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**Duplicity: The Translation of Bauhaus Pedagogy into American Modernist Architectural Education**

Twentieth century modernism pursued an approach to design and architecture that incorporated a universal visual language to provide a shared understanding of art and architecture. Critical to the translation of this language was Bauhaus pedagogy whose aims were not merely to bring these disciplines back into closer ties with everyday life, but to make them the very instrument of social and cultural regeneration. Efforts within Bauhaus pedagogy to propagate the universal were built upon the holistic, social and egalitarian ideals of John Ruskin and his reformist colleagues, but it would be Bauhaus émigrés László Moholy-Nagy, Josef Albers and Walter Gropius that would attempt the integration and interpretation of these doctrines in the wholly different economic and political context that was America circa 1930. Within this translation, the meaning of ‘the universal’ was misinterpreted as a dogma, leading to the Bauhaus ideologies and pedagogical methods being met with mistrust.

During this tenuous time American Modernists, clearly irritated by the Europeans, openly criticized Bauhaus émigrés for not disseminating a methodology but selling a commodity and considered the credit Russell-Hitchcock and Johnson had afforded the Europeans to be overstated and even erroneous. This paper demonstrates that although Gropius held tenure at Harvard and Moholy-Nagy, at the New Bauhaus in Chicago, was the most propitiously positioned of the émigrés to translate their ideals, it would be Albers through his drawing and painting that would encounter the most successful translation of Bauhaus ideals into American modernist architectural pedagogy. I will reveal the duplicity of the adoption of fundamental Bauhaus principles into the famed educational tenets of the Texas Rangers led by American Modernist Harwell Hamilton Harris, who himself, a vocal critic, attempted to refocus architectural education through the development of both rigorous analysis and a new universal visual language.
In 1919 architect Walter Gropius (1883–1969) founded the Bauhaus, considered to be the “most famous experiment in art education of the modern era.” These endeavours resulted in an approach to design and architecture that incorporated a universal, therefore less exclusive visual language. Efforts within the Bauhaus to propagate the universal were built upon the holistic, sensory and social ideals of Johann Pestalozzi (1746–1847) and Friedrich Froebel (1782–1852). Further reforms to aesthetic education were developed by John Ruskin (1819–1900) and his reformist colleagues, culminating in Hermann Muthesius’ (1861–1927) and Henry van de Velde’s (1863–1957) *Deutsche Werkbund* that incited the founding of the Bauhaus. With the provocations of reform well established by Ruskin and the reformists, it suffices to note that the Great Exhibition of 1851 revealed a predicament. While the general public were enamoured with Paxton’s (1803–65) building, a number of discerning citizens were appalled by what Britain exhibited. Concerns surrounding the impact of industrialization were not isolated to one side of the Atlantic, with America also desiring a restructuring of aesthetic education. As a result and inspired by Froebel and American reformist John Dewey (1859–1952), Pure Design was introduced in America by Arthur Wesley Dow (1857–1922), an architectural educator, and by design theorist Denman Waldo Ross (1853–1935). Like Pestalozzi’s and Froebel’s methods, this included a reductive graphic code and a belief in learning by doing. With reform established on both sides of the Atlantic, I will elucidate the similarities and differences within the teachings of Pestalozzi, Froebel, Ruskin and the *Werkbund* on one side and Dewey, Dow and Ross on the other, and reveal how these would eventually intersect within Bauhaus pedagogy on American soil.

In doing so, I will expose the duplicity of the adoption of fundamental Bauhaus principles into American architectural pedagogy in the face of mistrust, misinterpretation and misunderstanding and argue that this misinterpretation was as much, if not for the most part due to clashes of personalities as it was differences of ideology. With the Bauhaus lineage defined and the benefits held within its teaching strategy, more precisely, legacy, well established, I will assert that there is still much within the Bauhaus pedagogical tenets that continue to hold relevance in architectural and design education today.

