

473 - Historic Ceramics

473.1 IMACS Classification: see IMACS User's Guide for complete Historic ceramics classifications.

473.2 Historic Ceramics Introduction

The components which make up a ceramic artifact are the paste, glaze, decoration, the name (if any) of the decorative pattern, and the maker's mark.

Paste refers to the clay fabric which forms the vessel. It is composed of clay and added or natural fluxes which are formed in a wet malleable state then fired. The paste is what is commonly referred to as earthenware, stoneware, porcelain, etc.

Glaze is the glassy vitreous coating on the outside of a ceramic vessel. It is composed of fused silicate mixtures which are bonded to the ceramic surface.

Decorative techniques are the methods by which pattern is applied to the ceramic surface. They can be applied under the glaze or over the glaze. Some call for the application of color by a brush or decal, others, such as molded-relief techniques alter the paste itself before the firing to produce a desired texture or form.

The third component, historic pattern name, is really an extension or elaboration of the decorative technique. It refers to the manufacturer's name used to list (as in a catalogue) a particular pattern (in which case the pattern name might be printed on the base of the vessel). It can also refer to the informal labels archaeologists give to commonly encountered patterns or designs which are awaiting the illumination of research to provide official manufacturer's nomenclature.

Maker's marks or trademarks are the printed or impressed marks usually applied to the base of a ceramic vessel and which provide information on the manufacturer, date, and national origin of the ceramic artifact.

473.3 History:

Most ceramic tableware artifacts encountered in the western U.S. represent Euro-American attempts to imitate the expensive Chinese porcelains which strongly influenced the Euro-American market between 16-19th Centuries. During that period, European Delft, salt glaze white stoneware, as well as creamware, pearlware, and other "improved" white earthenwares were developed. By the beginning of the 19th Century, British ceramic tableware dominated the

American tableware market, however, French, German, Chinese, Russian, and American made goods also occurred in the western U.S. at the time. By the beginning of the 20th Century, American potters wrested dominance in the tableware market from the hands of the British.

The following sequence is quite general and it no doubt varies somewhat from region to region depending on the distance to costal ports and other transportation and ethnic factors. In late-settled sites, the earlier portions of this chronology are probably missing entirely.

1) Chinese Export Porcelains

The earliest imported ceramics to appear in the west are Chinese Export Porcelains. The end product of 2,000 years of ceramic technology, Chinese export porcelains remained superior to European ceramics until well into the 19th Century.

The porcelain trade proved so profitable to China that the secret of porcelain manufacture was jealously guarded on pain of death by the Chinese government. (Weiss 1971)

Chinese export porcelains were made for the European market and often modified to meet the tastes and vessel form needs of European and American consumers. These tablewares had fine textured vitreous, blue-white, translucent pastes that were covered by a blue tinted clear glaze. The most popular decorative technique was the blue and white handpainted underglaze motif of which Nanking and Canton, forerunners of the Willow pattern, were the most famous historic pattern names. Nanking and Canton decorated porcelains are not uncommon in west coast sites dating from the first part of the 19th Century.

Chinese "Lowestoft" porcelain was quite popular through the beginning of the 19th Century when entire dinnerware services were made to order in China for American consumers. Often these porcelains were painted with armorial emblems, pictures, or other symbols which included the name of the purchaser or their family crest. Pictures commemorating historical events or western landscapes scenes were also popular Lowestoft motifs (Eberlain and Ramsdell 1925:70).

In the 1820's, Rose Medallion style porcelains with gaudy red patterns and pictures of mandarin figures became popular and continued in popularity for many years (Eberlain and Ramsdell 1925: 76).

Chinese export porcelains dropped in quality during the first part of the 19th Century (Tindall 1975) and this along with the rise in popularity of British white earthenwares and the destruction of the major Chinese Potteries at Ching-te-chen led to a decline in the availability of Chinese porcelains in the western market by the 1850's (Weiss 1971:46).

2) English White Earthenware

During the 18th Century, potters in Staffordshire, England experimented with a series of white paste ceramics in an attempt to emulate the beautiful and expensive Chinese Export Porcelains of the same time period.

