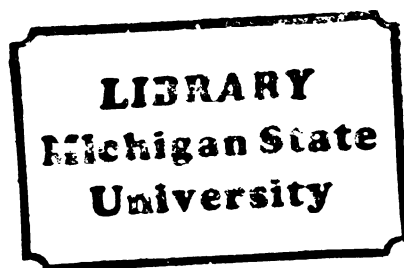


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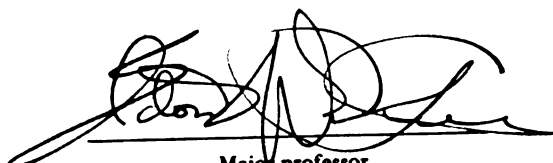
Etching in America: 1866 to 1925

presented by

Deborah McGowan

has been accepted towards fulfillment
of the requirements for

M.A. degree in HISTORY of Art


Major professor

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ETCHING IN AMERICA: 1866 TO 1925

By

Deborah McGowan

A THESIS

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ABSTRACT

AMERICAN ETCHING: 1866 TO 1925

By

Deborah McGowan

Etchers working in America in the late nineteenth century have been so long neglected that art historians and certainly the public at large easily forget these artists did exist. Evidenced by the names of almost 400 American etchers working between the years 1866 and 1925, an American etching movement took place. The problems addressed are: what was the relationship between the late nineteenth century European etching revivals and the American movement? Who were the principal exponents of the movement and what were the events, organizations and literature which are the assessable records of the movement? Auxiliary to these problems is the attempt to record names and events which are in danger of being lost.

Sources of information proving most helpful were rare books and documents concerning American etching, actual examples of the American etchings under discussion and original correspondence with authorities in the area of nineteenth century American prints.

A starting point of 1866 was chosen due to the founding of the American Branch of the French Society of Etchers in that year. Salient among the findings of the study were the popularity and commercialization for mass consumption of etchings produced between 1866 and 1895 which must be viewed

against the background of the original values catalyzing the etching movement. In the beginning, there were valid reasons for the subject matter chosen, its treatment and the details of production. Another major finding was the necessity of dividing the movement into two phases, the second occurring c.1900 to 1925. The latter phase did not succumb to mass commercialism as the first had but to a decline in artistic favor as the preferred medium in the 1920s.

1. The first step in the process of creating a new product is to identify a market need. This involves conducting market research to determine what consumers want and what problems they are trying to solve. Once a need is identified, the next step is to develop a concept for a product that addresses that need. This is often done through brainstorming and sketching ideas. The third step is to create a prototype, which is a small-scale model of the product that can be used to test the concept and gather feedback from potential users. The fourth step is to refine the product based on the feedback received. This may involve making changes to the design or the way the product is marketed. Finally, the product is launched into the market and its performance is monitored. If necessary, further refinements can be made based on ongoing feedback.

ACKNOWLEDGMENTS

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Much information otherwise unavailable to me was kindly supplied by Brenda Palley, Researcher for Robert Flynn Johnson of the Achenback Foundation for Graphic Arts in San Francisco; Elizabeth E. Roth, Keeper of Prints for the New York Public Library in New York City; Gabriel P. Weisberg, former Curator of the Department of Art History and Education of the Cleveland Museum of Art; Sue Reed, Assistant Curator of the Museum of Fine Arts, Boston, and Catherine Green, Intern at the Albright-Knox Art Gallery of Buffalo, New York.

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INTRODUCTION

In the latter part of the nineteenth century the effects of the diminished authority of the long-established academic institutions were felt in a variety of ways, one of which was the rise of a multitude of artists who formed societies and clubs each with a special interest or philosophy. These groups led to exhibitions, then publications, lectures, and more clubs.

Among these special interests were watercolor painting, drawing and etching. Serious American students of art traveled abroad to study and to keep abreast of what was being done in France, especially, and in this way European ideas and interests were transplanted to the United States. A major interest in Europe in the latter nineteenth century outside the realm of painting was etching, an interest which developed to such an extent as to be called an Etching Revival. Was there an etching movement in America similar to those of France and England in the late nineteenth century and, if so, what was the nature of the movement? Who were its principal exponents? What were the events, organizations and literature which are evidence of a significant trend which may be called an etching movement in America? The etching phenomenon in America was related to those of France and England, and it is the purpose of this paper to delineate its most important

aspects and, in the process, to provide a document for information which is in danger of being lost.

The revival of etching in the nineteenth century with its emphasis on craftsmanship and the individualism of the artist looked to the work of Rembrandt and other seventeenth century Dutch artists¹ for examples. The concept of painter-etching, meaning the use of the etching medium to produce works of artistic intent as serious as the intentions of painting, is derived also from Rembrandt. To some writers, especially those of the late nineteenth century, the term painter-etcher referred to an artist who uses the etching medium to simulate the tonal values of painting. For the purposes of this paper, the term will be used in the former, general sense, although several exceptions to this usage are noted.

The influence of Rembrandt is most clearly evident in the limited scope of subject matter associated with painter-etching. The choice of a picturesque subject is the most obvious and facile similarity an artist of limited vision can effect between Rembrandt's etchings and his own. Perhaps the most important esthetic consideration which was held up as a standard of successful etching and derived from Rembrandt was an appreciation of the beauty of line and its use to create effects of color, texture and detail. These very concerns, unfortunately, were to deteriorate into busy, overly-meticulous and methodical formulae later known as reproductive etching. The confusion and controversy in the last decade of the nineteenth century between painter-etching and reproductive etching

led to a collapse of the art altogether around 1895.

The attractiveness of etching as an artist's medium was related also to a subconscious yearning for the intimacy and human scale of etching and for the assertion of the autobiographic marks of the artist in a world which was rapidly replacing people's hands with machines. The appeal of etching also lay in the spontaneity of drawing in the plate which was easily portable to the countryside much like a sketchpad in the philosophy of plein air painting. Joseph Maberly, an important English writer on etching, observed in 1844: "Etching has no rival in the rapidity with which the varied effects of Nature can be seized and transmitted to the copper, and in the boldness as well as delicacy of execution. . . ."2

It is surprising that, aside from the multitude of contemporary accounts published before 1930, the etching movement in America has not been thoroughly documented.³ References to etching in America are generally confined to a few allusions here and there and even at that, it is quickly passed off as being of little consequence. Carl Zigrosser, one of the founders of the Print Council of America and a former Curator of Prints for the Philadelphia Museum of Art, expressed a like view regarding the whole of American printmaking:

"Perhaps the most unknown and uncharted area in print history is American graphic art. One wonders why the subject has been so neglected by scholars. Nineteenth-century American graphic art, for example, is by no means inferior to other national schools (such as German, Italian, Dutch, Russian, and Scandinavian) during the same period, except that of France and possibly England in the first quarter of the century. Beyond the works of Stauffer, Fielding and Peters, there has been little effort to map the full extent of American printmaking. . . ."4

I. THE FIRST PHASE OF THE AMERICAN ETCHING MOVEMENT

Historical Background in the Nineteenth Century

In the eighteenth century, American sophistication in the fine arts was limited. The most common prints resembling original etchings were produced by commercial printers, although the majority of these prints were of famous people or copies of well-known artworks. In 1881 an exhibition of American etchings was held at the Boston Museum of Fine Arts which revealed there were serious etchers in this country as early as the 1820s. Among the earliest American etchers were William Dunlap (1766-1839), Edwin White (1817-1877), John Mackie Falconer (1820-1903), George Loring Brown (1814-1889) for his early Italian Campagne subjects, David Claypoole Johnston (1797-1865) for his satirical prints, Robert W. Weir (1803-1889) who used etching as a reproductive art around 1820 and is known for copying Rembrandt very well, W. Franquinet (1785-1854), W. W. Weeks, Thomas G. Appleton (1812-1884), Henry B. Gay (?-1862), John Gadsby Chapman (1809-1889) and William Wilson. The exhibition was a disappointment to Sylvester Rosa Koehler, the pioneer American exponent of etching, writer and curator, who said of it, "None of these plates show special artistic merit, and indeed some of them are very bad."⁵ Another early American etcher was Joseph Wright (1756-1793) who "stole" a portrait of George Washington

THEOREM 1.1. Let f be a function in $L^p(\mathbb{R}^n)$ with $1 < p < \infty$. Then

(a) f is in $L^p(\mathbb{R}^n)$ if and only if f is in $L^p(\mathbb{R}^n)$ and f is in $L^p(\mathbb{R}^n)$.

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(p) f is in $L^p(\mathbb{R}^n)$ if and only if f is in $L^p(\mathbb{R}^n)$ and f is in $L^p(\mathbb{R}^n)$.

in 1790 which is probably the first American etching executed by a painter.⁶ The portrait is all the more precocious considering the earliest known directions for etching in America did not exist until 1797 in Philadelphia with the English book, The Artist's Assistant in Drawing, Perspective, Etching, Mezzotinto-scraping, etc. Edward Savage and Charles Willson Peale etched portraits and Amos B. Doolittle as well as Johnston etched satirical prints. The style of these early etchings is similar to linear engraving because etching was traditionally used as an engraving aid. Outlines and lines to be emphasized were etched. Of all these early attempts at etching, Koehler remarked they had little to do with the American etching movement of his time which he recognized as having begun by the introduction of the medium into the United States from abroad.⁷

The etching revival began in France around 1856 and was spurred on by the efforts of Alfred Cadart, the ambitious publisher, and Léopold Flameng (1831-1911) who founded a school for etchers in Paris and trained some of the most skillful reproductive etchers of the time. There had been earlier organizations to encourage original printmaking but Cadart and his Société des Aquafortists (1862-1873), which listed among its purposes the desire to clarify distinctions between commercial and painter-etching, were most successful. Through the publications of the Société, Cadart made available to subscribers much of the best original etching of his time.

Other figures of the French etching revival are Felix Bracquemond (1833-1914), an important teacher as well as an

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— *Journal of the American Medical Association*, 1967, 201: 1011-1012.

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1. *Chlorophyll a* and *Chlorophyll b* were determined using a spectrophotometer.

etcher (Figure 1.); Maxime Lalanne (1827-1886) who wrote the highly influential Traité de la Gravure à l'Eau-forte; Adolphe Appian (1818-1898), a Salon painter of large scale works who did numerous etchings after his own paintings; Mariano Fortuny (1836-1874); Charles Meryon (1821-1868) and Charles Emile Jacque (1813-1894). These artists were considered by their contemporaries to be the greatest modern etchers. Charles Blanc (1813-1882), the French writer, critic and exponent of etching⁸ wrote to Lalanne: "The art [etching], which, in our own day, has been rendered illustrious by the inimitable Jacque, now has its adepts in all countries and in all imaginable spheres of society . . . But after all Paris is the place where the best etching appear. . . ." ⁹

In 1881, the Société dissolved after nineteen years of existence. Its most important objective had been achieved:

"Printmaking had been given new impetus which was to be sustained and the print's merits as an independent original work of art had been accepted by the most serious artists. The writings and publications of Roger-Marx and Vollard, beginning in the 1890s, were gradually to win full recognition for the original print as a legitimate and important work of art."¹⁰

This development in France paralleled the disintegration of the art in America in the 1890s and helped to lay the foundation for serious printmaking in the early twentieth century.

In 1866, just four years after the establishment of the Société, Cadart, then of the firm of Cadart and Luquet which sold etchings and etcher's materials, came to America to encourage an interest in etching. He brought an exhibition of works by Jacque, Fortuny, Charles Daubigny (1817-1878),



Figure 1. Felix Bracquemond, Vue du Pont des Saints Pères.
7 5/8" x 9 5/8," 1877.

and Jules Jacquemart (1837-1880), among others, to the Chauncey L. Derby Gallery, 625 Broadway, of New York City. Shortly thereafter Cadart founded the American Branch of the French Society of Etchers. In the four months of his stay, Cadart influenced the artists George Snell of Boston, J. Foxcroft Cole (1837-1892) who studied also with Jacque, and A. W. Warren (?-1873) who did landscapes similar in mood to those of later painter-etchers. Cadart also gave classes in etching and instructed Charles H. Miller (1842-1922), John M. Falconer, and Edwin Forbes (1839-1895) who published a series of plates called Life Studies of the Great Army in 1876 for which he won foreign praise and was elected a member of the French Etching Club (French Society of Etchers) and a foreign member of the London Etching Club. There is disagreement as to whether he is a painter-etcher, however. He did not bite or print his plates himself and his style is somewhere in between the formulated lines of engraving and the freer etched line. It should be remembered that Whistler's first etchings were printed also by a professional printer, but, of course, Forbes did not pursue the aspect of craftsmanship as Whistler did.

Slightly earlier than the Forbes plates, in 1872, Henry Farrer (1843-1913) published a series of views of New York, a portfolio of eleven plates called Old New York, a theme which would be often repeated by others. Koehler considered Farrer to be America's first significant etcher but offered no basis for his opinion. It may be that in addition to the excellence of execution, the subject matter appealed to Koehler because

it incorporated the elements of the picturesque with the American scene.

In general, however, the formation of the American Branch of the French Etching Club met with general apathy. Mariana Griswold (Mrs. Schyler) Van Rensselaer, a leading art critic and writer, alluded to this dormant period when she wrote in 1883: "It is only within very recent years that the art [etching] has shown any real, spontaneous activity likely to result in vigorous and fruitful growth."¹¹

Although the London Etching Club had published etchings by its members in the first half of the century, the works were illustrative and had little relationship to the painter-etching which developed as a result of a renewed interest in Rembrandt and the French enthusiasm for the art. Leaders of the British etching revival were James Abbott McNeill Whistler (1834-1903) who had moved to London in 1859, his brother-in-law Sir Francis Seymour Haden (1818-1910), and the writer Philip Gilbert Hamerton (1834-1891), who, like Cadart, happened to be an untalented etcher but a very influential writer and exponent of etching. In his book, Etching and Etchers of 1868, he sharply criticized the lack of sustained effort in etching in England, attributing it to the absence of any great publishing enterprises similar to Cadart's of France. He also offered an opinion as to why, in spite of the fact the English are avid print collectors, they are such unremarkable printmakers, saying the English appreciate only powers of imitation in prints. The same accusation could conceivably be levelled against American printmakers, especially the

1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 26

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• *Journal of the American Medical Association*, 2000; 283: 2689-2693

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— (1) *Chlorophyll* α and β were determined by the method of Lichtenthaler and Whistler (1973). The total carotenoid content was determined by the method of Lichtenthaler (1987). The total chlorophyll content was determined by the method of Lichtenthaler and Whistler (1973).

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and the β value is the slope of the regression line. The β value is calculated as follows:

reproductive etchers, and may be a factor contributing to the conservatism of the medium. Francis Seymour Haden was, of course, an exceptional English etcher. According to Hamerton, the appearance of his plates in 1866 was "one of the most important events in the history of English etching."¹² Haden was a surgeon who found himself in a situation of not being able to practice due to ill health, so he began to etch. A few years later he returned to his practice. Haden's work shows an interest in nature akin to the French Barbizon painters and an attention to light influenced by his idol, Rembrandt. Increasingly, he felt a pure contemplation of nature meant the elimination of figures from the composition. Due to the extent of Haden's efforts in promoting etching in the United States through lectures and demonstrations, it is reasonable to suspect that three aspects of etching in America are attributable, at least in part, to his influence. They are the infrequent use of human figures, an interest in light derived from Rembrandt rather than from the Impressionists, and a preference for bucolic subjects traceable to the Barbizon group.

In 1870, Hamerton and an associate began an English version of the publications of the French Société des Aqua-fortists called the Portfolio. He was soon to be disappointed, however, with the great difficulty in finding English etchers to contribute original plates, there being so few of quality and those few were not interested. Hamerton had to bring etchers over from the continent to do the work.

English art schools welcomed American students thereby facilitating the exchange of ideas between the continents. The most significant exchange of ideas took place in London in 1881 with the first exhibition of the English Society of Painter-Etchers organized by Haden the previous year. It was the desire of the Club to unite all important painter-etchers then working into one exhibition. Ten Americans were included: Thomas Moran (1837-1926), Mary Nimmo Moran (1842-1899), Henry Farrer, John M. Falconer, R. Swain Gifford (1840-1905), J. D. Smillie (1807-1885), Albert F. Bellows (1829-1883), Stephen Parrish (1846-1938), F. S. Church (1842-1924) and Frank Duveneck (1848-1919). The Americans caused much surprise and praise among the British. They were all immediately elected members of the Society and a print by each artist, called a "diploma" print, was chosen for the Society's collection.

