

Excavation Journal I

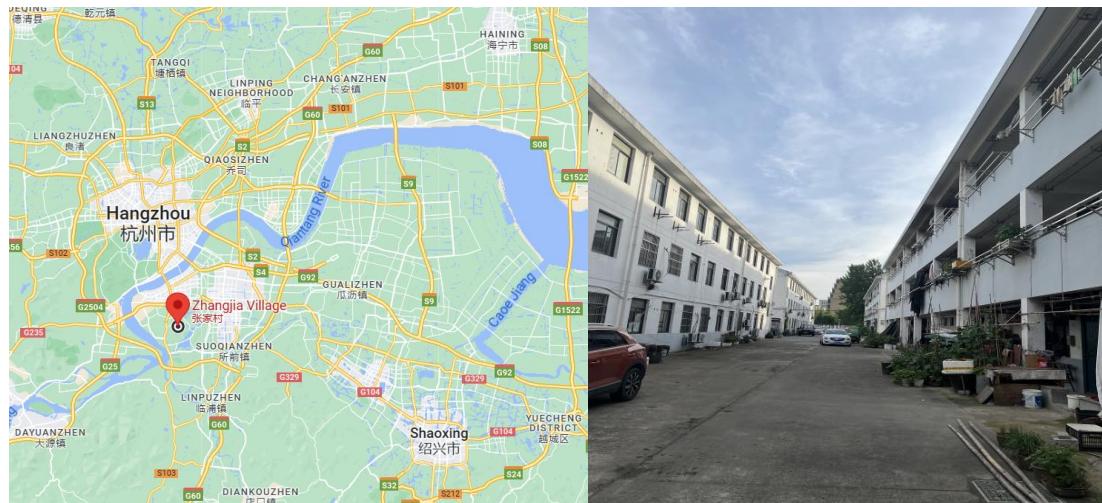
The classification and storage of archaeological materials (July 3 -July 9)

Affected by plum rains in Hangzhou, our excavation is rescheduled and postponed to July 11. Before that, we will work indoor to process and store archaeological materials of Maqiao culture unearthed last year.

Day 1: July 3

14:00

All team members gather at our workshop in Hangzhou on time (Zhangjia Village, Bingjiang District, Hangzhou City, Zhejiang province) .



15:00-22:00

We start the project by cleaning our room and preparing for the work tomorrow by reading archaeological report together at night.

We also dinner with Mr. Lin Sen, a field director. Mr. Lin briefly introduces his recent field work and provide us with basic information of Maqiao culture.

Located in the Minghang District in Shanghai, Maqiao site was discovered in 1959. Named after the site, Maqiao culture can be dated back to neolithic period (3700 years ago). A large number of artifacts (stone tools, pottery, porcelain wares and etc) were unearthed.

Our project focuses on Zhangshan, another site of Maqiao culture. The site is situated near Zhangshan Mountain and close to Dongtiaoxi Brook and Qiantangjiang River.

