So Tasteful:
A Note About Iron-Gall Ink

ABSTRACT

Iron-gall ink was not used for writing in historical Japan, but the compound did have a long tradition for aesthetically blackening teeth. This note summarizes the history of the practice and the materials, implements, and methods used.

INTRODUCTION

Although iron-gall ink was not used for writing or drawing in historical Japan, where black and gray shades were made with lamp black pigments (usually produced from burnt pine wood or rapeseed oil), the ink was used for another purpose—blackening teeth. This cosmetic practice extends back many centuries in several East Asian countries, including Vietnam, Indonesia, and possibly China (Casal 1966). Its earliest history in Japan is unknown: whether the practice was imported and, if so, where from; when the custom was first observed; and the original reason(s) for undertaking it. Eventually a darkened mouth—which might also be interpreted as the absence of obvious teeth—came to be seen as aesthetically pleasing. In Japan, the custom was called by several names, most commonly  ohaguro (o = esteemed, ha = teeth, guro = black).2

HISTORY OF USE

Whether social hierarchy dictated ancient blackening practice seems to be unknown, but in early historical periods the custom was restricted to men, women, and children of the court. Like any cultural practice or fashion, blackening teeth waxed and waned with prevailing social forces. In the Nara period (710–784), Chinese culture dominated the Japanese court, so men abandoned what came to be seen as a barbaric taste. Women, or at least those who were married, maintained the practice.

With the overweening refinement of the Heian court, around the ninth century the style again became voguish with ladies, and girls were initiated after puberty. Some male courtiers also resumed the practice, and by the twelfth century the custom was again widespread with men at court (Casal 1966; Kojima and Crane 1991, 253; Chamberlain 1980, 63–4). Boys also blackened their teeth after puberty.

After the majority of noble men and women resumed blacking, the convention was adopted by many of the samurai class—men, women, and children who had reached puberty. Samurai men took as much care to refresh the blackening in preparation for battle as before social events. During the Heian wars (1180–1185), the Heike/Taïra faction, who had adopted Kyoto court fashions, could be identified by their darkened teeth, while the Minamoto/Genji partisans kept theirs white. Casal aptly summarized the tradition’s early history: “...what probably began as a totem superstition, after passing through a stage of perverse sensuality, turned into an emblem of a warrior’s true and faithful spirit!”

Because the Taïra won the wars, they dictated taste in the Muromachi period (1336–1568). The fashion spread to other classes, even commoners, although outcasts such as leather workers, beggars, and others deemed “dirty” or socially unacceptable were not allowed to use any make-up. Young people continued to follow the custom after puberty. During the fourteenth century, the Noh drama developed, and by 1349 its actors were blackening their teeth as part of their theatrical dress (Frédéric 1984, 222). Their carved and painted masks, which continue to be highly valued as art objects, often show darkened teeth.

In the Momoyama period (1568–1603), Bernardino de Avila Girón, a Spanish merchant who settled in Japan, wrote that “…maidens and widows do not stain their teeth in this way” (Schilling and de Lejarza 1934, 17–18; quoted in Cooper 1965, 39, 48).

Received for publication Fall 2003.
However, later accounts reported that in certain regions young men had girls’ teeth forcibly blackened as a way of committing them to marriage (Ciarinzka 1904; Mossman 1873, 477), and during the Edo period (1603–1868) shagu ro was an important part of the rites that transformed apprentice courtisans into women at about age fourteen. To assure their professional success, the initial staining materials were collected from friends and applied at a ceremony sponsored by friendly “iron parents” (kane oya) (Casal 1966, 25). Edo women were required to blacken their teeth after they married, the practice having come to signify marital fidelity. Casal speculates that this new meaning may have derived from the earlier fidelity of warriors to their lords. Widows, no matter how young, were expected to maintain the practice as a sign of undying loyalty to their late husbands. Edo men observed the custom from the age of fifteen or sixteen.

