like custom, culture and building.

In these customs and rituals, the environment and symbols are well controlled with implicit meaning; they are the references in these activities to accomplish the implication. It is also related to body movement. Bartlett says that to define a situation is a matter not only of referring to the arrangement of cognitive material by a more or less specific active tendency or group of tendencies, but also to the activity in operation.⁴⁹ And as Bourdieu says, in the ritual, the movements of the body and practical manipulations are treated as purely logical operations.⁵⁰ Body participation is learned through activity to reach an awareness of order and relation, then the position and orientation of body in the building as the presentation of his/her status. This order is the structure of the group, and the relation is the requisite context to accomplish this structure.

The taboo in these customs and rituals is also an important factor in operation. As Bourdieu indicates, like night and death, anything that is endowed with the same properties would have a negative effect, and would be marked as taboo.⁵¹ Also as Turner says, taboos that hedge in and constrain those commanded by the normative structure loses its grip during such potent transitions.⁵² This concludes account of the customs and rituals associated with the Dong house: below are those connected with the use of the drum tower.

6.2 Customs and daily life in the drum tower

Kuan activity, clan activity, customs and daily activity maintain Dong society and group culture. These actives are executed at the drum tower, an open space: indeed, participation of the public makes the drum tower become a public space. It is a public space to practice and inherit collective culture, to coordinate and unite villagers.

⁴⁹ Bartlett, *Remembering : A Study in Experimental and Social Psychology*, p. 232.

⁵⁰ Bourdieu, *Outline of a Theory of Practice*, p. 117.

⁵¹ Ibid, p. 150.

⁵² Turner, *The Ritual Process: Structure and Anti-structure*, p. 14.

When there is a structure, there are relationships and boundaries. At the drum tower, there is a spot, a boundary among the public, the embodiment of social difference. It is a reflection of folk culture, consanguinity, surname, and social structure.

6.2.1 Rest, and amusement



Figure 8.
Rest and amusements in the drum tower.
Photograph by Derong Kong.

The drum tower is the place where people usually rest, and enjoy amusements. After work is over, people come to the drum tower, ignite the fireplace at the center of the drum tower, and sit around the fire, chatting, singing, play lusheng; elders talk about history, tell stories; children play around (Figure 8).⁵³ These common activities of rest and amusement strengthen the Dong group's interior emotional context. It is also a site for public experience exchange, and such ordinary, repetitious folk activities make this function inseparable from the drum tower. In the process the drum tower becomes an indispensable public space.

⁵³ He Bing, 'Introduction of Characteristics of the Drum Tower and Wind and Rain Bridge', *Journal of Southwest University for Nationalities, Philosophy and Social Sciences*, 22 (2001), 93. 冰河, '侗族鼓楼与风雨桥特征浅论', *西南民族学院学报, 哲学社会科学版*, 22 (2001), 93.

6.2.2 Courtship and marriage

The drum tower is also closely connected with the marriage customs. It is a good place for young men and women for 'singing songs and sitting on the moon'. As He Bing says, this is an ancient form of courtship, singing songs at the drum tower or the drum tower square, the antiphonal singing between singers or groups in a multiple-voice version of Dong big song. The main content of the antiphonal song is the love song, telling of the whole process of falling in love, and engagement.⁵⁴

There is another form of love called 'stepping on the singing hall', that is young men dance with joyful singing in the drum tower or at the drum square and wait for the girl to find her loved one. From the record of Shu, in Congjiang County, Guizhou Province, when the guests from another village come to the village it is called 'Yue Ye', a social activity of collective guest activity between villages. The young men in the village will assemble in the drum tower to welcome girls from the other village, and sing in antiphonal style, and people temporarily call the drum tower 'Luo Han Lou' (Young Men's Tower). Extraneous young men cannot go into the drum tower, and sing with local village girls in antiphonal style outside the drum tower.⁵⁵

The drum tower is a spatial mark to define the boundary of marriage and it is a main place for courtship and marriage. The people who share the same surname in Dong built one drum tower and cannot marry each other without violating the marriage rule. The cross-cousin marriage usually prevailed. Due to the limited resources and population growth, and a continuing outward migration of population, the families that can be married became farther away, which brought difficulties for marriage. As time passed, the relationship among the same clan and same surname became distant. This made the division of the same clan possible. From the research of Shu, Dong villages in the southeast of Guizhou Province have the legend that ninety nine villages discussed and established the Kuan Convention 'breaking surname to open marriage' (probably between 1746-1820). That is, the village elders decided that after five generations, the clan can be divided into two clans with the same surname, but different Dou (consanguinity). So the divided Dous with same surname could open marriage, but needed to build another drum tower as a symbol of the clan. This shows how the range

⁵⁴ Shu, 'Drum Tower and the Ancient Marriage of the Dong Nationality', 37.舒, '鼓楼与侗族古代婚姻', 37.

⁵⁵ *Ibid.*, p.37.

of marriage has been defined by the drum tower, for the households of the same drum tower are forbidden to marry.⁵⁶ From my field survey, the site of the wedding feast is also around the drum tower of the clan. In the feast, the relatives and the close friends occupy the place next to the drum tower (Figure 9).⁵⁷



Figure 9.
The wedding feast around the drum tower.
Photograph by Derong Kong.

6.2.3 Collective activity

The important event for welcoming collective guests is the antiphonal singing of Dong big song. From Wang's record, the collective visits between villages are called 'Wei Ye', and usually held in the New Year or the slack farming season. The guest village in the name of the village elder sends a letter to the other village, and they plan to go. After the other village has accepted, they depart according to the agreed schedule. 'Wei Ye' is usually led by the village elder or the 'Head of Luo Han', consisting of unmarried young men and women. The hosts, through singing in antiphonal style, hold a collective dinner to serve guests at drum tower square. The collective guest-visiting among villages increases friendship, becomes the emotional bond of Dong society.⁵⁸ The cultural activities between villages increase social context and cultural exchange (Figure 10,11). It has a significant meaning of constructing Dong nationality. Only when people share the same culture can they be a cultural group.

⁵⁶ Shu, 'Drum Tower and the Ancient Marriage of the Dong Nationality', 36. 舒, '鼓楼与侗族古代婚姻'. 36.

⁵⁷ From my field survey, Yandong Township, April 2010. Zhaoxing village, January 2013.

⁵⁸ Wang, 'The Drum Tower: The Centre of Dong village', 56. 王, '鼓楼: 侗寨人居的凝聚中心', 56.



*Figure 10.
Collective dancing at
the drum tower square,
at Xiaohuang village.
Photograph by Derong
Kong.*



*Figure 11.
Villagers singing in
Antiphonal style in the
drum tower, at
Xiaohuang village.
Photograph by Derong
Kong.*

6.2.4 Festival

The drum tower is a festive gathering place, for all kinds of ceremonies. In the record of Bing, at festivals, Dong people dress in festive costumes, gather at the drum tower to sing Dong songs, and perform Lusheng dances.⁵⁹ One such is the grand ceremony of 'Sa', before spring ploughing or after autumn harvest. In Wang's record, the ceremony of Sa Ma is started by an old woman who performs Sa Ma by holding a half-open black

⁵⁹ Bing, 'Introduction of Characteristics of the Drum Tower and Wind and Rain Bridge', 93. 冰, '侗族鼓楼与风雨桥特征浅论', 93.

umbrella and walking to the altar of Sa Ma. Dong females follow the old woman, then walk around the village, giving Sa Ma's blessing to each household. When the team arrives at the drum tower, people start to celebrate 'Duo Ye'. This is the climax of the ceremony. 'Duo Ye' is the Dong collective singing and dancing performance to worship the ancestors and celebrate the festive, Dong people believe that singing and dancing have the function to connect, please the deities, and receive blessing and protection from gods and ancestors.⁶⁰ As an important part of the ethnic culture and cultural transmission mode, these cultural activities and ceremonies strengthen the cultural connotations of the drum tower as a public space. In this process the drum tower receives its cultural symbolic meaning associated with folk and official impact.

6.2.5 Kuan activity and village activity

In the Kuan society, the drum tower is the place for people to discuss events. As Du says, when the village has important events, 'Kuan legs' use the drum to assemble people at the drum tower, discussing or notifying the important events.⁶¹

And Kuan convention and statute are discussed and constituted in the drum tower. From Xu's research, the village holds its rite at the drum tower to announce the Kuan convention and statute.⁶² The drum tower also worked as a public space of the Dong court. If anyone was indicted for crime, village elders would assemble people to discuss and decide. The drum tower is also the place for interceding in dissention between villagers, and dealing with minor crime. More detail can be found in Chapter 2. The drum tower is an embodiment of these social functions and legal culture.

When war breaks out, the drum tower becomes the assembly point for armed force and command post. As Wand says, when bandits struck or war came 'Kuan legs' used the drum to alarm and assemble people. People would congregate at the drum tower against the enemy. It was also a command post to manage the armed force, to make out the strategies and methods of war.⁶³ This is an important reason for the formation of

⁶⁰ Wang, 'The Drum Tower: The Centre of Dong village', 55-56. 王, '鼓楼: 侗寨人居的凝聚中心', 55-56.

⁶¹ Qianping Du, 'The Characteristics of Drum Tower, Cultural Connotation', *Journal of The Central University for Nationalities*, 1(1996), 64. 杜倩萍, '侗寨鼓楼建筑特色及文化内涵', *中央民族大学学报*, 1(1996), 64.

⁶² Xu, 'Evolution of 'the Stone law'', 100. 徐, "'石头法" 的嬗变', 100.

⁶³ Wang, 'The Aesthetic Connotations and Social Function of the Dong Drum Tower', 111. 王, '侗族鼓楼的社会功能和美学内涵', 111.

the drum tower, also the direct cause of its name. Through studying each factor, this functional impact on the development of the drum tower is obvious.

Now, although the Kuan no longer exists, the drum tower still is the place for people to discuss events, intercede in disputes, and to constitute and give publicity to village conventions and rules. These activities strengthen the social structure, and also highlight the importance of this public space. The drum tower is the official site of the Dong system. At the same time in the need of the extension of its activities, it also contributes to the generating of the external public space, the drum tower square.

6.2.6 Representing their identity: honour and disgrace

The drum tower is also the site of rites of recognition. Naming ceremonies are held at the drum tower, for Dong people's names change with age, marriage, and the birth of children. When a baby is one month old, the parents bring the baby to the drum tower to give it an infant name. This remains until thirteen to fifteen years old when the child gets his or her official name. Then village people gather together at the drum tower, a village elder entitles his or her first name, and after this naming ceremony at the drum tower the child has a formal legal name, which also proves that this person is accepted by Dong society as a formal member of the village.

The drum tower is also a site to represent honour or disgrace. In the record of Wang, if an elder over sixty years old has died of natural causes, or even not yet sixty years old and died of natural causes but has made a contribution to village, and is loved and respected by people, after his death his coffin is moved to the drum tower through obsequies presided over by a village elder, which is regarded as the highest praise for his lifetime.⁶⁴ Villagers paste or hang their honour certificate on the main column of the drum tower to show their achievements. A bunch of paddygrass can also be hung on the main column of the drum tower to pray for a good harvest (Figure 12). At Gaozhen village, from my field survey, in the drum tower, incense and paper money are inserted into the main column. Paddy grass is nailed onto the main column of the drum tower, hanging big with grain. Bamboo, red and green papers are hanging on the tie-beam of the drum tower.⁶⁵ These are all prayers for blessing, a good harvest of crops, prosperity

⁶⁴ Wang, 'The Drum Tower: The Centre of Dong village', 55. 王, '鼓楼: 侗寨人居的凝聚中心', p.55.

⁶⁵ From my field survey, Gaozhen village, March 2010.

and the safety of the village. These symbols are concrete and easy to read. At this important place, the meaning is amplified, becoming more reliable; it means it is more likely to happen in their mind. Because this is the right place to do this, not at the side of the road or in front of the gate, the drum tower has the power to promote this request. As villagers are worshipping the authority of the drum tower, this authority is granted by themselves.



Figure 12. Honour certificates and paddy on the main column of the drum tower.

Photograph by Derong Kong.

But if a family had seriously broken the village conventions and rules, in the record of Du, after a punitive decision was made, a rake would be deeply hammered into the main column of the drum tower. It represents the unchangeable authority of a final decision. It warns people not to associate with this family. Thereafter, no matter what happens to the family, the whole village will disregard them. In some terrible cases, a person has been expelled from the village. Unless the person thoroughly rectifies his error, and makes amends for his fault through good deeds, then apologizes and provides good meat and wine to the whole clan, such punishment is imposed. The person can be forgiven, and then the rake is pulled out and he returns to the clan.⁶⁶ It reflects Dong social culture, classification of class. The drum tower is transferred from a material

⁶⁶ Du, 'The Characteristics of Drum Tower, Cultural Connotation', p. 65. 杜, '侗寨鼓楼建筑特色及文化内涵', p. 65.

symbol to a cultural symbol, which represents its irreplaceable importance.

6.3 Conclusion

From my fieldwork I confirmed the materials included in the books I reviewed in Chapter 1 (1.4.2 Folk custom), and added more materials to the subject of custom. All these materials are employed and developed in this chapter, which gives a detailed account of the various important customs and rituals that take place in both the Dong house and the drum tower (I also make further discussions of these customs and rituals in each section). All of them have significance to the Dong community. As Rapoport indicates, the function of ceremony is in emphasizing and demonstrating the solidarity of the community, and also in presenting the social mechanism.⁶⁷ Just like the repetition of constructions in Dong society, the material, building and custom have been practised by many generations, renewing Dong society. As Bartlett advocates, 'we have to set the consideration that the greatest wealth of custom, institution and tradition will lie along the direction of a group's preferred persistent tendencies... constitute a kind of lasting social 'schema' on the basis of which much successful constructive work in recall may take place'.⁶⁸ The custom system is important in the Dong social schema. It is employed in the education, construction and use of building. The custom in Dong house is to cultivate the family, and the custom in the drum tower is to build up the community, and also create context with other village. They restructure the family in marriage, welcome new birth, and offer a proper farewell to deceased. Meanwhile they take care of the transition of person, family, village and society in different stages of union or separation. All these customs and rituals maintain the structure of the family, clan, continue or create the relation between them, and reproduce things or events.

Moreover, all these customs demand the participation of people, it is a public custom to announce an event, while the oral culture is also practised and published in an open communication to continue their culture. The custom also is a public coordination of right and agreement of event, system and social structure. All the people are offered the same oral culture, they are embraced in the same system, and united within the same schedule to build their society. The custom has multiple functions and implications, and it is a part of the social construction.

⁶⁷ Rapoport, *House Form and Culture*, p. 53.

⁶⁸ *Ibid.*, p. 264.

Furthermore, Chew indicates the importance of open communication, hence the publicity, so that people are embraced under the same knowledge system.⁶⁹ So as Berger and Luckmann say, participation in the social stock of knowledge assigns individuals positions in society and coordinates them in an appropriate manner.⁷⁰ Thus, as Bartlett says, people react in a social manner and uniformly determine situations and meaning throughout the group.⁷¹ In Dong society, people are interlinked by the relations of kin or work, and through all these customs and rituals, the relations are further confirmed.

From birth to death, Dong people inhabit buildings, while their characters are formed in this process. Living custom is the standard mode of the use of a building, and the rule and order of sociability. The living custom precisely assigns events in time and place. It makes sure people have the same collective rhythm and spatial structure. It also determines the process and way people can gain experience in buildings.

Moreover, like other villages in China or among other farming people, Dong people rely on land, and population migration is less than elsewhere. As Fei says, their activity is local, in their own area.⁷² Also after a long practice of living customs, this is a customary society, with which they are familiar, and they can trust rule and custom without thinking.⁷³ As Prak says, repetition causes a strong coherence, a regular meaning.⁷⁴ This is based on the foundation of rural society, inherited from the previous oral culture and custom system, and also caused by their oral mode since people are in the same space. As Fei says, there are no differences that block people from being fully acquainted with each other and their shared customs.⁷⁵ Under this circumstance, just as Rapoport says, they have a 'shared image of life, accepted model of house, an accepted hierarchy and hence an accepted settlement pattern'.⁷⁶ Dong society is a stable customary community. As has been demonstrated here, the use of building is an important local life custom system among other systems, and helps maintain the social character within this society.

⁶⁹ Chew, *Rational Ritual: Culture, Coordination, and Common Knowledge*, p. 22.

⁷⁰ Berger and Luckmann, *The Social Construction of Reality, A Treatise in the Sociology of Knowledge*, p.57.

⁷¹ Bartlett, *Remembering: A Study in Experimental and Social Psychology*, p. 235.

⁷² Fei, *From the soil: The Foundations of Chinese Society*, p. 6. 费, *乡土中国*, p. 6.

⁷³ *Ibid.*, p. 63.

⁷⁴ Prak, *The Language of Architecture: a Contribution to Architectural Theory*, p. 44.

⁷⁵ Fei, *From the soil: The Foundations of Chinese Society*, p. 6. 费, *乡土中国*, p. 63.

⁷⁶ Rapoport, *House Form and Culture*, p. 6.

Chapter 7

The reading, construction and cultivation of buildings and villages

This chapter deals with the remaining part of the oral architecture of the Dong. It is about how people read, recognise and construct their buildings and environments. Dong people use many systems in this process, such as body and sense, oral culture, ritual, and construction.

This chapter will start from the basic system—the body and senses—to discuss how people perceive and recognise buildings and environments. Then it will move onto different ways of reading to discuss the oral culture system and ritual system. The following part will discuss how people cultivate their buildings and villages through systematic construction. The final part will be a short discussion of these systems in the record of people's experience from the aspects of sensory experience, ritual and custom, material culture and construction.

Through these systems people reach an understanding of things, while these systems themselves are also the subdivided social generative schema by which they inherit and refresh their knowledge of their living environment. Construction is the vital system among these. It is both a recognising process and a concrete way to make things understandable and existent. Dong people read the natural environment, and then bring it into the manmade world. Then they read the manmade world and bring it into their life.

7.1 Reading a building

7.1.1 Body movement and sense

The body is the starting point of a person's world. Unwin says people use their body, movements and senses to measure the world.¹ As Pallasmaa says, architecture is the extension of the human body, its dimensions based on the human body. When a person walks on a stair, the depth of the step meets the length of the foot.² But it can be unclimbable, as with Edinburgh Castle, a giant stone building group that lies on the top of a steep hill. The precipitous cliff makes the hill unclimbable to man, so a man's movement ability is the measurement standard there. In my hometown and field survey, I found numerous descriptions and instances relating to body and space.

When a person walks through a door, his shoulder feels the width of the door, his height meets the height of the door. If the door is narrow, he says this door is too narrow, it nearly touched his shoulder. Or if the door is very low, for instance, during my field

¹ Unwin, *Analysing Architecture*, p. 106.

² Pallasmaa, *The Eyes of the Skin: Architecture and the Senses*, p. 63.

survey, a door I have met was 163 cm high in a Dong house's side room, and when I went to cross it, the host reminded me, be careful of your head. Maybe this is because in former times Dong people's were not as tall, as in the common saying that a man's height is no more than 5 Chi (equal to 166.5 cm).³ As a person walks through a room his steps measure the size of the room. If the wide verandah is big, a person says he cannot reach the other end of it even with ten steps. On the contrary, people say a room is too small, as with only a few paces they can reach the wall. The height of people or the stretch of the body measures the height of the ceiling. When a person thinks the floor is too low, he says the floor is so low that his hand can reach the ceiling without standing on his toes. As people sit around the fireplace, their bodies measure the size of the fireplace. So if people want to describe someone's house as big, they say how many people can sit in his fireplace room.

The small size determines the big size

When a person wants to sit, he builds a stool. When he needs a place to eat, he builds a dining table. When he needs a place to sleep, he builds a bed. When he needs a house to contain all of his needs and the furniture he has made, he builds his house. Body size and movement not only measure the space, but also influence the size of components and buildings. When these body measurements meet the function of the component, the size of the component is generated.

The stool, dining table, and bed are the commonly used furniture in a Dong house. Their heights are normally low (Figure1). During my field survey, I measured the furniture in Xiaohuang village, and found the average stool was 23.1 cm high, the dining table 30 cm high, the height of bed about 50 cm. When I sat on the stool, other people smiled and said: 'this stool is a little small for you, does your leg feel sore'? Yes, after sitting on the stool for a long time, my bent knees felt sore and painful. And people said: 'your leg is long, this stool is not suitable for you'.⁴ People's body movement is an important element in the pattern of architecture. The movement also influences the size and pattern of the room.



Figure 1. The stool and eating table at Xiaohuang village. Photograph by Derong Kong.

³ From my field survey, Xiaohuang village, November 2010.

⁴ Ibid., 2010.

According to the research of Yongxue Cui, based on archaeological discoveries and history documentary, in ancient times the Chinese sat on the floor, and at that time the ceiling height was relatively low.⁵ At the end of the Eastern Han dynasty (184-220 A.D.) the chair was imported from the western world, so people started to sit on chairs, and after the Tang dynasty (618-907 A.D.) chairs were widely used. Sitting relates to many behaviour patterns and furniture in the house, so the height of other furniture was also raised, along with people's scope of activity. It was a factor that influenced the interior of the building among many other reasons, and from then on, the height of the house was increased.

The inner space of the drum tower used to be small, like the public hall and the single column drum tower, then as more and more people gathered there, the narrow space was no longer suitable for the meeting. So people expanded its structure to achieve a bigger span. For instance, during my field survey, at Bapia village, villagers told me that they thought the old public hall was not suitable for the village activities, so in 2007 they built a new drum tower to replace it.⁶

The reference and criterion of measurement

Similarly Rasmussen says that feet and inches are standards based on human proportions.⁷ The measurement system used by a Dong carpenter is generated from the dimensions of different parts of the body.

According to Jianping Li's research, the Cun 寸 is a length unit. In '*The Commentary of Gongyang*', '公佯传', Xiu He, 何休 noted: 'press finger makes one cun.' (按指为寸) Chi 尺 is a length unit derived from the length of the forearm (Figure 2). 1 chi is 10 cun. Bu 步 is a length unit generated from a pace. In ancient Chinese, one pace is called kui 跬, two paces are called bu 步. In '*Erya*', '尔雅': 'kui, raise the foot once. Two kui make one bu, (跬, 一举足也. 倍跬指之步.)'. 1 bu is 5 chi, or 6 chi in a different system. Li 里 a length unit, is used for measuring long distances, such as a road, or farmland. In ancient time, 300 Bu or 360 Bu made 1 li.⁸

⁵ Cui, *History of Chinese Furniture—Sitting Furniture*, New edition, pp. 65-71, 93-98, 103-106, 120. 崔, 中
国家具史--坐具篇, 增订新版, pp. 65-71, 93-98, 103-106, 120.

⁶ From my field survey, Biapa, March 2010.

⁷ Rasmussen, *Experiencing Architecture*, p. 124.

⁸ Jianping Li, 'A Study on Classifiers in Early Ancient Chinese', (unpublished PhD thesis, Southwest University, 2010), pp. 195-196. 李建平, '先秦两汉量词研究', (未出版博士论文, 西南大学, 2010), pp. 195-196.

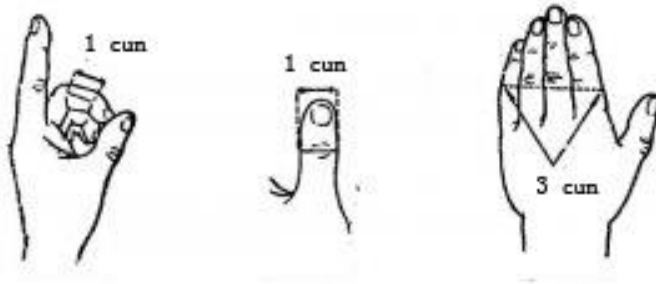


Figure 2. The context between cun and figure. Extract from

<<http://www.cn939.com/zyzj/shuxuexue/71140.html>>[accessed 7 February 2014]

古方中医网, '手指取穴, 取腧穴定位法', 古方中医网

<<http://www.cn939.com/zyzj/shuxuexue/71140.html>>[accessed 7 February 2014]

Although the length unit system has changed many times in the history of China, the basic structure of the system has remained similar. Below are two examples of length unit systems.

According to the research of Guangming Qiu, in the '*Sunzi calculation classics*', '孙子算经' (about 350-473 A. D.): 1 li=300 bu=1800 chi, 1 zhang=10 chi, 1 bu=6 chi, 1 chi=10 cun, in this system 5 cun are generally equal to 12.35 cm.⁹

Since 1929 according to the '*Weights and measures law*' 度量衡法 published by the Republic of China government, 1 li=150 zhang=1500 chi=500m, 1 zhang=10 chi, 1 bu=5 chi, 1 chi=10 cun=1/3 m, 1 cun= 1/3 dm. A Dong carpenter uses this measurement system, meanwhile people also use the modern international measurement system, the metre.

The world has its own dimension, but in order to measure it, people set up a unit system to unify all things under one standard criterion. Once the lengths of finger and forearm became standard units of measurement, the relationship between the movement of the body and the space of building could be quantified and manifested through this measurement medium. In a design, the possible movement of the body is presented by size. Through arrangement of size, the space for behaviour becomes predictable.

The sensory perception

The elements in architecture release or reflect their property. Unwin says, people receive and test these characters to identify the thing.¹⁰ This is based on people's sensory system. Again, as Bartlett indicates, these sensory patterns provide a physiological basis for perceiving.¹¹ The body is a primary tool to explore the

⁹ Guangming Qiu, *Investigations into The Length, Capacity and Weight Measures of China through The Ages*, (Beijing: Science Press, 1992), p. 69. 邱光明, *中国历代度量衡考*, (北京: 科学出版社, 1992), p. 69.

¹⁰ Unwin, *Analysing Architecture*, p. 57.

¹¹ Bartlett, *Remembering: A Study in Experimental and Social Psychology*, p. 188.

surroundings and to receive the effects and information from the environment. It is a sharp medium between people and environment. From looking at the facade, extrinsic features, smell, touch, sound, weight, etc., people can tell the difference between elements.

For instance, the smell of a new Dong house is different from an old house. The new wood gives a fresh smell of china fir with a humid and light scent (Figure 3). Aged wood has adhered to it the traces of daily life, dust, oil, smoke, rotten wood (Figure 4). And the moss and mould on the wood release a musty and stale smell. It is the same with the light, and as Rasmussen says, from the reflection of the sound, we gain an impression of the form and material of the environment.¹² The wooden components undergo various changes along with the change in condition of the environment: damp wood will expand, the squeezing between conjoined components generates a creaky sound. The drying wooden component will generate a gap where there was originally a close connection. There will be less squeezing and scrubbing, the noise is more fluent and light. But the gap provides a tunnel for other noises from the surrounding environment to come through.