As in England, an etching club did exist in Germany in the first half of the nineteenth century when there was considerable activity in etching. Frank Duveneck went to Munich at the age of twenty-one to study at the Academy of Fine Arts. In 1878 he founded his own school and one year later he moved to Italy with his students, the "Duveneck Boys,"¹³ where they remained together until 1881. It was not until 1880, however, and in Italy, that Duveneck began to etch under the influence and perhaps the instruction of his pupil, Otto Bacher (1856-1909).¹⁴ Duveneck had come into contact with Whistler in Italy and when Duveneck's etchings were exhibited in London they were mistaken for works by Whistler. All Duveneck's etchings date

between 1880 and 1885 when he abandoned the medium and returned to München to establish his own school. In 1889, he returned to America and began teaching in Cincinnati. Therefore, although the names Duveneck and Bacher are almost inseparable from München, it does not appear possible to identify a German influence on their etching. Koehler remarked that Germany did not produce any painter-etchers of note unless the brilliant reproductive etcher, William Unger (1837-1932) is included. The reason for the shortcoming was: "They [Germans] have an unconquerable tendency towards finish, which deprives them of the freedom that is the charm of most painter's etchings."¹⁵ It would not be until the early years of the twentieth century that German etching gained recognition. Frank Weitenkampf, writing in 1909, mentions Orlik and Emil Nolde as artists "giving utterance to modern ideals through the agency of the etching needle. . . ."¹⁶ Many Americans did go to München to study, however, among them etchers such as William Merritt Chase (1849-1916). German etching of the period had the usual similarities with other European and American etching in its worship of Rembrandt and preference for picturesque subject matter (Figure 2.). It is probable there had been some exchange between artists in München and the founders of the New York Etching Club who, according to Van Rensselaer, had just returned from travelling abroad, München in particular, before they came home to "rattle the dry bones"¹⁷ at the National Academy and organize the New York Etching Club.



Figure 2. Unidentified German etching, 7" x 5 1/2."

The Period 1877 to 1895

A sustained period of enthusiasm for etching began on May 2, 1877, with the formation of the New York Etching Club under the supervision of J. D. Smillie.¹⁸ Considered the veteran of American etching, Smillie was the son of the line engraver, James Smillie and was a bank note engraver before beginning to paint. Because of his background, Koehler characterized Smillie as being " . . . more thoroughly versed in the technicalities of etching than probably any other artist in America."¹⁹ It was probably not mere coincidence either that the Club was founded one year after the Centennial Exhibition which had included etchings by Forbes and others and where "so many unaccustomed eyes had been led to look with interest at things of art."²⁰ The names of all twenty original members of the Club are not known with the exceptions of the following: E. A. Abbey, A. F. Bellows, S. Colman, F. Dielman, H. Farrer, R. S. Gifford, C. H. Miller, J. C. Nicoll, J. F. Sabin, J. D. Smillie, L. C. Tiffany and L. M. Yale. Dr. Leroy M. Yale (1841-1906) was its first president and J. C. Nicoll (1847-1918), an etcher of marine subjects, was its secretary. Half the original members of the Club knew nothing about etching but in the first three years of its existence one-hundred and twenty plates were produced and discussed. At the first meeting Smillie applied ground to a plate, R. S. Gifford drew on it and Yale pulled the proof from the press (Figure 3.). The Club provided an etching press to its members, held classes, and sponsored annual exhibitions

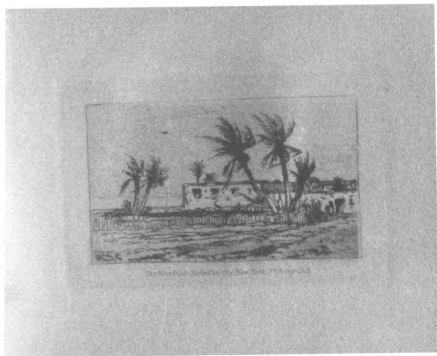


Figure 3. First plate produced by the New York Etching Club,
Untitled, 1 3/4" x 3," 1877.

from 1870 to 1893. In these respects the Club was invaluable and served the need in America to promote etching. Hamerton observed: "The position of an etcher . . . in some remote locality in America or Australia is not favorable to rapid progress because he may be stopped by technical difficulties."²¹ Beginning in 1882, the Club published catalogues for the exhibitions with scaled down facsimile etchings of the exhibited works. The 1882 exhibition filled two rooms with the work of fifty-three Americans, although not all of them were members of the Club. Van Rensselaer called this exhibition ". . . a surprise even to those who had watched with appreciative eyes the rapid progress of the art among us."²² By this time there were six clubs devoted exclusively to etching, all of them on the East Coast. Most had formed since 1880 when Koehler noted there was as yet only the New York Etching Club and the Cincinnati Etching Club, although a Boston club was in the planning stages. Koehler evidently did not recognize the Salmagundi Club as primarily an etching club. It was organized in 1878 and sponsored the first all black-and-white print exhibition in America. The etcher Joseph Lauber was one of the founders. The Club began in lofts along lower Broadway and its early exhibitions were not financial successes but it later prospered and moved to Fifth Avenue.

During the early 1880s, Haden was giving lectures and demonstrations in etching in the United States, arousing considerable interest. By 1885 the following English painter-etchers were well-known to Americans: Haden, Hubert Herkomer, J. Lumsden Propert, Ernest George, R. S. Chattock, Wilfred

Ball (Figure 4.), C. P. and F. Slocombe, R. W. McBeth, among others.

Book and art clubs were also often involved in the interest in prints. The Boston Art Club held an exhibition of American Painter-Engravers in 1893 and published a catalogue for it of Japan proofs. The Century Association of New York published a memorial address for Asher B. Durand, an artist known primarily for his portrait engraving and painting, but portrayed in the book with an etching by Smillie. The Grolier Club produced many publications and exhibition catalogues relating to prints and the art and history of engraving, including two catalogue raisonnés of the etched work of Whistler. The Caxton Club of Chicago published many exhibition catalogues pertaining to etching, including another catalogue raisonné of Whistler's etchings and an exhibition catalogue of the etchings designed to illustrate the book by the late P. G. Hamerton, Etching and Etchers. The print clubs of Cleveland and Philadelphia also published books about prints.

Worthy of note among the multitudes of painter-etchers working in the first phase of the etching movement are Winslow Homer, the Moran family, J. A. Weir and the American expatriate, Whistler. Born the son of an Army major in Lowell, Massachusetts in 1834, James Abbott McNeill Whistler received his initial albeit brief exposure to etching in the United States. He was educated at the Military Academy, West Point College, and worked for the United States Coast Survey Department in Washington, DC, from 1854 to 1855 where he executed two plates. They were printed by the company shop although he did the

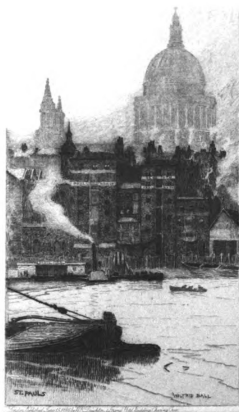


Figure 4. Wilfred Ball, St. Paul's, 6 1/4" x 3 3/4," 1886. The effect of mist in the background was obtained by manipulating the bite of the plate, the foreground having been bitten deeper (longer) than the background.

grounding and drawing. Whistler was ordered to resign when it was discovered he had drawn sketches in the margins of a plate.

In 1855, Whistler went to Paris where he spent two years studying under Marc-Gabriel-Charles Gleyre (1808-1874). The printer Auguste Delâtre published Whistler's early French plates and the artist learned much about printing from him also. Delâtre was known as an artist's printer--he and the artist conferred on the details of printing. Hamerton criticized him for an over-use of *retroussage* and other "tricks" which can conceal poor etching to some degree. In his later work, Whistler, like Degas, believed fervently in the artist's complete control over the print. "He was immovably convinced in his opinion that only the etcher himself can print his own plate well."²³ This concept became one of the cornerstones of the painter-etcher movement.

The extent to which the etching movement in America was led by Whistler in person, through his prints, and through his evangelical followers, can scarcely be overestimated (Figure 5.). His profound authority touched all phases of etching including the size of margins, signatures, framing and exhibiting. His most illustrative followers, Haden and Joseph Pennell, were fanatical in their teaching of Whistlerian etching. Pennell said of his idol, "Since the world began there have only been two supreme etchers--Rembrandt and Whistler. I am not sure there have even been two--but I am sure the latter artist is the greater etcher."²⁴

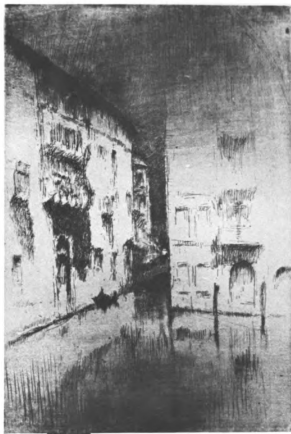


Figure 5. James Whistler, Nocturne: Palaces, 11 11/16" x 7 7/8," 1879-80. Venice as subject matter was a vogue of painter-etching.

In 1887, Winslow Homer (1836-1910) tried etching. He would do only eight plates, but they are among the finest American etchings ever made. All his etchings are after his paintings and watercolors although they cannot be regarded as reproductive. Examples of his plates are Eight Bells and Perils of the Sea. Homer's genius in etching lies in his ability to transform a painted image into a wholly fresh and vital linear one. He understood line and chiaroscuro as well as he understood the tonalities of paint. Excluding Whistler as an expatriate, Homer produced the first body of graphic works, wood engravings as well as etchings, by an important American painter.

The Morans were a family of etchers: Thomas (1837-1926), Edward (1829-1901), Peter (1841-1914), Mary Nimmo (Mrs. Thomas) (1842-1899) and Emily (Mrs. Peter) Moran. Mary is considered the most successful etcher. Her print, A Goose Pond, aroused much acclaim by the London Society of Painter-Etchers in 1881. The interest of the well-known Morans in the medium no doubt helped to further the popularity of etching.

Julian Alden Weir (1852-1919) is known for his drypoints. He was introduced to etching by his friend, John Henry Twachtman (1853-1902), and is remembered for his refusal to go back into a plate to burnish out mistakes, considering them a record of the artist's thought process. Weir produced about one-hundred and twenty-eight prints, all but four of them etchings.

The list of American etchers who were recognized in their own time but obscure today is long.²⁵ Some of the better-known etchers include Stephen Parrish, S. J. Ferris, R. Swain Gifford, J. D. Smillie, Charles A. Platt, Charles F. W.

Mielatz, and D. S. MacLaughlin, to name a few. Actually, as Van Rensselaer observed in 1883, Whistler was the only American etcher for whom a place in history had been guaranteed. She was quite accurate, there are few great American etchers but, she also indicated that one must remember Hamerton's observation that great etchers are produced at the rate of two or three a generation.²⁶

The number of women etching in proportion to the number of women involved in other media seemed itself to warrant the exhibition of the work of American Women Etchers held at the Boston Museum of Fine Arts in 1887, and the fact such an exhibition could have been mounted in that year seems to warrant a word about women etchers here. In the catalogue to the exhibition, S. R. Koehler remarked that the multitude of women etchers was peculiar to America. "Never before and nowhere else has etching been practised by female hands as enthusiastically and as assiduously as in America."²⁷ Koehler also expressed his reservations these women etchers would be regarded as dilettantes due to the history of women etchers as bored aristocrats and " . . . the belief, too prevalent even today, that etching is an easy accomplishment, fit for the amateur."²⁸ Interestingly, of the twenty-three female printmakers listed, Mary Cassatt is omitted. Perhaps she did not know of or was not interested in the exhibition as most of the participants volunteered themselves. Mary Nimmo Moran is included along with Eliza Greatorer, Ellen Oakford and Anna Lea Merritt who was known for her portraits, perhaps more so in England where she lived than in the United States.

They are all etchers who are regularly listed in contemporary books and exhibition catalogues.

In 1883, Van Rensselaer said of Mary Nimmo Moran, "[She] is as yet the only woman who is a member of the New York Etching Club, and no name stands higher on its roll. Her work would never reveal her sex--according, that is, to the popular idea of feminine characteristics. It is, above all things, direct, emphatic, bold--exceeding in these qualities, perhaps, that of any of her male co-workers."²⁹ She is known for her preference for working in the plein air tradition.

Mary Cassatt (1844-1926), the daughter of a wealthy Philadelphian, went to Paris at age twenty-three where she worked with Renoir and Degas. She first studied printmaking in 1871 although she did little with the medium until 1879. In her own time she was recognized as an important American artist and in her case the recognition was rarely qualified by reference to her sex. It was not foreseen, naturally, how important she would be in the history of art. Contemporary etching critics considered her to be an etcher of mother and child subjects, done skillfully and with none of the artificial sweetness the subject so often evokes. She has an innate understanding of human relationships in ordinary settings and is a master at expressing psychological nuances of posture and expression. Despite a lifetime spent abroad, Cassatt's figures retain an American sense of psychological isolation.³⁰

One of America's first print curators was Sylvester Rosa Koehler (1837-1900), born in Leipzig, the son of an

artist, and emigrated to the United States at an early age. Accomplishing in America what Cadart did in France and Hamerton did in England, Koehler became the first print curator of the Boston Museum of Fine Arts and of the Smithsonian Institution simultaneously (1887-1900). Koehler had no formal background in prints or art, but he had printed etchings himself and learned about prints by looking at them. He felt his qualifications for the job of print curator lay in the fact he could distinguish one medium from another. His lectures were always augmented with visual aids in the form of the tools and objects of etching. He had begun his career as a technical manager of Louis Prang & Co. of Boston in 1868 and worked there for ten years. Subsequently, he organized the publication, American Art Review, which he based upon European publications such as the French Société des Aqua-fortistes, the English Portfolio, and the German Zeitschrift für bildende Kunst. He hoped the Review would help the cause of etching in the United States but his hopes were not to be realized. The Review, though unequalled in quality, was too ambitious an undertaking, attempting to inform and to review everything happening in Europe and America. Only a year later, having produced four large volumes, the publication ceased. The Review had succeeded in publishing original etchings³¹ by American artists and for each print there was also a biography of the artist and a catalogue-in-progress. It was Koehler's intention, throughout the projected years of publication, to eventually compile these catalogues and biographies into a Peintre-Graveur Américain.

At about the same time Koehler's Review was being published, his translation of Lalanne's Traité de la Gravure à L'Eau-forte appeared also. Koehler had added much technical information in the American version such as an acid formula and improvised equipment for etching at home. A Boston marine painter, Walter Lansil, was commissioned to do his first etching with the equipment described and an impression he produced is included in the book. Other original prints in the book are plates by Lalanne and line studies by Koehler. Beginning in 1887, Koehler wrote important exhibition catalogues for several shows sponsored by the Grolier Club including exhibitions featuring Albrecht Dürer, Rembrandt, Meryon and Haden. The catalogues sold poorly. In 1895, Koehler's most important and long-lasting written contribution to the etching movement was published, his book, Etching. The work is filled with much historical and technical information as well as many original etchings by American and European etchers. By this date, however, Koehler's health was failing and he travelled to Europe to rest and learn about color printing. He intended to do an exhibition on the history of color printing but his health would not permit it. In 1898 he died, leaving his own collection of about 6,000 prints to the Boston Museum of Fine Arts.

Despite Koehler's death, the Review did serve as a prototype for later sumptuous volumes of limited editions with original etchings commercially designed to accommodate wealthy and average collectors alike.³² Etchers who wrote "fine art books" included in them, executed in the style of the Review,

original etchings. Many etchers had begun as illustrators or continued to do illustrations as well as original etching, so the combination was natural to them. Some of the publications containing original etchings and meant as collectible art books were identified by Francine Tyler in the notes to the exhibition, The First American Painter-Etchers, as: Original Etchings by American Artists, Some Modern Etching, Recent American Etchings, American Etchings, Notable Etchings by American Artists, Representative Etching by Artists of Today in America, and Selected Etchings. All were published between the years 1884 and 1890. Each book also included some words by either S. R. Koehler or J. R. W. (Ripley) Hitchcock.