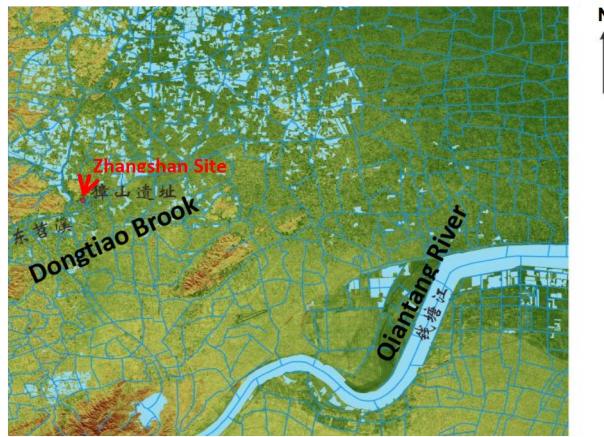


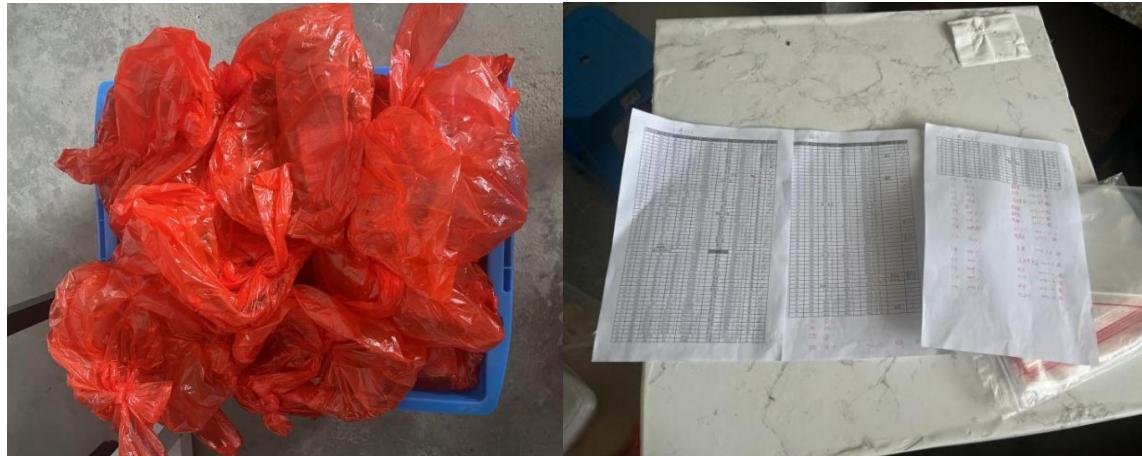
Photo edited on the map provided by Dr. Liwei

Day 2: July 4

The excavation team has helped to put sherds and stones in red plastic bags. Each package contains unearthed material of the same layer.

8:00-17:00

Firstly, we need to take all artifacts out from box, check against label list to make sure there is no artifacts lost and the label is correct.



Exquisite stone knife, stone adze and Gu with Kuiwen(夔纹) are among the artifacts.



Secondly, we are asked to re-label some artifacts when necessary. New labels are written on the bags and on the paper (paper tags are kept within small bags and put into big bags together with unearthened materials) to ensure they can be well preserved during storage.

Cases that new label should be assigned to:

1. Packages of the same labels
2. As representative sherds/stones will be used as samples (such as stone tools and complete objects), they need to be re-labeled.



Our working table and my selfie.



At last, we group the artifacts into pottery sherds group, stone group and sample group (used as samples), and then store them according to unit. The baskets on the table collects samples while boxes on the floor are for pottery or stone pieces.



Finally, we update the label list on computer.

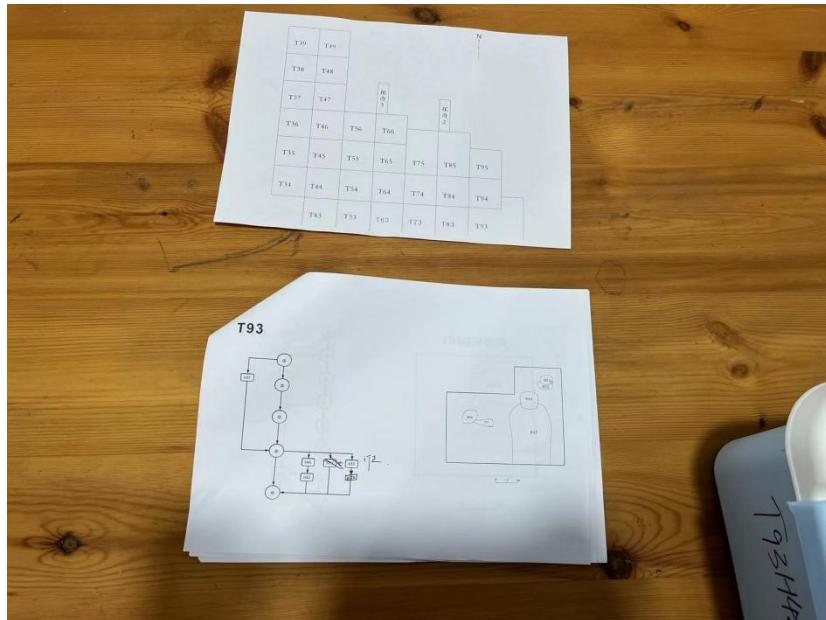
Before sleep

We read archaeological report of Maqiao culture and Qianshanyang culture and study the terminology (terms on patterns and types especially) used in the report.