These experiments resulted in the invention of salt glaze white stoneware which enjoyed an est. 30 years of popularity in the first part of the 18th Century (Noel-Hume, 1969:14) and the popular and enduring white earthenwares known as creamware and pearlware.

Introduced by the Wedgwood Company in the 1760's as "Queensware" (Noel-Hume, 1969) creamware, is characterized by a chalky, soft and porous cream colored paste covered with a satiny clear glaze which pools yellow in vessel crevices. Creamware vessels are usually very thinly potted and plainly decorated with molded-relief or black transfer print designs.

Pearlware was a variation rather than a true improvement on creamware (Noel-Hume, 1969:23). The pearlware paste is similarly chalky, off-white, and porous, but the glaze has added cobalt bluing agents which cause the glaze to pool blue-green in vessel crevices.

Pearlware vessels are usually thicker than creamware vessels and more often decorated with blue transfer print designs. One common pearlware vessel type is a dinner plate or bowl decorated with a glazed-incised edge design known as shelledge or feather-edge.

English made pearlwares and more refined white earthenwares decorated with transfer printing, are by far the most commonly encountered tableware ceramics in western sites dating from the first half of the 19th Century. Transfer print designs were most often blue in imitation of the Chinese blue on white porcelains, and in fact, the most popular blue transfer print pattern - known as "Willow" is a direct adaptation of a Chinese blue on white design. Transfer print decorations commonly depicted idyllic landscape scenes or historic events.

Transfer prints also occur in red, black, green, purple, and other color schemes.

3) The Ironstone Era

The following discussion is excerpted from Felton and Schulz's *The Diaz Collection* (1983):

By the late 1840s, a dramatic stylistic shift in popular British earthenwares had begun which is clearly evident in archaeological assemblages from the 1850s in regions as distant as California. The change entailed a decline in the popularity of transfer-printed and other colorfully decorated earthenwares which had predominated since the late eighteenth century, and a rapid rise in the

availability of "White Ironstone" style vessels. Although the term "Ironstone" had been applied to some improved earthenware bodies since at least 1813, we use it here to refer to a distinct stylistic trend, not the technological improvements in the clay mixtures themselves. "White Ironstone" style vessels commonly bear molded relief patterns rather than colored decorations, and have thicker vessel walls than most earlier creamware and pearlware forms. The bodies of some of these pieces are as porous as common earthenwares, while others are more comparable in this regard to stoneware or porcelain. The latter are variously referred to as "semi-vitreous China", "Hotel China", and "opaque porcelain." Vessels of this style were sold at high prices when first introduced, although it seems probably that their manufacture was cheaper than that of the more labor-intensive colored decorative styles. Perhaps this shift to less labor-intensive modes of decoration in the late 1840s and 1850s was in part a response by British manufacturers to the growth of labor organizations and legislation that limited work hours and child labor.

The "White Ironstone" style appears to have dominated the middle-class market in the United States from the 1850s to at least the 1890s. These wares ("White Improved Earthenwares" and "Opaque Porcelain") comprise about 70% to 90% of three California collections (dated 1857-1878) reported by Praetzellis (1980:75, Fig. 20).*

N.B. Complete references are available in The Diaz Collection, 1983, and do not appear in the IMACS bibliography.

4) American Ceramic Tableware

Prior to 1900, English pottery was considered the finest tableware available in the U.S. American made products which mimicked the British product were considered at best second class. No where was this sentiment better expressed than in the pages of 1897 issue of the Sears Catalogue: "Our stock of tableware includes only the finest selection of crockery... American made crockery is well known to be inferior to the English...manufacture..." (Isreal 1981).

In 1898, the American Potters Guild was formed to promote American-made ceramic tableware. Apparently it was successful because by 1909 the Sears Catalogue was carrying a full line of the "finest crockery" which now included goods from several American manufacturers, most notably Homer and Laughlin of East Liverpool, Ohio (Sears, Roebuck and Co. 1909, reprint 1979; Gates and Ormerod, 1982).

