Before the New Bauhaus: From Industrial Drawing to Art and Design Education in Chicago

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Footnotes begin on page 58.

In his recent book, *Art Subjects: Making Artists in the American University*, Howard Singerman describes as ironic the fact that when the design curriculum developed at the German Bauhaus in the 1920s was assimilated in the United States some fifteen years later it was as instruction in "fine arts."[1] The irony, however, is both less and more than Singerman's observation allows. Less, I will argue, because distinctions between what counted as instruction in design, or industrial arts, and instruction in fine arts in the United States never have been clear-cut. But also more, because it is exactly the kind of statement that makes it difficult for us to reconstruct the tangled trajectories of art and design education in the United States. For much of the twentieth century, the arts were made to simultaneously serve a variety of purposes (and political positions) in American education—at once vocational training *and* a source of spiritual uplift; the basis of progressive educational reform *and* a vehicle for social control. This is because two powerful cultural tendencies converged in the United States during the last decades of the nineteenth century: the pragmatic interdependence of art and industry established in the immediate aftermath of the Civil War (as business leaders advocated mass instruction in art as a way of enhancing the country's competitiveness in emerging world markets), and the utopian focus on art as an arena of social improvement (as conservatives and progressive reformers alike reacted to the excesses of capitalist competition). Modern American art instruction emerged out of these contradictions, as links between the acquisition of manual or industrial skills and the development of the intellectual or moral faculties were forged in public understanding.

Nowhere are these complications closer to the surface than in the history of art and design education in Chicago. Long before it became famous for the renewal and transformation of the Bauhaus idiom in its architecture and design of the 1940s and 1950s, there was the precedent set in Chicago by the discreet departure of many painters and sculptors even as architects and engineers were descending upon the city following the Great Fire in 1871. Chicago was home to a huge printing industry and turbulent labor politics in the late nineteenth century—two features key to its development as a center for art instruction. Not only did the burgeoning print culture of the late-nineteenth century require skilled renderers (in the age before

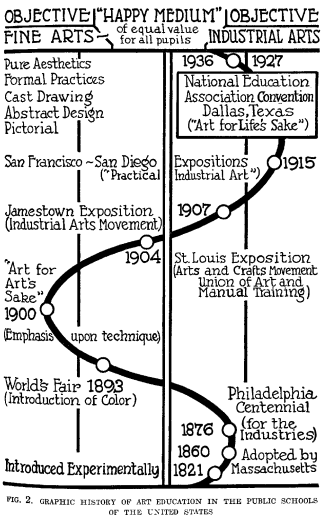
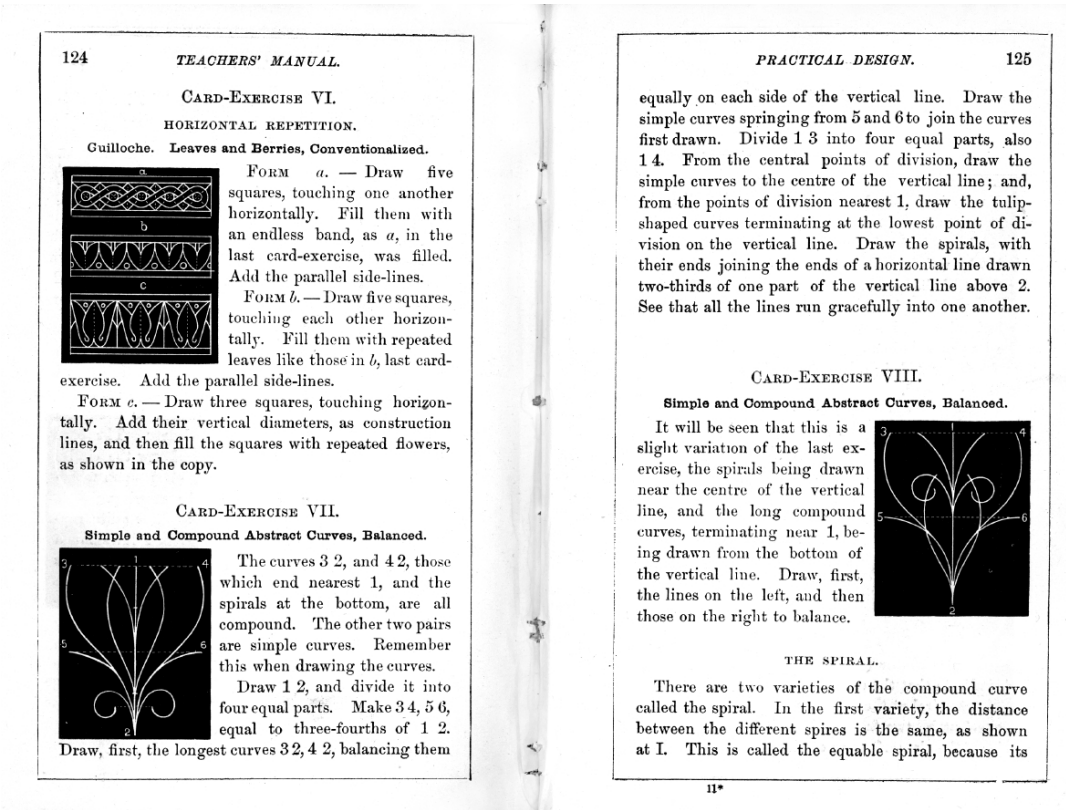


Figure 1
William G. Whitford, "Graphic History of Art Education in the Public Schools of the United States," *An Introduction to Art Education,* 1929.

photo-mechanical reproduction), but also, as Ellen Mazur Thomson has demonstrated, the profession of graphic designer developed in America alongside the industrialization of printing.[2] At the same time, civic leaders were responding to the tensions produced by Chicago's growing immigrant population with an aestheticism promoted by humble settlement houses and high-minded institutions of fine arts alike.[3] In this context, two cultural institutions today unequivocally associated with "fine arts" idealism, the Art Institute of Chicago and the University of Chicago, were in fact early pioneers in industrial arts education—training that was responsive to the needs of industry and delivered, in the case of University of Chicago, within the context of a general, or liberal, arts education.

There is no irony here, however. The needs of industry, real or imagined, always played the lead role in American art pedagogy, as a close look at the chart prepared in 1929 by University of Chicago art educator William Whitford suggests. (fig. 1) Although traced in a line William Hogarth would have loved (and which distorts somewhat its legibility), Whitford's graphic history of art education in American public schools (part of a text Whitford prepared as a general introduction to the field) allots but a scant eleven out of the 108 years between 1821 and 1929 to the pursuit of fine arts objectives.[4] Even the years 1893–1904 (between, in other words, the World's Columbian Exposition held in Chicago and the St. Louis Exposition) may be understood as having a strong industrial inflection. As I demonstrate below, a relentless drive towards standardization of methods (based, like American techniques of mass production, on a belief in the interchangeability of art's parts), resulted in highly technical systems of teaching that made the so-called principles of design, or composition, fundamental. This notion, that teaching composition was essential for an integrated education in fine and industrial arts, helped to shape the development of two venerable Chicago schools as they transformed themselves from bastions of Arts and Crafts-inspired progressivism in the 1890s into laboratories for efficient education by the 1920s. Two figures virtually unknown today emerged as central to this process: George Eggers, Director of the Art Institute 1916–1921, and Walter Sargent, professor of art at the University of Chicago from 1909 to his death in 1927. In this article, I trace the trajectory of integrated arts education in Chicago, and briefly consider its impact on the well-known survey text, *Gardner's Art Through the Ages* (written in the 1920s by a graduate of the University of Chicago, and based on a course offered to students at the School of the Art Institute). In conclusion, I look at the circumstances under which industrial and fine arts education ceased, for all practical purposes, to be an integrated pursuit.



124 TEACHERS' MANUAL.

CARD-EXERCISE VI.

HORIZONTAL REPETITION.

Guilloche. Leaves and Berries, Conventionalized.

FORM *a*. — Draw five squares, touching one another horizontally. Fill them with an endless band, as *a*, in the last card-exercise, was filled. Add the parallel side-lines.

FORM *b*. — Draw five squares, touching each other horizontally. Fill them with repeated leaves like those in *b*, last card-exercise. Add the parallel side-lines.

FORM *c*. — Draw three squares, touching horizontally. Add their vertical diameters, as construction lines, and then fill the squares with repeated flowers, as shown in the copy.

CARD-EXERCISE VII.

Simple and Compound Abstract Curves, Balanced.

The curves 3 2, and 4 2, those which end nearest 1, and the spirals at the bottom, are all compound. The other two pairs are simple curves. Remember this when drawing the curves.

Draw 1 2, and divide it into four equal parts. Make 3 4, 5 6, equal to three-fourths of 1 2. Draw, first, the longest curves 3 2, 4 2, balancing them

PRACTICAL DESIGN. 125

equally on each side of the vertical line. Draw the simple curves springing from 5 and 6 to join the curves first drawn. Divide 1 3 into four equal parts, also 1 4. From the central points of division, draw the simple curves to the centre of the vertical line; and, from the points of division nearest 1, draw the tulip-shaped curves terminating at the lowest point of division on the vertical line. Draw the spirals, with their ends joining the ends of a horizontal line drawn two-thirds of one part of the vertical line above 2. See that all the lines run gracefully into one another.

CARD-EXERCISE VIII.

Simple and Compound Abstract Curves, Balanced.

It will be seen that this is a slight variation of the last exercise, the spirals being drawn near the centre of the vertical line, and the long compound curves, terminating near 1, being drawn from the bottom of the vertical line. Draw, first, the lines on the left, and then those on the right to balance.

THE SPIRAL.

There are two varieties of the compound curve called the spiral. In the first variety, the distance between the different spires is the same, as shown at I. This is called the equable spiral, because its

11*

Figure 2
Walter Smith, *Teachers Manual for Freehand and Intermediate Drawing,* 1887.