Day 3: July 5

T93 was an ash ditch before being expanded as a unit. Since various artifacts were discovered in this unit, we start our classification from this unit.



1. All pottery and stone objects are displayed on the table and we roughly group them into “Tempered with sand” category and “Clay” category.



2. Further classification on fabric, shade, and shape. We set color and decoration standard for all artifacts.

The fabrics of pottery:

- (1) Sand-tempered (porosity: coarse sand 粗砂 and fine sand 细砂)
- (2) Clay (hardness: soft 软陶 and hard 硬陶)

The shades of pottery:

- (1) Puce(紫褐)
- (2) Red
- (3) Grey



The decoration of pottery:

- (1) Leaf-vein pattern (Yemaiwen,叶脉纹)



- (2) Check pattern (Fanggewen,方格纹)



(3) Rectangular check (Tiaogewen,条格纹)



(4) Basket pattern (Lanwen,篮纹)



(5) Rope pattern 绳纹 (The line of rope pattern is slimmer than that of basket pattern, and is of nots)



(6) Diamond pattern(Lingwen, 菱纹)



(7) Mat pattern (Xiwen, 席纹) (Groups of Lines perpendicular to each other like a mat)



(8) Meander border (Cloud and sound pattern, Yunleiwen, 云雷纹)



Ware:

(1) Dou (豆)



(2) Cone shaped leg 圆锥足



(3) Fish-fins shaped leg (鱼鳍形鼎足)



(4) Concave leg (凹弧足)



(5) Lateral flat leg (侧扁足)



(6) Gu (觚)



(7) Bo (鉢)



(8) Guan (罐)



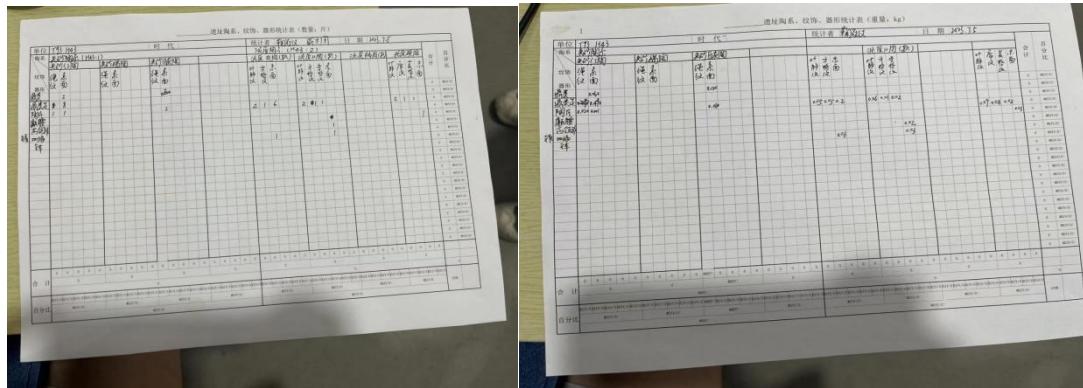
(9) Yan (甗腰)



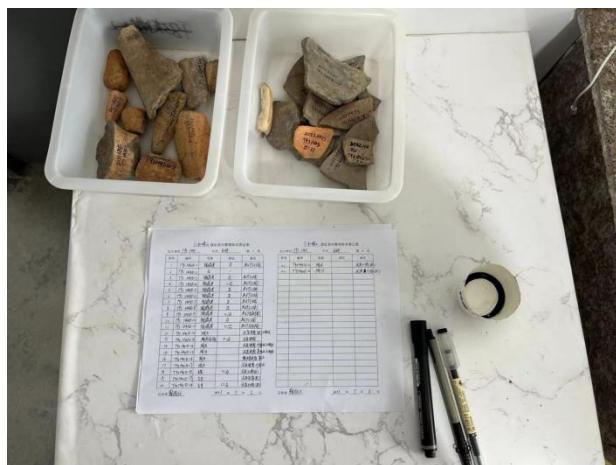
We record the number and weight of each group on the paper sheets.