Though identical products were made by British manufacturers, American Potters became famous for their sturdy and simply decorated vitreous earthenwares, commonly known as "Hotel China."

5) Overseas Chinese Ceramics

In the 1850's Chinese ceramics returned in force to the American scene for use by Chinese sojourners to the mining and railroad camps of the far west. These ceramics were naturally quite different in decoration and vessel form from those made earlier for the Euro-American export market. Three broad functional categories can be identified: tableware, utility and storage containers, and opium pipe bowls (see 473.8 for illustrations).

Tablewares: These most commonly include rice bowls and tea cups. Serving dishes, soup spoons, and small wine cups are less common. Tablewares are made from a fine, white porcelain or stoneware, with four decorative styles, including:

- Bamboo (also called Three Circles and Dragonfly, or Swatow).
- Four Seasons (or Four Flowers, a hand-painted overglaze polychrome).
- Double Happiness (or Swirl).
- Celadon (or Winter Green, see below).

For a more in detailed discussion of these types see Chace 1976.

Utility Wares: Utility stonewares or storage vessels are distinctively different, but no less common than tablewares. Generally composed of a coarse, sometimes gritty buff or grey-brown paste with a thick brown or metallic grey-black jian you glaze, utility vessels were generally shipped from China containing soy sauce, liquor, ginger, dried vegetables, and other foods. See Chace (1976) for a description of these vessel forms.

Opium Pipe Bowls: Although highly variable, opium pipe bowls are generally the size and shape of doorknobs. Round styles are most common, followed by 8-sided and round/10-sided. All bowls have a slightly convex smoking surface with a small (1-3mm) smoking hole in the center, sometimes with an insert, and a larger hole on the bottom with a flange and neck. The clay neck was often removed and replaced with a metal ferrule. Bowls are made of stoneware or earthenware in a variety of colors, commonly orange or grey. Surfaces may be plain, burnished, slipped, or glazed. Small Chinese characters or decorations are stamped on the bottom or side. The smoking surface immediately around the small hole may be burned and worn from preparing and igniting the opium pellet. This part of the bowl is thin and easily broken. For more detailed information, see Etter 1980, or Wylie and Fike 1986.

473.4 Historic Ceramics Attribute Descriptions:

Paste:

Paste attributes are most accurately determined by examining an unglazed, preferably clean or freshly broken ceramic surface. Data on two of several paste attributes is requested on the IMACS form. These attributes: paste color and paste texture, are readily observable in the field and the resulting descriptions are reasonably consistent. This paste information along with surface treatment, vessel form, and maker's mark can provide enough data to evaluate the function, origin, age, and socio-economic relevance of the ceramic artifact.

Paste Color:

Virtually any paste color is possible, however, the most common paste colors are variations of white or off white, yellow/buff, red-brown, and gray. Often paste colors are indicative of certain vessel functions, for example, white paste suggests tableware or personal artifacts, while a yellow/buff paste color suggests crockery or mixing bowls.

Texture:

For the sake of simplicity, texture is described as either coarse or fine. Generally a range of texture is likely, however, an adequate descriptive cut off is grain size. If an unglazed edge has visible grains, the size of sand or larger, it is coarse. If it has a chalky, powdery, or glassy appearance, it is fine.

The attributes of porosity, hardness, and translucence are often used to distinguish earthenware, stoneware, and porcelain, however, the tests for these attributes can require considerable ceramic expertise to produce consistent results and can be time consuming or unwieldy in the field. IMACS does not request data for these attributes, however, a brief discussion of their application to paste identification has been included for users with a specific interest in ceramics.

Porosity:

Relative porosity or permeability to water can be determined by touching a clean unglazed ceramic surface to your tongue. If it sticks, it is porous, and if it does not stick it is non-porous or vitreous. Stoneware, porcelain, and vitreous earthenwares are non-porous and do not stick. Common pottery, most white earthenware (except vitreous varieties), and some yellow ware and red-ware are porous and stick when applied to the tongue. Some Bennington or Rockingham-glazed yellow earthenware is vitreous and will not stick.