In 1886, Etching in America, by Ripley Hitchcock was published in New York. In it, Hitchcock boasts he has written the first book devoted to the etchings of America, an art which was scarcely six years old, he estimated. It was his intention to write a history of etching in America with lists of American etchers and notable collections of prints. The frontispiece is an original impression from the first plate produced by the New York Etching Club. His work is a valuable contemporary source and it must have done much to raise the consciousness of Americans regarding original etching.

The importance of the Englishman Hamerton's Etching and Etchers to the American movement was profound. In his dedication, Hamerton explained he intended the work to benefit " . . . many readers in remote country places, in the colonies, in America, in lonely districts where not a single etching is to be referred to. . . ." ³³ The book contains histories, criticism and instructions for etching. In the original 1868

version etchings were printed from plates by Haden and Rembrandt, among others. Otto Bacher used a design in this book to have an etching press built in Munich. On the binding of the 1902 edition are illustrations of terns and plovers from an etching by Bracquemond printed in gold on black, and on the cover, a detail of a work by Turner. The reverse style of gold on black was intended to approximate the way an etching plate looks before being printed.

Hans W. Singer and William Strang's Etching, Engraving and the Other Methods of Printing Pictures, published also in London in 1897, helped to encourage etchers in this country as well. Its stated purpose was to be a guide to the public in understanding and appreciating etchings. The book included photo-mechanical "processes" so that the reader could distinguish them from original prints. The authors made the observation that there were no print rooms of importance on the Eastern side of the Alps, meaning the etching revival was actually confined to Western Europe and America. But, they said, north of the Alps, "almost every town which can boast a picture gallery . . . has a Department of Prints and Drawings."³⁴ Today the statement is true also of American towns, a fact attributable, finally, to the original etching movement.

The influence of print publishers who often acted as galleries in providing information, exhibiting and promoting the etchings of their clients, is important to a view of the etching movement.

Among the most important print publishing firms were Frederick Kepple, Fishel Adler & Schwartz, and H. Wunderlich.

Frederick Keppel was also a writer and book publisher, the original publisher of The Print Collector's Quarterly.³⁵ He collaborated often with Van Rensselaer in authoring introductions and books such as American Etchers in 1886 which he also published.

H. Wunderlich of 868 Broadway, New York (publisher of the Benjamin Lander print, Figure 6.) is the precursor of the present-day Kennedy Galleries of New York. John Sloan, making an observation on the advancement of his career remarked, " . . . I must get Keppel or Wunderlich to handle my etchings if I want to sell them. . . ."³⁶

A prolific publisher who also promoted artists in its galleries, among them John Sloan, was Fishel, Adler & Schwartz. The firm was associated with a London publisher of the same name.

Christian Klackner of W. 28th Street, New York, was a publisher, printer and printseller much like Keppel. In 1888, Klackner's American Etchings, a sale catalogue, appeared. Klackner seems to have dealt mainly in photoengravings in the last years of the nineteenth century.

Writers on the joys of etching succeeded very well in their efforts. So well, in fact, that the inevitable exploitation of etching came to pass. Discouraged with this development, the most enthusiastic exponents of etching complained of a loss of intimacy and the commercialization of etching, " . . . it has become fashionable to show an interest in and love for etchings"³⁷ Plates became larger, prints were intended to be hung on the wall and admired rather than kept



Figure 6. Benjamin Lander, Sheep by Moonlight, 16" x 25 1/4," 1898. Delicate tonal patterning is characteristic of reproductive etching.

like treasures in a solander box. The display of prints in a decorative manner was called "a dishonest attempt to emulate paintings."³⁸ Pennell described the state of etching at its decline in the 1890s succinctly and cynically:

" . . . Clubs were formed all over the world. Then there began to appear books, portfolios, magazine illustrations with etchings made to order; and large machines, original or reproductive, real or faked, with remarques [Figure 7] and other baits to the amateur, vellum proofs and satin pulls, and I do not know what all--all over their surfaces, fronts and back. They were an appalling success, and the artist etchers were suppressed . . . the poor artist could not get the chance to publish anything or even sell anything, while of these machines, the proofs could not be printed fast enough to supply the market. The dealers made fortunes, the printers made fortunes,--even the people who turned out the plates made fortunes. All the while Whistler was working, Buhot was working . . . It was a happy time all around for all but the artists."³⁹



Figure 7. J. N. Snoey, Grazing Sheep, 9 1/2" x 19," detail showing remarque, 1 1/4" x 1 1/2," c.1895. The effect of retroussage is also evident in the upper half of the detail.

Figure 8. Frederick Keppel: Per Cent Sales of Modern Etchings to Total Sales.

1876	(year of the Centennial Exhibition).....	2
1877	(New York Etching Club founded).....	9 1/2
1878	.....	21
1879	.....	9
1880	.....	15
1881	(Boston Exhibition).....	26
1882	.....	33
1883	.....	73
1884	.....	60
1885	.....	62

No figures are available after this date. From the record high of 73 per cent in 1883, the trend was edging downward but did not reflect the collapse of the etching movement yet ten years in the future. The chart does illustrate the rapidity of the growth of the collecting of etchings, jumping in just two years from 2 per cent to 21 per cent.

II. ESTHETIC TOPICS AND THE END OF THE FIRST PHASE

Etchings As Works of Art

There was a sense of alienation in the nineteenth century fostered by the Industrial Revolution. Some artists reacted by returning to what were viewed as quieter traditions of the seventeenth and eighteenth centuries, in a kind of Romanticism tinted with a love of the picturesque. Artists returned to nature for subjects and for models, and the communion with nature on a sketching field trip was an important element of the trip. There is a striking similarity of subject matter of the etchers of France, England and the United States in the preference of country scene over cityscape, a preference revealing, perhaps, the psychological and emotional conflicts over the changes brought about by the Industrial Revolution. Etchers would continue to depict the picturesque, even into the twentieth century.

The landscape was the most popular subject of the etching movement. Its appeal lay in a versatility born of its general nature. The landscape subject showcases the individuality of an artist, no matter how many times it may have been etched before. Eventually, certain etchers would become known for their etchings of particular geographical areas, Thomas and Peter Moran, for example, became known for their scenes of the American Southwest. Other etchers known primarily as

landscape etchers were Joseph Pennell (early works), Samuel Colman (1832-1920), Kruseman Van Elten (1829-1904) and A. F. Bellows (1829-1883).

There was a connection between the Barbizon painters and etching in America through the influence of Haden. A more direct connection can be seen in the post-Civil War era in the United States, when French Barbizon works of the 1820s and 30s were desperately sought by Americans who were very familiar with the landscape paintings of Corot and the animal subjects of Jacque and Troyon. Predictably, American artists began adapting Barbizon subjects in their work. The art of the Barbizon painters spoke to the psychological and emotional conflicts brought about by the Industrial Revolution. " . . . There [in Barbizon] they created a kind of poetry of acceptance that posed no questions and required no answers. In an intensely analytical age they wished only to be."⁴⁰ The Forest of Fontainbleau, of which Barbizon is but a small part, had been carefully preserved beginning with Louis XIV to maintain much of its rugged variety. It was a forest known for the size and variety of its trees, especially its giant oaks. The exhibition and catalogue, American Art in the Barbizon Mood, revealed the relationship in subject matter between much American etching and Barbizon works in etchings and drypoints by:

R. Swain Gifford, The Path to the Shore, 1879
 Eliza Greatorex, Dakota, 1884
 Charles Mielatz, Untitled (landscape with windmills), 1884
 Mary Nimmo Moran, Salt Water Ponds, 1884
 Peter Moran, Untitled (New England orchard), c.1880-90
 Stephen Parrish, Mills at Mispen, n.d.
 Charles Platt, Bass River, Cape Cod, 1889

Incidentally, six of the American painters in the exhibition included sheep, an animal common to the agrarian community of Barbizon, as subject matter. Although he is not represented in the exhibition, it is possible J. A. S. Monks (1850-1917), who was obsessed with sheep as subject matter, was influenced by Barbizon art, perhaps through his teacher, George Inness who is well-represented in the exhibition.

There seems also to be a relationship between American Luminism which refers to an interest in light and space and is closely associated with the Hudson River School, and etching themes. An awareness of conditions of haze, fog, mist, twilight and thunderstorms is common in American etching as is a feeling of light and color in the black and white medium. "Even without color, most luminist drawings still suggest precise nuances of light . . . In terms of design we find the familiar emphasis on strongly horizontal formats with the foreground usually open."⁴¹ Like the psychological yearnings the etching movement helped to alleviate, luminist work often combined a praise for nature and regret for its loss in the industrial age. A major exponent of American Luminism was Martin Johnson Heade who often used the subject of New England marsh stacks. Although a concern with effects of light is absent, J. H. Millspaugh did an etching after a work by Louis K. Harlow, treating the subject of marsh stacks in a horizontal format with an open feeling to the foreground (Figure 9.).

The concern for effects of light seen in the etchings of Felix Bracquemond (Figure 1.) and Sir Francis Seymour Haden



Figure 9. J. H. Millspaugh, The Drying of Marsh Hay Along the New England Coast, 10 $\frac{3}{8}$ " x 20 $\frac{7}{8}$," 1887. The openness of the foreground serves to draw the viewer into the image.

is present also in the works of Whistler and later, the American Childe Hassam (1859-1935). The breaking up of space with strokes, with or without a concern for the effects of light, is particularly well-suited to etching since, by its nature, pure etching must build or break up form with lines (strokes).

Although the most dominant theme of American etching was landscape, subjects such as street scenes and landmarks of Paris and Italy (especially Venice), animals, architecture, figures and picturesque objects were also common. F. S. Church, Thomas Hovendon, T. W. Wood and F. Dielman were known as figure etchers, although a strong figural element was absent, a fact disturbing to Koehler who felt the situation "necessarily excludes the visible embodiment of the higher ideals."⁴² Picturesque architecture included quaint thatched cottages and "old town" buildings in any large city influenced by the prints of Lalanne, Bracquemond and Meryon and were almost as popular as landscapes. The distinction is made between these city scenes and city scenes incorporating social comment which prevailed in the 1920s and 30s. It is interesting, then, that in 1892, Van Rensselaer expressed her fascination with the modernity of New York City, its structures, lights, shadows and weather, saying, "even the flaunting sign boards . . . add to the accidental contrasts which a painter of modern temper loves. . . ."⁴³

The evolution of etching followed a path described by Koehler, although he could hardly have anticipated the extreme directions etchers would take in the next century. In hindsight,

Koehler's statement about etching is more true than he could have foreseen:

" . . . with the decline of interest in the subject, the individuality of the artist gains in importance. Hence the value of etching, at certain times, as the most personal of the multiplying arts. Again, as the importance of the subject declines, more attention is paid to the pictorial qualities of art--to color and to effects of light and shade. And as etching is such a magician in the expression of these qualities, it stands to reason that it should be most highly valued when they are esteemed of first importance."⁴⁴

Technical concerns for etchers of the movement were limited mostly to details of craftsmanship. Whistler especially, and others, were very concerned about the tactile and visual properties of the paper they used. Whistler and Twachtman were known to have searched for old papers, preferred for their high quality and resistance to discoloring, in antique shops. Duveneck and Bacher were pleased with the results obtained from a paper intended for wrapping butter, and other artists sometimes toned paper by soaking it in tea, coffee, snuff or tobacco. Unfortunately, their work is less likely to have survived as these procedures tended to rot the paper or at least to make it smell. "Fad" papers were made from vellum, silk, satin and other materials. First impressions from a plate, the artist's proofs, were customarily taken upon special papers such as India or Japan paper. By 1919, however, Pennell lamented the fact that, like everything else, quality papermaking had disappeared. "Gone forever are the mills along the little streams of north Italy, and the little streams of Philadelphia. Gone is the old paper of France and Germany and Belgium, gone for war work--"⁴⁵

Plates used for etching were generally copper, although Haden and Frank Brangwyn, British etchers, occasionally varied from copper and used zinc for a broader effect. There were many variations of copper plates resulting from the differing qualities of copper used and the thickness or thinness of the plate produced. American plates were rolled like sheet steel and machine polished. They proved more even in biting, lighter, cheaper and more reliable than English, French, German and Italian plates. American plates were also easily cut to any size. Aluminum was tried as plate material but uncertainty in biting made it undesirable. Not long into the etching movement there emerged the practice of steel-facing the copper plates, a commercial practice, which extended the printing life of the plate. The great popular demand for etchings led to the widespread practice of steel-facing by electrolysis. When the steel-facing broke down the plate could be re-faced making an even larger printing possible. Haden's late plates were commonly steel-faced and he claimed their quality did not suffer. It was a common practice for artists to keep the plates after they were printed, an acceptable practice when there were no "limited" or numbered editions. Some artists, however, such as Daubigny, effaced their plates after taking the desired number of impressions, to reuse them. The concepts of numbering prints and of limited editions are inventions of the twentieth century. To declare an edition is limited to a certain known number of impressions implies also that the plate was destroyed after the edition was pulled. Traditionally, prints were pulled as long as the printing surface held up, creating,

in some cases, unbelievable numbers of impressions.

Although artists such as Whistler and Pennell were adamant in their conviction an artist must print his own plates, many American painter-etchers had their plates printed in professional shops. At first, Paris had been the only place to have etchings printed, but by the end of the nineteenth century, American print shops such as Fishel, Adler and Schwartz did as well.

In the beginning, one of the main tenets of etching was the use of pure line, as etching is a linear medium and only by the use of pure line is its integrity upheld. Most of the best American etchers, however, also used methods which roughened the surface of the plate. Thomas and Mary Nimmo Moran used a roulette and a Scotch stone; Stephen Parrish used an acid bite to roughen the surface, perhaps a form of aquatint; S. J. Ferris combined roulette and stipple, and Smillie, Vanderhoof, Farrer, Van Elten, Cassatt and A. T. Millar all experimented with soft-ground etching. Vanderhoof, Chase, Robert F. Blum, and Cassatt made much use of drypoint and J. D. Nicoll and Yale used multiple needles for drawing on the ground, Yale reportedly using as many as six set in one handle. Experimentation in etching did go so far as to incorporate photogravure. Blum did a portrait of Chase by photographing a pen and ink drawing onto a special ground and the resultant print found favor with S. R. Koehler. A distinguishing characteristic of American etching is Americans' deep interest in and success with technique. Koehler remarked that although no etcher had surpassed Rembrandt's art, the painter-etchers of the nineteenth century

had surpassed him in technical concerns.⁴⁶ The importance of a technical mastery in the etching movement is best expressed in the words of one of the most eminent American etchers, John Taylor Arms:

"It is true that I have always been deeply, absorbingly interested in technical expression. My process of reasoning has been simple. The greatest etchers have all been great technicians. I wanted, and still desperately want, to be a great etcher, though I know now I never shall be. Spiritual conception and power of imagination cannot be acquired, technique can. Somewhere between the impulse I experience when I face the Cathedral of Chartres and the proof from the plate I have etched to express that impulse, something, I do not know what, has gone wrong. . . ." ⁴⁷

Etchings printed in color were not highly regarded. Both John Taylor Arms and Joseph Pennell condemned the practice, Arms observing that " . . . none of the masters of etching has resorted to color-printing." ⁴⁸ Pennell, noting color can be successfully applied to litho and wood blocks, explained the failure of color etching was due to the necessity of squeezing and crushing the pigment into the sunken lines of the plate and the characteristics of the pigment are changed for the worse. He felt only burnt umber, other than black, could be printed successfully. ⁴⁹ The problems of printing etchings in color were sometimes circumvented by using wood blocks or litho stones for color or, more commonly, by using photogravure, a practice most expertly executed in France, Germany and Austria. Of course, with such reliance on specialized technical skill, the painter-etcher generally had to rely on someone else to a certain extent to produce his color etchings.

The very notable exception to a lack of good work in color is the work of Mary Cassatt. She and Edgar Degas devised techniques of working with pastel which enabled them to obtain effects and qualities in the medium others could not. It is not surprising, then, that Cassatt was successful also in producing etchings in color.

Cassatt's most important exhibition of color etchings was held in 1891 in Paris at the Galleries of Durand-Ruel. Several years later, in 1903, the Société de la Gravure Originale en Couleurs was founded by M. Raffaelli, and according to Alice Rouiller, writing after 1910, etchings in color enjoyed a wide popularity since then.⁵⁰ By 1903, however, Cassatt was no longer involved in printing color etchings and seems even to have forgotten some of the technique she had developed so successfully.⁵¹ Her technique is complex but seems to include a use of soft-ground etching, aquatint and drypoint inked à la poupee, a careful separation of colors on the same plate and the use of two or more plates.