During this amalgamation American Modernists openly criticized the recently immigrated Bauhaus pedagogues, clearly irritated by their presence, for not disseminating a methodology but selling a commodity. Although Gropius held tenure at Harvard and László Moholy-Nagy (1895–1946), at the New Bauhaus in Chicago, was the best positioned to translate their ideals, quizzically it would be Josef Albers (1888–1976), first at Black Mountain College and subsequently Yale, who achieved the


2 Frank Whitford, *Bauhaus* (London: Thames and Hudson, 1984), 119. Joseph Paxton, a self taught engineer had designed the Crystal Palace. It was a vast exhibition hall constructed of prefabricated steel and sheets of glass containing exhibits from all around the world.
most successful translation into American architectural pedagogy. In contrast to Albers’ experience I will uncover the tensions and rivalries between Moholy and American industrialism, and between Gropius and his Harvard colleagues that hindered their translations. I will reveal the hypocrisy Moholy endured and the very personal and dogmatic attitudes of Joseph Hudnut (1886–1963) that restricted Gropius’ pedagogical pursuits. I will conclude with the duplicity of American Modernist Harwell Hamilton-Harris’ (1903–90) endeavours to refute the Bauhaus while furtively instilling numerous Bauhaus principles into his own pedagogy and that of his Texas Rangers. My argument purports that it was as much the fault of individual agendas as it was ideological differences that determined the fate of the Bauhaus ideals in America.

Inspired by Jean Jacques Rousseau (1712–78), Ruskin, Pestalozzi and Froebel believed that teaching simple elements of form alongside sensory learning would achieve harmony within struggling societies. With drawing a central component in educational reform, Pestalozzi created a reductive graphic code based on a sparse grammar of straight lines, diagonals and curves to express the abstracted essence of form. Heavily influenced, Froebel matured Pestalozzi’s theories introducing physical exercises that used holistic, tactile and sensory appreciation. Known as Froebel’s gifts, these educational ideologies achieved great “influence in the history of architecture and all plastic arts beyond any predictable proportion.” The introduction of Froebel’s gifts to Bauhaus masters Johannes Itten (1888–1967) Paul Klee (1879–1940), Wassily Kandinsky (1866–1944) and Americans Frank Lloyd Wright (1867–1959), Buckminster Fuller (1895–1983) and Charles Eames (1907–78) during their early childhood delineates a very significant empathy between the Bauhaus ideals and American Modernism. Believing that an engagement with a simple vocabulary of forms would become a rich enough experience to enable representations of the world around us, Froebel’s teachings influenced the creative work of each of these heroes.

Wright, having attended the University of Wisconsin in 1886 but never graduating, fortuitously avoided the restrictive and mechanical methodology of the École des Beaux-Art mode of architectural training. In the early twentieth century, Dow and Ross, both opponents of the Beaux-Art, independently developed the reductive theories of Pure Design. Like Ruskin, both

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3 Jeannine Fiedler and Peter Feierabend, eds. Bauhaus (Cologne: Könemann, 1999), 63. Black Mountain attracted many writers, artists and architects to participate. Buckminster Fuller, John Cage, Robert Motherwell, El Lissitzky, Harry Seidler and Edgar Kaufmann were among those who attended Albers’ summer classes.

4 Lisa Germany, Harwell Hamilton Harris (Texas: University of Texas Press, 1991), 144. The name “Texas Rangers” reflected the faculty’s Texas experience.


8 Brosterman, Inventing Kindergarten, 50. The gifts were non-specific, open-ended and symbolic. They encouraged experimentation with scale, balance, unity and divisibility.

wrote of composition, awakening creative faculties, and training the eye to appreciate beauty found in harmony, balance and rhythm. The difference was that “Dow used the exercises to foster subjectivity whereas Ross aimed at objectivity.” As with the Werkbund and the Bauhaus, it would be Ross’ objective approach that would experience the most credence. In 1906, his version was made mandatory in the architectural programme at Michigan University. Unfortunately, with the Beaux-Arts mode of training still the favoured methodology, Pure Design failed to gain enough immediate traction. Further impetus would not emerge until 1935, when Joseph Hudnut, an alumnus of the Michigan programme would, as Dean of Architecture at Harvard, remove of the Beaux-Arts method in its favour.

