

# A Field Guide to Glazed Thai Ceramics

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## INTRODUCTION

AT THE BEGINNING of the 1980s the accepted view on the development of Thai ceramics supported four ideas: (a) that kilns were set up in north-central Thailand in the thirteenth century to make glazed wares; (b) that production started at Sukhothai and, after the source of clay was depleted, moved to Sawankhalok (Si Satchanalai); (c) that the technology for making high-fired glazed stoneware derived from China; and (d) that the kilns closed in the mid-fifteenth century because of war. These parameters were based mainly on historical, rather than material, evidence. Scientific excavations of the kilns were limited in quantity and scope.

Now, at the end of the decade, material evidence is the primary basis of research, due to the discovery of thousands of ceramics and extensive archaeological research in the past ten years. Analyses of these finds challenge the original ideas.

Doubts about the earlier theory emerged in the mid-1970s when both Sawankhalok and Sukhothai ceramics dating from the first half of the fifteenth century were recovered from a sunken ship in the Gulf of Thailand (Brown 1975: 356–370). This was the first archaeological evidence that the two kiln sites were in operation simultaneously. Subsequently, Sawankhalok wares were found together with mid-sixteenth-century Chinese blue and white ware at another wreck site (Howitz 1979:15), suggesting that the Sawankhalok kilns operated at least 100 years later than previously believed (Brown 1988:7).

The next advance in research came in 1980 when a joint Thai-Australian team began excavations at Si Satchanalai. After seven years of work at the site, the Thai Ceramics Archaeological Project (TCAP) has made some startling discoveries. TCAP proposes the tenth or eleventh century as the beginning date for glazed ceramic production in Thailand (Hein 1987:13; Hein and Barbetti 1988:12), which is 300 years earlier than the original theory. It must, however, be considered a provisional date until the results of scientific testing have been published. These finds also indicate that the earliest glazed Thai ceramics were made at the Ban Koi Noi kilns in Sawankhalok, not Sukhothai, (Hein 1987:17) and that the technology

developed indigenously without any early influence from China (Hein 1987:9–13; Hein and Barbetti 1988:17).

Research in this decade on the development of ceramic production in northern Thailand has steadily progressed. It substantiates that the region was an extensive center making high-quality glazed ceramics between the early fourteenth and mid-sixteenth centuries (Shaw 1987:55; Brown 1988:84). These wares have attracted less attention because there have been no comprehensive excavations of the sites. Also, the wares were not exported, so very few pieces have been found outside of Thailand.

The most recent addition to research was an unprecedented discovery of ceramics made in 1984 in Tak Province. Quantities of ceramics were found in burials in two mountainous areas near the Burmese border. The inhabitants of the area and the owners of the graves are unknown. The types of wares include Chinese, Vietnamese, Sukhothai, Sawankhalok, and northern Thai wares as well as Burmese ceramics, a previously unknown group (Shaw 1985:93–102; 1986:10–13). Based on a stylistic comparison with burial wares in other parts of Southeast Asia, the Tak finds date from the mid-fourteenth to the mid-sixteenth century (Shaw 1986:10–13).

These finds constitute a large body of artifactual evidence that has enormous potential as a principal research source. To make it accessible to those who are not specialists, however, a simple system of identification is needed. This paper, therefore, proposes a field guide to be used for the initial identification of glazed Thai ceramics.

### THE FIELD GUIDE

The main production centers for glazed Thai ceramics are included in this guide. They are Kalong, Phan, and Sankapaeng in northern Thailand, and Sawankhalok and Sukhothai in the north-central region (see Fig.1). Only established types with a secure provenance are used for identification (Table 1). Using this guide, identification of an unknown specimen is made by inspecting the external structure, making judgments on distinctive features, and locating examples with similar characteristics

TABLE 1. TYPES OF GLAZED STONEWARES PRODUCED IN THAILAND

TYPE	KILN SITE				
	KALONG	PHAN	SANKAMPAENG	SAWANKHALOK	SUKHOTHAI
<i>One-color (monochrome)</i>					
Brown or black	x		x	x	
Green (celadon)	x	x	x	x	
White	x			x	x
<i>Two-color</i>					
Brown and green			x		
Incised brown and white				x	
Underglaze:					
Brown or black and green				x	
Brown or black and white	x		x	x	x

