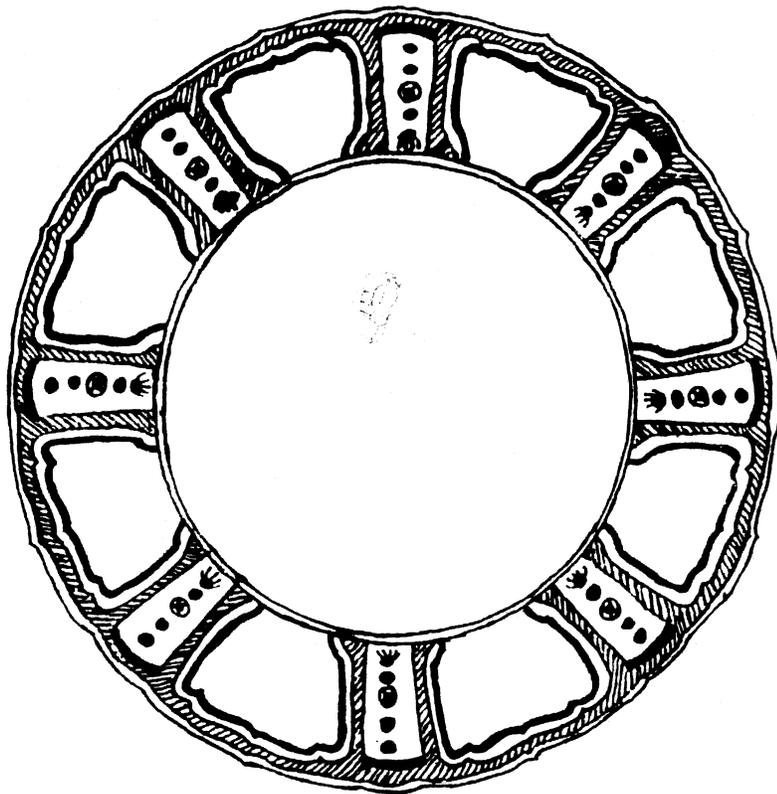


Kraak Plate Design Sequence
1550-1655

by
Clarence Shangraw
and
Edward Von der Porten



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The Porcelains

The great Chinese export porcelain trade emerged during the Ming Dynasty's Wan-li era (1573-1619), concurrently with a dramatic decline in court patronage of the former imperial kilns. To offset this severe reduction in demands on the Ching-te Chen porcelain factories, idled potters set up many private, short-lived kilns. In their new endeavours, they remained, at first, in the far-inland Ching-te Chen area with its extensive clay deposits, kilning materials, and well-developed inland waterway transportation system. Eventually, however, the art found its way into a network of kilns near the seacoast which had ready access to overseas shipping. This led ultimately to the creation of a vast assortment of qualities and styles of export porcelains, with a burgeoning production in the late sixteenth century as local potters also took up the art. Thus, lack of patronage at home and rapidly growing overseas demands, especially the birth of the Manila Galleon Trade in 1573,¹ caused a resurgence and redirection of a fading industrial art.

Even though the variety of these Chinese blue-on-white export porcelains proliferated in forms and decorations during the late sixteenth and early seventeenth centuries, they have been little studied until recently. Traditionally, historians of Chinese ceramics have concentrated their studies on the exquisite official (imperial) wares produced under court patronage at the Ching-te Chen kiln complex in Kiangsi Province. Only in the past three decades has that inattention been corrected, and today we have an appreciably clearer understanding of the more prosaic ceramic export categories. Using the continually expanding archaeological data from the People's Republic of China (excavated kiln sites, documents rediscovered, and dated tomb contents), scholars today are assiduously establishing reliable dates and provenances for these porcelains, defining them in terms of technical control, form, decorative idiom, and painting style.

In the West, research is augmented by knowledge derived from the porcelain cargoes retrieved from the remains of firmly dated shipwrecks of the sixteenth and seventeenth centuries, from commissioned porcelains bearing sixteenth century European coats-of-arms, and from reliable inventories of collectors' cabinets in Europe, particularly royal collections.

1. The Spanish trade from the Philippines to Acapulco, Mexico, began in 1565. Manila became the seat of government in 1571, and large-scale trade between Manila and China began in 1572. William Lytle Schurz, *The Manila Galleon*, pp. 15, 25, 27.

Although the exportations of Chinese ceramics, both over land and sea, had occurred as early as the late T'ang Dynasty (618-906 A.D.), reaching a peak of activity in the thirteenth and fourteenth centuries, these exports had been essentially monochrome-glazed stone- and porcellaneous-wares. Then, in the Middle Ming (late fifteenth century), some blue-on-white porcelain wares were first designated for the export market. By the mid-sixteenth century, new forms and decorative styles were beginning to be developed specifically to cater to foreign tastes.

Only one early Chinese text refers to this trade and its rapid development: "At the time of the late fifteenth century, Chinese porcelains were used extensively in India, the Philippines, Java, Sumatra, Borneo, Persia, Arabia and Zanzibar. As well, during the reign of the Wan-li Emperor (1573-1619) we encounter the statement in the records of the supervising port censors, 'those foreigners living beyond the seas -- in Thailand and Cambodia -- have sapan-wood, spices, rhinceros horn, and ivory tusks, all of which are needed by China. Also, in the states of Lu-sung (Luzon) and Fo-yin (as yet unidentified) there are mountains of silver, which the foreigners have produced only as cast silver coins, and in return these foreigners are satisfied with porcelains from Chiang-hsi (Kiangsi) as well as lacquer wares, fruit and porcelains from Fu-chien (Fukien).'"²

This passage, published in the seventeenth century, is the only known early written Chinese reference to the extensive Southeast Asian porcelain trade and, in particular, to South- and Central-American silver (not Philippine as the author assumed) in the Manila Galleon Trade, with Manila on Luzon Island as its trading center.

Initially some wares originally intended for the Chinese market proved to be acceptable items overseas. In time, the extensive kiln complexes of Ching-te Chen began to produce some ceramics specifically for trade, but within a short time, the innumerable kilns in South China, particularly in the provinces of Fukien, Kwang-tung and Kiangsi, were developed intentionally to make export wares at locations with ready access to seaports. Those kilns were all provincial. Because they were far removed from the influence of the court and official patronage (that is, the wares made at Ching-te Chen) and because so many of them sprang up almost spontaneously and operated for only a generation or two, unique problems

2. *Chuan* (scroll volume) 96 of *T'ien-hsia chun-kuo li-ping shu* (a seventeenth-century compilation of geographical information taken from various provincial gazeteers and histories), cited in *A Draft History of Ceramics at Ching-te Chen* (*Ching-te-chen t'ao-tzu shih-Kao*), p. 251. The system used to Romanize Chinese words in this study is Wade-Giles.

exist in traditional dating. Thus, the art historian has had to treat these export wares differently from the official wares.

