WEAVING WORDS AND DRAWING LINES: THE BAUHAUS MASTERS ENDEAVOURS TO ESTABLISH A UNIVERSAL VISUAL LANGUAGE WITHIN FOUNDATION EDUCATION.

BY NAN CATHERINE O'SULLIVAN

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Abstract

This study investigates the roots of interdisciplinary architectural and design education and methodology in Europe and the United States during the first half of the twentieth century. In particular this thesis is concerned with the establishment of the principles of a universal visual language within this context. Walter Gropius' (1883-1969) efforts to propagate a universal understanding of architecture, art and design at the Bauhaus is a central focus of this study along with the use of a universal visual language to facilitate such an ideal. This thesis argues that the instigation of the Bauhaus preliminary course, the Vorkurs, developed by Johannes Itten (1888–1967) and matured by Bauhaüslers Lázsló Moholy-Nagy (1895-1946) and Josef Albers (1888-1976) offered vitality, integrity, creativity and longevity to Bauhaus pedagogy and posits that the beliefs and practices of the Vorkurs contributed significantly to the translation of European modern design education in the United States. Although Bauhaus pedagogical translations were refuted by some and misunderstood by others in the wholly different economic context of the United States, this study proposes that the translations of the *Vorkurs* methodology, by the émigré *Bauhaüslers*, Moholy-Nagy at the New Bauhaus in Chicago, Albers at Black Mountain College and Yale and Gropius at Harvard contributed to the codification of modern twentieth-century design education, and as such continues to offer relevance in current architectural and design pedagogical environments.

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"I want to keep myself steeped in this wholeness of life...never to forget, to keep radiantly warm inside myself, to remember the tough lessons of this great apprenticeship-never to become a woman who says with millions of her kind that her day has passed." Sibyl Moholy-Nagy.

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Introduction

The Bauhaus is considered to be the "most famous experiment in art education of the modern era." Bookmarked near the end of WWI in 1919 and the rise of the Nazi Party in 1933 the new academy coincided with the fourteen year reign of the Weimar Republic in Germany. The Bauhaus' short lifespan belies the range and impact of its contributions to contemporary culture. Although the political and historic context of the Bauhaus' inception has been thoroughly investigated and analysed in numerous recognised studies by some of the discipline's most prominent historians and theorists, how the Bauhaus managed to elicit such a sustained resonance and attain such historical significance in such a short time frame and in such difficult political and economic circumstances remains an enigma. The elucidation of the challenges the Bauhaus faced is well established by Bauhaus historians in texts such as Gillian Naylor's 1968 Bauhaus and 1985 The Bauhaus Reassessed, Marcel Franciscono's 1971 Walter Gropius and the Creation of the Bauhaus in Weimar and Rainer Wick's 2000 Teaching at the Bauhaus. These are but a few of the numerous texts addressing the complex and urgent situation that provided the context for the establishment of the Bauhaus by Walter Gropius (1883–1969) and his collaborators. Franciscono argued that the Bauhaus was "the most radical and sustained effort yet made to realise the dream cherished since the Industrial Revolution, not merely to bring visual art back into closer ties with everyday life, but to make it the very instrument of social and cultural regeneration." With the aim of gradually "closing the broad gulf that existed between art and industry,"3 the masters at the Bauhaus individually and collectively strove to transform the private languages used at the time within artistic disciplines into a single language shared across the workshop structure within the Bauhaus academy. In doing so, Bauhaus pedagogy provided a model universal visual language that continues to be utilised as a primary pedagogical language in architecture design education.

My aim is to establish the roots of interdisciplinary architectural and design education and methodology in current pedagogical environments. I will elucidate the vitality, integrity,

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¹ Marcel Franciscono, Walter Gropius and the Creation of Bauhaus in Weimar: The Ideals and the Artistic Theories of its Founding Years (Urbana: University of Illinois Press, 1971), 843.

² Ibid., 3.

³ Rainer K Wick, *Teaching at the Bauhaus*, trans. Stephen Mason and Simon Lèbe (Ostfildern-Ruit: Hatje Cantz Verlag, 2000),37.

creativity and longevity of the Bauhaus' preliminary course. I will assert that the pedagogical approaches undertaken within the *Vorkurs* to embrace new worlds and new technologies and to educate fledgling minds still hold relevance today. The principles introduced by Gropius and Johannes Itten (1888–1967) and matured by Lázsló Moholy-Nagy (1895-1946), Josef Albers (1888-1976) to propagate an understanding and imbue artistic and design appreciation into the hearts and minds of all those who use them has never been more challenged.⁴ As both society and academia currently grapple with the morphological aspects of our environs I believe these tenets to be ripe for re-evaluation.

My research will trace the development and implementation of the universal visual language within interdisciplinary foundation year pedagogy. Having established the stimulus for such a language and its dissemination I will identify the key protagonists in both the development and implementation of this language. I will outline the teachings within foundation education and I will argue that the original preliminary course within Bauhaus pedagogy, the Vorkurs, established and taught by Itten gifted the Bauhaus both the revolutionary pedagogy and the reformative tools to propagate such a language. Although Itten's pedagogy would be denounced by Gropius rather quickly as subjective, and Itten himself alienated from the academy, I will argue his pedagogical ideals and methodologies would remain as fundamental tenets throughout the entirety of preliminary design education at the Bauhaus. Additional translations of it were attempted in the United States by Bauhaus émigrés Moholy-Nagy, Albers and Gropius himself. I will investigate the attempt to establish this pedagogy in the United States by Moholy-Nagy, Albers and Gropius and consider the development of the individual methodologies they posited to embrace the universal visual language. The promotion of their translations brought widely varying degrees of American patronage, endorsement and enthusiasm for innovation, change and economic advancement by academics, industrialists, critics and practitioners. The process of translation played a substantial role in the interpretation and misinterpretation of Bauhaus ideologies. I will reveal both the affirmative and negative contributors and contributions pre-WWII to the American debates and discourse surrounding modernist design and architectural education. Nikolaus Pevsner's sycophantic elucidations in his Pioneers of Modern Design from Morris to Gropius (1949) amplified the

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⁴ Jill Pearlman, "Joseph Hudnut's Other Modernism at the "Harvard Bauhaus"," *Journal of the Society of Architectural Historians*. 56, no. 4 (1997).

effects of Gropius' single-handed impact on Modernism beyond recognition. Although this author serves as only a minute segment of my study, the augmented affirmations made by Pevsner illustrate quite clearly the polarity Gropius elicited. Gropius' personality, preferences and politics had inspired his founding of the Bauhaus and played a major role in his selection of Bauhaus masters. His persona continued to play a profound and not always helpful role in the dissemination of the model universal visual language in the United States.

In order to elucidate the provocations surrounding Gropius' inception and establishment of the Bauhaus, Chapter One will serve as an introduction to the reformative pedagogies initiated in Europe and Britain by reform theorists Friedrich Froebel (1782–1852), Johann Pestalozzi (1746–1847), John Ruskin (1819-1900), Gottfried Semper (1803-1879), William Morris (1834-1896), Herman Muthesius (1861–1927) and Henry van der Velde (1863–1957). In addition I will identify the political and ideological triggers that incited such radical efforts, focusing primarily on the shifting political, economic, social and aesthetic ideologies that offered Gropius the agencies for change and inspired the establishment of the initial Bauhaus manifesto in 1919. Within this, his first of three manifestos, Gropius called for unity through interdisciplinary exploration, examination, experimentation and communication. Gropius believed that a common visual language would facilitate an understanding of art and architecture into the hearts and minds of those that used it, thereby loosening the elitist grip on artistic knowledge. This methodology, initiated by Froebel and Pestalozzi, was consistent throughout all three manifestos and led to the evolution of the universal visual language within the *Vorkurs*.

Within Chapter One I will also identify the core principles of Ruskin's "innocent eye," Froebel's simple forms and Pestalozzi's sensory perception. These were posited within Itten's original *Vorkurs* and contributed to the development of Itten's methodology where learning by doing, compositional analysis and innovative expression using universal elements of design were employed. Lacking the industrialised goals sought by such provocateurs as Theo van Doesburg (1883–1931), the Bauhaus was scrutinised in 1923 causing Gropius to re-orientate his ideals and prioritise technology. This challenge, to the merger Gropius had called for in 1919

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⁵ Nikolaus Pevsner, *Pioneers of Modern Design from Morris to Gropius* (New York: The Museum of Modern Art, 1949).

⁶ Gropius would re orientate his 1919 Bauhaus manifesto in 1923 to integrate technology and denounce craft. He would also in 1939 write "The Blueprint of an Architects Education" to introduce his proposed teaching methods at Harvard University in America.

propelled the Bauhaus away from the unification of art and craft previously sought, and towards a concord of art and technology. It had taken only three years for politics and personalities to play their part in the removal of the perceived subjectivity of the Vorkurs teachings and for Itten to depart in 1923. Gropius, I will suggest used Itten as a scapegoat, labelling his ideals as individualistic because they lacked industrialized goals. While unveiling the subsequent iterations of the Vorkurs, I will argue the course was superficially revamped and retooled for industry and its new location in Dessau. Although the direction of the Vorkurs had certainly been re-orientated towards industrial intent and an increased engagement with both technology and the workshops, I will argue that future Vorkurs masters Moholy-Nagy and Albers used Itten's fundamental pedagogical methodologies as a basis for their work and teachings. I will argue that although both men denounced Itten's pedagogy, the principle ideals of innocence, essence and individual creativity continued to be emulated and adapted into their versions of the course. I will assert the continued use of Ruskin's innocent eye, Froebel's simple forms and Pestalozzi's sensory perception to facilitate the universal visual language into the workshops and industry. The presence of these tenets in both Moholy-Nagy and Albers' Vorkurs proves that although Itten acted as the Vorkurs master for the short period of three years his ideologies remained, albeit unacknowledged by any and all of his successors.

Internal and external political disruptions continued to play a role in the short and turbulent life of the Bauhaus. The school was abruptly closed under Nazi rule in 1933. However its masters and a number of its students had already gained international acknowledgement. This notoriety would lead a number of *Bauhaüsler* to accept invitations to teach and work in the United States. Gropius, Moholy-Nagy and Albers were among the Bauhaus émigrés to quickly reconnect on arrival in the United States. Their mutual support for each other's endeavours was critical as they found themselves in a wholly different economic climate that suited some more than others.

In Chapter Two I will traverse the Bauhaus path in the United States where its ideologies and pedagogical methods were met with varying degrees of optimism and mistrust. All three Bauhaus disciples endeavoured to establish the principles: Albers at the John Dewey (1859-1952) inspired Black Mountain College (North Carolina) and Moholy-Nagy in Chicago with the New Bauhaus. Both men were supported by Gropius who was in residence at Harvard. Both

Moholy-Nagy and Albers steadfastly attempted to promote the Bauhaus ideals beyond the confines of Germany and continued to influence both modernist philosophy and pedagogy. More importantly both Albers and Moholy-Nagy continued to address, with varied success, the elitist hold on art and architecture and the emergent profession of design within both industry and academia. I will argue Moholy-Nagy and Albers' use of interdisciplinary foundation studies, imbued with Itten's tenets for the education of a universal visual language, continued to serve as the platform from which to loosen this elitist grip. However, it would be in the United States that certain individual and collective ideologies transmuted during the maturation of the Vorkurs. Albers, although promoting the 'innocent eye' as perception not pre-conception within his foundation pedagogy, and encouraging the appreciation of all creative endeavours, did however, confine his work and teaching to that of painting. This specificity, I will argue, minimised the opportunity he had to influence other disciplines more directly as he was now perceived by some as only a painter. I will also argue that Albers' return to painting highlights the hypocrisy of his attitude toward Itten's individualism and subjectivity. I will assert that having reached the prestigious mantle of Professor at Yale University, Albers' obsession with new vision and the advanced training of students' perception of form and space, brings into question his commitment to an egalitarian educational collective over elitist academia.

Moholy-Nagy's efforts in the United States were, in my opinion, the more challenged of these two particular *Vorkurs* masters. With the impassioned and consistent support of Gropius, and a number of U.S industrialists, Moholy-Nagy held perhaps, the most opportunistic position in the United States as the founder of the New Bauhaus. The New Bauhaus in Chicago was formatted on Gropius' Bauhaus model embracing both interdisciplinary education and the universal visual language. Industrial design, typography, photography and film formed the collective with, somewhat questionably, architecture placing itself as a superior course. It was Moholy-Nagy's preoccupation with methodology and experimentation, not economic ascendancy that caused a number of the industrialists to become impatient, ultimately causing fractures within their tenuous relationship. Moholy-Nagy did, in spite of his acrimonious environment make many strides ahead for both pedagogy and the implementation of industrial design and the burgeoning graphic and filmic mediums. Moholy-Nagy's greatest battle was with the economic climate in the United States which was principally concerned with a new aesthetic commodity not a new way of seeing. Industry seemingly cared little for pedagogy or methodology and

more for aesthetics and profit. Moholy-Nagy's commitment to the Bauhaus ideals was unquestionable. His untimely death at the age of fifty-three halted his unrelenting and at times fanatical efforts; however his second wife Sibyl Moholy-Nagy (1903-1971) would ensure the legacy of his ideologies in her emphatic and polemic writing which included her 1969 book, *Moholy-Nagy-An Experiment in Totality*.

In the third and final chapter, I explore the trials and tribulations of Walter Gropius' endeavours to introduce the universal visual language and interdisciplinary education at Harvard University – notably into its department of Architecture. It was here, specifically within architectural education, that I believe Gropius' contributions to modernist theories, interdisciplinary education and the universal visual language were most profoundly challenged, principally by Joseph Hudnut, a man almost ignored in modernist history. Gropius believed in the universal and felt the attributes of universality and egalitarianism were vital components in bringing art and architecture to everyone. Hudnut did not agree, believing that architecture only reached people on an emotional plane by speaking its own language. I will argue that Hudnut encouraged an elitism that Gropius had always denounced. The battle was played out over the preliminary course at Harvard's Graduate School of Design where Gropius vehemently fought for an interdisciplinary use of the universal visual language.

Gropius' teachings and works impacted both European and American artistic, design and architectural pedagogy. It had been a difficult path that had included political, academic and public struggles. Their cause was challenged by many, but Gropius and his Bauhaus colleagues introduced more than a generation of practitioners and users to the tools for understanding both a creative process and its outcomes.

I will conclude this chronicle with a transitory preface to the next generation of disciples and critics inspired by the teachings of Albers, Moholy-Nagy and Gropius. Their teachings, indoctrinated by Itten's, allowed the students of Bauhaus ideals to become some of the most formative voices in architectural and design practice, education and critique. I will argue that in spite of the many difficulties, or perhaps because of them, the Bauhaus pedagogy in both Europe and America continues to represent a critical benchmark in the history of modern design education and in the efforts of early modernists to define the universal visual language.

As such, that pedago	gy continues to of	fer lessons and	l provocations for	r design educatio	n in the
twenty-first century.					

Chapter One

All Roads Lead to the Bauhaus

1.1 The Emergence of Industrial Aesthetic Theory

In 1885 John Ruskin (1819–1900) wrote: "Students must attain the innocence of the eye, a sort of childish perception of these flat stains of colour, without consciousness of what they signify." Ruskin's belief in the innocent eye valued perception rather than preconception as a primary tool for creativity. Importantly, Ruskin's efforts, along with those of Friedrich Froebel (1782–1852), Johann Pestalozzi (1746–1847), Gottfried Semper (1803-1879), William Morris (1834-1896), Herman Muthesius (1861–1927) and Henry van de Velde (1863–1957), provided a wealth of theoretical and pedagogical ideas for an emerging post-Industrial Revolution aesthetic theory and would go on to inform future generations of design educators. Key figures in the translation and integration of many of these theories are Gropius and Itten within the Bauhaus pedagogy. It is well documented by Bauhaus historians that the teachings of Ruskin's innocent eye and Froebel's visual language of simple objects served as an embryo in modernist art education. This new language offered architecture and design a universal model and primary pedagogical vernacular that is still employed in contemporary educational practice.

In order to gain an understanding of the provocations that led to the founding of the Bauhaus by Gropius and his colleagues in 1919 I will retrace the influences of reformative pedagogical theories developed and implemented by Pestalozzi, Froebel and Ruskin. It is important in addition to outline the circumstances existing in Germany prior to and post-WWI. Having exposed the cultural influences and triggers I will reveal the beliefs embraced by Bauhaus masters for their own pedagogical intentions. Of these I will scrutinize the principles of Bauhaus pedagogy that formed the preliminary course, the *Vorkurs*, in order to elucidate how these theories effected the establishment and maturation of a universal visual language. Forming the basis of my study will be the endeavours of the three principle curators of the *Vorkurs*, Itten, Moholy-Nagy and Albers in conjunction with Gropius. Collectively and individually these men

⁷ John Ruskin, *The Elements of Drawing in Three Lessons to Beginners* (New York: John Wiley and Sons, 1885). To gain a more comprehensive understanding of the discourse around the innocent eye read Jonathan Fineberg's 1997 book *The Innocent Eye: Children's Art and the Modern Artist.* (Princeton University Press)

⁸ Kazys Varnelis, "The Education of the Innocent Eye," *Journal of Architectural Education (1984-)* 51, no. 4 (1998), 214.

formed the Bauhaus contingent of pedagogues to offer the most significant and sustained efforts towards preliminary architectural and design education and the development of a universal visual language both in Germany and the subsequent transatlantic iterations of the course.⁹

I will suggest that after Itten's resignation in 1923 the Vorkurs was not stripped of all his tenets to enable engagement with the industrial demands of Gropius' progressive academy. I will argue that the principles of innocent perception, learning by doing, scientific and analytical observation and universal understanding via a common visual language, continued to be fundamental. As the Bauhaus redefined its aims and tempered idealism with realism within Moholy-Nagy and Albers' adaptations of the course innocent perception remained absolute. I will argue that the universal language of form that Gropius and his masters laboured to achieve within the Vorkurs survived principally due to the Bauhaüsler's pedagogical commitment to method over result. Although the transatlantic appreciation of European Modernism would be judged as a Bauhaus style, or the formally defined and codified International Style, these three particular Bauhaus masters continued to espouse the Bauhaus in the United States as a methodology not a formulaic aesthetic code. They would each continue to embody the principles of the Vorkurs. Conceived by Itten, and matured within their own pedagogical pursuits and challenges both in Germany and the United States they made Bauhaus pedagogy, in particular the Vorkurs, the most celebrated methodology in art education of modern times.¹⁰ I will argue that within their initial pedagogical aims in Weimar and Dessau Gropius, Moholy-Nagy and Albers secured the Bauhaus Vorkurs as the preeminent opportunity for cohesion and solidarity within the pedagogy of creative practice. This standpoint would be either embraced or challenged within creative pedagogy for several decades to come but it would never be disregarded or forgotten. As art historian Frank Whitford stated, "Whatever the changing attitudes towards the Bauhaus its place in the history of virtually everything visual is secure. The look of the modern environment is unthinkable without it." 11

⁹ Although both Kandinsky and Klee also taught the preliminary course at the Bauhaus their pedagogy remained entrenched in drawing and painting and was not included in the American translations adopted by Gropius, Moholy or Albers.