Figure 3.
The hand-ink master Wenli Lu's new house at Luoxiang town. Photograph by Derong Kong.



Figure 4.
The hand-ink master Wenli Lu's old house at Jitang village. Photograph by Derong Kong.

¹² Rasmussen, *Experiencing Architecture*, p. 224.

The way we perceive the environment is originally derived from bodily practice which provides a chance to stimulate the senses and accumulate experience. Then as Bloomer says, this experience been recorded by the brain. It generates a system to get the appropriate pattern of behaviour, arouse a reaction, to achieve the balance of movement.¹³ This is unlike the some current buildings, where the body is numbed. If a building keeps a distance from people, abstract and cool, there is less to remember.

At the beginning I was planning to write about different sense experiences separately, But I find there is a problem: every time I describe a place or a thing experienced by one sense, I cannot stop myself recalling other sensory experiences. Because they work together, it is hard to restrain one sense from evoking another sense. As Pallasmaa says, every experience is integrated through the body and constant interaction with the environment as multi-sensory.¹⁴ I only can say, that at a particular moment, one sensory experience tends to lead the feeling.

Peripheral environment

In the use of architecture, building design provides the possibility for people to experience architecture. The immense sensory experience assembles and weaves an inseparable feeling of place. In the following sections are descriptions of sensory patterns and experiences in the Dong house, the drum tower, the village and the road.

House

Inside the house, the everyday activities happen.

Ground floor:



*Figure 5.
Ground floor.
Photograph by Derong
Kong.*

¹³ Bloomer and others, *Body, Memory and Architecture*, p. 1.

¹⁴ Pallasmaa, *The Eyes of the Skin: Architecture and the Senses*, pp. 40-41.

The wet and humid ground makes the user's skin feel moist, and the joints feel cold. A rash on the skin and arthritis report the violent reaction of the body. Walking on the mud ground or paved ground gives the user a different feeling of weight and impact to joint and muscle. The domestic animals are kept at ground floor level, and in the corner of the ground floor are stores of fire wood and manure, so the mixed smell reminds the user where he is. In the summer, mosquitos around animals and manure use their vicious bite to tell people it is time to leave this place (Figure 5).

Stair:

The stair links the different heights. The gravity and their stamina are what users need to be concerned about, they do not want it to be dangerous when they climb the stair. The width of the stair should be enough to let them bring some tools to the first floor, such as a bed, loom, etc. In my field survey, when I walked on the steps of the wooden stair, the wood components squeezed, each making a creaky sound. The elastic steps offered a comfortable experience to my joints. Some stairs were carved out of stone bases, and when my feet walked on it, my joints and muscles could sensitively feel the hard surface of stone in a quick impact (Figure 6).¹⁵



Figure 6. Stairs in Dong house. Photograph by Derong Kong.

¹⁵ From my field survey, Xiaohuang village, November 2010.

First floor

Wide verandah:

The Dong women usually process their housework on the wide verandah. The light in the spacious verandah is abundant; sunlight is warm and bright (Figure 7). It is a pleasant place to sit and work with a wide-open view (Figure 8). The light helps women to see clearly when they are weaving and embroidering. The sunshine on their skin makes people feel warm and relaxed. The wide place allows them to stretch out their body. It is a place for people to meet guests in summer, while breeze and shadow offer a cool environment. In my field survey, when I walked on the wooden floor, the squeezed wooden board generated a special wooden sound. The floor was elastic and my feet, muscles and joints could feel the reaction from the floor. Some wide verandahs are long and enclosed by windows, thus people can hear the echo of steps.¹⁶



Figure 7.
Daily life in wide verandah.
Photograph by Derong Kong



Figure 8.
Abundant sunshine in wide verandah.
Photograph by Derong Kong.

¹⁶ From my field survey, Xiaohuang village, November 2010.

Fireplace room:

Around the fireplace, it is warm and bright, the smoke makes it difficult for people fully to open their eyes, and the smell of ash and burning wood endue this place with a unique character. The wall and ceiling are black and covered with a thin layer of smoke. People eat and chat around the fireplace: in the winter it is a place to meet guests. Most of the joyful memory in the house happens here (Figure 9). As Bloomer says, ‘the hearth is surrounded with treasures and memorabilia’. And this place offers haptic experience.¹⁷ Also as Pallasmaa says, ‘every dwelling has its individual smell of home’.¹⁸ For instance, during the field visit to the Weald & Downland Open Air Museum. I saw a traditional fireplace room of a popular cottage from Washington, built in the mid 17-century. It has a similar smell and appearance to the Dong one, and maybe this is caused by the similar timber surface and function of this room which offered similar sensory properties.¹⁹



Figure 9. Fireplace room. Photograph by Derong Kong.

Bedroom

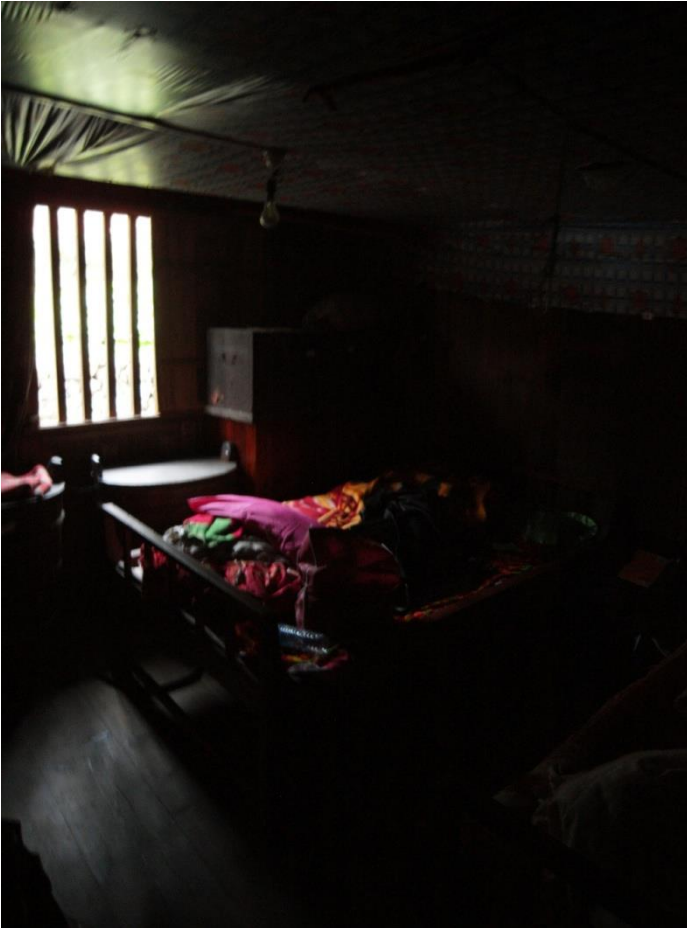
The bedroom is dark and small, it only has a small window. After the bed is placed, it only has enough space for few pieces of furniture and room to move. Even in the daytime with an open window, the room is dim (Figure 10).

¹⁷ Bloomer and others, *Body, Memory and Architecture*, pp. 50-51.

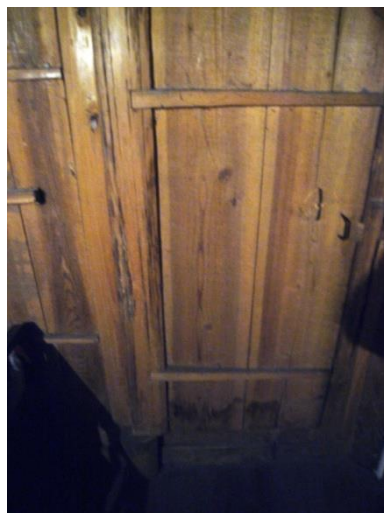
¹⁸ Pallasmaa, *The Eyes of the Skin: Architecture and the Senses*, p. 54.

¹⁹ From my field trip, Singleton, September 2014.

In the field survey, when I closed or opened the door, the touch of the wooden handle was relatively warmer than a metal handle, and the surface was soft. The door was not heavy to open or close, but the joints of the doorframe and door panel creaked when I opened or closed the door. Locking or unlocking the latch had different sounds, when I locked the latch, it squeezed with the door frame and creaked, if I unlocked the latch, the latch released from the door frame generated a soft and short fricative, yet the impact between components of the latch still created a small bang (Figure 11).²⁰



*Figure 10.
Bedroom.
Photograph by Derong Kong.*



*Figure 11. The door and
its latch. Photograph by
Derong Kong.*

²⁰ From my field survey, Wenli Lu's house, Jitang, January 2013.

The wall and the floor cannot seal the sound well from one room to other rooms. In the field survey, when I slept on the second floor, I still could hear people talking at first floor, and the dog's bark from outside. In the morning, the cock crowed to wake me up, and the light filtered into the room from the tiny gap between window and wall.²¹

The arrangement of a room like an instrument sounds different. The pattern of construction generates a corresponding rhythm or scheme of noises. One dark night, when I slept in a Dong house, the strong wind impacted and rubbed on the 2 or 3 cm thick wooden wall, and the vibration was transferred through the board into the whole room, as the sound of the wind penetrated the board. It is a unique sound in a wooden house.²² This sound told me how bad the weather was. I can barely hear this kind of sound in the city, where the well-sealed window reduces this vibration.

Loft:

The loft has good ventilation, and abundant sunshine keeps the grain dry (Figure 12), while people also can smell the light fragrance of rice. The ladder to the loft is narrow and steep, it demands good balance and attention to climb it, for there is the potential to fall down. So children are forbidden to climb it without good reason.



Figure 12. Loft. Photograph by Derong Kong.

The drum tower

From my field survey, I learnt that the fireplace in the drum tower was formerly burning in all four seasons, but now usually burns only at night or through the whole winter (Figure 13). The firewood is provided by villagers in turn. After a long time, the smoke dyes the columns black with a layer of dust. And it is a good thing for the columns, because insects or worms are killed by the smoke, so the columns are not eaten into. On summer nights the fire is small, and people can sleep in the drum tower, enjoying the cool breeze and keeping warm. On a winter night, it would be totally different, as the

²¹ From my field survey, Wenli Lu's house, Jitang village, January 2013.

²² Ibid.

drum tower is surrounding by cold, vicious winds. People sit close to the fire; their fronts are warm, while their backs are against the cold wind. The cold backs make people move close to the fire, but the temperature is little beyond the comfortable level, especially for the legs which are closest to the fire. So after a long time receiving the extra heat, the skins of the inside legs are purple, locally called 'warmed leg'.²³



Figure 13. People chatting in the drum tower. Photograph by Derong Kong.



Figure 14. Choral song performance in the drum tower. Photograph by Derong Kong.

²³ From my field survey, Zengchong village, March 2010.

I also learnt from my field survey that villagers usually finish their farm work and go home at 7 to 8 pm. After they have eaten their meal at 9 to 10 pm, people gather in the drum tower to sing and chat. During the harvest time there are few people in the drum tower, yet in other seasons there are many people. Especially in the Spring festival, the crowd takes up every place in the drum tower from inside to outside, yet even more villagers want to join in. Around the fireplace in the drum tower, people can hear the sound of the crowd and burning wood, feel the light and heat of the fire, see the dancing blaze, and time becomes slow, people being immersed into the slow atmosphere of the drum tower. When there is a choral song performance, the atmosphere becomes exciting and joyful (Figure 14). Or if some emergency happens, people gather in the drum tower, and the atmosphere becomes serious and intense.

● Village

Different environments create different features of sensory experience. In the valley, a flat field does not block or slow the speed of the wind, and when people walk in the field, the wind rubs the ear creating a long lasting whirr. Once people enter the village, the wind is blocked by buildings, yet they can still feel the cold brought by the wind, and hear the wind blowing on the roof, or a tree. In some straight lanes, people can feel that the speed of the wind is obviously increased. The reverberation of sound is delivered according to the surface texture, distance, and form of environment it has moved through. As Pallasmaa says, 'every city has its echo which depends on the pattern and scale of its streets and the prevailing architectural styles and materials'.²⁴ The wind and sound have their own pattern and rhythm. So do other elements of the environment. For instance, the light is dim in the narrow lane, but bright in front of the drum tower. As Norberg-Schulz says, the management of light also modifies the atmosphere.²⁵

Walking in the village, one's feet can feel the difference in the surface of the road, and whether it is a mud road, stone paved or wooden planks. Walking on the bridge, one's feet can sense the reaction from the planks, one's ears can hear the echoes of the steps in this roofed space, and the sound of the flowing river. When passing by houses, people can hear and see the life of the dwellers weaving, working, chatting, singing, playing with their children, etc (Figure 16). People also can smell and hear the domestic animals at ground floor, or people are preparing their meals, etc. Some sense experiences are pleasant, yet others urge people walk away, like some lane with dirty waste in the ditch at a dead end, a horrible view and smell.

²⁴ Pallasmaa, *The Eyes of the Skin: Architecture and the Senses*, p. 51.

²⁵ Norberg-Schulz, *Genius loci: Towards a Phenomenology of Architecture*, p. 179.



Figure 15. Scenes of everyday life in Zhaoxing village. Photograph by Derong Kong



Figure 16. Scenes of everyday life in Zhaoxing village. Photograph by Derong Kong.

● Road

The following are parts of my field survey which have given me a deep impression about the old traffic between villages, and I hope this would offer readers an idea of the transport between villages and villagers' experience. It was a trip from Yandong to Gaojing, passing by Shudong. From the map, it was only about 20 km distance. At the

beginning I travelled on a motorbike, but because it had rained the day before, the road was muddy and slippery, thus it was hard to control the direction of the motorbike. So I got off the bike and walked.

Then it took me nearly three hours to walk on that wet mud road (Figure 17). It was exhausting to walk on the slippery road. The guide said local people only need one and half hours to walk on another small old mountain path, which is only wide enough for one man to pass through, but is shorter than this new mud road. The mud road was built for cars to drive, the old small path for people to walk. The car and people both need the shortest distance between two places, especially people, but the car needs a wide and flat road, while people can adapt to different landforms better. After people are familiar with the landform, they choose the least laborious route to build the path, according to their body experience, stamina, size of body, and the condition of the landform.



Figure 17. The wet mud road from Yandong to Gaojing. Photograph by Derong Kong.

The distance between two villages is usually around 5 km, as between them there is usually enough farmland and mountains for both villages. And this is the normal walking distance of a single journey for the local people. Their feet measure the distance, and the peak of stamina decides how far they would walk from the boundary of the village, and the farmland or forest they can reach and use. The way people travel is a factor that influences the scope of their society among many other reasons.

Above are the descriptions of people's body experiences in different places. People perceive the elements in the architecture and receive the experience through their senses. As Bloomer says, the activity and space offer a chance for the body to reinforce and recognise the environment.²⁶ In the following part I will discuss further the sensory pattern and melody of atmosphere in Building. As Rasmussen says, people experience space in different rhythms and patterns.²⁷

● The sensory pattern and melody of atmosphere

As Pallasmaa says, architecture reconciles people with the world, and this mediation occurs through the senses.²⁸ Bartlett reinforces this, describing how this constructs the sensory pattern into an environment that is significant.²⁹ And this construction would be a wonderful project. Botond Bogнар claims that a cultivated sensibility is necessary in design to regenerate a sense of human rootedness.³⁰

For instance, the word scene '情景' in Chinese consists of '情' feeling, emotion or mood and '景' view or scenery, so it means feeling with scenery. The scenery is the foothold for feeling, and they are united. As Zumthor says, the detail of architecture, and the different timing of the experience influence the feeling of atmosphere.³¹ For instance, in a Chinese traditional garden, the pond, stone, plants, wall, road, pavilion, bridge, and two-storied building are deliberately designed and located, as are the pattern of the scenery, the route of walking, and the rhythm of view (Figure 18). As Unwin says, it is a precious, intentional construction to modify and place elements as a elaborate expression of people's concept.³² Then, as Zumthor says, let the elements do the rest of the work.³³ Thus when people walk in the garden, during their tour, the garden offers them a delicate designed pattern and rhythm of sensory experience. Yet, sense just is a starting point, mood and emotion are the further response. As Pallasmaa says, when people experience a work of art, the work projects its aura, while people project their emotions and percepts on the work, and ultimately, people meet themselves in the work.³⁴ It can also take place between people and a building. The scene arouses feeling, and the feeling echoes across the scene. An affective community develops, or a sense of meaning between the building and the people. These are generated from imagination and sympathy which are based on sensory experience. They are the intermediaries to connect people with architecture, and to immerse people in the atmosphere. As Heidegger said, this anchors them in the place.³⁵

²⁶ Bloomer and others, *Body, Memory and Architecture*, p. 50.

²⁷ Rasmussen, *Experiencing Architecture*, p. 147.

²⁸ Pallasmaa, *The Eyes of the Skin: Architecture and the Senses*, p. 72.

²⁹ Bartlett, *Remembering: A Study in Experimental and Social Psychology*, p. 188.

³⁰ Botond Bogнар, A Phenomenological Approach to Architecture and Its Teaching in the Design Studio, in *Dwelling, Place and Environment*, ed. by David Seamon and Robert Mugerauer, (New York: Columbia University Press), p. 195.

³¹ Zumthor, *Thinking Architecture*, pp. 9-10.

³² Unwin, *Analysing Architecture*, p. 33.

³³ Zumthor, *Atmospheres: Architectural Environments. Surrounding Objects*, p. 69.

³⁴ Pallasmaa, *The Eyes of the Skin: Architecture and the Senses*, p. 68.

³⁵ Heidegger, *Poetry, Language, Thought*, p. 549.



月到风来诗自清

*When the moon and wind come,
the poem becomes clean naturally*

Figure 18.

*The Humble Administrator's
Garden. Extract from Chen, On
Chinese Gardens, p. 5. 陈, 说园,
p. 5.*

The previous descriptions of the Dong house noted many sensory patterns. As Bachelard says, the house has engraved within us the hierarchy and diagram of the various functions of inhabiting.³⁶ It is where people's experience been piled up. In this process, a communication between body senses and building is well produced because of the sense of intimacy provided by house. As Bachelard says, the house as a shell confers people's feeling of physical intimacy.³⁷

For instance, in my field survey, when I visited the hand-ink master Wenli Lu, I lived in his house. He let me use his study room to edit my material. The room was very small, only enough space for a desk, and a pile of books and documents beside the desk (Figure 19). But I think it was very comfortable, because I could reach what I needed by hand without standing, I could touch both walls by stretching my arms, and my hand could open and close the door at my right side and the window in front of me. This room was under my control and easy to keep warm, so I felt safe and warm. The room was of an appropriate size, and I felt I was enclosed in an intimate space. A small desk lamp on the desk enhanced this feeling, as its light defined a sphere where I sat and wrote. It was bright, and the light gradually dimmed in the rest of the room. This was far from being a depressing atmosphere. The window extended the visual space of this small room. Through the window I could see the village and far away landscape, and it

³⁶ Bachelard, *The Poetics of Space*, p. 15.

³⁷ *Ibid.*, p. 131.

evoked my imagination.³⁸ As Bachelard says, one's corner produces a sense of immobility for consciousness of being at peace. It is the space of our being.³⁹ The space like corner, in a proper size and treatment, offers people physical protection and intimacy to achieve the space of their being.

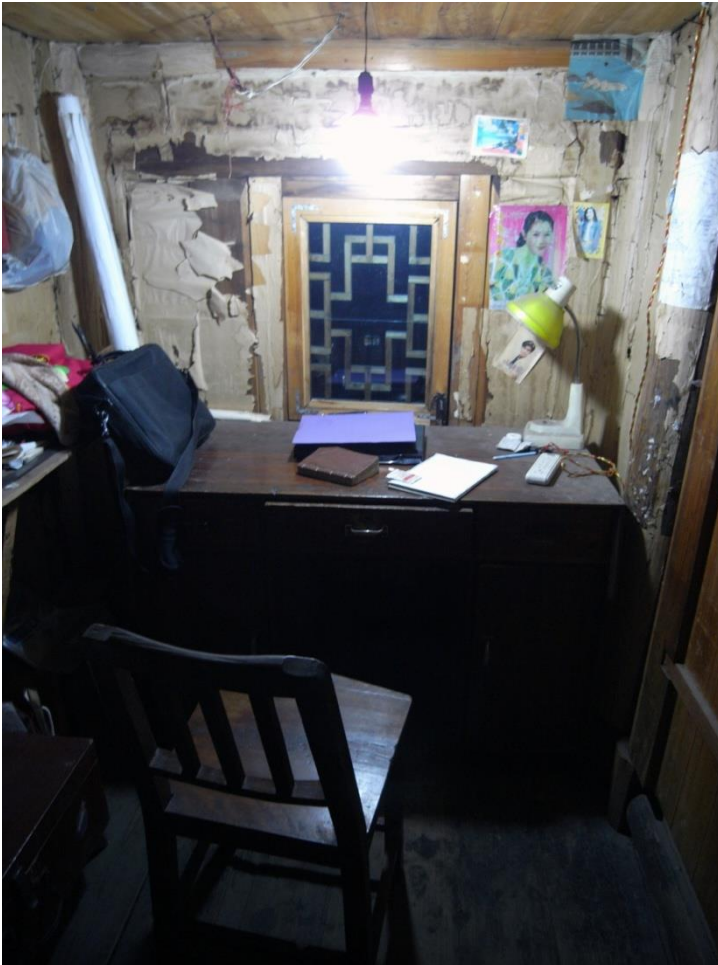


Figure 19.
The hand-ink master Wenli Lu's study room at Jitang village. Photograph by Derong Kong.

The melody of atmosphere

The experience of place is not static: it is a processional series. As Bloomer says, the form of locomotion decides the way that people connect with their environment, and what they can experience.⁴⁰ He claims that people and their activities are part of this place, they also influence the atmosphere.⁴¹ Thus people's movement and activity in the building becomes the essence, the motivation of the rhythm. But only after they participate in the bodily experience of the architecture can the rhythm exist, the feature of the environment be revealed.

Furthermore, Rasmussen says the rhythmic relation with places is determined by the way we live in them and move through them.⁴² Like the scenes in the Dong house, as

³⁸ From my field survey, Wenli Lu's house, Jitang village, January 2013.

³⁹ Bachelard, *The Poetics of Space*, p. 137.

⁴⁰ Bloomer and others, *Body, Memory and Architecture*, p. 94.

⁴¹ From my field survey, Xiaohuang village, March 2010.

⁴² Rasmussen, *Experiencing Architecture*, p. 136.

Pallasmaa claims, the experience of home is structured by distinct activities, like cooking, eating, socialising, reading, storing, sleeping, and intimate acts.⁴³ Also, as with the previous discussion of the rhythm in the drum tower and the scenes in the village, the activities in these places are against a social background, the life already having given the special melody to the atmosphere of the places. Thus each scene has its unique atmosphere, which not only comes from its material, composition and treatment, But also from the melody and scheme brought by the activity of the society it belongs to. This concludes the reading of place from the sense system and atmosphere. The next discussion will focus on different ways of recognising places, from the common reading and professional reading to the aspects of oral culture, custom and ritual.

7.1.2 Common reading and professional reading

Shen says, through participation, people gain the feeling of place.⁴⁴ Yet people have different responses and degrees of understanding, caused by the personal differences in their ways of reading, and recognising buildings.

Common reading of the villager

Villagers read the building from its appearance, activity, and sensory experience, which are common, legible to them. For instance, in the field survey, in Xiaohuang village, when I asked villagers which drum tower was beautiful and why, their answers focused on the decoration, painting, form, general size of columns, and activity. Dong people prefer the old paint, they think the patina of the old paint looks better than new paint, for modern paint is too bright. Shaoming Pan (80 years old) thought the drum tower he liked had a delicate and dainty form, but was too big. Xingwen Wu (87 years old) liked the first drum tower, because it has a story on its eaves. Bei Wu (15 years old, middle school), liked the middle drum tower, because that is where people assemble, singing and dancing. In my chat with the host of an inn, a middle aged man, I asked him how he knows whether a house is good or not. He said it depends on whether it is big or high, and whether the columns are thick.⁴⁵ This is embodied reading, people will use the familiar thing in life as a reference to understand, explain and mark a thing. And there is another example as follows.

The herding water Buffalo line

During my field survey, I found that there was a lane in the village of Zengchong. It was wider than the other lanes, so people brought their water buffalos through this way when they were going to herd them. After a long time, this lane was called 'herding water buffalo line'. People also used this line to divide between different areas of the village.⁴⁶

⁴³ Pallasmaa, *The Eyes of the Skin: Architecture and the Senses*, p. 63.

⁴⁴ Shen, *Architectural Phenomenology*, p. 57. 沈, *建筑现象学*, p. 57.

⁴⁵ From my field survey, Xiaohuang village, November 2010.

⁴⁶ From my field survey, Zengchong, March 2010.

Villagers' readings of buildings exist through their experience of life, while there are many other systems that will be discussed later, like oral culture, custom and ritual. Carpenters not only read the building as a villager does, but also —through the thousands of repetitions— they practice, experience and record in their bodies.

The carpenter does more

The carpenter looks at the craft, the structure, the detail of construction, the scale of the building, and the form of the building. During my field survey, when I visited Xiaohuang village, we looked at the Xingqian drum tower and the hand-ink master Wenli Lu said that the eave plank was wider than the eaves (Figure 20). The contour line of the Xiaohuang drum tower was too straight, and did not follow the form of a china fir. The column was thick, but the beams to support the raised columns were too big, because there were two overlapping beams at each side, so the beam did not need to be so big. Instead, the tie-beams to bear the beams should be bigger (Figure 22). The Gaohuang drum tower's contour line runs outward, and the size of the eaves is not right. The eave plank is too big (Figure 21). When we discussed a newly built house, he thought the window is too high, and that it should have been divided into two parts. The carpenter always gives a detailed reading, as carpenter Wendong Lu, when he saw a newly built building, said the scale of the tile block is not right, and the top and the bottom are the same, whereas it should be wide at the top and narrow at the bottom. These judgements are accumulated through a long time of hand work with close contact and experience of projects.⁴⁷ Carpenters read buildings from their carpentry system as described in Chapter 3.

⁴⁷ From my field survey, Xiaohuang village, November 2010.



Figure 20. The Xingqian drum tower.



Figure 21. The Gaohuang drum tower.