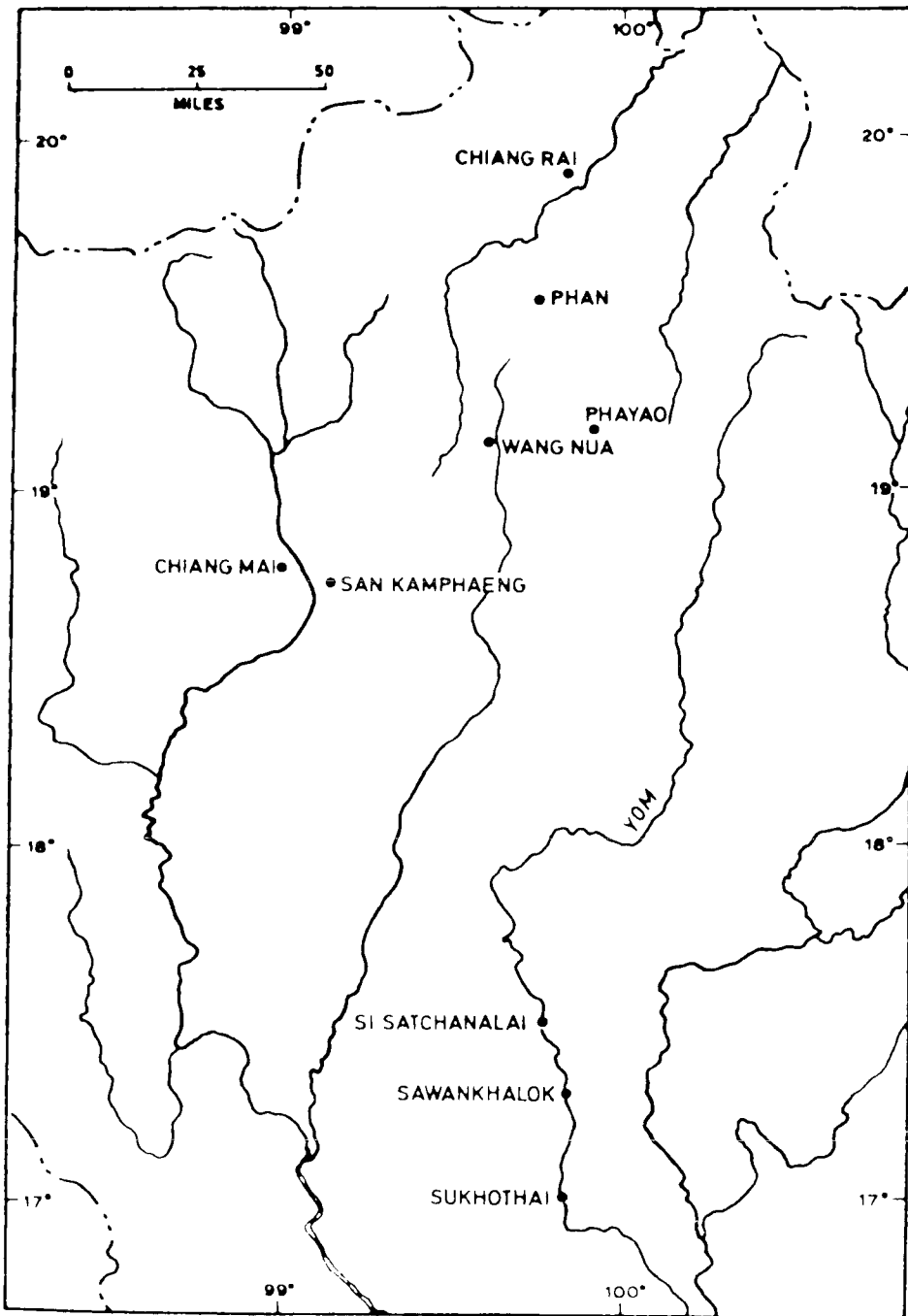


Fig. 1. Map of major kiln sites in Thailand.

in the key. When a choice is made, the key will direct the user either to another set of features for consideration or to the correct section for identifying the specimen.

This system has distinct advantages. It emphasizes practicality and simplicity in equipment, time, cost, and skill. Thus more people in a greater number of fields can use these data as a research source. It also enables a comparative study of material from different sites. There are, however, limitations to this approach that must be acknowledged. First, the internal structure of a specimen cannot be examined. Thus an analysis of the composition and physical properties of the body and glaze may be needed for conclusive identification. But this requires laboratory facilities that are expensive and available only to a limited number of researchers. Second, no standard form exists for descriptions of color, texture, and shape. Thus individuals may perceive these aspects differently. Regardless of the method used for identification, the initial classification of ceramics always relies on features that are readily visible.

### CHARACTERISTICS OF GLAZED THAI CERAMICS

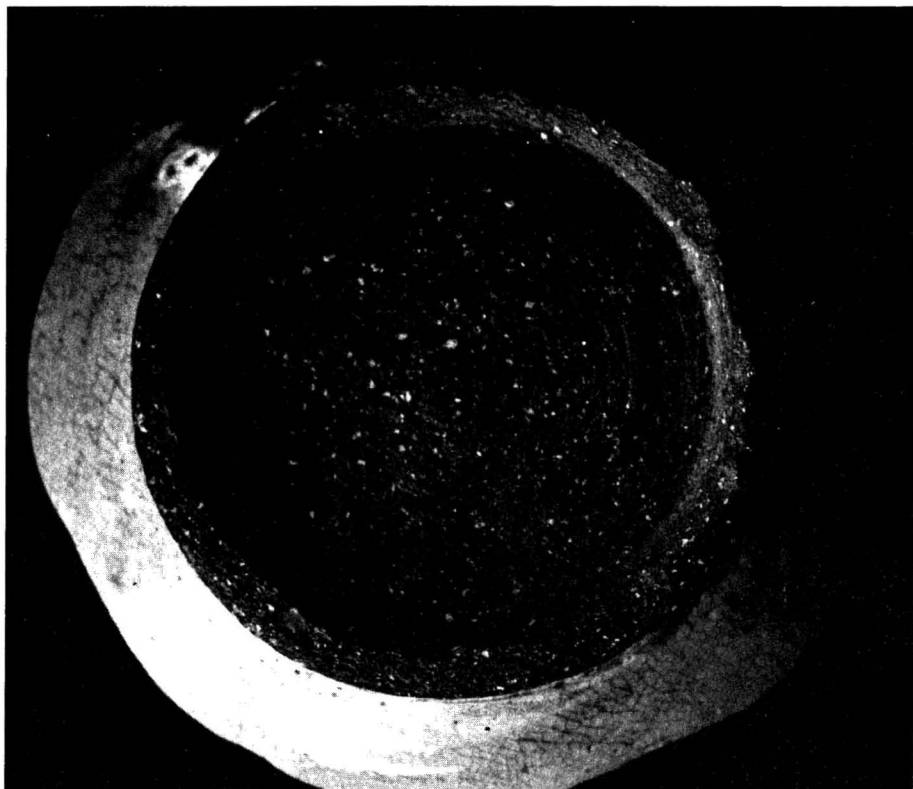
Two groups of features should be considered when examining a specimen: (a) materials and processes, and (b) shape and decoration. Even though each of these features is examined separately, it is important to analyze the specimen in its entirety because all aspects are related. Observations of one feature may suggest considerations for the examination of another aspect. The body, glaze, and techniques of potting and firing are all limited by the nature of the raw materials, whereas shape and decoration allow freedom of creativity and artistic skill.