Similar struggles existed within the Deutscher Werkbund and the efforts of Muthesius and van der Velde. In 1907 Muthesius formed the first Werkbund, uniting art and industry and offering the first alternative to the Beaux-Arts in Germany. The menagerie, described as an alliance of intimate enemies, and the resultant tensions led to heated debates among members. Although bound by a belief in reform, Werkbund members argued, like Ross and Dow, over free artistic expression, as espoused by Henry van de Velde (1863—1957) and standardization as argued by Muthesius. With the outbreak of WWI this debate remained unresolved. In 1919 with the establishment of the Bauhaus, and for reasons that can only be considered as quixotic, Gropius sought the unification of art and architecture, through subjectivity, but abruptly realigned it in 1924 under a new unity between art and technology. Prompted by the adjustment, Gropius acknowledged a debt to Ruskin, van de Velde, Behrens and the Deutsche Werkbund, considering them trailblazers who “consciously sought and found the first ways to the reunification of the world of work with the creative artists.”

At this time unity encapsulated design and architecture, understood as a variety of symbiotic relationships of man with nature, design with industry, art with architecture, form with function and man with his spiritual or physical self. As one of Gropius’ first appointments Itten, as master of the Vorkurs, the preliminary course, would attempt to amalgamate Froebel’s and Ruskin’s aims with Gropius’. Itten combined a vocabulary of forms as a universal, equalizing language. He explained: “Every student arrives encumbered with a mass of accumulated information which he must abandon before he can achieve perception and knowledge that is really his own.”


13 Whitford, Bauhaus, 22.


15 Whitford, Bauhaus, 36.

16 Wick, Teaching at the Bauhaus, 16.

17 Brosterman, Inventing Kindergarten, 99.

the Vorkurs, and I would argue Itten, is that whether aligned with art and architecture or art and technology, “it has come to be regarded as the essence, even the entirety, of the Bauhaus method.”19 Having successfully implemented this foundation Itten was rather unceremoniously removed by Gropius to realign the Bauhaus with technology. In spite of this recalibration, the Vorkurs continued Itten’s focus under Moholy and Albers, but as intended, the outcomes from the workshops were revolutionized. The exploration of opposites in the Vorkurs enabled transitions between two- and three-dimensional work to become more fluid, with Moholy and Albers cultivating the exploration of form with space. By asking the students to see anew, both pedagogues demanded analytical and reductive explorations to expose form and space at its most dynamic. Moholy guided his students toward dynamic explorations, asking them to place, suspend, or juxtapose forms in space.20 The results of Moholy’s teachings, which notably included the transparent architecture of Gropius’ Bauhaus School at Dessau and Marcel Breuer’s (1902–81) dematerializing Wassily chair, would serve to focus international interest, particularly from the United States.

With the abrupt closure of the Bauhaus in 1933, the cumulative efforts of the Bauhäuslers would fracture, becoming individual pursuits. As part of the artistic diaspora of the thirties Albers would lead Moholy and Gropius to the United States.21 The translation of Bauhaus tenets separate at this point to unveil both opportunities and restrictions, within a wholly different cultural and economic situation. The ideals Albers developed at the Bauhaus were already well regarded internationally, sparking Philip Johnson (1906–2005) and Alfred Barr (1902–81) to convince the founders of the newly established Black Mountain College to recruit Albers in 1933.22 Merging Dewey and Bauhaus methodologies, Albers accelerated the shift from Beaux-Arts to modernist art education. His experiments revealed unexpected space, with historian Craig-Martin asserting: “Albers’ space is utterly uncanny; in no way does it resemble natural space. In some instances they quiver and pulsate; in other instances they become muted and serene or entirely silent.”23 Albers’ teaching was considered instrumental, with Craig-Martin also stating: “Albers made Yale the most important art school in the United States as he had previously done at Black Mountain.”24 Not as overt, but of primary significance to this paper, was his influence on architectural education. A former student offered this tribute: “The architects who owe him enlightenment are as many as the painters and sculptors.”25 Although Albers had enjoyed numerous opportunities to disseminate his ideals, albeit

22 Fiedler and Feierabend, Bauhaus, 63. Albers had met Barr in Berlin to discuss opportunities outside of Germany. Barr and Johnson convinced John Rice and Theodore Dreier to offer Albers the position of Head of the Art Department at Black Mountain.
within the empathetic backdrops of fine arts at Black Mountain and Yale, his colleague Moholy would not be as fortunate.