Figure 22.
The Xiaohuang drum tower
All Photographs by Derong Kong

7.1.3 Oral culture

As an important part of the Dong society, its oral culture records the people's experience of architecture. It is the way people summarise and read the architecture. The following sections will discuss cases of how people use oral culture to explain and identify building and place.

Abandoned house

In my field survey, I saw an abandoned structure of a house in Xiaohuang village (Figure 23). A local villager told me the host had built a new house, But he reused the floor planks, wall boards and other components, only leaving the main structure there. I asked local villagers why they did not reuse the old columns and tie-beams, and they said that if they mixed old columns and new columns, the main components were incongruous. It would not be a good symbol to the host. If the house has an unusual death, or was owned by an unlucky family, none of the components would be reused, because the old component might bring some unlucky trace of the old house.⁴⁸ As Norberg-Schulz says, culture can transform meanings that may be moved to another place.⁴⁹ Thus a thing could have attached to it the meaning that does not belong to it. Also as Lakoff and Johnson say, culture affects the conception of physical reality. The real for an individual is a product both of his social reality and of the way that shapes his experience of the physical world.⁵⁰



Figure 23. An abandoned house structure. Photograph by Derong Kong.

⁴⁸ From my field survey, Xiaohuang village, November 2010.

⁴⁹ Norberg-Schulz, *Genius loci: Towards a Phenomenology of Architecture*, p. 170.

⁵⁰ Lakoff and Johnson, *Metaphors We Live by*, p. 146.

The naming of components

During construction, the supply of material also declares people's position in the clan, or relationship with family or clan. This has been described in Chapter 4 and Chapter 5. After the house and the drum tower have been built, different columns have the implicit meanings or connotations of different persons.

In my field survey, Lu said that in the house, the short column represents children, the longer short column represents young men, the decorated hanging column is a young girl, the central column is the male host, and the eave column is the female host. In the drum tower, different columns also have different meanings. The inner main columns are the male hosts, the eave columns are female hosts, the columns supported by the tie-beam to change the form of the drum tower are called fake columns as they do not land on the ground, which means the people from another clan. The short columns are young boys and children. The columns of brackets are young girls. The top central column of the roof is covered with terracotta ornaments and a symbolic weapon is installed at the top, manifesting the defensive power of the drum tower. The columns supporting the top central column in the roof structure are young men. The ladder columns connecting to the top floor where the drum is placed are called Kuan feet column, means the Kuan feet, the messenger.⁵¹

These meanings give people an impression that their home and the drum tower are constituted of themselves, and that they have been offered positions in the buildings, like their own social position in the family and village. As Norberg-Schulz says, the structural system also reflects the hierarchical system.⁵²

Signification of construction

The signification of construction of the drum tower has gained clear influence from the Han culture like, 'yin and yang', 'fengshui', 'four sides', 'five elements', 'six harmonies', and 'eight diagrams'.

The number of eaves in the drum tower is always odd, mostly with nine layers, eleven layers, or thirteen layers, because odd numbers belong to heaven, and are Yang (positive) numerals. The plan of the drum tower is even, usually square, hexagonal, or octagonal, because even numbers belong to earth, and are Yang (negative) numerals.

The octagonal drum tower has a Taijin diagram painted on the main beam. The spaces between the eight columns open towards Qian, Kun, Zhen, Xun, Kan, Li, Gen, Rui, the eight divinatory orientations, which correspond to heaven, earth, thunder, wind, water, fire, mountain, and lake, as eight natural phenomena.

⁵¹ From my field survey, Wenli Lu, January 2014.

⁵² Norberg-Schulz, *Genius loci: Towards a Phenomenology of Architecture*, p. 42.

The hexagonal drum tower has the signification of 'six harmonies', which means the universe is composed of front, back, left, right, up, down, which accords with six sides.

In the record of Wang, in a square drum tower the twenty-eight constellations of the universe are divided into four star areas. These four star areas are guarded by four sacred animals, east black dragon, west white tiger, north Xuanwu (a deity animal looking like a tortoise), south rose finch, representing 'powerful guardians of all sides'. The fireplace is located in the centre for people to sit around, which means 'harmonious five morals'. The top central column of the roof is called 'thunder column' meaning one year. The four inner main columns mean four seasons. The twelve-eave columns mean twelve months. All of these things mean that the drum tower synchronizes with four seasons.⁵³ As Prak says, the structure is understood by common sense.⁵⁴ Also as Unwin says, the composition and its characters are various; this is the direct external presence to tell people the difference.⁵⁵ Maybe this is a reason that enables people in a grammatical way to read the building from its composition. Then through importation of cultural implicit meanings, people made building works as symbolic structures under a grammatical expression.

The Gods and stories among the Dong villages

At the same time, the religious culture is also applied in their reading of places, as in the following discussion.

God, spirit and ghost

As described in Chapter 2, sky, thunder, river, field, tree, mountain, etc, and every surrounding element could have a god within it. The gods work as an embodiment of the abstract power and principle of nature to serve as a medium to connect people with the living environment. The importation of gods into elements is also an important aspect of constructing their spiritual world. As Lakoff says, it makes sense of phenomena in the world in human terms that we can understand.⁵⁶ The life experience and character of people has also been imported into the natural element with the god, for the relationship between people and nature is close. People are aware of the gods within nature and how they behave. Thus the communication between people and environment becomes exercisable. They know whom they have to obey, to whom they can appeal and what they can borrow or manipulate. These will be presented in relation to their construction and cultivation of their living environment.

When people go to work in the mountains, they think there are many spirits or ghosts in the mountains, so they cannot let other spirits know what they are going to do. They

⁵³ Wang, 'The Drum Tower: The Centre of Dong village', 54. 王, '鼓楼: 侗寨人居的凝聚中心', 54.

⁵⁴ Prak, *The Language of Architecture: a Contribution to Architectural Theory*, p.30.

⁵⁵ Unwin, *Analysing Architecture*, p. 41.

⁵⁶ Lakoff and Johnson, *Metaphors we live by*, p. 34.

keep silence, do not let spirits know they are coming, or even in a tricky way, lie to the spirits. It is a thing they think they can change or control through such religious and cultural behavior.

But unlike a spirit or ghost, a natural god represents the principle of the natural environment. People try their best to please a god, to pray for a blessing. They respect, flatter, and fear the god at the same time. Filtering off the utilitarian aspect, the worship of gods is a faith, a faith in the nature principle, the way of nature. It reminds Dong people of the principles they must respect and obey when they build their world.

Stories and myths

In the Dong living environment, everything could have a story about it, including building. These are further expiations of the Dong living environment to complement their world. They work as a medium to assist people to import meaning into surrounding objects. As Norberg-Schulz says, it allows for easy identification and understanding.⁵⁷ When people meet something they cannot explain, the stories and myths are a good way to interpret it.

There are many stories about the balance with nature. Some describe the village as a boat, while the surrounding environment is water. If there are too many people, the boat would risk being upset. Some stories record the natural disaster caused by people. In one such story a village used to be beautiful and rich, But people became greedy and took too much resource from the environment, and so broke the balance, then nature raised a horrible flood which destroyed the whole village. The survivors built a new village and passed this story down to descendants to remember this lesson.

Story and myth are a compilation of local experience and knowledge, they illustrate the preferences and taboos of life. They narrate affairs, also delivering the principle that is revealed in the story. Thus they offer people an experiential conception of the world with a setting of rules. The carpenter's conception of architecture is also influenced by the story. Carpentry stories are formed of local knowledge and carpenter experience: it is a form of folk homespun theory.

A story of the reversed central column

This is a story told by Yongchao Luo, during my field survey. A family hires a carpenter to build their house, and during the construction process, the family has to offer meals to the carpenter. The carpenter likes to eat the liver of chicken and the host knows it, but every day, in the meal, the host only cooks chicken without the liver. So the carpenter thinks the host has done this on purpose, feels disrespected, and gets angry. Then he makes an awful decision, to install the central column in the reversed direction, because

⁵⁷ Norberg-Schulz, *Genius loci: Towards a Phenomenology of Architecture*, p. 42.

the central column is the main supporting column in the house, and has an important meaning for the family. In this way, it symbolically brings bad fortune to the family. After the carpenter has finished his work, he goes back home with a basket of gifts from the host. On the way, in the basket, he finds all the livers well packed. He is shocked and full of regrets, so he turns around and doubles back to the family. He explains to the host that he forgot to write the spell on the column, so he writes a spell and recites: ‘...inverse can gain, inverse is good...’. It would be good either way.⁵⁸ Thus on the central column, some people still write this spell against any unexpected things.

Story of the Dong house

In the record of Fu, according to legend, in ancient time, the Dong ancestors lived in caves or among grass. At that time, there were no china firs, only grass on fields. Dong ancestors were exposed to bad weather without a shelter, while wild animals often attacked them. So the Dong ancestors imagined that if one day they could live in house, it would be wonderful. Their wish was known by a swallow, so it spent forty days flying thousands of Li from south to west, to the Kunlun mountain. It held the seeds of the china fir on the Kunlun mountain in its mouth and flew back to the south, spreading the seeds onto the mountains. After the swallow repeated that many times, the mountains were grown over with saplings of china fir. The swallow was so happy, it flew around the tree everyday and took care of the tree. When the trees became a forest, the swallow flew to the Dong ancestors and brought them to the forest. People followed the swallow to the forest and saw that the forest had grown over the mountains. Thus people felled trees, brought timbers to the residential area and built many houses. Since then, Dong people have lived in houses, and after many generations’ improvement, the Dong house evolved to today’s form. In order to show their appreciation to the swallow, when a new house is finished, people install a plank on the tie-beam of the central column to provide a place for the swallow to build its nest. Although the excretion of swallows fouls the central room, people do not get angry with the swallow. Adults also tell children to protect the swallow, because it is a useful bird and the benefactor which helped Dong people to build their houses.⁵⁹

The story of the drum tower

In the record of Du, long ago there was a man named Yang, brave and good at combat skills. He led the Dong to fight against imperial exploitation and oppression, but later he was captured and imprisoned in Liuzhou city. Luckily, his sister Bamei Yang was brave and smart. She rescued him with a good plan and they went back to the village. Then the government sent an army to catch them. When the army arrived at the village, the brother and sister beat the drum to assemble people, and defeated the army. In order to commemorate the heroic brother and sister, people erected a wooden tower, and

⁵⁸ From my field survey, interview with Yongchao Luo, Kaili, March 2010.

⁵⁹ Fu, *Dong Oral Classic*, p. 191. 傅, *侗族口传经典*, p. 191.

placed the large drum in the tower, and so came about the title ‘drum tower’.⁶⁰

The story I heard from the hand-ink master Wenli Lu was the best story about the drum tower I have heard. It led from the establishment of the village to the development process of the drum tower, with many detailed descriptions and vivid oral expressions, like a short epic story of the drum tower (see Appendix, A.1.4 Fourth Survey, 01/17---01/21, 2014).

These stories more or less reflect the origin, function and significance of buildings, although they cannot be taken as solid history record. They still in a simple and plain way reflect people’s attitude about the construction and use of buildings.

7.1.4 Ritual

Ritual is one of the ways for Dong people to recognise things, buildings and places. As Mary Douglas says, ritual can strength the definition or order of a thing, while ritual can redo or delete the events which seem to defy its classification, assumption and order.⁶¹ This practice process is also a cognitive process, as presented in the examples of ritual construction below.

A sacred stone

As described in Chapter 2, the Dong have the culture of worshipping a big rock. During my field survey, in 2010, in Zhaoxing village, a stone projected from the mountain in front of a wind and rain bridge, and people revered it, taking it as a fengshui stone to maintain good fortune. Villagers burnt incense and paper money around it and placed red cloth on it. Since people continuously provided offerings, the stone has become a sacred stone and a predominant spot in that area.⁶²

But a weird thing happened, in 2014, when I revisited the stone. At first glance, I did not find it, because it was covered by many abandoned wood planks. There was no offering or incense around it, except some other rubbish at its bottom. People stopped worshipping it, they did not think it is a fengshui stone anymore, so it became an ordinary stone again. Ritual has the power of transition from one stage to another stage, it endues meaning and power to a thing or a place. When people believe it, the ritual is performed, a sacred stone rises among the environment. However, when the ritual has stopped, there is an ordinary place, although the stone is still there.⁶³ As Bourdieu says, it is ‘a double game play with truth’.⁶⁴

⁶⁰ Du, ‘The Characteristics of Drum Tower, Cultural Connotation’, 63. 杜, ‘侗寨鼓楼建筑特色及文化内涵’, 63.

⁶¹ Mary Douglas, *Purity and Danger, An Analysis of Concepts of Pollution and Taboo*, pp. 40-41.

⁶² From my field survey, Zhaoxing, March 2010.

⁶³ From my field survey, Zhaoxing, January 2014.

⁶⁴ Bourdieu, *Outline of a Theory of Practice*, p. 133.

Closing a mountain

In my field survey, Lu said that closing a mountain is a constructional ritual to change the space pattern of the mountain, through reform of the geomantic omens thought to influence the fortune of the village. It could be done at the entrance of the mountain, where the village builds a gate or bridge, and the building must be built by the hand-ink master with magic power. The representation of the power is his spell. People believe that after he has applied his spell in this project, the building will have the power to accomplish this mission. After they finish the construction, this mountain becomes a positive influence on their fortune.⁶⁵

Restoring the mountain ridge

In Zhaoxing village, a part of the mountain ridge was broken down by a road built since the 1960s, and people built a village gate at the gap in the mountain (Figure 24). In 2012, people began to discuss recovering the mountain range to restore the fengshui and to give the mountain back its original form. In 2014, I saw that the separated mountain ridges were connected and restored, and a short tunnel had been built for the road to cross through the mountain ridge (Figure 25).



Figure 24.
The village gate at Zhaoxing, 2010. Photograph by Derong Kong.



Figure 25.
The restored mountain ridge at Zhaoxing, 2014. Photograph by Derong Kong.

⁶⁵ From my field survey, interview with Wenli Lu, Jitang village 2013.

● Boundary

As Lakoff says, ritual is one way to read a place, it creates the boundary to define a territory.⁶⁶ Turner says that a boundary maintains a mechanism, a form of organisation, so the structure can be constantly maintained and reinforced. Each becomes what they behold.⁶⁷ After the boundary is set, a place emerges, both in physical form and in mind.

Also as Rapoport says, the threshold and portal enhance the separation of the sacred and profane realms.⁶⁸ Apart from the examples discussed in Chapter 6, there are more rituals and customs in the building and Dong village which reveal the boundary and entrance.

Door

Door is the family boundary. As Norberg-Schulz says, the boundary separates private inside from and unifies it with the outside.⁶⁹ The ritual of the doorway is the choice between benefit and danger. If the host thinks there is a danger, he uses any method to change this situation. If there is a potential of benefit, the host increases that possibility and creates a potential contact. When the door faces a cross roads, the host would erect a 'Tai Mountain stone' in front of the door or hang some symbols on top of the door to avoid any potential danger (Figure 26, 27). The main door should not face the drum tower, because the Qi of the drum tower is too strong, a family cannot resist it, so the host would erect a 'Tai mountain stone' or a powerful statue to face the drum tower (Figure 27,28). This is probably generated from the unequal social power and status. These symbols are similar as Prak says, in the middle ages, the symbolic world of architecture stood between man and the outside world.⁷⁰



Figure 26. 'Tai Mountain stone' and grass-mark on the front door. Photograph by Derong Kong.

⁶⁶ Lakoff and Johnson, *Metaphors we live by*, p. 29.

⁶⁷ Turner, *The Ritual Process: Structure and Anti-structure*, p. 269.

⁶⁸ Rapoport, *House Form and Culture*, p. 40.

⁶⁹ Norberg-Schulz, *Genius loci: Towards a Phenomenology of Architecture*, p. 182.

⁷⁰ Prak, *The Language of Architecture: a Contribution to Architectural Theory*, p. 49.



Figure 27 'Tai Mountain stone' in front of the house faces the drum tower.



Figure 28. A tiger statue placed on the wall of the house faces the drum tower.

All photographs by Derong Kong.

The boundary and entrance of the village

As part of the ritual to worship the fields described in Chapter 2, people walk around the village to confirm its boundary, which enhances the idea of the territory and the identity of the village. For the spiritual boundary, as the place to build a shrine or temple to the field god, in the record of Fu and Yu, people usually choose the head, centre or end of the village, by the entry of a road, or in front of the bridge (Figure 29).⁷¹ The centre always is the most important place in the village, it is a focal spot of a territory. Other places are the entry to the village, and people know that beyond the territory boundary is their village. At the entry, before people go out for work, they need to pray for safety, and after they come back from work, the temple and shrine make sure nothing else enters the village with them. As Fei says, it does not matter whether there is a ghost or not, but it must remove the psychological fear.⁷² In this ritual construction, what they actually build are the spiritual protection and blessing of the core of the territory and the entry on the edge of the village.

⁷¹ Fu and Yu, *Custom of Nine Stockaded Village*, p. 28. 傅和余, *九寨民俗*, p. 28.

⁷² Fei, *From the Soil: The Foundations of Chinese Society*, p. 123. 费, *乡土中国*, p. 123.



Figure 38. A temple of the field god at the entrance of Jitang village. Photograph by Derong Kong.

Village gate

In the Dong language, the village gate is 'dol singl' or 'dol jingl', which means the gate is guarded by a soldier. But nowadays the village gate is a symbolic landmark of the village boundary, it does not have the function of defence or enclosing the village, it only reminds people of the edge of the village (Figure 30). It is a ritual building. As Norberg-Schulz says, the architecture is hence the incarnation of the meeting.⁷³



Figure 30.
The main gate of Tang'an village.
Photograph by Derong Kong.

⁷³ Norberg-Schulz, *Genius loci: Towards a Phenomenology of Architecture*, p. 170.



Figure 31.
The custom of blocking the road.
Photograph by Derong Kong.

Through the custom of blocking the road, a site tells the visitor that behind this gate is my land (Figure 31). When an outside village comes to visit, Dong people have a special custom, where young women use benches, branches, bamboo, etc, to block the road in front of the village gate and sing songs to ask who the visitors are and why they have come here. Then the guests use songs to answer their questions and show good will. After a series of antiphonal singing, young women will open the gate and welcome guests to enter the village (the song can be found in the Appendix 2, A.2.6, Blocking road song).⁷⁴ The boundary in this situation can be seen by both of them.

The above systems work together to unite people under a social schema, while the architecture is the direct system to build their living environment. Further discussion of the construction and cultivation of buildings, the drum tower and village will proceed as follows.

7.2 Construction and Cultivation

As Pallasmaa says, architecture confronts the fundamental existential questions, represents and structures action and power, societal and cultural order, interaction and

⁷⁴ Geary and others, *The Kam People of China*, p. 205.

separation, identity and memory, in its way.⁷⁵ It is a systematic work to gather things together. Rapoport says, the various ways of perceiving the reality, and the importance of different aspects of life are expressed in building and settlements.⁷⁶ So architecture will be constructed in different ways and for different purposes.

Five dragons temple

For instance, in the construction and cultivation of their living environment, Dong people receive the character of the environment and bring its forces into the construction. Thus as Norberg-Schulz says, the building manifests the character of the environment.⁷⁷

From my field survey, I found that, at Jitang village, Liping County, there was a temple called 'five dragons temple'. The temple was built on a small platform in the centre of the site where five mountain bridges meet (Figure 32). In the geomantic omen, people always describe the mountain as a dragon. The mountain has the power of nature, the dragon has the power of myth, and both of them have an immense body. The mountain bridge looks just like the description of the dragon in the legend, and I think this might be why people take the mountain ridge as the dragon, and its tendency as the dragon's direction. A temple built at such site definitely inherited the power from these 'five dragons'. And local people said this temple often answered villagers' prayers or questions, which enhances the idea of this construction.⁷⁸



Figure 32.
The Five dragons temple at Jingtang. Photograph by Derong Kong.

⁷⁵ Pallasmaa, *The Eyes of the Skin: Architecture and the Senses*, p. 71.

⁷⁶ Rapoport, *House Form and Culture*, p. 47.

⁷⁷ Norberg-Schulz, *Genius loci: Towards a Phenomenology of Architecture*, p. 17.

⁷⁸ From my field survey, interview with Wenli Lu, January 2013.

There are other two examples in my field survey. At Jitang village, the drum tower's direction is determined by the tendency of the mountain bridge. The back of the drum tower is set against the mountain bridge, and its front follows the direction of the mountain bridge. People think the drum tower inherited the Qi or power from the mountain, increasing its powerful status (Figure 33).⁷⁹



Figure 33.
The drum tower at Jitang village.
Photograph by Derong Kong.



The double eaves

At Jitang village, some house's middle part of the room is pointed at by the opposite house's eaves. Some householders have an uncomfortable feeling about this situation, and they ask carpenters to build an additional eaves under the room. Then the roof and additional eaves look like an open mouth which could grip the opposite eaves, and this relieves the householder's feeling (Figure 34).⁸⁰

Figure 34.
The double eaves.
Photograph by Derong Kong.

⁷⁹ From my field survey, Wenli Lu, Jitang village, January 2013.

⁸⁰ Ibid.

7.2.1 The drum tower

Before the drum tower was erected, villagers already offered this place a valuable status (Figure 35). The construction is the reconfirmation and concretization of this central position. The drum tower is both a man-made place, and an objectification of people's subjective experience. As Norberg-Schulz says, the public building concretises the shared understanding which makes communal life possible and meaningful.⁸¹ Also as Bloomer says, a centre place embodies a reference to a communal human identity.⁸²



Figure 35.

The drum tower at the centre of the Tang'an village.

Photograph by Derong Kong.

The open chamber

At Zengchong village, a stone made square platform is attached to the drum tower (Figure 36). During my field survey, local villagers said that this is a place for the village elders. Sometimes people gather in the drum tower to discuss a village event, but cannot reach an agreement. At this moment, the village elders collect people's opinions, then go to the attached platform to deliberate. After they have reached a conclusion, they come back into the drum tower to announce the decision, and explain the reason to the villagers.⁸³ There are therefore two centres of power coexisting: one is the drum tower, the other is the open platform. The village elders occupy a place in the further

⁸¹ Norberg-Schulz, *Genius loci: Towards a Phenomenology of Architecture*, p. 183.

⁸² Bloomer and others, *Body, Memory and Architecture*, p. 50.

⁸³ From my field survey, Zengchong village, March 2010.

discussion process of the village affairs, a extension of their power, therefore in a new authorised place.



Figure 36.
The open platform of the drum tower at Zengchong village.
Photograph by Derong Kong.

The unfinished drum tower

The drum tower is regarded as a symbol of a power centre, and also is the centre of a group. During my field survey, I found that, at Zengchong, once upon a time, some villagers thought the drum tower was too far away from their houses, so they wanted to build another one. The village elders were strongly against that plan, because that would threaten to separate the village and clan. Now there is a foundation left at the village called the Yin (non-existent) drum tower (Figure 37).⁸⁴



Figure 37.
The Yin drum tower.
Photograph by Derong Kong

⁸⁴ From my field survey, Zengchong village, March 2010.

The high threshold

During my field survey, in Zhaoxing village, an old villager Mingxian Lu told me that in olden days women were not allowed to enter the drum tower at leisure time, and until now only a few women enter the drum tower.⁸⁵ That reminded me that, at the drum towers I have visited, I saw old women walking around and sitting near the drum tower, but they did not enter while men sat around the fireplace. In Xiaohuang village, several children played in the drum tower including two girls, and one girl's grandmother leaned on the fence of the drum tower looking at her play and smiling. I asked the girl why her grandmother did not come inside to play with her. She said her grandmother feels too shy to enter the drum tower. In the survey, I talked this over with other villagers, and some told me that in some old drum towers, the threshold could be one metre high. Because Dong women wear skirts, striding over such a high threshold is undignified behavior, so their right to enter the drum tower was 'blocked' by that high threshold.⁸⁶

7.2.2 Village

The location of the village

As Rapoport says: 'house, settlement and landscape are products of the same cultural system and worldview', they first need to 'deal with physical nature of the site', then 'consider the symbolic, religious, cultural values of the site and their consequence'.⁸⁷ And this is also what Dong people have done during their construction. So this section will be in two parts. The first discusses the construction of village in the response to physic need, the second discusses the symbolic order and direction in road and villages. Architecture always depends on the elements that exist in the site. Before they start the construction, Dong people need to recognise the potential and characteristics of the environment. Unwin says, the way to deal with these natural elements is determined by people's conception of their relationship with nature, their demands, technique and available resources.⁸⁸

First, water, farmland, mountains, and safety are the factors Dong people need to consider before they choose the site for a village. The need for water forces people live near a river or build a well near their house. The demand for food decides there must be enough fertile land for farming. The site should have a good microclimate and be away from natural disasters, and easy to defend from outside intruders. Some villages are built on a hill or craggy rock to defend against intruders.

Most Dong villages are located in valleys, against mountains, with a river flowing through or around the village (Figure 38-41). The valley provides farmland and a site for houses,

⁸⁵ From my field survey, interview with Mingxian Lu, Zhaoxing, January 2013.

⁸⁶ From my field survey, Xiaohuang village, March-November 2010.

⁸⁷ Rapoport, *House Form and Culture*, pp. 73-74.

⁸⁸ Unwin, *Analysing Architecture*, pp. 44-45.

the mountain provides timber for construction and other resources for living, and the river provides water for living and agriculture. Some villages are located on a small plain near a river. A few villages are sited half way up mountains with abundant water resource, but their formation was late, for example Tang'an was separated from Zhaoxing village when the population grew too large (Figure 42, 43).



Figure 38. Zengchong village in Rongjiang County. Photograph by Derong Kong.



Figure 39. Zhaoxing County in Liping County. Photograph by Derong Kong.

As Norberg-Schulz says, in relation with environment, 'there ought to exist a meaningful correspondence between natural conditions and settlement morphology'.⁸⁹ The arrangement of a Dong village follows the pattern of the natural environment in the way that Norberg-Schulz asserts. The house is generally set along the river, following the contour line of the mountain, like the road (Figure 41, 43). Thus river and contour line of the mountain are the origin of the framework of the Dong village.



Figure 42. Tang'an village. Photograph by Derong Kong.