¹⁰ Frank Whitford, *Bauhaus* (London: Thames and Hudson, 1984), 9.

¹¹ Ibid., 200.Frank Whitford is a senior lecturer in Art History at Homerton College at Cambridge University and is a well established autor.

1.2 The First Intersection of Art, Education and Industry

The Industrial Revolution had brought with it machinery and materials which usurped the traditional meanings of artist and craftsmen. 12 The Great Exhibition of 1851, staged in London's Hyde Park, revealed this predicament now facing the civilised world. With it, criticism of the state of art and craft education began in earnest. Steam and iron stamping made cutting and fashioning objects faster and more regular than with the human hand. Lower prices and higher profits became a priority over individuality and craftsmanship. The most articulate opponents to the new machine age in Britain at this time were John Ruskin and William Morris. German architect and political refugee Gottfried Semper, who was residing in London at the time of the Great Exhibition, was also a vocal opponent in relation to the state of art, craft and production. Whitford discusses in his 1984 book Bauhaus that while the general public were enamoured with Joseph Paxton's (1803–1865) creation, a small but significant number of more discerning citizens were appalled by what the exhibition contained.¹³ Their concerns included the imminent demise of craft and all its perceived benefits to humanity. Ruskin and Morris would, along with Semper, become part of the vanguard to educate both the artist and the layman in their understanding and appreciation of this new industrialised age. While Morris believed that there was dishonesty in the mimicking of a craft aesthetic in machine goods, Ruskin was completely opposed to the use of machines at all. Semper, on the other hand, acknowledged that technology was irreversible and proposed: "an education for a new kind of craftsman who would understand and exploit the machine's potential in an artistically sensitive fashion." ¹⁴ Although there is no accreditation afforded to Semper in any of the major Bauhaus writings by Sigfried Giedion (1888–1968), Pevsner, Rayner Banham (1922–), or Rainer Wick (1944-), I would conclude from Semper's own writings that his ideology was more closely aligned to that of Gropius and the Bauhaus than either Ruskin's or Morris'. 15

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¹² Ibid., 13. From the 18th to the 19th century major changes in agriculture, manufacturing, mining, transportation, and technology had a profound effect on the social, economic and cultural conditions of the times.

¹³ Ibid. 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.

¹⁴ Ibid., 16.

¹⁵Semper's 1851 writings include "The Four Elements of Architecture" and "Science Industry and Art."

1.3 Reformative Education on the Development of a Visual Language

Educational reform had been gaining momentum in Europe since the late eighteenth century. It is generally recognised that the educational transformations espoused by Ruskin and his fellow reformists owed a philosophic debt to Jean Jacques Rousseau (1712-1778), Pestalozzi and Froebel. 16 Pestalozzi, inspired by philosopher Rousseau's book on alternative education and enlightenment, Émile, believed that teaching the simple elements of the laws of form united with sensorial learning would achieve harmony and knowledge for a society struggling with many reformations. Drawing had been a central component of educational reform ever since the publication in 1803 of Pestalozzi's co-authored book ABC's of Anschauung.¹⁷ This book distinguished "pedagogical drawing" from elitist drawing taught in the academies. Pestalozzi's drawing method was based on a desire to create a reductive graphic code or an alphabet for drawing where "the square was the foundation of all forms. The repertoire of forms was based on a sparse grammar of straight lines, diagonals and curves." This premise of "main forms" was introduced to elucidate an understanding and express "the abstracted essence of physical objects." Heavily influenced by Pestalozzi, Froebel also adopted pedagogical drawing to encourage dexterity and analytical skills. Froebel introduced a drawing grid to enable students to reduce the complexity of the visual world. These drawing exercises supported Froebel's theory surrounding the isolation of fundamental and constructive elements that we have come to know as Froebel's gifts.²⁰ Art curator Ellen Lupton and designer J. Abbott Miller assert that the popularity of this methodology and the use of the gifts created a pervasive, universal "visual language of elementary forms and basic colours and the program at the Bauhaus attests to its impact."²¹ Froebel's introduction of the learning at play theory, which still holds validity in contemporary early childhood education worldwide, added a sense of spiritual unity to Pestalozzi's tenets. Froebel believed that the teaching of Pestalozzi's visual language of simple

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¹⁶ Henry P. Raleigh, "Johannes Itten and the Background of Modern Art Education," *Art Journal* 27, no. 3 (1968), 284.

¹⁷ Ellen Lupton and J.Abbott Miller, eds., *The ABC's of ΔO*. *The Bauhaus and Design Theory* (New York: Princeton Architectural Press, Inc, 1991), 6. Anschauung is a German noun meaning to see or percieve.

¹⁸ Ibid.

¹⁹ Ibid. Pestallozzi's colleague Ramsauer's wrotethe book "Drawing Tutor" that was seen as an extension of these ideals

²⁰ Ibid., 8. Froebel developed his "Gifts and Occupations" between 1835 and 1850. Froebel believed this vocabulary of forms would become rich enough to enable representations of the world around us.

²¹ Lupton is the art curator at the Cooper-Union Art Museum in New York and Miller is a partner in the graphic design company Pentagram also in New York. Ibid., 18. Le Corbusier, Frank Lloyd Wright, Kandinsky and Klee were all educated under Froebel theories.

objects, coupled with haptic awareness and visual knowledge, was a far superior pedagogical approach to the existing rote styled schooling. Froebel and Itten shared a particularly profound link between their ideologies due predominantly to a belief in spirituality that both espoused as part of the methodology. Additionally, within both Ruskin's teachings and those of Froebel and Itten that followed, it becomes clear that the position of the educator has altered considerably. The educator is now, most importantly, a facilitator or guide in a student's quest towards a unity of head, heart and hands, not a leader to be followed or mimicked.²²

With education no longer only a quest for the noble, and a newly emergent middle class now requiring and demanding education, new pedagogical approaches were needed. Inspired by Pestalozzi and Froebel, and considered highly influential for his clear analysis and viewpoints on a changing industrialised world development, Ruskin's enhancement of their theories was seen by many as fundamental to the well-being of the new industrialised society. Described by Wick as "a fiery critic of industrial production," Ruskin believed, along with Morris, that the machine had no soul and would render man soulless.²³ Whitford summarises both Ruskin and Morris' concerns by stating: "It robbed the craftsman of the joy in work well done and denied the public the life-enhancing pleasure of living in an environment that had been shaped with both skill and love."24Ruskin's concerns for society and his beliefs towards honesty of work and creativity were borne out of a mistrust of industrialisation and these concerns spilled over into his pedagogical reforms. Ruskin asserted that the transparency of tabula rasa gifted to children had been displaced by societal conventions and emphasised that this childlike innocence was critical in order to embrace new theories. Ruskin insisted that: "We see what we only know and have hardly any consciousness of the real aspect of the signs we have learned to interpret."²⁵ The innocence of eye was to become a fundamental component of Bauhaus teaching within the preliminary course and I will argue that it served as a primary link to the teaching of a universal visual language.

²² Raleigh, "Johannes Itten and the Background of Modern Art Education," 285. This guiding role of the educator, or master as they would become known in the Bauhaus would be challenged after both Itten and Gropius left by Mies van der Rohe who saw the teacher indeed as a master, one to be followed.

²³ Wick, *Teaching at the Bauhaus,* 17.

²⁴ Whitford, *Bauhaus*, 16.

²⁵ Ruskin, *The Elements of Drawing in Three Lessons to Beginners*, 22. Ruskin also asserted that highly accomplished artists had always reduced themselves as nearly as possible to infantile sight.

Alternatively, Morris was to try to resuscitate the use of traditional crafts through a belief in the communal efforts of the medieval guilds of the middle ages. Artists such as Morris learned their trades from the ground up as apprentices and believed workers gained a pleasure of labour from their toils. They argued that the machine and mass production would eliminate this. Like Ruskin, Morris believed a sick society would emerge from the industrialised world. Unfortunately, Morris' oath to the handicrafts meant that only expensive goods could be produced and the ideal of affordable handcrafted goods became untenable. Morris sadly acknowledged that his aims could ultimately only serve the "obscene luxury of the rich." Nevertheless, according to the significant writings of Wick, Pevsner, Giedion, Franciscono and Banham we cannot deny Morris his significant influence on the Arts and Crafts Movement in England and his influence on craft revival, socialist politics and ultimately Gropius' goals for the Bauhaus.

In 1850 Semper, a political refugee, travelled from Paris to London where his commissions included designs for the Canadian, Danish, Swedish, and Ottoman sections of the 1851 Exhibition in the Crystal Palace. London proved to be a fertile ground for Semper's theoretical, creative and academic development. His writings offered recommendations for drastic changes in art education and the rectification of public taste. Commenting on the exhibits within the Great Exhibition Semper argued: The purpose of the product is seldom manifested artistically, except in the trimmings and the material has to be violated before the intent of the artist is even partly fulfilled. Semper held a more inclusive approach to industrial and technological development than either Ruskin or Morris. With his writings well received he was fortunate enough to gain the sympathetic ear of Henry Cole (1808–1882), the director of the South Kensington Museum and adjacent School of Art, now renamed the Victoria and Albert Museum and the Royal College of Art. Cole like Semper had assisted in the organisation of the Great Exhibition and been disappointed by the results of the exhibitors' efforts and widely articulated his criticism of the goods displayed. Both men considered that the only lasting solution to the

²⁶ Gert Selle, *Ideologie und Utopie des Design* (Cologne: DuMont Schauberg, 1973),33.

²⁷ Henry P.Raleigh, "Johannes Itten and the Background of Modern Art Education " *Art Journal* 27, no. 3 (1968), 284. Like Semper's book The Four Elements of Architecture published in 1851 the Bauhaus too explained the origins of architecture through natural and social sciences breaking the discipline into four categories; ceramic, weaving, woodwork & stone masonry.

²⁸ Gottfried Semper, *Science, Industry and Art (1852)*, trans. Harry Mallgrave and Wolfgang Hermann (Cambridge: Cambridge University Press, 1989).

problems posed by industrialisation was education. Together, they argued that the establishment of craft museums would play as important a role as the establishment of schools of art and crafts. This solution would also encompass the ever expanding and demanding populace.²⁹ Their arguments met with little resistance in England and Europe, and craft museums and reformative arts and crafts education were widely established. Unfortunately, according to Whitford, it was society that failed to accept that craft was anything other than a poor relation to art. Whitford argues that fine arts academies continued to educate their students in the ways of the old masters, believing that they alone enshrined the ultimate artistic values. He asserts that both Cole and Semper believed reform in art education would need to begin with an attack on elitist academies. ³⁰ The division is apparent when Pevsner states in his polemical book Pioneers of Modern Design: From Morris to Gropius that: "During the Renaissance artists had first learned to consider themselves superior beings, bearers of the great message. Leonardo da Vinci wanted the artist to be a scientist and a humanist, but by no means a craftsman." Semper's pedagogical efforts in Vienna during the 1860s and 1870s to establish preparatory classes and interdisciplinary education of architecture, painting and drawing had established him in the eyes of his contemporaries as an authority and positioned his ideals both philosophically and geographically to influence both Gropius and Itten more significantly than recorded.³²

Within my research I have noted that in the many historical writings on the Bauhaus, with the exception of Gillian Naylor's 1985 *Bauhaus Reassessed*, Semper is either passed over or given minimal acknowledgement as an instigator of Bauhaus ideology.³³ Wick minimises Semper's singular pioneering efforts by describing him as only: "among the first to draw attention to the critical points of design of forms and products."³⁴ Although Semper's writings were included in Wick's 1965 series *Neue Bauhausbücher* Wick again accredits Semper as having only: "In

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²⁹ Whitford, *Bauhaus*, 17.

³⁰ Ibid. For more discussion on the elitist debate see Christopher Frayling's 2011 "Craftmanship toward a new Bauhaus." Oberon Books, London.

³¹ Pevsner, *Pioneers of Modern Design from Morris to Gropius,* 8.

³² Semper, *Science, Industry and Art (1852)*, 118.Wilhelm Mrazek wrote a review of Semper's work that was included in the 1966 edition of this book

³³ Gillian Naylor, *The Bauhaus Reassessed.Sources and Design Theory* (New York: E.P Dutton, 1985), 33. Naylor makes a direct connection between Semper and the industrial and pedagogical tenets of turn of the century German art education, the Werkbunds but falls short of aligning them directly to Gropius and the Bauhaus ³⁴ Wick, *Teaching at the Bauhaus*, 17. Later in this book Wick again discusses Semper in the establishment of interdisciplinary education and preliminary education but abruptly and rather unconvincingly disconnects Semper from Itten.

certain respects, acted as a forerunner of the Bauhaus ideology."³⁵ Pevsner literally mentions Semper's name twice, and only in passing, in his entire book on the path towards modernism.³⁶ I would argue that Semper's role as a direct influence on the pedagogy and the methodology of both Gropius and Itten to unite arts and crafts is linked more substantially than history, or Gropius himself, has acknowledged. This omission is interesting when we consider in Chapter Three the additional side-lining of another major contributor to modernism, and one who could also be seen as a threat to the perception of Gropius' achievements, Joseph Hudnut.

1.4 The Influence of the Werkbund on Bauhaus Ideals

In Gropius' 1924 essay "Concept and Development of the State Bauhaus," he acknowledged a debt to Ruskin and Morris in England, van de Velde in Belgium, Olbrich, Behrens and others in Germany and finally the German *Werkbund* who he considered trailblazers and who had all in Gropius' opinion: "consciously sought and found the first ways to the reunification of the world of work with the creative artists." ³⁷

An historical appreciation of the word, unified, and the importance of the ideals behind such a word are imperative to understanding Germany's post WWI cultural agenda. In the 1870s, under the leadership of Otto von Bismarck, the Prime Minister of Prussia, Germany had emerged as a unified nation and world power and set about establishing itself as a distinct and undivided entity. By 1910 Swiss born Jean-Édouard Jeanneret, the young le Corbusier (1887-1965) had been commissioned by the French Art Academy *la Chaux-de-Fonds* to investigate Germany's ascendance.³⁸ His study, *Étude sur la movement d'art décorative en Allemagne* examined Germany's threat to other European efforts towards progressive art and architecture. The young le Corbusier questioned: "Among the great powers, Germany plays an essentially active role in the realm of applied arts. What are the factors that give Germany her strength? What are the workings of this astounding organism?"³⁹ Editors Kries and Anderson

³⁹ Ibid., 101.

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³⁵ J.P Hodin, "Neue Bauhausbücher," *The Journal of Aesthetics and Art Criticism* 26, no. 1 (1967), 133.

³⁶ Pevsner, *Pioneers of Modern Design from Morris to Gropius* It should be noted that Giedion's writings on Gropius and the modernist movement have been widely criticised retrospectively as being rather one-eyed.

³⁷ Wick, *Teaching at the Bauhaus*, 16.

³⁸ Mateo Kries and Alex T Anderson, *Le Corbusier A Study of the Decorative Art Movement in Germany*, ed. Mateo Kries and Alexander von Vegesack, trans. Alex T Anderson (Weil am Rhein: Vitra Design Stiftung gGmbH 2008). Jeanneret adopted the pseudonym le Corbusier in 1920.

outline in the prologue to le Corbusier's book the organisational support and financial backing that had made the German decorative and applied arts movement commercially very effective. Through this pecuniary support, education and a vibrant industrial sector Germany grew in political and economic success. The economic boom allowed the Austrians and the Germans to make up the principle contingent of the vanguard leading the race to produce original ideas and practical solutions to the quandary surrounding the education of art, craft, design, and (due to new urban and housing concerns) architecture. By the early twentieth century Germany had secured a leading international role. 40

German architect Hermann Muthesius was also commissioned by his government to study abroad. Undertaken in England, his study preceded le Corbusier's by some ten years and he would serve to be as profound in his views as le Corbusier. Inspired by the sobriety and functionalism displayed in English domestic architecture Muthesius wanted objects to express the quality of the materials from which they were made. He argued that objects should be devoid of unnecessary ornament and be affordable to the masses. 41 Naylor references Muthesius with a touch of light-heartedness, stating that: "in fact Muthesius only seemed to feel really at ease in the English bathroom, where he found a completely new sort of beauty ... the beauty of practical purpose." 42 On his return to Germany and in his new position as the Superintendent of the Prussian Board of Trade, Muthesius convinced architects Peter Behrens (1868-1940) and Bruno Paul (1874-1968) to head art schools in major German cities. Behrens, in particular reorganised the curricula in an attempt to reconcile traditional craftsmanship with mechanisation. Muthesius's efforts to persuade German industrialists to encourage good design were as important as Behrens and Paul's educational endeavours. In 1907 Muthesius successfully united twelve artists and twelve industrialists forming the first Werkbund. The introduction of art education through Werkbunds in Germany offered, in principle, a unification of artists, manufacturers and industrial enterprises.⁴³

The Deutsche Werkbund (1907-1933) represented itself as a movement, not of luxuriant extravagance, like its immediate predecessors the Romantics and Jugendstil, but suited to

⁴⁰ Ibid.