Hardness:

Take a sharp, pointed tool and scrape firmly on the exposed, fresh break of a ceramic sherd. If you can dislodge grains or easily make a scratch you have an unimproved earthenware or common pottery sherd. If it takes a great deal of pressure to make a scratch you have a vitreous or improved earthenware. Good stoneware or porcelain will not scratch. (Adapted from Costello, personal communication, April, 1985).

Translucence:

Only porcelain and some varieties of fine Chinese stoneware exhibit translucence: the quality of permitting the passage of light. This can be observed by looking at a light through the thin vessel wall - if light can be observed, the vessel is either porcelain or fine Chinese stoneware.

Ware Definitions (Based on Chace 1976; Ketchum 1983; and Rado 1969)**I. Common Pottery (coarse or unrefined earthenware, terra cotta)**

Paste Attributes: Usually red-brown, coarse, porous, soft.

Common Surface Treatments: None (flowerpot), clear glaze, handpainted, slip, sgraffito.

Common Vessel Forms: Flowerpot, crocks, other utility vessels.

*Majolica/Delft: A 12th century European pottery common until the early 19th century, is composed of a refined common pottery paste of red-brown or dark buff color covered with an opaque white "tin enamel" glaze, handpainted with bright, usually polychrome designs. Majolica occurs in early 19th southern Californian sites dating from the Mexican period. (Costello, personal communication, 1985).

II. Earthenware (refined)

*White Earthenware (creamware, pearlware, most varieties of Ironstone).

Paste Attributes: White/off white, fine, porous, soft.

Common Surface Treatments: Usually clear glaze with a variety of decoration including:
molded-relief, transfer printing, flow blue, handpainting (over and under

glaze), engine turned (annular), decal, and others.

Common Vessel Forms: Tableware, decorative vessels, chamber pots, and other toiletry vessels.

*Vitreous China or Earthenware (Semi-porcelain, Hotel Ware, Opaque Porcelain, some Ironstone).

Paste Attributes: White/grey-white, fine, non-porous, hard.

Common Surface Treatments: Usually clear glaze with molded-relief, decal, simple handpainted or engine-turned band, transfer print.

Common Vessel Forms: Tableware (often sturdy restaurant varieties), decorative vessels, toiletry vessels.

*Yellow Ware

Paste Attributes: Yellow/buff, usually fine (but can be quite coarse), usually porous, soft. Some varieties appear to be harder and non-porous, particularly those with Rockingham or other flint enamel glazes.

Common Surface Treatments: Usually clear glaze allowing the natural paste color to show through as a mustard color, frequently the interiors of the bowls are slipped or glazed opaque white. Other surface treatments include molded-relief designs, a single painted band, mocha or moss designs, spatter or sponge designs, mottled brown flint enamel glaze (Rockingham or Bennington).

Common Vessel Forms: Mixing bowls, mugs, crockery, kitchen utensils, e.g., colanders, meat tenderizers, rundlets (barrel shaped containers). "Rebecca-at-the-well" tea pot.

Note: Yellow Ware is a result of an industrial ceramic age after 1830, and was manufactured primarily in East Liverpool, Ohio in great quantities between 1830 and 1900. (Boger 1971).

*Red Ware

Paste Attributes: Red-brown, fine, porous, soft (some varieties are hard and non-porous enough to resemble stoneware).

Common Surface Treatments: Clear glaze allowing the natural paste color to show through, sometimes interiors are slipped white, painted band, mocha or moss designs, metallic lustre washes over clear or brown glazed, sponge or spatter designs, sgraffito designs through contrasting slip.

Common Vessel Forms: Mugs, jugs, pitchers, molds, crocks, rundlets (barrel-shaped containers).

III. Stoneware

*Utility Stoneware

Euro:American Utility Stoneware

Paste Attributes: Usually grey or buff, coarse, non-porous, hard.

Common Surface Treatments: Salt glaze, slip/trailing, dark brown "Albany" slip (particularly on vessel interior), cobalt blue handpainted designs, sgraffito.

Common Vessel Forms: Mineral water jugs, ink bottles, crockery, pickle jar, rundlets, ginger beer jars.