For example, there is only one pottery sherd (陶片) in group “grey clay without decoration -pot” (素面泥质灰陶-罐), and it weighs 0.1 kg.



Representative samples are selected, labeled with ink on the surface, recorded on the sample records and put together in the labeled tray.



Samples with wrong labels (wrong context number) are re-labeled.

Eg:

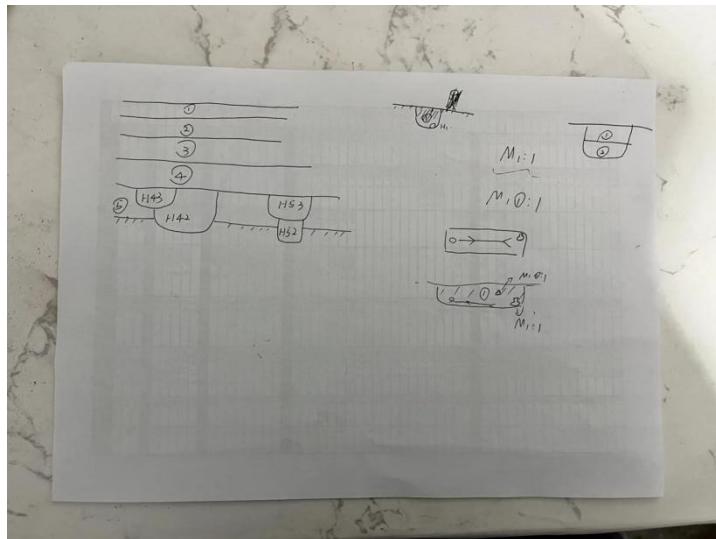
T93 H43:6 is replaced by T93 H43①:6 because the sherds are found in the rubbish disposal and only one fill event happened there.

Note:

H34 represents the action of pit digging

H34① represents the activity of filling the pit (for the first time)

H34:1 represents an artifact that was buried at the same time when the pig was dig, which is often the case of the grave.



(A hand drawing by Dr. Li Wei when he demonstrated us why some labels are wrong)

See final e-version recording sheets (Sample label list, Sample number list and Sample weight list) below.

仁和漳山 遗址室内整理标本登记表				
出土单位	T93 H43	时代	马桥	第 1 页
序号	编号	名称	部位	备注
1	T93 H43①：1	陶鼎类	足	夹砂红陶
2	T93 H43①：2	石		
3	T93 H43①：3	陶鼎类	足	夹砂红陶
4	T93 H43①：4	陶鼎类	口沿	夹砂红陶
5	T93 H43①：5	陶鼎类	足	夹砂红陶
6	T93 H43①：6	陶鼎类	足	夹砂红陶
7	T93 H43①：7	陶鼎类	足	夹砂红陶
8	T93 H43①：8	陶鼎类	足	夹砂红陶
9	T93 H43①：9	陶鼎类	口沿	夹砂白灰陶
10	T93 H43①：10	陶鼎类	足	夹砂红陶
11	T93 H43①：11	陶鼎类	口沿	夹砂白灰陶
12	T93 H43①：12	陶片		泥质灰陶(软) 方格纹
13	T93 H43①：13	高领罐	口沿	泥质硬陶
14	T93 H43①：14	陶片		泥质硬陶 叶脉纹 红褐色
15	T93 H43①：15	陶片		泥质硬陶 席格纹 红褐色
16	T93 H43①：16	陶片		泥质硬陶 缂丝纹
17	T93 H43①：17	陶片		泥质硬陶 叶脉纹
18	T93 H43①：18	罐	口沿	泥质红陶(软)
19	T93 H43①：19	钵		泥质灰陶(软)
20	T93 H43①：20	钵	口沿	泥质红陶(软)

Day 4: July 6

11:00

Accompanied by Mr. Shi Mengyi, we go to our excavation site and our camp there.



12:00-15:00

Then we visit Lugongqiao site, another archaeological site in Xiaoshan. This site covers more than 1000 square meters and might be the center of the settlement dated back to Liangzhu period.