⁴¹ Whitford, *Bauhaus*, 20. In 1896 Muthesius was posted to England by the German government to study and report on town planning and houses and from this came his important book "Das English Haus" in 1904.

⁴² Naylor, The Bauhaus Reassessed.Sources and Design Theory, 37.

⁴³ Whitford, *Bauhaus*, 22.

middle class culture which now increasingly defined modern society.⁴⁴ Ultimately le Corbusier's study would identify the *Deutsche Werkbund* as the 'astounding organism' that gave Germany this unanticipated position. Le Corbusier noted:

Now here is an aspect of something new and unexpected. Germany positions itself as a champion of modernism, creating nothing in the domain of fine arts to prove itself so, but on the other hand, revealing itself almost without warning to be colossal in power, in determining and achieving in the domain of the applied arts.⁴⁵

Muthesius described the *Deutsche Werkbund* as "an alliance of the most intimate enemies" because the opinions and beliefs of its members were extraordinarily broad.⁴⁶ Unfortunately, the alliance under the directorship of Muthesius became more of a dictatorship than a unified proposition. This unease led to heated discussions and debates among members, none more significant than the *Werkbund* Debate in Cologne 1914. Although the *Werkbund* members agreed fundamentally on the reformation of aesthetic and social concerns, the conflict between free artistic expression as espoused by Gropius' mentor Henry van de Velde (1863–1957) and the standardisation of machine-made products argued by Muthesius would not find resolution before the outbreak of WWI.⁴⁷ It was from this debate that the question which pervaded the entire history of the Bauhaus materialized, specifically the conflict between free artistic self-expression and the search for a language of form that would accommodate the requirements of mass production.

1.5 The Influence of a Post-WWI Germany on Bauhaus Ideals

It is perhaps enough to state that Germany's efforts in WWI cost the Empire its advanced position in the emerging art curriculum and the unification of art and industry. Consequently,

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⁴⁴ Kries and Anderson, *Le Corbusier A Study of the Decorative Art Movement in Germany*. The Deutsche Werkbund, was abrupty closed in 1933 by the National Socialist party but did reopen in Germany in 1947.

⁴⁵ Ibid., 101.

⁴⁶ Wick, *Teaching at the Bauhaus*, 24. Muthesuis believed within the broad spectrum of ideas advanced creativity and solutions would emege.

⁴⁷ Whitford, *Bauhaus*, 36. Van de Velde's rhetoric and aesthetic standpoint was totally different from that of Ruskin and Morris. But, in contrast his ideals of solidarity with the trades and art revival via handicrafts were completely sympathetic to that of his predecessor's.

post-WWI, a primary directive for Germany was to bring itself back to the forefront of design. In Germany the Bauhaus' efforts to achieve this superiority and influence over other industrialised nations were to employ a *modus operandi* to unify the arts and close the gulf that existed between art and industry. 48 Alongside the continued tensions within the world of art, craft and industry other new political conflicts had been percolating in Germany. The defeat and the abdication of the Kaiser left the country in chaos. Political jostling and hostility, coupled with the outcome of WWI, had cost the Empire immensely. Germany faced crippling debt, reparation payments, unemployment, lack of raw materials and limited imported goods. In August of 1919, the National Assembly chose to convene in the city of Weimar in order to write, adopt and sign the new National Constitution for the German Reich, and hopefully avoid more fighting and turmoil. The year 1919 was inauspicious for the founding of anything in Germany, let alone a radical art school. Weimar, described by Whitford as a rather austere location, had managed to remain fairly removed from political conflict. With a population of only forty thousand and almost no industry the small town's aptness for radical and creative thought seemed untenable. The lack of financial and political security experienced over the next six years, during Gropius' pedagogical endeavours, are testament to the school and the city's precarious relationship. Although the Bauhaus under Gropius would not remain in Weimar beyond 1925, this period of liberal democracy created by the constitution in Germany proved to also be short-lived, lasting only till the early 1930s. Wick summarises the situation succinctly: "The Bauhaus was founded by Walter Gropius in 1919 and closed in 1933 under pressure from the National Socialists. The beginning and the end of its existence coincided with the dates of the Weimar Republic."49

1.6 The Changes to Gropius' Ideologies Post-WWI and Pre-1923

During this period Gropius' thoughts and ideals shifted; the causes of these amendments were just as interesting as the changes. Historian Marcel Franciscono describes Gropius' change in proclamations from pre-WWI to the 1919 manifesto and onto the 1922 expression of the Bauhaus ideals as nothing short of astonishingly and strikingly different in both style and

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⁴⁸ Wick, *Teaching at the Bauhaus*, 37.

⁴⁹ Ibid., 15. Cultural historian Barbara Miller Lane's 1985 book " Architecture and Politics in Germany" is considered one of the most comprehensive and detailed examinations of the social and political ideas during the Weimar period.

content. 50 Even Pevsner, an acknowledged supporter of Gropius, questioned the transformation. "It is all very weird ... the Gropius of Fagus starting an Expressionist guild." 51 Gropius was born into an architectural family and studied architecture in both Munich and Berlin. Qualified in 1907, he joined Behrens' Berlin practice where Behrens' appointment as chief designer for AEG had just been confirmed. Within three years Gropius had left to establish his own practice, and secured the Fagus factory commission in 1911, which he would design with his partner Adolf Meyer (1881–1929). 52 Gropius' success with the Fagus factory is well documented and of the plethora of compliments surrounding this work Whitford sums it up accurately as: "startlingly ahead of its time, especially due to novel use of steel and glass."53 Links between Gropius' writings and the Deutsche Werkbunds, and his associations with van de Velde and Behrens, have generated certain assumptions about Gropius' pre-WWI beliefs. Again in collaboration with Meyer, who would remain Gropius' partner for many years, Gropius would design a small model factory for the 1914 Cologne Exhibition. It was here at the Exhibition that Gropius would ally himself to van de Velde in the famous 1914 Cologne Debate. Gropius in doing so had now clearly asserted his belief that the artist's free expression and reformative pedagogy was the answer to a unity between art, craft and industry. Behrens had, by example, introduced Gropius to the dogma that would drive him towards the founding of the Bauhaus and many of the principles Gropius and his contemporaries would teach there.⁵⁴ But within weeks of the opening of the 1914 exhibition war broke out and Gropius, now married to Alma Mahler and a father to Manon, his first and only biological daughter, was called to war.⁵⁵ Little is known about his war service but much is attributed to it.⁵⁶ Whitford explains that mentally and physically scarred by the war, Gropius, by this stage considered a

⁵⁰ Franciscono, Walter Gropius and the Creation of Bauhaus in Weimar: The Ideals and the Artistic Theories of its Founding Years, 13.

⁵¹ Nikolaus Pevsner, "Gropius and van de Velde," *Architectural Review* 133(1963), 167. Pevsner's writings have in retrospect been seen as rather biased but perhaps out of characher Pevsner states the obvious truth without a pro Gropius slant.

⁵² Whitford, *Bauhaus*, 33 -35. It is noteworthy that from the outset of Gropius' career he maintained a collaborator-interpretor in all his architectural works as Gropius could not draw. It is rumoured that Gropius, while attending school, employed an assistant to do his homework.

⁵⁴ Wick, *Teaching at the Bauhaus*, 22. Behrens believed that rich ornament was not acceptable on machine made forms. He favoured clear proportional relationships of individual components.

⁵⁵ Gropius and his first wife Alma, described as a "muse to genius" secretly married and had Manon. James Reidel, "Letters to an Angel," *Journal of the Society of Archiectural Historians* 69, no. 1 (2010), 88. The relationship between father and daughter was severley impaired by his divorce from Alma. Gropius was determined Manon would share in his legacy and the letters he wrote her attest to this. Manon died aged 19 from polio.

⁵⁶ Whitford, *Bauhaus*, 36. Gropius was at the Somme in 1917. Badly wounded he was awarded the Iron Cross twice and demobilised in 1918.

Werkbund leader, in a 1919 speech given in Leipzig surprisingly condemned: "the dangerous worship of might and the machine which led us over the spiritual and economic abyss." I would assert that these are not the words of a man ready to lead the way towards the assimilation of industrialisation, art and social reform. Gropius, ever the socialist, argued: "the true task of the socialist state is to exterminate this evil demon of commercialism." ⁵⁸

For reasons unclear even to those who have studied Gropius in depth, his 1919 Bauhaus manifesto was, described by Whitford as: "vague, ecstatic and utopian and draws upon neither Behrens nor van de Velde." Whitford has offered some insight to Gropius' curious behaviour. He suggests that Gropius' actions were politically astute in a time when the world of art was very confused. He asserts Gropius may not have denounced the machine in totality as suggested. The perceived understanding of Expressionism as a vehicle for social change and revolution, he argues, would assist Gropius' pre-WWI goals, allowing them to quietly mature, develop and gain political alliances within Germany's fragile political environment. Alexander Dorner's contribution to Bauhaus 1919–1928 supports this position stating: "No one would have prophesised success for Gropius. At the very start he stood firm against relentless opposition and the economic difficulties and struggled to develop the right program within the Bauhaus itself." Whitford posits that Gropius hoped his school would become a source of social change through art aiming to directly involve creative people in the forging of a new social order. In Gropius' own words: "Art and the people must form a unity." The 1919 manifesto read:

Let us therefore create a new guild of craftsmen without the class distinctions that raise an arrogant barrier between craftsmen and artist! Let us desire, conceive and create the new building of the future together. It will combine architecture, sculpture and painting in a single form and will one day rise

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⁵⁷ Ibid., 37. Gropius arrived at the Bauhaus a highly political creature. He soon became the chairman for the left wing group Working Soviet for Art whose aim was to engage creative people in the forming of a new social order. ⁵⁸ Ibid., 38. Wick references here a series of essays Gropius had written for the Arbeitstrat publications produced

by the Arbeitstrat fur Kunst (Working Soviet for Art)

⁵⁹ Ibid., 26.

⁶⁰ Ibid.

⁶¹ Herbert Bayer, Walter Gropius, and Ise Gropius, eds., *Bauhaus 1919 -1928* (New York The Museum of Modern Art. 1938).

⁶² Whitford, *Bauhaus*, 38.

towards the heavens from the hands of a million workers as a crystalline symbol of a new and coming faith. ⁶³

In pedestrian terms, Gropius' new school was an amalgamation of the Weimar Academy of Fine Art and the *Kunstgewerbeschule*, the School of Arts and Crafts, led by van de Velde. But historically the accolades are more florid and describe the merger as: "one of the most significant and consequential cultural initiatives of the twentieth century." Franciscono is in obvious agreement and states that the Bauhaus was: "the most famous experiment in art education of the modern era." Dorner, in his contribution to the 1938 MoMA exhibition book, rather flippantly and favourably toward Gropius, disregarded the first few years of Gropius' Bauhaus saying: "considering what the Bauhaus eventually became it is astonishing to realize it ever had anything to do with Expressionism," and added that: "Fortunately, the first and difficult stage of the development was over fairly quickly." Would suggest that although this period was over fairly quickly, the contributions made by the forward guard of artists assembled by Gropius as Bauhaus masters have fortunately, not been overlooked.

Having elucidated the emergence of an aesthetic education impacted by the influences of Pestalozzi, Froebel and Ruskin's pedagogical theories and discussed the cultural influences, triggers and circumstances that existed in Germany prior to WWI I have revealed the provocations that led to the formation of Gropius' Bauhaus in 1919. These influences and circumstances continue to play a vital role in the understanding of this pedagogy and the shared principles that would play an implicit role in the establishment and maturation of a universal visual language by Gropius and his colleagues to be explored in the next chapter.

⁶³ Walter Gropius, "Bauhaus Manifesto and Program," ed. The Staatliche Bauhaus (Weimar: The Bauhaus 1919), 1.

⁶⁴ Franciscono, Walter Gropius and the Creation of Bauhaus in Weimar: The Ideals and the Artistic Theories of its Founding Years, 843.

⁶⁵ Bayer, Gropius, and Gropius, *Bauhaus 1919 -1928*, 13. Given that Gropius was a contributing editor to this publication a ceratin bias is acknowledged.

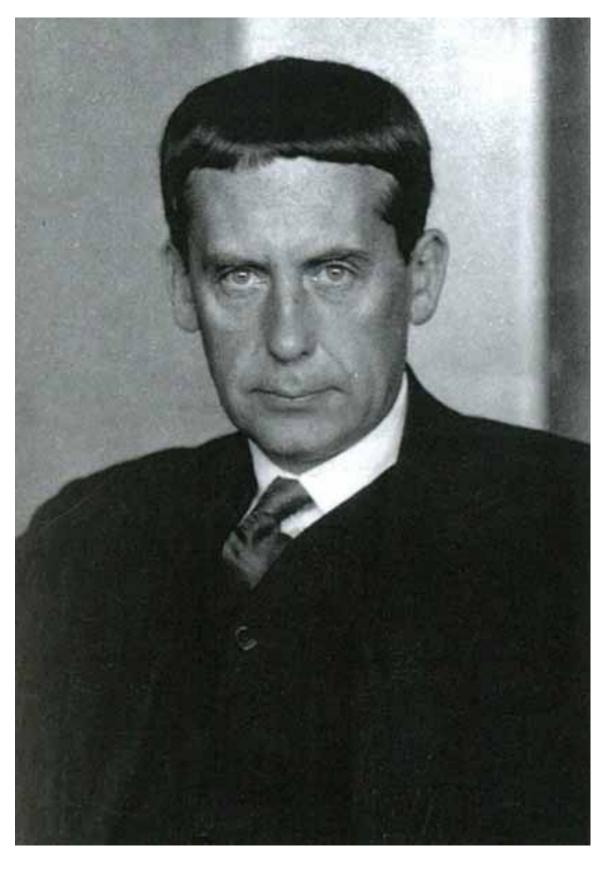


Figure 1: Walter Gropius, Founder and Director of the Bauhaus 1919-1923

Chapter Two

The Establishment of a Shared Visual Language of Form and Space at the Bauhaus

2.1 The Forward Guard of Bauhaus Masters

Gerhard Marcks (1889–1981) along with Lyonel Feininger (1871–1956) and Itten were the first three Bauhaus Masters of Form. Of these first masters, two were painters and one a sculptor. All had connections to the Expressionist aligned Berlin gallery, Der Sturm. Of greatest importance in this study is Itten who as the instigator of the preliminary course, the *Vorkurs*, takes a central and pivotal role in the establishment and dissemination of the Bauhaus tenets and the universal visual language.



Figure 2: Logo for the Bauhaus Weimar 1922 designed by Bauhaus master Oskar Schlemmer to symbolise 'A New Man,' who was to be educated

At the outset, Gropius and Itten both believed that the craftsperson was the true artist and that everyone must learn by starting anew. For a number of reasons, the principle one being Gropius' about-face in his ideals for the school in 1923, this accord between Gropius and Itten did not last for long. ⁶⁶ However Itten's impact in the history of design education far exceeds the brevity of his engagement at the Bauhaus. Franciscono asserted: "In almost every way, in force

⁶⁶ Jeannine Fiedler and Peter Feierabend, eds., *Bauhaus* (Cologne: Könemann Verlagsgesellschaft mbH, 1999), 120. Itten's popularity with the students and cult-like status within the Bauhaus has been recorded by historians, Bauhaus students and masters alike, along with the extreme jealously this brought out in Gropius.

of personality, his influence on the course of the Bauhaus, the extent of his responsibilities, the dominant figure in the Bauhaus until 1922 was unquestionably Johannes Itten."⁶⁷

Itten had come to Gropius' attention while teaching in Vienna. He was a respected contributor in pioneering abstract art and a graduate of Adolf Hölzel at the Academy of Art. Swiss-born Itten had himself been educated under the Pestalozzi and Froebel principles as a child, and now as a teacher, embraced these tenets and those he had encountered under the teachings of Hölzel. Hiten believed whole-heartedly in the theories in which both Pestalozzi and Froebel advocated learning to see anew. He encouraged Ruskin's theory of the innocent eye and Pestalozzi's unconditional respect for the individuality of the student. Itten asserted "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. Itten saw himself as a guide to enlightenment, a new vision. German artist, Lother Schreyer (1886–1966) stated: "Itten knew with certainty that his insight was an event of global significance in the teaching of art."



Figure 3: Johannes Itten Vorkurs Master 1919-1923

⁶⁷ Franciscono, Walter Gropius and the Creation of Bauhaus in Weimar: The Ideals and the Artistic Theories of its Founding Years, 173.

⁶⁸ Wick, *Teaching at the Bauhaus*, 92. Gropius met Itten in Vienna through his wife Alma Mahler- Gropius. Gropius had been impressed by his theory on education and immediately invited him to teach at the Bauhaus.

⁶⁹ Philipp Oswalt, ed. *Bauhaus Conflicts* 1919 - 2009 (Ostfildern: Hatje Cantz Verlag, 2009), 36. In 1905 Hölzel's painting began moving toward abstraction, reflecting his interest in such principles as the golden section and Goethe's Theory of Colours. Among the so-called "Hölzel circle" of students were both Baushausler Schlemmer and Itten.

⁷⁰ Henry P Raleigh, "Johannes Itten and the Background of Modern Art Education," *Art Journal* 27, no. 3 (1968). Itten was also influenced by Franz Cizek (1865- 1946) who rejected formal education in favour of individual creativity and confidence.

⁷¹ Whitford, *Bauhaus*,51. Whitford also discribes Itten as a teacher of unconventional brilliance and a mix between a saint and a charlatan.