Out of the Ashes

Founded as the Chicago Academy of Fine Arts in 1878 out of the ashes of an older, artist-run organization, the Art Institute of Chicago [AIC] and its School (the name was changed in 1882) was the project of a group of businessmen convinced that arts education was vital to the commercial success of their city. They were not alone in this conviction. In response to concern over the reception of their applied arts at the Great Exhibition of 1851, the British had established the schools and museums known as South Kensington (the nucleus of today's Victoria and Albert Museum).[5] In Massachusetts, the Free Instruction in Drawing Act of 1870 provided a mandate for instruction in industrial or mechanical drawing for any citizen of that state over fifteen years of age. It also established compulsory public school drawing education in the South Kensington style—the flattening of natural forms based on geometric convention (fig. 2) (the state engaged Walter Smith, a graduate of South Kensington National Art Training School and former art master in charge of the branch school at Leeds)—satisfying the desire of prominent local industrialists to provide drawing education for industry by exploiting popular and patriotic belief in drawing's less tangible qualities: that its practice cultivated habits of neatness and accuracy, taste, imagination, and the powers of invention.[6] The new School of the Art Institute of Chicago [SAIC] was equally eclectic, emphasizing the traditionally fine arts offerings of its predecessor (figure drawing, anatomy, etc.)

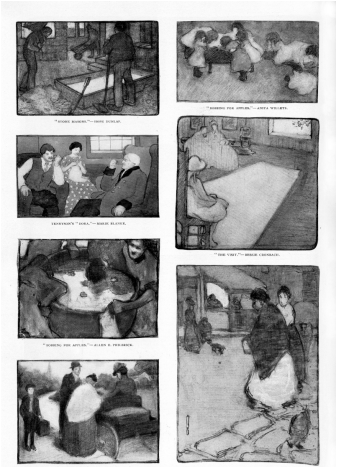


Figure 3
"Work of Composition Classes, Art Institute, Chicago," in E. F. Wagner, "Notes and Queries on Lithography," *The Inland Printer,* January 1902.

while adding a vigorous technical component: Saturday and evening classes in ornamental design, woodcarving, frescoing, mosaic, and stained glass attended throughout the 1880s mainly by men engaged in decorative arts and design and in Chicago's vast commercial lithography industry. Yet the division of the School into elite academy by day and working-class applied arts school by night (and weekend) failed to satisfy for long. Following the embarrassment suffered by the United States over the poor reception of its applied arts at the Paris Exposition of 1889, educational leaders in Chicago and elsewhere began to advocate the "industrial value" of traditional aesthetics.[7] At SAIC, applied arts courses would be fully integrated with the academic day program by 1897, the year that programs in what were described as the "modern arts" of illustration and advertising were introduced as well.[8]

SAIC's first instructor of illustration and advertising was Frederick Richardson, an artist trained at the St. Louis School of Art and in Paris, and an illustrator with the Chicago *Daily News.* Richardson introduced classes in composition, using systematic methods such as memory sketching in which students were asked to challenge their powers of retention by rendering objects without recourse to direct observation. (fig. 3) A particularly dry form of memory sketching, in which mechanical drawings of architectural details and ornamental combinations served as models, long had been part of the practical, South Kensington-based drawing courses taught in British elementary schools. But Richardson was an advocate of the more recent French deployment of memory sketching—a technique intended to foster originality in students' work by encouraging them to distill the essence of their perceptions.[9] Equally modern was his treatment of the "inspired" art of composition as an educable skill. In sharp divergence from the European academic tradition, many American educators believed that abstract laws or principles of art existed which, once stabilized, would not only facilitate the production of art, but raise it to a higher level.[10] Educators and policymakers agreed by the turn-of-the-twentieth century that an education in the principles of design would enhance a young student's appreciation of and, ultimately, ability to produce objects of beauty; the turn to teaching composition was attractive as well to art schools, including SAIC, forced to respond to complaints that their teaching was impractical.[11]

Richardson's better known contemporaries, Arthur Wesley Dow at Pratt Institute (and later Columbia University) and Denman Waldo Ross at Harvard, devised elaborate systems for teaching composition, using diagrammatic exemplars and recipes. Dow, for example, offered practical suggestions based on analyses of Japanese design, and insisted that his study of design would level traditional hierarchies: "Composition," he wrote, "is made the basis of all work in drawing, painting, designing, and modeling—of house decoration and industrial arts—of normal courses and of art training for chil-

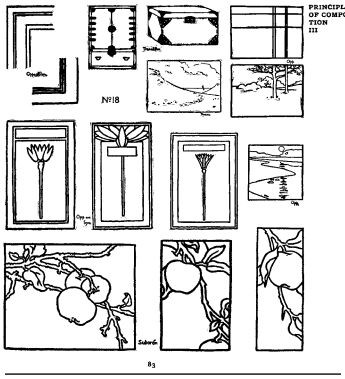


Figure 4 (above)
Arthur Wesley Dow, *Composition,* 1920. Preprinted with the permission of the University of California Press.

Figure 5 (below)
Denman Ross, *A Theory of Pure Design,* 1907.

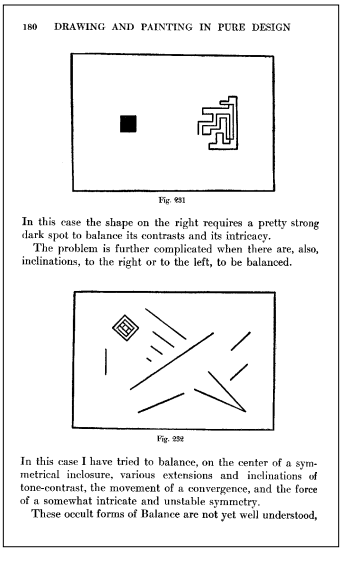

180 DRAWING AND PAINTING IN PURE DESIGN

Fig. 231

In this case the shape on the right requires a pretty strong dark spot to balance its contrasts and its intricacy.

The problem is further complicated when there are, also, inclinations, to the right or to the left, to be balanced.

Fig. 232

In this case I have tried to balance, on the center of a symmetrical inclosure, various extensions and inclinations of tone-contrast, the movement of a convergence, and the force of a somewhat intricate and unstable symmetry.

These occult forms of Balance are not yet well understood,

dren." [12] Through a series of graduated exercises, Dow encouraged students to explore what he called a picture's "line idea"—an intuitive division of the picture plane which was to precede and make possible the subject of representation. "A picture," Dow wrote, "may be said to be in its actuality a pattern of lines. Could the art student have this fact in view at the outset, it would save him much time and anxiety. Nature will not teach him composition." (fig. 4) Dow's synthetic pedagogy emphasized originality and personal choice; it received wide public circulation following the 1899 publication of his textbook *Composition.* Ross's 1907 *A Theory of Pure Design* was, by comparison, a densely mathematical treatise of neo-Platonic precision and mystification.[13] Under Ross's system, it was not intuition but nature's "geometric essence," distilled through scrupulously objective observation, that was to be the true source of all knowledge of design. (fig. 5) In representation, Ross advised, the artist must begin with an idea, the substance of which is science (inspired by observation and modified or verified from nature), the form of which is art. Ross, whose lectures on the theory of design at Harvard captured the attention of a generation of future architects, museum administrators, and art historians in the opening decades of the twentieth century (Roger Fry among them), emphasized studying the past and applying principles derived from such study to present art. His was an attempt to develop a rational, scientific theory: a major preoccupation in Ross's work, for example, was the elaboration of the aesthetics of perception, and the analysis of the interaction of colors.[14]

At SAIC, Richardson's passion for modern methods made him an ardent admirer of avant-garde French painting—Georges Seurat in particular—and he encouraged the same in his students. With the hiring of Richardson, a rift opened between the genteel past of SAIC's day program and the imperatives of a more competitive present. Traditionalists at the School tried to reorganize its program along the lines of the French atelier system in 1903. Yet academic life and antique drawing classes remained restricted to mornings only. Afternoons continued to feature a more progressive fare, including still-life painting, courses which concentrated on drawing geometric forms from solid blocks, composition, illustration, and figure classes for beginners which emphasized sketching and memory practice. Around this core were grouped special departments of decorative designing, normal instruction (teacher training), architecture (taught in tandem with the Armour [later Illinois] Institute of Technology), and evening classes which extended these offerings to part-time and working students.[15] By the fall of 1906, this rupture had been codified in the school's catalogue. That year, SAIC's statement of purpose and description was modified by a division of the faculty into categories designated "eminent and experienced" on the one hand, and representative of "the younger element" on the other (the latter group, significantly, comprised of colleagues in the school's department of illustration—former students of Richardson's who

had studied at SAIC in the late 1890s and early 1900s).[16] SAIC had, in fact, so enthusiastically embraced the latest trends in pedagogy that, upon the death of its renowned figure drawing instructor John Vanderpoel in 1911, Art Institute director William M. R. French was moved to observe that, in line with the trend of the time, the School had become a "modern school of color and composition." [17]