**BODY** Features of the body that can be examined visually are its texture and color. (Note that *texture* as used here refers to the surface of the body; both *color* and *texture* refer to the body after firing.) The body of glazed Thai ceramics is a high-fired stoneware that always contains a high iron oxide content. The iron appears as flecks, which are reddish, silvery, or black. When looking at the texture, judge only the arrangement of particles and not the marks made by potting techniques. Determine whether the texture is coarse or fine by examining the size of the particles. Then decide whether it is grainy or smooth by looking at the protrusion of the particles. A coarse, grainy body is shown in Pl. I. The color of the body is divided into five classes: white, buff, brown, gray, and red.

**GLAZE** The color of the glaze is the first criterion for consideration in the key, as it is the most apparent characteristic of the ceramic.

The most widespread glaze defects are crazing and pooling. Crazing is a series of fine-line cracks in the glaze that look like a mesh (Pl. IIa). The thicker the glaze, the more pronounced the crazing. It is caused by a difference between the degree of contraction of the body and that of the glaze (Fraser 1986:73). Pooling is a thick layer of glaze that collects in a small area (Pl. IIb). It results when the glaze is too runny.

**METHOD OF POTTING** This is a fundamental aspect, but very few specimens show evidence of it. One diagnostic mark of wares thrown on a potter's wheel is a spiral configuration that looks like a thumbprint on the base (Pl. III). It occurs when the potter detaches the vessel from the wheel with a wire or string.

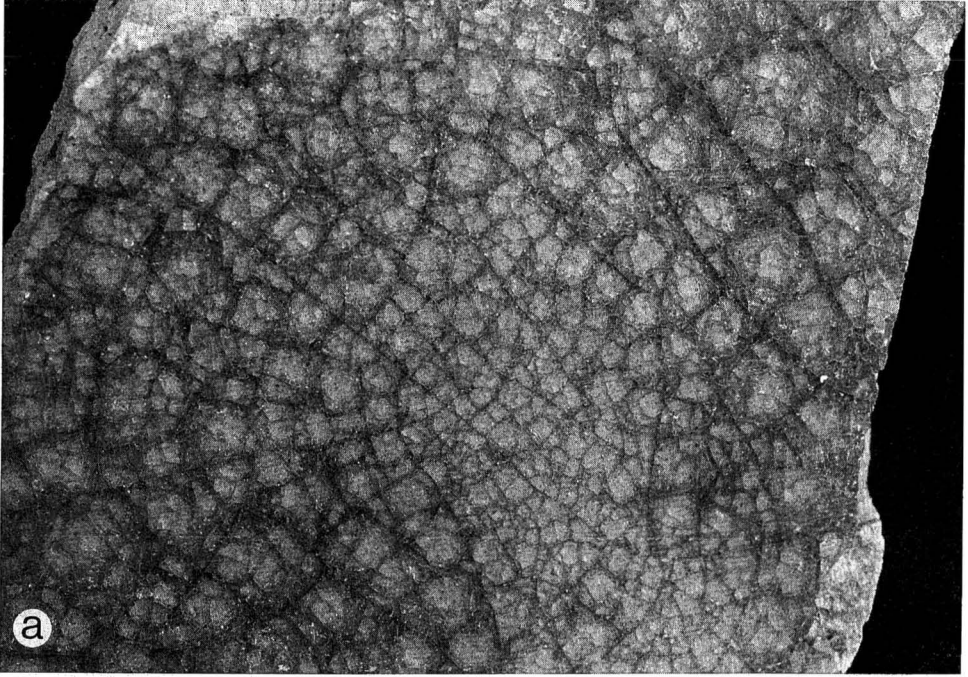


Pl. I. Coarse, grainy body.

**FIRING** The locations, number of kilns, and excavations are shown in Table 2. The color of the body is an indication of the kiln atmosphere. Generally, a body fired in an oxidizing atmosphere is buff or red, whereas a body fired in a reducing atmosphere is gray. Tinges of red on a gray base are common on wares fired in a reducing atmosphere. They occur when the exposed parts reoxidize during cooling.

Firing scars are a distinctive aspect for observation. Clay supports were used to stack wares in the kilns. After firing, they were removed, frequently leaving an unavoidable scar on the vessel. A readily visible black ring, or part of one, on the base resulted from a tubular support that was used extensively at Sawankhalok (Pl. IVa). A circular scar with evenly spaced unglazed dots (usually five) in the center of bowls and dishes is typical of Sukhothai wares. These vessels were stacked one on top of the other and separated by a disc with short spurs (Pl. IVb). An unglazed mouth rim resulted from a unique method used at Sankampaeng where plates were stacked base to base and rim to rim (Pl. Va).