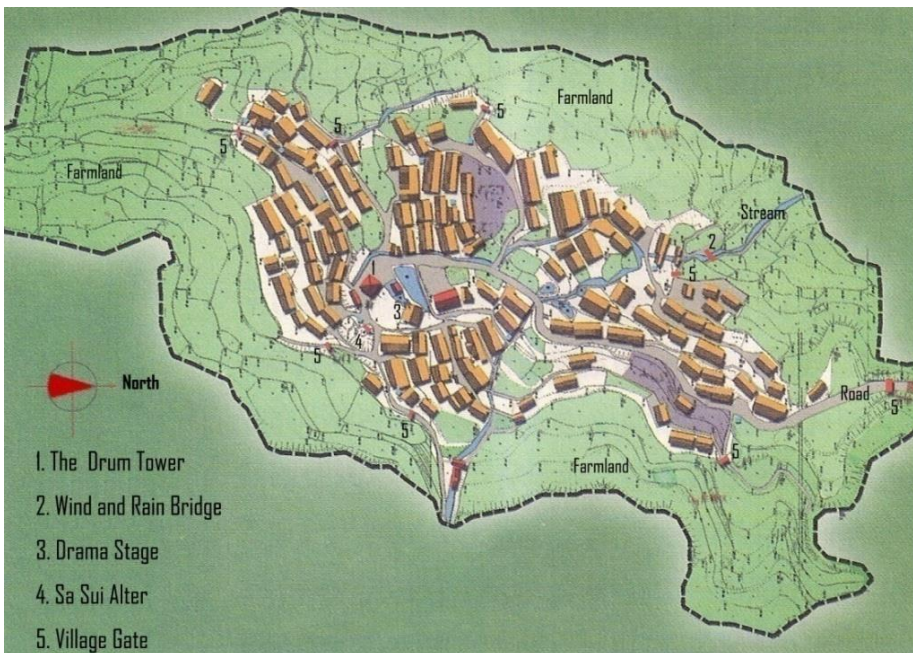


Figure 43. Map of Tang'an village. Extract from Luo, *Folk Dwelling of Guizhou*, p. 270. 罗, *贵州民居*, p. 270.

⁸⁹ Norberg-Schulz, *Genius loci: Towards a Phenomenology of Architecture*, p. 171.

The water channels, well, and ponds in the village

Every Dong village has wells, ponds and water channels. A well is a water resource for life. It must be easily accessible to the families around it. The water facilities are averagely spread about the village. When people choose a place to build these facilities, convenience and accessibility is their primary consideration (Figure 44).

The average distribution of water facilities also has an important function, working as fire fighting facility. Dong people have a strong conception and customs to prevent fire disasters. If somewhere has a potential for fire, a pond or water channel must be built around (Figure 45). Thus fire disasters rarely happen in the villages with good construction of fishponds, wells, and water tunnels.



*Figure 44. Well at Zhaoxing village.
Photograph by Derong Kong.*

Figure 45. The drum tower and pond at Zengchong village. Photograph by Derong Kong.

The balance between limited resources and people

The Dong village is built on the balance between environment and human activity. Dong people know that they have to follow the principles of nature, cycle of the seasons, alternation of day and night. They are forced to accept the natural limitations. After long practice with nature, people know the tolerance and capacity of nature, for instance, they preserve forests, and lay out farmland mixed with forest. They also know the proper way to exploit the land for farming, for instance, they build terraced fields using the slope to grow water paddy, or fell timbers from different forests in turn so that each forest has enough time to recover.

The Dong people have the folk saying that 'one tree can afford one nest of birds, but an extra nest would be starved', 'people can bear children, but the land cannot bear children'. Farmland and food are the crucial factors in consideration. From my field survey, I learned that one mu (a unit of area, one mu equal to 0.0667 hectares) of traditional farmland can produce 300-400 kg of grain twice in one year, which amounts to 500-700 kg rice in total per year, while one person consumes about 182.5 kg rice per year.⁹⁰ Thus people know the bearing capacity of the farmland, and that if the people exceed the number the total farmland can afford, conflict between people would emerge. They then have to move to another place to build a new village in order to develop new land and solve the problem of limited resources.

For instance, according to the research of Kanglong Luo and Chunxia Ma, Tang'an village and Jitang village are migrations from Zhaoxing village, when there were too many people sharing limited resources. In the 1990s, Lanyang village organised 30 families to move to land about 5 km from the old village, where they built a new village.⁹¹ These ideas become the regulation for the Dong people in development of the village.

● Cosmic order of their land

The Dong, as Norberg-Schulz says, have applied their way of life to the building, so their identification is imported into it.⁹² The following examples are about the villagers' thorough fengshui conception in reading and constructing the land.

Road

During my field survey, I learned that the road that enters a village is often built in the east or west, because the sun rises from the east and sets in the west. People entering the village from the east have a prosperous meaning. The river should be curved to preserve the 'treasure source'. People build bridges, pavilions, plant trees, and change the positions of road or river to perfect the geomantic omen. Because water and wind is considered a source of treasure, it can gather Qi like the original power or motive force of a place. The water flows away through the river, and the wind crosses the passes between two mountains, which would take the treasure away, so people often build bridge over the river or a pavilion at a mountain pass to preserve the source of treasure.

⁹⁰ From my field survey, villages in Rongjiang County, March 2010.

⁹¹ Kanglong Luo and Chunxia Ma, 'The Field Survey of Dong Spatial Settlement and Resource Arrangement', *Journal of Huihua University*, 27(2008), 3. 罗康隆和麻春霞, '侗族空间聚落与资源配置的田野调查', *怀化学院学报*, 27(2008), 3.

⁹² Norberg-Schulz, *Genius loci: Towards a Phenomenology of Architecture*, p. 64.

A fishpond is also a way to gather Qi through storing water, while improving the microclimate and as a fire fighting facility.⁹³

In the record of Yang, in Huangtu village, Tongdao County, Hunan Province, since a road comes through the front mountain side of the village, through a gap dug into the mountain, a Fengshui master thought the village was already leaking wind, so the village would not be rich. So the whole village offered money and labour to build a pavilion in the gap to block the air, thus to complement the Fengshui of the village.⁹⁴

The arrangement of the village

Spatial arrangements and orientation are the projection of people's ideal arrangement of the world into the realm of construction. It is a cultural lesson, to let people know the culture, and understand the meaning of the place. According to Norberg-Schulz, man tries to orientate himself in the environment, and the questions of where to dwell and what this place is, are about orientation and identification.⁹⁵ This is a resistance of man's cognition of direction and order. In fengshui, the natural phenomena are derived from the interaction and movement of wood, fire, earth, metal, water. These five elements correspond to east (wood), south (fire), west (metal), north (water), centre (earth). According to the research of Luo and Ma, the Yanglan village was built under Fengshui cosmic order to synchronize with the five elements, as in the following illustration.⁹⁶

East is wood

In Yanglan village, Tongdao County, Hunan Province, the ancestors took the forest at the east side of the village as a forbidden mountain, also as the landscape forest of the village, not letting anyone cut the trees. Villagers believe the forest is the place where the village guardian lives, the symbol of peace. The forest like a green wall encloses the village against outside interference. People build field shrines by the road to the forest, or go to the forest to worship the old trees. Some people build chairs for people to have a rest, or erect signposts along the road as a moral action.

South is fire

In order to suppress the south fire, villagers dug three big pits at the bottom of the south mountain, and buried three big tanks with water inside, meaning that the south fire will cease there. When villagers build a bridge over the river to the south of a village, they emphasise that the body of the bridge must not connect with the south bank. Once the bridge connects with the south bank, the cocks in the village would crow at night, and a

⁹³ From my field survey, Wenli Lu, Jitang, January 2013.

⁹⁴ Yang, *Record of Dong Custom*, pp. 58-59. 杨, 侗族风俗志, pp. 58-59.

⁹⁵ Norberg-Schulz, *Genius loci: Towards a Phenomenology of Architecture*, pp. 8,18.

⁹⁶ Luo and Ma, 'The Field Survey of Dong Spatial Settlement and Resource Arrangement', 2. 罗和麻, '侗族空间聚落与资源配置的田野调查', 2.

fire disaster would happen in the village. The bridge at the south of the head of the village was built in this principle. The bridge was destroyed by a flood in 1986, so in 1987 villagers funded money and built a new concrete bridge at the old site. The elder Huailiang Long obeyed the ancient precept, and did not let the bridge make contact with the south bank, but left a 20 cm gap between the village and the bank. In the villager's mind, the bridge as a passage not only lets people walk through, But also could lead the 'fire' from the south bank to cross over the river to the village.

West is metal

At the west of the village, there are two big mountains, one is Darong mountain and villagers also call it 'sword mountain'. Its form is like a sword, stabbing towards the village from the west and it might bring disaster to the village. In order to overcome this negative tendency, the ancestors built a drum tower at the west head of the village. The drum tower was built in 1787, and is the composite type of the drum tower, integrated with a pavilion and a gate, with the pavilion attached to the back of the drum tower, the gate attached to the front. The gate means the head of dragon faces west, and the eaves of the gate are the open mouth of the dragon. If the 'sword' launched itself towards the village, the 'dragon mouth' would grip the 'sword' with its teeth to ensure the village's safety. Another mountain is a Junshan slope, also called 'tiger mountain'. Villagers think the mountain looks at the village with hostility, so the 'tiger' might come to the village to harm people and domestic animals. So when they built the drum tower, they also built a pair of stone lions to face the 'tiger' and so to protect the village.

North is water

Water has the symbolic meaning of a treasure source, good fortune, clean. In order to lead the water flowing into the village from the north, Yanglan village dug a tunnel, and they also built a big well and many fish ponds connected with the tunnel at the north end of the village. In this way the water continuously flows into the village, and the village has 14 wells and 17 fish ponds averagely distributed about the village and constituting its water system.

Centre is earth

In Yanglan villagers' conception, earth is the basis for everything to grow, also the foundation for social relationships. When the ancestors built the village, they left a flat ground as the public space in the village centre near the drum tower. It is the place for public rituals and customs.⁹⁷ Thus, as Norberg-Schulz says, the cosmic order is concretised by spatial organisation, and formal articulation symbolizes characters.⁹⁸

⁹⁷ Luo and Ma, 'The Field Survey of Dong Spatial Settlement and Resource Arrangement', 2. 罗和麻, '侗族空间聚落与资源配置的田野调查', 2.

⁹⁸ Norberg-Schulz, *Genius loci: Towards a Phenomenology of Architecture*, p. 51.

7.2.3 Construction and cultivation of the way of life

The world has its order and time, like south and north based on the direction of the earth, east and west on the direction of sunrise and sunset. As Norberg-Schulz says, light and seasons connect temporal rhythms; time is the dimension of constancy and change.⁹⁹ But people have their own order, like left and right based on the body itself, and their own time scope in the continuity of time, from birth to death.

Through the construction of place, people relate to the world

Pallasmaa claims that 'architecture is our primary instrument in relating us with space and time, and giving these dimensions a human measure. It domesticates limitless space and endless time to be tolerated, inhabited and understood by humankind'.¹⁰⁰ We relate to the world through the intentional construction to build the environment into our life, locate ourselves in a certain time and place.

Zumthor says, 'every building is built for a specific use in a specific place for a specific society'.¹⁰¹ The hut in the forest offers a shelter for people, the village among the mountains offers people a settlement in the world. We make sense of our surroundings by organising them into places in our own way. Place mediates between us and the world we inhabit. A place accommodates, or offers the possibility of accommodation, to a person, an activity, a mood, a life. As Norberg-Schulz says, the place is the concrete manifestation of man's dwelling, and his identity depends on his belonging to the place.¹⁰²

Place, definition

Unwin says, the composition of architectural elements presents the distinction between different places.¹⁰³ I have visited many Dong villages, and they even use the same style of house, following the same principles to build their villages. Their differences are nonetheless still obvious, due to the landform, the shape of the river, given by nature. and some features are built by people, like the pattern of the village, the street between houses, the entry to the village, the location and surrounding space of the drum tower, and the drum tower itself.

The way of construction and the way of life

As Unwin says, architecture as the identification of place receives contributions from

⁹⁹ Norberg-Schulz, *Genius loci: Towards a Phenomenology of Architecture*, p. 32.

¹⁰⁰ Pallasmaa, *The Eyes of the Skin: Architecture and the Senses*, p. 17.

¹⁰¹ Zumthor, *Thinking Architecture*, p. 26.

¹⁰² Norberg-Schulz, *Genius loci: Towards a Phenomenology of Architecture*, p. 8.

¹⁰³ Unwin, *Analysing Architecture*, p. 39.

many aspects.¹⁰⁴ For Dong people, these include physical conditions such as weather, material, site, etc; technical conditions such as tools, technique, structure, and construction, and social conditions such as the designer's idea, functions, way of life, culture, etc. When villagers are constructing buildings and village, they conduct a dialogue between concrete practice and thinking, and after a long time of accumulated experience, as Sennett says, they establish their habit, and a rhythm between finding and solving problems.¹⁰⁵ Dong people conduct a balance between different conditions, demands and construction. They recognise these factors and build their living environment accordingly. Their idea of architecture and environment, relations between people, building and environment, the way to construct and cultivate life, are all reflected in the character of their architecture, as in the previous discussions.

And their construction is rooted in their social conditions, technical conditions and nature, and they cultivate the land with their ideology. Thus the construction connects the people, society, building and nature. As Pallasmaa says, architecture concretises and structures their being in the world, reflects and materialises ideas and images of ideal life.¹⁰⁶ This living environment is their life pattern as Dong.

7.2.4 The record of experience

All these systems assist people to recognise things, and construct buildings and places. They also record people's experiences. As Bartlett indicates, social organisation offers a persistent framework which influences both the manner and the matter of recall.¹⁰⁷ As discussed earlier, oral culture is an important way to record experience and events. So this part will only discuss the sensory experience, ritual, material memory and construction in the record of experience.

The experience of building, the construction of building and the life in the building form people's cognition of place, it is an overlapping outcome of multiple memories. When these memory fragments collect together, a montage of life emerges.

Sensory memory

Dong people have a constant and close contact with places, and receive deep sensory experiences. As Zumthor says, sensory experience records the detail of the atmosphere of the place. Equally, Pallasmaa claims that 'We remember through our bodies as much as through our nervous system and brain'.¹⁰⁸ Such sensory patterns and rhythms of scenes are stored in body. As Bloomer says, the perception experiences

¹⁰⁴ Unwin, *Analysing Architecture*, p. 15.

¹⁰⁵ *Ibid.*, p. 9.

¹⁰⁶ Pallasmaa, *The Eyes of the Skin: Architecture and the Senses*, p. 71.

¹⁰⁷ Bartlett, *Remembering: A Study in Experimental and Social Psychology*, p. 298.

¹⁰⁸ Pallasmaa, *The Eyes of the Skin: Architecture and the Senses*, p. 45.

are stored as body memory.¹⁰⁹

Ritual

Ritual is the ritualized conception which passes the preferences and taboos to following generations. As Mary Douglas says, 'ritual is to maintain a culture, a particular set of assumptions by which experience is controlled'.¹¹⁰ Dong people are involved in ritual. For instance, during the Spring festival, each Dong village has a ritual to worship the ancestors of the village, and the family has a ritual to worship the ancestors of the family. In the ritual, people hear and see the activity, and walk or dance in a pattern. They sing or recite the story of the ancestors to remind people where they come from, and who they are. All of these behaviours are under a pattern and sequence of experience. As the discussion with my supervisor Prof. Blundell Jones, ritual is a cultural process of enforcement and refreshment of memory.¹¹¹ Also, as Turner says, ritual is a sacred thing; it only keeps the important things for people. It reveals their deepest values and what moves them most, their cherished memory.¹¹²

Material memory

After people recognise a scene, as Zumthor says, the details of atmosphere identify the memory of the place, and revive memory.¹¹³ In Dong society, as Prof. Blundell Jones says, in mnemonics, when there is no writing, the immediate physical reality becomes the main depository of records and meaning, like buildings and other artefacts.¹¹⁴ As Berger and Luckmann say, the thing is available as an objective 'reminder'.¹¹⁵ These material references evoke the sensory experiences in life, like eating in the fireplace room, meeting in the wide veranda, festival in the drum tower, or construction of the building. For instance, as Bloomer says, rituals leave their impression and endow artifacts within the interior of rooms over time, giving us access to previous experience.¹¹⁶ Thus the material references records, reinforces recreates and reminds of the previous experience. Bartlett says, remembering occurs when the setting of a particular group of stimuli is presented as as belonging to the past subject. In recall the reaction to the stimuli can be fitted into the reconstruction of 'schemata' and organised into settings and materials of earlier date.¹¹⁷

Construction

As Ruan says, a figurative experience connects inhabitants with their built world, and

¹⁰⁹ Bloomer and others, *Body, Memory and Architecture*, p. 50.

¹¹⁰ Douglas, *Purity and Danger, An Analysis of Concepts of Pollution and Taboo*, p. 129.

¹¹¹ From a supervising meeting, Prof. Peter Blundell Jones, November 2014.

¹¹² Turner, *The Ritual Process: Structure and Anti-structure*, p. 241.

¹¹³ Zumthor, *Thinking Architecture*, p. 10.

¹¹⁴ From the supervision meeting, Prof. Peter Blundell Jones, November 2014.

¹¹⁵ Berger and Luckmann, *The Social Construction of Reality, a Treatise in the Sociology of Knowledge*, p. 50.

¹¹⁶ Bloomer and others, *Body, Memory and Architecture*, p. 50.

¹¹⁷ Bartlett, *Remembering: A Study in Experimental and Social Psychology*, p. 237.

this experience is objectified as myth and architectonics.¹¹⁸ Architecture in this situation has the function of inheriting and recording experience. It is also a form of material memory or reference.

Pallasmaa says that through construction we recognise and remember who we are, as it enables us to perceive and understand our environment.¹¹⁹ Dong architecture is not a simple construction or composition, as Pallasmaa says, it is a construction to make an elaborate arrangement of elements, a characteristic medium and sensory engagement to present people's thoughts.¹²⁰ So as Rasmussen says, the architecture provides an organisation of elements, recognised by everyone, in their way of living.¹²¹ People's experience relies on its details, which make architecture become a carrier, a catalyst for people's memory, to reveal a life status at that place and time.

7.3 Conclusion

As Bartlett indicates in recognising and in remembering, the construction of psychological material and reactions into an organisation plays a leading part. In this process, meanings result from the arrangement of reaction and material.¹²² In buildings and the living environment, Dong people organise things in a certain pattern with their intentions. They can understand the buildings and environment through their body senses, oral culture, custom, ritual, construction and daily life.

Furthermore, Bartlett deems that every social group is organised and united by some specific psychological tendency or group of tendencies, which are a bias of the group to deal with external circumstances. This bias also constructs the particular persistent features of group culture, technical and religious practices, material art, traditions and institutions.¹²³ Under this tendency, the new material becomes a characteristic complex form under many influences.¹²⁴ In this sense, Bartlett deems social constructiveness is not only a structure, but also a function. The function has to be performed in coordinated activity, while a group is maintained by its activity and more or less permanent structure, and possesses a trend of development.¹²⁵ Just as the culture, carpentry, building and custom systems have been discussed in this thesis, all these social systems accomplish the social construction of Dong society. They are the more or less permanent social structure: the detail, activity and procedure in these systems make the Dong society. Villages and buildings become the outcomes of systematic constructions, while the villagers are raised and educated in all these systems and the process of development.

¹¹⁸ Ruan, *Allegorical Architecture, Living Myth and Architectonics in Southern China*, p. 12.

¹¹⁹ Pallasmaa, *The Eyes of the Skin: Architecture and the Senses*, p. 71.

¹²⁰ *Ibid.*, p. 45.

¹²¹ Rasmussen, *Experiencing Architecture*, p. 136.

¹²² Bartlett, *Remembering: A Study in Experimental and Social Psychology*, pp. 227-229.

¹²³ *Ibid.*, p. 255.

¹²⁴ *Ibid.*, p. 280.

¹²⁵ *Ibid.*, p. 275.

From above discussion, the social constructiveness is not only a reproduction, but also refreshment of Dong society, generation by generation. Dong people practice all these activities to continue and develop their society and themselves. A social group has its tendency in culture or thinking, as well as through social recall and construction of their theme of structure. In dwelling, there is a tendency of choice, the resistance of people's tectonic construction and the idea of inhabitation. As discussed in this thesis, People made (or chose) these systems, they are the creators and user of these systems. In this chapter in particular, oral culture has been understood to provide their agreed culture system used to explain and identify things, while tectonic construction is the familiar method they used to construct their buildings and village. They construct and cultivate their building and life mode in a sympathetic way. All these are inherited from the previous generations and the traditional systems. At the same time, there must be some changes in each generation, yet their sympathy of construction and idea are rooted in the past traditions, as refreshment in the development of society.

Conclusion

As illustrated in Introduction, this thesis aimed to analysis and summarize oral education, building construction and customs in order to set out the concepts and modes of Dong oral architecture. It has concentrated specifically on the carpentry process, its social connections, and its procedural nature, along with the many roles involved. It paid attention to the building customs and rituals, and the implied values driving them, demonstrating them to be fundamental expressions of social meaning by which Dong buildings are understood, judged and validated. Through discussions of the transition stages of life, particularly birth, marriage, and death, it further presented the connection between constructed space and the way it is understood by the Dong. The term 'oral architecture' has been used to stress this kind of shared and participative building production.

This thesis followed the time-line of social construction to describe a coherent and dynamic series of social and architectural events and activities, setting out the development process and methods at different stages of conception and construction. Through analysis of the content and system of oral architecture, its principles and significance have been outlined. The thesis explained the series of social and architectural activities based on the oral mode of interaction, and how they form a unique process and mode of oral education, architectural construction and use of architecture. It also presented the significance and method of the process of social construction and self-construction.

The gaps in current research were identified in Chapter 1 (Literature review): during this study, more detailed materials from field surveys have been collected to supplement the existing knowledge of Dong carpentry, education, custom, buildings, the construction process and use of buildings, aspects of which have been discussed in each chapter and Appendix 1 (Field survey). According to the discussion set out in the literature review, existing knowledge remains fragmented, nor is it synthesized as a systematic whole or analysed together. Moreover, there are few further discussions of the Dong social systems, oral culture and education, carpentry, construction and custom. The content and significance of the Dong building system, and practices of dwelling have not been thoroughly analysed or summarized as a part of the social construction in Dong community. Through the comprehensive description and analysis undertaken in the six

main chapters of this thesis, the oral culture, oral education, Dong carpentry, construction of the Dong house and the drum tower, the use of building, the reading and cultivation of building have been introduced and analysed: in each case, further issues have been added to existing research of Dong architecture. All these systems are employed and united under the development process of social construction. Thus this thesis has discussed the development process, contents and systems of oral architecture, which is summarized below.

Oral architecture

Oral architecture is an important part of people's social generative and inheritance schema. It consists of several social systems, including the oral culture system, education system, carpentry system, construction system, and the custom and ritual system. Associated with these, in the construction and use of the buildings and village, Dong people construct and cultivate a particular life mode. It proceeds both at the rural community level and the individual level, and has following features and significances.

Rural community level

As Rapoport says, 'If provision of shelter is the passive function of the house, then its positive purpose is the creation of an environment best suited to the way of life of a people-in other words, a social unit of space'.¹ These systems serve and belong to the local Dong group. They are carried and implemented by the people within each system, like carpenter, fengshui master, village elder and villagers, etc. All these systems are reflected in the culture, architecture, and life of this group. As Prof. Blundell Jones says, they are the 'development of a craft tradition in response to social need, climate, material available, local ideology about how a house should be, and relations with deities and cosmos. Architecture articulates the social structure, so house relates to family as village to clan'.² As I have established through the main body of the thesis, they also have the following four features:

1. Because of the oral mode, these systems mainly work in various forms of situational contact. The sense transaction between people and building works well, so people can gain a rich and deep experience. In existing research, there are no books that discuss

¹ Rapoport, *House Form and Culture*, p. 46.

² From supervision, Peter Blundell Jones, November 2014.

the perception in Dong buildings from the point of view of phenomenology (which was undertaken extensively in Chapter 7). Furthermore, existing research does not develop further discussion or analysis that allows us to understand the significance and influence of oral culture in the construction of society, and for other systems. In contrast, this thesis started by accepting the central power and significance of oral culture, then made a systemic discussion of oral culture and other systems (see Chapter 1 and 2).

2. This thesis has shown how the Dong social structure, construction system, and custom system need people's participation and collaborative work, as people are the creators and users of the buildings. This focus contrasts with existing research on Dong architecture, where there are few discussions that proceed from the point of view of the people (the exceptions are the books '*Walking into the Drum Tower, Dong South Community Culture Oral History*' and '*Customs of Nine Stockaded Village*').

3. Dong society is a self-sufficient agricultural society; its social systems and carpentry system have a strong character of locality, and receive influence from the people within the systems, like the hand-ink master (personal knowledge) in carpentry system (local collective knowledge) (see Chapter 1 and 2). Furthermore, people rely on the natural environment: their buildings and villages have a close connection to the surrounding environment, yet existing Dong architectural research has not made systematic analysis of each system and the people within it, and still focuses on the form, construction and type of buildings. In other words, existing research does not think of these buildings as a product of their generative system.

4. Within such a small-scale scope of life, observation is easy, participation is more accessible, and the rule, order, or principle are more easily spread and shared, because people are not easily distracted or blocked by other things. As Prof. Blundell Jones says, there is local production of artefacts and clothes, perhaps exchanged by barter, so the relative value of manual work is well understood.³ Compared to existing research, this thesis has given a detailed account of the construction processes and various important customs and rituals that take place in both the Dong house and the drum tower, in order to reveal their methods and discuss their significance to the Dong community (see Chapter 4, 5 and 6).

³ From supervision, Peter Blundell Jones, November 2014.

Thus, the practical relations between people, things, buildings and environment are rather close. Things as material knowledge and phenomena have been presented in front of people in a comprehensive and authentic status, and people themselves are united under the same systems. They have a shared social structure, culture, set of customs, building form, and life pattern, which provides a coherent totality.

Individual level

The existing research on Dong architecture has not thought of the architecture from the point of view of social construction and humanity, except the books '*Allegorical Architecture*' and '*Customs of Nine Stockaded Village*'. So this thesis has provided further analysis and summary of the significance of architecture from the aspect of social construction and humanity, and focused on the architectural activity and people in this process.

At the individual level, to Dong carpenters, a close and intense practice of carpentry makes the building construction and its joints become the very core of Dong architecture. Meanwhile, there are numerous sensory experiences and substantial tacit knowledge. Although this subjective knowledge is not entirely correct, it does present a particular way of making and thinking that bonds carpenter and things: thus a carpenter fully comprehends, and is able to control, the construction.