2.2 The Vorkurs under Itten

The unification of Ruskin's 'innocent eye' and the innovative educational theories of Pestalozzi and Froebel came together in Itten's *Vorkurs*, which is referred to repeatedly by historians as the backbone to Bauhaus pedagogy. Rayner Banham commented that the *Vorkurs* achieved such fame that: "it has come to be regarded as the essence, even the entirety, of the Bauhaus method."⁷² It is within the preliminary course under Itten's tutelage that the private languages used at the time by the masters were transformed into a single language to be shared across the workshop structure of the Bauhaus. A major component in the Bauhaus legacy is the attempt made by a number of masters to identify a universal language of vision, a code of abstract forms that addresses us directly, devoid of cultural or historic conditioned knowledge. I will argue that Itten's *Vorkurs* provided the foundations for a universal visual language and outlined the pedagogical tenets that allowed the development of such a language in an advancing industrialised age.

In retrospect the *Vorkurs* has been viewed as highly influential. Interestingly, although the popularity of Itten and his course amongst students and teachers alike was obvious during his tenure, strangely he would find he was no longer welcome within the school beyond 1923 after Gropius re-orientated the Bauhaus' manifesto to embrace industry. Although Itten has been excluded from any acknowledgement by Gropius of his profound impact on the *Vorkurs*, many fundamental ideals from Itten's *Vorkurs* would remain within Bauhaus pedagogy throughout the multiple changes and variations of both master and locale. I will argue that all versions of the *Vorkurs* whether considered expressionist, integrated or modernist contained the fundamental principles outlined by Itten.⁷³ I will also argue that it was the inclusive and holistic nature of Itten's pedagogy that led to the successful development of a universal visual language which straddled both subjective and objective design philosophies, making it as relevant today as it has been at any other time in architectural and design pedagogy.

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⁷² Reyner Banham, *Theory and Design in the First Machine Age* (London: The Architectural Press, 1960), 278.

⁷³ Wick, *Teaching at the Bauhaus*. Wick notes that Gropius shamelessly omited to ever publish or exhibit examples of *Vorkurs* students works from 1919-1923 under Itten's name and only referes to them as spreliminary course works with no reference to Itten.

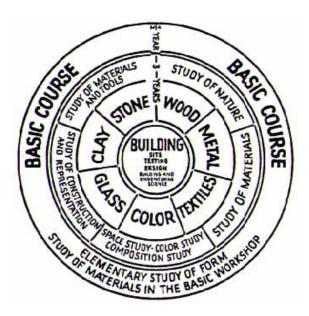


Figure 4: A Diagram of Gropius' Bauhaus teaching programme Weimar 1919

2.3 The Foundations of a Universal Visual Language

The *Vorkurs*, under Itten, offered the liberation of a student's creative power. A critical analysis of works by old masters generated an understanding of nature's materials and an introduction to the basic principles that underline all creative activity within the visual arts. Feeling and thinking, intuition and intellect, expression and construction were the contrasting poles that defined Itten's work. With a belief in spiritual truth also playing a large part in Itten's pedagogy, the elements of spirituality, personal health and meditation were encouraged in the *Vorkurs* in addition to practical components. The Itten sought to uncover the origins of visual language using Froebel's educational blocks and Pestalozzi's basic geometries, pure colours and the use of abstraction. Itten contended that within the use of expressive pictorial composition: "Geometric forms and the colours of the spectrum are the simplest and most sensitive and thus the most powerful and delicate means to represent an expressive example of form." I will argue that Itten's methodology within the *Vorkurs* would lay the pathway for individual exploration and analysis of one's self, nature and the world of artistic creativity within the guidelines of a collective. This was done to produce not a common result or style but a common understanding via the establishment of a universal visual language.

⁷⁴ Ibid., 120. Mazdanan is based on the ancient Pursian religion of Zarathustra. Substitute religions increased in popularity after WWI in Europe by offering inner tranquility as an escape from despair and encouraged the preservation and development of the self.

⁷⁵ Willy Rotzler, *Johannes Itten: Werke und Schriften* (Zurich: Orell Fussli, 1978), 169.

2.4 Creativity Though Spirituality, Individuality and Holistic Teaching

Froebel's references to both mystic and divine energies emanating from within the student were encapsulated in the *Vorkurs* when Itten became the guide through "the intricates of two and three dimensional space." I would argue that the fundamental idea of an instructor as a guide, whether they are spiritual, philosophical, intellectual or practical as opposed to a leader, one to be mimicked, sets out the first and most important tenet of Bauhaus ideology, that of individual exploration via method. Itten's spirituality was, in my opinion, intrinsic to his belief system and also an adroit means by which a system of guidance and exploration could be integrated into education. Spiritualties popular at this time endorsed individual appreciation and experience within holistic guidelines which again supports the ideal of method over a mimicked and singular result. Ruskin's and Morris' endeavours towards holistic education were encapsulated in the *Vorkurs* via individual spirituality and guidance. In the Bauhaus workshops, learning was by doing under guidance not instruction.

Pestalozzi believed the way to liberate creative powers was by cultivating a student's own powers of seeing, judging and reasoning and to encourage individual analysis. With Itten as their guide students were asked to confront not only problems of colour and form but most importantly to confront their selves. The validation of abilities and creative power within each student was not only gained through the spiritual attributes of Itten's course but also the unconditional respect Itten afforded the individuality of each student. Itten would encourage each student's to rip open the lemon from the still life and taste the vitality of its flesh so as to express the essence of the lemon from their own individual experience. Itten said of his preliminary course: "My goal is to awaken in people the feeling for the essence of things." ⁷⁷

In the *Vorkurs*, each class began with gymnastics. In Itten's eyes this enabled the body to awaken. Harmonization exercises were then introduced to encourage inner balance. The exercises then led to the drawing of rhythmic form. Within Itten's theories form was never

⁷⁶ Raleigh, "Johannes Itten and the Background of Modern Art Education," 286.

⁷⁷ Wick, *Teaching at the Bauhaus*, 119.

considered in isolation. Form and colour were regarded as one.⁷⁸ In 1916 Itten wrote "Form is also colour. Without colour there is no form. Form and colour are one."⁷⁹ Students were to restrict their studies to basic shapes and hues where contrasts and tensions were considered central to Itten's methodology. Itten's theory of colour and form led him to design not a colour wheel but a colour sphere where the use of form allowed the expression of relationships between colours. The quality of these relationships was not only optical but emotional, and Itten believed that when they were combined with the physicality of movement the students were able to live and feel the colours and forms within space.⁸⁰ It is my opinion that it was Itten's holistic translation of form and colour within space that allowed his pedagogy to establish itself as interdisciplinary and universal thereby enabling it to retain validity when transposed into the many educational paradigms that were to eventuate after his departure from the Bauhaus.

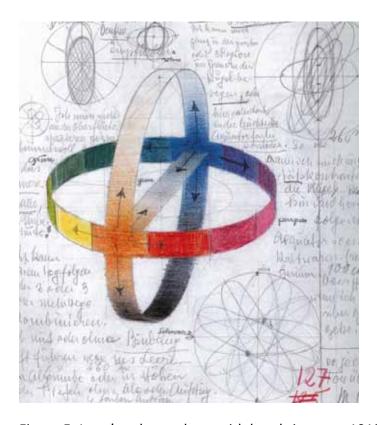


Figure 5: Itten's colour sphere with bands in space 1919-1920

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⁷⁸ Whitford, *Bauhaus*, 106. Following Hoslzel Itten had taken seven distinct types of colour contrast. For example light and dark, warm and cold and also quality and quantity the relationships between the contrasts was to be measured for effect and to produce form.

⁷⁹ Ibid. These theories would later be extended by Albers in his seminal work Homage to the Square where colour contrasts are used to allow a perception of form and space.

⁸⁰ Ibid., 107. Kandinsky and Klee, chose not to embrace three dimensions or engage with disciplines beyond drawing or painting and for this reason their pedagogical input to the *Vorkurs* will not be elucidated in this study.

2.5 The Contrasting Poles

Itten's belief in contrasting poles allowed his pedagogical theories to oscillate between personal expression and formal analysis. Within the nature studies, personal expression was paramount. Itten wanted his students to engage in individual investigations involving sensory explorations in order to discover the essence of materials via Ruskin's principle of the innocent eye. By his own account, Itten set himself three tasks for the preliminary course, to liberate creative forces, in which the student's own experiences and perceptions were to result in genuine work and for the student to rid themselves of dead wood."81 It was in these exercises that materials would be stripped of outer shells or surfaces to expose nature's structures and order. The juxtaposition of one material with another elucidated extremes of contrast thereby illuminating new and individual ways of seeing via a common methodology. In contrast the formal analysis of works by the old masters encouraged the student to find artistic order and structure, eliminating decoration to enable the definition of the basic principles of design. While scrutinising the works of the old masters, observations included the balance, repetition, hierarchy, rhythm, symmetry and asymmetry as ways to understand and as tools for creating pictorial information. By using these tools to simplify complex representational works into simple geometric forms and colour combinations students would expose the work's structure and intent. These exercises clearly established a common language of composition within Itten's pedagogy. I argue that by defining and enabling an understanding of these basic design principles, the universal visual language of form was articulated to the students. These principles remained primary as Gropius reformulated his ideas towards industry.

2.6 Itten interrupted

In a 1922 article inspired by Constructivist Theo van Doesburg (1883–1931) and written by artist Vilmos Huszar (1884 – 1960) for the *de Stijl Magazine*, the Bauhaus was condemned for non-productivity and crimes against the state and civilization. Gropius, Klee and Kandinsky were maligned alongside criticisms of Itten's efforts. Of Itten, Huszar wrote, "Where is there any attempt to unify several disciplines at the unified combination of space form and colour?

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⁸¹ Rainer K Wick, *Teaching at the Bauhaus*, trans. Stephen Mason and Simon Lèbe (Ostfildern-Ruit: Hatje Cantz Verlag, 2000). 101.

Itten's emptily pompous daubing aims only for superficial effect."⁸² Although in the full quote the harsh criticism defiles the majority of Bauhaus masters, including its founder, it would be Itten who would be singled out for blame by not only van Doesburg but also Gropius. Art scholar Norbert Schmitz wrote, "Control over history was too important to be left to the obscurantism of a Mazdanan prophet."⁸³ Itten's resignation, more correctly ostracism, would signal Gropius' return to his pre WWI ideals of integration between the machine and art.

Considered the ambassador of the Dutch art movement de Stijl, van Doesburg gave a number of seminars at the Bauhaus during 1921 and 1922 and spoken disparagingly of Expressionist tendencies and the lack of artistic or social synthesis within the Bauhaus. He eventually praised Gropius for his attempts at educational reform but he bitterly disputed the direction he felt the Bauhaus was taking. Although van Doesburg's frank comments were generally considered by Bauhaus members as exaggerated and over dramatized, they nevertheless sparked a reaction within the school. Van Doesburg's influence on the clarification of the new direction for the Bauhaus was in no way trivial and, interestingly, Gropius considered offering him a position at the Bauhaus. He was in fact reticent to do so as he felt van Doesburg would, as Itten had, command too much influence with the students and diminish Gropius' own impact.⁸⁴ Van Doesburg was also seen by the students as a threat to stability. A Bauhaus student provided a vivid account of van Doesburg and his aggressive rants: "He attacked the issues and people with drums and trumpets. And he screamed. The louder he screamed the more he believed his ideas would penetrate the minds of the people. He made us feel insecure."

We have established that pre-WWI Gropius had stated there was a need to engage with the working methods of the outside world, namely machines. The cause for Gropius' curious denouncement of this statement post-WWI has never been clearly attributed by historians but his return to his *Werkbund* proclamations announced the arrival of the next phase in Bauhaus

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⁸² Ibid., 116. Huszar was considered by many as van Doesburg's mouthpiece, as van Doesburg was prone to rant and rave at times, alienating his audience.

and rave at times, alienating his audience.

83 Fiedler and Feierabend, *Bauhaus*, 243. This belief was an underlying factor in the conflicts between Gropius and itten that could only,in Gropius' view be settled with Itten's departure from the Bauhaus.

⁸⁴ Whitford, *Bauhaus*, 117. More on the underlying jealousies and politics can be gained from Fiedler, Jeannine, and Peter Feierabend, eds. *Bauhaus*. *Cologne: Könemann Verlagsgesellschaft mbH*, 1999. Print.

⁸⁵ Ibid. Van Doesburg, along with his wife Nelly managed to convert four Bauhaus students and referred to the rest as "Romantics."

history. Itten would leave the Bauhaus and Gropius would announce the new manifesto. ⁸⁶ Gropius was relieved that Itten had not been prepared to take part in the new school. I would suggest however, that in spite of Itten's refusal to remain at the Bauhaus his efforts in establishing and formulating a universal visual language had been clearly and successfully established and consequently absorbed into all future versions of the course. ⁸⁷ The use of analytical and reductive simplification techniques to discover the essence of a composition or material complimented both van de Velde's and Behren's *Werkbund* theories of unadorned functionality for which Gropius had, in his pre-WWI ideals supported as valid investigations of utility and form. I will argue the fundamentals of Itten's *Vorkurs*, although not acknowledged as doing so by his successors, served as the backbone to both Moholy-Nagy and Albers' preliminary courses. I would also argue that by severing Itten at this point in the development of the school it would be to Itten that the Expressionist and incongruous era would be attributed, leaving Gropius clear of fault and free to curate what was seen to be the 'right program.' ⁸⁸

Although Itten's language of composition was derived and implemented in a two dimensional format the analytical understanding and abilities consolidated in his *Vorkurs* crossed over into the exploration and understanding of form and space, making it highly relevant to future adaptations of the course. In a diary entry Itten wrote: "Walls with windows and doors form the house, but the emptiness in them establishes the essence of the house. Fundamentally, the material conceals utility; the immaterial establishes essence. The essence of a material is its effect of space, the immaterial. Space is the material of the immaterial." Whitford notes that the inspiration and guidance that students gained in the workshops was not from the Masters of Form as it should have been, but from the theoretical aspect of the *Vorkurs*. Bauhaus student Peter Keler's (1898–1982) 1922 cradle, through its succinct use of simple forms and

⁸⁶ Wick, *Teaching at the Bauhaus*, 123. Wick gives a comprehensive account of the impact of Itten's teachings in Europe beyond the Bauhaus years.

⁸⁷ Whitford, *Bauhaus*, 121. Gropius felt threatened by Itten's influence at the Bauhaus and believed it had to be weakened. Gropius played a shrewd game. Gropius ignored Itten's pedagogical skills and focued on Itten's insecurities. Itten resigned in 1922 and left in Easter 1923.

⁸⁸ Bayer, Gropius, and Gropius, *Bauhaus 1919 -1928*.

⁸⁹ Wick, *Teaching at the Bauhaus*, 119.

⁹⁰ Whitford, *Bauhaus*, 115. The courses that Whitford referred to were those of Itten, Kandinsky and Klee. These instructors were all painters and instructors in two-dimensional works.

primary colours, is an accurate example of the assimilation of colour theory and simple geometries to construct a simple everyday object. 91



Figure 6: Keler's baby cradle1922 lacquered wood and rope webbing

I would argue that Itten had a profound understanding and appreciation for the unified combination of space, form and colour and that van Doesburg, the Constructivist, refused to accept that this understanding could be professed so eloquently and accepted so readily from an Expressionist, Mazdanan prophet. ⁹² One could take from van Doesburg's tyrannical rants his strong belief that one of the masters should have been Dutch! ⁹³

There is no question that Itten and Gropius were on different paths towards the unification of the arts. Itten had become wary of the economic and social realities of post-WWI Germany. Wick argues that for Itten, industrialism was the expression of a rationalistic culture that he disagreed with. So it was inevitable that now was as good a time as ever to take his leave. Itten wrote: "An analysis class in 1923 caused Walter Gropius to comment that he could no longer take responsibility vis-à-vis the government for my teaching. Without any further argument I spontaneously decided to leave the Bauhaus." Foropius' 1922 memorandum to Bauhaus staff on the 3rd February read: "Master Itten recently demanded that one must decide either to produce work as an individual in complete opposition to the economic world

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⁹¹ Ibid., 110. Keler would after graduation from the Bauhaus go on to become Wassily Kandinsky's assistant. But he studied the *Vorkurs* under Itten.

⁹² Fiedler and Feierabend, *Bauhaus*. Although not a prominantly discussed aspect in van Doesburg's rhetoric he too professed an unusual support for artists belonging to a self-declared idiot fringe.

⁹³ Whitford, *Bauhaus*, 116. Van Doesburg proposed that the Bauhaus required "other masters" who knew what the creation of unified works of art really were to demonstrate their abilities at the Bauhaus.

⁹⁴ Wick, *Teaching at the Bauhaus*, 122. There is also a full translation of Itten's letter of resignation found here.

⁹⁵ Johannes Itten, *My Preliminary Course at the Bauhaus and Later* (New York Van Nostrand Reinhold Company, 1975), 18.

outside or to search for an understanding with industry... I look for a unity in the combination not a division of these forms of life."⁹⁶ Having established the circumstances that led to Gropius's acceptance of Itten's resignation after the violent criticisms by van Doesburg and Gropius, it should come as no surprise that a close associate of van Doesburg's would be appointed to the post. This would no doubt appease the boisterous Dutchman and allow Gropius to progress his dream with the least opposition from van Doesburg. In 1023 constructivist, Lázsló Moholy-Nagy would take control of the *Vorkurs* at the Bauhaus.

