

RESEARCH ARTICLE

Domestic Space Structure and Abandonment Behavior: The Ye Family Complex at Baomei, Tong An District (Fujian, P.R. China)

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Abstract

Anthropological archaeology strives to recover, understand and explain past social dynamics. It relies on the uncovered material record to highlight past behavior patterns. For such a research agenda to be successful, one needs to fully understand all aspects of the processes involved in the formation of the archaeological record. It is undisputed that “Abandonment” is the condition *sine qua none* for the formation of archaeological sites. Fieldwork conducted at the Ye Family high ranking Qing Dynasty office-holder housing complex, outlines the “use-history” of the investigated architectural complex and its adjustment to China recent contemporary history. The housing complex shifted from an initial prestigious imperial office-holder family to a “commune” housing for disadvantaged families during the cultural revolution, to be finally either progressively abandoned and/or re-cycled as storage complex. Combining informant input and field archaeology methodologies, the study of an abandoned elite traditional vernacular house provides the opportunity to decipher abandonment processes and contribute to the theoretical agenda of anthropological archaeology.

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Introduction

During the last 50 years with the accelerated pace of modernization of China housing industry, traditional vernacular houses have been significantly impacted. In major cities, most of the individual old family houses were destroyed to make space for modern buildings and high rises. Modern housing templates with all their living amenities - kitchen, bathroom, toilets, air-conditioning - are clearly more convenient. In the countryside through the program against extreme poverty, new modern constructions are generally built next to the old family houses, that are turned either into chicken-duck coop/animal pen or simply abandoned and exposed to the elements.

The structure of domestic space as materialized in traditional vernacular Chinese family houses' features some variations all over China. Depending on families' size and wealth however, the "traditional family house" with its hip-and-gable roof style, also known as the *xieshan* style, is basically articulated on a combination of courtyards, ancestors' shrine and diverse arrays of rooms and activities areas on parallel sides of the central axis. The different components of the house living space are set according to more or less strict geomancy [*Feng shui*] requirements. Feng shui, defined as the "way of wind and water" and geared to achieve harmony and balance is an ancient Chinese art of arranging objects, space and buildings in the environment. Daily life activities and families' demographic changes may require alterations and changes in the articulation of domestic activity areas up to the definitive abandonment of the traditional family houses. Built features abandonment is the *sine qua none* condition for the formation of the archaeological record. Abandoned houses, depending on their states of decay, are accordingly *de facto* [proto] archaeological sites in process of formation.

The research conducted at the Ye family complex at Baomei, Ting Xi township in Tong'an district of the Fujian province (Southeast China) in Summer 2022 aimed at investigating the structure of an early Qing Dynasty high-ranking family traditional house, the arrangement of its activity areas, as well as patterns of its abandonment exclusively from a materialist archaeological perspective. Because of the existence of very sensitive periods in Chia contemporary history and strict censorship, oral history and witness testimonies tend to be partial and often unreliable.

1. Theoretical Perspectives

Domestic space tends to be structured according to a combination of factors both immaterial and material that vary from one context to another. Chinese traditional house size, orientation, spatial arrangement, and activity space allocation pattern are more or less culture-specific and tend to depend on the specific cultural area, family's size, wealth, and demographic structure. Abandoned houses provide the opportunity to model the formation of the archaeological record at all times and places. Daily life activities are carried out within the domestic space in a patterned frame. Distinct spaces are allocated to food processing, cooking, and consumption, storage, sleeping, sharing, entertainment...etc, with some of these activities requiring specially made installations. Depending on circumstances however, some of these activities may shift from one space to another, and/or overlap, thus generating palimpsests. "Activity area analysis enables two things: the reconstruction of single activities at one specific point in time, and the reconstruction of a structure of repetitive activity generating a specific pattern of objects in the archaeological record" (Pfalzner 2015: 31).

Activity areas research is accordingly articulated on a 3-steps process:

1. The recording of archaeological indicators of activity that may include refuse, installations, objects in active and/or passive postures.
2. The identification of the nature of depositions that may be destruction, construction, use/re-use, deterioration, maintenance, or abandonment.
3. And finally, the identification of kinds of assemblages, either refuse or active/passive inventories.

Abandonment, a *sine qua none* condition for the formation of archaeological sites and focus of intense and productive debates in the 1980s is part of a broader interpretative scheme dealing with formation processes of the archaeological record (Baker 1975, Binford 1981, 2019, Cameron 1993, Chase and Chase 2000, Holl 1987, 2003, Lamoureux Saint Hilaire et al 2015, Manzanilla 2003, Mudd 2019, Nelson and Schachner 2002, Pfalzner 2015, Schiffer 1985, 1987 Spencer 1994, Sims et al 2012, Sullivan 2008, Wei Wang et al 2022). Most of archaeological reports and narratives take material culture items recorded in the archaeological record for granted. Data are collected, processed, analyzed and published without any attempt at figuring out why they came to be where they are found in the archaeological contexts. A genuine anthropological archaeology agenda has to integrate the decipherment of archaeological record formation in its theoretical tool-kit.

The investigation of formation processes of the archaeological record pioneered by L. R. Binford (1981), M. B. Schiffer (1985) and Stevenson (1982) to mention but a few leading scholars resulted in an elaborate systematics that includes sets of crucial and important concepts. Accordingly, “the archaeological record of a particular cultural system is developed primarily by a finite set of activities which contributes materially to its formation. These activities are known as “cultural formation processes transform materials from a cultural systemic context to an archaeological context” (Baker 1975: 10). Grasping formation processes thus offers the “inferential bridge between the static patterns of the archaeological record and the dynamic patterns of ongoing actual behaviors. Before artifacts enter the archaeological record, they participate in the behavioral systems called systemic context” (Spencer 1994: 2).

Formation processes of the archaeological record systematically combine cultural (C-transforms) and natural (N-transforms) processes. C-transforms can be partitioned into: (1) cultural deposition; (2) re-use; (3) reclamation; and finally, (4) post-depositional disturbance. N-transforms include: (1) erosion; (2) sediment accumulation; and finally, (3) differential preservation. Abandonment that presides over the shift from systemic to archaeological contexts is not a singular event but a multi-faceted complex process (Cameron 1993, Chase and Chase 2000, Manzanilla 2003, Wei Wang 2022). The effective operation of abandonment, either slow and planned or rapid and unplanned determines the bulk, richness, and diversity of material culture items that enters the archaeological record. Spencer (1994: 49) singles out 5 main variables that can explain variations in the refuse found in archaeological contexts, notably: rate, anticipated return, means of transport, distance to the next site, and season of abandonment (Simms et al 2012).

Abandonment hypotheses

The nature of the implemented abandonment process significantly influences the composition of the archaeological assemblage to be found in the investigated sites.

1. Few curated items and little *de facto* refuse are to be found in the case of planned abandonment without anticipated return. Equally few artefacts and features in process of maintenance, use, and/or manufacture are expected to be absent.
2. Localities and places abandoned under sudden unplanned abandonment are expected to feature larger amount of *de facto* refuse. “Significantly more refuse and perhaps more concentrated arrangements of refuse would accumulate within enclosed living areas on sites undergoing planned emigration with no return” (Spencer 1994: 51).
3. Finally, if return to the site or locality is planned, much less refuse would be accumulated in the enclosed living spaces.

The fieldwork conducted at the abandoned Ye family complex at Baomei during the 2022 summer aimed at documenting activity areas and the structure of domestic space in an elite habitation unit and decipher the implemented abandonment behaviors.

2. The Ye Family Complex

The investigated Ye family house complex is made of two units is found at 24° 47' 362" North and 118° 05' 587" East, at 39.1 m above sea level. It is located in the village of Baomei in the Tingxi township of Tong'an district in coastal Fujian, People's Republic of China. The investigated units belonged to high level government official during the Qing Dynasty. Significant land and social reforms were implemented by the new government after the proclamation of the People's Republic of China on October 1, 1949. The ancient nobility and land-owner classes were disowned of most of their power and properties. Land reforms were implemented and the newly established regime tried to solve housing problems faced by disenfranchised families and groups.

There are critical segments of contemporary China national history that are very sensitive and generally willingly omitted. It is the case for: (1) - “the Great Leap Forward” - (1958-1961) that intended to accelerate the transformation of the country from an agrarian to a communist industrial society; (2) – the “Great Proletarian Cultural Revolution” - (1966-1976) launched to cleanse China communism from capitalism and remnants of traditional social practices with targeted assaults at the “Four Olds”: 'old ideas', 'old culture', 'old customs', and 'old habits' (Calhoun and Wasserstrom 1999, Saich 1981, Xie and Zhang 2019); and finally, (3) – the Tiananmen Square Protests (April 15-June 4, 1989). For well-known reasons of censorship, Chinese informants tend to shy away from these considerable upheavals of China contemporary national history.

3. Brief oral history of the Ye Family Complex

According to the oral testimony on the studied Ye family mansion collected by Zhang Yuwei (Field notes) during the Summer 2022 fieldwork, the complex was built by a county magistrate named Ye in the early Qing Dynasty (1644-1911).