During this social process, Dong people also achieve self-construction and recognition, and inherit their habitus and essential way of thinking. As Norberg-Schulz says 'man does not obviously only "build" nature, but also builds himself, society and culture.'⁴ Indeed, for the Dong, their identity grows out of the culture, custom, buildings and living activity. These things are also the ingredients of their identity. As shown by many descriptions of 'the soul of the drum tower' in journals and books, their faith is actually vested in this place, that is, they have a deep feeling of belonging to this place. A place has its unique aura, bringing the feeling of intimacy to people. As Norberg-Schulz says, a place pleases us because of the way it been organised in the same way according to a common form of life, a common way of being on the earth.⁵ A person's small world is to inhabit his house. Dong people's life is to inhabit their village. Again as Heidegger

⁴ Norberg-Schulz, *Genius loci: Towards a Phenomenology of Architecture*, p. 168.

⁵ *Ibid.*, p. 64.

says, dwelling is accomplished by the activities of cultivation and construction.⁶ One builds a house like a carpenter, and cultivates a living environment like a dweller.

Further study

As illustrated above, this research added more first-hand materials to the existing research on Dong architecture. One of the important contributions of this thesis is to show how oral architecture provides a view of architecture that is constructed by people and particular systems. This thesis has also shown a way of undertaking research from the point of view of social systems, social construction and humanity to understand and evaluate architecture in life. However, limited by the research materials, human resources and time, this research cannot make further investigations to collect more detailed materials, in order to make further discussion of each system and factor, and their relations, such as the carpentry system in each village or small area; the history of the development and context between these village carpentry systems, buildings and customs; the origin of the drum tower and Dong dwelling, and so on.

This thesis is not driven by simple nostalgia. Things are always changing; current Dong society is also a changing stage in its history. The work undertaken in this thesis could be supplemented by further investigation and analysis of current approaches to design and construction in Dong area, which has a practical significance, as it is entering a new stage of building production, facing the changes of the social systems, production, social organisation, carpentry system, material, technique, cost, people's thinking and needs, etc. These demand more research materials, time, money, and human resources than are available for a single PhD thesis: to take these on would be a big project, which could last for decades, but which would be worth being explored by researchers and architects.

Further research could also be developed from this thesis through comparison with the current design and construction, in order to highlight where there might be some differences, new conditions or absences. The high criticality of needs and factors may be revealed, as would the generative systems that architecture and people are engaged with. These may provide some references for people to think about the current situation and issues, and what is consistent and important for architecture and people, and how

⁶ Heidegger, *Poetry, Language, Thought*, p. 555.

to design it.

Mode of architecture and its conditions

This mode of Dong architecture also has its specific background: it is influenced by many conditions, and when these conditions change, it is also changed. Such changes are reflected in its character. In traditional China, the clan used to play an important role in the rural area, which is the fountain of culture and society in China. This type of community relies on human labour, so the clan production is inseparable. With rapid development, the changing of livelihood, and the separation of production, the function of the clan shrinks. Traditional production needs the mutual help among the clan, yet now, the clan mainly has the function related to family, custom and ritual. Mutual help among the clan is no longer an inseparable relation and work. The social organisation and lifestyle also follow these changes.

For instance, the ritual or customary space is a place to transmit the information, but after this information can be written down, it does not need to happen there. People can read it in a book or see it on TV, or by PC. Thus, the collective space changes into many individual spaces. Among many changes, there are two obvious ones in architecture: 1. alienation between people, construction and building, and 2. the separation of design and construction.

1. For instance, compared to the separation of modern design, the hand-ink master builds a house specifically for a client. The client and his relatives are involved in most parts of the construction process, and have a close relation with the house and clear idea of it. But nowadays, a real estate company can build hundreds of the same houses that everyone can use. Shen says, it is massive and fast produced standardized and unified building but without local quality. It is created by an instant environment mechanism in pursuit of efficiency and profit.⁷ Also, following the special organisation of labour, people do not need to join in the construction. They overlook the whole procedure to meet only the finished building. The relations between people and things are weakened or have been cut off, so they lack the sense of building and also cannot influence the design. Meanwhile, the less sensible appearance also creates a distance between people and building.

⁷ Shen, *Architectural Phenomenology*, p. 57. 沈, *建筑现象学*, p. 57.

2. The builder and designer used to be united in one role as the hand-ink master. A solid practice by hand and bodily involvement in construction was dominant, now it is more practised in drawing and model making (I am not depreciating the value of drawing and model in education and design). As construction is an expensive activity, drawing and model making are an easy way to enable people to understand and predict the design. What I am concerned with is the absence of bodily practice, splitting constructing and thinking, which has proceeded for hundreds of years, until the separation of production divided people into designers (procedure of design) and builders (procedure of construction). Consequently, there will be a gap between design and construction.

Appendix 1

Field survey

Five field surveys (03/05—04/16, 2010; 11/09---12/07, 2010; 01/25/---02/06, 2013; 01/14---01/21, 2014; 05/23---05/26, 2014) and a field visit (09/17---09/18, 2014) were done during my study. In the introduction and at the beginning of the literature review, I have described the purposes and contents of each field survey and methods used during the field surveys. More detailed illustrations are as follows.

A.1.1 First survey

This survey consisted of two parts. One part was the interview with researchers and government officials in the city to learn about relevant information of Dong village and drum tower, and collected documentary materials. Another part was the fieldwork. In the field survey, I interviewed villagers, village elders, carpenters to collect relevant information on buildings, the drum tower, village, custom, and social structure. I also used video, voice, and pictures to record their social activities. I took photos of the buildings, the drum tower and village. Then I used long tape to measure buildings and the drum tower and drawn the sketch plan of them, and written some notes, such as the place, time, structure, construction time, relevant information on my sketch book. These are the contents of the fieldwork. I have done the same in every village I visited. So it is not necessary to repeat these in the following illustration, and it will be written as ‘the same fieldwork’, unless there is something important or different.

Every village has at least one drum tower. There were several steles placed in front of every drum tower, wind and rain bridge, and important buildings. They record the time of construction and builder, village convention and rules. This also will not be repeated, unless it is necessary. During the first survey, I went to 22 Dong villages as follows.

03/05—03/08, 2010

Guiyang, China. I visited the Guizhou Province Library and Guizhou Province Museum to collect documentary materials.

03/09—03/21, 2010

Kaili, Guizhou Province, China. I went to Kaili College to interview some researchers as follows. Prof. Anhui Fu (Dong), he is an expert in Dong oral culture, the author of '*Customs of Nine Stockaded Village*' and '*Dong Oral Classic*'. He explained the content and education process of Dong oral culture, the Dong social structure, and the development of Dong to me, and offered me some suggestions of research. He listed some Dong villages where are worth to visit. He also introduced important Dong culture experts, Yong Zhang and Dingguo Wu to me. Prof. Zhejiang Long, he is an expert on the study of local society and custom. He gave me a list of books on the subjects of Dong culture and custom, and a website where I could buy the books. In the following days, he also described the Dong history to me. Prof. Qichao Luo (Dong), he is an expert on mathematics including Dong mathematics. He had done some studies on Dong mathematics, the use of math and geometry in the construction of the drum tower. He explained his studies to me, and also told me some knowledge of Dong carpentry, like the rule of felling timber and the story of reversed column (see Chapter7). During this time, I collected some books of the Dong culture, history, custom, architecture, and prepared for the field survey.

03/24, 2010

Dali village, Rongjiang County, China. The same fieldwork.

03/25, 2010

Chejiang village, Rongjiang County, China. The same fieldwork.

03/26—03/27, 2010

Rongjiang County, China. Fieldwork: I interviewed local scholar Yong Zhang (Dong), he was the director of the county cultural centre. He has studied the oral culture for more than thirty years. I learned about local villages' development, oral culture, and collected some documentary materials.

03/28—03/30, 2010

Xiaohuang village, Congjiang County, China. Xiaohuang village is famous for its Dong song. Fieldwork: I observed the repair of Xiaohuang drum tower. Vice village head Wenbin Wu (45 years old, junior school education) said, this project was discussed by village elders. After villagers agreed, they shared the material, cost and labour. This

project was led by two master carpenters. One is hand-ink master Fenglin Pan (65 years old). They made four new inclined columns, and installed them into the top structure of the drum tower. Then they removed four small temporary columns which supported the main beams. Thus, the repairing was finished (Figure 1). Then a singing ceremony was held in Gaohuang drum tower, from 7 pm to mid of night.



*Figure 1. The repairing of Xiaohuang drum tower.
Photograph by Derong Kong.*

Wenbin Wu told me that this village is consisted by three Dous, and these people shared the same surname, Pan or Wu. Every Dou has a drum tower. He explained the social structure of the village to me. He said the village elders have their association of elder. The village committee is the official unit. Normally, the village committee manages the affairs in the village, if there is a big event, these two units would work together. Both of them are elected by villagers.

In the visit to the village head Chen (70s years old), he is also a village elder. He told me some knowledge of the construction of the drum tower. He invited me to have a banquet, and there were also three carpenters who worked for him. These three carpenters taught me some carpentry knowledge, etiquette of apprentice, banquet, dinner (see Chapter 3).

03/30, 2010

Gaozheng village, Congjiang County, China. Fieldwork: I interviewed the village elder Renhe Wu (80 years old, middle school education), he is also a song master. He told me that at 20s year old, he became a song master. He used songs to record the events

happened in his village. And at 30s years old, he became a village elder until now. I asked him the meanings of the symbols in the drum tower. He taught me that the grass nailed onto column is praying for harvest, some villages tie a bamboo with red and green paper to the main beam to pray for safety and flourishing of the village. And these symbols should be put by ghost master. I interviewed a fengshui master Yujin Wu (85 years old). He told me, actually when people settle a village, they would build the house first. And the order for a settlement is from upward to downward, left to right, and a centre is reserved for the drum tower. In the interview with Jiumao Wu (74 years old), he said the upper village is 'father' (built in 2005), the lower village is 'mother' (built in 2007), the small village is the 'son' (built in 2004), so the roofs are different (see Chapter 5), and other villagers shared the same opinion.

03/31, 2010

Rongjiang County, China. Fieldwork: I interviewed Yong Zhang again. I discussed my field survey with him. He explained the Kuan in a broader historical context to me. He indicated that the development of Dong has local differences. Then he further illustrated the role of the village elder and song master. He told me the single column drum tower at Sudong village, and suggested me to have a visit of it.

04/01, 2010

Gaochuan, Pinglou village, Congjiang County, China. The same fieldwork.

04/02—04/04, 2010

Zengchong village, Congjiang County, China. Zengchong village has the extant oldest drum tower which was about built in 1672. In front of the drum tower, there were several steles record the historical events, Kuan conventions and statutes. The oldest one was made in 1672, according to the time recorded on the stele. It was collected by the National Museum. I interviewed village party secretary Canwu Shi (Dong, 29 years old). He told me Zengchong village had been built for 600 years old, and consisted of four big families, 80% of villagers' surname is Shi. During the tour of the village, he told me the Yin drum tower, and the open platform attached to the drum tower (see Chapter7). I interviewed the Wangdong town head Jiang Li (Han, 29 years old, university education), he introduced the facilities improvement projects in the village, like the new kitchen, electricity, water supply. I interviewed Bo Shi (Dong, 30 years old), he also told me similar information of the Yin drum tower. Yet, he complemented that after the

discussion of the ghost master and village elders, they decided to forbid the construction. So there may have the issue of fengshui that influenced their decision. I interviewed Zhenlin Shi (Dong, 55 years old). He is a village elder and a member of the village committee. He told me that a gate normally opens towards the east direction to face sunrise. It means good fortune and peace. He said now the village was under the management of planning sector and tourism sector. They planned to move the barn and cattle from residential area, to improve health condition and reduce the possibility of fire disaster. He said there are many water tunnels and ponds in the village, which are convenient for daily life, and work as fire fighting facilities, and also have the function of fengshui.



Figure 2. Sketch and notes of Zengchong drum tower. Drawing by Derong Kong.

04/04—04/05, 2010

Zhaolivillage, Wangdong village, Gaochuan village, Congjiang County, China. The same fieldwork.

04/06, 2010

Congjiang County, China. Fieldwork: I interviewed Degang Wei, he is the director of the County cultural centre. He gave me many materials on the drum tower and its construction process.

04/07, 2010

Xiaohuang village, Congjiang County, China. Fieldwork: I interviewed the hand-ink master Fenglin Pan. He taught me the role and knowledge of the hand-ink master, design process, the use of Zhang pole, the normal size of components. He illustrated

the function and use of tools. I took photos of all the tools (see Chapter3). He told me the carpentry education process. His master is Rongshan Pan. He had worked with him for more than ten years.

I interviewed former village head Xiantai Pan (Dong, 70s years old), he said he organised villagers to rebuild drum tower, wind and rain bridge. When they lacked money, he went to the autonomous prefecture government to ask for help, then the government offered money to support their construction. An elder told me, the village was originally located near Kaili (a city) hundreds years ago, but in the conflict with other people, they were forced to move to today's site to build their village.

I also observed and recorded the construction of a new house.

04/08—04/09, 2010.

Zhaoxing village, Liping County, China. The Zhaoxing village is the biggest Dong village, has five drum towers (see Chapter 5). I interviewed local Dong people, collected relevant information of custom, buildings, the drum tower, village. I also took many photos to record their customs and buildings. In a phone call, Dingguo Wu told me that I could contact hand-ink master Wenli Lu, and gave his mobile phone number to me.

04/10, 2010

Tangan village, Liping County, China. The same fieldwork.

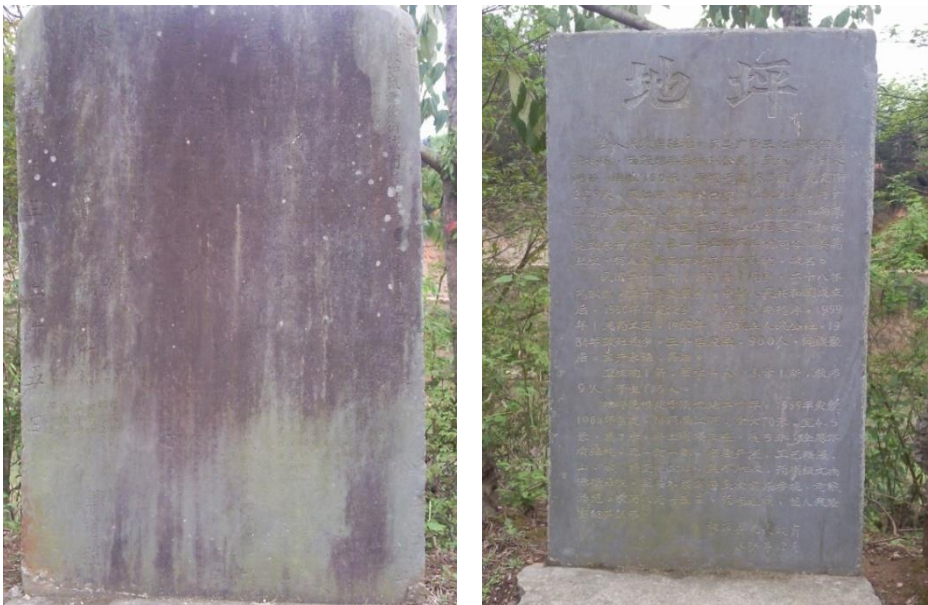


Figure 3. Steles of Diping wind and rain bridge. Photograph by Derong Kong.

04/11, 2010

Long'e village, Diping village, Liping County, China. The Diping village has the second biggest wind and rain bridge. This bridge was first built in 1883, and has been repaired and rebuild for several times. In 2004, part of the bridge was destroyed by a flood, then it was rebuilt by hand-ink master Wenli Lu in 2008. There are several steles in front of the entrance of the bridge. They recorded the time of construction and the hand-ink master (Figure 3).

04/12, 2010

Liping County, China. I called hand-ink master Wenli Lu, he was at Liping County to build a drum tower. I visited him at the work site, he told me some knowledge about the drum tower, and I took some photos of their work.

04/13, 2010

Yandong village, Liping County, China. It consists of three small villages, Shatao, Dengwu, Sizhou village. Each village has a drum tower. According to the steles placed in front of each drum tower, the Shatao drum tower was built in 2008, Dengwu drum tower was built in 1992, Sizhou single column drum tower was built in 2001. At Sizhou village, I joined a wedding ceremony, and the hosts invited me to sit at the main table next to the drum tower. I asked them the information of this custom and recorded this event.

04/14, 2010

Shudong village, Liping County, China. Sudong village has the oldest single column drum tower (see Chapter 3). People said it is first built in 1636 (yet from the books I have read and researchers I visited, or stele I saw. I did not find further material to support this issue), and had been rebuilt for several times. Current drum tower was rebuilt in 1921. This is agreed by most researchers. During the interview with most of the carpenters and hand-ink masters, they all said, this single column drum tower is the origin of the drum tower. I think there would need more research and material to explore this issue.

04/15, 2010

Rongjiang County, China. I visited Yong Zhang again, and discussed materials I had collected during my field survey, like the development of education, the division between

Dou, the oral culture, the Sa Sui shrine, the drum tower.

04/16, 2010

Went back to Kaili, the fieldwork was finished.

A.1.2 Second survey

11/09---12/05, 2010

Xiaohuang village. I visited hand-ink master Wenli Lu at there, while he and his apprentices were making the components of his new house. So I worked and lived with them for nearly one month, and most of the components were finished in this time. And much knowledge and experience of Dong carpentry were taught by Wenli Lu during this time. Like the construction process of Dong house and the drum tower (see Chapter 4 and 5), the sizes, names and functions of components, making of components, drawing ink lines, structure, carpentry education, carpenter code system, roof forms, function and arrangement of a house (see Chapter 3), rituals and customs in construction (see Chapter 4 and 5) (Figure 4).

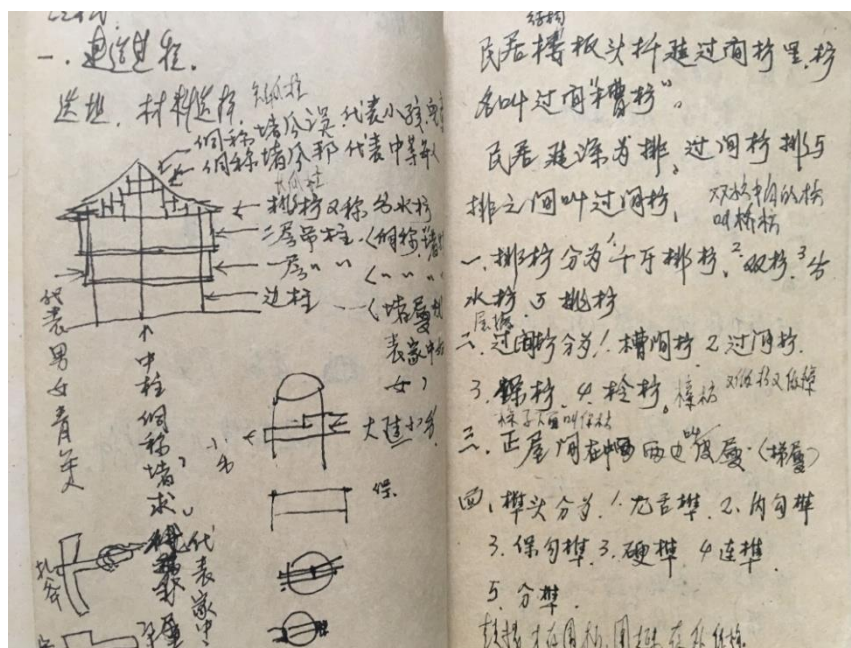


Figure 4. Sketch and notes of Dong carpentry. Drawing by Wenli Lu. Photograph by Derong Kong.

He taught me, the ceremony for the front gate (see Chapter 4). The ceremony should be prepared with the following stuff:

1. One big bowl of cooked sticky rice.
2. One pig's head.
3. Three sticks of incense.
4. One Liang (Chinese unit of weight, 1 Liang= 250 g) of paper money.
5. One bottle of rice wine.
6. Three cups.
7. One bowl of dry rice.
8. One bowl of water.
9. Three pickled fishes.
10. Red envelope of money, the money should be a lucky number: two, four, six, eight, like 24.68 Yuan or 24.8 Yuan, the last number must be eight.
11. One cock.

A table is placed beyond the door, and a pig's head is put on the middle of the table. In front of the pig head is one bowl of rice with three incense sticks sticking it and a red envelope of money is placed on it. Left are the pickled fishes and water, right is the cooked rice.

And the incantation, 'Divine water':

'Mansion of heaven, earth and water, the three great gods who manage these three spaces.

The host of the center star, Arctic Ziwei great god.

Former person imparts and following person teaches, past generations ancient master, Founder master and my master, two masters'.

'Assist heaven and earth, nature, dispels unclear air.

Cave to heaven and earth, so mystic and unable to measure.

Mighty God in eight sides, makes me and nature as one.

Order from the highest god, announces the nine heavens.

General of exorcism, Ganluo Dala, Donggang Taixuan.

Kill and catch the evil spirits, killing thousands of ghosts.

The Spiritual Mantra of Central Mountain, the words from the Original Beginning Great God.

Great power catches Dark lord, protects me from danger.

The Evil and dirty spirit are dispelled, the mystic power of the Tao lasts forever.

This order is to be double-quick implemented.

First sprinkle, gate of heaven; second sprinkle, land of five Li; (Chinese unit of length 1Li=500m)

Third sprinkle, divinity comes; fourth sprinkle, evil spirits are converted;

Fifth sprinkle, dragon gods of house take their positions; sixth sprinkle, salute the host and wish him longevity;

Seventh sprinkle, devils are dispelled; eighth sprinkle, eight sides are quiet.

Ninth sprinkle, bright light shows palace; tenth sprinkle, enters hall of palace,

Glazed tile, impure matter, Qing River and divinity water sprinkle it clean.

If divinity water had not been sprinkled, divinity would not come.

Once divinity water is sprinkled, all divinities are converted,

The clean water falls to the ground, disaster is gone and blessing comes'.

Above are the incantation.

I also met another group of carpenters led by a hand-ink master. They were making a house too. Yet, the codes they used were totally different. I interviewed them and recorded their work.

And during my survey, many villagers invited me to have dinners in their houses. So I have collected much data of their custom, living habit, some songs, grass-mark, the reading and use of a house and the drum tower from them. Two little Dong girls, Peixin Wu (15 years old) and Xiuhua Wu as translators helped me and my wife to make the interview with villagers who do not speak Mandarin. I observed and recorded the construction of a new house, and the host invited me to join the feast for the new house. I interviewed them and collect relevant information.

I measured and recorded the houses of Buzhong Pan (built in 2010), Buge Wu (built in 2009), an old lady (built in 2005, she did not speak mandarin, so I do not know her name), Jiliang Pan (built in the 1950s), Xiuhua Wu (built in 1995).

12/06---12, 07, 2010

Rongjiang County. I interviewed Yong Zhang, he further discussed the procedures, classification and contents of oral culture and education. He also discussed the use of

oral culture in the Dong house and the drum tower. He gave me his book 'Exploration of Dong Art and Literature'.

A.1.3 Third Survey

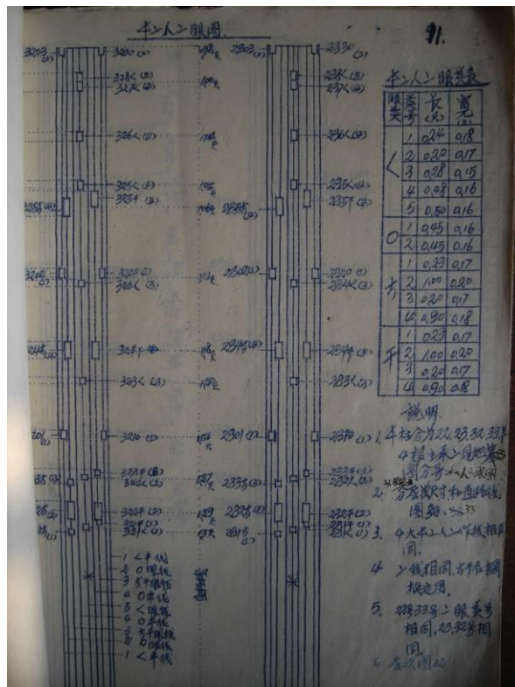
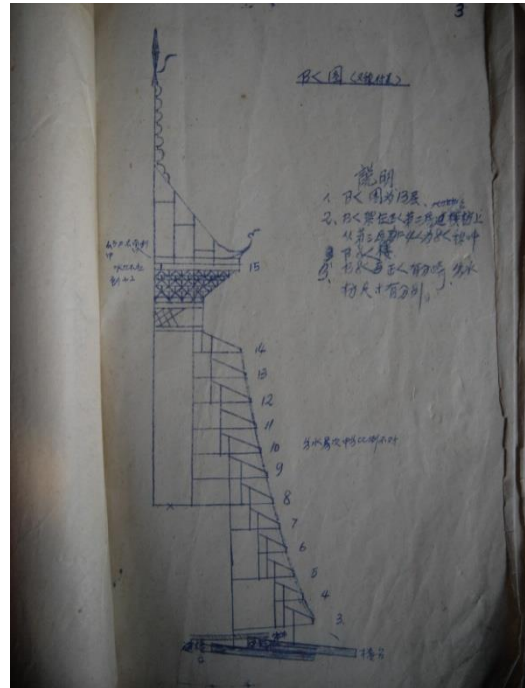


Figure 5. 'The Drawings of the Drum Tower', author hand-ink master Wenli Lu. Photograph by Derong Kong.

01/25--01/28, 2013

Jitang village. I visited hand-ink master Wenli Lu and lived in his house. There were three drum towers. Yet, people demolished the smallest one. Wenli Lu told me that

because of this one was less used and without proper maintenance, it also damaged by a fire by an accident, so people thought it was not necessary to keep it. During this time, Wenli Lu offered me a tour of this village, he described the development of village, we visited the Kuan square at the outside of the village, a temple at the entrance of the village (see Chapter 7). He explained the geomantic conditions of Jitang drum tower (rebuilt by hand-ink master Peifu Lu and him, in 1979), five dragons temple (first built in 1889, first rebuilt in 1919, second rebuilt by him, in 1986, according the steles placed in front of temple and his illustration) to me (see Chapter 7). He also told me more details of the construction process of the Dong house and the drum tower (see Chapter 4 and 5). He showed me a book of hand drawings, 'The Drawings of the Drum Tower', '鼓楼图册'. It was written by him, in 1987, recorded every component of a drum tower, and the structure (Figure 5).