A Modern School

If the proposition that SAIC was a modern school in 1911 strikes today's reader as unlikely at best, it is due largely to anecdotes such as Georgia O'Keeffe's of her disastrous semester as a student of Vanderpoel's "severe art" of figure drawing in 1905, or the many horror stories of Chicago reactions to the Armory Show in 1913. Regarding the latter, it is important to note that the fact that the Armory Show was at AIC at all is telling—after all, the Metropolitan Museum in New York refused it.[18] The case of Vanderpoel and O'Keeffe bears closer scrutiny as well. Despite his reputation as a traditionalist, popular society painter John Vanderpoel's teachings once were recognized as quite innovative. In common with his contemporary Thomas Eakins (who also taught art via the figure exclusively, proclaiming that an education in "pure art" served every student, fine, industrial, and amateur alike), Vanderpoel used principles that have their origin in American craft traditions of pattern and piecework. Both emphasized the geometric construction, weight, and volume of the human figure, with Vanderpoel guiding his students carefully through the principles of figure construction in a series of lectures accompanied by large demonstration drawings.[19] One might as easily say that O'Keeffe, who was converted to a progressive ideal as a student of Arthur Dow follower Alon Bement at the University of Virginia in 1912, narrowly missed becoming a modernist at SAIC: Dow's pedagogy attracted a large following in Chicago after 1900 (he gave a series of lectures in Chicago that year), and his methods were standard practice in the School's normal (teacher training) department by the time O'Keeffe arrived.[20] O'Keeffe's contemporary, Thomas Hart Benton, attended SAIC at practically the same time and acquired there the lifelong interest in abstract patterning that he called his "modern inheritance." [21] Benton's own pedagogy focused on composition as well. His optimistically-entitled essays "The Mechanics of Form Organization" c. 1926–1927, for example, featured a number of schematic illustrations intended to demonstrate "fundamental mechanical" design principles.[22] (fig. 6)

The distance is great, however, between director French's essentially romantic notion of what it meant to be a modern school and the more mechanistic vision about to emerge at SAIC. When French himself died in June 1914, just months before the outbreak of World War I, the coincidence of the two events suggested a motive—and presented an opportunity—to the small but influential faction of original members remaining on the Art Institute's board of

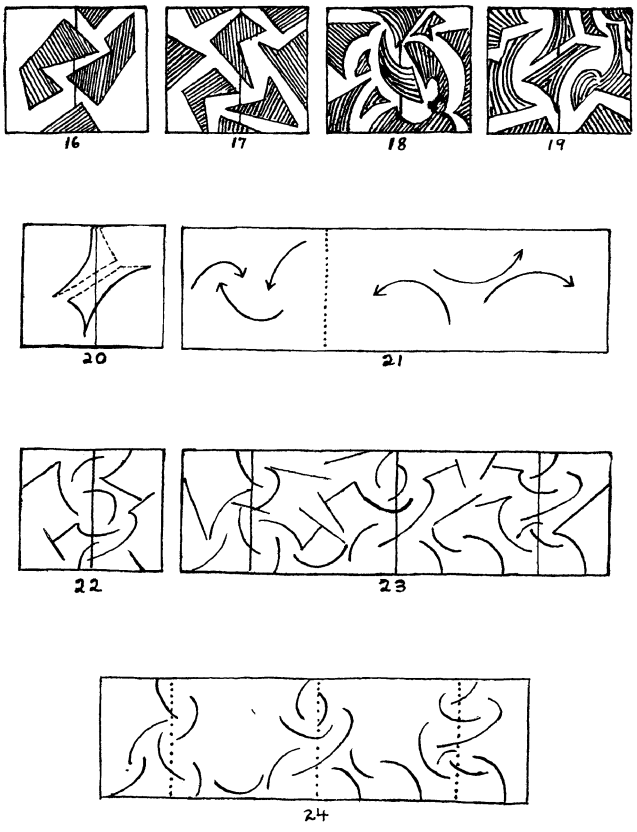
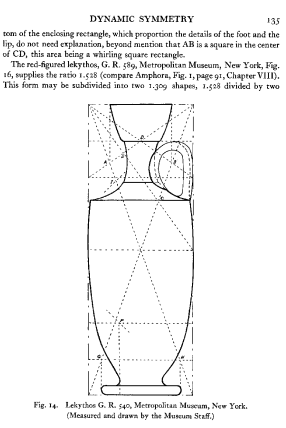


Figure 6
Thomas Hart Benton, illustrations for "Mechanics of Form Organization Part I," *The Arts*, November 1926.

trustees. Newton Carpenter, AIC's secretary since 1881 (and before that instructor of perspective in its school of art), assumed the position of *director pro tem.* He and Charles Hutchinson, president of the board since 1882, shared a vision of the synthesis of art and industry that had taken on renewed urgency with the First World War. Each recently had discussed the changing role of the museum in the *American Magazine of Art*, (formerly *Art and Progress*, it was the organ of the American Federation of Arts, a progressive group co-founded by Hutchinson in 1909).[23] Carpenter immediately made clear his intention to increase the Institute's popular appeal: "The opportunities for greater usefulness were never so apparent as at the present time," he wrote in his annual report of 1915.[24] But he was, at least initially, unable to put his reforms into practice in SAIC's curriculum. Although he convened a new committee on the School—and charged it with the responsibility for updating its course of studies—the conservative committee members refused to act.[25]

Undaunted, Carpenter and Hutchinson focused on hiring a passionate educator—and ally—for AIC's vacant directorship. Although the board deferred consideration of the subject at its January 1916 meeting, by February two candidates, George Eggers and James P. Haney, had emerged. Both were progressive educators. Eggers, who had studied with Arthur Dow at Pratt, had been head of the art department at the Chicago Normal School since 1906



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tom of the enclosing rectangle, which proportion the details of the foot and the lip, do not need explanation, beyond mention that AB is a square in the center of CD, this area being a whirling square rectangle.

The red-figured lekythos, G. R. 540, Metropolitan Museum, New York, Fig. 16, supplies the ratio 1.528 (compare Amphora, Fig. 1, page 91, Chapter VIII). This form may be subdivided into two 1.309 shapes, 1.528 divided by two

Fig. 14. Lekythos G. R. 540, Metropolitan Museum, New York. (Measured and drawn by the Museum Staff.)

Figure 7
Jay Hambidge, *Dynamic Symmetry: The Greek Vase*, 1920.

and was vice-president of two of Chicago's best-known progressive groups—School Arts and the local Arts and Crafts Society.[26] Haney was director of art and manual training in the public schools of the city of New York, and formerly a lecturer in New York University's School of Pedagogy. Again, the board balked, recommending in May only that Eggers be appointed to a newly created office of assistant director. Nevertheless, on August 9, 1916, George William Eggers was elected acting director of the Art Institute of Chicago and its School. A new office, that of Business Manager, was created at the same time, and Newton Carpenter elected to that position. On July 18, 1917, Eggers was elected unanimously to the office of director. He assumed his duties on the first of September.[27]

This unprecedented appointment opened the door for some dramatic changes. Eggers came in with what must have seemed to him to be a mandate to reorganize SAIC. He immediately added two classes—elementary decorative design and elementary picture design—to the courses required of first-year students in the School's core academic program. In fact, teaching composition was crucial at Eggers's SAIC. He made the School an early center for the "scientific" pedagogy that dominated the patriotic second wave of industrial arts education—including a drive to reform the tastes of working- class families—formed in the wake of the First World War: illustrator Jay Hambidge's Dynamic Symmetry.[28] A compositional system based on the mathematical theory of proportion known variously as the logarithmic spiral, the golden section, or the Fibonacci series, the "laws" governing dynamic symmetry's infinitely flexible sequence of diagonals or so-called "whirling triangles," according to Hambidge, had been distilled by the ancient Egyptians and Greeks from their observations of the organic growth of shells and the sequence of leaf distribution in plants, and were the basis of all design in Greek and Egyptian art and architecture (fig. 7).[29] This is not to say that change was accomplished without resistance. Eggers had hoped—but was unable to convince members of the School Committee in 1916—to add four courses, not two, and to hire as their instructor Emma Church of the more vocationally-oriented Chicago School of Normal and Applied Art [CSNAA]. But by May 1918, the makeup of the school committee included several of the more forward-thinking members of AIC's board—Arthur Aldis, Howard Shaw, and Abram Poole—some of whom had been involved with bringing the Armory Show to Chicago in 1913, and all of whom had tried to organize a show of modern German design before the outbreak of war. This progressive faction had managed to reinstate earlier, stalled negotiations between SAIC and Church based on Church's proposal to merge her industrial arts school with SAIC, with herself as its director.[30]

At an emergency meeting of the reconfigured school committee held December 7, 1917, it was announced that Aldis and Shaw would be visiting Church's Chicago School of Normal and Applied

Art immediately. Emma Church, in attendance at the next committee meeting (February 9, 1918), underscored the urgency of her proposal by noting that there were at least two other movements afoot for industrial schools of art in Chicago.[31] Asked by committee members to compare Church's methods to those in place at SAIC, Eggers commented that "the methods of instruction in the academic type of art school, under which head the Art Institute may be classified, as well as certain other important schools in the country, had remained insensible to the development of the science of education which has largely taken place during the past twenty-five years." When Church left the meeting before its adjournment, however, Eggers added that "the observations that she made with regard to the Art Institute school also were observations which had manifested themselves to him, but that he had been advised to give his first attention to the work of the museum during the period in which he was being initiated into the problems of the Art Institute, and therefore had recommended no course of action, though he had spent much time in the school, and formulated his observations in a statement for future presentation." On April 25, 1918, two proposals from Church for merging SAIC and CSNAA were submitted in writing to the School Committee. Eggers submitted his own plan for reorganizing SAIC on April 26th. On April 29th, the board voted to reject Church's proposal. One week later they resolved unanimously to accept Eggers's alternative.[32]