2.7 The Lasting Impact of Itten's Vorkurs

Even though Gropius was unwilling to concede the point, the use of Itten's language of composition ensured an amalgamation of theory and practice in the workshops. Although Itten had not intended that his visual language be embraced by industry, the language of composition that he had contributed to pedagogy would continue to influence the formulation of three dimensional works and thereby initiate a common language of form. This was the language Gropius had been seeking. Without formally mentioning Itten, in 1935 Gropius acknowledged the immense contribution of the Vorkurs pedagogy. He noted the severance from the past that the initial Bauhaus teachings encouraged and by paraphrasing Itten's own words introduced a return to an honesty of thought and feeling. 97 Gropius stated: "A breach had been made with the past, which allowed us to envisage a new aspect of architecture corresponding to the technical civilization of the age we live; the morphology of the dead styles had been destroyed; and we returned to honesty of thought and feeling." Franciscono stated that the works produced under the next Vorkurs iteration with Moholy-Nagy underwent a considerable aesthetic change. But he argued that under Itten the students had already become accustomed to thinking in basic forms and volumes: "The transition from the earlier work, it is apparent, was extremely easy to make and involved no significant change of mind." ⁹⁹

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⁹⁶ Whitford, *Bauhaus*, 120. The full memorandum is also to be found here.

⁹⁷ Wick, *Teaching at the Bauhaus*, 110. Itten's pedagogy was based on the contrasting poles of feeling and thinking, intuition and intellect and expression and construction which allowed the Bauhaus works to be more than just functional and rational.

⁹⁸ Walter Gropius, *The New Achitecture and The Bauhaus*, trans. P.Morton Shand (London: Faber and Faber, 1935), 19.

⁹⁹ Franciscono, Walter Gropius and the Creation of Bauhaus in Weimar: The Ideals and the Artistic Theories of its Founding Years, 224. This is the only evidence I found where a Bauhuas historian allows a direct acknowlegement

Within the brevity of his time as the master of the *Vorkurs*, Itten had offered students, as individuals, the ability to see, synthesize emotion and senses, and expressively articulate an essence from innate materials and compositions. I would assert that Itten established a solid and durable foundation upon which Gropius, Moholy-Nagy and Albers could base their pedagogies in order to unite art and technology for mass production.

2.8 "Art and Technology a New Unity "

It was not only van Doesburg that placed pressure on Gropius' goals for the Bauhaus. In 1922, hindered by economic pressures, the local government pressurised Gropius into an exhibition to promote the Bauhaus products and enhance sales and orders of Bauhaus produced items. Gropius was not in favour of this, but as the school was state funded and these funds were under threat, he was in no position to debate. The exhibition named *Art and Technology*, opened to great national and international support in August 1923. This was the first large exhibition of the Bauhaus and it generated a great deal of publicity for the new programme being offered, attracting some of the Bauhaus' finest students, including Albers. For some at the Bauhaus the programme came as a shock. Helmut von Erffa wrote: "Even if Gropius had planned to work for industry from the beginning and postponed it only because Germany was poor, the new programme was a shocking surprise to Feininger or Marcks." 100



Figure 7: Bauhaus Faculty 1925 Gropius (centre) with cigarette and Moholy-Nagy wearing glasses is forth from left.

of the continued use of Itten's pedagogical tenets in three dimensional works for mass production, making his teachings relevent beyond 1922 within Bauhaus.

¹⁰⁰ Helmut von Erffa, "Walter Gropius and the Creation of the Bauhaus by Marcel Franciscono," *Art Journal* 31, no. 4 (1972), 482.

Marcks, a founding member of the Bauhaus faculty, would, like Itten, reject the new programme and leave the Bauhaus forever. Whitford asserts that Gropius' lecture 'Art And technology: A New Unity' given during Bauhaus Week clearly: "marked the public emergence of a man purged of craft-romanticism and utopian ideas."

2.9 László Moholy-Nagy and the Vorkurs

In 1923 the appointment of Hungarian artist Lázsló Moholy-Nagy to the *Vorkurs* effectively marked the end of the school's expressionistic leanings and moved it closer towards Gropius' pre-WWI aims as a school of design and industrial integration. Described by Gropius as 'a born educator' Moholy-Nagy took up the mantel of the *Vorkurs* at the Bauhaus. ¹⁰³ The contrast between Moholy-Nagy's forward reaching, technologically inspired drive toward mass production and Itten's metaphysical and individualist teachings could not have been more pronounced. In distinct contrast to the monk-like robes Itten had worn to create an aura of mysticism, Moholy-Nagy wore workers' overalls and nickel rimmed glasses to convey a sense of modern industry and sobriety. ¹⁰⁴



Figure 8: Moholy-Nagy wearing his overalls and glasses

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¹⁰¹ Wick, *Teaching at the Bauhaus*, 33.Marcks began teaching at the Bauhaus at the same time as Feininger Whitford, *Bauhaus*, 139. Exhibition week ran 15th-19th August, 1923 and lectures were given by Gropius Oskar Schlemmer and J.J P Oud.

Wick, *Teaching at the Bauhaus*, 131. Even though Moholy-Nagy had no formal training as a teacher Gropius recognised his pedagogical talents. Herbert Read would also describe Moholy as "one of the greatest teachers of our time"

¹⁰⁴ Whitford, *Bauhaus*, 123. Students also partook in dressing in "uniform" under both Itten and Moholy-Nagy.

As a political exile Moholy-Nagy, a painter and photographer, was a keen participant in theoretical discussions of political and social agendas circulating in Europe in the early twentieth century. His co-conspirators in these dialogues included artist and writer Raul Hausmann (1886-1971) and van Doesburg. All three men were particularly active and held strong social and political goals defining the role of the progressive artist within the highly charged and unstable political terrain. As a result of discussions at the International Congress of Progressive Artists held in Dusseldorf, by 1922 a description of the modern artist had been delineated. It was said that the modern artist was defined as one who denies the allure of subjective art and lyrical whims of fancy and, in contrast engages in a systematic process of ordered thinking to achieve an expression that can be universally understood. 105 As the new master of the Vorkurs, Moholy-Nagy developed his ideals of constructivism and the machine. Modern technology and its possibilities were an integral part of Moholy-Nagy's teachings and he affirmed this commitment by stating: "Reality is the measure of human thinking. It is the means by which we orient ourselves in the universe... And this reality of our century is technology: the invention, construction and maintenance of machines. To be a user of machines is to be of the spirit of the century." 106

The advances made by Moholy-Nagy within the *Vorkurs* were two-fold. Firstly, his pedagogical skill and success in marrying the products of his workshops to the needs and desires of industry were highly productive and a direct result of the *Vorkurs* teachings. Supporting this were the highly desirable yet very utilitarian household items designed by Bauhaus students Wilhelm Wagenfeld (1900–1990), Marianne Brandt (1893–1983) and Marcel Breuer (1902-1981). This work was considered a production success. ¹⁰⁷ Secondly, his spatial investigations as an artist and a pedagogue were ground breaking. ¹⁰⁸ Technological advancement was embraced in the *Vorkurs* and disseminated into the workshops. The items designed by students implied, by association with the production of objects, that Moholy-Nagy's teachings considered form, and not space as being paramount. This is short sighted. The inclusion of experiments involving

¹⁰⁵ Wick, *Teaching at the Bauhaus*, 143.

¹⁰⁶ Sibyl Moholy-Nagy, *Moholy-Nagy: Experiment in Totality* (Cambridge: MIT Press, 1969), 19.

¹⁰⁷ Fiedler and Feierabend, *Bauhaus*, 629 - 31. Wallpaper was also a great success as a production line for the early Bauhaus. But Moholy-Nagy was not involved with this as it was not seen as a suitable product for the Bauhaus from 1923 till Hans Meyer took over directorship.

¹⁰⁸ Wick, *Teaching at the Bauhaus*, 138. Moholy- Nagy referred to himself as 'Lichtner,' the light manipulator. His experiments with wood, glass and highly reflective metals were the beginning s of free play of light in space.

wood, sheet metal, glass, wire and string directly assisted in the understanding of construction, static and dynamic factors of design, balance and most importantly space. ¹⁰⁹ Students would construct forms placing, suspending, or juxtaposing them in space. Moholy-Nagy wrote: "Today spatial design is an interweaving of shapes: shapes which are ordered into certain well defined, if invisible, space relations; shapes which represent the fluctuating play of tension and force." ¹¹⁰Moholy-Nagy remained convinced throughout his career that space and form were critical components to be explored in parallel and on a variety of scales. The universal visual language and the Bauhaus methodology were the tools employed to facilitate these explorations. The success of Moholy-Nagy's experiments in form within which spatial awareness is introduced are nowhere more evident than in both Breuer's dematerialising tubular steel furniture (notably the Wassily chair) and the transparent architecture of the Bauhaus School at Dessau done by Gropius himself.



Figure 9: Breuer's Wassily chair 1926. Nickel plated tubular steel and grey fabric

I argue it was the assimilation of Itten's teachings in the *Vorkurs*, the use of a universal visual language and Moholy-Nagy's methodology to propagate these ideals that resulted in a new aesthetic emerging in utilitarian objects, forms and spaces. It was unfortunate that the in

¹⁰⁹ Through his own collaboration with engineers and technicians between 1922 and 1930 Moholy-Nagy's experimented with materials, form, light and movement. This culminated through spatial experiments and experiences in the creation of the Kinetic Light Prop, the 'Light Space Modulator' which was a machine designed to seize the light in its structure and make space and time visible.

¹¹⁰ Bayer, Gropius, and Gropius, *Bauhaus 1919 - 1928*, 122. Moholy-Nagy went on to say that "the primary means of the arrangement of space is still space itself." Moholy remained interdisciplinary with a focus on architecture when other masters did not.

America the appeal of the new aesthetic would overshadow the methodology. This would lead to the misinterpretation of the Bauhaus work as a 'style' not a method.¹¹¹ Both Gropius and Moholy-Nagy would encounter and challenge this perception both separately and collectively at later stages of their careers. Constructivist painter and designer, Walter Dexel (1890–1973), and close friend of both van Doesburg and Moholy-Nagy, wrote: "It is high time we stop using the cliché 'Bauhaus Style,' which only ignorance of the most elementary facts of the 1920s could have allowed to become current."

2.10 Itten's Influence on Moholy-Nagy's Vorkurs

In 1968, artist Henry Raleigh (1880-1944) argued that Itten, being the most romantic of all Vorkurs masters, must have found himself to be philosophically unprepared to accept the functionalist credos developing at the Bauhaus. Raleigh suggested that Itten's theories were no match for the constructivist rationales of Moholy-Nagy. However I believe this to be a superficial overview of both Itten and Moholy-Nagy's efforts. 113 Moholy-Nagy brought with him a very humane and environmentally responsible approach to industrial design which we will come to appreciate in his encounters within the economic landscape in the United States later in his career. But for now, as he entered the Bauhaus Moholy-Nagy sought, like William Morris and John Ruskin, to include the 'whole man' in his experiments and experiences. Moholy-Nagy wrote: "Not the product, but man, is the end in view. Technical progress should never be the goal, but always the means." 114 Moholy-Nagy's intentions to integrate art and technology certainly differed from those of Itten, but the systematic process of ordered thinking and analytical critique that Moholy-Nagy would claim for his Vorkurs was in fact borne of Itten's preliminary pedagogy. Through the use of the universal visual language, Itten had introduced analytical processes to understand balance, repetition, rhythm, symmetry and asymmetry within two dimensional compositions which had assimilated seamlessly into the

¹¹¹ Sibyl Moholy-Nagy, "The Diaspora," *Journal of the Society of Architectural Historians*. 24, no. 1 (1965), 24. Sibyl Moholy-Nagy was very vocal during the 1960's in relation to the "total misunderstanding" of the terms and ideologies of the functionalism Gropius and Moholy-Nagy had brought to America.

Walter Dexel, "The Bauhaus Style: A Myth," in *Bauhaus and Bauhaus People: Personal Opinions and Recollections of Former Bauhaus Members and their Contemporaries*, ed. Eckhard Neumann (New York: Van Nostrand Reinhold, 1993),248.

¹¹³ P. Raleigh, "Johannes Itten and the Background of Modern Art Education", 287.

¹¹⁴ Laszlo Moholy-Nagy, *The New Vision. From Material to Architecture*, trans. Daphne M Hoffmann (New York: Brewer, Warren and Putman, 1932), 152.

three dimensional forms. Keler's cradle is evidence of this amalgamation. Although Itten's spirituality had been removed from the *Vorkurs* the analytical ordered thinking, common understanding and shared visual language he had introduced remained. Moholy-Nagy had dismissed Itten as subjective and whimsical and in what Moholy-Nagy considered a stark contrast proposed a universally understood systematic process of ordered thinking. I would argue that although there were certainly advancements and changes to the *Vorkurs* with the integration of technology by Moholy-Nagy, the adjustment from Master Itten to Master Moholy-Nagy was not as drastic or clear cut as either Gropius or Moholy-Nagy would have us believe. Itten's theories continued to pervade Moholy-Nagy's *Vorkurs* as did the theories of Ruskin, Froebel and Pestalozzi.

Moholy-Nagy's experiments encouraged fresh approaches where students achieved a transparency of form by hollowing out, blocking out and drastically reducing the consumption of materials within their work. Having used their perception and vision students reduced the form to its essence, as requested in Itten's pedagogy. Moholy-Nagy called this technique 'vision in motion.' The technique challenged students to explore a canvas or structure with their eyes seeking understanding and space. 115 As had been suggested by Pestalozzi, Froebel and Itten this type of investigation invited students to discover spatial awareness and understanding by way of haptic and optical experiences. It invited students to the privileged threshold of space. 116 Moholy–Nagy, armed with this knowledge and method, would now advance his own pedagogy and enable his students to investigate and discover spatial relationships within and beyond form. Varnelis stated of the progress in Bauhaus pedagogy that: "The act of perception had thus been divided into two events: what Moholy-Nagy called 'vision in motion,' leading the eye around the canvas, and the moment of illumination that would finally lead to an understanding of the work. The glance of the eye that Ruskin had defined had lengthened into a reverie." Interestingly, in spite of Moholy-Nagy's scientific and systematic approach to sensory discovery, and his denouncement of feelings or spirituality, he did eventually agree with both Ruskin and Itten's theory that the basis for creation lay in intuitive responses. Moholy-Nagy stated: "Creation needs intuition, on the one hand, and conscious analyses on

¹¹⁵ Wick, *Teaching at the Bauhaus*, 156. These experiments would not have been conceivable without the influence of the Constructivists or Moholy-Nagy's own work.

¹¹⁶ Varnelis, "The Education of the Innocent Eye," 212.

¹¹⁷ Ibid., 216-17.

the other."¹¹⁸ Intriguingly, museum director and Viennese artist Veit Loers views the entire oeuvre of Moholy-Nagy's work against a spiritual cosmic-gnostic background.¹¹⁹ Thereby supporting other historian's notions that Moholy-Nagy's denouncements of spirituality, particularly the Mazdanan spirituality he had encountered earlier in his career, were not as complete or as separated from Itten as have been recorded by Gropius or Moholy-Nagy.

2.11 Moholy-Nagy's Vorkurs-Universal by Process

Moholy-Nagy has been remembered by students as "having burst into the Bauhaus circle like a strong eager dog ... sniffing out with unfailing scent the still unsolved, tradition-bound problems in order to attack them. Or, a pike in a pond full of goldfish." Whatever the simile, Moholy-Nagy's energy, clear-headedness and rational were evidenced in his 1922 essay "Constructivism and the Proletariat" in which Moholy-Nagy announced that: "Everyone is equal before the machine. There is no tradition in technology, no class-consciousness. Everyone can be the machine's master or its slave." With Itten's meditation, gymnastics and deep breathing exercises gone from the *Vorkurs*, Moholy-Nagy introduced his students to the rational use of materials and basic techniques. Moholy-Nagy endeavoured to open his students' minds to the use of new technologies and new media. This premise relied greatly on both Ruskin and Itten's belief in the removal of all preconceptions to enable creativity and individual experimentation. Three dimensional exercises in construction were fundamental to Moholy-Nagy's systematic form of study.

Students experimented with problems involving forms in space. He experimented with new technologies, processes and materials and thrust not only the *Vorkurs*, but the Bauhaus as a whole, into experiments with industrialised media. This included film, photography and typography. Moholy-Nagy consistently tried to demonstrate through his own work the belief that technology was not a threat to the students' creativity.

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¹¹⁸ Moholy-Nagy, *The New Vision. From Material to Architecture*, 54. Moholy-Nagy wrote this book after he left the Bauhaus and dedicates a section to the Role of Intuition.

¹¹⁹ Dexel, "The Bauhaus Style: A Myth."

¹²⁰ Whitford, *Bauhaus*, 127-28.

Laszlo Moholy-Nagy, "The Constructivist and the Proletatiat," *MA* (1922). This essay was also reprinted in Sibyl Moholy-Nagy's biographical book" Laszlo Moholy-Nagy An Experiment in Totality." (Cambridge: MIT Press, 1969)

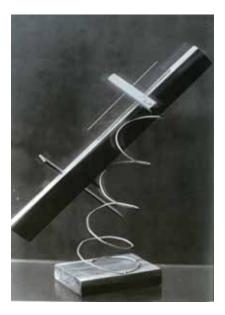


Figure 10: Hovering sculpture by Bauhaus student Corona Krauce 1924 wood and wire

Although I have argued that there are fundamental traces linking Itten's *Vorkurs* to Moholy-Nagy's, there were also differences. Two of the most significant divergences from Itten's *Vorkurs* were that Moholy-Nagy's course would be run in conjunction with another instructor. Josef Albers joined Moholy-Nagy in the teaching of the materials course. ¹²² Importantly, within this course an economy of materials was initiated through the integration with industry. I would argue this was the most significant differentiation between the two *Vorkurs*. Itten had said on introducing material studies to his teachings: "I hope that in this way the stroke, the line, will also be felt as something material, that the love of the line will grow from the love of silk." ¹²³ By comparison, and in total allegiance with Moholy-Nagy's economic and environmental concerns, Albers introduced the second *Vorkurs* by stating: "Nothing unused is permitted in any form. Otherwise the calculations will not work out because chance has played a role. This is thoughtless because it derives from habit." ¹²⁴ Materials would be addressed quite differently and the course Moholy-Nagy and Albers Materials and Matière course. ¹²⁵

What did remain common in both *Vorkurs* were Itten's investigations into material structure and measured contrasts and these were merged into Moholy-Nagy's and Albers' teachings. The

¹²² Albers had entered the *Vorkurs* having taught in the workshops but more importantly he was a product of ltten's Vorkurs

¹²³ Wick, *Teaching at the Bauhaus*, 106. Prior to teaching at the Bauhaus Itten had taught the appreciation of materials and their usages in his courses in Vienna.

lbid., 182. In this statement Albers had fundamentally employed the ideologies of not only the Bauhaus manifesto but the economic context that Germany had found itself in following World War 1.