Chinese Utility Stoneware

Paste Attributes: Usually buff to brown, coarse (sometimes tiny chunks of gravel are visible in the paste and poking through the glaze), non-porous, hard.

Common Surface Treatments: Thick brown glaze (jian you, or "Tiger" glaze), iridescent black-brown glaze, turquoise blue glaze and white glaze over molded-relief or impressed designs (ginger jars).

Common Vessel Forms: Soy sauce, pickle vegetable, large globular storage jars, wine or liquor jars, ginger jars, various storage vessels. (See Chace, 1976 for vessel illustrations).

*Refined Stoneware

Euro-American Fine Stoneware

Paste Attributes: Usually light grey or buff, fine, non-porous, hard (some redware in fact may be red stoneware).

Common Surface Treatments: Clear glaze or golden brown "Bristol" glaze (ale bottles), modern stoneware tableware usually has a clear or colored glaze with a manufactured or handpainted design.

Common Vessel Forms: Ale bottles (often two tone clear and golden brown glaze on a fine buff body), some good crockery and mugs.

Chinese Fine Stoneware

Paste Attributes: Usually light grey with few small, dark inclusions.

Common Surface Treatments: Usually blue tinted clear glaze with handpainted underglaze design e.g., "Bamboo" some argue that Bamboo bowls are in fact crude porcelain and not stoneware.

Common Vessel Forms: Medium sized "rice" bowls.

IV. Porcelain

*Euro-American Porcelain

Paste Attributes: Pure white, fine (almost glassy), translucent, non-porous, hard.

Common Surface Treatments: Clear glaze, molded-relief, decal, gilding, gaudy handpainted floral designs, sprigging or other applied decorations.

Common Vessel Forms: Usually delicate tableware (tea cups and saucers), decorative vessels, commemorative display pieces.

*Chinese Porcelain

Paste Attributes: Blue-white (occasionally with some darker inclusions), fine, translucent, non-porous, hard.

Common Surface Treatments: Blue-tinted clear glaze, blue-green "celadon" glaze, overglaze enamel handpainted design e.g., Four seasons or Four Flowers design, underglaze handpainted designs e.g., "Double happiness" or "Swatow" designs.

Common Vessel Forms: Tableware, tea sets, decorative and commemorative vessels (export porcelain), rice bowls, spoons, etc.

473.5 Surface Treatment

Ceramic surface treatments occur in a variety of combinations, often with two or more decorative techniques in addition to a glaze as in a molded-relief saucer with transfer print design under a clear glaze. The site form requests description of the glaze, the most distinctive decorative technique and the pattern name if known. Definitions of common glazed, decorative techniques and pattern names are described below:

Glaze:

The definition of glaze is a glassy, vitreous coating which is usually prepared from silicate mixtures bonded to ceramic surfaces. Maturing temperatures vary according to ingredients (Parmalee 1973; Rado 1969).

Glazes vary in color and texture according to their chemical constituents and firing temperatures. Glaze mixtures are fused to the ceramic paste surface during firing to produce a vitreous veneer which can be both protective and decorative. Porous paste ceramics must be glazed in order to be waterproof and sanitary.

Some glazes are used only with certain paste types due to their fusing constituents and required maturing temperatures. Salt glaze, for example, requires the extremely high temperatures characteristic of stoneware firing in order to vaporize sodium chloride for fusing. Glazes also enjoy periods of market popularity as well as revivals. Rockingham flint enamel glaze, which was popular between 1830 and 1870, is occasionally revived for use on decorative vessels today..

Glaze and Slip Types:

Bennington: Often used synonymously with "Rockingham" glaze. Bennington, Vermont potteries produced all ware types from earthenware to porcelain, but are most famous for an improvement patented in 1849 on the Rockingham, mottled brown glaze. (Barclay 1976; Norman-Wilcox 1965).

Bristol Glaze: A glassy, creamy glaze sometimes colored with iron to make it brown, most commonly found on cylindrical vessels formed by an extruder, glazed half brown, half cream color: for example: stoneware ale bottles (Barclay 1976). Bristol glaze has been used on commercially made stoneware since the late 19th century (C. Malcom Watkins 1978).