Sir John Addis, the foremost Ming porcelain authority, has noted, "by the Chia-ching reign (1522-1566) certain export types were already being created for the export market, and by the first decade of the seventeenth century, certain shapes and styles already had been codified for the European trade."³ It is precisely within this experimental development era that five firmly dated cargos of blue-on-white porcelains belong. The changes in trade habits and production can be observed by studying materials found in these deposits and shipwrecks: the 1579 abandonment by Francis Drake at Drakes Bay, California; the 1595 *San Agustin* shipwreck remains, also at Drakes Bay; the 1600 *San Diego* shipwreck off Manila, the 1613 *Witte Leeuw* shipwreck at Saint Helena, and the 1643 Hatcher I wreck in the South China Sea.⁴

During this germinal stage of creation and production, astute traders demanded more and more porcelain wares of types most appealing to their markets. As a result, there developed certain styles in form and decoration exclusively for export. A complex system of supply and demand developed as competitive potters scurried to take advantage of these newfound lucrative markets. Decorative styles and painting qualities varied tremendously. Often a style long out-of-fashion at home was revived for export. Many wares, particularly at the provincial seacoast kilns, were mere imitations of the formerly fashionable styles. Repetition of a design or decoration over a long period of time often resulted in the motifs and idioms being reduced to abstraction or mannerism. On the other hand, the more technically proficient potters and painters attempted and successfully perfected invigorating and progressively expanding design categories.

All of these events were occurring simultaneously, and extremely keen observation and analysis of stylistic variations are required to discriminate one product from another and to properly attribute a particular object. To identify an object there must be a thorough knowledge of the output and distinguishing characteristics of the provincial kilns and the official kilns, and of the original source style, the

3. Sir John Addis, *South-east Asian and Chinese Trade Pottery*, p. 6.

4. Clarence Shangraw and Edward Van der Porten, *The Drake and German Expeditons' Chinese*

locally or provincially imitated style, provincially recreated copies of formerly fashionable styles, and the seacoast localized style.

In analyzing various blue-on-white export porcelains, variations of decoration and type are immediately observed. Changes in design, manner of application, and styles of decoration occur for a multiplicity of reasons. Nevertheless, decorative change, decorative elaboration, and decorative innovation, as they appear on Chinese export ceramics, have consistently fallen into an absolutely clear pattern. When a new design or decorative idiom was first used, it was painted with precision, but after a while, because the wares were hand-worked and produced in quantity, the application tended to become casual because the task became boringly repetitious -- and anyway their newfound customers were neither discriminating nor that demanding. Another consideration is that the central decorative theme might change from piece to piece whatever the schematic layout, but a border decoration might continue to be used for a decade or decades before phasing into a more elaborate design, the results of experimentation based on the previous design. The provincial kilns continued for convenience to copy the old decorations from Ching-te Chen, at first perfunctorily, and then, through continuous repetition, the decorations rapidly devolved into near abstraction. These phenomena, and changes in schematic decorative layout and their elaboration, are particularly relevant to studying the porcelains from the five cargos dating from 1579 to 1643.

These characteristics can be easily observed on the *Kraakporselein*, a Dutch term for the blue-on-white porcelains first transported to Europe by carracks, a Portuguese ship type. Kraak ware, as a group, is only just now becoming fully understood from the viewpoint of form and design evolution.⁵ Kraak ware was first made in Fou-liang (the Ching-te Chen kiln complex), Kiangsi Province, with production beginning about 1550 and ending about 1655. Kraak was made and exported in large quantities and had tremendous influence on early European ceramics such as Delft, which copied it closely. The Kraak potters adopted a fresh naturalistic decorative repertoire, deviating from official decoration. In shape, Kraak is distinct, being moulded into panels radiating around a central area which contains a naturalistic motif. Its potting is very brittle and thin-walled. A sub-category of Kraak-type ware, more perfunctorily made and with slightly thicker walls, is attributed to provincial kilns in Fukien,

5. Brian S. McElney, "The Blue and White Wares, (post-15th Century)," in Sir John Addis, *South-east Asian and Chinese Trade Pottery*, pp. 34-36.

and often bears a gritty footring, the one distinct characteristic of Fukien-made porcelain.

Kraak porcelain research is particularly rewarding when evaluating the plates with flattened rim strips. These are usually the most common forms encountered in the cargos, they exhibit the most variations of decorative designs, and the often-rapid evolution of these designs lends itself to close dating. These dated cargos provide evidence about wares from Ching-te Chen and their close derivatives from Fukien kilns. Severely degraded provincial derivative wares are not present in useful quantities in the cargos.

The Kraak plate series began in the reign of the Chia Ching Emperor (1522-1566), probably about 1550, with the development of plates with white rim strips and cavettos (Type I). The next design, with continuous decoration around the rim strips, and white cavettos, evolved soon thereafter (II). It is easily identifiable by the thin lines representing water on the inner side of the rim strips.