After Commodore Matthew Perry’s expedition forced Japan to reopen intercourse with the world in 1853, the nation became aware of foreign technological advancements and grew anxious about related cultural discrepancies. At the beginning of the Meiji Restoration, an imperial decree on January 30, 1868, announced that nobles were no longer “obliged” to blacken their teeth. This indicates not only that the government was sensitive to Western aesthetics, but that at some previous time the custom had mutated to a requirement for those at court. Despite the edict, the Emperor maintained the tradition for a while. Then in the spring of 1870 another decree was issued: men were forbidden from blacking their teeth. In March 1873 the Empress let it be known that she had discontinued the practice, sending a signal that ladies of the court quickly followed. The change flowed down through society, although some women in remote rural areas continued the practice for nearly a century.

Staining Materials and Methods

Early blackening methods are not known; since the procedure was traditional, the method documented during the Edo period probably was similar to earlier techniques. “Mr. A. B. Mitford, in his amusing Tales of Old Japan, gives the following recipe for tooth-blacking, as having been supplied to him by a fashionable Yedo [Tokyo] druggist: ‘Take three pints of water, and, having warmed it, add half a teacupful of wine. [By “wine,” he must of course mean Japanese sake.] Put into this mixture a quantity of red-hot iron; allow it to stand for five or six days, when there will be a scum on the top of the mixture, which should then be poured into a small teacup and placed near a fire. When it is warm, powdered gall-nuts and iron filings should be added to it, and the whole should be warmed again. The liquid is then painted on to the teeth by means of a soft feather brush, with more powdered gall-nuts and iron, and, after several applications, the desired colour will be obtained’” (Chamberlain 1980 quoting Mitford 1904). "UROY prints often depict women brushing on the concoction.

Some modern references describe the dye as being made from oxidized iron shavings soaked in vinegar and powdered gallnuts (Kojima and Crane 1991; Salmon 1975, 18), perhaps reflecting the observation of Luis Frois, a sixteenth-century Portuguese missionary, who remarked, “European women use artificial means to make their teeth white; Japanese women use iron and vinegar to make their mouth and teeth black” (Frois chap. 2, no. 16; quoted in Cooper 1965, 39, 48, 420). Several modern writers say that tea was used (Shimizu 1988, 380; Pekarik 2003). Avila Girón reported that “the bark of a tree” was used [to provide tannic acid] (Cooper 1965, 39), and Casal said that the snake gourd (Luffa petola, called beihima in Japanese) was used. Thus, it seems that as with Western iron-gall inks, a variety of ingredients were used to intensify the acidity of a recipe. Because the Japanese colortant was used orally, one would not expect the water-soluble gum binder, provisional colorants, or gloss enhancers that were incorporated into Western iron-gall inks to have been added; but one source says “things such as candy were also added” to the iron, water, and tea or vinegar mixture (Pekarik 2003).

During the tenth and eleventh centuries, it became stylish to store cosmetics and toilet implements in sets of nesting lacquer boxes, which upper class women took to their husbands’ households as part of their dowries. The often elaborately decorated sets sometimes contained more than fifty pieces altogether and remained popular through the Edo period; examples can be seen in the lacquer collections of fine arts museums (Montreal Museum of Fine Arts 1989, 203–4; Shimizu 1988, 292–95). Among other accoutrements, the boxes held polished metal hand mirrors, feather and hair brushes, water ewers for mixing pastes into pots, basins for rinsing the mouth between ink applications, and thin papers for removing make-up. In addition to white face powders (e.g. white lead and chalk, pulverized rice), the boxes held black powders: lamp black for eyebrows (Casal 1966, 16; Frédéric 1984, 84; Salmon 1975), powdered gallnuts—called fush or fushiko (Montreal Museum of Fine Arts 1989)—for teeth, and possibly a powder of fully formed, desiccated stain.4

Less wealthy people probably stored their powders and liquids in a variety of containers. Kilns in Echizen province (now Fukui prefecture) were famous for rough, functional stoneware jars made especially for tooth blackening materials (“Major ceramic kilns of Japan,” [2003]), and humble brushes included reed or willow wood sticks fibrillated at one end (Casal 1966, 24).

The first time teeth were blackened, two or three days of applications were required to create a desirably dark shade.


Pekarik, A. 2003. Email communication to the author.


CHRISTINE A. SMITH
President
Conservation of Art on Paper, Inc.
Alexandria, Virginia
capi@erols.com