Eggers's pedagogical vision emerged in full force in SAIC's catalogue for 1918–1919, which shows that the new program was based on a division of three parts: an introductory program called the Lower School, which offered basic courses in drawing and design (including color) to all untrained students; a Middle School in which design, normal and commercial art, illustration, and crafts were pursued side-by-side with elementary painting and sculpture; and an Upper School, in which advanced students pursued painting and sculpture in an Atelier system with recognized masters. "This reorganization," Eggers wrote, "recognizes not only the responsibility which the art school owes to American industry, but takes full cognizance of the responsibility of the school to the individual whose vocation must render him a livelihood."[33] The centerpiece of his new plan was the reorganized design department, for which Eggers was able to recruit as head the distinguished modern designer Hermann Rosse, a native of the Netherlands. Emile Rollet of Paris, chief designer for the Star-Peerless Wallpaper Mills, came as visiting instructor of wall coverings and textiles. Finally, Richard Fayerweather Babcock, a renowned poster designer and producer of war posters for the Navy Department, was invited to teach a course in his field. The Scammon Lectures for May 1919, AIC's prestigious series of annual public lectures, were delivered by James Haney, director of art in high schools for the city of New York and an impassioned author of various calls for increased industrial arts education

following World War I (the same Haney AIC had refused for the position of director three years before). His topic was "Art for Use."[34] That spring, Eggers invited a group of local manufacturers, designers, and educators to AIC to meet and talk with Florence Levy of the New York-based Art Alliance of America (publishers of *American Art Annual*). As a result of this meeting, a permanent organization, the Alliance of Art and Industry, was set up in Chicago in September 1919. Reorganized as the American Arts and Industries Society in August 1921, this group was the precursor to the Association of Arts and Industries—best known for bringing László Moholy-Nagy and the New Bauhaus to Chicago in 1937.[35]

The Early History of the University of Chicago

The ideals of progressivism neatly dovetailed with the needs of industry in the early history of the University of Chicago as well. AIC trustees Charles Hutchinson and Martin Ryerson formed the core of the board when the new university opened its doors in 1892 as a modern, comprehensive university with graduate programs, laboratories, seminars, and specialized lectures derived from German models. The reform-minded charge of its first president, William Rainey Harper, to focus on the relationship between industrialism and democracy in the urban setting, attracted a number of faculty interested in the sociological dimension of art and aesthetics.[36] Although the University at first offered neither practical courses in art nor courses in art history, it did make manual training, along with cooking and sewing, the basis of regular instruction for very young children at the experimental school opened by the young John Dewey, professor and head of philosophy and pedagogy in 1895. Dewey's progressive Laboratory School joined forces with the vocationally-oriented Chicago Manual Arts Training School (founded in 1884 by the Commercial Club of Chicago, a business organization whose membership included many of the same individuals involved with both the Art Institute and the University of Chicago) in 1901, under the auspices of the University's new School of Education. When the School of Education became a center for the empirical "science" of education with the arrival of its new head, psychologist Charles Hubbard Judd, in 1909, the stage was set for industrial drawing to emerge as an important practice.

Walter Sargent, director of drawing and manual training for the City of Boston and, before that, Massachusetts state supervisor of drawing, came to Chicago as professor of manual training and art in relation to education the same year as Judd. Sargent had worked closely in Massachusetts with Henry Turner Bailey, the man who gave shape to the optimistic social and psychological goals of the Massachusetts Drawing Act by emphasizing the "industrial" value of nature drawing, drawing from the human figure, and portrait painting (in fact, the two were brothers-in-law).[37] Bailey and Sargent were graduates of the Massachusetts Normal Art School established

Figure 8
Page from Henry Turner Bailey's report, *Sixty-First Annual Report of the Board of Education of the State of Massachusetts... 1896–1897*, 1898.

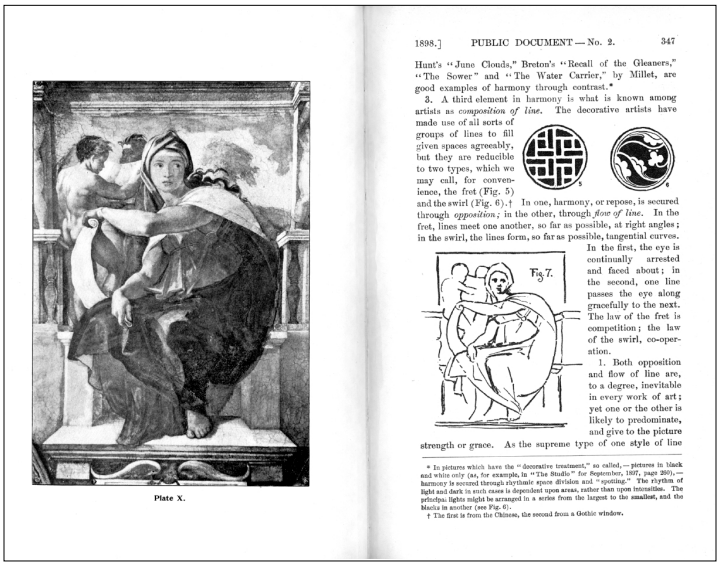


Plate X.

1898.] PUBLIC DOCUMENT — No. 2. 347

Hunt's "June Clouds," Breton's "Recall of the Gleaners," "The Sower" and "The Water Carrier," by Millet, are good examples of harmony through contrast.*

3. A third element in harmony is what is known among artists as *composition of line*. The decorative artists have made use of all sorts of groups of lines to fill given spaces agreeably, but they are reducible to two types, which we may call, for convenience, the fret (Fig. 5) and the swirl (Fig. 6).† In one, harmony, or repose, is secured through *opposition*; in the other, through *flow of line*. In the fret, lines meet one another, so far as possible, at right angles; in the swirl, the lines form, so far as possible, tangential curves.

Fig. 7.

In the first, the eye is continually arrested and faced about; in the second, one line passes the eye along gracefully to the next. The law of the fret is competition; the law of the swirl, co-operation.

1. Both opposition and flow of line are, to a degree, inevitable in every work of art; yet one or the other is likely to predominate, and give to the picture strength or grace. As the supreme type of one style of line

* In pictures which have the "decorative treatment," so called, — pictures in black and white only (as, for example, in "The Studio" for September, 1897, page 260), — harmony is secured through rhythmic space division and "spotting." The rhythm of light and dark in such cases is dependent upon areas, rather than upon intervalles. The principal lights might be arranged in a series from the largest to the smallest, and the Macia in another (see Fig. 4).

† The first is from the Chinese, the second from a Gothic window.

by Walter Smith in 1873 (today's Massachusetts College of Art, this school produced a generation of art educators formed in Smith's image), but rejected the vocational approach of South Kensington after 1889. Their new commitment was to exercises they described as more "developmentally appropriate" for young children, such as sketching from objects in order to immerse the child in a more potent aesthetic experience and to nurture his individuality.[38] They advocated the new picture study as well, along with diagrams explaining composition and suggesting questions to be used by teachers to guide children's explorations of subject and meaning. (fig. 8) The two studied color and composition with Denman Ross at Harvard in 1901, and found in his teachings an especially efficient system for the production of beauty—a democratic system that could, despite its complexity, be implemented by all who chose to follow its precepts closely.

Sargent applied Ross's theories to his principal responsibility at Chicago: formulating a single course of study that would serve both the fine and industrial arts.[39] Composition, he concluded, was the common denominator. Following the 1912 publication of the results of his work as *Fine and Industrial Arts in Elementary Schools* (a book intended to set national standards), Sargent's practical courses in color and composition began to be cross-listed between Chicago's School of Education and its art history department. The art program at Chicago before Sargent's intervention was unremarkable. Specialized art history seminars had been introduced in 1902, taught by faculty whose primary appointments were in disciplines such as archeology and the Semitic languages and literature. Offerings also included, as was typical at the time, courses in "modern" (i.e., Renaissance and after) and American art taught by an artist, George B. Zug, a graduate of the university. Beginning in 1915, however, the University made a commitment to the emerging academic discipline

of art history when it hired the young Richard Offner, a specialist in Florentine painting, to teach its modern sequence. Steeped in the Germanic tradition of psychological aesthetics and formalism, Offner, like Sargent, explored works of art in light of principles understood to govern the artistic enterprise as a whole.[40] With his reconfigured appointment, Sargent's title changed as well to Professor of Fine and Industrial Art in Relation to Education.

Like his colleagues at the Art Institute, Sargent saw the First World War as an opportunity. In a survey of the state-of-art education for the federal government's biennial study in 1918, he observed that:

> Art education related to industries has been prominent in America for many years. It is receiving fresh impetus at present from the prospect that, after the war, the United States will have to depend upon its own resources more than in the past, not only for designers but also for styles of design. A kind of originality must be developed that can produce things which are not only new but fine in quality.[41]

Sargent's expertise in the industrial arts and scientific teaching methods would have brought him, inevitably, to the attention of SAIC. Sure enough, his name appears among the members of AIC's school committee in 1921–1922, and Sargent was invited to teach an educational psychology course in SAIC's normal department that same year. But his ideas were really put to the test in 1924, when he was named professor and chair of the University of Chicago's reformed and renamed Department of Art. Implicit in the name Sargent gave his new department, which brought together the former department of art education in the School of Education and the department of art history in the School of Arts, Literature, and Science, was his belief that the values and order of art were independent of, and separate from, any particular instance. Eschewing plans to develop an academic department along the lines of Princeton, Sargent instead insisted on the integration of art disciplines and stressed connections between art of the past and the present—what he described as the ways in which art "entered into the current of contemporary life." [42]

Sargent had, in his own words,

> four main objectives in his program: to offer all students an opportunity to develop an intelligent enjoyment of the world's artistic inheritance; to reach a much wider sphere by training teachers in the history, theory, and practice of the arts who will be able to present art in such a way that it will enter into the daily life of students; to offer some experience with the materials of art; and to forward appreciation

> of industrial art and to cooperate with the rapidly growing interest in giving to possessions and surroundings greater charm and distinction.[43]

As chair of a department in which history, theory, and practice commingled, Sargent presided in the three years before his death in 1927 over a program that reflected the most progressive factions of modernism in Chicago—a remarkably diverse collection of designers, artists, and art historians. Under his leadership, registrations in art courses reached the unprecedented number of 910 during the academic year 1926–1927. Sargent even had plans for an "Institute of Fine Arts" at the University. In a memorial to Sargent, published in the November, 1927 number of the *University of Chicago Magazine,* sculptor Lorado Taft described an address on the topic before several hundred members of the President's Club as his friend's moment of glory. But plans for an Institute foundered without Sargent's leadership.[44] In any event, under the influence of new president Robert Maynard Hutchins's neo-Aristotelian revolution in the 1930s (Hutchins advocated an emphasis on general courses in undergraduate education in response to what he described as the "sickness" of modern culture), the university's direction would shift dramatically within a few short years away from the far horizon of scientific empiricism.