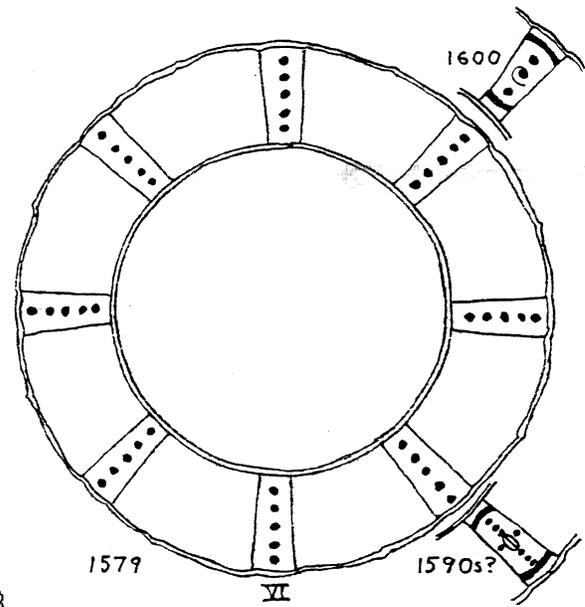
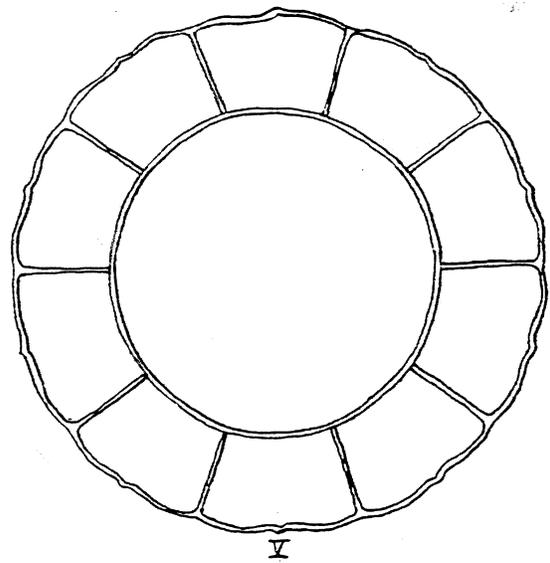
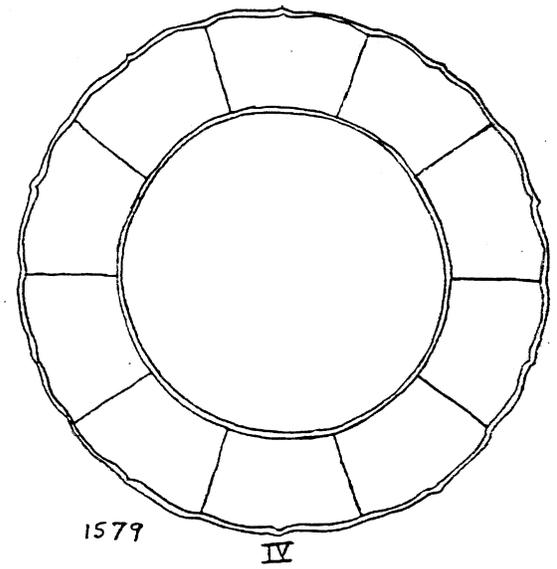
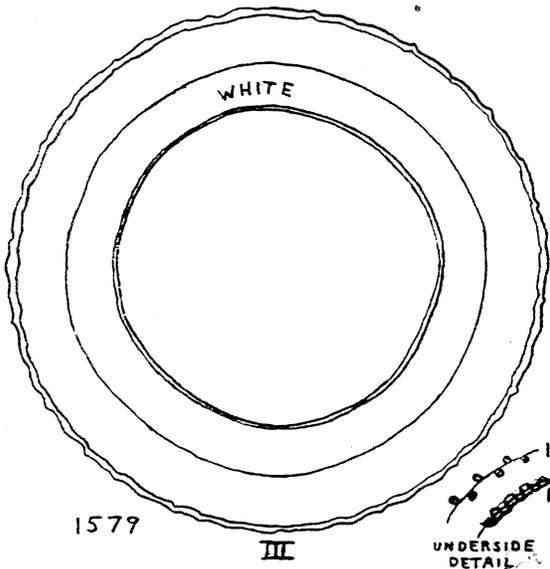
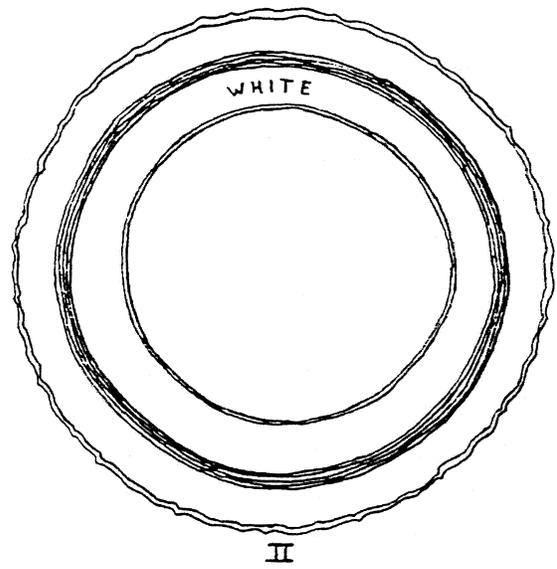
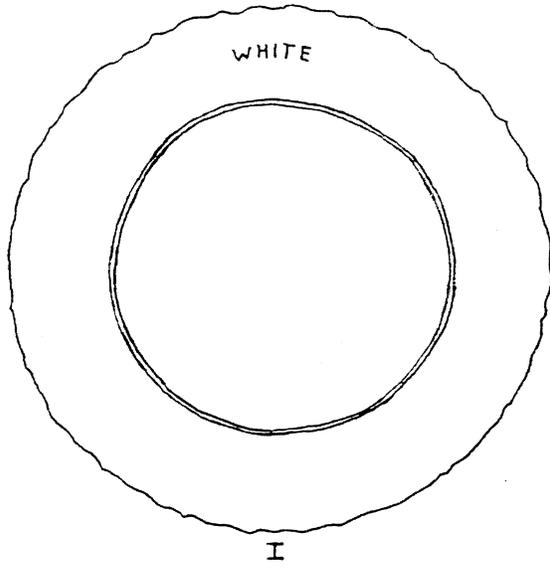
Both these designs had been superseded by the mid-1570s by four new designs: a continuous rim decoration without the water lines on the rim strips (III); the first segmented-rim decoration, consisting of rim and cavetto panels separated by single lines (IV); a quickly developed successor design with double-line dividers between the panels (V), and another successor design in which the two divider lines were separated far enough to permit the introduction of a secondary rim design consisting at first of mere rows of dots, called "beaded pendants" (VI).