**SHAPE** Classification of shape in this key is made on the basic characteristics of form, rather than function (see Table 3; see Glossary for nomenclature). A foot, base, rim, or handle is useful for identification. The base on Sukhothai wares characteristically reveals traces of a whitish slip (liquid mixture of clay and water) resulting



Pl. II. Glaze defects: *a*, crazing; *b*, pooling.



Pl. III. Thumbprint mark.

TABLE 2. KILN SITES IN THAILAND

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**KALONG**

Location: Between Chiang Rai and Lampang provinces  
 Number of Kilns: 200 (estimate)  
 Excavations: Wang Nua, 11 (1972, Fine Arts Department)  
 Tung Hua, 8 (1974, Dean Frasche)  
 Huay Sai, 4 (Fine Arts Department)

**PHAN**

Location: Chiang Rai Province, Phan district  
 Number of Kilns: 30  
 Excavations: Pong Daeng, 12 (1973, Fine Arts Department)  
 Champoo, 3

**SANKAMPAENG**

Location: Chiang Mai Province, 25 km east of Chiang Mai  
 Number of Kilns: 83 (1952, Fine Arts Department)  
 Excavations: 8 (1970, Fine Arts Department)  
 1 (Chiang Mai National Museum; reconstructed)

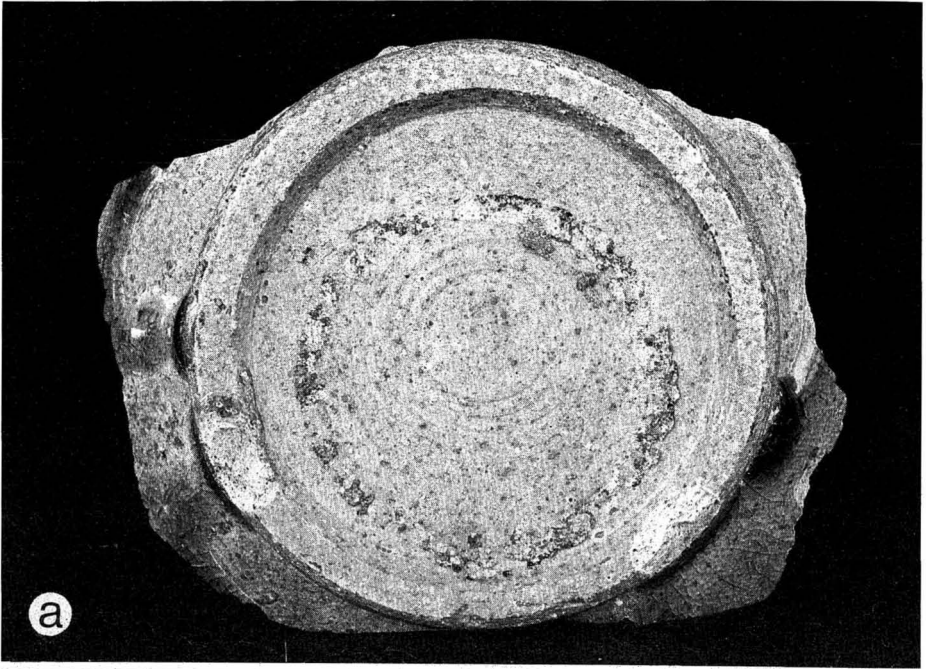
**SAWANKHALOK**

Location: Sukhothai Province, Sisatchanalai  
 Number of Kilns: 600 (estimate)  
 Excavations: Ban Ko Noi, 230  
 Pa Yang, 27  
 Tukatha, 6

**SUKHOTHAI**

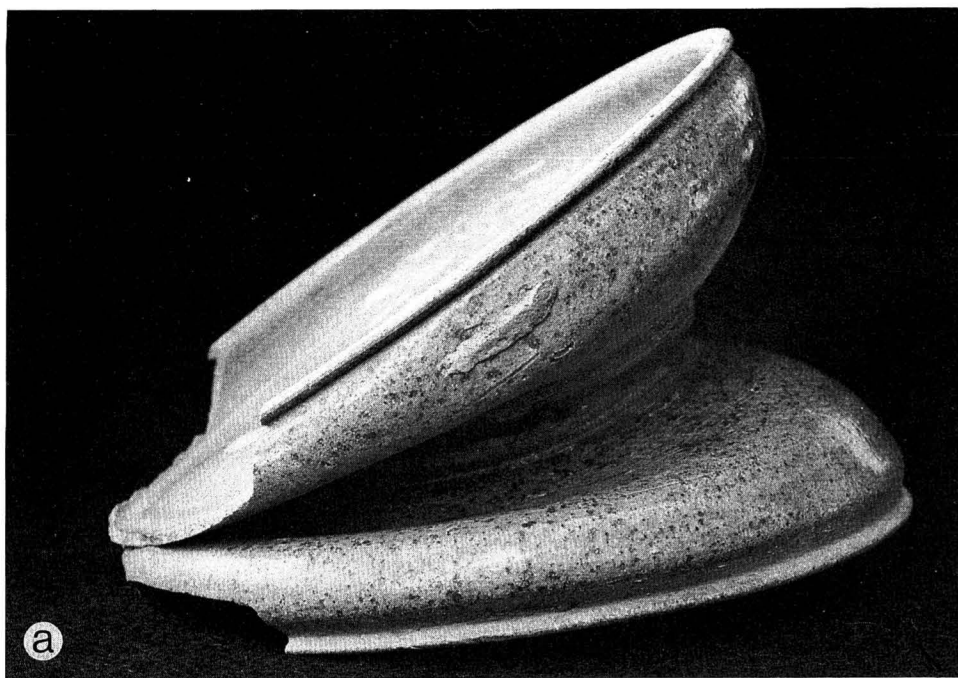
Location: Sukhothai Province, 1 km north of city wall  
 Number of Kilns: 100  
 Excavations: 51 (recorded)