No Bauhaus

The SAIC already had proved itself to be no Bauhaus. According to AIC's annual report of 1920:

> The school is developing as rapidly as possible toward a closer contact with the industries. The design department has projected a series of courses in typography which are to be put before a number of representatives of the printing industry early in the year for criticism; classes in lithography working under co-operation of the lithographic trade and the Institute are at work in the day, evening and Saturday schools. Other industrial arts courses are contemplated.[45]

But the transformation of the school's curriculum meant high enrollment and prosperity by mid-decade (whereas AIC's annual report for 1917 had noted the School's increased expenses and decreased revenues, enrollment stood at a high of 4,267 following the war), and, as Charlotte Moser has noted, this shift:

> Turned the School into a major source of revenue for the museum at a time when its curatorial program was rapidly expanding. During these years, School surplus often went toward paying museum expenses rather than going back into the School program; more than half of the School surplus in 1924, for instance, was used to pay off the muse-

> um's deficit that had been accumulating since the 1880s. That same year, the museum began charging the School rent for its space at a rate of thirty cents per square foot.[46]

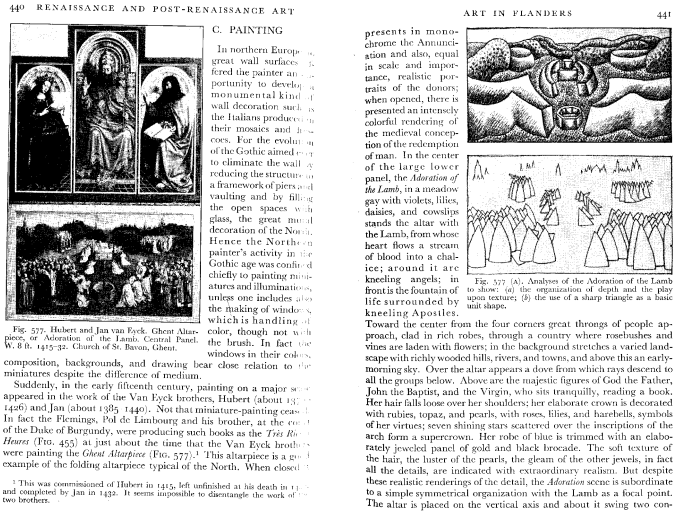
This was not the vision of George Eggers. The death of Newton Carpenter in May 1918 had marked a waning of the new director's support. In a break with tradition, Eggers was not called upon to make a report in AIC's annual for 1918 (for the first time in the institution's history, the trustees made their own report instead), and the board brought in one of their own, Robert B. Harshe—a graduate of SAIC, former assistant chief of the Pan-Pacific Exposition (held in San Francisco in 1915), and assistant director of the department of fine arts at Carnegie Institute in Pittsburgh—the following year. Made assistant director "with immediate charge of the School," Harshe became AIC associate director on April 14, 1921.[47]

The AIC's annual report of 1921 tells the tale of what happened next:

> George William Eggers resigned as Director of The Art Institute October 1, 1921, after an association of five years which has been both stimulating and constructive, to assume the task of developing a large museum in Denver. Mr. Eggers will find in his new field opportunity and time to develop his creative side. Robert B. Harshe, a man of wide experience and a trained museum executive, until then Associate Director, was appointed by the Trustees Director of The Art Institute. A careful reorganization of the museum, made necessary by its rapid growth, is in progress.[48]

Eggers' replacement spelled the beginning of the end of the coalition of art and industry at SAIC. Although not averse, in the beginning, to staying the course begun by Eggers, Harshe lost his enthusiasm for the extremes of "scientific" pedagogy after the death of AIC board president Charles Hutchinson in 1924. Harshe had brought in Raymond Ensign, director of applied arts at the Cleveland Museum of Art, as SAIC Dean in 1921 (according to Ensign, the mission of the school was "to pull the conception of the fine arts and the commercial arts together").[49] An innovative new class entitled "Research in Nature" (which mounted sketching expeditions to the Field Museum of Natural History justified in practical terms—as scientific research) was added in 1923–24. The Department of Printing Arts, established by Eggers in 1920 under the supervision of Ernst Detterer, expanded in 1928 to become the Division of Printing Arts and Advertising Design.[50] But Harshe's growing ambivalence eventually would lead to a break with the Association of Arts and Industries. Although he managed to prolong the Institute's relationship with this group—the successor to Eggers's Alliance of Art and Industry—until 1935, the

Figure 9
"Analyses of the Adoration of the Lamb" in Helen Gardner, *Art Through the Ages*, 1936.



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C. PAINTING

In northern Europe great wall surfaces offered the painter an opportunity to develop a monumental kind of wall decoration such as the Italians produced in their mosaics and frescoes. For the evolution of the Gothic aimed to eliminate the wall by reducing the structure to a framework of piers and vaulting and by filling the open spaces with glass, the great medium. Hence the Northern painter's activity in the Gothic age was confined chiefly to painting miniatures and illuminations, unless one includes also the making of windows, which is handling of color, though not with the brush. In fact those windows in their colors, composition, backgrounds, and drawing bear close relation to the miniatures despite the difference of medium.

Fig. 577. Hubert and Jan van Eyck. Ghent Altarpiece, or Adoration of the Lamb. Central Panel. W. 8 ft. 1415-32. Church of St. Bavon, Ghent.

Suddenly, in the early fifteenth century, painting on a major scale appeared in the work of the Van Eyck brothers, Hubert (about 1370–1426) and Jan (about 1385–1440). Not that miniature-painting ceased. In fact the Flemings, Pol de Limbourg and his brother, at the court of the Duke of Burgundy, were producing such books as the *Très Riches Heures* (FIG. 455) at just about the time that the Van Eyck brothers were painting the *Ghent Altarpiece* (FIG. 577).[1] This altarpiece is a good example of the folding altarpiece typical of the North. When closed it

[1] This was commissioned of Hubert in 1415, left unfinished at his death in 1426, and completed by Jan in 1432. It seems impossible to disentangle the work of the two brothers.

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presents in monochrome the Annunciation and also, equal in scale and importance, realistic portraits of the donors; when opened, there is presented an intensely colorful rendering of the medieval conception of the redemption of man. In the center of the large lower panel, the *Adoration of the Lamb*, in a meadow gay with violets, lilies, daisies, and cowslips stands the altar with the Lamb, from whose heart flows a stream of blood into a chalice; around it are kneeling angels; in front is the fountain of life surrounded by kneeling Apostles. Toward the center from the four corners great throngs of people approach, clad in rich robes, through a country where rosebushes and vines are laden with flowers; in the background stretches a varied landscape with richly wooded hills, rivers, and towns, and above this an early-morning sky. Over the altar appears a dove from which rays descend to all the groups below. Above are the majestic figures of God the Father, John the Baptist, and the Virgin, who sits tranquilly, reading a book. Her hair falls loose over her shoulders; her elaborate crown is decorated with rubies, topaz, and pearls, with roses, lilies, and harebells, symbols of her virtues; seven shining stars scattered over the inscriptions of the arch form a supercrown. Her robe of blue is trimmed with an elaborately jeweled panel of gold and black brocade. The soft texture of the hair, the luster of the pearls, the gleam of the other jewels, in fact all the details, are indicated with extraordinary realism. But despite these realistic renderings of the detail, the *Adoration* scene is subordinate to a simple symmetrical organization with the Lamb as a focal point. The altar is placed on the vertical axis and about it swing two con-

Fig. 577 (A). Analyses of the Adoration of the Lamb to show: (a) the organization of depth and the play upon texture; (b) the use of a sharp triangle as a basic unit shape.

resignations of Dean Ensign and design department head Alphonso Iannelli in 1929 effectively ended its productive life.[51]

An Unlikely Vehicle

Still, the old ideal of an integrated education in industrial and fine arts lingered for some years in Chicago through an unlikely vehicle: the teaching of art history.[52] One of George Eggers's final innovations at SAIC—following the advice of designer Ernest Batchelder (a graduate of the same summer course with Denman Ross that Henry Turner Bailey and Walter Sargent took at Harvard in 1901)—had been to add art history to the curriculum in 1920. As early as 1910, Batchelder had called for artists to study history, geography, archeology, and ethnology, stressing the streamlined efficiency of earlier epochs in choosing the "line of least resistance in the development of art forms."[53] Art history, then, entered SAIC as part of Eggers's efforts to rationalize its curriculum, and its presence was intended to supply the underlying principles for what had become a highly fragmented pursuit. University of Chicago-trained Helen Gardner offered the first art history survey at SAIC, and based her classic text, *Art Through the Ages*, on that course. By 1926, the year Gardner's book appeared, art history was described in the School's catalogue in unabashedly compensatory terms, as "an intensive study of certain phases of art so presented as to be of particular value to students as their training becomes more specialized."[54] In machine age vernacular, *Art Through the Ages* represented the singular and authoritative position from which the automated assembly line of modernized art education acquired its meaning.