Mr. Shi shows us a complicated unit in which various features overlap. He also teaches us how to use trowel to scrape the surface and feel the texture of the soil. The bottom of a layer or edge of a cut is usually identified when there is a change in color and (or) texture

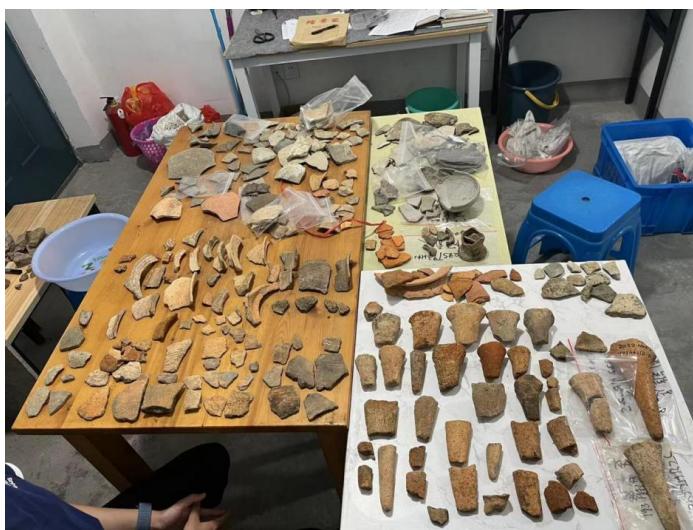


A field worker from Fengxiang (Shanxi province) made us a saozi noodle during lunch time.



19:00- 21:00

We start the classification of T93H42 according to the standard and check whether it is possible to join pottery sherds into a complete one.



Day 5: July 7

We spend the whole day processing pottery sherds from T93 H42① and update classification standard according to new sherds we see.



New ware type: Duck shaped Jug 鴨形壺



New sherd color :

1. Grey coating with black core (灰皮夹黑芯)



2. Red coating with black core(红皮夹黑芯)

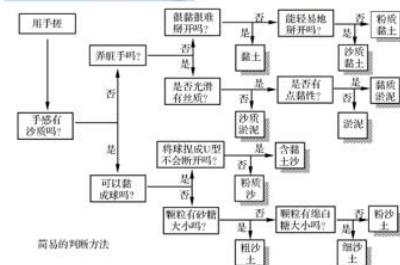


Except for applying special coating material on the surface, low firing temperature can also lead to a core of different color. We distinguish the two by observing whether the pattern is on the coating surface or on the sherd itself.

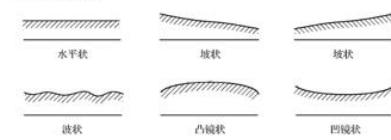
19:00-21:00

Seminar on field archaeology host by Dr. Li Wei

五、发掘记录表					
年度:	遗址名称:	工作单位:	底箱号:	流水号:	
探方号	遗迹号	堆积号	堆积单位号	记录日期	
绘图号	照相号	摄像号		记录者	
堆积关系:					
层位关系: [] [] [] [] [] []					
叠压或打破: [] [] [] [] []					
→ [] [] [] [] [] []					
堆积特征描述:					
深度(最高最低点): 表面 东南____ 西南____ 东北____ 西北____ 厘米					
底面 东南____ 西南____ 东北____ 西北____ 厘米					
厚度: 最厚____ 最薄____ 厘米					
堆积描述:					
土色_____ 土质_____					
致密度 疏松□ 较疏松□ 较致密□ 致密□					
堆积形状 坑洞□ 筒状□ 袋状□					
水平状□ 坡状□ 波状□					
凸起状□ 凹槽状□ 其他_____					
包含物 陶_____ 石_____ 骨角_____ 灰土_____					
料姜石_____ 蚌壳_____ 灰屑_____ 其他_____					
保存状况_____ 堆积性质_____					
发掘方式_____					
其他_____					
遗物采集情况 方法(单孔大小)_____ 测试标本采样:					
遗物类型 数量 _____ ¹⁴ C 编号 数量 _____					
遗物类型 数量 _____ 植物/植硅石 编号 数量 _____					
遗物类型 数量 _____ 浮选土样 编号 数量 _____					
遗物类型 数量 _____ 其他_____ 编号 数量 _____					
遗物类型 数量 _____ 其他_____ 编号 数量 _____					
示意图: 备注:					
记录者: 审核者: 审核日期: 资料员:					



示意图二 田野发掘土质判断简易方法示意图
(参考: Museum of London Archaeology Service, 1994. *Archaeological Site Manual*, 3rd ed.)