Celadon: A glaze used on Chinese porcelain which is derived from iron and ranges in color from putty to sea green to blue. Winter Green: may be a universal marker for late 19th/early 20th century Overseas Chinese sites. In addition to being very common, they were the most expensive type of Overseas Chinese tableware (Sando and Felton 1984). They exhibit the following distinctive characteristics (Wylie and Geer 1983):

1. Green or blue-green translucent glaze, full of minute bubbles, that exhibits variation in color density depending on thickness.
2. An extremely heavy exterior glaze, especially at the corner of the foot.
3. A very thin, almost transparent interior glaze.
4. A fine, white vitreous paste.
5. A scraped rim, sometimes a faint yellow, covered with a thin glaze.
6. A slightly flared rim with an expanded lip.
7. A light colored exterior collar (contrasting thicknesses of glaze).
8. Cobalt blue base marks under the glaze. Rice bowls have a square "reign" mark; some cups have simple brush strokes (sun, moon).

Rockingham: A common lead based glaze used on earthenware from the late 18th century. The glaze is mottled dark brown and yellow. (Boger 1971; Barclay 1976).

Salt Glaze: A thin, glassy glaze found exclusively on high fire stoneware. Common table salt is thrown into the kiln during firing. The salt vaporizes and bonds with the stoneware surface to produce an "orange peel" pitted surface. (Norman-Wilcox 1965; Barclay 1976).

Chinese Brown Glaze: A dark brown glaze which may be "semi-matte" chocolate brown or almost an iridescent black-brown color (Chase 1976). Sometimes known as "jian you" or "Tiger" glaze.

Slip: Clay that is mixed with water and applied in liquid form to the ceramic surface (Hughes 1965).

Albany Slip: A dark brown to greenish-black clay slip which was usually applied to the interior surface of salt glaze stoneware vessels common after 1843. It also occurs on vessel exteriors. The slip derives its name from Albany, New York where the dark clay for the slip was primarily found.

White Opaque: (Tin Enamel) A lead glaze popular on Mexican earthenware (Majolica). It is visibly thick in cross section and often has handpainted designs applied on the glaze.

473.6 Decorative Techniques:

Transfer-printing: The process of decorating pottery from paper impressions taken off inked copperplate engravings; an English invention dating from the Buttersea enamel-works (1753-56). (Norman-Wilcox 1965). The design is made of many colored dots, barely visible to the casual observer. Dots are always underglaze in contrast to decal overglaze dots.

Decal: A method of multiple color decoration introduced about 1860. Decal colors will appear in slight relief when light is reflected from the vessel's surface (Berge 1980). The design is composed of hundreds of raised dots, similar to transfer prints, but over the glaze.

Handpainted: Applied by hand with a brush or fingers. Irregular uneven designs are the usual result. Brush marks are clearly visible in most cases.

Molded Relief: Raised decoration which is an integral part of a vessel mold or form; particularly popular on clear glazed white ironstone vessels dating from the second half of the 19th century. (Wetherbee 1974).

Spatter or Sponge: Mottled, colorful designs applied with a sponge or brush. Popular from 1798 to 1865. (Sperry Wood 1959).

Sprigging: Applied relief design usually in the form of small leaves and flowers. (Boger 1971).

Annual/Banded Design: Decorative rings around the exterior rim and base of a vessel, usually in earth tones, applied with a stationary brush and rotating wheel; often called "engine turned". This type of decoration is often seen on yellow ware and pearlware mugs and bowls.

473.7 Pattern Names:

Flow Blue, Flown Blue, Flowing Blue: A ceramic decoration of transfer print variety usually blue, made by adding a volatilizing mixture during the glaze firing, causing a softened effect. Popular between 1825-1862, flow blue also appears in other colors including green, brown, red, etc.

Gaudy Dutch/Gaudywelch: A pattern style popular between 1810 and 1930. The design generally consists of handpainted stylized flowers in bright colors. It was made to appeal to the cheaper market (Norman-Wilcox 1965). Gaudy Dutch designs have been observed on Ironstone vessels dating from the late 19th century.