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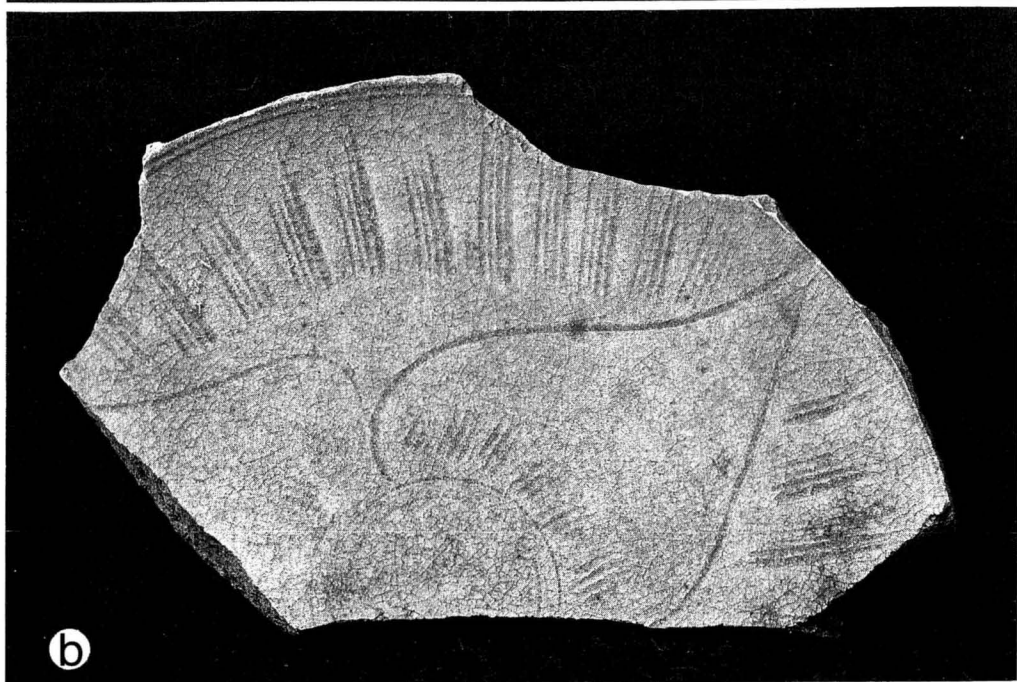
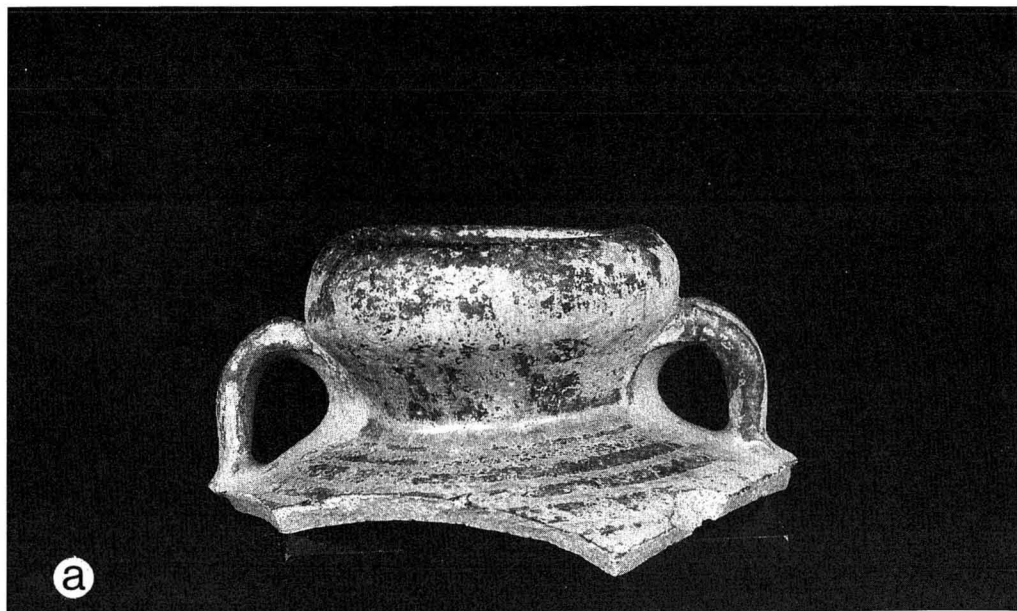


Pl. IV. *a*, Tubular support mark (Sawankhalok). *b*, Disc support marks (Sukhothai).





Pl. V. *a*, Stacking base to base (Sankampaeng). *b*, Base of bowl with traces of slip (Sukhothai).



Pl. VI. *a*, Thick, rolled-mouth rim with two handles (Sawankhalok). *b*, Thin, delicate incised lines made with pointed tool.