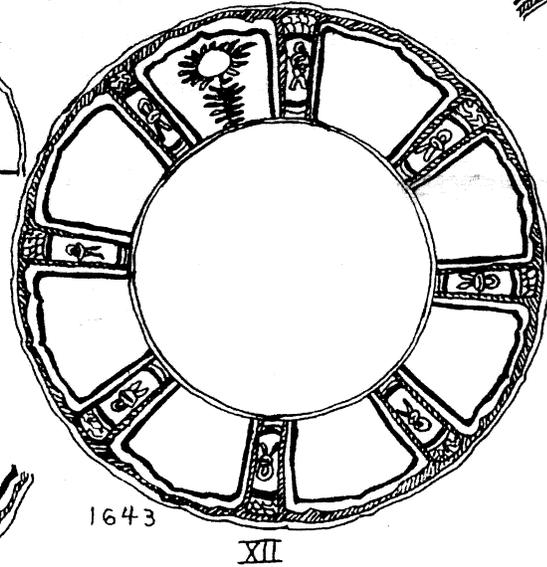
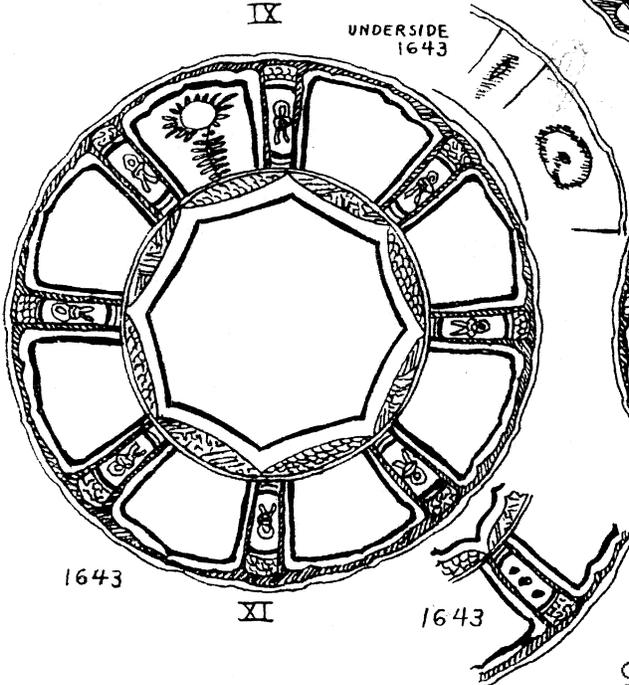
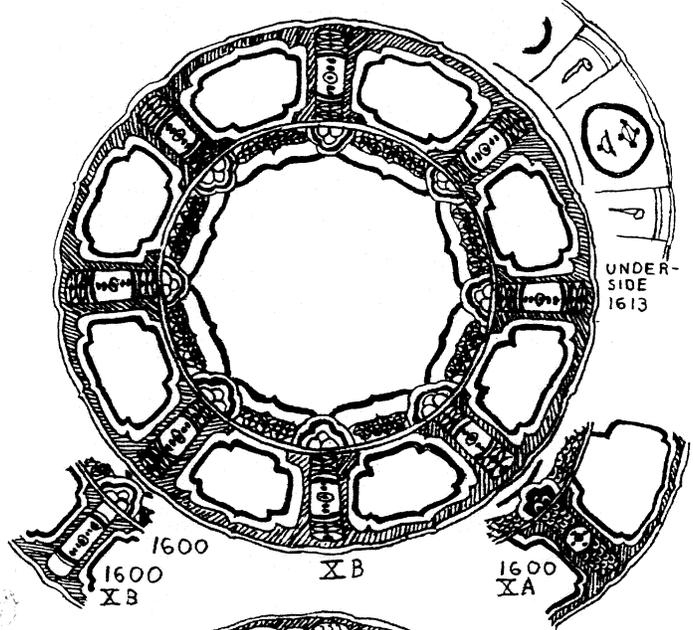
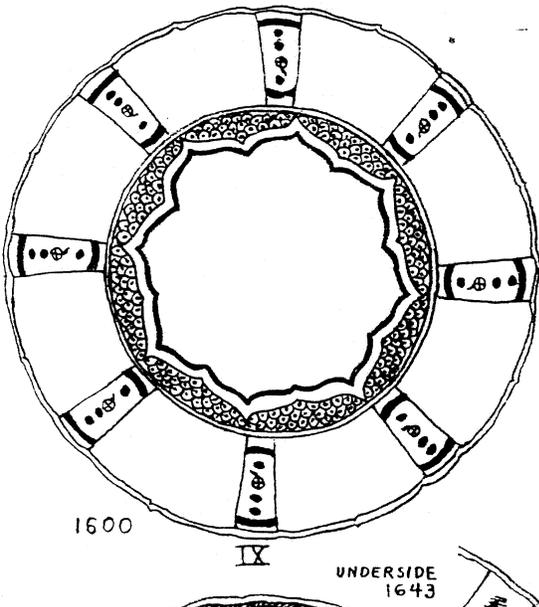
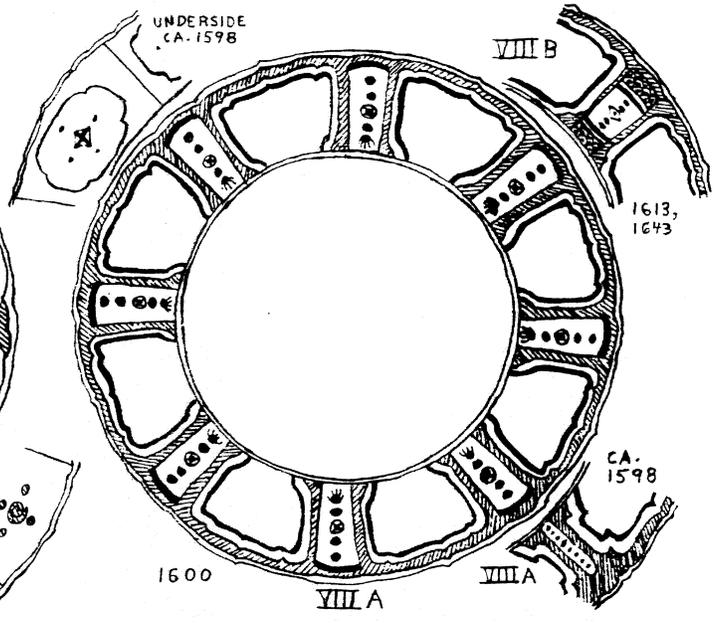
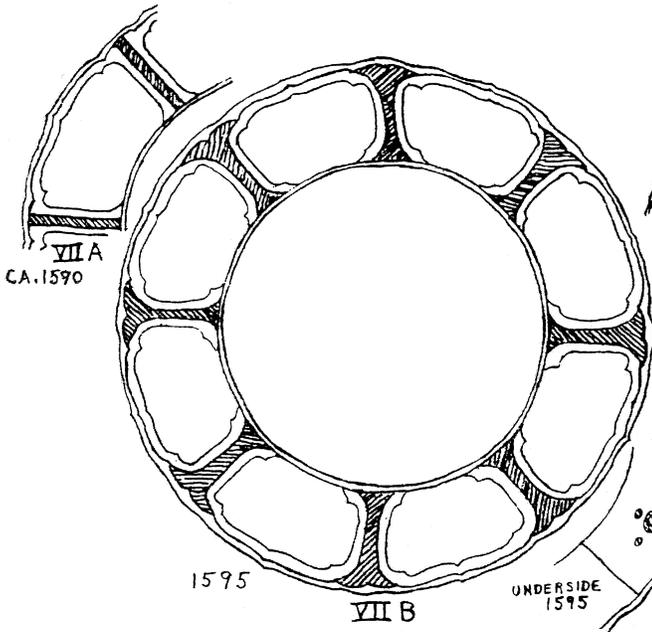
More than a decade later, the first rim and cavetto medallions were introduced, separated at first by two parallel lines emphasized with light-blue washes (VIIA) and then by "I-wedge" elements with light-blue washes (VIIB). The "I-wedge" design set off a series of very rapid changes which led to the virtual end of Types III, IV, V, and VI in the beginning years of the seventeenth century. First, a beaded pendant was hesitantly introduced into the "I-wedge." This was quickly expanded into a full beaded pendant by 1600, and the medallion borders were made more complex (VIIIA and VIIB). Some simple beaded-pendant plates acquired diaper-patterned separators between the cavettos and the central roundels (IX), also by 1600. Then, beaded pendants, "I-wedges," elaborate medallion borders, and diaper-patterned separators were combined into one design, which was fully developed by 1600 (XA and XB). That design, the most complex of the Kraak wares, also was the most popular and the

most long-lived, carrying on almost to the end of the Kraak period, while the simpler Types VIIB and IX disappeared shortly after 1600, and Type VIII barely survived in small quantities about as long as Type X.

Simplification of the very elaborate and labor-intensive Type X began early in the century, with a similar design using semi-medallions, beaded pendants, and less-complex diaper-patterned separators (XI), but it did not become a major part of the cargos until very late in the Kraak period. A further, and very late, simplification was the same semi-medallion and beaded pendants design without the separators (XII).

A final pattern, marking the end of the Kraak and the transition to the next era, used large and small semi-medallions alternating around the rim and cavetto (XIII). By this time, all the diapers and beaded pendants had disappeared.





Design Patterns

Design (Shangraw) Number	Design Description
I	White cavetto, white rim.
<u>II</u>	<u>White cavetto, continuous rim decoration with "water."</u>
III	White cavetto, continuous rim decoration without "water."
IV	Single-line rim and cavetto dividers.
V	Double-line rim and cavetto dividers.
<u>VI</u>	<u>Beaded pendant rim and cavetto dividers, no medallions</u>
VIIA	Double-line rim and cavetto dividers, open medallions
<u>VII B</u>	<u>"I-Wedge" rim and cavetto dividers, open medallions.</u>
VIIIA	Beaded pendant rim and cavetto dividers, open medallions.
VIIIB	Beaded pendant rim and cavetto dividers, closed medallions.
IX	Beaded pendant rim and cavetto dividers, no medallions, diapers.
XA	Beaded pendant rim and cavetto dividers, open medallions, diapers.
<u>XB</u>	<u>Beaded pendant rim and cavetto dividers, closed medallions, diapers.</u>
XI	Beaded pendant rim and cavetto dividers, semi-medallions, diapers.
<u>XII</u>	<u>Beaded pendant rim and cavetto dividers, semi-medallions, no diapers.</u>
XIII	Large and small semi-medallions, no diapers.