And we have visited many Dong houses, including an old house (built about 200 years ago, told by Wenli Lu), now it was used as a stored room. These houses all shared the same structure and similar appearance. He taught me the implicit meaning of double eaves (see Chapter 7). I asked him some questions I met in my study, then he further explained the details of structure of Dong house to me. He also told me the ritual of 'closing mountain' (see Chapter 7).

01/29---01/31, 2013

Zhaoxing village. Wenli Lu told me the development of this village. And we visited the drum towers rebuilt by him (Lituan drum tower, built in 1982) and hand-ink master Peifu Lu (Xingtuan drum tower, built in 1982). He also told me the construction process.

Then I further investigated this village, and mapped wells, village gates, wind and rain bridges, drama stage, the drum tower, Sa Sui alter, to understand the structure of Dong village. I measured and recorded houses of Minde Lu (built 1960), Huanian Lu (built 1975), Xiang Lu (built 1988). I also measured and recorded part of a long house, the house of Kunxiang Lu (built 1800s, according to his description. He said the rest of the long house is owned by his relatives). This long house was in a poor condition, and it was demolished 2014.

I also joined a wedding ceremony in the drum tower, and met several carpenters and a hand-ink master Youwang Lu. They told me some carpentry knowledge. Yet there were

few new materials.

01/29, 2013

Luoxiang town. I joined the ceremony of a new house. The host is Qinggui Lu (28 years old). I measured and recorded his new house.

02/01---02/02, 2013

Tang'an village. I further investigated and mapped this village, to understand the structure of Dong village. I also visited Yunan Pan's house (built in the 1950s) which is recorded on Lin Cai's book *'Traditional Villages and Architecture of Dong Nationality's Habitation Region'*. I measured and recorded this house, and the sizes were the same, except the family changed part of the arrangement of the wide veranda (changed in 2011), and built a kitchen and a toilet at ground floor (changed in 2009). I also measured two barns (built in 2008).

02/02---02/04, 2013

Zhaoxing village. I measured and recorded houses of Desheng Lu (built in 1977), name missed (built about in the 1910s), part of a long house of Kaisong Lu (probably built in the 1790s).

02/05---02/06, 2013

Luoxiang town. I visited hand-ink master Wenli Lu. I lived in his new house and discussed my field survey with him.

02/12---02/13, 2013

Zhengyuan county. A visit to my relative at Shinanpo village (northern Dong area). I took photos of his house as comparison to southern Dong house.

02/23, 2013

Kaili. I interviewed Yong Zhang, and discussed my field survey with him. He gave me the book *'Exploration of Dong Origin'* written by Min Zhang, which was very helpful to my study.

A.1.4 Fourth Survey

01/14, 2014

Guima village. I have visited this village at March 2010, as the development of tourism, it totally changed. I took photos of its earth shrine. And on the way to Zhaoxing village, I visited a construction site of a long corridor and pavilion, and record their construction. And I interviewed the carpenters and collected some information.

01/15---01/16, 2014

Zhaoxing village. I visited this village and took some photos for my thesis.

01/17, 2014

Diping town. I went with hand-ink master Wenli Lu to visit the Diping wind and rain bridge rebuilt by him. He told me the construction process of the bridge and some carpentry knowledge (see Chapter3).

01/17---01/21, 2014

Jitang village. I visited Wenli Lu and lived in his house. I asked him some questions that I have during my study, and checked the material I collected from field surveys and literatures. I learned more carpentry knowledge to complement my material, like the choosing and use of timber, the sizes of gate, his own education process. He also told me a story of the drum tower.

Story of the drum tower

Long ago, a Dong ancestor found a small plain in front of mountains, and there was a big old china fir stranded in the middle of the small plain. The landscape was beautiful with plenty of land, so the Dong ancestor decided to settle the village there. The small plain looked like a big pond, and the big old china fir was located in the middle of the pond. The Dong ancestor called it 'china fir plain'. That china fir was so high with flourishing branches and leaves, that everyone who walked by it had to raise their head to look. People liked it and worshipped it, calling it 'treasured china fir'. Dong people kept that china fir, and used it as a landscape place for rest, chatting, assembling, story telling, and entertainment. People were forbidden to damage it, even by one leaf. Then people started to built their living sheds around the big china fir, so the china fir stood

between sky and earth and covered the whole village. At the top of it there were a honeycomb and a bird's nest on the tree. There were two mountain bridges in front of the village, extended to the river at the front of the small plain. These two mountains were called 'two dragon mountain', and raised their 'heads' to look at the treasured place(the big china fir) of the 'pond' (the small plain), and people called this landscape 'two dragons compete for treasure'.

After long period of development, Dong people's life was abundant. There was a couple, a young girl and a young man. The girl was beautiful, clever and good at singing, called Neng Er, 蝉子. The man was brave, positive and diligent, called Lang Zui, 艺术人. One night in the middle of August, the weather was good, the moon and stars were bright. As Lang Zui passed by the outside of his village, he saw a tall young man assembling a group of young men and talking to them. So he stopped and sneaked near them, and so heard that they were planning to capture Neng Er and loot her village's property. After he heard all of the plan, he rushed back to the village, ran into every lane and yelled: 'elders, young men, everyone, immediately go to the china fir for a village meeting. After a while, everyone assembled at the china fir, Lang Zui told villagers what he had heard, and people were worried and felt nervous. At that moment, the clever girl, Neng Er proposed a plan: 'young men and women should set an ambush in the dark places of the lanes around the china fir, prepared with swords, bars, stones; they should set a fire near the china fire and lead the bandits enter the village. Lang Zui should stand sentry at the entrance of the village, pretending nothing has happened and that he is just resting there; Neng Er brings a bamboo tube and hides on the china fir, and when the bandits arrive at the fire, she would beat the bamboo tube to signal the hidden people to attack.' People thought this would be a good plan and did as Neng Er planned. On the night of the second day, the bandits came to the village led by the tall young man. At the entrance of the village, the bandits saw Lang Zui was sleeping, and the village was silent. They were elated, and thought they would succeed. They captured and woke up Lang Zui, forcing him to lead the way. Lang Zui pretended he did not know what had happened and led them to the fire near the china fir. When Lang Zui and the bandits arrived at the fire, Neng Er also saw them. Lang Zui coughed loudly while Neng Er beat the bamboo tube. The people hidden in the lane heard the sounds, and rushed out with weapons toward the bandits, and Lang Zui also turned to fight them. The bandits fell into a flutter and found themselves surrounded by villagers, so they were defeated and ran away.

After this victory, people thought Neng Er was so smart and good at singing, and she sang the bamboo tube song on the china fir to praise the victory, so people started to call her 'China fir cicada girl' (Dong people use the example of the cicada to describe good singing). In order to prevent the bandits going back to attack the village, China fir cicada girl and Lang Zui discussed with the villagers how to reinforce the organization of the defence of the village. They thought the big china fir could not keep the rain off or maintain warmth in the winter, and it was not suitable for assembling. They thought they could fell the big china fir and build a shed to help people to protect the village, called 'Ka shed', 卡棚, means the shed to protect the village. And they could set a fireplace in the shed, so the shed was also called 'Tang Ka' 堂卡, which means the shed to protect the village with a fire to keep warm. People agreed with this suggestion, so they felled the big china fir and built the shed. But as soon as the big china fir was cut down, the landscape of the village was disrupted, and people were no longer as united as before, conflict between villagers often happened, the life standard declined, and the village became weak to internal and external action.

The origin of the drum tower

One night, Lang Zui was sleeping, and in his dream he saw an old man, who talked to him in a serious tone: 'The land your village is settled on a big fish pond, the big china fir is the fish nest in the pond, where the fishes gather. Now you have cut down the big china fir, but the shed cannot replace the big china fir, cannot protect the village, this is harmful to your village. The bees and birds who used to live on the big china fir all flew away. You need to recover the old china fir, so build a tall tower to take the place of the big china fir. The bees, birds, bats on the tree are not to be harmed. Building an indispensable central tall tower for the village will be good for you, for people will be united with faith, life could be good. This tower is sun and moon, sky and earth, it is as old as the sky and earth, born with the sun and moon. You are the person with ability in Dong village.' After saying this, suddenly the old man disappeared, and Lang Zui woke up. He thought this dream was wise and related to the village, so next day he described his dream to the elders and people. They remembered the old life of the village with the big old china fire and compared it with current life with the shed, and they thought the dream made sense. So people decided to demolish the shed and build a tall old tower in the form the big old china fir at its original place. People were full of passion, worked together, offered labour, material and money to the project. They demolished the shed,

chose a big china fir and erected it at the place of the original big china fir. They used the big china fir as the central column surrounded with and supported by short columns. They used rattan to tie wood sticks and projected the sticks outward to form the eaves, then people covered the eaves with bark of china fir. Thus the tower had the appearance of the original big china fir, and offered people a place to shelter from the rain, to protect the village, to assemble, to rest. This tower was called 'single column tower', 独柱楼, and because this tower was built in an ancient time, it was also called 'ancient tower', 古楼.

After the ancient tower was built, people loved and cherished it. Then they elected a village head, village elders, and a messenger to manage events at the ancient tower and for the village. The messenger was responsible for maintaining the ancient tower, and ensured there was always water to drink and wood for the fireplace, and he delivered the message. The prestige of the ancient tower increased and the village organization became solid. But when there was an emergency, the messenger could not deliver the information to people, to a different ancient tower or village quickly. One day, the messenger went into the mountains to collect wood for the fireplace, and he found a hollow china fir. He thought maybe he could use this hollow trunk to make a drum like the bamboo tube. So he cut a section of the trunk, in the form of the bamboo tube, and used water buffalo's skin to seal the two ends. After many experiments, he made a long big drum which could deliver a loud and clear sound a long distance and could be heard by a nearby village. Thus, the village head was so happy that he ordered that in every ancient tower should be placed a drum like this to deliver a warning when an emergency occurred. The village head and village elder made a set of tunes on the drum to deliver different messages. 1. If there was an emergency like an invasion, they should beat four times on the drum. 2. If there was a disaster, they should beat three times on the drum. 3. If the other ancient tower heard the sound, they should beat their drum twice as a response. 4. When the village had a meeting with another village, they should beat the drum in the rhythm of thump---thump thump. 5. When the village was organizing an entertainment, the sound of the drum was thump thump---thump. 6. For internal affairs of the ancient tower, the sound was in the rhythm of thump---thump thump---thump. When people heard the sounds of the drum, they would know what had happened, for instance, if there was a invasion, people would bring weapons and quickly assemble at the ancient tower to fight the enemy. If there was a fire, people would bring buckets and run to help. If there was a meeting, people would gather at the

ancient tower. If there was a recreational activity, people would get well dressed to join in. Since then, people started to change the title of the ancient tower to the drum tower, 鼓楼. With social development and improvement of the technique, the drum tower became bigger, taller and better, and the central single column was replaced by the multiple columns to today's drum tower.

02/15, 2014

Kaili. I visited Yong Zhang and collected some material of custom and culture from him to complement my material, like the gods in house, roles of people in village, some translations between Han and Dong. And I discussed my study and field survey with him.

A.1.5 Fifth survey

I revisited some important villages with Prof. Peter Blundell Jones, and observed the rapid changes during this four years of research.

05/23, 2014, at Zengchong village.

05/23, 2014, at Yingtan village

05/24, 2014, at Biasha village

05/24, 2014, at Xiaohuang village

05/24---05/25, 2014, at Zhaoxing village

05/25, 2014, at Tangan village

05/25, 2014, at Diping town

05/25, 2014, at Liping County

05/26, 2014, at Sudong village

05/26, 2014, at Dimen village

A.1.6 A field visit

09/17---09/18, 2014

A field visit to the Singleton open air museum was done to learn the British traditional carpentry and buildings. I joint part of a course of British traditional carpentry. I observed and record how they make tie-beam, column and joints. Joe Thompson (49 years old)

taught me much knowledge of the British traditional carpentry. He has 30 years carpentry experiences.

Appendix 2

Supplementary data

These materials in Appendix 2 provide supplementary data for each chapter, in case readers want to pursue further reading, or to understand the broader context and content of books and cases drawn on in this thesis.

A.2.1 Supplementary data for Chapter 1

- Annotated bibliography

This is an annotated bibliography with a list of citations to books collected in this thesis. Each citation is followed by a brief note to describe and evaluate the book, in order to inform readers of content, relevance, reliability and quality of the book, relevant details concerning its author(s), and its contribution to this thesis. This might be helpful for other researchers who would be interesting in those particular fields.

A.2.1.1 Oral knowledge

'*Dong Folk Literature*' records lots of different Dong oral knowledge, and carried out some analysis.¹ It offers a brief understanding of the Dong oral culture. Author Anhui Fu is Dong and a professor at Kaili College.

'*The Research of Dong Language*' discusses the origin of Dong language, pronunciation, meaning, language structure, and briefly states the newly invented Dong written language's use and function.² It works as a dictionary in the translation between Dong and Han language to reduce the misunderstandings and errors. Author Yaohong Long is Dong and a professor at Guizhou Minzu University.

'*Dong Culture Research*' covers many aspects, starting from the origin of the Dong people and culture, to Dong social structure, culture, custom, agriculture, social life,

¹ Anhui Fu, *Dong Folk Literature*, (Huhehaote: Distant Place Press, 2009). 傅安辉, *侗族民间文学*, (呼和浩特: 远方出版社, 2009)

² Yaohong Long, *The Research of Dong Language*, (Guiyang: Guizhou Nationalities Publishing, 2003). 龙耀宏, *侗语研究*, (贵阳: 贵州民族出版社, 2003)

buildings, village, food, cloth, up until the contemporary situation.³ It provides relatively detailed material with clear citations, and states some opinions of Dong culture, but less prominently. Author Zuyi Feng is a researcher of Guizhou Academy of Social Science.

'*The Notes of Dong Culture Research*' focuses on Dong culture, social structure and custom. Author Jianeng Shi is an important Dong culture researcher.⁴ This book is the collection of his research papers which completed in the 1980s and 1990s. It provides detailed cases and knowledge with clear citations, and proceeds deeply into a discussion of the relationship between social culture, structure and customs, as well as their influence. It has a reference value in this thesis.

The book '*The Research of South Dong Traditional Culture Feature*' has made comprehensive, detailed description and analysis of the southern Dong living environment, culture, social structure, mode of thinking, the drum tower and architectural culture.⁵ Author Xiangjun Liao presents proposition and argument, while it provides many materials. In the conclusion, the author summarises harmony as the quality and feature of southern Dong culture. She is a deputy professor at Hunan University of Science and Technology.

The books '*Dong Ancient Song Volume One*' and '*Dong Ancient Song Volume Two*', are the Dong ancient songs collected by local Dong scholars under a long-term work started from the beginning of 1980s among the Dong villages.⁶ These ancient songs are well recorded, dated and referenced. The contents record Dong people's life, big events, important customs and ritual. But the origin and the exact age of the songs are impossible to find out, and only suggested by side evidence from local historical records and other literature.

³ Zuyi Feng and others, *Dong Culture Research*, (Guiyang: Guizhou People's Press, 1999). 冯祖贻及其他, *侗族文化研究*, (贵阳: 贵州人民出版社, 1999)

⁴ Jianeng Shi, *The Notes of Dong Culture Research*, (Shenzhen: Huaxia Culture Press, 2000). 石佳能, *侗族文化研究笔记*, (深圳: 华夏文化出版社, 2000)

⁵ Xiangjun Liao, *The Research of South Dong Traditional Culture Feature*, (Beijing: The Ethnic Publishing House, 2007). 廖君湘, *南部侗族传统文化特点研究*, (北京: 民族出版社, 2007).

⁶ Min Zhang and others, ed., *Dong Ancient Song Volume I*, (Guiyang: Guizhou Nationalities Publishing, 2012). 张民和其他, 编译., *侗族古歌上卷*, (贵阳: 贵州民族出版社, 2012)
Min Zhang and others, ed., *Dong Ancient Song Volume II*, (Guiyang: Guizhou Nationalities Publishing, 2012). 张民和其他, 编译., *侗族古歌下卷*, (贵阳: 贵州民族出版社, 2012)

In Anhui Fu book '*Dong Oral Classic*', lots of oral knowledge from different categories are recorded and clearly cited.⁷ He is also the author of the book '*Customs of Nine Stockaded Village*'.

The book '*Exploration of Dong Art and Literature*' is a collection of author Yong Zhang's many years' research papers.⁸ He was the director of Rongjiang county Cultural Centre. This book comprehensively and systemically discusses and describes the Dong oral culture from its contents, transmission method, the application in life, significance, current situation and development possibility. Most of the research outcomes are from his field works in more than thirty years in 1970s-2010s. It is a valuable reference book on the subject of Dong oral culture.

A.2.1.2 History

'*Dong Brief History*' is a widely cited historic account.⁹ It was written in the 1980s by researchers at the central university, local universities, and cultural institutions. The writing group studied historic materials, such as local history records, national history records, and archaeological finds. So it is relatively reliable. Yet, because of lack of enough historical material, there are some uncertainties about historical events.

The book '*Exploration of Dong Origin*' written by Min Zhang is about the origin of Dong culture and customs, and is comprehensive, detailed and reliable.¹⁰ It is a collection of his research papers over many years. Most of the papers were finished in 1980s-1990s. The writing is rigorous, with abundant references from his field surveys and local history records. The argument is full and based on reason, the citation is clear.

Author Min Zhang was born in 1916 and grew up in the Dong area, then accepted higher education. He is familiar with the Dong culture, customs and society, and has witnessed many changes in the Dong area. As the main resource of the Dong history

⁷ Anhui Fu, *Dong Oral Classic*, (Beijing: The Ethnic Publishing House, 2012). 傅安辉, *侗族口传经典*, (北京: 民族出版社, 2012)

⁸ Yong Zhang, *Exploration of Dong Art and Literature*, (Guiyang: Guizhou Nationalities Publishing, 2010). 张勇, *侗族艺苑探寻*, (贵阳: 贵州民族出版社, 2010)

⁹ Editing group for Dong brief history, ed., *Dong Brief History*, (Guiyang: Guizhou Nationalities Publishing, 1985). 《侗族简史》编写组, 编写, *侗族简史*, (贵阳: 贵州民族出版社, 1985)

¹⁰ Min Zhang, *Exploration of Dong Origin*, (Beijing: Chinese Drama publishing house, 2012). 张民, *侗族探源*, (北京: 中国戏曲出版社, 2012)

material in this thesis, this book is about the best among other contemporary books on this subject.

'*Dong History, Culture and Custom*' is a collection of research papers from local scholars in the 1980s.¹¹ It describes and discusses Dong history, festival, language, folk art and architecture. The contents are with clear citation, and have certain reference value.

'*New Exploration of Yue Descendant Relique*' discusses Dong history, culture and customs.¹² Author Shengxian Wang was a researcher at Qiandongnan Academy of Ethnic Culture. The references and materials used are full and detailed with clear citation. He proceeds with a relatively deep discussion and raises some arguments, although some issues are still under debate. This book still could be used as a reference book in history to compare with other resources.

Author Caigui Huang of 'The Anthology on Guizhou Ethnic Group Culture' is a local scholar who worked at Guizhou Ethnic Culture Research Institution on the subject of ethnic group survey and research.¹³ This book collects his research papers which were written during his thirty year research. The references and material used in this book are full and exact, and clearly cited. From the aspects of history, culture, customs and architecture, he makes a detailed record and deep analysis. His viewpoints have considerable value. He also made some comparison of the culture and architecture between Dong and Japanese. It is a valuable reference book for this thesis.

'*Guizhou Ancient Education History*' provides a comprehensive, exact education development history of Guizhou Province, with detailed description of the educational methods, content and development stages in history of different ethnic groups including the Dong.¹⁴ Author Yuqiong Zhang quotes lots of historical material, and makes some

¹¹ Tinghua Luo and Shengxian Wang, ed., *Dong History Culture Custom*, (Guiyang: Guizhou People Press, 1989). 罗廷华和王胜先,编,《侗族历史文化习俗》, (贵阳: 贵州人民出版社, 1989)

¹² Shengxian Wang, *New Exploration of Yue Descent Relique*, (Guiyang: Guizhou People's Press, 1990). 王胜先, *越裔遗俗新探*, (贵阳:贵州人民出版社,1990)

¹³ Caigui Huang, *The Anthology on Guizhou Ethnic Group Culture*, (Guiyang: Guizhou People's Press, 2009). 黄才贵, 贵州民族文化论丛, (贵阳:贵州人民出版社,2009)

¹⁴ Yuqiong Zhang, *Guizhou Ancient Education History*, (Guiyang: Guizhou Education Press, 2003). 张羽琼, *贵州古代教育史*,(贵阳:贵州教育出版社,2003)

discussion about different systems of education. She is a professor at Guizhou Normal University.

'*Walking into the Drum Tower, Dong South Community Culture Oral History*' is a full and interesting book.¹⁵ It records the conversations, stories and observations during the field survey of the author, in a mixed field report and diary. It presents Dong people's life and history in a vivid and lively way, and provides many detailed and interesting materials enriching the content and idea of the thesis. The oral content is easy to understand, along with the experience and situation of the interviewee. She used to be a lecturer at Guizhou Normal University, now she is the deputy chairwoman of Chinese Folk Art and Literature Association.

The book '*History of Ancient Chinese Architecture*' is a cooperative work of many scholars and led by Shichen Liang and Dunzhen Liu since the 1950s. It was finished at 1965 by Dunzheng Liu, and was the sixth draft of this book, first published in 1980. He was an academican of Chinese Academy of Sciences. It systematically illustrates and discusses the development and accomplishment of Chinese ancient architecture at different historic stages. This book includes much solid documentation, archaeological records and discovery (painting, sculpture, ancient building components, ancient existed buildings). There are many drawings and pictures in this book to illustrate the buildings. It is a very important book of Chinese architecture history, and is commonly adopted by universities as teaching material and reference.¹⁶

In the book '*History of Chinese Furniture—Sitting Furniture*', author Yong Cui systematically illustrates and discusses the development of Chinese chairs. He has used much solid documentation, archaeological discovery and records in this book. There are also some drawings and pictures of the ancient furniture make this book more readable. It provides some references to this study, like the ancient living habit and the importation of the chair.¹⁷

¹⁵ Weiren Yu, *Walking into the drum tower, Dong South community culture oral history*, (Guiyang: Guizhou People's Press, 2001). 余未人, *走进鼓楼侗族南部社区文化口述史*, (贵阳, 贵州人民出版社, 2001)

¹⁶ Dunzhen Liu, *History of Ancient Chinese Architecture*, Second edition, (Beijing: China Architecture & Building Press, 2003), p. 1. 刘敦楨, *中国古代建筑史*, 第二版, (北京: 中国建筑工业出版社, 2003), p. 1.

¹⁷ Cui, Yong, *History of Chinese Furniture—Sitting Furniture*, New edition, (Taipei: Ming Wen Book Co. Ltd., 1994), pp. 93-98. 崔詠, *中国家具史--坐具篇*, 增订新版, (台北: 明文书局股份有限公司, 1994), pp. 93-98.

A.2.1.3 Social structure and customs

Social structure

The book '*The Kingdom without King*' is important for the study of Dong social structure.¹⁸ Authors Minwen Deng and Hao Wu are Dong people who grew up in the Dong area. They are Dong and professors at Minzu University of China. They have done more than thirty years research and field surveys on the Dong. This book systematically introduces the ancient Dong social organisation of the Kuan, its structure, operational method, factors of Kuan culture, the legend of Kuan, historical relics of Kuan, the changes of Kuan in its history, the remaining influence of Kuan on current life, and case studies. Its content is detailed and vivid with clear citation, accompanied with meaningful discussion and analysis. It is helpful to understand the Dong social structure.

'Guizhou Six Hills and Six rivers, Selected Data of National Survey' is a collection of many years of field survey achievements by local Dong scholars and researchers, most of whom were born and raised in the Dong area.¹⁹ Most of these survey materials were finished in the 1980s and a few were done in the 1990s. The researchers went to different villages, and proceeded to make thorough and intensive investigations. They recorded lots of explicit and detailed field survey material about social structure, customs, production and building construction. Those materials are clearly dated and indicated. The contents are reliable. It is a considerably important reference book, and many of the cases of customs in this thesis are cited from this book.

Folk custom

The book '*The Kam People of China*' is a collaboration of western scholars and Chinese scholars and written in English.²⁰ It introduces the background of the Dong people and their life circumstances, and systematically describes the Dong history, social structure, folk customs, culture, religion, production, architecture, oral knowledge, food and clothing.

¹⁸ Minwen Deng and Hao Wu, *The Kingdom without King, Dong Kuan Research*, (Beijing: China Social Science Press, 1995). 邓敏文和吴浩, *没有国王的王国, 侗款研究*, (北京: 中国社会科学出版社, 1995)

¹⁹ *Guizhou Six Hills and Six rivers, Selected Data of National Survey*, ed. by Rong Wu, Yongrong Pan, and Xu Yang, Volume of Dong (Guiyang: Guizhou People press, 2008). *贵州六山六水民族调查资料选编*, 吴嵘, 潘永荣, 杨旭, 编, 侗族卷(贵阳: 贵州人民出版社, 2008)

²⁰ D. Norman Geary and others, *The Kam People of China*, (London: Routledge, 2003)

'*Record of Dong Custom*' is a book edited by Zhuhui Yang based on previous studies describing the Dong social structure, customs and life.²¹ It contains much material, and offer readers a comprehensive and brief understand of Dong social customs. She is a professor at the Minzu University of China.

The book '*Poetic Life, the Outline of Dong Ecology Culture*' describes and analyses the Dong oral culture, features of thought, and life style. It also proceeds to a comparison with surrounding ethnic groups.²² However, the analysis does not bring deep propositions. Its argument, content and analyses are similar to other books in this subject area.

'*Customs of Nine Stockaded Village*' records the social structure, culture, customs, architecture, the inheritor and practitioner, and the contemporary development situation.²³ Author Anhui Fu and Dazhong Yu have done detailed surveys and research, and most of the material is first hand from their field surveys. They are Dong and professors at Kaili College. This is a valuable reference book. It is well organised with full and exact content, the citation is clear, the analysis and proposition are deep and prominent. Authors analyse the content, procedure and reason for the social structure, production, folk custom and building construction.