¹²⁵ Ibid., 176. In 1923, due to Albers' efforts at the Bauhaus as a student, he was quickly elevated to the made to measure' position of junior master.

goal of these explorations was to acquire a feeling for materials through juxtaposition and relationship. Itten, Moholy-Nagy and Albers all sought in their investigations of materials, structure, surface aspect and texture. They all concurred that experimentation and discovery were vital to the student's understanding of materials. Moholy-Nagy and Albers certainly enriched the materials programme. Material structure now referred to the qualities of surface that revealed how a material might grow or be formed. The surface aspect referred to the qualities of surface that reveal how a raw material may have been treated technically and the texture is the presence of a combined use of both structure and surface aspect. The teaching of an economy of materials, more aptly described as frugality or prudence, was also considered fundamental to the investigations into spatial awareness leading to an emphasis on lightness and transparency. Both lightness and transparency become synonymous with the Bauhaus aesthetic. Banham wrote of Gropius' Dessau buildings: "The ponderousness of the old methods of building is giving way to a new lightness and airiness. Gropius is able to make genuinely original contributions to the formal usages of the growing International style. The Bauhaus (Dessau) remains a masterpiece of this new architecture." This economy, lightness and spatiality can also be attributed to the design works of *Bauhaüslers* Herbert Bayer (1900–1985) in typography and Brandt's (1893 -1983) home and office wares.



Figure 11: Universal Typeface 1926. Bayer attempted to make a world alphabet

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¹²⁶ Banham, Theory and Design in the First Machine Age, 282.



Figure 12: Marianne Brandt tea and coffee set, MT50-55a. Silver, ebony handle and glass lid to sugar bowl

The economic use of material and spatial qualities in Breuer's tubular steel furniture ranks it as one of the finest examples of Moholy-Nagy's ideologies expressed in objects. Additionally, the economic use and techniques applied to construction materials in Gropius's 1928 Dessau Bauhaus make it a superior example of architectural lightness and transparency. Although simplistic in plan, layout and linking, the Dessau school, built to accommodate the workshops and the school's spiritual life, was complex. This building is a quintessential example of the accomplishments of *Vorkurs* teachings. Gropius has exemplified Pestalozzi's and Froebel's theories of haptic and optical engagement, Itten's visual language to compose and to juxtapose forms, Moholy-Nagy's 'vision in motion' technique to allow appreciation of form and space and Albers' economic rationale. Gropius himself expresses the fundamentals of Moholy-Nagy's theory when he described the Dessau campus. "One must walk round this building in order to understand its form and the function of its components." I would assert that although

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Naylor, *The Bauhaus Reassessed.Sources and Design Theory*, 125. The shift to Dessau, an industrial city, provided Gropius with the opportunity to redefine the aims of the school with the workshops now called laboratories becoming the heart of the Bauhaus.

¹²⁸ Ibid., 131. Gropius, although never acknowledging the impact of Moholy-Nagy's teachings on his own work never ceased to support his colleagues pedagogical endeavours both within the German Bauhaus and the American iteration that would follow in 1932.

Gropius has been gifted the accolades for the Dessau buildings, the impetus for such work came from the *Vorkurs* pedagogy.



Figure 13: Bauhaus building Dessau workshop façade 1926

Entrenched with Itten's founding ideologies Moholy-Nagy's *Vorkurs* was a major influence in the design of the Dessau buildings. Sadly, Moholy-Nagy would never enjoy the fruits of his pedagogy. Perhaps considered abrupt or untimely, and amidst the rise of Hitler's third Reich, Moholy-Nagy a socialist and a Hungarian Jew, felt both his political views and religious affiliations were becoming of interest to the Nazi party. In 1928, only four days after Gropius departure into private practice, Moholy-Nagy resigned. However, this would not be the end of Moholy-Nagy's relationship with Gropius or the advancement of Bauhaus ideology. In the meantime, Moholy-Nagy's politically motivated departure handed Albers, the apprentice and junior master, the role of Master of the *Vorkurs*. Albers remained at the Bauhaus and in this position throughout the on-going difficulties faced by the school until its forced closure in 1933.

2.12 Josef Albers and the Vorkurs

It was, as the student that became a teacher, that Albers would make his mark at the Bauhaus. Historian Friederike Kitschen wrote Albers was: "a teacher who wanted to be a student and the student that became a teacher."¹²⁹ It was in the *Vorkurs* that Albers would merge his own ideologies and those of both Itten and Moholy-Nagy consolidating much of what became Bauhaus ideology. Artist Lux Feininger (1910-2011), the son of Bauhaus master Lyonel Feininger (1871-1956), disagreed, stating: "the concept of the course so drastically that nothing but the name remained."¹³⁰ Although Albers did bring a distinctive focus and unique enthusiasm to the *Vorkurs*, I will assert that the fundamental tasks of the preliminary course remained intact.

Albers was already teaching in Munich when the discovery of a leaflet containing the Bauhaus manifesto and his thirst for expertise and knowledge drew him toward Gropius's new academy. When interviewed in later life about this radical shift Albers stated: "I was thirty-two. I threw all the old junk overboard and went right back to the beginning again. It was the best thing I ever did in my life." In 1915, having gained a teaching certificate Albers began teaching in Bottrop. While there he also studied at the School of Applied Arts in Essen. The old junk to which Albers refers is the large number of academic works he achieved while studying at these institutions. In 1919, Albers moved to Munich where he attended: "the profitable Max Dormer course in painting techniques." Albers' studies in Munich were not as inspirational as he had hoped prompting the shift to Weimar. In retrospect Albers stated: "All I knew of the Bauhaus was derived from a single sheet, the first manifesto. This program gave me the impulse to try out the new idea." 133

Entry into the Bauhaus was not easy. There were limited places and rejections after the six month *Vorkurs* were numerous. Despite this, Albers was enrolled as a student at the Weimar Bauhaus and entered Itten's *Vorkurs* in 1920.¹³⁴ As a student of the *Vorkurs*, Albers stood out. Unlike Gropius' or Itten's childhoods, Albers had not been exposed to the pedagogy of

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¹²⁹ Fiedler and Feierabend, *Bauhaus*, 308.

¹³⁰ Lux Feininger, "The Bauhaus: Evolution of an Idea," in *Bauhaus and Bauhaus People: Personal Opinions and Recollections of Former Bauhaus Members and Their Contemporaries*, ed. Erkhart Neumann (New York: Van Nostrand Reinhold, 1993), 190.

¹³¹ Neil Welliver, "Albers on Albers," *Art News*, 31, no. 64 (1966).

¹³² Fiedler and Feierabend, *Bauhaus*, 308. Albers also studied with Franz von Stuck at this time but wasdissatisfied with Stuck's teachings as Albers felt that at thirty years oldand having experienced Cubism first hand the course did not pffer any innovative content applicable to him.

Rainer K Wick, *Teaching at the Bauhaus*, trans. Stephen Mason and Simon Lèbe (Ostfildern-Ruit: Hatje Cantz Verlag, 2000), 166.

Whitford, *Bauhaus*, 69. Other students that were singled out for excellence in the Vorkurs were Joost Schmidt, Gunta Stolzl and Marcel Breuer.

Pestalozzi or Froebel.¹³⁵ Cynical of conventional education, described by Albers as 'knowledge schools,' Albers, as a teacher had been inspired by the educational reforms of John Dewey. Aware that the way to discover one's own powers of seeing, judgment and reason was through explorations Albers immersed himself into student life at the Bauhaus, approaching learning with an open mind and a "determination to always improve and compete." His willingness to acquire numerous craft skills, his imaginative use of materials in Itten's *Vorkurs* and the various workshops made it clear that Albers was "one of the most gifted students of his generation." His particular interest in the assemblage of discarded materials would become a significant influence not only on his own work but also the *Vorkurs* pedagogy that he would develop having advanced to the: "student that became a teacher."



Figure 14: Albers teaching in the *Vorkurs* 1928-1929. Teaching was central to Albers' own development

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¹³⁸ Fiedler and Feierabend, *Bauhaus*, 308.

¹³⁵ Wick, *Teaching at the Bauhaus*, 174. Gropius, Kandinsky, Klee and Itten were all exposed the the Froebel and Pestalozzi ideals in their early childhood education.

¹³⁶ Ibid., 166. John Dewey's (1859 - 1952) "The School and Society and Democracy and Education" were translated into German in the early 1900s and were highly influential on Albers formation of his own pedagigical ideas of both learning and teaching.

¹³⁷ Whitford, *Bauhaus*, 133. It was Albers outstanding results in the Vorkurs that had led Gropius to invite Albers to become a junior staff member and to teach the use of materials to the preliminary year students.

2.13 Itten's Legacy Continued

Albers held an unprecedented position in the Vorkurs. He had been Itten's student, an experience that had solidified his principles of learning and where he had witnessed the establishment of a universal language of composition and form. He had also worked as a junior master under Moholy-Nagy who had expanded the experimentation of materials in search of light, form and space beyond Gropius' expectations of both innovation and profitability. These experiences, I will assert, enabled Albers to supplement the Vorkurs ideologies with his own brand of tenacity. It is noteworthy that upon taking over the Vorkurs, Albers criticised Itten's preliminary course and questioned the goals Itten had set for his charges. He denounced Itten's work unequivocally in a letter to a 1923 Bauhaus masters committee saying: "The failure of the students seems to me to have been partially caused by the way the preliminary instruction was handled. The way it is carried out is not right and that it produces in many of the students the exact opposite of what was sought." ¹³⁹ This criticism was hypocritical and, if not obvious at the time it was certainly evident by 1933, when Albers was teaching in the United States. The hypocrisy lies in the criticism of individualism and vanity he levels at Itten. These same criticisms could be directed towards Albers when, after leaving the Bauhaus in 1933 he focused his own work and teachings on painting and the artist thereby supporting the subjectivity he claimed to denounce. I would argue that in 1923, riding a crest of popularity with the remaining Bauhaus masters, any acknowledgement by Albers of Itten's input into his pedagogy would have been seen as counterproductive to the advancement of his career. Additionally, Gropius would have admonished any acknowledgement of Itten's input during his continued reign as director of the Bauhaus beyond 1923 and Itten's departure. In spite of the criticisms, possibly encouraged by the overtness of Albers criticisms and the retrospective knowledge of his American endeavours, I would suggest that Albers was directly influenced by Itten's and the reformist's prerequisite pedagogy.

Albers did however acknowledge Dewey's writings as influential to his enthusiasm for reformist pedagogy and, I would propose, Dewey as the catalyst for Albers' ability and relative ease with which he shuffled between teaching, learning and doing for the entirety of his career. Albers, like Dewey, professed learning and not teaching, trial and error experiments and learning by

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¹³⁹ Wick, *Teaching at the Bauhaus*, 176.

discovery as the maxims when teaching creativity.¹⁴⁰ The extra-ordinary versatility that students such as Albers, Herbert Bayer, (1900–1985) Brandt and Breuer displayed while at the Bauhaus, "testified to the efficacy of the courses and the Masters that taught them." Albers aimed to pass on to his students his spirit of versatility, by example. His own works through painting, glasswork, photography, topography and furniture exemplified his ability to translate Itten's common language of composition and form into industrialised objects.

Albers and Moholy-Nagy had referenced hierarchy, rhythm, scale, proportion and symmetry across numerous disciplines. By also referencing these principles in his teaching Albers had engaged and disseminated the universal visual language cultivated by Itten and thereby continued the legacies of Pestalozzi, Froebel and Ruskin into this next iteration of the Vorkurs. But importantly, the versatility Albers demonstrated in the use of these principles, allowed Gropius' deepest wish of a shared visual language that would break down social barriers. Albers, like Gropius, believed everyone should understand artistic creativity and worked continuously throughout his career to replace the prevailing elitist restrictions surrounding the understanding of art and architecture. 142 In his 1919 manifesto for the Bauhaus Gropius had demanded: "The ultimate, if distant, aim of the Bauhaus is the unified work of art, the great structure, in which there is no distinction between monumental and decorative art." 143 Although we have established Gropius had altered the direction of the Bauhaus in 1923 and steered it towards mechanisation and technology, his fundamental desire to reach the hearts and minds of all users of art or architecture never diminished. Gropius would continue throughout his lifetime to call for: "the development of an artistic culture to be as broadly based as possible that would not depend on idiosyncrasies of an artistic elite." 144 Varnelis argued that by including Itten's fundamental principles in both Albers and Moholy-Nagy's pedagogy the visual language become universal. He stated: "Albers and Moholy-Nagy hoped to go beyond simply teaching artists. They intended that their method of erasing student's

¹⁴⁰ Ibid., 174. Dewey's belief that a school should prepare a student for current life also influenced Albers as he would later regard history as an inappropriate subject to be taught alongside art or architecture.

¹⁴¹ Whitford, *Bauhaus*, 70. In particular this versitallity allowed many Bauhaus graduates to disseminate their talents into a variety of disciplines including architecture and interior decoration.

Achim Borchardt-Hume, ed. *Albers and Moholy-Nagy.From the Bauhaus to the New World* (London: Tate Publishing, 2006), 74. Albers commitment to versitality and universal understanding was somewhat undermined in America when he confined his work and teaching to painting at Black Mountain College and Yale University.

¹⁴³ Gropius, "Bauhaus Manifesto and Program." Ed.The Staatliche Bauhaus(Weimar:The Bauhaus1919),2

¹⁴⁴ Franciscono, Walter Gropius and the Creation of Bauhaus in Weimar: The Ideals and the Artistic Theories of its Founding Years, 68.

preconceptions and habits of seeing would create a radically new perception of the world for everyone."¹⁴⁵

2.14 Albers Contribution to the Vorkurs

Wick argues that the materials course under Albers, named Materials and Matiére was: "his (Albers') most original and unmistakable contribution to the pedagogy of the Bauhaus," Albers was fascinated by the properties and potentials of materials and while at the Bauhaus he acquired a new view of "materials, not noticed before." He would use the simplest and least likely materials to teach fundamental lessons of construction that engaged with art, architecture and engineering. Paper, as basic as news print, used razor blades and spent matches were composed into "the most impressive structures." Paramount to Albers teaching was the preservation and respect for a materials inherent qualities and characteristics. Albers would challenge himself and his students with the slogan: "try to make something out of a material that is more than you have now." Albers believed the process of folding was natural to paper. Folding it yielded this pliable material stiff. He demonstrated that by folding and standing paper up, the material visually activated.

Material investigations held great significance within the Bauhaus methodology and the versatility shown with the knowledge gained from this course bestowed a meaningful contribution to the universality of both the Bauhaus method and result. Albers developed a visual language of unity for the artist or designer to develop utilitarian objects for universal use. It was an all-inclusive language in which the designer, manufacturer and consumer would all be able to understand and appreciate the compositional and material essence of the form and its function. I will argue that it was from this new desire for a shared understanding and the efforts of the *Vorkurs* masters to disseminate it, that the elitist grip on the comprehension and use of artistic and architectural forms was loosened. Varnelis stated that "The development of

¹⁴⁵ Varnelis, "The Education of the Innocent Eye," 215.

¹⁴⁶ Wick, *Teaching at the Bauhaus*, 179.

 ¹⁴⁷ Ibid., 166. Although Johannes Itten and Josef Albers were both trained as teachers and were the same age
 Albers happily took instruction from him as Albers appreciated Itten's teaching methods were far reaching.
 ¹⁴⁸ Feininger, "The Bauhaus: Evolution of an Idea," 190.

Wick, *Teaching at the Bauhaus*, 181.

a new visual language in architecture would be based on the translation of Moholy-Nagy and Albers work into three dimensions."¹⁵⁰

We have established that fundamental to all pedagogy within the Bauhaus was the desire to liberate a student's creative powers. Each master came with agendas and theories to enable this to be established. One such theory, held as paramount and shared by Gropius, Itten, Moholy-Nagy and Albers was the concept of the instructor as a guide, not a leader to be mimicked. This philosophy was not held by all of the successive directors of the Bauhaus. After the departure of Gropius and Moholy-Nagy, Albers would be left at the Bauhaus to negotiate the path forward for the Vorkurs that would in 1930 see him engage with Mies van der Rohe. Miesian pedagogy strongly enforced that although the universal language was to be engaged with it should be understood that the way Mies himself engaged with it, was best. 151 Bauhaus student Hurbert Hoffman retrospectively wrote: "Mies was the worst educator one could imagine, because, unlike, say, Gropius, he was not interested in what possibilities existed or could be awakened in the student but only whether and to what extent the student was in a position to think Miesish." Hoffman went on to say Mies would often, due to his inability to teach, shove a hand drawn sketch to a student saying: "try doing it like this." The idea of repeating work appalled Albers and his philosophies of individual creative freedom via a universal visual language and thereby it also contradicted his beliefs in the teaching of historic references within artist pedagogy. Unlike Gropius, Albers was a reluctant writer. It was not until 1924 that Albers would offer some transparency towards his theoretical or ideological foundations. His first essay Historic or Contemporary expressed his views with great acuity. His later effort in 1928, Form Teaching in Craftwork, also elucidated what Albers saw as problematic robustly. In particular, Albers believed the teaching of historical ideologies, methods or understandings were fruitless. "A lot of history leaves little time for work. The reverse, little history and much work, is our task." 153 Albers asserted that historical knowledge hindered production and to pass on old knowledge was senseless. He rather indelicately

¹⁵⁰ Varnelis, "The Education of the Innocent Eye," 216. Varnelis also argues the significance of Moholy's and Albers' work in the 1976 essay Transparancy:Literal and Phenomenal where Rowe and Slutzky lay the foundation for this translation

Wick, *Teaching at the Bauhaus*, 85. Mies has been described as an "elitist jail warden" seizing control of the school in an authoritarian way.