For Gardner, who had studied with both Offner and Sargent at Chicago, it was universal values in design that made it possible for art to have a history, as she wrote in 1926, from the dawn of man, a time in which the fashioning of crude tools was character-

ized by a "feeling for symmetry," to the historical present. Though later formalists would seek to isolate and divide the products of visual culture into decorative *or* expressive, popular *or* avant-garde, and to provide access to them only through cryptic directives and appeals to higher authority, Gardner strove to integrate all the arts in her discussion (including those to which she referred quaintly as "minor"), and to provide clear (i.e., diagrammatic) methods for their appreciation and understanding. (fig. 9) The first two editions of *Art Through the Ages* were admirable though hardly unconventional attempts to survey the world history of art in a single volume for the interested general reader. The compressions and distortions of history necessary to the task produced, in the second edition especially, an outline of world history not unfamiliar to today's reader. But the third, 1948 edition of Gardner's book represented the fullest expression of her integrated fine and industrial arts ideal. It is an extraordinary document, one which echoes in its wildly original periodizations the rhetoric of liberal internationalism in the atomic age—the idea of a world government (the University of Chicago, site of the first self-sustaining nuclear reaction, became a center for the world government movement with the formation of the Committee to Frame a World Constitution in November 1945).

"Because today and only today, the concept of one total world inescapably thrusts itself forward," Gardner wrote in the preface to her 1948 edition:

> I have been motivated, in preparing this third edition of *Art Through the Ages*, both in the incorporation of new material and in the reorganization of the old, by a desire to present a world panorama of art; to look at the world horizontally; to present a view of Ancient, Medieval, Renaissance, and Modern Art, each as a whole the world over; to show where contacts did or did not exist, and how the world of the relatively isolated cultures of antiquity has gradually become one world, with national barriers so breached that we are now talking of international styles in art ... the panorama becomes particularly valuable at a time when the world has shrunk to its present size; it helps to break down our Europocentric [*sic*] attitude toward art, to reorient our thinking, and to enlarge our horizons ....

True to her word, Gardner provided readers with an ecstatic vision in which "Medieval" Chinese artifacts commingle with the "Renaissance" art of Northwest Coast Indians, the whole culminating optimistically in a chapter devoted to the "Arts of the Machine." Yet little of Gardner's integrated scheme survived the Cold War revision of her text, accomplished by Yale University's art history department under the direction of Sumner McKay Crosby, and published in 1959 as the more familiar *Gardner's Art Through the Ages* (Gardner died in 1946 as her third edition went to press). The new edition

represented a return to "normalcy" in its rejection of globalism, reinstatement of traditional hierarchies, and reinforcement of temporal and spatial boundaries. In its imperialistic universalism, the Yale edition recapitulated the divisions of the postwar world order, and the effects are several. The (presumably) distinctive stylistic coherence of European art was preserved, but at considerable expense: on the one hand, the "mass" productions of the so-called minor arts (so important to Gardner's discussion) were eliminated from consideration side-by-side with works bespeaking individual genius, and, on the other, canonical works which originated in widespread practices of artistic appropriation were reappropriated into the realm of pure art. Most significantly, for the purposes of this article, discussion of what had been the goal of Gardner's insistent teleology, industrial design, disappeared without a trace.

An Art Equal Parts Poetry and Pragmatism

It had been the dream projected in 1928 by R. L. Duffus (on behalf of the Carnegie Corporation, which financed his study) that a truly American art, an art equal parts poetry and pragmatism, would issue from SAIC:

> To make the commercial arts finer and the fine arts, if not more commercial more practical [, i]n this direction, if anywhere, must lie our approach toward an American Renaissance—the birth of a new national art. For it means that the artist will come out of the most powerful forces of his own time. Such, one feels, is the vision taking form at Chicago. The Art Institute is, at all events, in a good position to train just such artists....[55]

And it must have seemed likely, from that vantage point, that an unprecedented fusion of science, art, and industry was imminent. Yet Chicago is better known today for the apparent divergence of its fine and applied arts traditions—the former associated with the figurative expressionists emerging from SAIC in the post-World War II era, and the latter with Moholy-Nagy's New Bauhaus (later School of Design and, after 1944, Institute of Design).[56] In fact, the separation of fine and industrial arts education in Chicago was accomplished not so much through the opening of the New Bauhaus in 1937 ("Everyone is talented," Moholy-Nagy insisted on that occasion—an unmistakably progressive claim)[57] as it was through the literal absorption of that institution into an engineering school, the Illinois Institute of Technology—and the resignation of a number of its faculty in response to what was perceived as the crass commercialism of the move—in 1955. Of course, by that year a number of things had changed in Chicago, as elsewhere. The rapid growth of the field of industrial design, which began in the 1930s, had created a demand for specialized training: it would be the appointment of one of these newly professionalized designers, Jay Doblin, as direc-

tor that so incensed Institute of Design faculty in 1955.[58] The first Bachelor of Fine Arts (BFA) degree in industrial design was offered in 1935 by the Carnegie Institute of Technology, today's Carnegie Mellon University, and quickly became the professional benchmark.[59] SAIC began to offer the BFA in 1934, reorganizing itself into two divisions, a School of Fine Arts and a School of Industrial Arts after 1938. Students at SAIC after 1938 started with an integrated foundation year comprised of life drawing, design and lettering, composition, and art history. From there, however, they moved in two very different directions: towards industrial design, ceramics, stage design, dress design, interior architecture, architectural sculpture, advertising and printing design, and fashion illustration on the one hand, or towards drawing, painting and illustration, sculpture, and art education on the other. Within each of these "majors" was a rigidly prescribed sequence of specialized courses. [60]

The end of the era of integrated arts education in the United States was encouraged as well by Cold War imperative to separate the realms of the material and the spiritual, beginning with the rejection of the "degraded" products of mass culture in Clement Greenberg's "Avant-Garde and Kitsch" of 1939, and continuing with such arguments as Alfred H. Barr, Jr.'s 1952 "Is Modern Art Communistic?" a defense of avant-garde painting and its "democratic" values, or Meyer Schapiro's suggestion in his 1957 "The Liberating Quality of Avant-Garde Art" that the significance of avant-garde (especially abstract expressionist) painting lay in its positing of an alternative to the technological extremes of corporate capitalism. Fine arts education became increasingly subjective—dominated by larger-than-life figures such as German immigrant painter Hans Hofmann, who drew sharp distinctions between the fine and the applied arts even as his formulaic teachings continued to aestheticize, nostalgically perhaps, the distinctive methodologies of integrated arts education. Of course, in this highly charged atmosphere, an equally heroic image for industrial design would be requisite. The new generation of industrial designers sought, and achieved, their own status as celebrities.

1 Howard Singerman, *Art Subjects: Making Artists in the American University* (Berkeley, Los Angeles, and London: University of California Press, 1999).

2 Thomson concentrates on the case of Philadelphia, another early center of both the printing industry and art education reform. Ellen Mazur Thomson, *The Origins of Graphic Design in America, 1870–1920* (New Haven and London: Yale University Press, 1997).

3 Helen Lefkowitz Horowitz, *Culture & the City: Cultural Philanthropy in Chicago from the 1880s to 1917* (Lexington, KY: University Press of Kentucky, 1976).

4 From William G. Whitford, *An Introduction to Art Education* (New York and London: D. Appleton & Co., 1929). Whitford was professor of art education in the University's School of Education. His book, intended as a reference for introductory college courses in art education, surveyed the state of art education in the United States, including assessments of need, available courses of study, theory, methodologies, and, especially, tests and measures; all arrayed in graphic form.

5 On South Kensington and its first director Henry Cole, see Stuart Macdonald, *The History and Philosophy of Art Education* (New York: American Elsevier Publishing Co., Inc., 1970), 169–170, 181–182. Industrialists in several American cities, notably Boston, New York, Philadelphia, and Washington, DC, took their cues from South Kensington and established ambitious art school-museum complexes of their own following the Centennial Exhibition held in Philadelphia in 1876. Steve Conn, *Museums and American Intellectual Life, 1876–1926* (Chicago and London, University of Chicago Press, 1998).

6 See *Framing the Past: Essays on Art Education,* Donald Soucy and Mary Ann Stankiewicz, eds. (Reston, VA: National Art Education Association, 1990); especially Paul E. Bolin, "The Massachusetts Drawing Act of 1870: Industrial Mandate or Democratic Maneuver?" 59–68 and Patricia M. Amburgy, "Culture for the Masses: Art Education and Progressive Reforms, 1880–1917," 102–114.

7 This is the vision that came to spectacular fruition in Chicago at the World's Columbian Exposition of 1893: the shift is embodied nowhere more tangibly than in the physical structure still occupied by the Art Institute today. Built in grand, Beaux Arts style to house educational and religious congresses at the Exposition, the Art Institute of Chicago sits proudly on the remains of the former exhibit hall of the Chicago Interstate Industrial Exposition (a fact which accounts for the peculiar circumstance of a major art museum straddling a still-active railway system). The Exposition Hall was erected in 1872, one year after the infamous Great Chicago Fire, in order to demonstrate to the outside world that business would continue as usual in the devastated city. Among its displays of commercial goods and commodities (including livestock), the Exposition Hall included a prestigious annual art exhibition known in Europe as the "American Salon." Microfilmed records of the Art Institute's scrapbooks indicate that the Industrial Exposition held its last art exhibit in 1890, at which time its directors (many of the same businessmen on the Board of the Art Institute) agreed to raise $100,000 for the new building of the Art Institute in exchange for use of a portion of it for its own industrial and fine arts exhibitions.

8 *The Art Institute of Chicago, School Catalogue* (Chicago: The Art Institute of Chicago, 1901).

9 First systematized in 1847 by Horace Lecoq de Boisbaudran (instructor in memory sketching at the Ecole du dessin, the French government's industrial art school), this aestheticized and romantic version of memory sketching had flourished in what Albert Boime has described as the atmosphere of increasing appreciation for the goals of popular drawing instruction in France codified in that country's educational reforms of 1863. Lecoq de Boisbaudran, *The Training of the Memory in Art and the Education of the Artist,* trans. L. D. Luard (London: Macmillan and Co., 1911). Albert Boime, "The Teaching of Fine Arts and the Avant-Garde in France During the Second Half of the Nineteenth Century," *Arts Magazine* 60 (December 1985).