The property being shared with his five brothers (fig. 1 and 2). The social standing of the complex owners as high government officials is supported by the presence of their symbols of office, the two stone sculptures on the upper part of the front gate: a deer in the left and a crane in the right (fig. 3). In traditional Chinese society, different kinds of stone sculpture were strictly regulated and this kind of sculpture could only be used by high-ranking officials.

The word for deer in Chinese is (鹿) *Lù* which phonetically refers to wealth. The deer thus symbolizes longevity (Eberhard 1986) and riches derived from imperial official position. Cranes (鹤, *Qǐzhòngjī* in Chinese) have a multiplicity of meanings in ancient Chinese mythology. They are considered as bird of “1st rank”, referring to high status in the Imperial hierarchy. As is the case for deer they also symbolize longevity and immortality and, as divine birds they are conveying purity, nobility, wisdom and long-lasting love.



Figure 1. The Ye Family complex 1 in the right and 2 in the left.

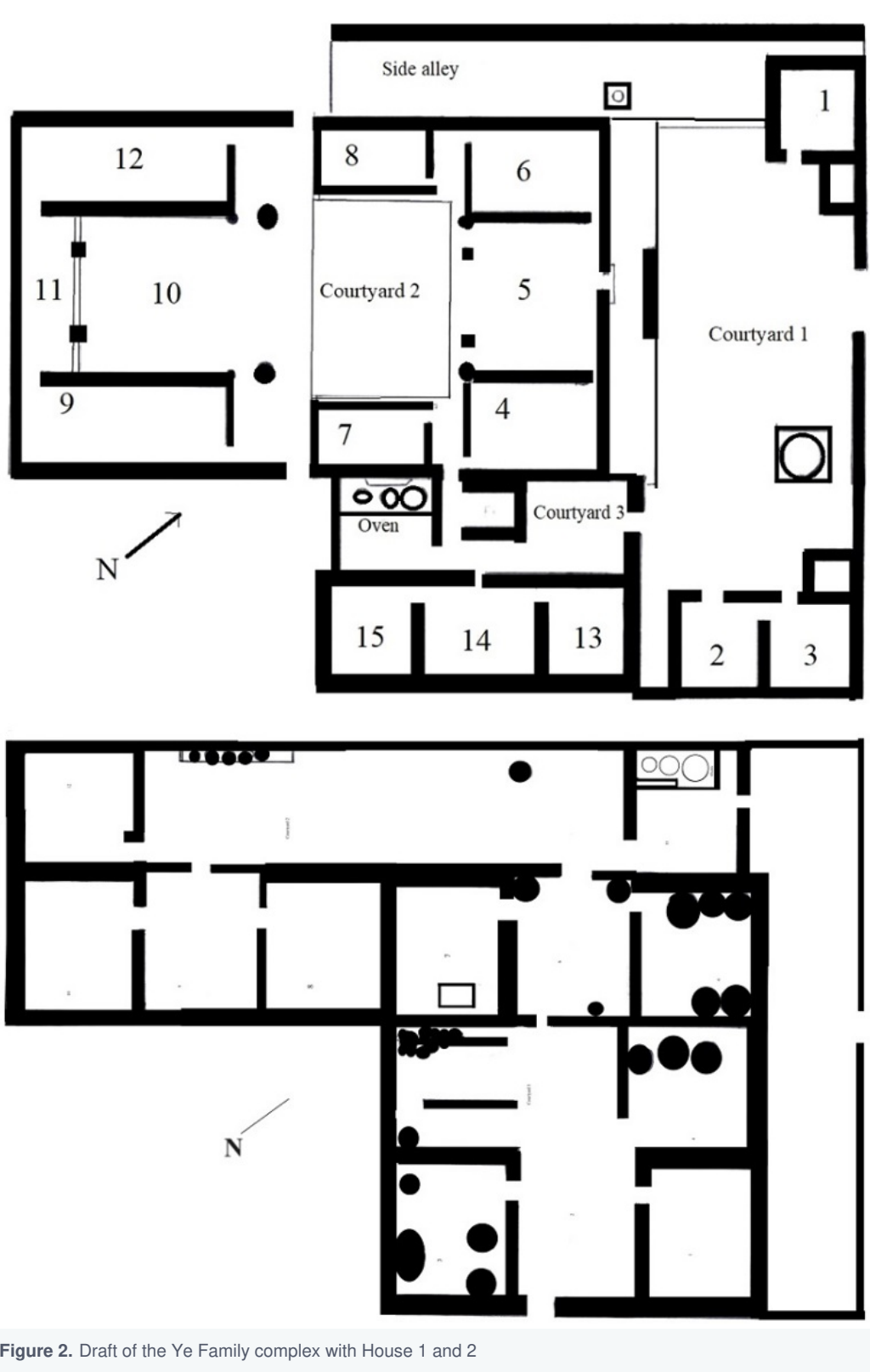


Figure 2. Draft of the Ye Family complex with House 1 and 2

Both house units are separated by 1.2 m wide gutters evacuating rainwater.



Figure 3. House Unit 1 gate with symbols of office: the deer in the top-left and the crane in the top-right

According to informant Ye, aged 50 years, who led the team cleaning the abandoned main residence, the mansion was inherited by the Ye's family until now even if the new generations built their own new houses near and away from the ancient traditional family houses. During its more than 200-year's history, the complex was constantly expanded and furnished. However, during the early stage of the founding of the People's Republic of China, the house was shared with a stranger. According to informant Ye, his generation had lived in this house until around 10 years ago and in the 1950s and 1960s, there was a strange woman who rented a room, living with her son. At that time, Ye's family was poor and could not maintain such a big house. Moreover, according to then implemented public policy, the government made an attempt to offer housing and shelter for disadvantaged people. Therefore, during the special period, the house was shared by two different families and some of them did not know each other. Mr. Ye did not know the woman's whereabouts and now the Ye's family still inherited and owned the traditional house.

The last resident, who lived in the right bedroom next to *Xialuo* Hall passed away in 2013. She was the grandmother of the last generation in this old building. After her death, the complex was abandoned. In other words, until now, the house has been empty for almost 10 years. After the family abandoned the house, some strangers asked some family members to buy some antique items. After being turned down, they stole some items and destroyed some wooden gates to grab sculptures set on the upper part of the door.

The upheaval of the Great Proletarian Cultural Revolution [] (1966–1976) is subtly mentioned in the narrative, but never explicitly. The oral testimony while useful is full of inaccuracies. If Mr. Ye the informant was 50 years old at the time of interview in July 2022, it means he was born in 1972, 4 years before the end of the movement. He could not have direct knowledge of “a strange woman who rented a room, living with her son” in the 1950s-1960s. The Ye family house

complex was appropriated and the mansion converted into a “commune” – collective property – housing different poorer families from the village. It is very likely that the members of the Ye family had to share the houses with new and unknown people who were granted access through the new policies. It is these latest occupants who shaped the final organization of activities areas represented in the investigated house complexes, as well as patterns of abandonment behaviors to be deciphered.

4. Field Methodology

Understanding the formation of the archaeological record and by extension that of archaeological sites is precisely the research problem that has motivated the field operations conducted at Baomei Ye Family house complex. Fieldwork consisted essentially of clearing the vegetation that started recolonizing the complex (fig. 4), drafting and photographing all the uncovered material culture elements *in-situ*, conducting limited excavation when features of interest were hidden, and finally analyzing the data recorded. In some case, when there was important accumulation of collapsed material, proper archaeological excavation was conducted to access the original features (fig. 5). The field crew consisted of six persons, 3 hired workers, 2 students, and myself.



Figure 4. Clearing the vegetation in House unit 1 the front-yard



Figure 5. Archaeological excavation in the lateral courtyard exposing a buried pottery.

5. Domestic Space Structure and Activity Areas

Complex 1: The Main Residence

Complex 1: the Main Residence or the Ye Family Mansion, is an extensive habitation complex oriented Southeast-Northwest with the main entrance gate opening southeast on an out-yard or square. It is made of 15 rooms arranged around 3 courtyards delimited by a side alley and a wall in the northeast (fig. 6, table 1).