Maintaining the influences of Pestalozzi, Froebel, Ruskin, Ilten and Albers, Moholy’s endeavours continued to seek insight not eyesight.26 Invited to America by the Association of Arts and Industries and financially supported by the President of the Container Corporation of America, Walter Paepcke (1896–1960), Moholy sought to establish a New Bauhaus. Unfortunately, in the heart of the industrial Midwest, little was known about Bauhaus advancements.27 Complicating his transition and seen as a significant challenge was the conflict between Moholy’s own motivations and those of the capitalist environment. Industry seemingly cared little for methodology and more for aesthetics and profit. Although the Bauhaus had initially offered hope for American industry it would be the economic demands of the marketplace that challenged Moholy most acutely. In direct criticism of America’s outmoded design approach, that of superficial styling, Moholy wrote: “In the last ten years this has meant ‘streamlining,’ just as a generation ago it meant ornamentation.”28 Alain Findeli explains: “What Moholy-Nagy was selling and what Chicago was buying were two very different products.”29 With Moholy’s arrival the debate between Bauhaus ideals and the American interpretations of them would gain ascendancy. Moholy’s social concerns for design education became central to the argument. Lost within the spite-filled dispute over profitability and efficiency were Moholy’s abilities to reveal space. By drastically reducing the material consumption, and abstracting a form to its essence, a well-established Bauhaus tenet, Moholy’s experiments encouraged fresh approaches towards transparency. As suggested by Pestalozzi, Froebel, Ilten and Albers, this type of investigation invited spatial discovery using haptic and optical experiences, inviting them to the privileged threshold of space.30 Architectural theorist Kazys Varnelis (b. 1967) argues that Albers’ and Moholy’s theories of ambiguous space were the basis to a major shift in architectural language and understanding.31 Despite Moholy-Nagy’s clear campaign to address consumption through a reductive process, he and his Bauhaus colleagues were accused of not disseminating a methodology but a codified and marketable aesthetic. Yet, in contradiction, the economic climate in the United States was principally attracted to the Bauhaus as an aesthetic and only for commodification. I would posit America had taken the Bauhaus aesthetic and not unlike the Beaux-Arts, copied it with little regard for context. After Moholy’s death, his second wife, Sybil (1903–71) criticized Hitchcock and Johnson’s 1932 book, The International Style, calling it a “mixture of truth and opinion” and accused both men that they

26 Borchardt-Hume, Albers and Moholy-Nagy. From the Bauhaus to the New World, 106.
27 Borchardt-Hume, Albers and Moholy-Nagy. From the Bauhaus to the New World, 69.
31 Varnelis, ”The Education of the Innocent Eye,” 212.
“slew the anti-aesthetic, expedient, economic and socially conscious tendencies” of the émigrés’ ill-informed arguments.\(^{32}\) In the face of capitalist agendas demanding immediacy and profit, both Moholy and Gropius’ ideologies for society, methodology and a universal aesthetic understanding fell predominantly on deaf ears. It would ultimately be Moholy’s untimely death in 1946 that halted his efforts. Having witnessed the translation of Bauhaus pedagogy in two dimensions through Albers’ efforts and experiencing first-hand Moholy’s frustration in the face of overt hypocrisy, it would fall to Gropius to advance the translation of Bauhaus tenets in architecture.

Many in America believed that Pure Design did not offer the comprehensive alternative to the Beaux-Arts-pedagogy required in the rapidly changing design environment.\(^{33}\) As a result, Gropius’ arrival was keenly anticipated.\(^{34}\) In 1937 Gropius arrived, with Hudnut the Dean of the Harvard’s Graduate School of Design almost singing: “Welcome to America where happiness and success awaits you.”\(^{35}\) Although contested, the position, was awarded to Gropius, while Mies van der Rohe, the competition, was described by Hudnut as “somewhat vain” and likely to be “more difficult to work with than Mr Gropius.”\(^{36}\) Although neither Harvard nor Gropius would experience the Miesian pedagogical approach directly, Moholy’s efforts in Chicago would be decimated by Mies when, following Moholy’s death, the Institute of Design was merged with the Illinois Institute of Technology. Here Mies forged what Bauhaus member Hubert Hoffman described as “an academy built around a single master”, earning him a reputation as “the worst educator one could imagine.”\(^{37}\) Despite avoiding Mies, Harvard and Gropius would experience their own challenges of personality. Unfortunately the rivalry that emerged between Gropius and Hudnut would eliminate any surety implied in the initial positive reception. In contrast to the perception that Gropius was a highly valued, affable, well-styled European, Hudnut was described by a colleague as “the least modern individual you could find.”\(^{38}\) Although the outward distinctions may have been obvious, veiled were Hudnut’s intentions to employ Gropius as an architectural luminary and not for his pedagogical doctrines. Hudnut saw the GSD as the highly visible platform and Gropius as “the greatest possible value to the cause of