10 The academic tradition itself had moved in this direction, as Albert Boime long has maintained. Pedagogical reforms initiated during the Second Empire in France and directed towards training a new generation of industrial designers (both by making fine artists responsive to industry and by educating a wider population in the basic principles of design) resulted in the French Academy's adoption of abbreviated methods of instruction—methods which later proved consistent with the new aesthetic standards of the 1870s. In his 1985 "The Teaching of Fine Arts and the Avant-Garde in France During the Second Half of the Nineteenth Century," Boime insists further that "the École progressively realized the concept of a unity of all the arts," and that this ultimately led to the ratification at the Universal Exposition in Paris in 1900 of geometricizing principles of drawing instruction. See Boime's *The Academy & French Painting in the Nineteenth Century* (New Haven, CT and London: Yale University Press, 1971); "The Teaching Reforms of 1863 and the Origins of Modernism in France," *The Art Quarterly* 1 n.s. (1977): 1–39; and Boime, 1985, 55.

11 Popular mural painter Will Low, an artist who got his start at the Columbian Exposition, targeted SAIC in this regard. Low described SAIC as the largest of American art schools (citing enrollment statistics showing that SAIC was twice the size of the next largest school—the Art Students League of New York—and more than six times larger than the average) and complained that it shouldered a disproportionate share of responsibility (or blame) for glutting the art market with so many ill-prepared young hopefuls. According to Low, art students needed training in composition to be competitive:

> "As at present constituted, our schools serve principally to enable a student to draw and paint, more or less correctly, a figure from life.… He advances through various grades of the school, and at last steps out into the world to find that he has learned how but not what to do.…"

Low laid out his argument in practical terms: art schools were producing more artists than the market reasonably could be expected to absorb. Only a tiny proportion of these possessed the genius to operate ahead of trends and tastes. Therefore, it was the duty of the art school first to be more selective about admitting only students likely to succeed at their profession, and second to provide those students with the tools to practice within the mainstream, commercial art world. The perfect school, he argued, would be similar to the workshops of the Italian Renaissance, where students imbibed the secrets of their art through the pragmatics of its execution. Absent this possibility, Low recommended that more significance be attached to such courses in composition as already existed in some art schools. W. H. Low, "The Education of the Artist, Here and Now," *Scribner's Magazine* 25 (June 1899): 766–767.

12 Arthur Wesley Dow, *Composition: A Series of Exercises in Art Structure for the Use of Students and Teachers* (Garden City, NY: Doubleday, Page & Company, 1920).

13 Denman W. Ross, *A Theory of Pure Design: Harmony, Balance, Rhythm* (Boston and New York: Houghton, Mifflin and Company, 1907).

14 I argue elsewhere that the prevalence of compositional theories in art instruction of this period was crucial in the development of vernacular forms of modernism in the United States. Dow, for example, was a significant figure in the development of canonically modernist artists such as painters Max Weber and Georgia O'Keeffe, and photographer Clarence White. Ross was admired by, among others, the Ashcan School realist Robert Henri and his followers.

15 *The Art Institute of Chicago Twenty-Second Annual Report of the Trustees for the Year Ending June 1, 1901* (Chicago: The Art Institute of Chicago, 1901), 33.

16 Among the group which coalesced around Richardson was John Norton. Inspired to become an artist by his sister, Louise, (author of a book on Japanese art, Louise gave John a copy of *Hokusai's Sketchbook* in 1899), Norton's interest in what he described as "the mechanics of decoration" is evident in his major mural commissions including the design for Frank Lloyd Wright's Midway Gardens executed in Chicago in 1912. *Art Institute of Chicago ... School of Drawing, Painting, Sculpture, Designing, Architecture ... Circular of Instruction for 1905–1906* (Chicago, 1905), 5. The cover of 1906–1907's circular describes the School as comprised of departments (in the following order) of Drawing, Illustration, Sculpture, Painting, Designing, Architecture, and Normal Instruction.

17 French is quoted in *The Art Institute of Chicago Thirty-Third Annual Report for the Year 1911–1912*. Fashionable society artist John Vanderpoel, one of SAIC's five original faculty members, taught drawing via the figure exclusively. Between 1905 and 1906, *The Sketch Book,* a Chicago-based, national art journal whose origins were as the in-house publication for students of the School of the Art Institute, ran a series of articles contrasting Vanderpoel's authoritative approach to the "severe art" of figure drawing with the more "modern" techniques of memory sketching and composition favored by Richardson. *The Sketch-Book* 5 (July and August 1906).

18 When the old Academy of Fine Arts changed its name to the Art Institute in 1882, it was to signal the organization's intention to be an advocate for the present. The Institute prided itself on being current in its early years, courting provocative exhibitions, and striving to bring the best contemporary artists and scholars to Chicago as guest lecturers.

19 On Eakins and the sources of constructive drawing, see Lisa Fellows Andrus's unpublished dissertation, *Measure and Design in American Painting, 1760–1860* (New York: Columbia University, 1976); especially Chapter Five, "The Development of a Practical Basis for Institutionalized Art Education."

20 The architect Frank Lloyd Wright, a major collector of Japanese prints, presented them at AIC in an exhibition of his own design in 1906. Within a few years of O'Keeffe's attendance, poster designer Alphonse Mucha visited the School concurrent with an exhibition of his work (the Scammon Lectures of 1908 and 1909 were delivered by Mucha, a frequent instructor at the Women's School of Applied Art in New York. His subject was "Harmony of Art: Line, Proportion, Color"), illustrator and bookbinder Ralph Fletcher Seymour was engaged for a special class in "decorative line composition," and a new class devoted entirely to the practice of mural painting was introduced.

21 According to Benton, what he learned at SAIC between 1907 and 1908 was his first insights into the art of designing—of consciously planning, or composing, pictures before attempting to execute them: "Japanese prints were, very largely because of James McNeill Whistler's influence, much in favor at this time. Fredrick Oswald, my favorite teacher at the Institute, was enthusiastic about these and encouraged continuous study of the way they were put together. Through continued observation of the prints, I learned to arrange my pictures in definite patterns and acquired a taste, from such artists as Hokusai, for flowing lines which lasted all my life ... ."

Benton's favorite teacher was one of the many upon whom illustrator Fred Richardson had left his mark: Oswald's student years at SAIC coincided with the moment in which the lifelong allegiances were formed which led to sharp divisions among the faculty in 1905. Oswald was touched by Arthur Dow's influence as well: when his name first appears in SAIC's 1902–1903 catalogue, Oswald is listed as an advanced student acting as assistant teacher in the juvenile classes held on Saturdays—this at a time when course work in the school's normal department was required of all student teachers. Thomas Hart Benton, *An American in Art* (Lawrence, KS: University Press of Kansas, 1969).

22 Thomas Hart Benton, "The Mechanics of Form Organization" Parts I–V, *The Arts* (November 1926): 285–289; (December 1926): 340–342; (January 1927): 43–44; (February 1927): 95–96; (March 1927): 145–148. A greater irony than the American reception of Bauhaus pedagogy described by Singerman may be that the formative moment for the paradigmatically personal and spontaneous art of Benton's best-known student, abstract expressionist Jackson Pollock, came in the context of a "modernized" pedagogy with roots in nineteenth century industrialism. (This is the subject of my article "Jackson Pollock's Industrial Expressionism," in progress).

23 "The Democracy of Art," and "How the Art Institute of Chicago Has Increased Its Usefulness," respectively.

24 *The Art Institute of Chicago Annual Report for the Year 1915,* 41.

25 On March 31, 1915, the newly formed School Committee, chaired by conservative trustee Frank Logan (Logan's wife later founded Sanity in Art, a group devoted to countering modern art in all its forms), heard a proposal from Emma Church, then director of the Chicago School of Normal and Applied Art [CSNAA]. Previously director of SAIC's principal rival, the commercially-oriented Chicago Academy of Fine Arts (founded in 1900 as a school for the "modern" arts of mural painting, advertising, and illustration; the Chicago Academy of Fine Arts had hired a number of Frederick Richardson's students, including John Norton), Church addressed the committee on the possibility of establishing an affiliation between SAIC and CSNAA. Yet on April 8, 1915, the school committee voted unanimously to reject Church's proposal. The consensus among its members

was that a vocational program such as CSNAA offered would detract from SAIC's "higher aesthetic goals." *Minutes of the School Committee Meeting,* Archives of the Art Institute of Chicago, 3-5ff (includes a four-page letter from Church detailing her proposal).

26 At the time, Chicago had the most arts and crafts societies outside of Great Britain, according to Eileen Boris, *Art and Labor: Ruskin, Morris, and the Craftsman Ideal in America* (Philadelphia: Temple University Press, 1986).

27 *The Art Institute of Chicago Annual Report for the Year 1916.*

28 Ralph Pearson's 1925 *How to See Modern Pictures,* among others, harnessed Hambidge's technique to a vision of progressive consumerism with chapters on the discerning arts of furniture arrangement and shopping.

29 Eggers had brought Ashcan School realist George Bellows to Chicago as visiting instructor in conjunction with a major exhibition of the painter's work he was organizing for AIC in 1919. Bellows, who for some years had admired the design theories of Denman Ross, was well under the spell of "dynamic symmetry" by that time—as was his mentor Robert Henri. (Henri even organized and circulated an unpublished treatise on dynamic symmetry, outlining the geometric system for his students in the interim before the appearance of Hambidge's first book.) During the three months that Bellows spent teaching and painting in Chicago, dynamic symmetry was the basis of his practice. Before he left, Bellows convinced Eggers that Hambidge should deliver AIC's Scammon Lectures for 1920. Dynamic Symmetry found its niche in academia after Hambidge joined Denman Ross as a Sachs Fellow at Harvard between 1918 and1919. Though it was controversial among archeologists, the appeal of Hambidge's system for pictorial artists was its promise of certainty. Ross was among the most enthusiastic of Hambidge followers, even devising his own mechanical measuring tool—described in excruciating detail in Hambidge's book—to facilitate the correct application of the sequence of diagonals.