TABLE 3. SHAPES OF GLAZED STONEWARES PRODUCED AT THAI KILN SITE

KILN COMPLEX	SHAPE*																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
<b>SAWANKHALOK</b>																		
Monochrome:																		
Brown	x	x	x			x	x	x		x			x				x	
Celadon			x	x		x	x	x	x	x		x	x	x				
White	x	x					x			x			x					
Underglaze black	x	x	x	x		x	x										x	
Brown and white	x			x		x								x				
<b>SUKHOTHAI</b>																		
White monochrome			x		x													
Underglaze black	x	x										x			x			
<b>KALONG</b>																		
Brown monochrome								x									x	
Celadon		x			x					x	x						x	
Underglaze black		x	x		x			x		x	x	x					x	
<b>PHAN</b>																		
Celadon			x		x	x		x		x		x				x		x
<b>SANKAMPAENG</b>																		
Brown monochrome								x										
Celadon								x	x							x		x
Underglaze black					x							x						
Two-color								x									x	

\*Key: 1, architectural ornament; 2, bottle; 3, bowl; 4, covered box; 5, dish; 6, figure (animal); 7, figure (human); 8, jar; 9, kendi; 10, miniatures; 11, oil lamp; 12, plate; 13, pot; 14, stem dish; 15, storage jar; 16, vase; 17, weight.

from careless application (Pl. Vb). Sawankhalok closed forms, such as bottles and pots, are distinguished by a thick rolled mouth rim with two handles extending from the mouth rim to the shoulder (Pl. VIa).

**DECORATION** Decoration consists of two aspects, technique and design. The use of incising as a decorative technique was widespread at all kiln sites except Sukhothai, where it was rare. The degree of fineness varied from thin delicate lines made with a pointed tool (Pl. VIb) to gouged lines made with a piece of wood or bone (Pl. VII). Underglaze painting was the next most common decorative technique. It was used at all Thai kilns except Phan. Iron oxide was the only coloring medium used for painting and always resulted in a brown to black design. A clear glaze was applied over the iron decoration. It generally reveals greenish, yellowish, or bluish tinges.

Sgraffito was used as a decorative technique at Kalong and Sukhothai. Lines were scratched through a slip or glaze to reveal a contrasting color underneath.

The Sankampaeng kilns specialized in an impressed design on brown glazed plates. A central medallion of two fish was stamped into the clay.

Sawankhalok potters used a combined technique of decoration for producing incised brown and white wares. A design was incised into the body, and then a glaze



Pl. VII. Gouged lines.

was applied over it to delineate the pattern; finally, a glaze in a contrasting color was applied over the background.

There are two aspects of the design, composition and motifs. Composition was based on shape. On open forms, the design fills the center; on closed forms, the body provides the main background for decoration. Distinctive motifs are indicated in the key; the descriptions are self-evident.

#### KEY TO GLAZED THAI CERAMICS

##### *Abbreviations*

- KAL = Kalong (pp. 138–139)  
 PHN = Phan (pp. 139–140)  
 SKP = Sankampaeng (p. 140)  
 SWK = Sawankhalok (pp. 141–142)  
 SUK = Sukhothai (pp. 142–143)

##### 1. Color and texture of glaze

Brown

Streaky

- |                           |     |
|---------------------------|-----|
| Jar with double lip ..... | SKP |
| Bulbous storage jar ..... | SWK |

Black	
Homogeneous; buff or gray clay, storage jar	SWK
Thick drops; no crazing, jar (high collar)	KAL
Green (celadon)	
Clear with greenish or grayish tinge	KAL
Yellowish tinge, crazing	PHN
Olive	
Jar with flat mouth rim	SKP
Bowl with unglazed mouth rim	SKP
Dish with unglazed exterior, broad base	SWK (Mon)
White	
Yellowish with five-spur disc mark	SUK
True white with/without tubular mark	SWK
Brown (black) and green	
Two glazes	SKP
Underglaze iron decorated	SWK
Brown (black) and white	
Incised	SWK
Underglaze iron decorated	
Tubular mark	SWK
Five- or six-spur disc mark	SUK
Design	
Fish	
One in center (underglaze)	SUK
Two swimming clockwise in center (impressed)	SKP
Two or more in cavetto, stemmed flower stylized, very greenish glaze	SWK
2. Color and texture of body	
White (sometimes light or dark particles)	KAL
3. Shape	
Architectural ornament	
Roof tile	
Celadon	PHN
White	SWK
Finial (mythical: Naga)	
Brown and white (incised)	SWK
Underglaze iron decorated	SUK
Figure (animal)	
Green (celadon)	
Elephant with tray on back	PHN
Elephant with sunburst design	KAL
Brown	SWK
White	SWK
Brown and white (incised)	SWK
Underglaze iron decorated	
Fish (modeled)	KAL
Figure (human)	SWK

Jar	
Large, bulbous	SWK
High collar	KAL
High lip	KAL
Flat mouth rim	SKP
Double lip	SKP
Kendi	
Brown (miniature)	SWK
Celadon	
Mammiform spout	PHN
Zoomorphic form	SWK
Underglaze iron decorated	SWK
4. Shape of mouth rim	
Closed form	
Thick, rolled	SWK
Trumpet-shaped	
Celadon	
Grayish or whitish	KAL
Yellowish	PHN
Green	SWK
Open form	
Foliate	SWK
Piecrust	KAL
5. Shape of handles	
Circular (sharp edges)	KAL
Semicircular, round edges	SWK
Nibs	SKP
6. Firing marks	
Tubular mark on base (pronounced)	SWK
Tubular mark on base (broad diameter)	KAL
Disc mark (five/six spurs)	SUK
Unglazed mouth rim	SKP
Disc mark (four spurs)	SWK (Mon)

#### KALONG (KAL)

Kalong is the most extensive kiln site in northern Thailand. Underglaze iron decorated is the largest group of Kalong ware. Only a small number of Brown (Black) Monochromes have been found. Kalong pieces are distinguished by a fine white body, extremely thin potting, and a tubular support scar that is nearly as large as the base.