Notes

Twenty-centimeter-diameter and larger plates with flattened rim strips are used in this study because they show the most changes in detail of all the shapes, and because smaller plates sometimes do not use all the elements of decoration. Some dishes without flattened rim strips conform to these design patterns.

Underlining separates date groups.

IX-XI. "Diapers" refers to diaper patterns within a border around the central roundel.

Dates on the drawings indicate that specific dated examples are illustrated.

Chronology

Design Number	Chia Ching 1522- 1566	Drakes Bay I to 1579	Drakes Bay II to 1595	<i>San Diego</i> to 1600	<i>Witte Leeuw</i> to 1613	Hatcher Wreck I to 1643	Tentative Dates
I	*						1550-1570
<u>II</u>	*						<u>1560-1570</u>
III		**	**	*			1570-1605
IV		*	*				1575-1595
V		*	*	*			1575-1605
<u>VI</u>		*	*	*			<u>1575-1605</u>
VIIA			(*)				1585-1590
<u>VII B</u>			**	*			<u>1590-1605</u>
VIIIA				**			1595-1605
VIIIB					*	*	1605-1645
IX				*			1595-1605
XA				**	*		1595-1620
<u>XB</u>				**	**	**	<u>1595-1650</u>
XI					*	**	1610-1655
<u>XII</u>						*	<u>1630-1655</u>
XIII							1645-1655

Notes

A "*" indicates the preponderant design or designs in the cargo.

Cargo dates indicate the year of loss. The porcelains could have been made before the date given, but rarely more than one to three years before, as porcelains were shipped and sold promptly.

These dates refer to Ching-te Chen wares and their immediate derivatives from Fukien kilns, not severely degraded provincial wares which sometimes continued to use older designs for many years.

Chia Ching dates are not based on closely dated find groups.

Design XIII dates are not based on closely dated find groups.

The Ardebil Shrine collection dates from the fourteenth century to 1611.

It includes small quantities of Types II, III, V, XA, and XB.

A very small quantity of Types II, V, and VI is present in the *Witte Leeuw* cargo but is considered to be "antique" by the catalogers.

A very small quantity of Type VI is present in the Hatcher I cargo. It is very degraded provincial ware.

The Designs

Type I. The "undecorated rim" plates with white cavetto and rim strips are dated to Chia Ching (1522 - 1566). No cargo from this era has been recovered as yet, so dating is tentative.

Type II. The earliest "white cavetto with water" Kraak plates with continuous decorated rim strips are quite formal in rim-motifs layout, and have fine lines indicating water along the inside part of the rim strips. They also are dated to Chia Ching. No cargo from this era has been recovered as yet, so dating is tentative.

Type III. These "white cavetto without water" plates with continuous decorated rim strips have no water lines, in contrast to Type II, and the decoration is more lively and informal. They formed major components of the 1579 and 1595 cargoes. This type had a long life, from the early days of the Manila Galleon traffic to the turn of the seventeenth century. Quality deteriorated during this period, characterized by heavier potting, lighter or silvery blue paint, and cruder painting, easily seen in such details as individually painted petals on branches, on the underside, becoming meanders filled in with a single sweep of light-blue wash.

Type IV. This "single-line dividers" design introduced the division of the rim and cavetto into panels. The simplest method was to draw single lines from the rim to the circle surrounding the central roundel. The single-line form was supplemented by Type V with double-line dividers. Only two examples of Type IV are known from closely-dated contexts, one each from 1579 and 1595.⁶

Type V. This "two-line dividers" design defined the rim panels more sharply than in Type IV. This design lasted from the early Manila Galleon trade to the turn of the century. An example in the 1600 cargo has wash coloring between the lines. Deterioration of quality followed the same pattern as in Type III.

Type VI. This "beaded pendants" type introduced the separation of the rim-divider lines to permit secondary rim designs to alternate with the main rim-panel designs. At first, these secondary designs were mere rows of dots. Soon, designs with small symbols in the center, dots above and below, and curved lines top and bottom were developed, but their

6. The 1595 find was made after the Shangraw and Von der Porten publication.

dates of introduction are uncertain. The time span for this design paralleled that for Types III and V, although smaller plates carried the pattern into the next century, and very simple and degraded versions from provincial kilns continued to be made into the 1640s. Deterioration of quality paralleled that of Types III and V. Beaded pendants formed part of more complex designs starting just before the turn of the century.

Type VIIA. This "double-line dividers with medallions" design introduced rim medallions in place of simple panels. It used the two-line dividers of Type V with light blue wash between the lines and added rim medallions defined by single lines.⁷ It was so ephemeral that it is not present in any of the five cargos, but it must date to shortly before the 1595 cargo.

Type VIIB. This type, the "I wedge," modified Type VIIA slightly. The two divider lines are spread top and bottom to conform to the shape of the medallion. This was a short-lived design that formed a prominent part only of the 1595 cargo. It led directly to the more complex forms just before the turn of the century.

Type VIIIA. This "beaded pendants between open medallions" pattern is a combination of Types VI and VIIB. Its evolution is shown by a very-short-lived version in which the beaded pendant is very narrow and does not reach to the rim of the plate,⁸ as if it were an intrusion into the "I wedge." The rim medallions acquired another line close to the original medallion line and the space between the two lines was filled with a light blue wash. The rim medallions are separated from the rim line by an extra line and an extension of blue wash. The medallions are open at the bottom. This version was prominent in the 1600 cargo, but did not appear in the later ones.

Type VIIIB. This "beaded pendants between closed medallions" pattern is a later version of Type VIIIA. It has closed medallions, and diapers appear in the tops and bottoms of the beaded pendants. Small quantities of this version appeared in the 1613 and 1643 cargos.

Type IX. This "beaded pendants with diapers" design introduced a diaper-filled separator between the cavetto and central roundel. The lobed border of the central scene derived from small low bowls of the 1590s. This design was also very short lived, seen only in the 1600 cargo.

7. Von der Porten collection.

8. Photographed in a private collection.

Type XA. This "beaded pendants between open medallions with diapers" design combined the previous four patterns and carried Kraak ware to its ultimate degree of complexity. In this version, the medallions are open at the bottom. In 1600, the only time this pattern formed an important part of the cargo, the tops and bottoms of the beaded pendants included diapers. By 1613, only the tops of the beaded pendants included diapers, and by 1643 none of this version was in the cargo.