Etching was the chosen medium for late nineteenth century printmaking over lithography which was too closely associated yet in the minds of the people with its commercial applications; the prints of Currier & Ives and many other printmakers were commercial enterprises and frankly reproductive from the beginning. The freedom of the etched line when juxtaposed with the reproductive engraving works so common earlier in the century seemed refreshing and perfectly suited to creative pursuits. Lovers of etchings were lovers of line, in the beginning. Pure line etching is, by its nature, an

abstraction as no lines exist in nature, so to interpret recognizable subjects requires the powers of analysis and condensation which Jules Dupré referred to when he said, "Artists paint on their good days and their bad, but etch on their good ones only."⁵² There was a program of etching esthetics laid out early in the movement by S. R. Koehler, the main tenets being:

1. The use of a free, flowing, economic line.
2. The best etchings are by painter-etchers, not etching craftsmen.
3. A successful etching is small in size, not intended for display on a wall, printed in warm brown ink on translucent Japanese paper and often it is wiped using the *retroussage* technique. It may also have a sense of color.

Koehler felt very strongly that the best etchings were those exhibiting an understanding of form and psychological nuances with as few lines as possible. He was not impressed with multitudes of lines and criticized Henry Farrer's Sweet is the Hour of Rest (landscape) on the point, saying, " . . . complete tonality has been aimed at by the use of a multiplicity of lines employed without any special regard to their quality as lines, and merely with a view to their ultimate effect when seen as a mass."⁵³ Koehler's esthetic system contrasts the esthetics of printmaking in the twentieth century which include large scale and a use of color, thereby assuming some of the aspects of painting. Koehler was distressed over the trend in France, Germany and the United States towards larger plates and perceived them as dishonest attempts to emulate painting.

$$f(x) = \frac{1}{2} \ln \left(\frac{1+x}{1-x} \right) = \frac{1}{2} \ln(1+x) - \frac{1}{2} \ln(1-x) = \frac{1}{2} \left(x - \frac{x^2}{2} + \frac{x^3}{3} - \frac{x^4}{4} + \frac{x^5}{5} - \frac{x^6}{6} + \frac{x^7}{7} - \frac{x^8}{8} + \frac{x^9}{9} - \frac{x^{10}}{10} + \frac{x^{11}}{11} - \frac{x^{12}}{12} + \frac{x^{13}}{13} - \frac{x^{14}}{14} + \frac{x^{15}}{15} - \frac{x^{16}}{16} + \frac{x^{17}}{17} - \frac{x^{18}}{18} + \frac{x^{19}}{19} - \frac{x^{20}}{20} + \frac{x^{21}}{21} - \frac{x^{22}}{22} + \frac{x^{23}}{23} - \frac{x^{24}}{24} + \frac{x^{25}}{25} - \frac{x^{26}}{26} + \frac{x^{27}}{27} - \frac{x^{28}}{28} + \frac{x^{29}}{29} - \frac{x^{30}}{30} + \frac{x^{31}}{31} - \frac{x^{32}}{32} + \frac{x^{33}}{33} - \frac{x^{34}}{34} + \frac{x^{35}}{35} - \frac{x^{36}}{36} + \frac{x^{37}}{37} - \frac{x^{38}}{38} + \frac{x^{39}}{39} - \frac{x^{40}}{40} + \frac{x^{41}}{41} - \frac{x^{42}}{42} + \frac{x^{43}}{43} - \frac{x^{44}}{44} + \frac{x^{45}}{45} - \frac{x^{46}}{46} + \frac{x^{47}}{47} - 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Figure 1. The effect of the number of trials on the number of correct responses. The number of correct responses was significantly higher than the number of incorrect responses in all cases. Error bars represent the standard error of the mean.

• *Journal of the American Medical Association*, 1990; 263: 1001-1002.

• *Chlorophyll a* • *Chlorophyll b* • *Chlorophyll c* • *Chlorophyll d* •

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Whistler also developed a set of criteria by which etching should be judged called his "Propositions on Etching" which included:

1. The use of a small plate, large plates were a sign of the "duffer."
2. The custom of the remarque (Figure 7.) is also a sign of the amateur. Indeed, there should be no margin on the proof to receive such a remarque. He asked, would a painter leave six inches of canvas between the image and frame?

It is not surprising that etchings were quick to take on some of the characteristics of painting, as almost all painter-etchers were first painters. The most significant prints produced, notably those by Whistler, Cassatt, Marin and Sloan were related to developments in painting. "The same factors which contributed to the evolution of modern painting--the artist's increasing sense of creative freedom and his awareness of himself as an individual, as well as the involvement in and use of technical innovations which lent strength to his statements--are paralleled in the development of the modern print."⁵⁵

Writing in 1883, Van Rensselaer attempted to define some special characteristics of the American school of etching. She observed that Americans had not yielded to the temptation to etch so freely as to etch meaninglessly and pretentiously. In fact, the opposite fault existed, Americans were too conservative, showed too little personality and force and tended, rather, to over-elaborate. Also, most Americans had to learn their craft in isolation in this country but learned it very well in spite of this fact, exhibiting a good use of various

techniques. Through their work and teaching in the early twentieth century, Pennell and Arms played roles similar to Koehler's in forming a foundation for etching criticism. Even then, a successful etching had "to display its craft with jewel-cut agility in all its technical brilliance."⁵⁶

The Clash Between Painter-Etching and
Reproductive Etching and the Collapse of the
First Phase of the Etching Movement

The distinction in America between painter-etchers and reproductive etchers is not as clear as it is for European etchers. The reason being that in Europe there was a strong tradition and a necessity for reproductive work after old master works which were done upon first-hand observation of the works. Reproductive engraving and etching in the United States was necessarily limited as there was a lack of material. Therefore, when we speak of European reproductive etching, the names of Léopold Flameng, William Unger, Jules Jacquemart and Rajon are held in high esteem as reproductive etchers. But with American reproductive etchers the sureness of identity fades because American reproductive etchers stumbled into reproductive etching by interpreting their own paintings, other painters' paintings, and copying works. Even the writers and critics of the etching movement did not agree on what was meant by the terms painter-etcher and reproductive etcher. Hitchcock uses the term painter-etcher as an artist who works in the etching medium.⁵⁷ Van Rensselaer uses it as an artist who naturally incorporates tonal values into an etching,⁵⁸ and Hamerton likewise supports the use of tonal techniques

such as aquatint, retroussage (to a reasonable degree), roulette and mezzotint,⁵⁹ while Koehler condemns the emphasis on tonal values (with the exception of retroussage) as having no place in a linear medium.⁶⁰ Weitenkampf agrees with Koehler in his view that tonal qualities in etching are characteristic of reproductive etching. The painter-etcher should be interested in line, he felt, in exploiting and manipulating line by the use of the acid and the wipe.⁶¹ Hitchcock condemned Hamerton for his support of tonal values saying, "If Mr. Hamerton has been converted to the doctrine of elaboration, the art of etching is sadly in need of a new evangelist."⁶² Even Haden, he observed, seemed to support the use of mezzotint by 1886. Hitchcock viewed with alarm that "Within the last year or two reproductive etching in America has risen to a place of no little importance . . ."⁶³ He named certain American etchers who had succumbed to the trend toward tonality, among them, Hamilton Hamilton, Thomas Hovendon, J. S. King and Benjamin Lander (Figure 6). Hitchcock's concern was that mechanical excellence put reproductive etchers in the field of the engraver and placed them also in competition with the photo-reproductive processes which could copy images so closely as to be almost undetectable. Amand Durand and Goupil of Paris were the best known and most successful reproducers of art, including many etchings by the photogravure process. In retrospect, it is curious that reproductive etchers would attempt to compete to such a great degree with reproductions by photogravure. Another reason for the decline of etching was its traditionally auxiliary relationship to engraving.

It would seem that etching as a means of creative expression for the artist was but an exception to its history, " . . . there are signs of a growing tendency among etchers to ignore free-hand painter's etching and to be influenced by popular demand into a style of elaborated work which differs little from the engraver's etching of our fathers."⁶⁴ Engraving had become much too laborious for the age of the post-Industrial Revolution and etching was a faster method of reproduction by comparison, but other reproductive methods had surpassed etching in speed and economy. Still, there was a demand for reproductive etching.

American reproductive etchers could be grouped roughly into two traditional camps, reproductive etchers who had their roots in the earlier facsimile engravers who reproduced with exactitude a pencil or pen and ink drawing, and translator-etchers who came from the tradition of the translator-engravers who interpreted the wash drawings of the artist by rendering them in line, such as Marc-Antonio Raimondi. Hamerton, among others, did not consider interpretive etching to be creative work, saying, "when an etcher interprets a picture he ceases to act as a creative artist, and becomes merely a translator."⁶⁵ The esthetic problem with reproductive etching, as Koehler saw it, was that it finally " . . . resolves itself into a technical question."⁶⁶ The problem has been viewed from the standpoint of painter's prints versus printmaker's prints, also. Painters have, historically, come to the making of prints with a freedom and freshness, turning the medium to their own use.

Printmakers, however, have always tended to value craft over art and often become lost in technical concerns.

A remarkable number of etchings were produced between the late 1870s and the mid-1890s, implying public support. But the success which etching enjoyed was also its demise, at least until the movement returned to its original purposes in the early twentieth century. Dealers exploited reproductive etching and artists approached etching itself without an appropriate seriousness, to the point that even the New York Etching Club finally excluded reproductive etchings from its exhibitions. Reproductive etching had turned into a fad aimed at versimilitude of tonal effects, a fashion which had the effect of cheapening all etchings. By 1892, Koehler noted the various etching societies which had begun so enthusiastically had been in a state of indifference for some time. It was his hope, along with Hitchcock and others, that this degeneration in etching would lead ultimately to work of higher quality. Pennell felt there was actual corruption on the part of printsellers supplying the public's desire for reproductive etching, claiming a Guild of Print Sellers formed a ring and tried to compel artists to join by threatening them with not showing or selling their work if they did not join. "The artist was frightened, and whole societies, including the Painter Etchers joined . . . [but since the start of World War I] this scheme for encouraging print selling has not since been much in evidence." The vast production of commercialized etchings led to the collapse of painter-etching in the mid-1890s and Pennell continued: "disgusted, even bankrupt, Whistler

smashed his plates But there was scarce a painter who did not etch--the world was flooded with etchings. Then --I do not see how or why--people got tired of etching and the bubble burst. All but the few who really cared stopped etching . . ."⁶⁷ In the end, the photo-reproductive processes won the favor of the businessmen and the public, the former preferring the economy of the processes and the latter preferring the life-like realism of photography.

History did not bear out Hitchcock's sense of esthetics which seemed so appropriate in his time. Tonality did find a place in the best painter-etching. Mary Cassatt, most notably, used aquatint and drypoint extensively to create tonal effects. As in all other mediums, the most successful work is created not by rules or esthetic programs, but through the force and individuality of the artist's vision and his manipulation of materials.

III. THE SECOND PHASE OF THE AMERICAN ETCHING MOVEMENT

The Organizations, Literature, Artists and Personalities of the Period 1900 to 1925

One of the differences between the first (1866-1895) and second (1900-1925) phases of the etching movement was the freedom in the second phase from the curse of mass commercialism. Weitenkampf wrote in 1912, "Today we find that etching as a means of direct expression for the artist has come to its own again."⁶⁸ The original spirit of the etching movement had been renewed.⁶⁹

With even more vigor than in the late nineteenth century, etching societies and clubs sprang up. In 1898, the American Art Annual listed a few etching societies, mainly on the East Coast, but by 1916 it listed many clubs and societies for etching all over the country. In the second phase, the Chicago Society of Etchers, the Brooklyn Society of Etchers and the California Society of Etchers were the most important clubs, as the New York Etching Club had been in the first phase. The Brooklyn Society of Etchers became perhaps the most representative body of exhibiting printmakers from its inception and reflected the regrouping of etching interests which had taken place. Participants in the first exhibition of the Society in 1916 included Frank Benson, Mary Cassatt, Childe Hassam, Ernest Haskell, Ernest D. Roth, Eugene Higgins, Anne Goldthwaite, Roi Partridge, Abraham Walkowitz, Troy Kinney,

John Marin and John Taylor Arms.

In the effect it produced of renewing the etching movement, the Chicago Society of Etchers is similar to the New York Etching Club. In addition, there were coincidentally just twenty original members in the Society also, although there are no records as to who they were with the exceptions of Bertha E. Jaques, an etcher who learned the art from the books of Hamerton and Lalanne and long-time Secretary of the Society, and Earl H. Reed, the first President (Figure 10.). The Society was founded in 1910, at a time when almost all the old etching clubs had dissolved or were inactive, as was the case with the New York Etching Club. The Chicago Society of Etchers was the first etching club to use the concept of associate membership. Under this system, any party interested in etching, though not necessarily an etcher, could hold a membership by paying dues for which he received an annual publication. The Society became a financial success and was able to organize and distribute travelling collections to different parts of the country and to produce a large exhibition annually at The Chicago Art Institute. In addition, ten per cent of the members' annual dues was used to purchase etchings from the exhibitions and to present them to the permanent collection of the Institute.

Another important force in the etching revival centered in Chicago was the Albert Rouiller Gallery at 410 South Michigan Avenue, 701 Fine Arts Building. Albert Rouiller was born in Paris and obtained his education at the Paris Lycée. He emigrated to the United States where he was



Figure 10. Earl H. Reed, The Voice of the Dunes, 11" x 7."
Reed's specialty was depicting the sand dunes
of Lake Michigan. The wipe has been used as
part of the actual drawing.

associated with Frederick Keppel in New York for twenty-one years before establishing his own gallery. By 1902, Rouiller Gallery was specializing in old master prints but from about 1912 on the emphasis was equally placed on old and "modern masters." The sale catalogues attempted to keep a catalogue-in-progress as well as to provide biographical information on each of the many contemporary artists represented by Rouiller. In 1911, an interesting exhibition catalogue reflecting an interest in the origins of American etching was published by the Gallery entitled, "The Men of 1830: The Great Masters of the Barbizon School" which included an introduction by Frederick Keppel.

Albert Rouiller is remembered in Chicago as a knowledgeable dealer of integrity who guided the millionaires of Chicago in buying good things.⁷⁰ The Cassatts at the Institute are from the Rouiller Gallery and he was also an expert on Meryon and Redon. In 1918 the French Ministère des Beaux Arts bestowed upon Rouiller the distinction of "Officier de l'Instruction Publique" for his services in educating and guiding the public. When Rouiller died, his daughter, Alice Rouiller, took charge of the Gallery and the concern existed into the 1950s.

The New York Society of Etchers was organized in February of 1913 and stated in its constitution its reason for existence as: "The furtherance of the Art of Etching and the Allied Graphic Arts and the bringing together of those interested in them." They continued, citing the "fine showing of original graphic art at the Armory last year" as one of the stimuli

for their existence and noted that "during the past decade New York has offered no facilities to etchers for public exhibition."⁷¹

In 1916, the Brooklyn Society of Etchers adopted the associate membership plan for financial support also, and it worked as well for them as for the Chicago Society. Through many name changes, the Brooklyn Society of Etchers became the Society of American Graphic Artists (SAGA) of today.⁷² The basic tenets of the Society were:

1. To promote the integrity of personal vision.
2. To promote the consciousness of an American art.
3. To provide exposure for American printmakers.
4. To oppose any differentiation between "modern" and "conservative" art, declaring the Society " . . . stands for no single tradition and represents no individual school but is working for all serious practitioners of the art."⁷³

Thus, the only etching club still extant reiterated some of the original philosophies of the etching movement as well as providing an atmosphere conducive to innovative etching after 1916.

The Painter-Gravers of America was formed in 1917 and included engravers, lithographers and etchers. They cited as their intention "to continue and develop in America the great tradition of the artist-print in its many phases--the tradition born of such men as Dürer, Holbein, Rembrandt [and others]. . . ."⁷⁴ Although the aims of the group were not as perceptive as those of the Brooklyn Society of Etchers, its founders included such innovative artists as Childe Hassam as Chairman, George Bellows, John Marin and John Sloan.⁷⁵

An important difference between the etching societies formed after 1910 and those of the first phase of the movement was the more general nature of the later clubs which often included other printmaking mediums as well as etching.