Featheredge: A moulded border decoration consisting of a swirled feathery band at the edge of a usually scalloped rim on a plate or bowl. The band is usually colored blue or green in contrast to the white vessel. Featheredge and its variant, "shelledge" were commonly used on creamware, pearlware and other white earthenwares between 1770 to the mid 19th century (Noel-Hume 1976).

Willow Pattern: The best known of all transfer print designs. It is a European imitation of a Chinese blue and white design which depicts a river with a bridge across it and willow trees on the bank. Two birds are supposed to represent two lovers flying away from an irate father. First produced by English potters in 1780, the willow pattern is still used today. (Barclay 1976).

Mocha: A moss like decoration obtained by touching the ground color of a white slip with a brush containing pigment. Popular from 1790 - 1890.

Rebecca-at-the-Well: A Rockingham glazed molded relief design consisting of a raised figure of a woman drawing water from a well. The design was used almost exclusively on tea pots and originated in 1852.

Delft: Blue decoration on a opaque white tin glaze, similar in technique to Majolica or faience. Delft was an early European attempt at imitating Chinese export porcelain. Popular to 1730, it was produced in England until the early 19th century. (Noel-Hume 1976).

Canton/Canton Ware: A design common to Chinese export porcelain. Along with the variations called "Nanking" were Chinese forerunners of the Willow pattern. The design is handpainted blue on white underglaze and includes a central pictorial theme of a bridge, teahouse, birds and willow tree. The design on porcelain reached its height of popularity in the Euro-American market by 1780. By the first quarter of the 19th century the quality dropped dramatically. (Tindale 1975; Barclay 1976).

Bamboo, Three Circles and Dragonfly, Swatow: The pattern on the outside of these rice bowls has four units: three circles, a dragonfly character, a marsh with five big leaves and a prunis with four wide leaves. These are all arranged counterclockwise. (Chase 1976).

Four Seasons, Four Flowers: The "Four Seasons" pattern is composed of the flowering plant of each of the four seasons painted crudely in overglaze polychrome enamel in the four quadrants: cherry, water lily, peony and chrysanthemum, in clockwise order. (Chace 1976).

473.8 Vessel Forms:

For illustrations of most Euro-American vessel forms see the following pages. For Asian vessel illustrations see next page.

Euro-American Vessels

Common Euro-American Vessel forms from: "Pottery and Porcelain, Knopf Collector's Guides to American Antiques" by William C. Ketchum Jr. (1983), courtesy of Alfred A. Knopf, Inc. Euro-American Vessels

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Ceres Pattern on 10 in. milk Fig Pattern on 9 in. teapot, pitcher, 1850 Davenport, 1856

Corn N' Oats Pattern on 8 in. Boote's Octagon Pattern on high sugar bowl, no date 11 in. platter, T.R. Boote, 1851

Common Ironstone Patterns from: "A Handbook on White Ironstone" by Jean Wetherbee (1974), courtesy of Wallace Homestead, Inc. Euro-American Vessels

Davenport's Decagon Pattern on 9 in. diameter, 6 in. high chamber pot, Davenport, 1853

Gothic Pattern on 9 in. wide, 7 in. tall octagonal dish, Davenport, ca. 1840's

Common Ironstone Patterns from: "A Handbook on White Ironstone" by
Jean Wetherbee (1974), courtesy of Wallace Homestead, Inc. Common Chinese Vessel Forms:

Common Chinese Vessel Forms: (from Felton, Lortie, and Schultz 1984; Chace 1976)

473.9 Trademarks:

Maker's marks, patents and other devices that are printed or impressed on ceramic vessels, are usually the most accurate dating indicators. Hallmark motifs, key works and pattern names are often associated with specific time periods e.g., "made in England" implies a post 1900 date. Registry marks, the diamond shaped inscriptions commonly used in England between 1842-83 provide a key to the year, month and day of manufacture. If any numbers, pictures, initials or marks are observed on ceramic artifacts in the field, these should be recorded and an encyclopedia of maker marks should be consulted (e.g., Gates and Ormerod, 1982).