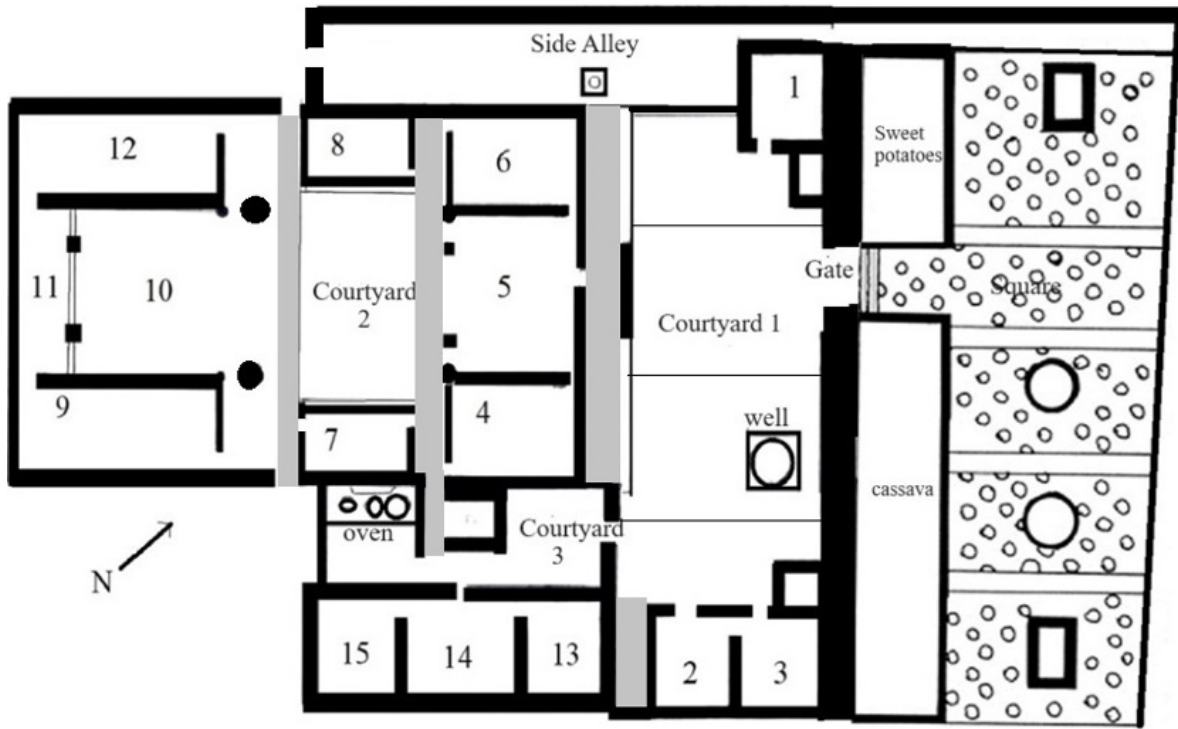


Figure 6. Plan of Complex I the main residence. Transversal corridors in light grey

Room Number	Length (m)	Width (m)	Surface (m ²)
<i>Collective space</i>			
Square	22.00	10.00	220.00
Courtyard 1	11.00	6.00	66.00
Room 5 (Patio)	5.25	4.20	21.84
Courtyard 2	5.75	4.50	25.87
Room 10 (Patio)	5.00	4.50	22.50
Room 11 (Shrine)	5.00	2.00	10.00
Lateral Courtyard	9.00	3.00	27.00
Total Collective space			393.21
TOTAL			556.84
<i>Private domestic space</i>			
<i>Unit 1</i>			
Room 1	3.25	3.00	9.75
Storage	1.50	1.25	1.87
Total			11.62
<i>Unit 2</i>			
Room 2	3.25	2.75	8.93
Room 3	3.50	3.50	12.25
Storage	1.50	1.25	1.87
Total			23.05
<i>Unit 3</i>			
Room 4	4.50	3.50	15.75
Room 7	3.25	2.50	8.12
Total			23.87
<i>Unit 4</i>			
Room 6	4.50	3.50	15.75
Room 8	3.25	2.50	8.12
Total			23.87
<i>Unit 5</i>			
Room 9	6.25	3.25	20.31
<i>Unit 6</i>			
Room 12	6.75	3.25	21.93
<i>Unit 7</i>			
Room 13	3.60	3.00	10.80
Room 14	4.00	4.00	16.00
Room 15	3.75	3.25	12.18
Total			38.98
<i>Total Private domestic space</i>			163.63
TOTAL			720.47

Table 1. Complex I: Main Residence Domestic space structure and room's Size

The Square

The Out-yard or square in front of the main gate measures 22 m in length southwest-northeast and 10 m in width southeast-northwest (table 1). It is oriented northwest-southeast and paved with cobblestones of different sizes, representing a pattern similar to daisies/chrysanthemum, with a larger stone at the center and two circles of relatively smaller elongated stones, the first radiating and the second in a ring. The distribution of the flower motifs is arranged along diagonal axes (fig. 6).

The square is partitioned into five panels separated by a decorative 0.60 m wide red-bricks band. The panels numbered from I to V along the southeast-northwest axis are made of cobbles of different size and decorated with evenly distributed small cobbles-made flower motifs, either daisies or Chrysanthemum. Panel IV leading to the House gate and devoid of flower bed measures 2.45 m in width and 10 m in length. It contains 24 evenly spaced daisies motifs (fig. 6).

Starting from the Southeast, Panel I features 21 flower motifs and a central rectangular flower bed 2 m long, 1.4 m wide and 0.35 m high. Panel II has similar size with 16 flower motifs and a circular 1.5 m in diameter and 0.35 m high flower bed. Panel III also contains 19 daisies-like motifs, measures 1.55 in diameter with a 0.40 m high wall. And finally, Panel V, at the northwestern end of the square is the largest with 27 daisies-like motifs and a central rectangular flower bed 2 m long, 1.40 m wide, and 0.40 m high. Along the House Unit 1 wall, on both side of the gate there are two miniature gardens. One, in the southeast planted with cassava measures 12 m in length, 2.6 m in width, with a 0.40 high contour wall. The other, in the northwest planted with sweet potatoes is 6.8 m long, 2.6 m wide, with a 0.40 m high contour wall.

The square as it was recorded during the fieldwork was not part of the original complex. The cobble pavement investigated was part of the relatively recent “beautification” project of Baomei village’s open public spaces.

Courtyard 1

A series of steps leads through the main gate to the front yard. This Courtyard 1 is rectangular in shape, oriented southeast-northwest, and measures 20.50 m in length and 7 m in width, for a total surface of 143.50 m² (table 1). It is partitioned into 5 sub-units built with combinations of different materials. Proceeding from the southwest to the northeast, Sub-unit I at the southwestern end is made of compacted soil (fig. 6). It is delineated along its northeast flank by a 0.30 m wide water gully perpendicular to the house and connected at right angle to another gully running parallel to the main wall and opening under the main gate. It was designed to drain rainwater out of the house unit and discharge it in the square.

Sub-unit II made of cobbles and cement includes the Complex 1 Main residence unit well. The latter is built with a rectangular stone and cement margin 1.50 m long, 1.30 m wide and 1.20 m high. Sub-unit III measuring 7 m long and 4.8 m wide connects the main gate to the house entrance. It is made of quarried thick rectangular and elongated stone slabs, signaling of high symbolic importance of that space segment between the main gate and the house entrance. Sub-unit IV is made of cobbles and cement and finally, Sub-unit V corresponding to a portion of the northwestern side alley is exclusively made of large cobbles (fig. 6).

Room 1

Room 1 is located at the northwest angle of the Main Residence abutting the perimeter wall (fig. 6 and 7). It is a relatively small room, measuring 3.3 m long and 2.9 m wide that was used as kitchen (table 1). A large storage vessel probably used for rice was found next to the door (fig. 7). The abutting smaller space that measures 1.70 m long and 1.25 m wide was likely used for storage.



Figure 7. Room 1

Room 2 and 3

The Room 2 and 3 set is located along the southeast end of the main Residence (fig. 6). It is made of 4 delineated spaces (fig. 8, table 1). (1) A corridor end along the south flank of Room 2 measuring 3.2 m long and 1.20 m wide; (2) Room 2 used as kitchen measure 3.25 m long and 2.75 m wide and (3) Room 3, square in shape 3.50 by 3.50 m used for storage; and finally, (4) the small installation 1.70 m long and 1.25 m wide very likely used for storage also.



Figure 8. Room 2 and 3 and the well

Room 4

Room 4 measures 15.75 m^2 , 4.50 m long and 3.50 m wide (table 1). It is located in the southeast angle of the building and served as bedroom (fig. 6 and 9). It has two doors, one leading to the patio on the north side and the other opening on a corridor along the east wall. It was completely emptied of all its content suggesting a well-planned abandonment.

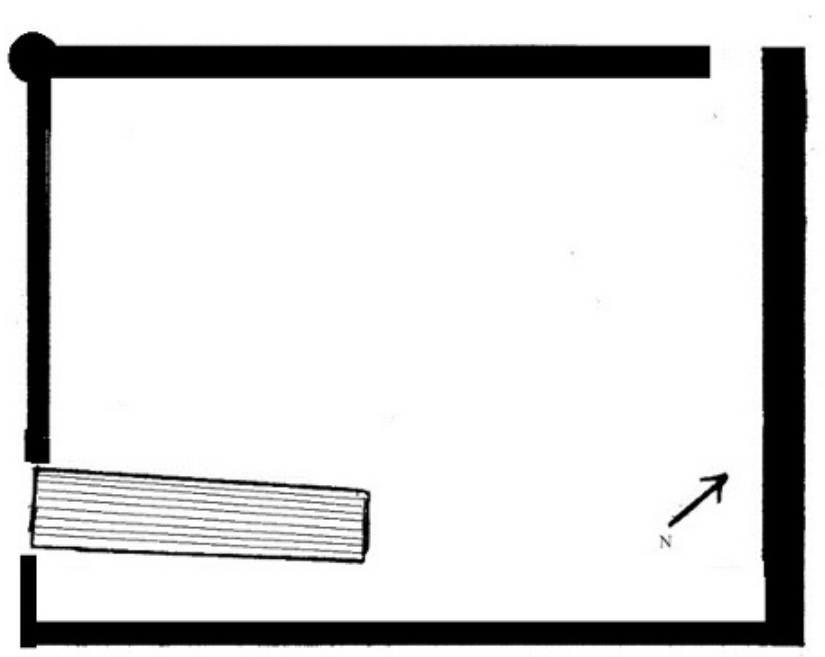


Figure 9. Room 4

Room 5

Room 5, the patio, is the reception hall situated along the central northwest-southeast axis of the building (fig. 6 and 10). It measures 21.84 m², 5.25 m long and 4.20 m wide (table 1). It is delineated by a series of 4 wooden poles, circular ones at both ends, and square ones in the middle.