¹⁵² Wick, *Teaching at the Bauhaus*: 85.

¹⁵³ Josef Albers, "Werklicher Formunterricht," *Bauhaus* 2(1928), 6. More extensive quotes are included in Rainer K Wick, Teaching at the Bauhaus, trans. Stephen Mason and Simon Lèbe (Ostfildern-Ruit: Hatje Cantz Verlag, 2000)

described teaching history as: "taking a meal without a stool to follow." This discourse would by in large be played out in the United States but Albers assertions towards the exclusion of history in artistic or architectural education would bind his pedagogy to Gropius's as they both sought to conquer the Transatlantic modernist landscape.

In 1933 Albers and his Bauhaus colleagues would all be forced to leave the Bauhaus when, under political pressure the Nazis closed it down. Albers took with him his passion for both learning and teaching and actively sought new posts beyond the frightening confines of Europe as WWII approached.

It is clear the unification of the theories of Pestalozzi, Froebel and Ruskin continued to impact on teaching at the Bauhaus. This is nowhere more obvious than in Itten's Vorkurs which is retrospectively referred to by many historians as the backbone to Bauhaus pedagogy. Equally as clear is the refusal of Gropius, Moholy-Nagy and Albers to recognise Itten's contributions and impact on their own pedagogical ideals. I would suggest this is primarily due to the unease felt by Itten's more conservative colleagues in relation to Itten's overtly alternative lifestyle choices which they felt had no place in the modern world. For Gropius it was political. Itten commanded great popularity and threatened his standing and power in the school. With Itten gone, each pedagogue, Gropius the architect, Albers the artist and Moholy-Nagy the photographer would mature the foundation teachings in their own way facing their own unique challenges. With this further understanding of how Albers and Moholy-Nagy matured the Vorkurs in Germany we enter the next phase of Bauhaus teaching as it is transposed into a wholly different context, the United States. These challenges will be explored within the next chapter to illustrate not only the difficulties each Bauhaus master faced in the United States but also to again solidify the continued relevance of Itten's teaching within their Vorkurs styled pedagogy.

¹⁵⁴Josef Albers, "Historisch Oder Jetzig," *Junge Menschen* 8 (1924), 171.

Chapter Three

The Bauhaus In America

3.1 The Bauhaus Tenets Transposed and Translated in America

With the abrupt closure of the Bauhaus in 1933 by the Nazi regime, my study now fractures

from a review of a collaborative reform effort to propagate the ideals of the Bauhaus outside

of Germany. I will now investigate the translation of Bauhaus pedagogy from within Germany

to the transatlantic efforts made by three specific Bauhaus émigrés in the United States,

namely Albers, Moholy-Nagy and Gropius. This chapter will focus on two of the three émigrés,

Albers and his efforts within the discipline of Fine Arts at Black Mountain College and Yale

University, and Moholy-Nagy's work in industrial design at The New Bauhaus and the School

of Design in Chicago. I will explore the separate journeys of translation undertaken in pre-

WWII the United States by each Bauhaüsler and unveil the opportunities afforded and

restrictions placed upon their pedagogical interpretations. I will examine what aspects of the

Bauhaus pedagogy, particularly the Vorkurs, were utilized and how this was to affect their

attempts to sustain a universal visual language within a wholly different cultural and economic

situation.

3.2 Part One.

Albers: the First Bauhaus Émigré in America

Albers would lead the Bauhaus émigré as part of the intellectual and artistic diaspora of the

thirties, to the United States, where they would all contribute to the translation of the Bauhaus

pedagogy. Unlike Gropius and Moholy-Nagy who had left the Bauhaus some years before,

Albers had remained at the school through all its iterations. 155 But with the Bauhaus' closure

Albers had sought work outside of Germany. In fact, after his arrival in The United States Albers

had commented to Alfred Barr (1902-1981), a director of the Museum of Modern Art in New

York, that he and his young wife Anni had "sat on packed trunks waiting for new professional

¹⁵⁵ Gropius had left the Bauhaus in 1928 to concentrate on private practice and Moholy-Nagy resigned the same year under pressure from the National Socialists as he was Jewish. Both men left Germany for England before they

immigrated to America.

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opportunities." The pedagogical philosophy Albers had developed within his distinguished tenure at the Bauhaus was already well regarded internationally. ¹⁵⁷ In 1933 Philip Johnson (1906–2005) and Alfred Barr, of the MoMA convinced the founders of the newly established art school, Black Mountain College in North Carolina, John Andrew Rice (1888–1968) and Theodore Dreier, to actively pursue and recruit Albers. 158 Albers pedagogical beliefs, and his empathy with the Dewey inspired reformative aims of both Rice and Dreier made Albers the obvious candidate for not only employment but leadership at Black Mountain College. 159 Having overcome some initial immigration issues around the accreditation of Black Mountain College and Albers' salary both Josef and Anni Albers "acknowledged the warmth and spirit that their journey had been organised in" and sailed to the United States. 160 Albers would be the first Bauhaus master to take up a teaching position in America. He was welcomed with great enthusiasm by both the Ashville Citizen and the New York Times, which wrote on November 24th 1933: "The coming (to America) of Professor Albers heralds the beginning of a new era in America in the teaching of art." ¹⁶¹ The fervour for his new opportunity was mutual. At forty-five Albers again embraced a new life with the same exuberance and tenacity he had displayed when at thirty-two, in his own words he had "thrown all his old junk over board" to begin his new education at the Bauhaus. 162 It would be both an uplifting experience for Albers and his

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¹⁵⁶ Karl-Heinz Füssl, "Pestalozzi in Dewey's Realm: Bauhaus Master Josef Albers among the German-speaking Emigres' Colony at Black Mountain College (1933 - 1949)," *Pedagogica Historica* 42, no. 1 & 2 (2006), 84. The fact that Anni (nee Fleischmann) was a Jew added tension to their desire to leave Germany. But as she was now married to a non-Jew her status added no weight to the urgency of their visa applications. James Sloan Allen, *The Romance of Commerce and Culture* (Chicago and London: University of Chicago Press, 1983).

¹⁵⁷ Due to his own restricted experiences as a student in what Albers described as "knowledge schools" Albers found Itten's experimental and discovery based pedagogy within the *Vorkurs* at the Bauhaus enlightening and built on these ideals within his own teaching career. Both Philip Johnson and Alfred Barr had met and corresponded with Albers while he was still teaching in Germany.

¹⁵⁸ Fiedler and Feierabend, *Bauhaus*, 63. After Albers had met Barr in Berlin and corresponded with him about opportunities outside of Germany, Alfred Barr and Philip Johnson convinced Rice to cable Albers directly to offer him the position of Head of the Art Department at Black Mountain.

¹⁵⁹ The incumbent Beaux-Art system of artistic education was under pressure from Pure Design theories and Dewey inspired ideals for reformative education. The Great Depression in America was seen by Black Mountain's founders as an opportune time to modify the rigid "grade" educational system.

¹⁶⁰ Borchardt-Hume, *Albers and Moholy-Nagy: From the Bauhaus to the New World*, 104. As Albers was not a Jew, immigration assistance was less accessible. Edward Warburg, a wealthy young volunteer at the MoMA paid for the first class steamship travel and the Black Mountain acted as guarantee with a salary of \$1000.00 promised to Albers.

¹⁶¹ Vincent Katz, ed. *Black Mountain College- Experiment in Art* (Madrid: Museo Nacional Centro de Arte Reina Sofia, 2002), 24.

¹⁶² Welliver, "Albers on Albers." Albers lifelong thirst for knowledge and expertise had made him a willing participant in Itten's Vorkurs where abandoning previous learnt knowledge and skills was considered necessary in order to realise new potentials.

wife and a tenuous one as life in Europe for their families and friends became increasingly dangerous. Although not a part of this study the contrasting poles between German and American cultures and the impact of new freedom and abundance in the United States were evident in Albers work and his life's goals. 64



Figure 15: 1933 Josef and Anni Albers, from "Germans on Faculty at Black Mountain School"

At this time, conventional American college instruction was heavily influenced by the Beaux-Art methods of teaching and only available, in the most part, to the financially privileged. It had been a fundamental dissatisfaction with this situation that had led Rice and Dreier to develop a Dewey inspired "learning by doing" curriculum based on democracy, observation and experimentation. Both men believed that these attributes were to be placed at the foreground of the educational canon in contrast to the exclusive emphasis placed on printed matter.

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¹⁶³ Borchardt-Hume, *Albers and Moholy-Nagy. From the Bauhaus to the New World*, 108. Both Josef and Anni Albers juggled the complexties of their existance deftly to assist family and friends in their escape from Germany and other parts of Europe during WW11 while still pursuing their work at Black Mountain.

¹⁶⁴ Albers responded to the American and Mexican landscape by picking up his paintbrush again. This led to his passion for painting being ignited again.

Dewey himself visited and corresponded regularly with Rice¹⁶⁵ In one letter of support sent in 1940, he wrote: "The work and life of the college are a living example of democracy in action. The college exists at the very 'grass roots' of a democratic way of life." Paralleling Rice and Dreier's ideals were Albers' own experiences of the intellectual system which had ignited in him the belief that formulaic, non-sensory teaching was destructive to creativity. 167 In 1999 historian Paul Betts wrote: "Black Mountain College, NC" that: "Albers' teaching nicely meshed with the college's guiding objective of discouraging imitation and mannerism in order to develop independence, critical ability and discipline." ¹⁶⁸ Even though Black Mountain College was established after the closure of the Bauhaus and the schools shared many ideological beliefs, Black Mountain was not merely a continuum of the Bauhaus. However, it was in retrospect recognised as an important outpost for Bauhaus pedagogy and diaspora due mostly to the introduction and influence of Albers. 169 Albers would, over his sixteen year tenure at Black Mountain, integrate many Bauhaus influences and continue to develop the universal visual language cultivated at the Bauhaus. JoAnne Ellert describes one important commonality that served as a vital thread for the Bauhaus legacy in America. She posits: "John Dewey was not too far removed from one of the basic ideas of the introductory Bauhaus course – the idea that there exists in every human latent artistic power which needs to be awakened." ¹⁷⁰

All Bauhaus pedagogues concurred that fundamental to their pedagogical ideologies was the belief that intellectual education offered a limited palette of understanding. This primary standpoint was unwavering within all adaptations of the *Vorkurs* by its masters either at the Bauhaus or within any of the transatlantic versions of these teachings. The influence of Pestalozzi and Ruskin within Itten, Moholy-Nagy and Albers' preliminary courses at the

¹⁶⁵ According to Karl-Heinz Füssl Rice and Albers fell out over Rice's consistent experimentation within the curriculum. Rice was forced to resign from Black Mountain in 1938. Rice stated that he felt only John Dewey truly understood his endeavours.

¹⁶⁶ Füssl, "Pestalozzi in Dewey's Realm.Bauhaus Master Josef Albers among the German-speaking Emigres'Colony at Black Mountain College (1933 - 1949)," 81.John Dewey also served as a member of Black Mountain's advisory board.

¹⁶⁷ Fiedler and Feierabend, *Bauhaus*, 174. Both the Beaux-Art system and the apprenticeship system of learning encouraged imitation not innovation.

ւթջ ibid., 64

¹⁶⁹ ibid., 63. Black Mountain attracted many influencial European and American writers, artists and architects to participate. Buckminster Fuller, John Cage, Robert Motherwell, El Lissitzky and Edgar Kaufmann were among those who attended Albers' summer classes.

¹⁷⁰ JoAnne C Ellert, "The Bauhaus and Black Mountain College," *The Journal of General Education* 24 no. 3 (1972), 144. Johannes Itten believed everyone had the innate ability to be creative. These abilities were to be awakened within his 1919 - 1923 version of the Bauhaus Vorkurs.

Bauhaus continued to be fundamental within the American translations. This lineage of educating the student holistically encouraging vision and perception through an 'innocent eye' remained important. Each Bauhaus pedagogue had inherent differences in their pedagogical beliefs that had been, to varying degrees masked, under an imposed unity at the Bauhaus.



Figure 16: Black Mountain logo 1933. This logo owes a debt to the Bauhaus signet by Schlemmer

Once the pedagogues immigrated to the United States, the translations of the beliefs and their idiosyncrasies would be uncovered and challenged. This ultimately caused the individual interpretations to undergo manipulations. Albers endured the least criticism as he had brought his rigorous teachings in drawing, design and colour to Black Mountain where the liberal unfettered curriculum embraced Albers ideals. While at the same time Moholy-Nagy would endeavour to engage with entrepreneurs and capitalism in order to create a design institute in the heart of the industrial Midwest.¹⁷¹

3.3 Itten and Dewey's Influence on Albers' Black Mountain Werklehre

Black Mountain College (1933-1956) was an experimental community located in North Carolina and considered an exemplar in innovative art, education in America. Within the liberal arts programme an emphasis was placed on the visual arts with literature and music also major

¹⁷¹ Borchardt-Hume, *Albers and Moholy-Nagy.From the Bauhaus to the New World*, 69. Although Albers and Moholy-Nagy are coupled together in this chapter they did develop very different stratagies for the universal visual language in America that did not always gain eachother's approval.

contributors to the creative environment. The social agendas that Albers had formulated at the Bauhaus would be well supported at Black Mountain. The new environment had radical left-leaning patronage both politically and educationally. Albers would, unlike Moholy-Nagy or Gropius, be more accepting of the Dewey influences established at Black Mountain. Dewey's books The School and Society and Democracy and Education had inspired Albers prior to his indoctrination to Bauhaus principles. 173 Albers slogan "experimenting takes priority over studying" was a derivative of Dewey's motto "learning by doing." ¹⁷⁴ For Albers these two reformative slogans were epitomised in Itten's Vorkurs. Itten's teachings had served as principle foundations in Albers' own work and continued to be informative in his development of pedagogical ideals. Albers and Moholy-Nagy's Vorkurs was portrayed as a revolt against Itten's course and the subjectivity imbued within it. However, Albers would integrate much of Itten's pedagogical programme into his American iterations of the Vorkurs. Pestalozzi and Ruskin would continue to be formidable influences as Albers progressed towards his mission "to open eyes." Albers merged the German and the American reformative pedagogies of Dewey and the Bauhaus and in doing so accelerated the shift from Beaux-Art to modernist education within Fine Arts in America.

Although I have established a number of influences that had shaped Albers' idealistic intensions he also, most importantly, brought his own distinct pedagogical blueprint to Black Mountain. Dewey's theories had not addressed a belief in a universal understanding or visual language but Albers would adhere to and develop the ideals of universality inherent in the Bauhaus ideology in his Black Mountain programme. At Black Mountain Albers renamed the *Vorkurs* the *Werklehre* which when translated, means 'learning through working or doing.' It is important to appreciate that although Albers would in his role at Black Mountain College address these pedagogical ideals within Fine Arts alone, he still held to the Bauhaus tenet that "our desire for the simplest and clearest forms will make mankind more united and life more real, more

¹⁷² ibid., 98. Albers arranged for Gropius, Feininger, de Kooning, Twombly and Cage among others to visit and lecture at Black Mountain. The encounters were described at in some cases cataclysmic..

Wick, *Teaching at the Bauhaus*, 174. Before entering the Bauhaus as a student Albers had been inspired by the writings of Dewey. He then by chance found a brochure adertising the Bauhaus and Walter Gropius manifesto which led him to enroll at the Weimar school.

174 ibid.

¹⁷⁵ Borchardt-Hume, *Albers and Moholy-Nagy.From the Bauhaus to the New World*, 106.

essential."¹⁷⁶ As part of this belief, Albers maintained a principle ambition within his teaching to sensitise his students to "open their eyes." 177 At both Black Mountain College and his next post Yale University, Albers would canonise this doctrine. Within his Bauhaus and Dewey inspired programme Albers continued the tradition of holistic teaching. To this experimental community Albers brought the analytical focus he had learnt in Itten's classes and developed in his own Vorkurs. He did however make one vital change to the Bauhaus methodology. He abandoned the interdisciplinary ethos taught at the Bauhaus. 178 He offered courses in drawing which stressed techniques for visualisation, composition and spatial relationships. Interestingly, after Itten's departure Albers and Moholy-Nagy had removed colour studies from their Vorkurs but here, in the Black Mountain Werklehre Albers would reintroduce it. He would also teach painting in his advanced colour course. Albers would in his own work, detach himself from industrial design focusing on the fine arts and become a painter in his own right. Sandler argues: "It must be stressed that Albers' exclusive commitment was to art and not, as often believed, design." Although unlike Gropius and Moholy-Nagy, Albers would not address form or space three dimensionally in his work, the relationships between form and colour to create or suggest space formed the nucleus to his artistic investigations. 180 Albers may not have engaged in making form beyond the Bauhaus but his beliefs in a shared pedagogical approach or creative value never altered.



Figure 17: Albers at Black Mountain College.

¹⁷⁶ Irving Sandler, "The School of Art at Yale: The Collective Remininiscences of the Twenty Distinguished Alumni.," *Art Journal* 42, no. 1 (1982),16.

¹⁷⁷ Borchardt-Hume, *Albers and Moholy-Nagy.From the Bauhaus to the New World*, 106. Albers believed it was more important that the student grow into their own world than be led by the teachers background. ¹⁷⁸ ibid.. 98.

¹⁷⁹ Sandler, "The School of Art at Yale: The Collective Remininiscences of the Twenty Distinguished Alumni.," 16.