32 Sibyl Moholy-Nagy, “The Diaspora,” *Journal of the Society of Architectural Historians (JSAH)* 24, no. 1 (1965): 25. Miesian disciple Howard Dearsyne took offence to Mrs Moholy-Nagy’s comments and the fact that she felt qualified to have an opinion and called her “an idle or viscious vagrant.”
37 Wick, *Teaching at the Bauhaus*, 85. Mies dismissed any pedagogical tenets that included unified aesthetic education, believing his view of aesthetics to be the most worthy for reptition.
architects in this country.” Gropius’ architectural voice was the tool Hudnut felt would advance these agendas.

On face value, Hudnut’s belief in Pure Design shared certain commonalities with the Bauhaus but almost immediately a fracture began to manifest. With Gropius insisting that Albers and Breuer could offer GSD students a modern design education that no American instructor could match, tensions were initiated. Gropius wanted Vorkurs teachings at Harvard, believing they would foster individual creativity and a universal visual language accessible to all. Visual language, as imbued in Pure Design, had aligned Hudnut and Gropius to a degree. What created the blockade was the accessibility to this language. Hudnut believed that architecture should speak “its own language in an eloquent way.” Gropius believed in a language that eliminated all barriers. In a surprising move and against Hudnut’s advice the university provided funds to deliver Gropius’ Basic Design course for a two-year trial period. The course was both hard fought for and synonymous with the Bauhaus aims in fostering creativity and developing a universal language of vision. Although Gropius and many of the faculty were pleased with the success of the course, Hudnut was appalled at the results. For Hudnut, removing Gropius’ fundamental course would become a central and very personal objective. Beyond these adversarial debates, the relevance of history within architectural education would also create an impasse. Overlooked within the Bauhaus translation was an understanding for what the émigrés referred to as the abandonment of preconceived knowledge. Never viewing history as the enlightening force that Hudnut viewed it as, Gropius would vehemently oppose the inclusion of architectural history within preliminary education. He believed it was too influential on a fledgling mind. Gropius never succeeded in eliminating history from the GSD but did demote it to a diminished status. In spite of their bickering the GSD under Gropius and Hudnut was acknowledged as having “transformed the physical landscape worldwide”.

To understand the full context of the inaccurate interpretation of the Bauhaus as an aesthetic, not a methodology, the limitations imposed by WWI and WWII need to be acknowledged. In their defence, political restraints were hindering access to Europe and impacted on American modernists’ ability

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39 Pearlman, Inventing American Modernism, 70. Gropius negotiated his retirement terms at Harvard. This proved strategically potent in out foxing Hudnut’s plan to outlast him at the GSD.


42 Pearlman, “Joseph Hudnut’s Other Modernism at the ‘Harvard Bauhaus’,” 469.

43 Pearlman, “Joseph Hudnut’s Other Modernism at the ‘Harvard Bauhaus’,” 471.


46 Pearlman, Inventing American Modernism, 204.

47 Pearlman, Inventing American Modernism, 231.

48 Pearlman, Inventing American Modernism, 1.
to fully appreciate Bauhaus work.\textsuperscript{49} While Harwell Hamilton-Harris knew of the houses of Wright and Rudolph Schindler (1887-1953) and had experienced the spatial qualities first-hand, he and the American cohort’s reliance on photography led them to believe the Bauhaus work lacked the spatial qualities they purported to. Hamilton-Harris stated: “These things are not alive.”\textsuperscript{50} Interestingly, Lisa Germany states that Hamilton-Harris, like many Bauhäusler, had little faith in Hitchcock and Johnson’s attribution of the International Style to the Bauhaus. Harris too believed that his own work existed outside a codified style and considered his approach as an attitude toward design, rather than an adherence to a creed.\textsuperscript{51} Furthermore, like Itten he found solace in the immaterial, valued accessible communication and wanted his work understood.\textsuperscript{52} Although Harris was a critic of the Bauhaus, I would conclude that his predisposition to method not result, his appreciation that the International Style, as already elucidated by Sybil Moholy-Nagy, did not accurately represent Bauhaus ideology. His concerns for architecture that could be understood aligned him more closely to the Bauhaus tenets than he was possibly comfortable with.