30 *Minutes of the School Committee* (Archives of the Art Institute of Chicago).

31 *Minutes of the School Committee* (Archives of the Art Institute of Chicago).

32 In light of subsequent events, it seems reasonable to assume that this is the moment of Eggers's undoing, for the committee approved his plan at the same time it confirmed a school budget with little or no capital investment in change. SAIC dean Theodore Keane's angry letter of resignation arrived within ten days, although it would not be read into the School Committee's record until May 28th, one day after the death of Newton Carpenter, AIC business manager and former director *pro tem. Minutes of the School Committee* (Archives of the Art Institute of Chicago), 161–178.

33 *Catalogue of the Art School of the Art Institute of Chicago, 1918–1919,* 10–11.

34 James Parton Haney, "Our Needs and Opportunities in the Industrial Arts," *The American Magazine of Art* 11 (November 1919): 53–61.

35 Lloyd C. Engelbrecht, *The Association of Arts and Industries: Background and Origins of the Bauhaus Movement in Chicago,* (Unpublished dissertation, University of Chicago, 1973).

36 Ellen Mazur Thomson, "Thorstein Veblen at the University of Chicago and the Socialization of Aesthetics," *Design Issues* 15:1 (Spring 1999): 3–15.

37 Their evolving ideas on design were affected by association with William Torrey Harris, United States Commissioner of Education 1889–1906. Art was a conservative force for Harris, a way of preserving the great ideals of past civilizations. Harris believed that the arts, philosophy, and religion were three paths by which humanity reached toward the divine, and he singled out music, the visual arts, and literature as the great civilizing agencies in the school curriculum. An education in art, according to Harris, placed greater constraints on personal action; it could, in other words, be harnessed for purposes of social control. As his ideas were popularized, picture study, along with programs for the decoration of the elementary schools with art reproductions and plaster casts of statuary, began to be supported by public-spirited groups throughout the country. Patricia Ambrugy has made the pertinent observation that Harris's conservative revolution was on some level indistinguishable from the progressive movement in education championed by reformers such as Jane Addams in Chicago. Patricia M. Ambrugy, "Culture for the Masses: Art Education and Progressive Reforms, 1880–1917" in *Framing the Past: Essays on Art Education,* Donald Soucy and Mary Ann Stankiewicz, eds., 102–114.

38 Henry T. Bailey, "Report" in *Fifty-Fourth Annual Report of the Board of Education... 1889–90* (Boston: Wright & Potter Printing Co., State Printers, 1891), 201–213.

39 The creation of instruments of measure was a priority. One of the most influential studies completed under Sargent's direction was Fred Carleton Ayer's investigation into the psychology of drawing. Prompted by interest in the relationship between drawing styles and the processes of scientific inquiry, Ayer's study lent credence to older notions of connections between drawing and cognition. Ayer concluded that, although there was no correlation between representative drawing (i.e., a drawing "which reproduces as accurately as possible the exact appearance of an object") and ability in analytical observation, there was a small but significant correlation between a child's ability to describe a thing verbally and his or her ability to render its salient characteristics in diagrammatic (nonimitative) form. Ayer's study under Sargent's direction, *The Psychology of Drawing* (Baltimore, MD: Warwick & York, Inc., 1916), 135–136, is remembered best today through its prominent citation in E. H. Gombrich's justly famous *Art and Illusion: A Study in the Psychology of Pictorial Representation* (Princeton, NJ: Princeton University Press, 1960), 146–147.

40 A Harvard-trained specialist in Florentine painting, Offner earned his Ph.D. in 1914 under Max Dvoŕák in Vienna. Offner taught at the University of Chicago from 1915 to1920, spent the following two years at Harvard, and the majority of his long and distinguished academic

career on the faculty of the Institute of Fine Arts at New York University.

41 Walter Sargent, *Instruction in Art in the United States* [advance sheets from Biennial Survey of Education in the United States, 1916–1918] (Washington, DC: Government Printing Office, 1919), 29–30.

42 The University formed a Committee on the Reorganization of the Department of the History of Art in 1922. The Committee's recommendations to President Burton included hiring a new Chair, Frank Mather, Professor of Art and Archeology at Princeton, and several new faculty members. Burton's swift reply—that no funds would be diverted from the existing budget—resulted in Sargent's ascension. Sargent immediately embarked on an ambitious fundraising program. From The President's Papers, 1895–1925, Archives of the University of Chicago.

43 *Chicago Tribune,* April 17, 1927.

44 In fact, Sargent's death initiated an intense struggle for power within the department. The major antagonists were Lucy Driscoll, a graduate of the University and longtime instructor in Asian art, and Edward Rothschild, a historian of modern art appointed by Sargent. In her bid to President Mason (Burton died in 1925), Driscoll argued for a program based on psychological principles. She dismissed both Princeton and Harvard as models, describing the project of the former as more archival than interpretive, and that of the latter as too beholden to, on the one hand, biography, and, on the other, the formulaic assumptions of Denman Ross (Driscoll refers to these as "psychologically the reverse of any normal creative progress so one can scarcely expect results"). Rothschild's response reiterated the positivism of Sargent's tenure and is representative of the direction in which the department subsequently developed: "To teach appreciation of art is only to teach how to see, and I should prefer to shun the feeble and perhaps dangerous assistance of psychology in an introduction to the subject ... it is the vision not the resultant thought or action which is significant." The President's Papers, 1925–1945, Archives of the University of Chicago.

45 *Annual Report of the Art Institute of Chicago for the Year 1920,* 12.

46 The Report of the Trustees for 1919 indicates that the School's attendance had dipped twenty-eight percent. *Annual Report of the Art Institute of Chicago for the Year 1919,* 37. Charlotte Moser, "'In the Highest Efficiency': Art Training at the School of the Art Institute of Chicago" in *The Old Guard and the Avant-Garde: Modernism in Chicago, 1910–1940,* Sue Ann Prince, ed. (Chicago and London: University of Chicago Press, 1990), 204. Moser's generally excellent article falls short of recognizing the role of Eggers.

47 *Annual Report of the Art Institute of Chicago for the Year 1920,* 18–19.

48 *Annual Report of the Art Institute of Chicago for the Year 1921,* 15–16.

49 Ensign is quoted in R.L. Duffus, *The American Renaissance* (New York: Alfred A. Knopf, 1928), 139.

50 Ernst Detterer, his students, and the printing arts program are discussed in Victor Margolin, "Graphic Design in Chicago," *Chicago Architecture and Design, 1923–1993* (Munich, London, and New York: Prestel, 1993), 285–286.

51 Charlotte Moser, "'In the Highest Efficiency': Art Training at the School of the Art Institute of Chicago" in *The Old Guard and the Avant-Garde: Modernism in Chicago, 1910–1940,* Sue Ann Prince, ed.

52 Promoting a fusion of fine and industrial art was a growing trend in the 1930s in the fields of art history and appreciation. The Museum of Modern Art hosted its *Machine Art* exhibition in that decade, and Sheldon Cheney and Martha Cheney published their study, *Art and the Machine: An Account of Industrial Design in 20th-Century America,* in 1936.

53 Ernest Batchelder, *Design in Theory and Practice* (New York: The Macmillan Company, 1910), 233.

54 *The School of the Art Institute of Chicago, Catalogue for the Year 1926–1927.*

55 R. L. Duffus, *The American Renaissance* (New York: Alfred A. Knopf, 1928), 139. Duffus underscored this idea elsewhere by noting that "The Art Institute of Chicago, now well along in its sixth decade, is said to have had in its classes at one time or another one-fifth of all living American artists" (in Frederick R. Keppel and R. L. Duffus, *The Arts in American Life* [one of a series of monographs published under the direction of the President's Research Committee on Social Trends embodying scientific information assembled for the use of the Committee in the preparation of its report entitled *Recent Social Trends in the United States*], [New York and London, McGraw-Hill Book Company, Inc., 1933], 37–38).

56 The most recent iteration of this is Franz Schulze, "Art in Chicago: The Two Traditions" in *Art in Chicago, 1945–1995,* Lynne Warren, ed. (Chicago: Thames and Hudson and Museum of Contemporary Art, 1996), 13–34. I discuss the socio-political context in which the once fluid Chicago situation came to be thus characterized in my article "Pride of Place," pages 53–68, same volume.

57 Alain Findeli, "Moholy-Nagy's Design Pedagogy in Chicago, 1937–46," *Design Issues* 7: 1 (Fall 1990): 4–19.

58 Peter Selz, "Modernism Comes to Chicago: The Institute of Design" in *Art in Chicago, 1945–1995,* Lynne Warren, ed. , 48–49. A number of former Institute of Design faculty and students joined the Chicago branch of the University of Illinois on the eve of its move to its new Chicago Circle campus. They would be instrumental in shaping that school's ongoing commitment to Moholy-Nagy's vision.

59 The idea of a degree-granting program in industrial design at Carnegie was conceived by a graphic artist, Donald R. Dohner, and implemented with the support of a painter and instructor of design, Alexander Kostellow. Kostellow and his colleague (and wife) Rowena Reed Kostellow later joined with Dohner to create an industrial design program for Pratt in 1938. See Arthur J. Pulos, *The American Design Adventure, 1940–1975* (Cambridge, MA and London: The MIT Press, 1988), 164–171. Jay Doblin, a designer with the firm of Raymond Loewy and director of the Institute of Design from 1955 to 1969, was among the many students trained by the Kostellows at Pratt.

60 *Bulletin of The Art Institute of Chicago* (February 1938): 15.