In the book '*China Dong People Customs and Paddy Culture*', author Fengzhi Liu explores and discusses the proposition of the Dong paddy culture from the aspects of Dong culture, productive custom, festival custom, cloth, architecture and craft, and its relation to their customs in general.²⁴ There is much useful evidence in this book, yet the theme has not been strong presented, and the analysis does not provide a deep view.

²¹ Zhuhui Yang, *Record of Dong Custom*, (Beijing: The central University of Nationalities Press, 1999). 杨筑慧, *侗族风俗志*, (北京: 中央民族大学出版社, 1999)

²² Huizeng Zhu and Zezhong Zhang, *Poetic life, the Outline of Dong Ecology Culture*, (Beijing: The Ethnic Publishing House, 2005). 朱慧珍和张泽忠等著, *诗意的生存侗族生态文化审美论纲*, (北京: 民族出版社, 2005)

²³ Anhui Fu and Dazhong Yu, *Custom of Nine Stockaded Village*. (Guiyang, Guizhou People's Press, 1997). 傅安辉和余达忠, *九寨民俗*, (贵阳, 贵州人民出版社, 1997)

²⁴ Fengzhi Liu, *China Dong People Custom and Paddy Culture*, (Beijing: People People's Press, 1999). 刘, 芝风, *中国侗族民俗与稻作文化*, (北京: 人民出版社, 1999)

'*From the Soil: The Foundations of Chinese Society*' is an important book on the subject of Chinese society and humanity research.²⁵ It discusses the foundation of the Chinese social system--village, the reasons and principle of this operating system, and how it works. Xiaotong Fei is one of the founders of Chinese sociology.

A.2.1.4 Architecture

Chinese and Dong architecture

The book '*Treasures of Ethnic and Folk Arts: The Drum Tower. The Wind and Rain Bridge*' briefly introduces the Dong drum tower and wind and rain bridge.²⁶ The book '*Treasures of Ethnic and Folk Arts: Dong Hanging Column Building*' briefly introduces the Dong folk dwelling and barn.²⁷ These two books offer a general illustration of Dong buildings.

'*Cathay's Idea-Design Theory of Chinese Classical Architecture*' is an important book to understand Chinese classical architecture.²⁸ It is a famous book among architecture departments in China. It deeply, systemically and comprehensively describes and discusses Chinese traditional buildings from different periods, material, technique, components, joints, structure, construction and decoration. The content is full and exact, accompanied with detailed materials and clear citation. It is a valuable reference book to understand the design of Chinese traditional architecture. Also it provides comparison reference to Dong architecture as a branch of Chinese architecture.

'*Folk Dwelling of Guizhou*' is a comprehensive and detailed architecture reference book.²⁹ It provides much architectural data from the aspects of material, carpentry technique, tools, structure, construction, types and forms of buildings, and villages. It

²⁵ Xiaotong Fei, *From the Soil: The Foundations of Chinese Society*, (Hongkong, Joint Publishing, 1984). 费, 孝通, *乡土中国*, (香港, 三联书店, 1984)

²⁶ Kaizhong Shi and others, *Treasures of Ethnic and Folk Arts: The Drum Tower. the Wind and Rain Bridge*, (Guiyang: Guizhou Nationalities Publishing, 2009). 石开忠和其他, *民族民间艺术瑰宝: 鼓楼. 风雨桥*, (贵阳: 贵州人民出版社, 2009)

²⁷ Yongbin Ma and others, *Treasures of Ethnic and Folk Arts: Dong Hanging Column Building*, (Guiyang: Guizhou Nationalities Publishing, 2009). 麻勇斌和其他, *民族民间艺术瑰宝: 吊脚楼*, (贵阳: 贵州人民出版社, 2009)

²⁸ Yunhe Li, *Cathay's Idea-Design Theory of Chinese Classical Architecture*, (Tianjing: Tianjing University Press, 2005). 李允铎, *华夏意匠-中国古典建筑设计原理分析*, (天津: 天津大学出版社, 2005)

²⁹ Deqi Luo, *Folk Dwelling of Guizhou*, (Beijing, China Architecture & Building Press, 2008). 罗德启, *贵州民居*, (北京, 中国建筑工业出版社, 2008)

covers all categories of folk dwellings found in the Guizhou Province including the Dong folk dwelling, the drum tower, and the wind and rain bridge, meanwhile it provides a general view and comparison between different folk dwellings. Author Deqi Luo has done many years of research on the folk dwelling in Guizhou province, and many materials derive from his field surveys. The content is rich and reliable. He is the director of Guizhou Design Research Department.

'*Traditional Villages and Architecture of Dong Nationality's Habitation Region*' is a comprehensive and detailed book.³⁰ It provides much architectural data from the aspects of structure, construction, types and forms of buildings, and villages. It covers all categories of Dong buildings found in Dong area. Author Ling Cai started her research on Dong architecture since the 1990s, and many materials derive from her field surveys, like some drawings of the Dong house and the drum towers. The content is rich and reliable. Now she is a professor in South China University of Technology. She is also the author of '*Chinese Minority Architecture, Constitution Technology of Dong Nationality's Drum Tower*'.³¹

'*The Folkloric Heritage of the Dong Drum Tower*' and '*The Folkloric Heritage of Native Architecture*', are two books with high quality and artistic photos, all taken from the field surveys of authors with clear indication, and accompanied with comprehensive and clear description of Guizhou folk dwellings including Dong architecture.³² They are very elegant architecture reference books, recording most of the typical Dong buildings and the drum towers, and well mapped. Authors are researchers at Culture Department of Guizhou Province.

³⁰ Ling Cai, *Traditional Villages and Architecture of Dong Nationality's Habitation Region*, (Beijing: China Architecture & Building press,2007). 蔡凌, *侗族聚居区的传统村落与建筑*,(北京:中国建筑工业出版社, 2007)

³¹ Ling Cai, 'Chinese Minority Architecture, Constitution Technology of Dong Nationality's Drum Tower', *Huazhong Architecture*, 22 (2004), 137-141.蔡凌, '中国少数民族建筑, 侗族鼓楼的建构技术', *华中建筑*, 22 (2004), 137-141

³² Jiaqi Li and others, *The Folkloric Heritage of the Dong Drum Tower*, (Guiyang: Guizhou People's Press, 2002). 李嘉琪和其他, *图像人类学视野中的侗族鼓楼*, (贵阳: 贵州人民出版社, 2002)

Guangrong Li and others, *The Folkloric Heritage of Native Architecture*, (Guiyang: Guizhou People's Press, 2006). 李光荣和其他, *图像人类学视野中的乡土建筑*, (贵阳: 贵州人民出版社, 2006)

The book 'The Analysis of the Living Organism of the Guizhou Miao Ethnic Group Architectural Culture' comprehensively, systematically and exactly records and analyses the architecture and culture of the Miao, a cultural group geographically adjacent to the Dong. The book covers the cultural meaning in the construction process, the purpose and the use of buildings, and the overlapping cultural relationship in architecture, to the external cultural context with architecture.³³ Author Yongbin Ma is the deputy director of the Culture Research Institute of Guizhou Academy of Social Sciences. He has done lots of field surveys. The references are full and exact. The argument and its theme are prominent. The structure of this book is well organised, despite the fact that some discussion and expressions are not clear, yet most of the contents have reference value.

The book '*Traditional Chinese Dwellings*' records and describes some Chinese folk dwellings, mainly from northern China and the southern Yangtze River.³⁴ It describes and analyses buildings from the aspects of environment, material, structure, construction, detail, design, layout, function, space, decoration and furniture. And the buildings are beautifully illustrated throughout. It is a helpful reference book for the study of folk dwelling and provides comparison material for Dong architecture research, and expands the scope of knowledge.

'*Northern Guangxi Folk Architecture*', this book introduces the Dong dwelling, the drum tower, and wind and rain bridge in Guanxi province.³⁵ It was completed under the cooperation of several universities and local design institutes. The content is full and accurate. The drawings are exquisite and exact, and are the first hand materials of the authors' many years field research during the 1980s. It is a very good and high quality reference book that provides many solid cases of dwellings, drum towers, and village plans for the comparison and references of this thesis.

In the book '*The Dong Drum Tower Culture Research*', author Kaizhong Shi summarises the distribution and forms of the drum tower. It also describes and analyses

³³ Yongbin Ma, *The analysis of the living organism of the Guizhou Miao ethnic group architectural culture*, (Guiyang: Guizhou People's Press, 2005). 麻勇斌, *贵州苗族建筑文化活体解析*, (贵阳: 贵州人民出版社, 2005)

³⁴ Qiming Jing, *Traditional Chinese Dwellings*, (Tianjin: Tianjin University Press, 1999). 荆其敏, *中国传统民居*, (天津: 天津大学, 1999)

³⁵ Changjie Li and others, *Northern Guangxi Folk Architecture*, (Beijing: China Architecture & Building Press, 1990). 李长杰及其他, *桂北民间建筑*, (北京: 建筑工业出版社, 1990)

the drum tower from the aspects of the hand-ink master, construction process, structure, components, decoration, function and ritual to further summarise the culture and meaning that generated in the construction process of the drum tower.³⁶ The material in the book is clearly cited. Yet the analysis and argument are common.

The book '*The Chinese Dong Drum Tower*' introduces and discusses the origin of the drum tower, materials, construction, structure, function and decoration, and also expounds the relationship between the drum tower and folk customs.³⁷ Author Yongming Yang has some first hand material. He is a local scholar who has done many years of field survey. In its appendix, there is a table elaborately recording most of the drum towers in the Dong area with time and brief data, which is valuable for further research.

'*Traditional Chinese Housing-Northern Guangxi Volume*', '*Hills beyond Hills and Towers beyond Towers*', these two books briefly introduce Dong buildings accompanied with many pictures, and have some reference value.³⁸

The book '*Chinese Traditional Dwelling and Culture Volume Three*' includes many Chinese scholars' research papers of the different regional buildings from various ethnic groups.³⁹ The content is rich and presents respective issues to different regional buildings. It is helpful for the comparison of the folk dwelling study, and expands the study area and cases.

The book '*The Research of the Dong Village Drum Tower*' collects nine papers, from the aspects of history, building, and culture to discuss the drum tower, which were finished in the 1980s by local scholars.⁴⁰ The content is rich and reliable, and proceeds to some analysis, therefore has some reference value.

³⁶ Kaizhong Shi, *The Dong Drum Tower Culture Research*, (Guiyang: Guizhou Ethnic Group Press, 2012). 石开忠, *侗族鼓楼文化研究*, (贵阳: 贵州民族出版社, 2012)

³⁷ Yongming Yang and others, *The Chinese Dong Drum Tower*, (Guangxi: Guangxi Ethnic Press, 2008). 杨永明和其他, *中国侗族鼓楼*, (广西: 广西民族出版社, 2008)

³⁸ Deqi Shan, *Traditional Chinese Housing-Northern Guangxi Volume*, (Beijing: Tsinghua University Press, 1998). 单德启, *中国传统民居图说桂北篇*, (Beijing: Tsinghua University Press, 1998)

Yan Hai, *Hills beyond Hills and Towers beyond Towers*, *Qian Xiang Gui Dong Architecture*, (Guiyang: Guizhou Science & Technology Publishing House, 2011). 海盐, *山外青山楼外楼, 黔湘桂侗族建筑*, (贵阳: 贵州科技出版社, 2011)

³⁹ Changjie Li, ed., *Chinese Traditional Dwelling and Culture Volume Three*, (Beijing: China Architecture & Building press, 1995). 李长杰, 编辑, *中国传统民居与文化(三)*, (北京: 建筑工业出版社, 1995)

⁴⁰ Yinsheng Mei, ed., *The Research of the Dong Village Drum Tower*, (Guiyang: Guizhou People's Press, 1985). 侗寨鼓楼研究, (Guiyang: 贵州人民出版社, 1985)

In the book '*Allegorical Architecture: Living Myth and Architectonics*', author Xin Ruan synthetically discussed culture, oral knowledge, life and architecture based on the author's field research since the 1990s.⁴¹ The discussion is prominent with rich material, including the understanding of Dong buildings, and contemporary local building research. And it works from the aspects of Dong culture, life and space pattern to expound the Dong building in the life as a transmitting point and so presents well the character of oral knowledge among Dong builders. It is an important reference book for this thesis. He is a professor at The University of New South Wales.

A.2.1.5 British craft and building

In the book '*The Wheelwright's Shop*' author George Sturt gives a description of British traditional wheel makers, illustrates their method and working process of choosing material, making components, building and repairing the cart and wagon.⁴² The book '*The Village Carpenter*' narrates British traditional carpenter crafts and their work process.⁴³ Author Walter Rose also describes the way a carpenter treats material, and the use and maintenance of tools. While the illustration of the carpenter crafts in this book is impressive, there are lots of detailed and vivid descriptions of craft lore and experience, and such tacit knowledge is vital in craftsmanship. It provides readers with a readable understanding of the craftsmanship. It also provides some written examples about the working process of the carpenter.

In the book '*Discovering Timber-Framed Buildings*', author Richard Harris illustrates English timber framed buildings. The content is clear and rich, with many detailed descriptions.⁴⁴ The analysis is deep and significant. It is a very good book to understand English timber framed buildings. In the book '*Building in England Down to 1540: A Documentary History*', author L. F. Salzman illustrates medieval building, from mason and architect, regulation and organisation, construction process of building, to different materials in the construction during that period. He describes primitive types of timber-framed buildings and shows the structure of cruck-built house and how they were built, with clear illustrations and diagram.⁴⁵

⁴¹ Xin Ruan, *Allegorical Architecture, Living Myth and Architectonics in Southern China*, (Honolulu: University of Hawaii Press, 2006)

⁴² George Sturt, *The Wheelwright's Shop*, (Cambridge: Cambridge University Press, 1963)

⁴³ Walter Rose, *The Village Carpenter*, (Ammanford: Stobart Davies, 2001)

⁴⁴ Richard Harris, *Discovering Timber-Framed Buildings*, 3rd edn, (Oxford: Shire Publications Ltd, 2013)

⁴⁵ L. F. Salzman, *Building in England Down to 1540: A Documentary History*, special edn, (Oxford: Oxford University Press, 1997), pp. 195-198.

A.2.2 Supplementary data for Chapter 2

-Oral material

A.2.2.1 Proverb

As rice feeds the body, so singing feeds the soul.

Rice sustains a person's life and singing opens a person's heart.

As kind words are pleasing to ear, so good songs encourage the heart.

Singing resolves unhappiness and laughter resolves worry.

If you do not sing, you grow old quickly. Sing and be happy.

Songs nurture good character.⁴⁶

A.2.2.2 Dong song

Ancient song

'Dong ancient song':

Ancient age was without form and void,
Until the beginning of world the heaven and earth were split.
Wind, cloud, thunder, and rain belong to heaven,
Soil, stone, humans and animals belong to earth.⁴⁷

About the ancient natural environment:

The small road under feet is small as palm,
The old trees hide the sky and block the road.
The green vine coils round the tree like a dragon clings to a pillar,
A Hundred men cannot lift the china fir,
A Hundred birds tweet on the tree,
Agminate monkeys jump across the forest.⁴⁸

⁴⁶ D. Norman Geary and others, *The Kam People of China*, (London: Routledge, 2003), p. 237, cited in English

⁴⁷ Fu, *Dong Folk Literature*, p. 9. 傅, *侗族民间文学*, p.9, translated by Derong Kong.

⁴⁸ *Ibid.*, p.10, translated by Derong Kong.

Genesis song

The following song is extracted from Dong Genesis song about the origin of human beings; it relates briefly the story of the birth of the first ever girl (Song Sang) and boy (Song En):

Four female turtles incubated four eggs.
They hatched the eggs beside a stream.
Three rotten ones were thrown away,
Song sang was born from the remaining good eggs.
They hatched the eggs on the mountainside.
Three rotten ones were thrown away,
Song En was born from the remaining good egg.⁴⁹

Migration song

The following example of a migration song is extracted from the song, 'Where does the Dong ancestor come from?', which is sung in the southern Dong area, counties of Rongjiang, Congjiang and Liping.

Where did they come from?
From Wuzhou beside the river Xun.
They left Dan village.
They came from a village called Dan.

While they were living in Wuzhou,
The population was exploding.
The population was growing form year to year.
Parents felt that the land was squeezing them together, a cacophonous crowd.
Children felt that the villages were becoming unbearably overcrowded.
Young woman swarmed the plains.
Young men swarmed the paths.
With land scarce and people numerous, it was hard to make a living.
Life became more and more of a struggle.
Tree branches were devoured, then tree roots.

⁴⁹ Geary and others, *The Kam People of China*, p. 215, cited in English.

Why should our ancestors get stranded there and die of hunger?
They called people together for a meeting.
Everyone decided to leave, to look for a place where they could live.
Dong and Miao people decide to go up-river together,
They left home, in search of a decent living...⁵⁰

It describes the different events in life through this simple means of representing function and sense in song.

Narrative song

The following is an extract from a narrative song that warns young people to take their time before launching into marriage.

No matter what era you speak of,
The age of eighteen cannot be surpassed.
It's the time when the sun is exactly above your head,
When the moon is round.
Men, you may gain a good wife,
But you are well advised not to rush into marriage.
Women, you may find a good husband,
But whatever you do, don't rush into marriage.
Young people, wait a little while longer together,
Free and unrestrained like the sparrow hawk in the sky.⁵¹

Principle song

'The Qing River banks have good timber':

The Qing River banks have good timber,
Straight timber is straight and curved timber is curved.
Straight timber joined together and carried to Dongting Lake,
Curved timber is used to make plow.⁵²

⁵⁰ Geary and others, *The Kam People of China*, p. 221, cited in English.

⁵¹ *Ibid.*, pp. 242-243, cited in English.

⁵² Fu, *Dong Folk Literature*, p. 29. 傅, *侗族民间文学*, p. 29, translated by Derong Kong.

It records that different timber will have different uses, just as different people will have their own character and ability to adapt to different work.

Expostulation song

'Take aspiration as important':

As long as you have money in your pocket,
people are friendly to you when you go out.
Once you became penniless,
Ten persons meet you, and ten dislike you.
All say that kindheartedness and justice are heavier than a mountain,
Actually they only see money. But wealth merely passes down three generations,
Only aspiration will pass down forever.
No matter how poor, you can have aspiration,
If they dislike you, just let it be.
There will be a time for the poor to get rich,
Aspiration is the great asset.⁵³

Custom song

Sacred song

The sacred song of spring ploughing. The following is part of that song:

Every spirit please come and drink, people pray for your blessing.
Blessing for what from you? Blessing the standing grain in the field.
First month bird sing, second month woman of thunder makes a sound in the sky.
Third month rake the hill and soil, fourth month rain in the paddy starts the planting
of seedlings.

Fifth month moves the seedlings to the field, sixth month big Ru and small Ru.
Planting dry paddy on the hill, planting paddy in the field.
Dry paddy reaped more, paddy gives a good harvest.⁵⁴

⁵³ Fu, *Dong Folk Literature*, p. 37. 傅,《侗族民间文学》, p. 37, translated by Derong Kong.

⁵⁴ Yang, *Record of Dong Custom*, p. 148. 杨,《侗族风俗志》, p.148, translated by Derong Kong.

Benedictory and Praiseful song

A the celebration of a new drum tower, other villages will sing 'Paeon of drum tower' to praise it:

Your drum is built at Dragon's lair, locking in the golden dragon to last for ten thousand years of happiness.

The Dragon devotes its scales for tiles, the Dragon's son clings to pillar and leaves its figure.

The image of the Dragon's grandson, carpenter master carves it on the drum tower. Sincere felicitation of today, the village becomes more and more prosperous.⁵⁵

Stepping onto the stage song

Below is part of 'Stepping onto the stage song':

'Everybody happy':

Hand in hand to step onto the singing stage,

One step to left and one step to right,

You sing, I answer, so jubilant.

We step onto the singing stage, first invite 'grandmother' to guide the way,

Having her guidance, our heart is gladder.

Like the carp swimming out of the nest,

Swim up and down in the limpid pond.

Like the thrush flying out of the forest,

Free to sing songs to the top of our passion.⁵⁶

Work song

'Pulling timber':

Leader: Hauling together, Hey. Crowd: Hey yo!

⁵⁵ Jun Wang, 'The Aesthetic Connotations and Social Function of the Dong Drum Tower', *Journal of Yunmeng*, 28 (2007), 54. 王俊, '侗族鼓楼的社会功能和美学内涵', *云梦学刊*, 28 (2007), 54, translated by Derong Kong.

⁵⁶ Fu, *Dong Folk Literature*, p. 84. 傅, *侗族民间文学*, p.84, translated by Derong Kong.

Leader: Hauling harder, Hey. Crowd: Hey yo!
Leader: Walking one step, Hey. Crowd: Hey yo!
Leader: One more step, Hey. Crowd: Hey yo!⁵⁷

Children's song

'Growing up to be a good singer':

Whip the wooden horse and ride quickly,
Roll around the floor and get dirty all over,
We are still small and are masters at crying,
When we grow up we want to become masters at singing.⁵⁸

A.2.2.3 Dong Verse

Genesis words

The extract from 'Making of Heaven and Earth' is given below:

CiGuang, Le Wei made the Earth, Dian Xian, Wang Yi made the Heaven,
The people made Heaven, made it narrow,
The people made Earth, made it broad.
The narrow Heaven could not cover the broad Earth, BaoHai has great strength,
Rolled the Earth to be folded, disposed valley and mountain.⁵⁹

Sacred words

'Words of killing cock', '杀鸡咒' (see Appendix 2, A.2.4.2 'Words of killing cock').

⁵⁷ Lanlan Tian, 'Guizhou North Dong Folk Song', *Guizhou*

Journey <<http://www.chiyou.name/page/mzfq/bdmg.htm>> [accessed 7 September 2010]

田兰兰, '贵州北侗民歌', *黔途网*, <<http://www.chiyou.name/page/mzfq/bdmg.htm>>, [accessed 7 September 2010], translated by Derong Kong.

⁵⁸ Geary and others, *The Kam People of China*, p. 240, cited in English.

⁵⁹ Fu, *Dong Folk Literature*, p. 104. 傅, *侗族民间文学*, p.104, translated by Derong Kong.

Kuan word

The history of Kuan:

Formerly we are Big Kuan, the head is at Guzhou, the tail is at Liuzhou.
Fifty rivers, every village erects a stele...⁶⁰

Below is part of Kuan law:

Stealing duck and chicken, stealing rice and firewood,
Stealing vegetables in field, stealing pears in a garden.
If caught on the spot and there is evidence, punishment is four Fen four Liang of silver.⁶¹

Principle word

Congratulation and eulogy

When people from another village visit the village of the host, they will recite the 'eulogy of drum tower':

Drum tower is superb, grand and brilliant, the ground of the drum tower has no dust, so clean.
People at the drum tower dress in splendid attire, singing and dancing, so fantastic, beautiful and attractive.⁶²

A.2.2.4 Dong story

Legend of People

The Kongfu Masters Wu mian and Jiang yingfang led people against tyrants. In their legend, they are very upright men, abhorring evil as a deadly foe. They were born

⁶⁰ Fu, *Dong Folk Literature*, p. 125. 傅,《侗族民间文学》, p.125, translated by Derong Kong.

⁶¹ LinglingQian, 'Preliminary Exploration of Dong Principle Verse', *Moutain Flowers*, 16(2011), 156. 千玲玲, '侗族说理赋初探', *山花*, 16(2011), 156, translated by Derong Kong

⁶² Fu, *Dong Folk Literature*, p. 148. 傅,《侗族民间文学》, p. 148, translated by Derong Kong.

among poor people, accepted inequality and injustice, but had extraordinary willpower, and overcame many difficulties, through hard study and exercise obtained in good martial arts. In the rising up against the brutal rule, they nearly overcame whole Dong area, and brought a big impact. Although in the end they failed, their courage, indomitable spirit, and good will for justice still influence Dong people.

Story of custom and thing

In ancient times, there was a heroic leader called 'ancient head', leading people to fight against the invasion of wild animals and he became everyone's leader. And 'ancient head' knew magic. He could become animals to fight ferocious beasts. In a later fight with a beast, the ancient people lost 'ancient head'. In order to show homage to 'ancient head', they built a thatched shed called 'ancient head shed'. Later, people learned to use animal skins to make drums, and put the drums in the 'ancient head shed'. When the beast strikes, people will rataplan to scare off wild animals. Afterward, the thatched shed changed to a wooden tower, so people call the wooden tower with a drum in it, drum tower.⁶³

A.2.3 Supplementary material for Chapter 3

- Custom and ritual in the construction of the Dong house

A.2.3.1 'Starting with the mallet'

There is a ritual before preassembling the fan structure, called 'starting with the mallet'. In the record of Fu and Yu, the hand-ink master stands in front of the central column and recites: 'Lu Ban passed the gold mallet to the world of man, ordinary people cannot use you, leave it to your disciple for starting with the mallet'. The hand-ink master uses a mallet tied with a red cloth to strike the central column three times, and keeps reciting: 'Handling a golden mallet thousand Jins, neither knock the nether world nor the heaven gate, only knock the new house's central column, let ears hear the blessing sound. Utterly hear the sound of the golden hammer, one bang brings ten thousand years prosperity. First mallet knock family prospers, second mallet knock makes fortune and honour, third mallet knock makes family flourish for a hundred generations, with a big

⁶³ Yuefei Wu, 'The Origins of Dong Drum Tower and Lusheng Festival', *Nationalities Forum*, 4(2008), 59. 吴跃飞, '侗族鼓楼和芦笙节的来历', 民族论坛, 4(2008), 59, translated by Derong Kong.

fortune and great profit to last ten thousand years!' ⁶⁴

A.2.3.2 'Open wealth door'

The carpenter who built the front door plays Master Lu Ban. People stand around them to see their performance. ⁶⁵

At this time, Wealth Star sings in a loud clear voice:

The scene in the front of the new house is bright,
Morning sunshine and lucky morning glow cover the door and courtyard,
Black dragon and white tiger protect two sides,
Ziwei Star shines high in the middle.

Then he gently knocks on the door:

The return of heaven, turn of earth,
Auspicious day and good time,
I am coming to present the treasure,
Please open the wealth door.

Lu Ban answers loudly inside the door:

Golden axe makes golden door,
Who is outside?
Unless the guest is from heaven,
Nobody can open the door on his own!

Wealth Star replies:

I will not come with empty hands,
I am the Wealth Star from heaven.

Lu Ban asks:

⁶⁴ Fu and Yu, *Custom of Nine Stockaded Village*, pp. 180-181. 傅和余, *九寨民俗*, pp. 180-181, translated by Derong Kong.