#### *Kalong: Brown (Black) Monochromes*

GLAZE: golden, olive, black; no crazing, thick heavy drops, streaky

BODY: pale grayish with particles

SHAPE: jars with a high collar or high lip

DECORATION: none

DISTINGUISHING FEATURES: shapes of jars

*Kalong: Green (Celadon) Monochromes*

GLAZE: clear with whitish or grayish tinge, fine crazing

BODY: whitish, buff, gray (sometimes dark or light particles); sometimes reddish in exposed areas; fine

SHAPE: dishes, oil lamps, vases, miniatures, bottles with trumpet-shaped mouth, elephant

DECORATION: simple incised geometric motifs (combed parallel lines, horizontal bands)

DISTINGUISHING FEATURES: circular handles (sharp edges)

*Kalong: Green (Celadon) Monochromes (Pa Dong)*

GLAZE: whitish, golden, deep olive green; thick, oily; wide crazing

DISTINGUISHING FEATURES: chocolate base

*Kalong: Green (Celadon) Monochromes (Wang Nua)*

GLAZE: grassy green; sometimes crazing

BODY: grayish

SHAPE: large plates, small dishes, vases, jars without foot ring, chess pieces, miniatures

DECORATION: usually none; gouging on plates

DISTINGUISHING FEATURES: thick dark glaze on rim and in center (interior); pie-crust rim on plates

*Kalong: Underglaze Iron Decorated*

GLAZE: clear with greenish or bluish tinge, sometimes white slip

BODY: white, buff, gray (sometimes dark or light particles)

FIRING SCARS: tubular scar with reddish exposed area

SHAPE: dishes, bowls, bottles, large jars, covered pots, lime-pots, chess pieces, modeled fish, elephant

DECORATION: vegetal and floral motifs (stylized lotus panels on exterior), mythical creatures, sunburst design

DISTINGUISHING FEATURES: broad brush strokes, broad tubular mark

PHAN (PHN)

Phan kilns produced very little except celadon. Pieces are distinguished by delicate incising with a fine point and no firing scars.

*Phan: Green (Celadon) Monochromes*

GLAZE: green with a yellowish tinge, straw-colored, dark green, olive; always crazed, fine crazing

BODY: grayish-white, pale buff; reddish in exposed parts; extremely fine

SHAPE: jars, bowls, dishes, plates, kendi with mammiform spout, bottles with trumpet-shaped mouth, vases, oil lamps, animals (elephant with tray on back), miniatures, stem plates, roof tiles

DECORATION: simple incised geometric motifs, stylized flower, onion skin

DISTINGUISHING FEATURES: minimal decoration, low foot ring

### SANKAMPAENG (SKP)

Sankampaeng kilns were poorly constructed and the techniques of potting were inferior to other northern sites. The wares reflect these conditions with a few exceptions. They are distinguished by a motif consisting of a pair of fish and by two-color jars with a blackish body and a green neck and mouth.

#### *Sankampaeng: Brown (Black) Monochromes*

GLAZE: light-brown, yellowish, olive, black; thick, runs into drops, streaky

BODY: buff, light brown, grayish, reddish

SHAPE: jars with double lip, jars with flat mouth rim, plates

DECORATION: none

DISTINGUISHING FEATURES: glaze extends to the base

#### *Sankampaeng: Brown and Green*

GLAZE: blackish, green, pale straw-yellow; watery, tendency to flake

BODY: dark gray

SHAPE: large vases with high neck and everted rim

DECORATION: none

DISTINGUISHING FEATURES: two glazes; handles are nibs (nonfunctional)

#### *Sankampaeng: Green (Celadon) Monochromes*

GLAZE: green, yellowish, olive, grayish green; white slip

BODY: buff, gray; grainy

FIRING SCARS: unglazed mouth rim

SHAPE: vases, plates, dishes, bowls, stem-plates, jars, kendi

DECORATION: impressed fish motif in center of plates, incised radial or swirling lines

DISTINGUISHING FEATURES: brush strokes from application of slip; plates have a thin layer of glaze on exterior

#### *Sankampaeng: Underglaze Iron Decorated*

GLAZE: yellowish

BODY: buff, gray; coarse

FIRING SCARS: unglazed mouth rim

SHAPE: plates, dishes, bowls

DECORATION: two fish in center of plates, detailed floral medallion, leaf pattern

DISTINGUISHING FEATURES: fish motif



## SAWANKHALOK (SWK)

Sawankhalok wares compose the largest group in the north-central Thailand kiln area. Clay with dark particles and a tubular support mark on the base are diagnostic of this group.

*Sawankhalok: Brown (Black) Monochromes*

GLAZE: honey, dark brown, medium brown; thin and dull or lustrous

BODY: buff, gray with dark particles, reddish; coarse, homogeneous, streaky (large forms)

FIRING SCARS: tubular support mark on base

SHAPE: globular bottles with two handles, gourd-shaped vases, miniatures, storage jars, bulbous jars, figures; black glaze only on storage jars and finials

DECORATION: incised horizontal bands

DISTINGUISHING FEATURES: glaze stops well above foot

*Sawankhalok: Brown (Black) and Green*

GLAZE: very greenish glaze over iron decoration

BODY: buff, gray with dark particles, exposed areas reddish

FIRING SCARS: tubular mark on base

SHAPE: dishes, plates, small pots

DECORATION: center design of stylized flower surrounded by fish in cavetto, floral scroll