The following list of general rules for interpreting Euro-American maker's marks has been adapted from Godden's Illustrated Encyclopedia of British Potter and Porcelain Marks (1963) and Wetherbee's White Ironstone (1974). For a discussion of Asian maker's marks, see Berge 1980:215-216.

"Any printed mark incorporating the name of the pattern may be regarded as having been made after 1810."

"The use of the work "Royal" suggests a date after the mid-19th century."

"The garter shaped mark was used from 1840 onward."

"The Staffordshire knot occurs from about 1845."

"The Royal Arms was used from the early part of the 19th century, but the quartered shield without a central escutcheon was used after 1837."

By law, the word England has to be affixed to English goods imported to the U.S. after 1891. Some British potters, however, labeled their wares with "England" as early as 1869.

Note: This American law requiring labeling of national origin applied to other ceramic exporting countries.

"Made in England" is a 20th century mark.

Ltd., "Limited," reveals a date after 1860's but was not generally used in ceramics marks before 1880."

"Trade Mark" had to be subsequent to the Trade mark Act of 1862. Normally, it denotes a date after 1875.

473.10 Historic Ceramics

Registry Marks

The following key for interpreting English Registry marks is also adapted from Godden and Wetherbee.
(Note: These are not IMACS codes.)

Index to Year and Month Letters:

1842-67		1868-83	
Year Letter at Top		Year Letter at Right	
A - 1845	N - 1864	A - 1871	L - 1882
B - 1858	O - 1862	C - 1870	P - 1877
C - 1844	P - 1851	D - 1878	S - 1875
D - 1852	Q - 1866	E - 1881	U - 1874
E - 1855	R - 1861	F - 1873	V - 1876
F - 1847	S - 1849	H - 1869	W - (Mar. 1-6)
G - 1863	T - 1867	I - 1872	1878
H - 1843	U - 1848	J - 1880	X - 1868
I - 1846	V - 1850	K - 1883	Y - 1879
J - 1854	W - 1865		
K - 1857	X - 1842		
L - 1856	Y - 1853		
M - 1859	Z - 1860		

Months (Both Periods)

A	-	December
B	-	October
C or O	-	January
D	-	September
E	-	May
G	-	February
H	-	April
I	-	July
K	-	November (and December 1860)
M	-	June
R	-	August (and September 1st-19th, 1857)
W	-	March

Datable Motifs and Registry Marks on Ceramics

Summary of Historic Ceramic Tableware in Western Archaeological Sites

by Sarah Johnston

-1500

Typical
Trademarks

English Delftware/Majolica

Paste: Buff to Red-Brown, Porous

Glaze: Opaque white lead with tin oxide

Deco: Handpainted Blue on White Polychrome

Chinese Export Porcelain

Paste: Fine Blue-White
Vitrified, Translucent

Chinese
"Chop" Marks

-1600

Glaze: Clear with blue tint

Deco: Handpainted
Blue on White (Nanking, Canton)
Polychrome (Famille Verte, Famille Rose,
Lowestoft, Rose Medallion)

-1700

1730 - Delftware loses popularity

-1800

Decline in Quality of
Export Wares

European White Earthenware

Paste: Fine White or Creamy White, Porous

Glaze: Clear Lead

Deco: Transfer Print (Willow, Landscape Scenes)

Staffordshire
England

-1840

Decline in popularity and
availability of Chinese
Export Porcelain

Beginning of Ironstone Era

1850

Overseas Chinese Pottery
"Reign marks" "Sun/Moon"
Characters

Paste: Fine White

Glaze: Clear non-Lead

Deco: Molded-Relief

Paste: Fine Blue-White
Translucent also Stoneware

-1900

Glaze: Clear or Celadon
End of Ironstone Era

American White Earthenware

Deco: Handpainted
Blue on White (Double
Happiness, Bamboo, Swatow)
Polychrome (Four Seasons)

Paste: Fine White or Grey-
White, Vitreous China,
"Semi-Porcelain"

Glaze: Clear

Deco: Decal Floral or Pinstripe

East Liverpool
Ohio