⁶⁵ *Ibid.*, p. 178.

'What is your business here?

Wealth Star replies:

I am coming to open the treasure door for the household.

Lu Ban asks:

What hat are you wearing, wearing what cloth?

What belt are you tying around your waist, what shoes on your feet?

Wealth Star replies:

I am wearing a black gauze cap, wearing a purple dragon robe,
A gold and jade belt is around my waist, and I walk in dragon and phoenix shoes.

Lu Ban asks:

Did you get here by land route or waterway?

How many mountains have you climbed, how many fords have you crossed?

Wealth Star replies:

I did not take a land route, or a waterway either.

I flew above clouds and I saw no mountains, above the vast water I could see
no ford.

Wealth Star asks in reply:

Where did you come from, and what is your name?

When were you born? Which door did the Household ask you to make?

Lu Ban answers:

I am from the people of Lu in the Spring and Autumn Period,

Gongsu is my surname, Ban is my given name,
I was born on 7th May, year of Renji,
Specially for making the treasure door here.

Wealth Star asks:

How long in total are the four sides of the frame of the treasure door?

Lu Ban replies:

One Zhang six Chi six, no need to worry about food and clothing.

Wealth Star asks:

How many chis is the height of door?

How many chis and cuns is the width of door?

What chis and cuns to chisel the peephole?

What chis and cuns to install the latch?

Waiting for what to come out? Who will open the latch?

chi, a unit of length (1 *chi*=1/3 m)

cun, a unit of length (1 *cun* =1/3 dm)

fen, a unit of length (=1/3 cm)

li, a unit of length (=1/3 mm)

Lu Ban replies:

The door is five chis six high, four chis three wide,

Four chis three cuns to open the peephole, four fens eight lis to install the latch.

Just waiting for eastern sunrise, wife of householder to open latch.

Lu Ban asks in reply:

How many bends does Heaven River have?

How many shoals does the Milky Way have?

Which deity plays chess? Which deity refines a panacea?

Which deity sits cross-legged? Which deity laughs loudly?
Whose house door have you passed by? How many wet places and dry
places?

Wealth Star answers:

Heaven River has nine bends, the Milky Way has nine shoals;
Deity of luck and wealth plays chess, Lord Lao Zi refines a panacea;
Kwan-yin sits cross-legged, the God of Love laughs loudly;
I passed by the door of the god of longevity, three wet places and three dry
places.

Lu Ban asks:

Who came in front? Who walks in the middle? Who has just arrived? Please tell
me.

Wealth Star answers:

Ziwei Star shines high in front, Scholar star and Warrior star are in the middle,
I just arrived today, and I tell you now.

Lu Ban asks:

What do you bring here in front? What do you bring here behind?
What do you bring here at your left and right sides? Please tell me in detail.

Wealth Star answers:

In front are five boys and two girls, behind they bring treasures to fill the home.
The left brings profits pouring in from all sides, the right brings granary full of
grain.
Today I come here on purpose to congratulate the householder,
To wish householder happiness and health.

Lu Ban asks again:

What gifts do you hold in your hands?

Wealth Star answers:

One hand bears gold, one hand bears silver.

Lu Ban says:

Since you are Wealth Star, I will open the treasure door.

Master Lu Ban opens the latch, Wealth Star pushes open the two treasure doors with both hands and sings loudly:

Two hands push open two doors, one golden door and one silver door.
The Left hand opens the door with the crowing of a golden cock,
The Right hand opens the door with the singing of a phoenix.
The Left foot steps in bringing thousands of treasures,
The Right foot steps in bringing ten thousands decalitres of silver.
Congratulations to the householder, family is wealthy and prosperous.
See happy event when opening the door, flourishing for ten thousand generations.⁶⁶

A.2.3.3 Drinking 'riches and honour wine'

Drinking 'riches and honour wine' is the last time to offer auspicious words to the host. Generally the Lu Ban master and the wealth master propose the toast to the host together:

White jade cup is bright, silver chopsticks and golden bowl with glory light.
Here have all sorts of delicacies, there are dragon's liver with Phoenix intestine.
Today, after drinking the riches and honour wine, the family host will flourish for

⁶⁶ Fu and Yu, *Custom of Nine Stockaded Village*, pp. 191-193. 傅和余, *九寨民俗*, pp. 191-193, translated by Derong Kong.

thousand of generations.⁶⁷

A.2.4 Supplementary material for Chapter 5

- Custom and ritual in the construction of the drum tower

A.2.4.1 'Take back body and cover land'

Incantation: 'one gold joss stick, one silvern joss stick, one gold ingot joss stick, tiny smoke to four directions. Excellent! Puanzhu master impart me big theurgy; year, month, day, time are in hand; three hills, artery of dragon managed by me; twenty-four direction decided by me, disciple decides first Taishui (artificial star to count the years) of year, first Taishui of month, the first Thaishui of day, the first Thaishui of time, Sky evil spirit, terra evil spirit, day evil spirit, time evil spirit. Pig, horse, cattle, sheep grow up on the lawn; chicken, duck, goose, dog grow up at store city of corn; drive the devils outside the world; time to complete, everything go back to its position. TaishangLaojun fast as that according to order'⁶⁸

A.2.4.2 'Words of killing cock'

Incantation used in the ritual of 'dispelling evil spirits'.

Putting a plate of meat on the table, after burning three joss sticks and spirit money, the hand-inkmaster incants: 'This cock, this cock, is not an ordinary cock, it is the cock from Xumi mountain (a mountain in Buddhism, which means the central mountain of a small world) herald of the break of day; head with red cockscomb, dressed in cloth with pattern of flower python; you are not useful to human, disciples use you to dispel evil spirits. This cock assorts with year, but its birth is not assorts with month; assorts with month, but not assorts with day; assorts with day, but not assorts with time. This disciple does not want to cut your life, but intends to send you to back to Xumi Mountain to reincarnate. This Disciple makes you like a phoenix to fly in the sky, forward is a light way, return is darkness and eeriness. You will never see me'.

Then using the Luban axe he cuts the neck of cock, then immediately takes the live and

⁶⁷ Fu and Yu, *Custom of Nine Stockaded Village*, p. 194. 傅和余, *九寨民俗*, p. 194, translated by Derong Kong.

⁶⁸ *Ibid.*, p. 178, translated by Derong Kong.

struggling cock around the site for one round and sprinkles the blood on the ground and incants: 'Five directions, devils from five ways, quickly retreat! The blood falls to the ground, evil spirits keep away from here'!

And spreading the blood on the column, he incants: 'The blood falls on column, evil spirits go away!' at the same he uses the axe to knock the column several times. Then he goes back to the table to spread the blood on it and incant: 'first print village has more wealth and offspring, second print village has riches and honour completed at both aspects, third print village has many auspicious things, fourth print village flourish at four seasons, fifth print village's sons pass the imperial examination, sixth print village has no taboo. I have the order of Taishang Laojun (the highest god of Daoism), fast as that according to order!' After he has finished the incantation, he throws the cock out of the site, and at this moment the ritual is over. Then construction can start.⁶⁹

A.2.4.3 'Words of feting beam', 'climbing beam words'

Its use in the ceremony of 'fete the beam'.⁷⁰

The hand-inkmaster stands in front of table and loudly says: 'A table has four sides, pig head, wine and gifts are put in the centre. On the four sides are placed eight bowls, and there is one cup of good wine on the table. The Host brings these for what use? We put these things on the table to fete the precious beam. Precious beam, precious beam, where you born? Born in the Kunlun Mountain, grown up into a huge tree and old mountain. Birth in order, grow up in germination. Who has see your birth? Who has seen you grow up? Sun and moon have seen your birth, mountain and water have seen you grow up. Zhang father meets you, dares not to see you; Li father sees you, dares not to measure you. Luban master riding his horse in the sky pass by you, sees you and chooses you to be the precious beam. He tells disciples, and they go to search for you. He tells the host, and the host goes to find you. Seventy-two persons chop it for half a year. Pitsaw cuts the head, no need to worry. Small saw cuts a trail, dragon king turns water. Axe in one way, treasures fill the hall. Ink line in one way, straightness becomes a row. Plane in one way, dragon and phoenix bring good luck. Have a look around, every face is energetic. Hand with Five chi ruler measures the head, every generation gains a

⁶⁹ Fu and Yu, *Custom of Nine Stockaded Village*, p. 183. 傅和余, *九寨民俗*, p. 183, translated by Drong Kong.

⁷⁰ *Ibid.*, p. 184, translated by Derong Kong.

senior official; Hand with Five chi ruler measures the waist, every generation dresses in dragon robes; Hand with Five chi ruler measure base, congratulate the host for his riches and honour. Five chi ruler contrast, five chi ruler measure, not short, not long, it is just right for the precious beam, to bless the host for all time.’ As the hand-ink master says each sentence, everybody responds and answers: ‘Yeah!’ Then a rope is attached to each end of the beam, while the hand-ink master incants: ‘At this propitious day and time, heaven and earth are open, welcome the precious beam, raise it to the top of the central hall: a gold rope fastened on both sides firmly raise up the precious beam to sky, left raise mountain produce riches and honour, right raise descendant have Number One Scholar. Raise up beam!’⁷¹

When the beam has been put on the tie-beam and the firecrackers are finished, the hand-ink master puts on new shoes and says: ‘Zhangsan’s sister, Lisiniang, made a pair of shoes and gives them to the world, for earthling wear you have no use, as disciple wear you help to install beam. Feet tread on scaling ladder climbing higher step by step, at the top a deity gives an immortal peach. Get the immortal peach with immortal fruit, change your blue cloth to a purple robe’.

After the hand-ink master wears the new shoes, he climbs the structure to install the precious beam. While the hand-ink master is climbing the structure, he says ‘climbing beam words’:

First step on scaling ladder, second step is going on, pig, sheep, cattle,
horse full fill the barn.

Thousands come out of the barn in daytime, ten thousands come into
the barn in night.

Second step on scaling ladder, third step is going on, a good many
auspicious things come.

A thousand guests come to present a treasure in daytime, ten
thousand head for the lamp at night.

Third step on scaling ladder, fourth step is going on, wealth of four
sides and eight ways belong to you.

⁷¹ Fu and Yu, *Custom of Nine Stockaded Village*, p. 185. 傅和余, *九寨民俗*, p. 185, translated by Derong Kong.

East meet wealth, west meet treasure, bullion and property come to family.

Fourth step on scaling ladder, fifth step is going on, tower overtop nine layers of sky.

Phoenix faces sun and coils on jade column, lion with kylin stand in front of yard.

Fifth step on scaling ladder, sixth step is going on, every generation of posterity are intelligent.

Last generation just passed the imperial examination, next generation will achieve imperial examination as well.

Sixth step on scaling ladder, seventh step is going on, much farmland and wide land with good harvest.

Westerly buy land from Yunnan province, northerly buy land from Beijing.

Seventh step on scaling ladder, eighth step is going on, family has thousands of hectares of farmland.

Collect bullion become nabobism, good at teaching son to be number one.

Eighth step on scaling ladder, ninth step is going on, road in front of yard to Beijing.⁷²

When the main beam reaches the top and is installed between the main columns, the hand-ink Master throws the prepared candy, glutinous rice cake, and red envelope to the ground and says:

Throw glutinous rice cake to east, every generation of posterity will have a hero.

Throw glutinous rice cake to west, no need to worry about food and clothes.

⁷² Fu and Yu, *Custom of Nine Stockaded Village*, p. 186. 傅和余, *九寨民俗*, p. 186, translated by Derong Kong.

Throw glutinous rice cake to south, good luck and safety to the whole joyous family.

Throw glutinous rice cake to north, golden and lucky ray around tower.⁷³

A.2.5 Supplementary material for Chapter6

- Custom and ritual in use of building

A.2.5.1 Collecting the bride and the bride's departure

At Baojing, Zhengyuan, and Xiaoguan village, in Jianhe County, the groom's family sends people to bring gifts, meat and wine to the bride's home, then the bride's family prepares feast to entertain guests. In the middle of the night, the bride's brother carries her out of the gate on his back, then marches to the groom's home.⁷⁴

In Congjiang County, Xingdi Township, the groom's family sends one man and one woman to the bride's family. They sit with the bride's family around the fireplace, burning paper money and incense to worship the ancestors, and then eat together. This is called 'dos dih', meaning 'worship earth'. After the meal, the groom's group escorts the bride to the groom's home.

At Tongdao village, in Rongjiang County, the bride needs to make her departure before daybreak. When she arrives at the groom's house, she needs to burn incense and paper money at the fireplace, and eat the prepared three fishes, three cups of wine and one bowl of rice which are offered at the fireplace.⁷⁵ When the bride departs, the groom's group hold a torch in front to lead the way, which means to illuminate the world, to bring light.⁷⁶

At Jingzhou, the groom brings tokens of love and gifts, coming to the bride's home and

⁷³ Fu and Yu, *Custom of Nine Stockaded Village*, p. 189. 傅和余, *九寨民俗*, p. 189, translated by Derong Kong.

⁷⁴ Yang, *Record of Dong Custom*, p. 132. 杨, *侗族风俗志*, p. 132.

⁷⁵ Yongqing Wu, 'Rongjiang County, Renli Township, Tongdao Village, Dong Culture Investigation', in *Guizhou Six Hills and Six rivers, Selected Data of National Survey*, ed. by Rong Wu, Yongrong Pan, and Xu Yang, Volume of Dong (Guiyang: Guizhou People press, 2008), p. 154. 吴永清, '榕江县仁里乡通倒村侗族文化调研', 出自 *贵州六山六水民族调查资料选编*, 吴嵘, 潘永荣, 杨旭, 编, 侗族卷(贵阳: 贵州人民出版社, 2008), p. 154.

⁷⁶ Yang, *Record of Dong Custom*, p. 122. 杨, *侗族风俗志*, p. 122.

singing songs as usual. First, he gives the gifts to the father and mother in law, then he goes into the bride's boudoir with the groomsman. They eat sweets and drink tea, singing in antiphonal style with the bride and bridesmaids. Late at night, after they have the departing meal, the well-dressed bride is carried on her brother's back through the gate, afterwards they walk to the groom's home on the same night.⁷⁷

In Sanbao villages, when he collects the bride, the groom's group should have two or three old women, three or five girls, and two boys taking lanterns. The total number should be odd, leaving one place for the bride to complete an even number. The boys' parents should be alive, rich and honored, with no pregnant woman in their family. The old women also need to achieve these conditions, and be respected. There is no limitation to the girls. First the group burns incense and paper money, and offers meat, rice and wine to worship the ancestors. Then they march to the bride's home with several kilograms of meat and a basket of rice as a gift, led by the boys holding lanterns.

When the group arrives at the bride's family, they first worship the ancestors, and then have a meal together. After the meal, the two boys holding lanterns stand at either side of the gate. The bride goes through the gate first and she must not touch the threshold. Then they depart to the groom's home, followed by bridesmaids, the groom's group, the old women and the two boys from the bride's side holding lanterns. The number of old women and bridesmaids who accompany bride to the bridegroom's family should be an odd number too, again to leave one space for the groom to compose an even number.⁷⁸

In Sanbao villages, when the groom's group goes to collect the bride, they also bring gifts to the bride's unmarried brother as a gift for her mother's brother. But the bride's brother still has the right to go to the bride's home with his friends to ask for another gift. When they arrive at the bride's home, they set off firecrackers, and meanwhile the bride's family place a long bench to block the gate and sing welcoming songs. The brother's group sings in songs in reply, and after several rounds of singing the bride's family removes the obstacles to let them in. At the same time, the bride's family place the loom, spinning machine and so on in the central room. They hang a duck on the beam, and place a bowl of wine with floating glutinous rice grass on the table in front of the shrine. They use grass to make a doll dressed with wooden comb, silver earrings,

⁷⁷ Yang, *Record of Dong Custom*, p. 123. 杨,《侗族风俗志》, p. 123.

⁷⁸ Zhang, 'Rongjiang County, Sanbao, Dong Marriage Investigation', p. 191. 张, '榕江三宝侗族婚姻调查', p. 191.

necklace, hand ring, new clothing and loincloth. The singing master from the brother's group sings songs to explain the origin of the above tools and ornamentations. If he cannot sing, he needs to drink, and only after he sings about the origins of the above stuffs, can they have the gifts. Otherwise they would go home with empty hands. After this custom the bride's family serves the brother's group with a meal and wine, but they still need to sing songs concerning 'worship ancestor', 'origin of human beings' and so on, if they do not know how to sing these songs, it is also not easy for them to enjoy this meal. The whole process is performed in this funny and humorous way. After this the possibility of marriage relationship between the aunt's daughter and the uncle's son is stopped.⁷⁹

A.2.5.2 Arrival at the groom's home

In Rongjiang County, an old woman who has many children and grandchildren stands beside the gate to welcome the bride. When the bride arrives, she hands her a small bucket with a little gold, silver, rice and tea in it or a basket with rice in it. The bride takes the bucket or basket in her right hand, stepping over the threshold with her left foot. Then she places the bucket or basket at the left side of the shrine. In Leli Seventy-two villages' area, the bride puts the bucket or basket in the kitchen, which means bringing wealth to the groom's family. After this, she sits against the central column and faces east, waiting to meet the groom's family.⁸⁰ In Hekou, Wendou, in Jingping County, when they arrive at the groom's home, an old lady who has a son and daughter carries the bride on her back through the gate and steps over the 'seven stars light' besides the gate. After the bride enters the central room, and worships heaven and earth with respect for the ancestors, she goes into the bridal chamber.⁸¹

In Gaochuan, different points of the calendar decide which stuffs the bride should bring into house.

Year of ZI, WU, MAO, YOU. A Dustpan with silver and rice;

Year of Ceng, Wu, Cou, Wei, A bucket with silver and rice;

⁷⁹ Zhang, 'Rongjiang County, Sanbao, Dong Marriage Investigation', pp. 194-195. 张, '榕江三宝侗族婚姻调查', pp. 194-195.

⁸⁰ Yang, *Record of Dong Custom*, p. 117. 杨, 侗族风俗志, p. 117.

⁸¹ *Ibid.*, p. 122.

Year of Ying, Sheng, Yi, Hai, A balance hangs silver or firewood. ⁸²

In Sanbao villages, before the bride enters the house, everyone have to leave the house. In Xiabao, only the member of the clan remains in the house. He accompanies the groom to light candles and oil lamps, they burn incense and paper money, then worship and kowtow to the ancestors. Then they go out through the back door or side door to avoid meeting the bride. It is said that this is to avoid the bride's 'new feet' treading on him, which may cause illness. They must prevent pregnant women being in the house who might bring disadvantage to the marriage. And it is widely accepted, if they break the taboo, it would cause a conflict in the family.

At this moment, the bride holds the above listed symbols. Sometimes the bride raises her left leg to enter the house first, meaning to give birth to a boy first then to a girl. In Luba, they also place a bundle of fire, which the bride steps over, and the fire is meant to remove evil. When the bride walks through the door, she can not touch the threshold. Then she puts the symbols at the side of the shrine, or on the table. The chosen woman who places the stools leads the bride to sit on the stool placed in front of the central column, and she faces east, which means watching the sun rise up from the east, so the marriage is prosperous and flourishing. Then the rest of the group follow and enter the house. In this order, the bridesmaids would not be misunderstood as they are the bride to enter the family.⁸³

In front of the shrine, people place meals and wine to worship the ancestor. In Zhongbao, pick up three or five men sit around the meals, and one of them recites 'worship words' to invite gods and ancestors to come and bless the new couple's marriage, make it flourish and have good fertility in the following life. After this ceremony, the bride can change her seat, or enter the bridal chamber. And a banquet is served to everyone, people singing, eating and drinking through the night. On the second day, a meal is served to everyone, people singing, eating and drinking again until dusk. The groom's family sends a group to escort the bride and her companions back home. They set off firecrackers on the road when they arrive at the bride's home, lighting all the firecrackers. The groom's group, bride's relatives, and friends come together to enter the house. Then a feast is served to everyone, people drinking, eating and singing until

⁸² Zhang, 'Congjiang County, Xiangdi Township Marriage Investigation Report', p. 169. 张, '从江县信地乡的婚姻调查报告', p. 169.

⁸³ Zhang, 'Rongjiang County, Sanbao, Dong Marriage Investigation', p. 192. 张, '榕江三宝侗族婚姻调查', p. 192.

late at night.⁸⁴

In Sanbao villages, the groom's family chooses a respected woman with children who, places stools to the right side of the central room. She places a symbol at the right side of the gate, in Xiabao, it is a small bucket with little water, little tea, little rice, a silver bracelet; in Shangbao, it is a piece of firewood bonded with three pieces of glutinous rice grass; in Zhongbao, it is a rice basket with rice, tea and gold or silver; at Duliu River, Balu, it is a dustpan containing rice and silver, letting the bride bring them into the house, which means she will bring wealth, and rice into the house, so after the marriage the family will be rich.⁸⁵

In Guben, Xingmin, Yuhe village, the Groom sends two men to pick the bride up. The bride does not take anything and goes out quietly without companions. When the bride arrives at the groom's home, the groom's family starts a feast to serve guests. Three days later, the bride's family sends bridesmaids to take the bride back home. At this time, the groom sends his sister and an old lady to accompany bride and to take meat, wine, a cock, food and money to the bride's home, thus helping the bride's family to make a feast. Every family in the bride's village prepares wine and places it in front of their gates, and the people from the groom's side have to drink every family's wine and leave some money for appreciation. After the bride reaches home, the old lady invites the bride's relatives to have a feast and leaves some money to each family as invitation. On the second day, the groom's group shoulder the dowry and escort the bride back to the groom's home. From this time on, the bride lives in the groom's home.⁸⁶

In Tongdao village, when they arrive at the groom's village, the bride needs to put a piece of Shimao grass (a local grass) in her pocket to dispel evil, then strides over a fire and sieve, scissors within a basin placed in front of village gate. The groom's family must avoid meeting the bride, so as not to have any disagreement in future. After the wedding feast, the bride goes back to her parents' home, and the groom's family needs to give her some wine, meat, rice and other things. Afterwards, the bride starts to live at her husband's home.⁸⁷

⁸⁴ Zhang, 'Rongjiang County, Sanbao, Dong Marriage Investigation', p. 193. 张, '榕江三宝侗族婚姻调查', p. 193.

⁸⁵ Ibid., p. 192.

⁸⁶ Yang, *Record of Dong Custom*, p. 122. 杨, 侗族风俗志, p. 122.

⁸⁷ Ibid., pp. 122-123.

In Jingzhou, they place, a sieve with tea tray and grain outside the groom's gate. The bride steps over the sieve, and takes the tea tray and grain into the home. Then she sits on a new bench beside the fire, boiling tea to serve to the groom's relatives. On the second day, the groom's family gives a banquet to serve the relatives and friends. On the third day, after breakfast, the groom's brother and groomsmen bring meat and wine, then escort the bride back to her parent's home. They hold a wedding feast to serve the bride's relative and friends, then go back to the groom's home again and settle.⁸⁸

In Baojing, Zhengyuang, and Xiaoguan villages in Jianhe County, when they reach the groom's home, an old lady leads the bride into the house, in the process of a 'returning god' ritual and worship of the ancestors. After the ritual, the bride sits beside the fireplace, indicating that she is already a member of the groom's family. At this time the old lady gives the bride a duck leg, and the bride takes it but eats little. Then the bride leaves the groom's home and returns to her parents' home accompanied by bridesmaids.⁸⁹

A.2.5.3 After the wedding

'Not settle at husband's home'

In Tongdao village, Rongjiang County, the groom and bride cannot stay together during the first day, and on the morning of second day, they go back to the bride's home. The bride stays at her parents' home, and only in festival or busy time will her husband send his sister to pick her up to live with him for several days. The new couple will repeat this two or three times, then they will permanently live together. This is to represent the honour and respect of the bride's family.⁹⁰

A.2.5.4 Funeral

In Rongjiang County, after people have buried the coffin, an old man places a plate of water in front of the gate for them wash their hands in, and gives them a bowl of rice gruel boiled with the chicken that had beaten the coffin to eat. Then they can eat meat.⁹¹

⁸⁸ Yang, *Record of Dong Custom*, p. 123. 杨,侗族风俗志, p. 123.

⁸⁹ *Ibid.*,p. 123.

⁹⁰ Wu, 'Rongjiang County, Renli Township, Tongdao Village, Dong Culture Investigation', p. 154. 吴, '榕江县仁里乡通倒村侗族文化调研', p. 154.

⁹¹ Yang, *Record of Dong Custom*, p. 134. 杨,侗族风俗志, p. 134.

In Liping County two days after the coffin is buried, the deceased's family invites relatives and friends for dinner. After dinner, the host uses yellow soil and brick to make a small cooking stove, and erects a small monument style memory tablet on a Sheng (a unit of dry measure for grain = 1 litre) of rice. One month later, a relative goes to the grave in the middle of the night, and uses three clumps of Bamang grass to sweep the grave three times. Then he brings the clumps of grass back home, places them in front of a memory tablet beside the fireplace, cooking the rice and offering it for everyone. This indicates that after eating the rice cooked of burning paper money, the future will certainly be flourishing. At this point, the entire funeral process ends.⁹²

A.2.6 Supplementary material for Chapter 7

- Read and construction of place

The following is part of a blocking road song.

The women sing:

We have a question:
Are you called Zhang or Li?
Zhangs and Lis should not enter,
Our village has not relatives of yours.

The men sing:

Here is our answer:
We are neither Zhangs or Lis.
Our paternal grandmother was born in your village
And she is one of your village community.
Our maternal grandfather use the same drum tower as you.
What do you think now, do we or don't we have relatives here?

The women sing:

We have few more questions:
Do you want to go this way or that?
Are you thinking of stealing our water-buffaloes or horses?

⁹² Wu, 'Li Ping Dong Funeral Custom', in *Dong History Culture Custom*, p. 115. 吴, '黎平侗族丧葬习俗', p. 115.

Or are you thinking of doing business here?

The men sing:

By day you should not interrogate pedestrians,
If they come by night, you can ask them their background.
We have not come to steal water-buffaloes or horses,
And we have not come to do business.
The thing we have carried on our shoulders are all precious gifts,
Carried here to this village to give to our relatives.⁹³

In Zhanli village there is the custom that if a couple's farmland can produce 50 dan (a unit of weight, one dan equals 100 kilograms) of grain, they can have two children, but if a couple's farmland can produce only 30 dan of grain, they can have only one child.

⁹³ Geary and others, *The Kam People of China*, p. 205, cited in English.

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