DISTINGUISHING FEATURES: greenish glaze

*Sawankhalok: Brown and White (Incised)*

GLAZE: white or silvery; brown or caramel

BODY: pale buff; fine

FIRING SCARS: tubular mark on base

SHAPE: covered boxes, kendi, water droppers, architectural fixtures (finials), miniatures, figures

DECORATION: sawtooth design, floral and leaf scroll

DISTINGUISHING FEATURES: technique

*Sawankhalok: Green (Celadon) Monochromes*

GLAZE: greenish yellow, olive, sea-blue-green; always crazing, shiny, glassy

BODY: buff or gray with dark particles, reddish tinge on exposed parts

FIRING SCARS: tubular support mark on base

SHAPE: large dishes, plates, bowls, stem-plates, small pots with or without handles, jars, globular bottles, bottles with trumpet-shaped mouth, gourd-shaped vases, kendi (zoomorphic), figures, miniatures

DECORATION: vertical gouges, incised single flower, lotus petals, peony blossoms, undulating vines

DISTINGUISHING FEATURES: small wares have thumbprint mark on base, concentric circles in center of plate, foliate mouth rim on some open forms

*Sawankhalok: Green (Celadon) Monochromes (Mon Wares)*

GLAZE: olive; sometimes traces of white slip; fine crazing on interior

BODY: blackish with light and dark particles

FIRING SCARS: sometimes disc mark (four spurs) in center of dishes

SHAPE: dishes with broad base and no foot ring

DECORATION: none

DISTINGUISHING FEATURES: unglazed exterior

*Sawankhalok: Underglaze Iron Decorated Wares*

GLAZE: transparent grayish, greenish, or bluish tinge; always crazed pooling

BODY: medium gray with light particles; fine

FIRING SCARS: tubular support mark on base

SHAPE: covered boxes, pots, bowls, kendi, vases, jars, pear-shaped bottles with cup-shaped mouth, figures

DECORATION: floral or leaf scrolls, cross-hatch, fish scale, lotus panels, vegetal sprays, geometric motifs

DISTINGUISHING FEATURES: iron—brownish, grayish, or black

*Sawankhalok: White Monochromes*

GLAZE: true white; hard, glassy, opaque

BODY: buff, light gray with dark particles

FIRING SCARS: tubular support mark on base

SHAPES: covered jars with handles, bowls, kendi, bottles, architectural fixtures (roof tiles), animals

DECORATION: minimal incised geometric bands

DISTINGUISHING FEATURES: true white glaze color

## SUKHOTHAI (SUK)

Sukhothai wares are distinguished by a characteristic fish motif painted in the center of dishes, bowls, and plates. The clay is coarser, the potting cruder, and fewer techniques and designs are present than in Sawankhalok pieces.

*Sukhothai: Underglaze Iron Decorated Wares*

GLAZE: straw-colored; whitish slip; transparent; pinholes

BODY: brownish, buff, medium gray with light and/or dark particles; coarse, grainy

FIRING SCARS: disc mark (five/six spurs) in center

SHAPE: dishes, plates, bowls, pear-shaped bottles, tiles, architectural fixtures (finials), stem-plates, vases

DECORATION: fish, solar whorl, tiered crown, water weed, feathery chrysanthemum, vegetal spray, sunbursts, classic scroll, chevrons

DISTINGUISHING FEATURES: thick foot ring, traces of slip on base

*Sukhothai: White Monochromes*

- GLAZE: transparent, yellowish tinge; whitish slip; pinholes  
 BODY: buff, light gray with dark and/or light particles  
 FIRING SCARS: disc mark (five spurs) on bowls  
 SHAPE: bowls, bottles with flaring mouth rim  
 DECORATION: none  
 DISTINGUISHING FEATURES: traces of slip on base and lower body

## CONCLUDING REMARKS

Recent excavations at kiln and burial sites in Thailand have produced masses of sherds. A study of this material can help us gain a clearer understanding of the development of Thailand's ceramic history. A significant point raised by the material is the existence of regional styles that evolved from native raw materials. A further consideration is the distribution of sherds within the region. A study of this aspect can contribute to establishing the trade and cultural contacts in the region. On a broader scale, integration of the results obtained from this material with what is known from other disciplines can increase our knowledge about the economic, cultural, and historical aspects of Thailand's long and prosperous ceramic tradition.

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## GLOSSARY\*

- Bottle** Vessel for holding liquids; has a long neck and a narrow mouth.
- Bowl** Concave vessel, wider than it is high, but deeper than a saucer.
- Celadon** Group of glazed stonewares with the following characteristics: iron oxide content, green color, and fired in a reducing kiln atmosphere.
- Dish** Circular, shallow utensil on which food is served or from which it is eaten; diameter usually more than 12 inches.
- Jar** Deep wide-mouthed vessel for holding a variety of substances, usually without handles.
- Kendi** Vessel with a round body, narrow neck, and a spout on the shoulder; used as a water container.
- Oxidizing kiln atmosphere** Occurs during firing when a sufficient or excessive supply of oxygen is available.
- Plate** Circular, shallow utensil from which food is eaten, with a rim and a well.
- Pot** Circular vessel of many shapes and sizes, employed for a variety of domestic purposes; usually has a handle and a cover.
- Reducing kiln atmosphere** Occurs during firing when there is an insufficient supply of oxygen.
- Saucer** Small circular concave dish used either for serving food or as a stand for a cup.
- Vase** Vessel made in many forms; usually rounded and taller than it is wide; used mainly for ornamental purposes.
- Vitrify** To change into glass or a glass-like substance by heat.
- Well** Depressed central portion of a plate or dish; also called *cavetto*.

\* Terms defined as used by the author.