Our camp go out of electricity after the seminar. Luckily, we manage to find hotel nearby.

Day 6: July 8

We finalize our color and decoration standard for all artifacts and reclassify sherd processed previously according to new standard.

The fabrics of pottery:

1. Sand-tempered (porosity: coarse sand 粗砂 and fine sand 细砂)
2. Clay (hardness: soft 软陶 and hard 硬陶)

The shades of pottery:

1. Puce (紫褐)
2. Red
3. Grey
4. Black
5. Grey (with black core) (灰皮夹黑芯)
6. Red (with black core) (红皮夹黑芯)

It is much harder to produce a black pottery because of its strict reduction requirement compared to that of grey and red pottery.

The decoration of pottery:

1. Leaf-vein pattern (Yemaiwen, 叶脉纹) : There are vertical lines in the middle of each pattern like stems. Some leaf-vein pattern are standard and organized while others are messy and disorganized. 有纵向叶杆型竖线, 部分陶片叶脉较为规整, 部分陶片叶脉较杂乱
2. Check pattern (Fanggewen, 方格纹) : Square grids formed by intersecting lines. 有明显横向交错线条, 格子较方正
3. Leaf-vein and chek pattern (Fanggewen and Fanggewen, 叶脉加方格纹)
4. Rectangular check pattern (Tiaogewen, 条格纹) : Rectangular grids formed by intersected lines. 有明显纵向竖线分割, 格子较长
5. Mat pattern (Xiwen, 席纹) : Groups of lines with different directions. 方向不同的线条组
6. Basket pattern (Lanwen, 篮纹) : Wide and organized lines of same direction. 较绳纹更宽、更平整
7. Rope pattern (Shengwen, 绳纹) : Thin lines with nots. 较细, 有结节
8. Diamond pattern (Lingwen, 菱纹)
9. Cloud and sound pattern (Yunleiwen, 云雷纹)
10. Kui dragon pattern (Kuiwen, 蟠纹)
11. Plain (素面)

An illustration of classification standard for clay sherds:

The classification standard of clay pottery shards 红陶陶片分类标准											
Pattern	Color	Line	Dot	Mark	Shard						
Patterns	Yellowish-red	Leaf-vein pattern These are vertical lines in the surface of red pottery. The lines are irregular, sometimes thick and sometimes thin, and some are intersected by horizontal lines.									
	Red	Diagonal grid pattern These grids are formed by intersecting lines.									
	Leaf-vein and check pattern										
	Diagonal grid	Horizontal lines intersected by intersecting lines.									
	Dot pattern	Groups of lines with different directions.									
	Diagonal pattern	Red and irregular lines of some direction.									
	Line pattern	Red lines with dots.									
	Smooth pattern										
	Cross and cross pattern										
	Red dragon pattern										
Flame											