Figure 10. Room 5, the patio.

Room 6

Room 6 abuts the entrance hall, located in the northwest flank of the building opposite and symmetric to Room 4 (fig. 6). It measures 15.75 m², 4.50 m in length and 3.50 m in width (table 1). It is a bedroom that still contains most of its abandoned furniture: a canopy bed with its mosquito net and an inserted fan still in place, a wooden wardrobe, a small night table, and a board set in the wall (fig. 11).



Figure 11. Room 6 with its abandoned furniture.

Courtyard 2

Courtyard 2 is located at the gravity center of the building (fig. 6, table 1)). It is a rectangular 25.87 m² space, 5.75 m long and 4.50 m wide, made of thick quarried and elongated stone slabs (fig. 12).



Figure 12. Courtyard 2

Room 7

Room 7 is located along the west flank of courtyard 2. It measures 8.12 m², 3.25 m in length and 2.50 m in width (table 1). It contains a pile of rocks and wooden planks at its west corner, two medium size liquid storage vessels disposed in the central area, as well as a large fragment of a portable hearth (fig. 13). It has two doors, one at the north corner and the other one at the opposite south corner, and appears to have been used for storage.

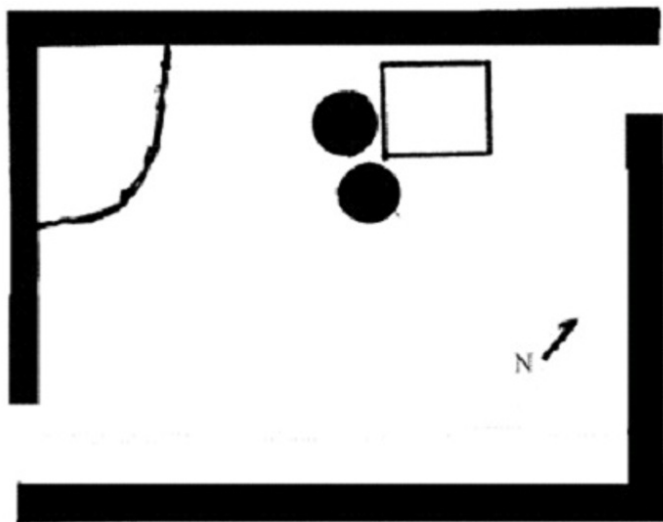


Figure 13. Room 7

Room 8

Located along the northwest flank of the courtyard, Room 8 measures 8.12 m², 3.25 m in length, 2.50 m in width (fig. 14, table 1). It contains a horse-shoe shaped fire-place at its west corner, four pairs of shoes in the center along the west wall, and a large collection of vessels at its north corner. The room, with the fire-place for heating was used as eating, entertainment, and living space.

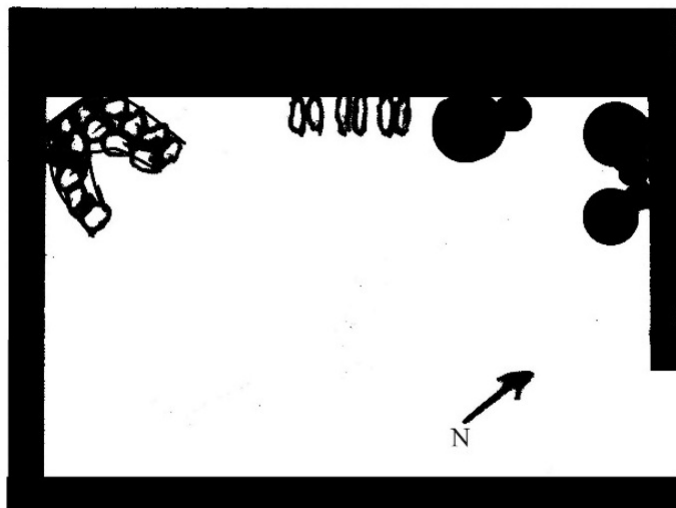
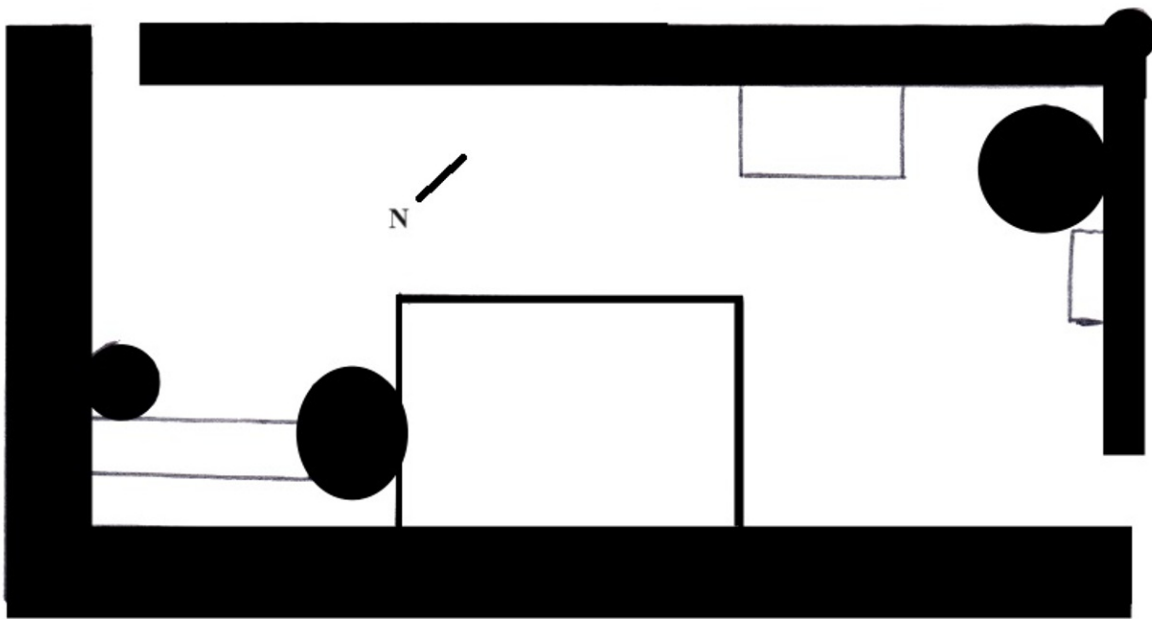


Figure 14. Room 8

Room 9

Room 9 is located in the southwest corner of the complex (fig. 1). It measures 20.31 m² in surface extent, 6.25 m in length and 3.25 m in width (table 1). It was clearly a “master bedroom” containing a wardrobe and a large rice storage vessel at its north corner, two additional vessels, a wooden bath-tube, a pile of large plastic sheets, and a wooden pole scattered all over the floor (fig. 15). The room also includes a mezzanine used for storage.

**Figure 15.** Room 9

Room 10

Room 10 and 11 are part of the same space partitioned into 2. Room 10 is a 22.50 m² patio, 5 m long and 4.50 m wide. It was initially the Ye family reception room, but was finally used post-“abandonment” for the storage of bulky and

cumbersome objects. It contains a small table, a wooden granary and tens of wooden planks and poles (fig. 16).



Figure 16. Room 10.

Room 11

Room 11 at the back of the patio is demarcated by a four-pillars wooden gate. It measures 10 m², 5 m long and 2 m wide (fig. 17, table 1), used as the ancestors' shrine. It has two doors on both sides leading to both "master bedrooms 9 and 12. It contains a small table carrying a small vessel used as incense burner and an image of generic ancestor on the wall.