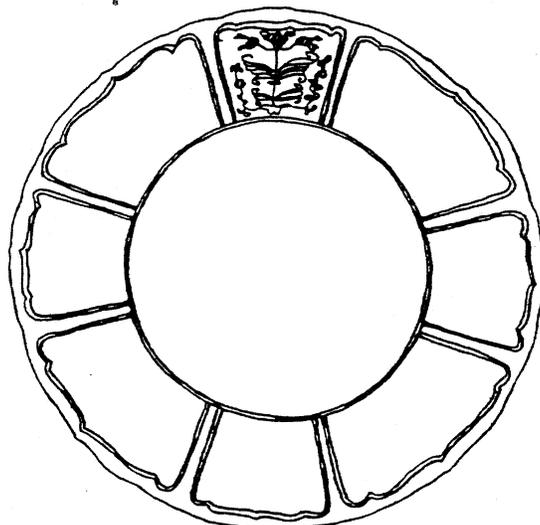
Type XB. This "beaded penants between closed medallions with diapers" design is a variant of Type XA with closed medallions. The 1600 cargo included such plates with diapers in the tops and bottoms of the beaded pendants, and plates without such diapers. By 1613, all beaded pendants had diapers, but sometimes they were only in the top, and sometimes very sketchily painted. Occasionally, knotted ribbons in various patterns replaced the dots. By this time, the diaper-filled separators around the central roundel were drawn in many patterns, including the one shown in Illustration IX. By 1643, the design had returned to the original pattern and become codified, with closed rim medallions, diapers in the top and bottom of the beaded pendants, no knotted ribbons, and one pattern of rui heads and diapers around the central roundel, as shown in central Illustration X. Type XB shared prominence with Types VIII A and XA in the 1600 cargo and then became the dominant design from the 1613 cargo through the 1643 cargo. Quality deteriorated with time, although the design remained remarkably consistent, apparently reflecting market demands.

Type XI. This "beaded pendants between semi-medallions with diapers" design was a simplification and deterioration of Type X. It appeared first, in small quantities, in the 1613 cargo. Most 1613 examples have diapers in the tops of the beaded pendants, which are conventional, except one on which knotted ribbons replace the dots. One example has no diapers in the beaded pendants, which have small flowers in the middle. As in contemporary Type XB plates, the diapers around the central roundels come in many patterns. By 1643, diapers sometimes were found both in the tops and bottoms of the beaded pendants, and sometimes only in the tops. The latter sometimes have dots and sometimes knotted ribbons, while all the former have knotted ribbons. A few of the former have "tulips" in some of the medallions, a pattern which characterizes Type XIII. The 1643 diaper patterns around the central roundels usually lack the rui heads and usually are simpler than on contemporary Type XB plates. This design also generally was cruder in execution. Sometimes there are "sunflowers" (a degenerate form of "peaches on branches") in the

medallions. This type was a significant element only in the 1643 cargo. Quality deteriorated with time.

Type XII. This "beaded pendants between semi-medallions without diapers" design is virtually identical to Type XI, but without the diapers around the central medallions. Diapers appear only in the tops of the beaded pendants, which sometimes have dots and sometimes knotted ribbons. These plates appeared in small numbers in the 1643 cargo.

Type XIII. This "large and small semi-medallions" design closes the Kraak sequence. The semi-medallions include human figures and "tulips." The design is not represented in any of the cargoes used in this study.



XIII

Design Number Concordance

Shangraw Number	McElney Number	Rinaldi Number
I	I	-
II	II	II
III	II	II
IV	III	IV
V	III	IV
VI	IV	V
VIIA	-	-
VII B	-	VI
VIIIA	-	VI
VIIIB	-	VI
IX	V	-
XA	VI	VII.1,2
XB	VI	VII.1,2
XI	-	VII.3
XII	-	VI
XIII	VII	IX

Notes

Rinaldi's VII.2 is a degraded version of VII.1. The process is especially notable on the simplified underside medallions, which became rough roundels, and in the rim medallions' foliage, flowers and fruits. In the most extreme cases, the early "peaches on branches" became "sunflowers" on later specimens. In Rinaldi's Type VII.3 the deterioration is even more evident, often more pronounced than in contemporary Type VII.1 and VII. 2 specimens.