Frank Weitenkampf (1866-1962) was the first print curator of the New York Public Library and was a man of much energy and enthusiasm in promoting and documenting the etching movement. He was officially appointed Curator when the Avery Collection of 19,000 prints was given to the Library in 1900. Previously, the Library contained mostly prints of historical interest. Like Koehler, Weitenkampf was a self-taught curator and print historian. He also served a split appointment, working at the Astor Library as well. He wrote many articles for periodical publications such as Scribner's Magazine, Print Connoisseur, Century Magazine, and American Printer. His best known work, however, is his landmark book, American Graphic Art, the most thorough and historically valuable book concerning prints of its time. Under Weitenkampf's curatorship, the New York Public Library kept a permanent exhibition of processes showing the making of an etching, a mezzotint, a wood engraving, and even a photo-mechanical reproduction.

William M. Ivins, Jr. became the first Curator of Prints of the Metropolitan Museum of Art in 1916 when Harris Brisbane Dick left his print collection and funds to the Museum. The Museum's first choice for curator had been Paul J. Sachs who declined but suggested Ivins in his stead. Ivins was very astute at building the collection and is best known today for his writings on the appreciation of prints.⁷⁶

There were few important collectors of American contemporary prints in the late nineteenth and early twentieth centuries. Most collectors of means preferred old master prints and added perhaps only a few examples of the leading modern etchers. Three exceptions were James L. Claghorn who loaned 603 of his prints to the Philadelphia Society of Etchers Exhibition of 1883, and Samuel P. Avery whose collection included many rare and important modern prints. The Avery collection was housed in both the Boston Museum of Fine Arts and the New York Public Library. The W. L. Andrews collection of one-hundred contemporary prints, though small, was enough to open a Print Department in the Metropolitan Museum of Art in 1883.

Evidence that original etching had all but vanished is revealed in the prize distributions of three important expositions from 1901 to 1915. Only slightly earlier, in the Columbian Exposition of 1893, etchings and drypoints outnumbered wood engravings by almost 30 per cent but by 1901, when the Pan-American Exposition at Buffalo was held, half the awards went to wood engravings. By 1904, however, etching seemed to be making a comeback. Seven etchings and only four wood engravings won awards in the St. Louis Exposition. In 1915 at the Panama-Pacific Exposition in San Francisco, prize etchings outnumbered prize wood engravings by a large margin. Incidentally, Joseph Pennell (1852-1926) was the Chairman of the International Jury of Awards for Engraving at this exposition. A comparison of the distribution of prizes is one indication of the timing and progress of the second etching phase. Obviously, in the late nineteenth century and the first few

years of the twentieth century, wood engraving came into its own as an artist's medium, becoming most popular in the 1930s.

World War I had a great adverse impact on the progress of the second phase of the etching movement, which seemed to be doomed again almost as soon as it was revived. Pennell commented in detail upon the effects of the War on etching, including the inability of European galleries to acquire what few contemporary works were produced and those that were not destroyed. Exhibitions virtually ceased, "And even as peace dawns, art still flies away."⁷⁷ Etching materials could not be had, paper mills were gone, records destroyed, dealers could not get prints and collectors were too preoccupied to collect what little was available. In spite of it all, etching did survive and prospered into the 1920s.

Two of Pennell's most cherished ideals which can be gleaned from his writings are the championing of the artist's best interests and a view of the artist as worker. Pennell's hands-on approach to teaching included little respect for writers on etching who wrote more than they etched. In his book, Etchers and Etching, a transposed title of Hamerton's book, Pennell lambastes every other book ever written about etching and their authors, including Hamerton. Also singled out was A. M. Hind and his History of Engraving and Etching. Pennell mocked Hind's credentials as a Slade Professor at the University of Oxford and an official of the Print Room of the British Museum, saying Hind knew " . . . as much practically of art as the guard at the door of their departments . . ."⁷⁸ He felt Hind had no practical experience in engraving mediums

and yet set himself up as an authority, attempting to explain technical matters, but succeeding only in revealing his lack of knowledge of all modern-day practices. He accused Hind of purposely ignoring some of the best methods because they were developed in the United States and ridiculed Hind's grasp of the present saying, "His remarks on modern men are as quaint as his knowledge of present day etchers is limited."⁷⁹

In 1922, an English book was published by William Palmer Robins with a Foreword by Martin Hardie, called Etching Craft. It is similar to Pennell's book in the author's admiration for Whistler but Robins was not as fanatical as was Pennell. Another similarity is Robins' hands-on approach to etching which incorporates a sense of craftsmanship, individualism and an implied view of the artist as worker. It is curious Pennell said nothing about the Robins book when he added numerous notes to the 1924 reprint of Etchers and Etching.

Another Englishman, James Laver, wrote A History of British and American Etching in 1929, prefacing it with the comment, "The literature of etching is already so vast--how vast the author himself did not realize until he commenced to draw up the bibliographies to be found at the end of this volume--that some apology is needed for adding to it. . . ."⁸⁰ Interestingly, Laver explains as part of his reason for adding to the list his hope to increase the British appreciation of American etching. He noted Koehler's apology in his book, Etching, for devoting a whole chapter to American etching, and commented, "he wouldn't need to today."⁸¹

With the revival of etching in the twentieth century, there arose no fewer etchers than the swell ranks of the late nineteenth century. "There are many etching societies, but there are not so many etchers as societies,"⁸² Pennell said. Etchers were now quickly publicized, written up in magazines and printsellers' catalogues and featured in one-man shows. Weitenkampf commented, " . . . it is easy to grow enthusiastic over the vogue of etching."⁸³

Joseph Pennell was born to Quaker parents in Philadelphia and began his career as an illustrator after his expulsion from the Pennsylvania School of Industrial Art, an unfortunate event he was never able to reconcile to himself. By the age of 16, Pennell admired the works of Duveneck, Fortuny and Martin Rico. He learned to etch from the masterful reproductive etcher, S. J. Ferris and from studying the prints of the Claghorn Collection. In addition to being a practicing artist, world traveller, teacher and lecturer, Pennell also produced a tremendous output of books, often in collaboration with his wife, Elizabeth Robins Pennell, incorporating his lifelong love of writing with illustration. His Graphic Art School of the Art Students League was founded with his hope of uniting all the crafts of bookmaking with the printing arts. His adulation of Whistler was well known and most of his opinions are based upon the association he had with the artist (Figure 11.). Pennell had made a reputation for himself as an etcher in London where he undertook his first monumental project of etching the English Cathedrals which was published with a text by Van Rensselaer. He taught and lectured in London before his final

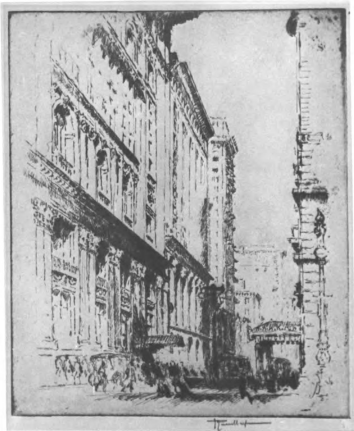


Figure 11. Joseph Pennell, Stock Exchange, Philadelphia, 9 1/2" x 7 3/4," 1920.

return to the United States. In 1908, the Grolier Club exhibited Pennell's etchings. He had already been etching for thirty years by that date. The show was comprised of 157 works, the plates for most having been destroyed. Four years before his death, Pennell began teaching in the United States. In his last years he was dogmatic, arrogant, and probably senile. His students both revered and feared him and he had little good to say about them in his writings. When Pennell died in 1926, he left all his prints as well as his considerable fortune to the Library of Congress which is the basis of the collection catalogued by Karen F. Beall in American Prints in the Library of Congress.

Many parallels can be drawn between the lives of Pennell and John Taylor Arms. Both were highly influential artists and teachers, both had seemingly endless energy and dedication to the cause of art, and both were very interested in the technical side of etching. Arms' book of 1934, Handbook of Print Making and Print Makers, is even similar to Pennell's in its emphasis on the printmaker-writer rather than the critic-writer which came so naturally to Arms and became an important difference in the way etching was approached in the twentieth century compared with the nineteenth century. Both Pennell and Arms believed a good etcher was a good technician and that great etching and great printing were synonymous.

John Taylor Arms (1887-1953) was younger than Pennell but his work has many affinities with nineteenth century etching. Arms had begun his career as an architect but soon after making his first etching in 1914, he decided to make etching

his life's work after his military service ended in 1919. He travelled all over Europe drawing cathedrals and other architectural subjects in the 1920s and attempted to chronicle the history of sailing ships with a revival of color aquatint. Only one year after Arms began his etching career he also began lecturing and demonstrating the art of etching. He lectured to art organizations, colleges, clubs, museum staffs, and at the New York World's Fair in 1939 he also arranged a section devoted only to prints. Long considered exemplar as a conservative etcher, he was also a superb etcher and is being rediscovered today.

By 1925 it was no longer a controversial subject to be a painter-etcher. The term was used to mean an artist who worked in the etching medium as Royal Cortissoz used it to describe the etchings of Childe Hassam, "The test of the painter-etcher is his ability to do with the needle what he can do with the brush, to carry over into a black and white art something of the quality which is characteristic of his work in color, to be himself, in other words, though he may change his wonted instrument."⁸⁴ The arguments over linear versus tonal qualities had ceased, there being no point. Reproductive or interpretive etching was a ghost and original etching was on the way to a respectability near that of painting. Cortissoz also felt Whistler had influenced other etchers almost too much, even etchers of talent who had, unfortunately, "found the readiest outlet for their energy in being 'Whistlerian.'"⁸⁵

The transition between the first and second phases of the etching movement is exemplified in the work of John Marin

(1872-1953). Having been trained as an architect, Marin did not begin to etch until 1905 while in Paris. In the next two years, he produced about sixty plates in the Whistlerian tradition using traditional subject matter of picturesque European landmarks (Figure 12.). Albert Rouiller of Chicago was his print dealer and in his sale catalogue of 1913 he describes the style of the "well-known painter-etcher" as "characterized by a certain lightness of touch and delicacy of line. . . ." Rouiller explained Marin had not etched in the last few years, " . . . but we understand that he is soon to take up his etching needle once more, and doubtless, in the not far distant future his newest plates will be obtainable."⁸⁶ They would not be obtainable through Rouiller Gallery, however, When the dealer saw Marin's new work, he did not like it and dropped Marin from his stable of artists. The tranquility of Marin's early etchings was replaced with a nervous movement and, as exemplified in his best-known work, Woolworth Building, forms as monumental as a skyscraper were infused with life. Marin's work was already as modern as much of the work in the Armory Show and Marin soon became associated with Alfred Stieglitz and Gallery 291.

Another threat to the complacency of the etching movement was the new realism of the Ash Can School in the first years of the century. John Sloan (1871-1951) began as a poster designer in the Art Nouveau style but learned to etch from Hamerton's book so successfully he was known as the "dean of American etchers" in Philadelphia before moving to New York in 1904. In 1905 he began, as a labor of love, a series of etchings



Figure 12. John Marin, From Ponte S. Pantaleo, Venice, 7 7/8" x 5 1/2," 1907. A predominance of Whistlerian influence is evident.

of city life. Sloan's choice of subject matter was ahead of its time, forerunning the emphasis in etching of the 1920s and 30s on city life. Invited to participate in the American Watercolor Society's Exhibition of 1906, he submitted ten of these etchings, of which four were rejected as being too vulgar to exhibit. Sloan's work underwent even more changes resulting from the Armory Show but he never relinquished his basic love of line. He did more than any other single artist to interest important American painters in etching as an extension of painting. By the 1920s, Childe Hassam and Edward Hopper (1882-1967) were etching themes of American life, both rural and urban.

In spite of the innovations by etchers such as Marin, Sloan, Hassam and others, etching, for the most part, remained in its familiar paths. The conservatism of etching was protected in large part, by the official stamps of approval from the Chicago Society of Etchers and the Society of American Etchers, organizations carrying much authority and respect. As late as 1925, the important Fifty Prints of the Year exhibition sponsored by the American Institute of Graphic Arts separated avant-garde prints from the rest, putting them in a special group called "Moderns," and added an explanation for their inclusion. The few dealers who encouraged the new work included E. Weyhe, Edith Halpert of the Downtown Gallery and J. B. Neumann of the New Art Circle. Joseph Pennell detected signs of change in the spirit of etching and he did not like them. "The New Art has invaded etching, and the same old stenciled tricks have been played with it as with paint. I suppose it

amuses the people who perpetrate it and the fools who are fooled by it. American up to date students practice it, it is so easy and artless."⁸⁷ But even Weitenkampf recognized vital signs of the etching movement had ceased when he observed, "There is no violent novelty in the various personal phases of this movement, no obstreperous shriek, no blatant blare of revolution . . ."⁸⁸ The etching movement was over, but etching remained, slowly, reluctantly, incorporated into the mainstreams of the most important American art produced in the twentieth century, reflecting the words of a writer in 1930, "Even if it is the most reluctant of the arts to accept new dimensions, owing to the extreme rectitude of the etched line, etching must eventually reflect something of the vigorous ordering of our modernistic age in order to sustain its essential vitality."⁸⁹

The collecting public was not so quick to recognize the end of the useful life of the etching movement. In 1922, the business of selling etchings was still growing. Other prints, lithographs and wood engravings, were also sought, but etchings were still the most popular. Pennell was appalled by the return of commercial success to etching and equated it to the over-evaluation of the stock market, predicting the same crash would come to both, and he was correct.

IV. CONCLUSION

A phenomena of such proportions took place in America as deserves to be called an etching movement. It grew directly from the etching revivals of France and England, being deliberately planted at first by Cadart in 1866, but having failed at first to take hold, evolved finally from contact between American and European artists resulting in the New York Etching Club of 1877 and the many other clubs which followed. The development of the movement depended heavily on the existence of etching societies and exhibitions which were also numerous in other fields of endeavor as a result of the failing authority of the National Academy. America produced more than its share of talented and able exponents of the movement. An energy which effected whole careers to be formed, institutions to be founded, and left in its path untold thousands of works, etchers and literature on etching, is repeatedly under-estimated as a force in the art of the turn of the century, recalling Koehler's prediction that " . . . much of what is admired to-day will be forgotton to-morrow."⁹⁰ It is argued that Whistlerian etchers produced little important work, but it is neglected that the few important etchers who arose did so within the climate of the etching movement. We will never know if Winslow Homer, John Marin, John Sloan and Childe Hassam, among others, would have picked up an etching needle if there had been no etching

movement. It is unlikely, and if they had, they would not have produced the numbers of etchings they did.

Commercialization constantly plagued the etching movement, due perhaps to the mass appeal of the often picturesque subject matter. The turn of the century was also a time of new economic affluence for the middle class who were developing an interest in cultural pursuits. Dealers and publishers were quick to capitalize on this trend and the all-out mass production of "painter-etchings" from steel-faced plates soon became a reality. Commercial greed combined with the untimely resurrection of reproductive etching led to the collapse of the first phase of the etching movement around 1895 and commercial concerns were more careful in the first years of the etching revival in the twentieth century, but again commercialization grew out of hand.

An important change in the way etchers were viewed was reflected in the early and late phases of the etching movement. In the beginning, from roughly 1877 to 1885, etching had been a cult activity. Its practitioners felt the need to justify their love of the medium by formulating strict standards of what it was and was not. There were camps of thought on different meanings of who a painter-etcher was. In the twentieth century, however, the distinctions between shades of meaning were vanishing and with the example of artists such as John Marin and John Sloan, the term painter-etcher itself became obsolete. An artist was an artist whether he worked in oil or etching ink. With the rise of the importance of art over medium came the final demise of the etching movement. The

transplanted traditions of picturesque landmarks, landscapes and other pleasant, sometimes sentimental subjects were antithetical to the new realism which was pervading printmaking in general. Americans were becoming capable of dealing psychologically with the effects of the Industrial Revolution and the "painters, sculptors and architects who sought to recapture qualities of the past in a rapidly changing present . . ." ⁹¹ entered history.