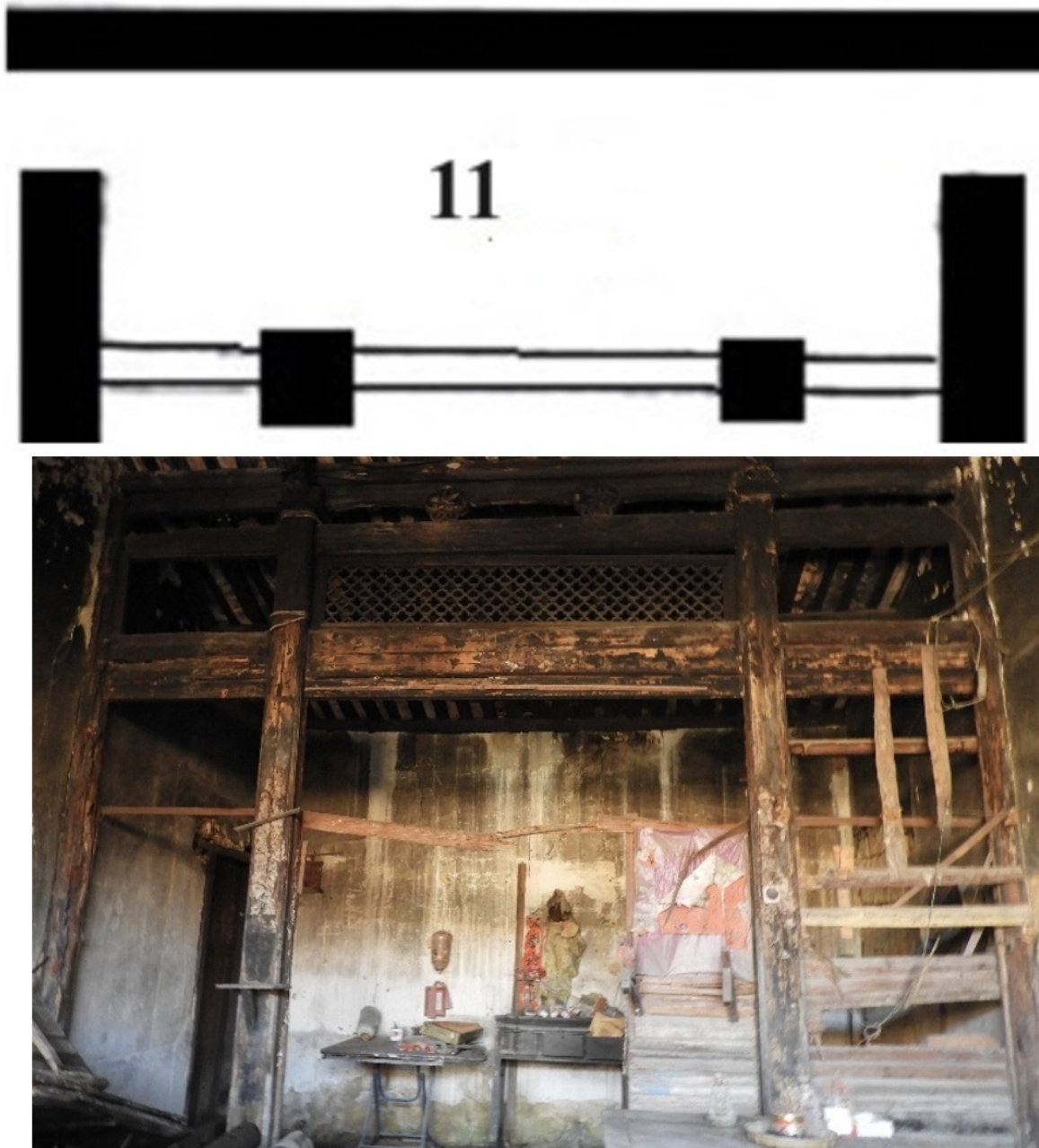


Figure 17. Room 11

Room 12

Room 12 is the other “Master bedroom” opposite and symmetric to Room 9. It communicates through a door with the Ancestors’ shrine and measures 21.93 m² in surface extent, 6.75 m in length and 3.25 m in width. As is the case for Room 9, it too has a mezzanine that was initially used for storage. It contains the largest amount and bulkiest items of material culture recorded in any of the investigated rooms (fig. 18, table 1). They ranged from wooden planks and poles from dismantled bed frame, to 12 pottery vessels and 2 metal pans.

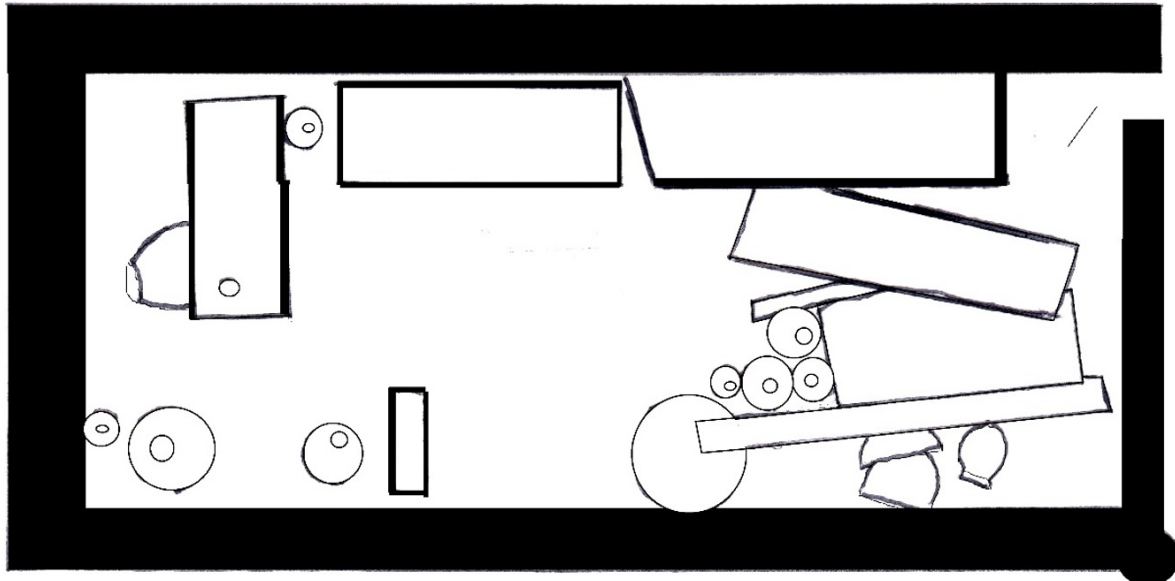


Figure 18. Room 12.

The lateral sub-unit

A lateral sub-unit is located in the southeast flank of the main house (fig. 1, table 1). It is made of rooms 13, 14, and 15 with two installations arranged in a lateral courtyard and corridor measuring 27 m², 9 m long and 3 m wide with two doors (fig. 19). One door opens in the main courtyard 1 and the other leads to the main residence courtyard 2. Wooden beams are stored along the western wall in the lateral courtyard next to the northern door. A large rice storage jar was set at the courtyard west corner.

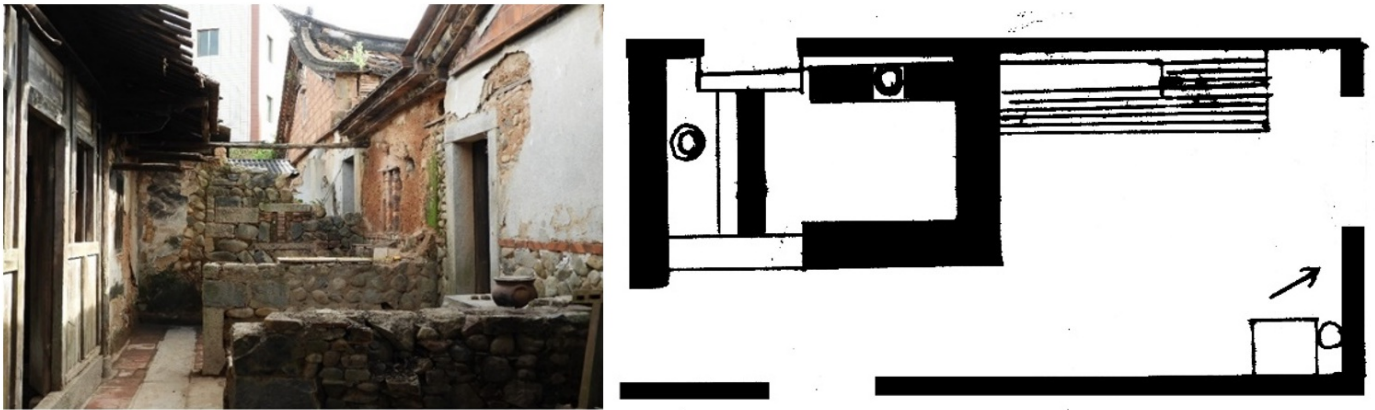


Figure 19. Views of the lateral sub-unit

Installations 1 and 2 abut the main residence wall. The Installation 1, completely overgrown by vegetation has required significant archaeological excavation. The process revealed an installation made of three low walls measuring 1.25 to 1.95 m in length, 1.05 to 1.15 m in height, 0.20 to 0.40 m in thickness, capped by a thick stone slab (fig. 20). It was built with a cobble paved floor and includes “offering vessels” and a cache of small medicine bottles, iron rings, and a “five-pointed star” representing the China Communist Party (CCP). All evidence points to the use of the installation as an altar for domestic ritual practices.



Figure 20. The lateral shrine after excavation featuring cultural deposits

The Installation 2, a triple “burners” oven measures 2.40 m in length, 1.00 m in width, and 0.80 m in height. The largest burner measures 0.68 m in diameter, the medium size one at the center 0.52 m, and the smallest one, 0.32 m. What was preserved as the chimney system made of white tiles is 1.10 m long, 0.25 m wide, and 0.38 m high (fig. 21).