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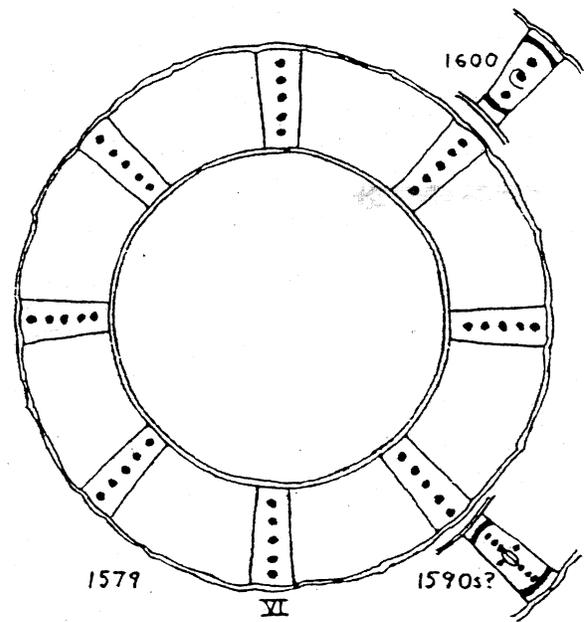
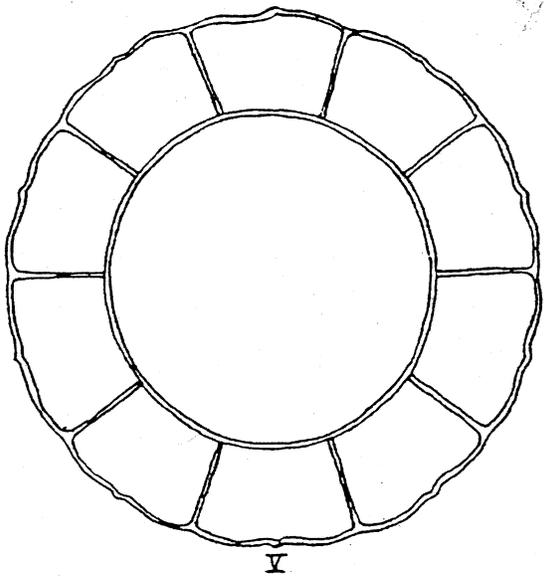
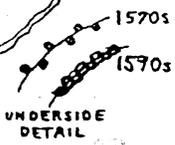
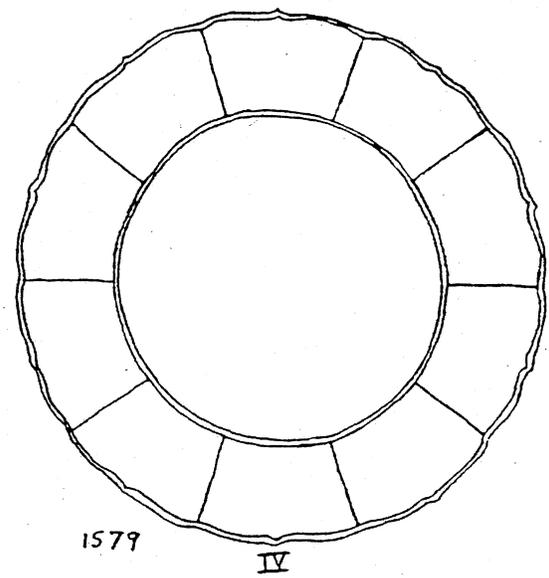
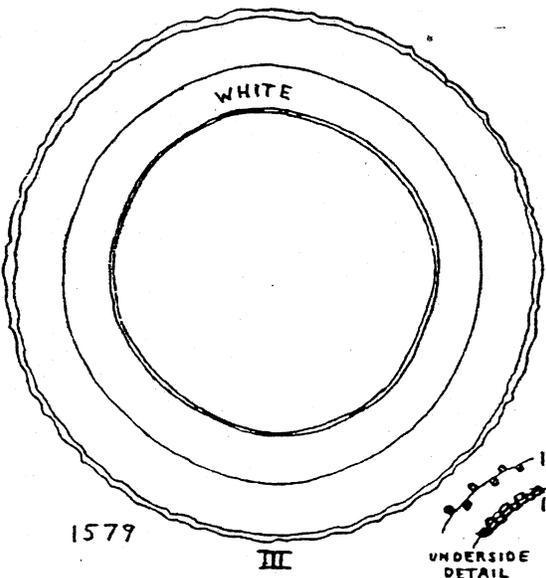
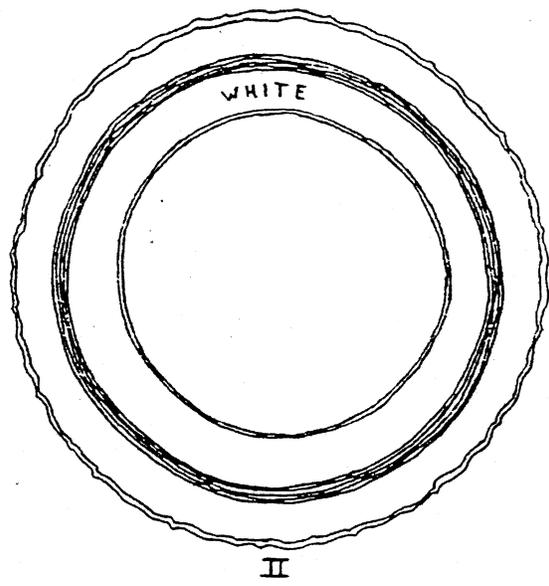
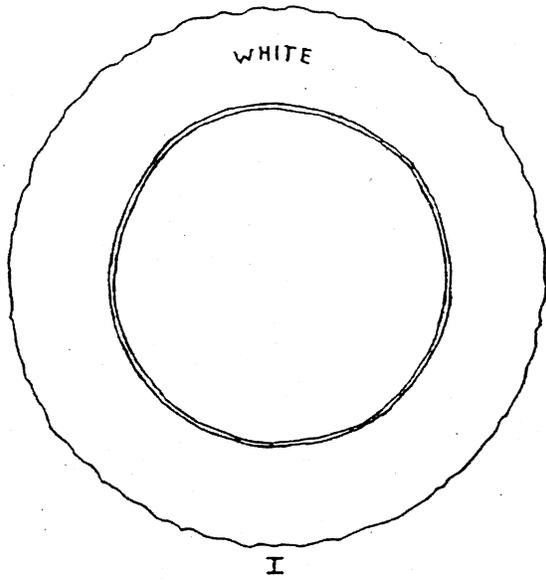
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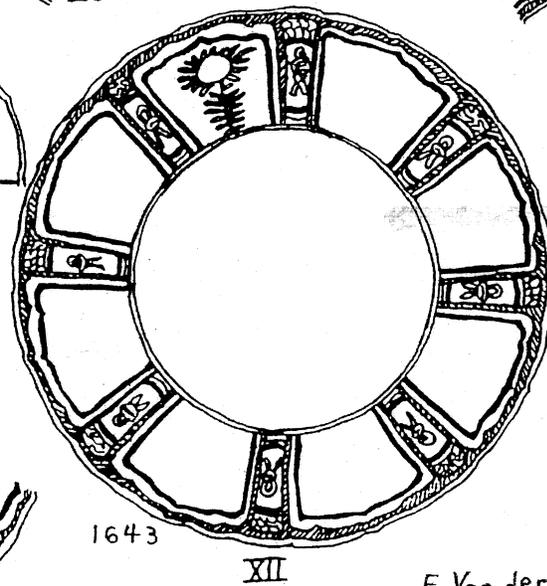
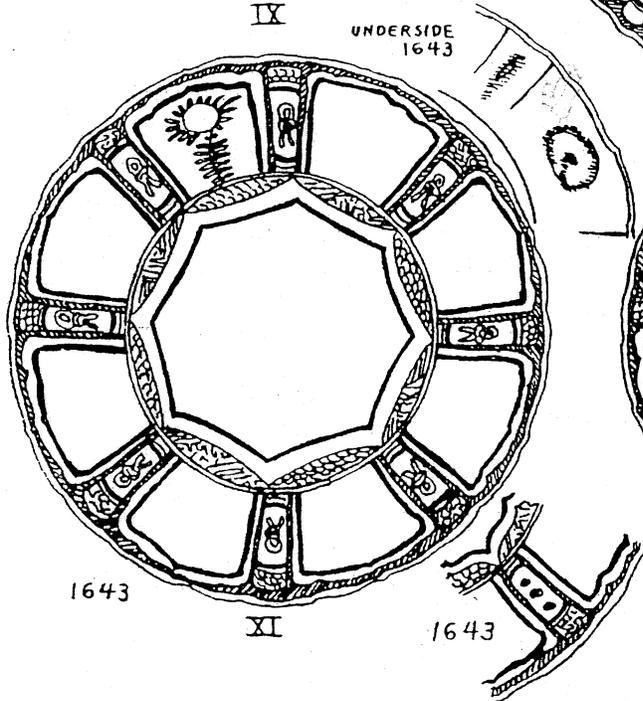
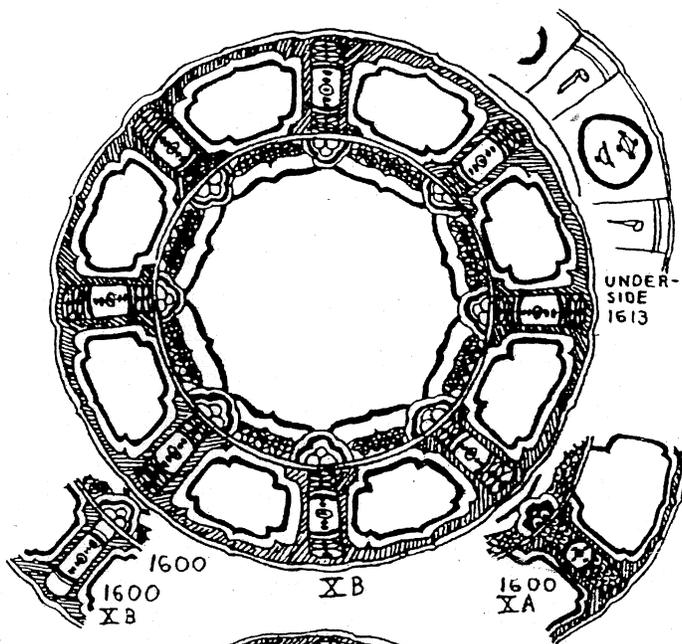
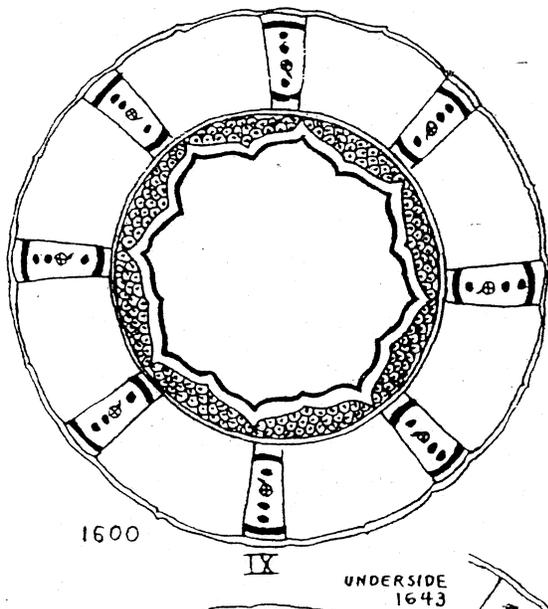
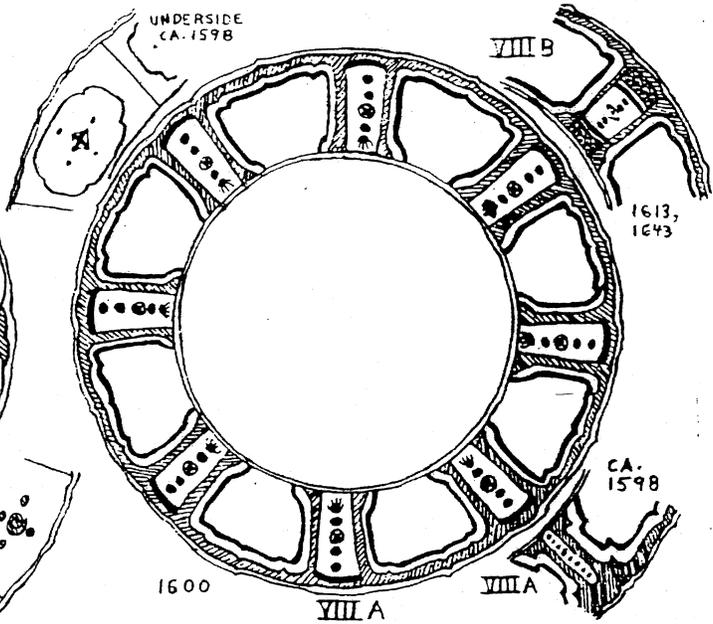
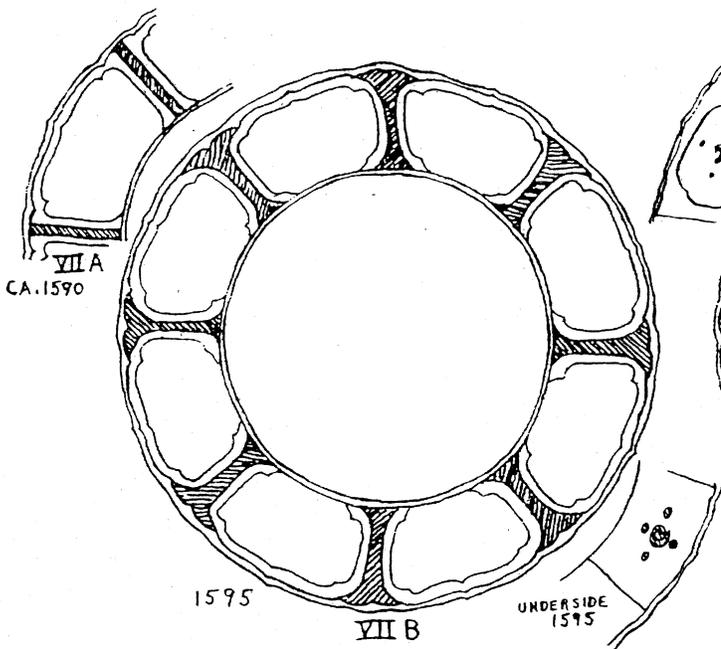
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Design Patterns