APPENDICES

APPENDIX A: CHRONOLOGIES

Chronology of Events Comprising the First Phase of the Etching Movement

- 1866 Cadart visits America. American Branch of the French Etching Club formed.
- 1868 Whistler exhibits his Thames series in New York.
- P. G. Hamerton publishes Etching and Etchers in London and the American Henry Farrer attempts etching with Hamerton's instructions.
- 1870 First Chicago Etching Club formed (short-lived).
- 1872 Henry Farrer's Old New York portfolio published.
- 1876 Edwin Forbes publishes the portfolio, Life Studies of the Great Army: A Historical Art Work in Copper Plate Etching Containing Forty Plates. He wins a gold medal for it in the Centennial Exhibition.
- 1877 New York Etching Club forms.
- Society of American Artists forms (The Ten).
- 1878 Salmagundi Club forms.
- 1879 New York Etching Club holds its first exhibition in collaboration with the American Watercolor Society.
- Cincinnati Etching Club forms. Members: H. F. Farny, M. Louise McLaughlin, Emery H. Barton, Elizabeth Nourse, Caroline Lord.
- Whistler exhibits his Thames series in Boston.

- 1880 Philadelphia Society of Etchers forms. Members: Peter Moran, S. J. Ferris, Joseph Pennell, Stephen Parrish, B. Uhle, J. Neely, Jr., W. J. LeFevre, Hermann Faber, H. R. Poore. Holds its first exhibition in 1882-3 "devoted exclusively to painters' etchings."⁹² The show included 356 prints by Americans out of a total of 1,070 etchings by international artists. Pennell, Whistler, Haden, Legros and Bracquemond were included.
- An etching club in San Francisco is considered but not formed.
- Koehler translates Lalanne's Treatise on Etching.
- First issue of Koehler's American Art Review appears.
- New York Etching Club holds an exhibition in collaboration with the Salmagundi Sketch Club.
- 1881 Boston Museum of Fine Arts Exhibition of American Etchers is held.
- Boston Etching Club forms. Members: E. H. Garrett, F. T. Merrill, F. G. Attwood and J. E. Baker. First exhibition is held in 1883 with a catalogue etched throughout including text.
- 1882 The Scratcher's Club of Brooklyn forms. Members: G. W. H. Ritchie, Walter M. Aikman, Carleton Wiggins, Benjamin Lander (Figure 6.) and Stanley Middleton. The Club lasts only a few years and the members do not make enough plates as a group to hold an exhibition.
- 1883 Metropolitan Museum of Art begins a Print Department with the W. L. Andrews collection of 100 prints by contemporary artists.
- 1887 Boston Museum of Fine Arts holds Exhibition of of the Work of the Women Etchers of America.
- Koehler organizes an exhibition of Rembrandt etchings from the Harry F. Sewell Collection of New York.
- 1888 New York Union League Club holds an expanded version of the Boston Museum's Works of the Women Etchers of America. A notable inclusion is an etching from 1844 by Sarah Cole, sister of Thomas Cole.

- 1893 World's Columbian Exposition is held in Chicago. Many etchings and some wood engravings are exhibited. Works by forty-two American etchers, mostly from New York and Philadelphia.
- 1894 Society of Iconophiles organizes. Published engraved views and portraits relating to New York City. Their interests sometimes overlapped into etching.
- 1895 Fine Arts Federation of New York organizes. There are so many art societies of every interest a federation is needed to secure their united action.
- First phase of the etching movement ends.

Chronology of Events Comprising the Second Phase
of the Etching Movement

- 1898 Black and White Club of New York City organizes. Exhibit works in mono-tint of all mediums including etchings.
- 1901 Pan-American Exposition held in Buffalo, New York.
- 1904 St. Louis Exposition held in Missouri.
- 1908 Revolt of The Eight against the National Academy.
- 1909 Howard Mansfield writes a Whistler catalogue raisonné for the Caxton Club, Chicago.
- 1910 E. G. Kennedy writes an illustrated catalogue raisonné of Whistler's works for the Grolier Club, New York.
- Chicago Society of Etchers forms.
- 1912 California Society of Etchers organizes.
- 1913 Print Room established in the Museum of Modern Art.
- The Armory Show is held.
- New York Society of Etchers organizes.
- 1914 Print Makers Society of California organizes.
- American Institute of Graphic Arts of New York City is founded. Sponsors touring exhibitions.
- 1915 Panama-Pacific Exposition held in San Francisco.
- 1916 Brooklyn Society of Etchers forms and holds its First Annual Exhibition at the Brooklyn Museum.
- 1917 Painter-Gravers of America founded.
- 1919 Etchers and Etchings by Joseph Pennell published. (Would have been published earlier if World War I had not occurred).
- 1922 Etching Craft by William Palmer Robins published in England.

- 1924 American Graphic Art by Frank Weitenkampf published.
- 1925 Practical end of the second phase of the etching movement.

APPENDIX B: AMERICAN ETCHERS 1866 - 1925

Abbey, E. A.
Adams, J. Wood
Aid, George C.
Aikman, Walter M.
Anderson, John O.
Armington, Caroline H.
Armington, Frank M.
Attwood, F. G.
Auerbach-Levy, William

Bacher, Otto H.
Bacon, Peggy
Baker, J. E.
Baldwin, A. H.
Barry, Aug.
Barton, Emery H.
Barton, Loren
Bauer, W. C.
Beal, Gifford
Beal, W. Goodrich
Beatty, J. W.
Beckwith, Carroll
Bellows, Albert Fitch
Bellows, George
Benson, Frank W.
Bernstein, Therese
Bicknell, A.H.
Bicknell, W. H. H. (W. H. W.?)
Bishop, Richard E.
Blaney, H. R.
Blondheim, A. A.
Bloodgood, Robert F.
Blum, Robert F.
Borein, Edward
Boyer, Ralph
Brennan, Alfred
Brown, Howell C.
Brown, George Loring
Brown, Mary Cummings
Browne, George Elmer
Bush-Brown, Margaret W. Lesley
Burleigh, Sidney Richmond
Burns, M. J.
Burr, George Elbert

Calaghan (Calahan), James J.
Canby, Louise Prescott
Cassatt, Mary
Chamberlain, Samuel
Champney, J. Wells
Chandler, George Walter
Chapman, Carlton T.
Chapman, John Gadsby
Chase, Harry
Chase, William Merritt
Church, Frederick S.
Clark, Roland
Clements, Gabrielle D.
Cole, J. Foxcroft
Colman (Coleman), Samuel
Congdon, Adelaide Vose
Congdon, Thomas R.
Coover, Nell
Cordoba, Mathilde de
Corey, Arthur S.
Corwin, Charles
Covey, Arthur (Corey?)
Coxe, Reginald Cleveland
Crosman, Rose
Curran, C. C.

Dahlgreen, Charles W.
Daingerfield, Elliot
Davies, Arthur B.
Davis, Georgiana A.
Davis, Warren
DeHaas, M. F. H.
Deville, Henry
Dielman, Frederick
Dillaye, Blanche
Dixwell, Anna Parker
Dougherty, Parke C.
Dougherty, Paul
Duveneck, Frank

Earle, L. C.
Eaton, C. H.
Eaton, Wyatt
Eby, Kerr

Ehninger, John W.
 Engelhard, Elizabeth
 Eno, Henry C.
 Ertz, Edward
 Eskridge, Lee

Faber, Erwin F.
 Faber, Hermann
 Fagan, James
 Falconer, John M.
 Farny, H. F.
 Farrer (Farrar), Henry
 Farrer, T. C.
 Ferris, Jean Leon Gerome
 Ferris, Stephen J.
 Field, Edward Loyal
 Forbes, Edwin
 Freer, Fred W.
 Fuchs, Emil

Gallagher, Sears
 Ganso, Emil
 Garber, Daniel
 Garrett, Edmund H.
 Gaugengigl, I. M.
 Getchell, Edith Loring Pierce
 Gifford, R. Swain
 Glackens, William G.
 Gleeson, Charles K.
 Gobo, Georges
 Goetsch, Gustav F.
 Goldthwaite, Anne
 Grant, C. R.
 Greatorex, Eliza
 Gregory, Frank M.
 Guarino, S. Anthony
 Guy, S. J.

Haas, M. F. H. de
 Hale, Ellen Day
 Hale, Walter
 Hall, H. B.
 Hambly, Edgar R.
 Hamilton, Hamilton
 Handforth, Thomas
 Harlow, Louis K.
 Harper, William St. John
 Harshe, R. B.
 Hart, George "Pop"
 Haskell, Ernest
 Hassam, Childe
 Heil, Charles E.
 Heinigke, Otto
 Heintzelman, Arthur William

Hewitt, Edward S.
 Higgens, Eugene
 Hill, Henry J.
 Hill, John H.
 Homer, Winslow
 Hopkins, George E.
 Hopper, Edward
 Hornby, Lester
 Horter, Earl
 Hovenden, Thomas
 Hoyt, Henry Martin
 Hunter, F. Leo
 Hurley, E. T.
 Hyneman, Herman

Inness, George

Jaques, Bertha
 Johnson, Thomas
 Jones, Alfred
 Jones, Haydon
 Jones, H. Bolton
 Juengling, Fred

Kappel, Philip
 Kimball, C. F.
 Kimball, Katharine
 King, C. B.
 Kinney, Troy
 Kleiber, Hans
 Koehler, Robert

Laffan
 Lander, Benjamin
 Lathrop, W. L.
 Lauber, Joseph
 Lawson, Robert
 Learned, A. G.
 LeFevre, W. J.
 Lesley, Margaret W. (Bush-Brown)
 Lever, Haley
 Lewin, Katherine (Levin?)
 Lewis, Allen
 Lewis, Arthur A.
 Lewis, Martin
 Lippincott, W. H.
 Little, Philip
 Locke, Charles
 Logan, Robert F.
 Lord, Caroline
 Loring, Charles J.
 Lovewell, Rominer
 Low, Will H.
 Lum, Bertha
 Luquiens, Huc. Mazelet

McCormick, Howard
 McCutcheon, G. G.
 McCutcheon, John T.
 McCutcheon, S. G.
 McIlhenny, C. M.
 MacLaughlin, Donald Shaw
 McLaughlin, M. Louise
 Manley, Thomas R.
 Mansfield, John W.
 Marcus, Peter
 Marin, John
 Marshall, W. E.
 Martin, T. M.
 Matlack, Eleanor
 Mercier, Gustav
 Merrill, F. T.
 Merrill, Katherine
 Merritt, Anna Lea
 Metour, Paul
 Middleton, Stanley
 Mielatz, Charles F. W.
 Mielziner, Leo
 Milhau, Zella de
 Millar, Addison T.
 Miller, Charles H.
 Miller, E. F.
 Miller, E. H.
 Miller, Kenneth Hayes
 Millier, A. H.
 Mills, Charles E.
 Millspaugh, J. H.
 Minor, R. C.
 Mitchell, John Ames
 Monks, J. A. S.
 Moorepark, Carlton
 Mora, F. Luis
 Moran, Emily
 Moran, Leon
 Moran, Mary Nimmo
 Moran, Thomas
 Moran, Peter
 Morley, Alice E.
 Murphy, H. D.
 Myers, Jerome
 Mygatt, Robertson K.

 Nankivell, Frank A.
 Nast, Thomas
 Natt, Phebe D.
 Neely, J. Jr.
 Nicoll, James Craig
 Niemeyer, John H.
 Nisbet, Robert H.
 Nordell
 Nourse, Elizabeth

Oakford, Ellen
 Olsson-Nordfeldt, Bror J.
 Orr, Louis
 Osborne, H. Frances
 Osgood, H. H.

 Pach, Walter
 Pape, Eric
 Parrish, Stephen
 Parsons, P. B.
 Partridge, Roi
 Paulus, Francis P.
 Pearson, Ralph M.
 Penman, Edith
 Pennell, Joseph
 Peterson, Martin
 Piazzoni, Gottardo
 Pierce, Edith Loring (Getchell)
 Platt, Charles A.
 Plowman, George T.
 Polley, Frederick
 Poole, H. Nelson
 Poore, H. R.
 Pope, Marion Holden
 Post, Ernest C.
 Preissig, Vojtech
 Priestman, Bernard Walter

 Quinlan, W. J.

 Raleigh, Henry
 Raubichek, F.
 Reed, Earl H.
 Reich, Jacques
 Reindel, W. G.
 Reinhart, C. S.
 Renouard, Paul
 Resler, George
 Rhead, Louis John
 Richards, F. De Berg
 Richardson, Clara V.
 Ritchie, G. W. H.
 Ritchie, Henrietta
 Rix, Julian
 Robbins, H. W.
 Robinson, Boardman
 Rogers, Bruce
 Rood, Roland
 Rosenberg, H. M.
 Rosenberg, Louis C.
 Rosenthal, Albert
 Rosenthal, Max
 Roth, Ernest David
 Ruzicka, Rudolph
 Ryerson, Margaret

Sabin, J. F.
 Sandham, Henry
 Santee, Rose
 Sargent, John Singer
 Sartain, Emily
 Sartain, William
 Satterlee, Walter
 Sawyer, Philip Ayer
 Schneider, Otto J.
 Schilling, Alexander
 Schoff, S. A.
 Scott, Eric G.
 Schutz, Anton
 Seidenberg, Roderick
 Senat, Prosper L.
 Senseney, George
 Sewell, Robert V. V.
 Seymour, R. F.
 Share, Henry Pruett
 Shaw, Annie C.
 Shelton, W. H.
 Sherwood, W. A.
 Shirlaw, Walter
 Shope, H. B.
 Simmons, Will
 Skelton, W. H.
 Sloan, John
 Smillie, George H.
 Smillie, James D.
 Smith, J. Andre
 Smith, Sidney L.
 Snell, George
 Snoey, J. N.
 Sparks, Will
 Squire, Maud Hunt
 Stella, Joseph
 Stern, Maurice
 Sterner, Albert
 Stetson, Charles Walter
 Stevens, Helen B.
 Stevens, Thomas W.
 Sturges, Dwight C.
 Sturges, Lee
 Szekessy, Curt

Taylor, Margaret M.
 Taylor, William Ladd
 Tiffany, Louis Comfort
 Tittle, Walter
 Townsend, Harry
 Twachtman, John H.
 Twachtman, Mattie S.
 Trowbridge, V.
 Turner, C. Y.
 Tuttle, Henry E.

Uhle, B.

Vanderhoof, Charles A.
 Van Elten, Hendrik Dirk Kruseman
 Verrees, J. Paul
 Vondrous, John C.
 Volkmar, Charles

Wales, George E.
 Walker, Charles A.
 Walker, Horatio
 Walkowitz, Abraham
 Wallace, W. H.
 Waller, Frank
 Warner, Everett L.
 Warren, A. W.
 Washburn, Cadwalller
 Webb, Alonzo E.
 Weber, Frederick T.
 Weber, Otis T.
 Webster, Herman A.
 Weir, John Alden
 Weir, Robert Walter
 Welsh, H. Devitt
 Wenban, S. L.
 Wendel, Theodore M.
 West, Levon
 Whistler, James Abbott McNeill
 White, C. Harry
 Whittemore, C. E.
 Whittemore, W. J.
 Wickey, Harry
 Wiggins, Carleton
 Wingate, Carl
 Winkler, John W.
 Winslow, Henry
 Wiseman, Robert R.
 Woiceske, R. W.
 Wood, Franklin T.
 Wood, Thomas Waterman
 Woodbury, Charles H.
 Woodward, Stanley W.
 Worcester, Albert
 Wright, George
 Wust, Theodore

Yale, Leroy Milton
 Yewell, G. H.
 Young, C. Jac
 Young, Mahonri

The preceding are cited as etchers in contemporary sources as listed in the bibliography or are known otherwise to have published one or more etchings.