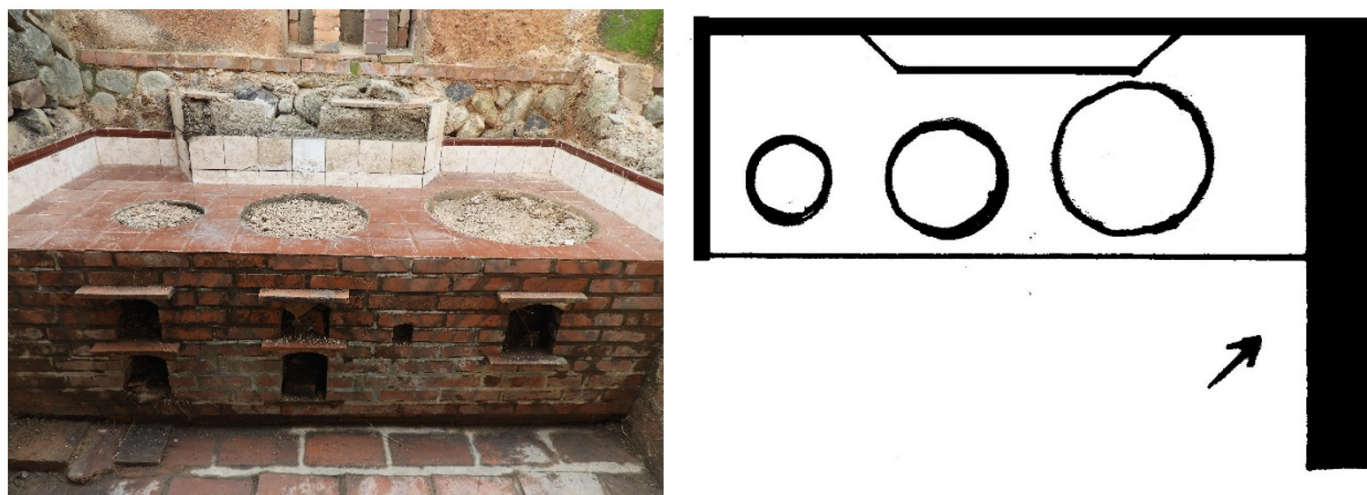


Figure 21. Installation 2, the 3-burners oven after cleaning and excavation

The associated room set of the lateral sub-unit measures 38.98 m² in surface extent and consists of 3 rooms (fig. 22, table 1). Room 13 was empty and devoid of any material cultural item. It may have been used as bedroom and/or storage space and measures 10.80 m², 3.60 m in length and 3.00 m in width. Room 14 at the center, 16.00 m² in surface extent, is square in shape, 4.00 m long and wide. It has a cupboard inserted in the southeast wall and a series of scattered bowls on the floor. And finally, Room 15 at the eastern end was a bedroom. It measures 12.18 m², 3.75 m long and 3.25 m wide and contains a bed frame and a number of large bowls scattered on the floor.

The lateral sub-unit appears to have initially been the dwelling unit of the Ye family domestic employees. In ancient Imperial times, high ranking office-holders benefitted from the service of domestic employees taking care of domestic chores.

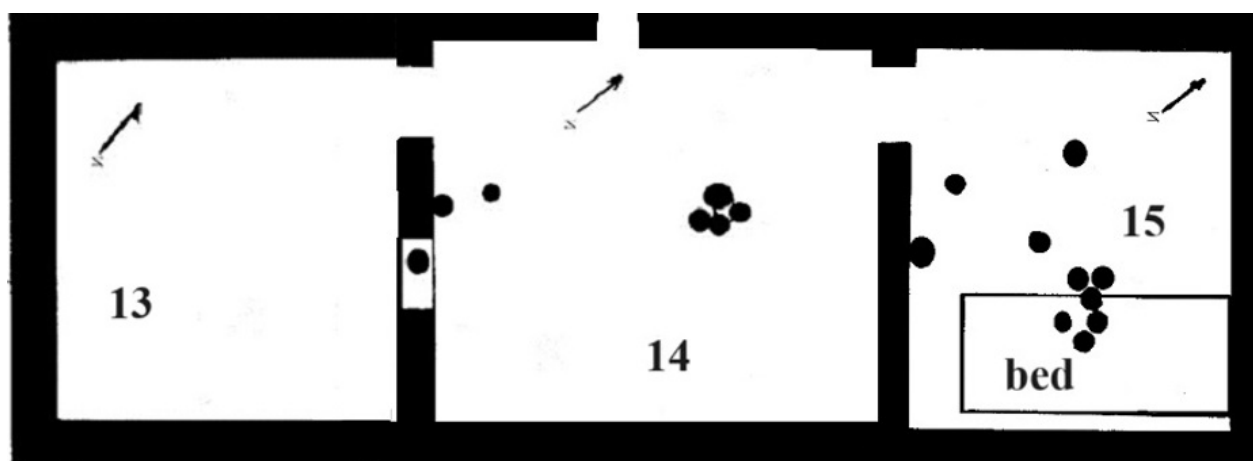


Figure 22. Room 13, 14 and 15

Complex I Patterns of space allocation

The life-use history of the investigated Ye family Complex I main residence can be partitioned into three successive

phases. The initial one (phase 1) that may have lasted for at least 2 centuries extends from the complex construction and use by Ye family high ranked Qing Dynasty imperial office-holders. The next phase (phase 2) that stretches from the 1960s to the early 21st century revolves around the formation of the “commune” and the use of the Ye Family mansion to house poor families. And the third and last one (phase 3) corresponds to the complex abandonment which is asserted by the informant to have taken place a little more than 10 years ago.

The structure of domestic space and activities areas presented above conflates instance of use from phase 1 and 2, with however the predominant material signature of the “Commune phase”. The inhabited space that measures 556.84 m² can be partitioned into two categories (table 1): The collective and private domestic space. The former covers 393.21 m² and consists of the square, courtyard 1, 2, and lateral, patios Room 5 and 10, and finally Room 11, the Ancestors’ shrine. The latter, made of 7 “housing Units” reveals the equity concerns that have presided over the distribution of living space among the “Commune” families. With the notable exception of Unit 1 made of Room 1 and its attached installation located in the Northwest corner of courtyard 1, whose function cannot be assessed as accurately as one may wish, all the remaining 6 units from the main residence display almost similar size, ranging from a maximum of 38.98 m² in the 3-room Unit 7 – the lateral sub-unit - to 20.31 m² in the single room with storage mezzanine Unit 5 (table 2). Four of the recorded housing units – Unit 2, 3, 4, and 6 – with 1 to 3 rooms measure 21.93 to 23.87 m² in surface extent. Each “family” was accordingly granted with a bedroom and at least some storage space.

Unit	Number of rooms	Minimum (m ²)	Maximum (m ²)	Range (m ²)	Mean (m ²)	Total (m ²)
Private domestic space						
Unit 1	2	1.87	9.75	7.88	5.81	11.62
Unit 2	3	1.87	12.25	10.38	7.68	23.05
Unit 3	2	8.12	15.75	7.63	11.93	23.87
Unit 4	2	8.12	15.75	7.63	11.93	23.87
Unit 5	1	20.31	20.31	0.00	20.31	20.31
Unit 6	1	21.93	21.93	0.00	21.93	21.93
Unit 7	3	10.80	16.00	5.20	12.99	38.98
<i>Total</i>	<i>14</i>					<i>163.63</i>
Collective space	7	10.00	220.00	210	56.17	393.21

Table 2. Main Residence Patterns of Domestic space allocation

Complex 2: The Subsidiary Residence

The Ye Family complex 2, the Subsidiary residence is situated along the Southeast flank of the Main Residence at 24° 47' 35.7" latitude North and 118° 06' 58.1" longitude East, at 31.5 m above sea level. It is a 191.50 m² flipped L-shape

architectural complex oriented Southeast-Northwest/Northeast-South with 3 courtyards, 3 patios and 7 seven rooms (fig. 23). It is currently uninhabited but not abandoned strictly speaking, essentially used as animal pen and storage facility. The outer courtyard along the East flank of the complex used as livestock and duck pen was out of reach. The initial main gate, opening in the East was locked, with the complex accessed through a Southeast side door.