Red pottery (Leaf-vein pattern) 红陶叶脉



Red pottery (Rectangular check pattern) 红陶条格



Hard red pottery (Plain) 红陶素面硬



Soft grey (with black core) pottery (Basket pattern) 灰皮黑芯篮纹软陶



Hard grey pottery (Check pattern) 方格灰陶硬



Soft red pottery (with black core) 红皮黑芯软陶



Grey clay (Rectangular check pattern) 泥质灰陶条格纹



Hard grey pottery (Leaf-vein pattern) 叶脉灰陶硬



Hard grey pottery (Plain) 素面灰陶硬



Hard red pottery (Check pattern) 方格红陶硬



Hard red pottery (Leaf-vein and chek pattern) 叶脉加方格红陶硬



Soft grey (with black core) pottery (Rectangular check pattern) 灰皮黑芯条格



Soft grey (with black core) pottery (Check pattern) 灰皮黑芯方格



Soft black pottery (Plain) 素面黑软陶



Soft red pottery (Plain) 素面红陶软



Soft grey pottery (Plain) 素面灰陶软



Soft red pottery (Leaf-vein and check pattern) 叶脉方格红陶软



Soft red pottery (Leaf-vein pattern) 叶脉红陶软



Soft red pottery (Mat pattern) 席纹红陶软



Soft black pottery (Rope pattern) 绳纹黑陶软



Soft black pottery (Basket pattern) 篮纹黑陶软



Hard puce pottery (Rope pattern) 绳纹紫褐硬陶



Soft grey pottery (Rope pattern) 绳纹灰陶（软）



Hard grey pottery (Rope pattern) 绳纹灰硬陶



Soft grey (with black core) pottery (Rope pattern) 绳纹灰皮黑芯软陶



Soft grey pottery (Check pattern) 方格灰陶软



Soft grey pottery (Leaf-vein pattern) 叶脉灰陶软



Soft black pottery (Basket pattern) 篮纹黑陶软



Soft red (with black core) pottery (Check pattern) 红皮灰芯方格



Soft grey pottery (Basket pattern) 篮纹灰陶软

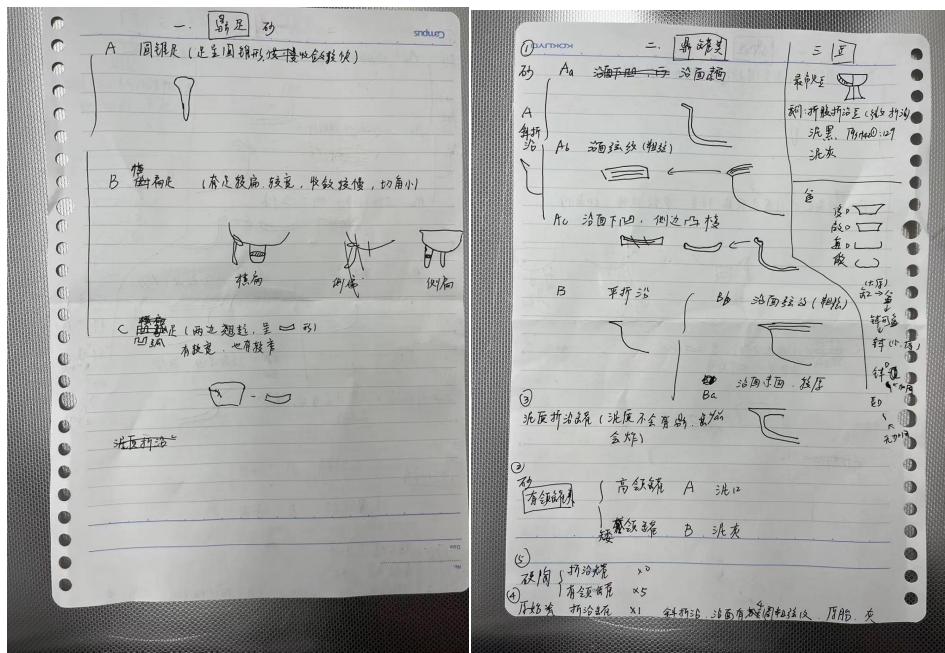


Day 7: July 9

We get up early in the morning and start the day taking aerial image using drone



Then we go back to the camp and apply typology method to classify sherds from T93H42 that are indicative in terms of ware type.



1. Legs of tripod

Type A: Cone shaped leg

Type B: Horizontal flattened leg

Type C: Concave leg

Labeled legs with tags.



2. Tripods and Pots

Group1: Tempered with sand

(i) No collar

Type A: Tilt rim

Aa Plain rim

Ab Rim with wide curve pattern

Ac Concave rim

Type B: Horizontal rim

Ba Plain thick rim

Bb Rim with wide curve pattern

(ii) With collar

Type A: High collar, red clay

Type B: Low collar, grey clay

Group2: Clay

(i) Soft

Type A: Tilt rim

(ii) Hard

Type A: With collar

(iii) Proto porcelain

Type A: Tilt rim

Note:

- (1) Compared to other colors, the black pottery is the most demanding one because it requires reducing atmosphere. Also, the firing core of sherds is more likely to be black due to the reducing atmosphere in the core.
- (2) Wares of rims of different angles falls in different categories.
- (3) The rim of a *Bo* is reinforced and thickened while the rim of a *Dou* is not