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APPENDIX C: GLOSSARY

- A La Poupee** A French term referring to a method of printing several colors simultaneously on one plate. The method employs separate pads or "dolls" to ink and wipe each color.
- American Luminism** A term first employed by John I. H. Baur in "American Luminism, A Neglected Aspect of the Realist Movement in Nineteenth Century American Painting," Perspectives USA, Vol. 9 (Autumn 1954), pp. 90-98. The term refers to an interest in a continuum of space and light as the principal subject and the interest beginning in the 1850s in conditions of haze, fog, mist, twilight and thunderstorms and especially in the work of painters of the Hudson River School, c. 1848 to 1876, including the painter-etcher Frederick E. Church. "Even without color, most luminist drawings still suggest precise nuances of light . . ."93
- Aquatint** A method of INTAGLIO in which a tonal resin or ground is applied to the plate, heated, and etched, perhaps several times, for tonal gradations. The method produces a pleasing granular effect. J. B. Le Prince, a pupil of Boucher, was the first to make aquatint known in 1769, calling it gravée à l'aquatinte, a reference to its similarity in appearance to drawings incorporating water-color washes.
- Biting** A metal plate is inserted into an acid bath for a period of time sufficient to eat away lines that have been drawn in the GROUND.
- Clean Wipe** The practice of completely removing the ink from the plane surface of the INTAGLIO plate to produce a print with the sharpest contrast possible between the etched

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and unetched areas. Van Rensselaer refers to this practice as "frank etching."⁵⁸

Copperplate

A metal plate, sometimes made of zinc or aluminum, on which the etcher or engraver incises his image, either through the use of a burin or engraving needle or through an acid BITING process.

Drypoint

An INTAGLIO printing process in which a metal plate is inscribed directly with a sharp instrument. No acid is used. The technique leaves a ragged edge or burr on the lines which, when printed, produces a soft quality, especially in the first few IMPRESSIONS.

Eau-forte

A French term for ETCHING referring to the acid-bath. Also, gravure à l'eau-forte.

Engraving

In the general sense, as in the French, gravure, a reference to all incised media including ETCHING, drypoint, aquatint, etc. and the various forms of engraving in the specific sense meaning an INTAGLIO process in which the image is cut into a metal plate using an instrument such as a burin and without the use of acids or grounds.

Etching

The act or process of making an image on a metal plate by the corrosive action of acid instead of by a burin. The drawing is made with a pointed instrument through a thin coat of an acid-resistant GROUND onto a highly polished metal plate, usually copper. The actual engraving agent in etching is the MORDANT: the lines drawn with the etching needle merely expose areas of the metal plate. The plate is then immersed in an acid solution and may be bitten several times for various periods to produce lighter or darker lines in different parts of the plate. An etching is printed by inking the plate then wiping it, leaving ink in the etched depressions. The inked lines are transferred to damp paper by running the plate and the paper through an etching press. The term also refers to a print thus pulled.

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the 1990s, the number of people in the United States who are 65 years of age or older has increased by 50 percent. The number of people 75 years of age or older has increased by 100 percent. The number of people 85 years of age or older has increased by 200 percent. The number of people 95 years of age or older has increased by 400 percent. The number of people 100 years of age or older has increased by 1,000 percent. The number of people 105 years of age or older has increased by 2,000 percent. The number of people 110 years of age or older has increased by 4,000 percent. The number of people 115 years of age or older has increased by 8,000 percent. The number of people 120 years of age or older has increased by 16,000 percent. The number of people 125 years of age or older has increased by 32,000 percent. The number of people 130 years of age or older has increased by 64,000 percent. The number of people 135 years of age or older has increased by 128,000 percent. The number of people 140 years of age or older has increased by 256,000 percent. The number of people 145 years of age or older has increased by 512,000 percent. The number of people 150 years of age or older has increased by 1,024,000 percent. The number of people 155 years of age or older has increased by 2,048,000 percent. The number of people 160 years of age or older has increased by 4,096,000 percent. The number of people 165 years of age or older has increased by 8,192,000 percent. The number of people 170 years of age or older has increased by 16,384,000 percent. The number of people 175 years of age or older has increased by 32,768,000 percent. The number of people 180 years of age or older has increased by 65,536,000 percent. The number of people 185 years of age or older has increased by 131,072,000 percent. The number of people 190 years of age or older has increased by 262,144,000 percent. The number of people 195 years of age or older has increased by 524,288,000 percent. The number of people 200 years of age or older has increased by 1,048,576,000 percent. The number of people 205 years of age or older has increased by 2,097,152,000 percent. The number of people 210 years of age or older has increased by 4,194,304,000 percent. The number of people 215 years of age or older has increased by 8,388,608,000 percent. The number of people 220 years of age or older has increased by 16,777,216,000 percent. The number of people 225 years of age or older has increased by 33,554,432,000 percent. The number of people 230 years of age or older has increased by 67,108,864,000 percent. The number of people 235 years of age or older has increased by 134,217,728,000 percent. The number of people 240 years of age or older has increased by 268,435,456,000 percent. The number of people 245 years of age or older has increased by 536,870,912,000 percent. The number of people 250 years of age or older has increased by 1,073,741,824,000 percent. The number of people 255 years of age or older has increased by 2,147,483,648,000 percent. The number of people 260 years of age or older has increased by 4,294,967,296,000 percent. The number of people 265 years of age or older has increased by 8,589,934,592,000 percent. The number of people 270 years of age or older has increased by 17,179,869,184,000 percent. The number of people 275 years of age or older has increased by 34,359,738,368,000 percent. The number of people 280 years of age or older has increased by 68,719,476,736,000 percent. The number of people 285 years of age or older has increased by 137,438,953,472,000 percent. The number of people 290 years of age or older has increased by 274,877,906,944,000 percent. The number of people 295 years of age or older has increased by 549,755,813,888,000 percent. The number of people 300 years of age or older has increased by 1,099,511,627,776,000 percent. The number of people 305 years of age or older has increased by 2,199,023,255,552,000 percent. The number of people 310 years of age or older has increased by 4,398,046,511,104,000 percent. The number of people 315 years of age or older has increased by 8,796,093,022,208,000 percent. The number of people 320 years of age or older has increased by 17,592,186,044,416,000 percent. The number of people 325 years of age or older has increased by 35,184,372,088,832,000 percent. The number of people 330 years of age or older has increased by 70,368,744,177,664,000 percent. The number of people 335 years of age or older has increased by 140,737,488,355,328,000 percent. The number of people 340 years of age or older has increased by 281,474,976,710,656,000 percent. The number of people 345 years of age or older has increased by 562,949,953,421,312,000 percent. The number of people 350 years of age or older has increased by 1,125,899,906,842,624,000 percent. The number of people 355 years of age or older has increased by 2,251,799,813,685,248,000 percent. The number of people 360 years of age or older has increased by 4,503,599,627,370,496,000 percent. The number of people 365 years of age or older has increased by 9,007,199,254,740,992,000 percent. The number of people 370 years of age or older has increased by 18,014,398,509,481,984,000 percent. The number of people 375 years of age or older has increased by 36,028,797,018,963,968,000 percent. The number of people 380 years of age or older has increased by 72,057,594,037,927,936,000 percent. The number of people 385 years of age or older has increased by 144,115,188,075,855,872,000 percent. The number of people 390 years of age or older has increased by 288,230,376,151,711,744,000 percent. The number of people 395 years of age or older has increased by 576,460,752,303,423,488,000 percent. The number of people 400 years of age or older has increased by 1,152,921,504,606,846,976,000 percent. The number of people 405 years of age or older has increased by 2,305,843,009,213,693,952,000 percent. The number of people 410 years of age or older has increased by 4,611,686,018,427,387,904,000 percent. The number of people 415 years of age or older has increased by 9,223,372,036,854,775,808,000 percent. The number of people 420 years of age or older has increased by 18,446,744,073,709,551,616,000 percent. The number of people 425 years of age or older has increased by 36,893,488,147,419,103,232,000 percent. The number of people 430 years of age or older has increased by 73,786,976,294,838,206,464,000 percent. The number of people 435 years of age or older has increased by 147,573,952,589,676,412,928,000 percent. The number of people 440 years of age or older has increased by 295,147,905,179,352,825,856,000 percent. The number of people 445 years of age or older has increased by 590,295,810,358,705,651,712,000 percent. The number of people 450 years of age or older has increased by 1,180,591,620,717,411,303,424,000 percent. The number of people 455 years of age or older has increased by 2,361,183,241,434,822,606,848,000 percent. The number of people 460 years of age or older has increased by 4,722,366,482,869,645,213,696,000 percent. The number of people 465 years of age or older has increased by 9,444,732,965,739,290,427,392,000 percent. The number of people 470 years of age or older has increased by 18,889,465,931,478,580,854,784,000 percent. The number of people 475 years of age or older has increased by 37,778,931,862,957,161,709,568,000 percent. The number of people 480 years of age or older has increased by 75,557,863,725,914,323,419,136,000 percent. The number of people 485 years of age or older has increased by 151,115,727,451,828,646,838,272,000 percent. The number of people 490 years of age or older has increased by 302,231,454,903,657,293,676,544,000 percent. The number of people 495 years of age or older has increased by 604,462,909,807,314,587,353,088,000 percent. The number of people 500 years of age or older has increased by 1,208,925,819,614,629,174,706,176,000 percent. The number of people 505 years of age or older has increased by 2,417,851,639,229,258,349,412,352,000 percent. The number of people 510 years of age or older has increased by 4,835,703,278,458,516,698,824,704,000 percent. The number of people 515 years of age or older has increased by 9,671,406,556,917,033,397,649,408,000 percent. The number of people 520 years of age or older has increased by 19,342,813,113,834,066,795,298,816,000 percent. The number of people 525 years of age or older has increased by 38,685,626,227,668,133,590,597,632,000 percent. The number of people 530 years of age or older has increased by 77,371,252,455,336,267,181,195,264,000 percent. The number of people 535 years of age or older has increased by 154,742,504,910,672,534,362,390,528,000 percent. The number of people 540 years of age or older has increased by 309,485,009,821,345,068,724,781,056,000 percent. The number of people 545 years of age or older has increased by 618,970,019,642,690,137,449,562,112,000 percent. The number of people 550 years of age or older has increased by 1,237,940,039,285,380,274,899,124,224,000 percent. The number of people 555 years of age or older has increased by 2,475,880,078,570,760,549,798,248,448,000 percent. The number of people 560 years of age or older has increased by 4,951,760,157,141,521,099,596,496,896,000 percent. The number of people 565 years of age or older has increased by 9,903,520,314,283,042,199,193,993,792,000 percent. The number of people 570 years of age or older has increased by 19,807,040,628,566,084,398,387,987,584,000 percent. The number of people 575 years of age or older has increased

- Feathering** An ETCHING technique for BITING only certain areas of a metal plate. Drops of acid are placed on areas of the plate and moved about with a feather or fine brush to achieve varying degrees of bite.
- Graphic Arts** "The graphic arts were once defined as the fine arts of drawing, painting, engraving, etching, etc., but the term has come to mean engraving and illustration in their various forms. There grew up an opposition, particularly strong during the nineteenth century between the specialist engravers, who were masters of technique and craftsmanship, on the one hand and on the other hand the artist-engravers who used graphic processes, often without specialized training in craftsmanship, as one medium among others for artistic expression. It was not until near the end of the nineteenth century that the artistic value of graphic work by original artists became the subject of renewed appreciation among critics, connoisseurs and . . . the general public . . . A lifetime of apprenticeship in the minutiae of craftsmanship is no longer considered necessary among artists . . ." ⁹⁴
- Gravure** A French term for ENGRAVING. Refers to all incised (INTAGLIO) techniques. Sometimes refers to a process by which the PROOFS are pulled on dry paper (see ETCHING).
- Ground** An acid-resistant covering which protects the etching plate. The image is incised into the ground and then immersed in an acid bath for BITING. Grounds most commonly consist of two parts asphaltum, two parts beeswax, and one part powdered resin.
- Impression** A print taken from an inked plate, block or stone.
- India Paper** The thinnest paper that is sufficiently strong and opaque for printing. The paper often used in Bibles.

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- Intaglio** An Italian term including all the metal-plate ENGRAVING and ETCHING processes in which the printing areas are recessed or incised.
- Japan Proofs** PROOFS on Japanese paper or Papier Japon, also called Japon, Japon Super Nacré and Japon Nacré, a warm-toned Dutch paper of a fine, silky, translucent quality well-suited to delicate line etchings. "As is the usual custom of modern etchers, first impressions were taken upon special kinds of paper, in various states of progress, and these early states are, many of them, very rare."⁹⁵
- Liber Studiorum** A book of studies.
- Mezzotint** A relief printing technique which is often combined with INTAGLIO techniques in which the entire surface of the plate is heavily abraded with a rocker. The areas to be white in the image are rubbed with a burnisher. Thus, the whites are extracted from the blacks, rather than vice-versa as is the case with etching, drypoint, etc. Also called manière noire.
- Mordant** A French term meaning "biting." The acid mixture used to eat away the lines, dots, etc. of INTAGLIO techniques. The mordants most commonly used are dilute solutions of nitric acid (aqua-fortis) and hydrochloric acid. Smillie's bath refers to a solution of hydrochloric acid and potassium chlorate. A highly concentrated mordant, it is used especially for aquatint. The term is probably derived from J. D. Smillie and his involvement with the New York Etching Club.
- Original Print** A print made by a recognized graphic-arts process in which the artist has created the master image on the printing surface which is of a temporary nature. The artist has pulled the print himself, has supervised the production of the print himself, or has otherwise approved of the end result. An original print is distinguished from mechanical or photographic reproductions

Figure 1. The effect of the concentration of the *Agrobacterium* suspension on the transformation efficiency of *Agrobacterium* strains.

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

2. Once the problem is identified, the next step is to define the objectives and goals of the project. This helps to clarify what needs to be achieved and provides a clear direction for the work.

3. The third step is to develop a plan or strategy to address the problem. This involves breaking down the problem into smaller, manageable tasks and determining the resources needed to complete them.

4. The fourth step is to implement the plan. This involves putting the strategy into action and monitoring progress to ensure that the objectives are being met.

5. The final step is to evaluate the results of the project. This involves assessing the outcomes against the objectives and identifying any areas for improvement or further action.

[illegible]

The following is a list of the names of the persons who have been appointed to the various positions in the various departments of the Government of the State of New York, for the year 1900:

The following is a list of the names of the persons who have been appointed to the various positions in the various departments of the Government of the State of New York, for the year 1900:

such as photogravure and offset lithography. An original print may or may not be signed and it may or may not be numbered. The concept of "early" and "late" IMPRESSIONS usurps the importance of numbered editions in older prints.

Painter-Etcher

Generally, an artist who works in the etching medium. For a full discussion and comparison to REPRODUCTIVE ETCHER see pp.36-40.

Papier de Chine

A thin, strong paper made of bamboo shoots and other vegetable matter, generally of Oriental fabrication. Well-suited to fine-line etching.

Photoengraving

A commercial relief printing process in which a photographic negative of the original to be reproduced, either line-cut or half-tone, is printed on a metal plate, the image in the positive is blocked out with an acid-resist material and the plate is bitten as in the ETCHING process. This method differs from PHOTOGRAVURE only in the relief method necessary to print the plate (rather than an INTAGLIO method). Compare to ORIGINAL PRINT.

Photogravure

A commercial INTAGLIO printing process noted for its high-quality reproduction of half-tones and color reproduction. The printing surface is either a flat copper plate or a copper-covered cylinder (Rotogravure). The original to be reproduced is photographed through a finely cross-ruled screen onto a sensitized copper plate, breaking up the photographic image into units. The image in the negative is blocked out with acid-resist material and the plate is bitten. The inking and printing processes are essentially those employed for printing an ETCHING. Characteristics of a photogravure may include plate marks, slightly raised lines and a grainy texture similar to AQUATINT under magnification.

Picturesque

A term originating from the Italian, pittoresco, meaning "after the manner of painters." The term is used to describe subject matter which is neither beautiful nor sublime, yet "suitable for painting."⁹⁶ The picturesque subject often incorporates roughness and sudden variation joined to irregularities, as well as a use of abstract color. Picturesque subjects include: gnarled trees, sandy banks, water and windmills, rough heaths, rustic bridges, stumps and logs, hovels, unkempt persons, and shaggy animals. Picturesque tendencies in England culminated in the work of Constable and Turner; in France, in the work of the Barbizon painters.

Process

Referring to mechanical or photographic engraving. Sometimes meaning technique or medium. See PHOTOENGRAVING and PHOTOGRAVURE.

Proof

An IMPRESSION taken from an inked plate, block, stone or glass to determine its state. Also, any print.

Remarque

Small sketches or "trials" drawn into the margins of a print. Such drawings may be executed on the original plate or may later be added to the individual impressions in pencil or crayon. Originally, the artist made a remarque to aid in making corrections in the main image or to test the acid bath before immersing the whole plate. Such remarques were usually removed with a burnisher before the final edition of the plate was printed. During the nineteenth century, however, remarques of small details related to the subject of the main image were often intentionally etched and left on the plate, especially in prints of landscapes and seascapes. The practice became highly commercialized. See Figure 7.