Design (Shangraw) Number	Design Description
I	White cavetto, white rim.
II	<u>White cavetto, continuous rim decoration with "water."</u>
III	White cavetto, continuous rim decoration without "water."
IV	Single-line rim and cavetto dividers.
V	Double-line rim and cavetto dividers.
VI	<u>Beaded pendant rim and cavetto dividers, no medallions.</u>
VII A	Double-line rim and cavetto dividers, open medallions.
VII B	<u>"I-wedge" rim and cavetto dividers, open medallions.</u>
VIII A	Beaded pendant rim and cavetto dividers, open medallions.
VIII B	Beaded pendant rim and cavetto dividers, closed medallions.
IX	Beaded pendant rim and cavetto dividers, no medallions, diapers.
X A	Beaded pendant rim and cavetto dividers, open medallions, diapers.
X B	<u>Beaded pendant rim and cavetto dividers, closed medallions, diapers.</u>
XI	Beaded pendant rim and cavetto dividers, semi-medallions, diapers.
XII	<u>Beaded pendant rim and cavetto dividers, semi-medallions, no diapers.</u>
XIII	Large and small semi-medallions, no diapers.

Notes

Twenty-centimeter-diameter and larger plates with flattened rim strips are used in this study because they show the most changes in detail of all the shapes, and because smaller plates sometimes do not use all the elements of decoration. Some dishes without flattened rim strips conform to these design patterns.

Underlining separates date groups.

IX-XI. "Diapers" refers to diaper patterns within a border around the central roundel.

Dates on the drawings indicate that specific dated examples are illustrated.

The Ardebil Shrine collection dates from the fourteenth century to 1611.

It includes small quantities of Types II, III, V, X A, and X B.

Designs I and XIII dates are not based on closely dated find groups.

Chronology

Design Number	<i>San Fe- lipe</i>	<i>Gold -en Hind</i>	<i>San Agus -tin</i>	<i>San Die- go</i>	<i>Már- tires uw</i>	<i>Witte Lee- cher</i>	<i>Hat- cher I</i>	Tentative Dates
	1576	1579	1595	1600	1606	1613	1643	
I								1565-1570
<u>II</u>	*							<u>1570-1575</u>
III	*	#	#	*				1570-1605
IV		*	*					1575-1595
V		*	*	*				1575-1605
<u>VI</u>		*	*	*	*			<u>1575-1610</u>
VII A			(*)		*			1590-1610
<u>VII B</u>			#	*	*			<u>1590-1610</u>
VIII A				#				1595-1605
VIII B					*	*	*	1605-1645
IX				*				1595-1605
X A				#		*		1595-1620
<u>X B</u>				#	#	#	#	<u>1595-1650</u>
XI						*	#	1610-1650
<u>XII</u>							*	<u>1630-1650</u>
XIII								1645-1655

A # indicates the preponderant design or designs in the cargo.

Cargo dates indicate the year of loss. The porcelains would have been made one to three years before, rarely more, as porcelains were shipped and sold promptly. The 1579 cargo had been on one of the 1578 Manila galleons.

These dates refer to Jindezhen wares and their immediate derivatives from Fujian kilns, not to severely degraded provincial wares which sometimes continued to use older designs for many years.

The *Nossa Senhora dos Mártires* collection is too small to determine the proportions of the types in the original cargo. Other types almost certainly were present in the cargo but were not recovered.

A very small quantity of Types II, V, and VI is present in the *Witte Leeuw* cargo but is considered to be "antique" by the catalogers.

A very small quantity of Type VI is present in the *Hatcher I* cargo. It is very degraded provincial ware.