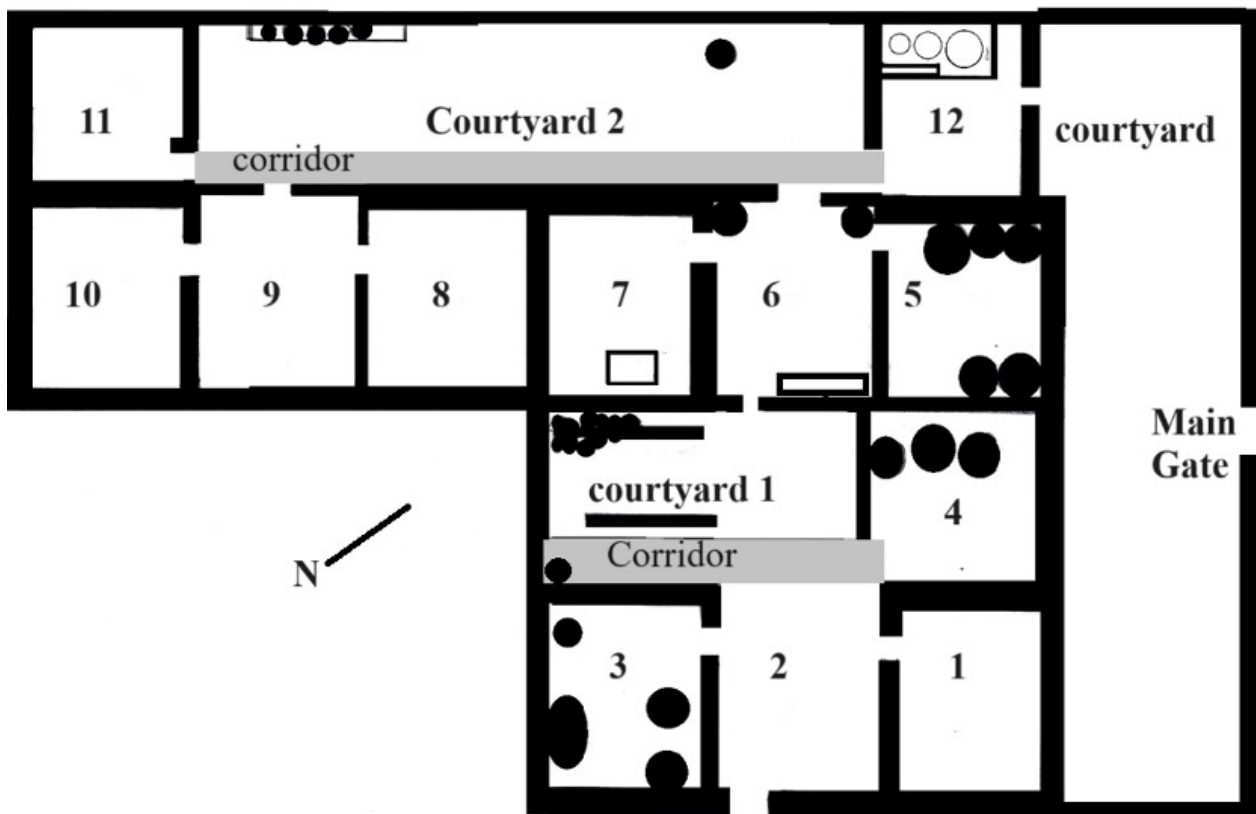


Figure 23. Habitation Complex 2: Corridors in light grey.

The patterning of habitation units is quite straightforward and appears to be made of 3 domestic units, each with a hall (patio), rooms, and courtyard (Fig. 23, table 3).

Habitation Unit 1 in the southeast of the subsidiary residence complex measuring 59.50 m² in surface extent is made of courtyard 1, a Hall (Room 2), and Room 3 and 4. The courtyard, a narrow rectangle 4 m in length and 2 m in width measures 11 m². It was clogged with accumulated worn-out objects and equipment (fig. 24). Room 1 and 3, measuring respectively 12 and 14 m² are situated along the flanks of the 12 m² entrance hall (table 3). The former, Room 1 was empty and the latter, Room 3 and 4 contained 3 large rice storage jars and a wooden bath-tube.



Figure 24. Partial view of courtyard 1.

Room Number	Length (m)	Width (m)	Surface (m ²)
<i>Habitation Unit 1</i>			
Room 1	4.00	3.00	12.00
Room 2 [hall]	4.00	3.00	12.00
Room 3	4.00	3.50	14.00
Room 4	3.50	3.00	10.50
Courtyard	5.50	2.00	11.00
<i>Total</i>			<i>59.50</i>
<i>Habitation Unit 2</i>			
Room 5	4.00	3.50	14.00
Room 6 [hall]	4.00	3.00	12.00
Room 7	4.00	3.00	12.00
Courtyard	5.50	3.00	16.50
<i>Total</i>			<i>54.50</i>
<i>Habitation Unit 3</i>			
Room 8	4.00	3.00	12.00
Room 9 [hall]	4.00	4.00	16.00
Room 10	4.00	3.00	12.00
Room 12	3.00	3.00	9.00
Courtyard	6.50	3.00	19.50
<i>Total</i>			<i>68.50</i>
Collective			
Room 11 (Kitchen)	3.00	3.00	9.00
TOTAL			191.50

Table 3. Complex 2 Structure of domestic space and room's size

Habitation Unit 2 (Fig. 23, table 3) covers 63.50 m². It consists of half of courtyard 2, 5.50 m long and 3.00 m wide (fig. 24), Room 5 and 7 measuring respectively 14 and 12 m², and finally, a hall (Room 5) 4 m long and 3 m wide. Room 5 largely devoted to storage contains 5 very large rice storage jars. Room 7 includes a wooden bath-tube. The Hall (Room 6) features the ancestor's shrine.



Figure 25. View of Courtyard 2 with a ducks' coop

Finally, habitation Unit 3 at the southwestern end of the complex extends over 68.50 m² partitioned into the 19.50 m² of the half courtyard 2 (fig. 24, table 3), Room 8, 10 and 12 measuring respectively 12 and 9 m², and finally, a 16 m² hall (Room 9) slightly larger and square shaped. The whole habitation unit was empty having been re-cycled as livestock space.

Courtyard 2 shared by units 2 and 3 measures 36 m², 12 m in length and 3 m in width. It includes a duck's coop and a series of 6 medium to large vessels stored along the west wall.

Room 12 at the north corner of the complex is a collective installation containing a 3-burners oven displaying an arrangement similar to that of the Main Residence (table 3). It is a square-shaped room, 3 x 3 m with a 1.90 m long and 1.00 m wide oven installation set along the northwest wall.

The pattern of space allocation recorded in the Subsidiary Complex also conveys a deep sense of equity for the grantees' families. The investigated habitation units are made of 3 to 4 rooms, articulated on a hall and a courtyard, measuring respectively: 59.50 (Unit 1), 54.50 (Unit 2), and 68.50 (Unit 3) m² (table 3).

Both the Main Residence and the Subsidiary complex appears to have been re-arranged to fit in the "Commune" requirements of providing equitable housing to those in need at that time.

6. Patterns in Material Culture and Abandonment behavior

The range of material culture items recorded in the investigated residences is relatively narrow. It includes bulky wooden objects like beds and wardrobes, poles and tables, as well as stone ware and porcelain vessels differentially distributed among habitation units and rooms.

Complex 1: the Main Residence

Starting with the ceramics, its distribution is uneven. Complex 1, the Main residence contains a total of 63 vessels belonging to 5 categories (fig. 25, table 4): 6 large storage vessels generally used for rice, 11 liquid storage vessels of different size, 10 pots, 30 bowls, and 9 “others” including basins, plates, lids and incense burners. Beside the presence of large storage vessels in Room 1 and courtyard 1 that are not amenable to reliable assignment to any habitation unit, it is possible to delineate coherent abandonment and post-abandonment scenario for habitation units 1 to 6.



Figure 26. Complex 1 Main Residence vessels assemblage

Room	Large storage vessel	Liquid storage vessel	Pots	Bowls	Others	Total
Courtyard 1	1	-	-	-	-	1
Room 1	1	-	-	-	-	1
<i>Habitation Unit 1</i>						
Room 2-3	-	-	-	-	-	-
<i>Habitation Unit 2</i>						
Room 7	-	1	1	-	-	2
<i>Habitation Unit 3</i>						
Room 8	-	-	1	24	-	25
East Corridor	-	-	4	1	-	5
<i>Habitation Unit 4</i>						
Room 9	-	1	1	-	1	3
West Corridor	-	1	1	-	-	2
<i>Habitation Unit 5</i>						
Room 12	2	8	-	-	2	12
<i>Habitation Unit 6</i>						
Room 14	-	-	-	2	1	3
Room 15	-	-	-	3	2	5
Courtyard 3	1	-	1	-	-	2
Collective space						
Room 10						
Room 11	1	-	1	-	1	3
TOTAL	6	11	10	30	9	63

Table 4. Complex 1 Main Residence Vessels distribution.

Habitation Unit 1 with room 2 and 3 was devoid of any material culture item, suggesting a well planned and carried out abandonment. Habitation Unit 2 with room 4 and 7 also features a well planned and executed abandonment. Bedroom 4 was totally emptied. What was left is the collapsed door panel. Room 7 on the other hand, very likely used for storage contained two vessels, a pot and a liquid storage container left in the central part of the room. Habitation Unit 3 with room 6 and 8, asserted by informant to have been the last inhabited unit of the complex, contains the largest amount of *de facto* refuse, pointing to an unplanned sudden abandonment. Furniture, including a canopy-bed with its mosquito net and fan,

the wardrobe, and night table were left in the bedroom (Room 6). Pairs of shoes and cooking and service vessels were abandoned in Room 8. The uncovered service vessels include tea-cups, spoons, and eating bowls. The latter are distributed in 5 variants with frequency ranging from 1 to 8 (fig. 26, table 5). In addition, the East corridor between Room 6 and 8 had a deposit of 5 vessels: 2 handled pots with sprout, 2 large pots, one with a lid, and finally 1 bowl.