Reproductive Etcher

Generally, a craftsman who uses the ENGRAVING or ETCHING medium to reproduce original works, usually paintings, often heavily dependent upon tonal techniques. For a full discussion and comparison to PAINTER-ETCHER see pp. 36-40.

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Retroussage

A French term referring to the practice of dragging ink up from the incised lines of an ETCHING plate and depositing it on the printing surface. The resultant effect ranges from a thin veil of ink which serves to soften contrasts to actually drawing on the plate with the ink (see Figure 10.). The technique may also be used to create highlights by removing ink from certain areas. Retroussage is also called tinting or pumping and includes the practice of blotting the plate with balls of cotton (veils). It was to retroussage Van Renssealer referred when she wrote of "artificial printing."⁵⁸ Because retroussage also tends to conceal in the prints slight defects that may be in the plate, such as those caused by foul biting, some purists do not approve of the technique. The practice of retroussage was commercially popular in the nineteenth and early twentieth centuries.

Roulette

An instrument with a small, sharply ridged, revolving cylinder at the end of a handle used in INTAGLIO media in making tonal areas in the metal plate.

Soft Ground

An ETCHING process in which tallow is added to the GROUND covering the metal plate. The ground remains semi-soft and a variety of textures may be impressed into it before BITING. The effect is often that of a crayon drawing or lithograph.

Steel-facing

The coating of an etched plate with nickel or chromium, not steel, to prolong its printing life in long runs such as for book illustrations. Commonly, a loss of detail and nuance was observed in steel-faced plates, especially steel-faced DRYPOINTS.

Stipple

The use of small dots or flecks in ENGRAVINGS and ETCHINGS made by a graver, etching needle, or ROULETTE wheel to produce tonal areas in the metal plate.

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Vellum

Strictly, parchment made from the skin of calves and kids. Generally, any heavy, high grade paper.

Several of the preceding definitions are based upon citations in A Dictionary of Art Terms and Techniques by Ralph Mayer (New York: Thomas Y. Crowell Co., 1969; Apollo Edition 1975).

1. The first of these is the fact that the
the system is not a simple one, and that it is
not possible to find a single formula which
will describe the behavior of the system in all
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the system is not a simple one, and that it is
not possible to find a single formula which
will describe the behavior of the system in all
cases.

FOOTNOTES

¹Ruysdael, Van Goyen, Hobbema, Ostade and Cuyp.

²Joseph Maberly, The Print Collector: An Introduction to the Knowledge Necessary for Forming a Collection of Ancient Prints, original edition 1844, ed. Robert Hoe, Jr. (New York: Dodd, Mead & Co., 1880), p.262.

³For more on this see Robert Flynn Johnson, ed., American Prints 1870-1950 (Baltimore Museum of Art, 1976), p.1 and Patricia C. F. Mandel, "A Look at the New York Etching Club," Imprint, April 1979, p.31.

⁴Karen F. Beall, ed., American Prints in the Library of Congress: A Catalog of the Collection (Charlottesville: University Press of Virginia, 1975), p.ix.

⁵Sylvester Rosa Koehler, Etching (New York: Cassell & Co., Ltd., 1885), p.156.

⁶The story goes that in 1790 Wright attended Washington's church on a Sunday and positioned himself in a pew affording him the best advantage of Washington's profile and made the sketch for his etching during the services.

⁷Koehler, p.157.

⁸Blanc was an enthusiastic supporter of the etching revival. He had begun his studies as an engraver, but abandoned them for etching which he also abandoned to become a writer. Among his works is a catalogue raisonné of Rembrandt for which Flameng made his famous etched copies.

⁹Maxime Lalanne, A Treatise on Etching, trans. S. R. Koehler (Boston: The Page Co., 1880), p.xxx.

¹⁰Minneapolis Institute of Arts and City Art Museum of St. Louis, Prints 1800-1945 (Minneapolis Institute of Arts, March-September, 1966), introduction.

¹¹Mariana Van Rensselaer and Frederick Keppel, American Etchers (New York: Frederick Keppel & Co., 1886), p.12.

¹²Philip Gilbert Hamerton, Etching and Etchers (London: MacMillan & Co., 1868; reprint ed., Boston: Little, Brown and Company, 1902), p.257.

¹³"The Duveneck Boys" included Albert Reinhart, Charles E. Mills, Julian Story, John W. Alexander, John Twachtman, Joseph Decamp, Julius Rolshoven, Oliver D. Grover, Otto Bacher, Charles A. Corwin, John O. Anderson, Henry Rosenberg, Charles H. Freeman, Theodore Wendel, Louis Ritter, Ross Turner, Harper Pennington, Charles Forbes and George E. Hopkins.

¹⁴Bacher must have begun to etch before leaving Munich, see p.27.

¹⁵Van Rensselaer and Keppel, p.12.

¹⁶Frank Weitenkampf, How to Appreciate Prints (New York: Moffat, Yard & Co., 1909), p.45.

¹⁷Van Rensselaer and Keppel, p.12.

¹⁸For a full chronology of events see p.70.

¹⁹Koehler, p.160.

²⁰Van Rensselaer and Keppel, p.12.

²¹Hamerton, p.142.

²²Van Rensselaer and Keppel, p.13.

²³Arthur M. Hind, A History of Engraving & Etching from the 15th Century to the Year 1914 (New York: Houghton, Mifflin Co., 1923; 3rd ed., revised, New York: Dover Publications, Inc., 1963), p.325.

²⁴Joseph Pennell, Etchers and Etching (New York: The MacMillan Co., 1924), p.29.

²⁵See Appendix B.

²⁶Hamerton paraphrased according to Van Rensselaer and Keppel, p.13.

²⁷Museum of Fine Arts, Boston, Exhibition of the Work of the Women Etchers of America (Museum of Fine Arts, Boston, November 1-December 31, 1887), p.3.

²⁸Ibid., p.4.

²⁹Van Rensselaer and Keppel, p.18.

³⁰For more on Cassatt see p.42.

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³¹Because of the large number of impressions needed for inclusion in the Review, the copper plates for these etchings had to be electro-plated with steel. The procedure must have been distasteful for Koehler who enjoyed discerning between early and late impressions as steel-facing renders the timing of printing meaningless.

³²There could be had "vellum" proof sets for \$100, "satin" proofs for \$50, Japan proofs for \$35, and regular impressions on "etching paper" for \$12.50, remarques not included.

³³Hamerton, p.ix.

³⁴Hans W. Singer and William Strang, Etching, Engraving and the Other Methods of Printing Pictures (London: Kegan Paul, Trench, Trubner & Co., Ltd., 1897), p.viii.

³⁵Frederick Keppel & Co., 4 E. 39th St., New York, New York, 1911-1912.

³⁶Bruce St. John, ed., John Sloan's New York Scene (New York: Harper & Row, 1965), p.25.

³⁷J. R. W. Hitchcock, Etching in America (New York: White, Stokes & Allen, 1886), p.60.

³⁸Art & Commerce: American Prints of the Nineteenth Century (Museum of Fine Arts, Boston, May 8-10, 1975; Charlottesville: University Press of Virginia, 1975), p.50.

³⁹Pennell, p.299.

⁴⁰Peter Bermingham, American Art in the Barbizon Mood, Introduction by Joshua C. Taylor (Washington, DC: Smithsonian Institution Press, 1975), p.9.

⁴¹John Wilmerding, "American Light: The Luminist Movement, 1850-1875," The Magazine Antiques, April 1980, p.851.

⁴²Koehler, p.159.

⁴³Van Rensselaer, "Picturesque New York," Century Magazine, December 1892 as quoted in Francine Tyler, The First American Painter-Etchers (New York: Pratt Graphics Center, October 13-November 10, 1979), no page.

⁴⁴S. R. Koehler, Exhibition of American Etchings (Museum of Fine Arts, Boston, 1881), as quoted in Tyler.

⁴⁵Pennell, p.219.

⁴⁶Koehler, Etching, p.153.

1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that proper record-keeping is essential for transparency and accountability, particularly in financial matters. The text suggests that organizations should implement robust systems to track every aspect of their operations, from procurement to sales.

2. The second part of the document addresses the challenges of data management in a rapidly changing environment. It highlights the need for flexible and scalable solutions that can adapt to new technologies and data sources. The author argues that organizations must invest in training and development to ensure their workforce is equipped to handle complex data sets and analyze them effectively.

3. The third part of the document focuses on the importance of collaboration and communication in achieving organizational goals. It stresses that no single department or individual can succeed in isolation. Instead, it advocates for a culture of open communication and teamwork, where information flows freely across all levels of the organization. The text also mentions the role of leadership in fostering this collaborative environment.

4. The fourth part of the document discusses the impact of external factors on organizational performance. It notes that organizations must stay vigilant about market trends, regulatory changes, and competitive threats. The author suggests that proactive risk management and strategic planning are crucial for navigating these uncertainties and ensuring long-term success.

5. The fifth part of the document explores the role of innovation in driving growth and differentiation. It encourages organizations to embrace new ideas and technologies, even if they seem risky or unproven. The text argues that innovation is not just a buzzword but a necessary component of staying relevant in a competitive market. It also mentions the importance of protecting intellectual property and fostering a culture of innovation.

6. The sixth part of the document discusses the importance of sustainability and social responsibility in modern business. It argues that organizations have a duty to their stakeholders beyond just maximizing profits. This includes environmental stewardship, ethical sourcing, and community engagement. The text suggests that sustainable practices can lead to long-term cost savings and enhanced brand reputation.

7. The seventh part of the document focuses on the importance of talent management and employee engagement. It stresses that organizations must attract, develop, and retain top talent to maintain a competitive edge. The author suggests that offering competitive compensation, providing opportunities for growth, and creating a positive work environment are key to achieving these goals.

8. The eighth part of the document discusses the importance of continuous improvement and learning. It argues that organizations should regularly evaluate their processes and performance, and be willing to make changes when necessary. The text suggests that a growth mindset and a focus on learning from both successes and failures are essential for long-term success.

9. The final part of the document provides a summary of the key points discussed and offers some concluding thoughts. It reiterates the importance of a holistic approach to business management, where all these factors are considered and integrated into a cohesive strategy. The author ends with a call to action, encouraging organizations to embrace change and strive for excellence in everything they do.

⁴⁷ Carl Zigrosser, The Artist in America: Twenty-Four Close-Ups of Contemporary Printmakers (New York: Alfred A. Knopf, 1942), pp.27-28.

⁴⁸ John Taylor Arms, Handbook of Print Making and Print Makers (New York: The MacMillan Co., 1934), p.6.

⁴⁹ Pennell, p.277.

⁵⁰ Albert Rouiller Art Galleries, privately published pamphlet, Chicago, 1902-1903, p.5.

⁵¹ Adelyn D. Breeskin, Mary Cassatt: Pastels and Color Prints (Washington DC: Smithsonian Institution, National Collection of Fine Arts, 1978), p.19.

⁵² Jules Dupre as quoted in Van Rensselaer and Keppel, p.9.

⁵³ Koehler, Etching, p.159.

⁵⁴ Albert Rouiller Art Galleries, p.5.

⁵⁵ Minneapolis Institute of Arts and City Art Museum of St. Louis, introduction.

⁵⁶ Art Students League of New York, One Hundred Prints by 100 Artists of the Art Students League of New York, 1875-1975. Foreword by Judith Goldman (Art Students League of New York at Associated American Artists, April 22-May 17, 1975), p.17.

⁵⁷ Hitchcock, pp.14-15.

⁵⁸ Van Rensselaer and Keppel, pp.6-7. In the notes to the exhibition, Etching as a Painter's Medium in the 1880s by James E. Spears (Washington, DC: Smithsonian Institution, July, 1974) it is stated Van Rensselaer wrote disparagingly about tonal values in etchings through the manipulation of the wipe. The source cited is an article by Van Rensselaer in a Century Magazine of 1883. The text for American Etchers was reprinted from the above article in 1886 and in this version Van Rensselaer's use of the terms, artificial printing and frank etching, seems to offer no hint of disparagement toward the former. Either Van Rensselaer has re-evaluated her opinion and rewritten certain passages of the original or there is interpretive confusion.

⁵⁹ Hamerton paraphrased in Hitchcock, p.65.

⁶⁰ Koehler, Etching, p.159.

⁶¹ Weitenkampf, p.12.

⁶² Hitchcock, p.65.

⁶³ Ibid., p.40.

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- ⁶⁴Ibid., p.4.
- ⁶⁵Hamerton, p.138.
- ⁶⁶Koehler, Etching, p.179.
- ⁶⁷Pennell, p.300.
- ⁶⁸Frank Weitenkampf, American Graphic Art (New York: The MacMillan Co., 1912; 2nd ed., 1924), p.23.
- ⁶⁹For a full chronology of events see p.73.
- ⁷⁰Anselmo Carini, Associate Curator of Prints and Drawings, The Art Institute of Chicago, interview held in Chicago, Illinois, February, 1980.
- ⁷¹Unidentified document from the New York Public Library.
- ⁷²1931 - Society of American Etchers; 1947 - Society of American Etchers, Gravers, Lithographers and Woodcutters, Inc.; 1952 - Society of American Graphic Artists, its present name.
- ⁷³Society of American Graphic Artists, SAGA: Fifty Years of American Printmaking (Associated American Artists Gallery, May 5-30, 1969), no page.
- ⁷⁴Painter-Gravers of America, Painter-Gravers of America, 1917. Unidentified document from the New York Public Library.
- ⁷⁵Other founding members were: Albert Sterner, Leo Mielziner, Frank W. Benson, George Elmer Browne, Arthur S. Corey, H. K. Eby, S. Anthony Guarino, Eugene Higgins, Lester G. Hornby, Earl Horter, Allen Lewis, Huc. Mazelet Luquiens, Mahonri Young, Ernest Haskell, Howard McCormick, F. Luis Mora, C. F. W. Mielatz, Bror Nordfeldt, Henry Raleigh, Boardman Robinson, Ernest D. Roth, Rudolph Ruzicka, Maurice Stern, Harry Townsend and J. Alden Weir.
- ⁷⁶Prints and Visual Communication and How Prints Look.
- ⁷⁷Pennell, p.xi.
- ⁷⁸Ibid., p.viii.
- ⁷⁹Ibid.
- ⁸⁰James Laver, A History of British and American Etching (New York: Dodd, Mead & Co., 1929), p.vii.
- ⁸¹Ibid., p.124.
- ⁸²Pennell, p.24.
- ⁸³Weitenkampf, American Graphic Art, p.40

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⁸⁴Royal Cortissoz, Catalogue of the Etchings and Drypoints of Childe Hassam, N.A. (New York and London: Charles Scribner's Sons, 1925), p.v.

⁸⁵Ibid.

⁸⁶Albert Rouiller's Art Galleries, Illustrated Catalogue of Etchings by American Artists, biographical sketches by H. H. Tolerton (Chicago: Albert Rouiller's Art Galleries, 1913), p.83.

⁸⁷Pennell, p.xv.

⁸⁸Weitenkampf, American Graphic Art, p.41.

⁸⁹Prints, "Contemporary American Etching," (November 1930), p.50.

⁹⁰Koehler, Etching, p.153.

⁹¹Gabriel P. Weisberg and Ronnie L. Zakon, Between Past and Present: French, English and American Etching 1850-1950 (Cleveland Museum of Art, 1977), Preface.

⁹²Weitenkampf, American Graphic Art, p.8.

⁹³Wilmerding, p.851.

⁹⁴Harold Osborne, ed., Oxford Companion to Art (Oxford University Press, 1970), pp.500-1.

⁹⁵Maberly, p.285.

⁹⁶Uvedale Price as quoted in Christopher Hussey, The Picturesque: Studies in a Point of View, reprint ed. (London: Frank Cass & Co., Ltd., 1967), p.51.

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where $f(x)$ is a continuous function on the interval $[0, 1]$.

2. In the second part, we consider the problem of finding the maximum value of the function $f(x)$ on the interval $[0, 1]$.

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1. The first part of the report is a general introduction to the project. It describes the purpose of the study and the objectives that were set at the beginning. It also mentions the scope of the work and the limitations that were encountered.

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