Having been appointed Dean at the School of Architecture in Austin (Texas) Hamilton-Harris in 1951 tailored an architectural faculty of individuals now known as The Texas Rangers.\textsuperscript{53} Harris wrote: “My ideas in teaching grew out of my experiences in learning. I consider design to be discovery. I look for the natural and the simple.”\textsuperscript{54} Although, these comments smack of Froebel, Pestalozzi and Itten and most strikingly Albers’ experiences and his theories, Harris continued to be openly critical of the Bauhäusler, calling them clichéd and “salesmen who had to portray a new product to sell and take credit for it.”\textsuperscript{55} Quietly, Hamilton-Harris was impressed by Albers’ approach to design, demonstrated by Hamilton-Harris consulting Albers over the inclusion of an artist for the Texas faculty.\textsuperscript{56} Perhaps believing the Bauhaus doctrines belonged to an artist and not Gropius, made the pill easier to swallow. The infusion of a Bauhaus legacy into the Texas Rangers continued with Hamilton-Harris employing Robert Slutzky (1930-2005) and Irwin Rubin (1930-2006), both Albers disciples, and John Hejduk (1929-2000) from Gropius’ GSD Masters programme.\textsuperscript{57} In spite of Hamilton-Harris’ reluctance to acknowledge Bauhaus tenets, his own curriculum remained heavily reliant on their teachings. Inadvertently repeating the Vorkurs principles, Varnelis explains that: “For the young Texas faculty, the solution to architectural education’s crisis was to refocus on its real essence: a rigorous understanding of form. The development of a new visual language in architecture would be

\textsuperscript{49} Germany, Harwell Hamilton Harris, 77.
\textsuperscript{50} Pearlman, Inventing American Modernism, 1.
\textsuperscript{51} Pearlman, Inventing American Modernism, 1.
\textsuperscript{52} Pearlman, Inventing American Modernism, 2.
\textsuperscript{53} Pearlman, Inventing American Modernism, 144.
\textsuperscript{54} Pearlman, Inventing American Modernism, 102.
\textsuperscript{55} Pearlman, Inventing American Modernism, 104.
\textsuperscript{56} Pearlman, Inventing American Modernism, 144.
\textsuperscript{57} Pearlman, Inventing American Modernism, 144.
based on a translation of Moholy-Nagy, Albers and Kepes’ work in three dimensions.”

It was Albers’ ambiguity of space that the Texas Rangers wished to explore. Encouraged by Moholy-Nagy’s ‘vision in motion’, students would draw continuously in order to achieve Ruskin’s innocent eye, removing preconceptions. Alex Caragonne describes a student epiphany, “a mysterious change of vision”, that took place. “Slowly, imperceptibly, our vision changed. We began to see the world differently. The spaces in between began to assert themselves, pressing forward into our consciousness.”

Having elucidated the opportunities, struggles and tensions involved in the translation of Bauhaus ideals in America during the mid-1900s, I would assert that although there were misunderstandings and misinterpretations, and although much of what occurred was due to the short-sighted of the Americans, it is understandable. What is not, even with twenty years hindsight available, is Hamilton-Harris’ duplicity in his disparaging critique of all things Bauhaus, while he attempted to refocus architectural education through the development of both rigorous analysis and a new universal visual language. Hamilton-Harris’ actions and words, I would argue, are less excusable. More generous in their acknowledgements and saving Hamilton-Harris from his duplicity, were the Texas Rangers who accredited the lineage and were objective enough in their translations to see the benefits held within the Bauhaus pedagogy, more precisely, legacy, which I fervently believe continues to hold relevance today.