Figure 27. Room 8 cooking and service vessels assemblage

	Measurement MD (cm)	MaD (cm)	H (cm)	HMD (cm)	BD (cm)	Number of specimens
<i>Courtyard 1</i>						
Large Jar	52	70	74	40	40	1
<i>Habitation Unit 2, Room 7</i>						
Necked Jar	13	30	35	25	15	1
Necked pot	10	30	32	15	20	1
<i>Habitation Unit 3, Room 8</i>						
<i>Bowls</i>						
Variant 1	13	13	6	6	5.5	1
Variant 2	11.5	11.5	6	6	5.5	8
Variant 3	11.5	11.5	5.5	5.5	5.5	7
Variant 4	12.5	12.5	6.5	6.5	6.0	5
Variant 5	13	13	6.0	6.0	6.0	3
Large pot	33	40	30	20	24	1
<i>Habitation Unit 4, Room 9</i>						
Necked Jar/lid	10	25	32	21	12	1
Basin	45	45	19	19	21	1
Large pot	25	26	21	10	16	1
<i>Corridor</i>						
Large necked jar	14	40	50	30	24	1
Night pot	3.0	25	25	12	7.0	1

Habitation Unit 5, Room 12

Basin	19.4	19.4	8.4	8.4	9.4	1
Basin	50	50	10.4	10.4	38.4	1
Storage jar	50	30	38	18.5	16.8	3
Storage jar	39.4	47	41.6	13.6	13.4	1
Storage jar	14	36	44	13	25	1
Storage jar	10.7	33	39	17	17	1
Globular pot	25	35	29.4	17	29	1
Globular pot	36	50	43.8	15	25.5	1
Globular pot	14.4	32	32.6	12	18.4	1
Incense burner	9.0	9.4	6.6	3.6	6.5	1
Lid	-	24	6.8	-	-	1

*Habitation Unit 6,
Room 14*

Large bowl 1	12	12	2.5	2.5	6.0	1
Large bowl 2	13.5	13.5	6.0	6.0	6.0	1
Incense burner	8.5	8.5	6.5	6.5	8.5	1

Room 15

Cup	6.0	6.0	5.0	5.0	3.0	1
Plate	15	15	2.7	2.7	7.5	1
Large bowl	19.6	19.6	6.4	6.4	6.0	2
Large bowl	13.2	13.2	5.0	5.0	10.5	7
Large bowl	13.4	13.4	6.2	6.2	6.0	1

Courtyard

Large Jar	47	60	65	40	36	1
Large pot/lid	24.5	27	20	8.0	8.0	1

Table 5. Complex I: Main Residence Vessels distribution and measurements

Key: MD = Mouth Diameter; MaD = Maximum Diameter; H = Height; HMD = Height of Maximum Diameter.

Habitation Unit 4 that includes Room 9 with its mezzanine as well as the southwest corridor has 5 vessels, 2 necked jars, one with its lid, a basin, a large and a medium-size night pots scattered without a specific concentration all over the unit space (table 4 and 5). The represented additional furniture includes a wooden bath-tube, a wooden wardrobe, as well as a sizable wooden beam. The presence of a thick pile of plastic sheets, suggests post-abandonment opportunistic discard. Habitation Unit 4 abandonment thus appears to have been planned with a selection of material culture items left behind, with the vacated space used to discard bulky plastic sheets.

Habitation Unit 5, also with its storage mezzanine features the largest concentration of what may appear at first glance as de facto refuse mimicking sudden unplanned abandonment. A closer analysis of the evidence suggests the accumulated material culture items to have resulted from at least two relatively distinct and independent accumulation episodes. The first revolves around an initial planned abandonment represented by a small table, the dismantled canopy bed, and its planks set on the room floor and against the North wall. The second episode, very likely enacted by the latest inhabitants of the complex from Habitation Unit 3, is the opportunistic use of the empty room as storage space. It is indicated by the scattered distribution of vessels and containers all over the room's surface. The recorded containers include two metal

basins, 4 storage jars of varying size, 3 globular pots, a red incense burner, and a large pot-lid (table 4 and 5). The four storage jars still contained food supplies – clearly in very advanced state of decay -: porc meat, brown beans, wine, and rice, supporting the hypothesis of sudden unplanned abandonment of habitation unit 4 group.

Habitation Unit 6 in the southwest flank of the main residence is articulated around a small lateral courtyard comprising an oven set and an altar. A large rice storage was left at the southwest corner of the courtyard and a lidded large pot set on the altar stone lab. The unit abandonment appears to have been carefully planned and executed. Room 13 was totally empty. Service vessels including plates, large bowls, and cups were scattered on Room 14 and 15 floors, and a small red incense burner was found in Room 14 cupboard shelf. A bed wooden frame was left in Room 15.

Room 5, 10, and 11 parts of the common space were also used for the disposal of material culture items. A small wooden table was left in Room 5, patio 1. Bulky and cumbersome items were accumulated in Room 10, patio 2. The consist of a relatively large wooden granary, a wooden table, and a series of wooden beams and planks pointing to post-abandonment accumulation. Finally, Room 11, the Ancestors' shrine contained a small table with a small incense burner. A series of 3 vessels, consisting of a small storage jar containing brown beans – in state of advanced decay -, very likely a last food offering left at the shrine, a relatively large pot with a lid, and finally, a large open pot used as heater, scattered on the room's floor.

In summary, as far as the Main residence is concerned, the abandonment of habitation unit 1, 2 and 6 was well planned and carried out with almost no significant material culture left behind. Habitation units 4 and 5 were also abandoned as planned with however bulky and heavy material culture items left. Finally, habitation unit 3, the last inhabited entity, displays all evidence of a sudden unplanned abandonment. It is very likely that the members of Habitation unit 3, may have opportunistically used all the space available for post-abandonment storage of their supplies and belongings.

Complex 2: The Subsidiary Residence

During the “Commune years” Complex 2, the Subsidiary residence was divided into 3 habitation units. It is uninhabited, not abandoned strictly speaking, but used as a storage facility and livestock pen. There are nonetheless a few clues on abandonment behavior as can be gleaned from habitation unit 3 (table 6). All 4 rooms are devoid of any material culture item, with Room 9 used as sheep shelter. A series of 6 vessels, 1 large storage, 1 pot, and 4 liquid containers, was set along the wall in courtyard 3.

Room	Large storage vessel	Liquid storage vessel	Pots	Bowls	Others	Total
<i>Habitation Unit 1</i>						
Room 1	-	-	-	-	-	-
Room 2	-	-	-	-	-	-
Room 3	2	-	1	-	-	3
Room 4	3	-	-	-	-	3
Courtyard 1	2	-	5	-	-	7
Total	7	-	6	-	-	13
<i>Habitation Unit 2</i>						
Room 5	5	-	-	-	-	5
Room 6	2	-	-	1	-	3
Room 7	-	-	-	-	-	-
Room 11	-	-	-	-	-	-
Courtyard 2	-	-	-	2	-	2
Total	7	-	-	3	-	10
<i>Habitation Unit 3</i>						
Room 8	-	-	-	-	-	-
Room 9	-	-	-	-	-	-
Room 10	-	-	-	-	-	-
Room 12	-	-	-	-	-	-
Courtyard 3	1	4	1	-	-	6
Total	1	4	1	-	-	6
TOTAL	15	4	13	3	-	29

Table 6. Vessels distribution from Ye family Complex 2.

Habitation unit 1 contains a total of 13 vessels, 7 large for rice storage and 6 pots. The large storage containers are found in Room 3, 4, and the courtyard with 2 to 3 specimens each. The pots are essentially stored in courtyard 1 (table 6).

Habitation Unit 2 features a vessel distribution pattern similar to the previous one, with 10 containers, 7 large rice storage jars and 3 pots. Large storage vessels are found in Room 5 and 6 with respectively 5 and 2 specimens, while pots are found in Room 6 and courtyard 2 (table 6).

Both residences of the Ye family complex present similar partition inherited from the “Commune Period”. Each of the housed family was granted a number of rooms for private domestic use while common space articulated on courtyards, patios, and kitchen was accessible to all “Commune” members. In the aftermath of the “Great Proletarian Cultural Revolution”, the Ye family descendants may have started to petition the local government to regain control of their family

property, pressuring the remaining “commune” members to vacate the houses. The abandonment processes triggered then have been analyzed in this paper, featuring cases of well planned and executed leaves as well as post-abandonment *de facto* accumulations.

Conclusion

The formation of archaeological entities results from a three-phases process: (1) - the construction of an installation; (2) – its life-time use; and finally, (3) – its abandonment and preservation by natural agencies. Archaeological finds can be spectacular or ordinary and redundant. Whatever the case however, it is important to figure out how the archaeological record currently under investigation came to be. Converting static material remains into dynamic behaviors requires robust frames of references (Binford 2019) to guide the interpretation of the archaeological record and refrain from *ad hoc* fantasies. Such frames of references or sample theories are built through diverse and complementary strategies. One is ethno-archaeology: the observation and conduct of fieldwork in contemporary settings addressing archaeological questions (Holl 2003). The other is the practice of experimentation (Coles 1973). The fieldwork carried out at Baomei was articulated on a tri-phase methodology combining oral information, features mapping and drafting, and archaeological excavation. The use-life of the architectural units under investigation consists of 4 successive steps: (1) - the construction and use of the house-complexes by a high-ranking Qing dynasty imperial office-holder family; (2) the shift to a “Commune” with the buildings used for housing of poor families; (3) the progressive abandonment of one building and the refurbishing of the other as storage space. Finally, the detailed analyses of the contained material culture items revealed polar extreme abandonment tactics: well-planned and carefully implemented abandonment leaving nothing behind on the one hand, and sudden unplanned abandonment on the other, with a gradation of post-abandonment *de facto* disposal in between.

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