With this dramatic change in his own direction of work one could postulate that Albers had returned to the beliefs of subjectivity so venomously criticised by Gropius and van der Velde within Itten's *Vorkurs*. There is certainly an element of truth in this argument and Albers time at Yale will illuminate this discourse more fully. In Albers' defence, the teachings of the universal language at Black Mountain were not discarded, indeed he had broadened them to include not only a universal understanding between artists but most importantly he wanted art to be an enlightening experience for the viewer. Author and curator Achim Borchardt-Hume writes: "They (Albers and Moholy-Nagy) wanted their art to be immediate and inclusive, intelligible without any art-historical knowledge or academic education." This had been a central tenet to all Bauhaus pedagogues in their translations but would for some, namely Gropius at Harvard University, be fiercely challenged.

3.4 Bauhaus Versus Black Mountain-A Competition

Albers' ethos was questioned, indeed comparisons and reservations were made between the Bauhaus and Black Mountain College. Ellert compare Black Mountain to the Bauhaus and maligns "the revolution carried out by Gropius and his Bauhaus colleagues" as a "mere palace revolution" and claims the founding of Black Mountain College as a definitive "revolt against the entire system of standard higher education." The commonalities within their intentions are more evenly balanced than she purports. To further quote Ellert:

The new school in Black Mountain was to be an experiment in pure democracy and the 'education of the whole man.' It was also to be an experiment in self-deprivation on the part of the faculty in starting a college without funds in the midst of the worst depression America had ever known. 184

One may debate the imprudence of the author's comparison of Gropius' and his colleague's efforts within the highly charged political, ethical and economic climate that existed for them in

¹⁸¹ ibid., 74.

¹⁸² ibid. Borchardt-Hume curated the 2006 exhibition "Albers and Moholy-Nagy." at the Tate Modern, London.

¹⁸³ Ellert, "The Bauhaus and Black Mountain College," 145.

¹⁸⁴ ibid. The reference to educating the whole man is one that has roots in the teachings of Pestalozzi and Ruskin a century before the Dewey theories were introduced to American education.

Germany at the inception and during the tenure of the Bauhaus to Rice and Dreier's struggles to establish Black Mountain within a depressed and conservative climate in the United States. But beyond the financial difficulties placed on both of the schools and their faculties, Ellert's description of the tenets of the Black Mountain teachings show mirror like aspirations to the Bauhaus' belief in the democratic education of the whole man.

Although both the Dewey and the Bauhaus pedagogical approaches were integrated into components of Albers teachings it is of interest that a certain element of competition seems to exist within historical records in relation to which of the ideologies, Bauhaus or Dewey played the greater role in ridding America of the Beaux-Art method of teaching where imitation, style and illustrative codification were paramount. Ellert's acerbic description from the American perspective evidences a disregard for the context in Germany within which the Bauhaus was conceived and developed. It is plausible to interpret this rather disparaging description by Ellert as a dismissal of the Bauhaus' successful development of a creative and reformative pedagogy and to claim this pioneering effort for Dewey's American disciples. Although Ellert gives significant weight to a depressed economic situation within America at the time of Black Mountain's inception, to applaud Black Mountain for instigating a reformation during a difficult period of time within a nation while downplaying the efforts of its European counterparts in similar if not more oppressive conditions seems ill informed. I would argue that these comments are moreover, incorrect. Albers himself made explicit references to the depressed economic situation in Germany within his teachings. He is known to have stated in the introduction to his preliminary course at the Bauhaus: "Ladies and gentlemen, we are poor, not rich. We cannot afford to waste material or time. We have to make the most out of the least. Notice then, that often you will have more by doing less." 185 In addition to Albers' frugality, a tenuous political and economic context led to self-denial and self- deprivation within other areas of the Bauhaus' framework. Parsimony was also encouraged within the spirituality of Itten's Vorkurs. The edification of spirituality was primarily through the belief in the Mazdanan philosophies. The exercise of self-deprivation discussed by Ellert was not exclusive to Black Mountain College as alluded to in her article. A former Vorkurs student confirms this situation by stating: "great demands were made on our self-denial, and if we occasionally faltered when

Wick, *Teaching at the Bauhaus*, 181. Albers was particular in his theories of economy of material and effort to gain maximum effect. His work was precise and economical.

conditions were too hard or hunger and thirst too great, on the whole we felt happy and privileged to have the firm support of our doctrine." ¹⁸⁶

Whether one adheres to Ellert's claims that Black Mountain's plight was greater than the extremes felt within the Bauhaus's struggles or the opposing view, this discourse highlights my argument that there are antagonistic comparisons being made where between the two schools. It would seem important that within the writings of Ellert, Black Mountain be understood as the more pious example of enlightened educational reform. Beyond these debates it is still nevertheless true that finances were unstable at Black Mountain College just as they had been at the Bauhaus. Black Mountain's pecuniary support was reliant on the passions and financial capabilities of the institute's benefactors, and although Rice and Dreier were both wealthy men (and Theodore Dreier was considered an accomplished fundraiser on the behalf of Black Mountain College) the donations did eventually begin to subside. Post WWII conservatism, criticism from competing institutions and political suspicions of communist links within the United States took its toll on the left leaning experimental college. Attempts to retain funding could not avert the inevitability of bankruptcy. In 1956 the remaining staff and students voted to disband the school.

Albers would again need to seek employment and a new start. With the dissemination of Bauhaus teaching gaining traction in the United States, in part due to the arrival of its founder Walter Gropius at Harvard University in 1937 and the pedestal some had placed him upon, Albers had been offered other opportunities to teach in America. In fact Gropius would continuously attempt to encourage Albers, "the backbone of the preliminary course", to join Harvard's faculty. But although Albers did lecture on occasion at Harvard's Graduate School of Design he was never a member of the staff. Whether Albers declined Harvard because he

¹⁸⁶ Katerina Ruëdi Ray, *Bauhaus Dream-House. Modernity and Globalisation* (New York: Routledge, 2010), 50. Ruedi Ray offers an insightful twist on hardship at the Bauhaus. She suggests that the extent of the fasting was as a result of a lack of food available but embraced under tutelage of Itten and the guise of Mazdanan to empower spirituality and creativity.

¹⁸⁷ Füssl, "Pestalozzi in Dewey's Realm.Bauhaus Master Josef Albers among the German-speaking Emigres' Colony at Black Mountain College (1933 - 1949)," 87. Post WW11 Black Mountain was criticised by Princeton's award winning psycologist Eric Bentley as having massive deficiencies and a democratic education for the elite. Both Harvard and The University of Chicago supported this rhetoric.

¹⁸⁸ Pearlman, "Joseph Hudnut's Other Modernism at the Harvard Bauhaus," 469. Albers was viewed by many in America, including Joseph Hudnut, the founder of the Graduate School of Design at Harvard, and Gropius himself as the most vital instructor of the preliminary course at the Bauhaus.

found the school too elitist and the pay too little as some have suggested, or whether Harvard declined to employ an artist in an architectural programme as argued by Pearlman could be seen as immaterial. But this discourse does illuminate a fracture between some former *Bauhaüsers* in mainstream American pedagogy. Albers ideals did not sit as comfortably outside Black Mountain College. Despite the relative isolation of Black Mountain, Albers had considerable impact on mainstream America. Having exhibited in 1938 in New York it was enthusiastically reported in Time Magazine: "A Bauhaus alumnus who has had better luck than Moholy-Nagy since he landed in the U.S in 1933 is Josef Albers, a gigantic little man." 190

In spite of the fact that his earning capacity was seriously limited by the college's finances Albers remained loyal to the school that had removed him from the German Nazi environment. This was not an expression of gratitude but more a display of Albers commitment to teaching as a vocation and the fulfilment he gained from it. ¹⁹¹ He had never regarded his stay at Black Mountain as a stepping stone to other more professional positions in America. He had not sought the pedestals or accolades of some of his Bauhaus colleagues. ¹⁹² Importantly to Albers, he had been able to address art education on two levels within his methodology. He had taught art to those with no experience of it with the aim of encouraging a common understanding and appreciation of the visual language, and equally as significant Albers had influenced an entire generation of artists and designers. Having studied at Yale under Albers, Michael Craig-Martin considered Albers to be one of the most influential educators in the history of American art education. In 1995 he wrote:

Albers' teaching can be seen as having directly contributed to several important movements. Yet at its heart, his teaching was about attitude and values rather than any particular type or style of art. It would be no

¹⁸⁹ Borchardt-Hume, *Albers and Moholy-Nagy.From the Bauhaus to the New World*, 109. Albers often found himself having to defend his work when exhibited. This was in the most part due to misinterpretations of his work that had became more and more about visual deception and trickery and not universal understanding. ¹⁹⁰ ibid. This quote also acknowledges the difficulties being experienced by Moholy-Nagy and not by Albers.

¹⁹¹ Füssl, "Pestalozzi in Dewey's Realm. Bauhaus Master Josef Albers among the German-speaking Emigres' Colony at Black Mountain College (1933 - 1949)," 89. Albers had declined other earlier offers to leave Black Mountain. His committment to teaching is evident as the artist did not take up painting for himself until he left Black Mountain. He then began his famous "Homage to the Square."

¹⁹² Both Gropius at Harvard and Moholy-Nagy in Chicago gained more exposure in America due to the institutes and personalities they were associated with.

exaggeration to see Albers as the father of the last generation of American modernists. 193

The isolation of Black Mountain and the socialist tendencies of some of its teachers and students had sheltered Albers from the capitalistic consumer environment that inevitably caused anguish and misunderstanding to both Moholy-Nagy and Gropius. His next step into mainstream education would see changes to Albers' methodology but not his intentions.

3.5 Albers at Yale

After his sixteen year term at Black Mountain in 1950, Albers sixty-two, took up a post at one of America's most prestigious schools, Yale University. Albers progressed from Black Mountain College to become the Director of Design at Yale University, where he continued his teachings concerning the 'whole man' and the 'innocent eye'. By the time Albers took up this post the reform of artistic and architectural education was well underway in the United States. Beyond the success of Albers to disseminate, throughout the United States, the new teachings from Black Mountain, Gropius had also arrived and been a very vocal and prolific propagandist for his Bauhaus ideals. Although he had strong opposition at Harvard for some of his tenets by 1950 he had finally managed to introduce a Harvard version of the *Vorkurs*. 194 Moholy-Nagy had, after an assertive and dogged effort, also carved a path for the Bauhaus methodology but sadly he had already died of leukaemia some three years before Albers would arrive at Yale. With the ground pre-prepared by his Bauhaus colleagues Albers entered Yale on a pedestal equalled only by the one that Gropius had been elevated to by Bauhaus supporters upon his arrival some thirteen years earlier. Art critic Irving Sandler stated that Albers' teaching at the Bauhaus had made him a historic figure. Albers' stature was enhanced greatly by his efforts at Black Mountain and Sandler asserted: "Albers was one of the most influential teachers of modern art in the United States, if not the world. Even the mass media reported on his

¹⁹³ Michael Craig-Martin, "The Teaching of Josef Albers: A Reminiscence," *The Burlington Magazine* 137, no. 1105 (1995), 252.

Pearlman, "Joseph Hudnut's Other Modernism at the Harvard Bauhaus," 473. Gropius had fought a long and loud battle for the a Vorkurs at Harvard and although it was 13 years before he would achieve this other universities throughout America were quicker to indoctrinate his tenets into their curriculum.

teaching; Life Magazine featured Albers in a four page picture story that helped spread the word." ¹⁹⁵

Yale offered a number of new challenges to the Bauhaus' and Albers' ideals. Like all other versions of Bauhaus teachings in the United States Albers would need to adapt his tenets once again to suit his new situation. Although Yale saw Albers and his teachings as clearly aligned with a progressive modernist, there are important distinctions between the Bauhaus, Black Mountain College and Yale. These distinctions included the calculated student selections cultivated by Albers, the training of the innocent eye and his seemingly autocratic view that his own ideas were paramount. In Chapter One, we addressed Albers' distinct personality. He was an abrupt and at times, rude man who was never anything but serious about his students' work. This seriousness, Sandler asserted "enabled the students to make allowances for Albers frequent hot-headedness and nastiness to students and his authoritarian posture. Students had to learn to cope with Albers and some could not." ¹⁹⁶ Albers personality did not alter in this new more traditional environment. The illustrious environs of Yale were a comfortable fit for Albers' autocratic characteristics, where he was always considered the student's master with competition fiercely encouraged and criticism always public. 197 As both a student and a teacher Albers had always encouraged competition and he had always demanded exactitude and excellence from his charges (and of course, himself). Itten and Albers had both demanded of their Vorkurs students that they challenge themselves. Albers would expect no less of his American students than he had of his Bauhaus students. He had always assimilated learning, teaching and doing as one. Wick asserts that Albers the student, Albers the teacher and Albers the painter were interwoven facets of the one man. ¹⁹⁸ His thirst for knowledge and his passion for sharing it were what defined him as a great teacher and in later years gained him the accolades for his own works. Sandler states: "Albers' genius as a teacher depended less on what he taught than on the example he himself set: his utter devotion to making art and to

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¹⁹⁵ Sandler, "The School of Art at Yale: The Collective Remininiscences of the Twenty Distinguished Alumni," 14. Irving also notes that although Albers did not achieve recognition for his own work until his mid-sixties, while at Yale, he had been considered an eminent pedagogue for nearly three decades.

¹⁹⁶ ibid., 16. His demeanour was described as his "prussianism." Other students who could cope with Albers temperament found him aloof but sensitive to their individual works.

¹⁹⁷ ibid. Sandler also stated that some students did request private critiques with Albers. But he would dissect their work thoroughly and investigate the students intensions rigourously. These sessions proved no less intimidating than the public critiques.

¹⁹⁸ Fiedler and Feierabend, *Bauhaus*, 308. Albers the artist was often hidden behind Albers the teacher and it was not till Albers reached Yale that Albers the artist re-emerged as primarily important to Albers.

teaching. Indeed his seriousness as a teacher inspired his students to be equally serious as students." ¹⁹⁹

At Yale, the demographic of the student would be wholly different to that of the liberal Black Mountain College. Black Mountain had as its student body an enlightened radical fringe, and Yale, considered one of the most powerful conservative institution in the United States, catered primarily to university postgraduates. The Bauhaus ideal of universal understanding by means of a universal language was no less a component of Albers teaching at Yale than it had been at Black Mountain, but it would be the structure for teaching universality within his Yale programme that would require adjustment to both the Bauhaus and Black Mountain methodologies. Albers needed to again embrace the interdisciplinary mode of teaching that had been fundamental at the Bauhaus and that he had dispensed with at Black Mountain. It was within the wide and variant selection of disciplines at Yale that included not only fine arts and architecture but engineering, drama, law and finance that Albers formed his new incarnation of the Vorkurs and selected his pupils. It was not intended that the pool of potential students be moulded into artists. The aim was to develop through visual experience and awareness a basis for understanding art. 200 At Black Mountain Albers had fostered art education as part of a system of general education. We know from the Vorkurs that creativity was believed to be innate needing to be awakened. Albers believed that although art could not be taught it could be learned. This he endeavoured to do through exercises in sharpening observation skills.²⁰¹ This belief formed the basis for his Yale courses and informed his selection of students.

Sandler explains that Albers introduced an eight week cross-examination and selection process. From this rigorous course of action Sandler posited that Albers felt he could more confidently select a multi-disciplinary collection of students. Albers was considered by his Yale colleagues as a great recruiter and he induced many of the other art schools finest graduates to attend Yale, therefore instantly assembling a potentially unequalled student body. Albers was

¹⁹⁹ Sandler, "The School of Art at Yale: The Collective Remininiscences of the Twenty Distinguished Alumni," 16.

²⁰⁰ Craig-Martin, "The Teaching of Josef Albers: A Reminiscence," 248. Craig-Martin was a Yale student who was taught in the Albers method by his successor Sewell Sillman who considered it his mission to keep Albers teachings in tact and unaltered.

²⁰¹ Füssl, "Pestalozzi in Dewey's Realm. Bauhaus Master Josef Albers among the German-speaking Emigres'Colony at Black Mountain College (1933 - 1949)," 84.

considered to have great skill for recognising talent. He was not tempted by a student's abilities but more interested in the person, or to use an established term of reference 'the whole man.' Albers would gauge their intelligence, seriousness, enthusiasm and energy as his measure. Irving Sadler writes of the student selections: "They were also looking for students who seemed on the basis of their work to be professional and intelligent, to possess substance, and to be open to new ideas and experiences." 202

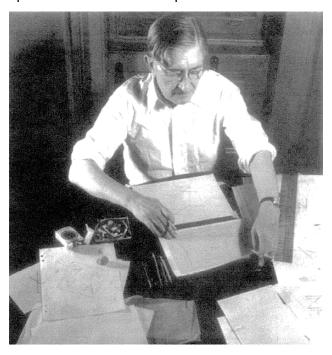


Figure 18: Albers at the Yale School of Art, 1950-1970

I would assert that this selection process, although a first glance seems to address the desired attributes, fails to include fully the demands of innocence, egalitarianism and universality that had been apparent at Black Mountain. The selections are in my opinion, elitist. These were highly educated and due to the exclusivity of education at Yale most likely wealthy students. This argument is supported by the writings of sociologist Pierre Bourdieu (1930–2002) and architectural sociologist Garry Stevens who propose that those most able to decipher modern art and architecture are those individuals whose social position allows advanced educational opportunities.²⁰³ This argument, which I will unravel presently, becomes more germane in my discussion of Albers intentions for the innocent eye.

²⁰² Sandler, "The School of Art at Yale: The Collective Remininiscences of the Twenty Distinguished Alumni," 15. ²⁰³ Pierre Bourdieu, *The Field of Cultural Production: Essays on Art and Literature* (New York: Columbia University Press 1992), 2.

3.6 The Innocent Eye becomes the Educated Eye

Once accepted into Albers' programme the students were encouraged in the spirit of the *Vorkurs*, to wipe their palette clean. We have established that fundamental to Albers and many of his Bauhaus colleague's ideologies individual discoveries were imperative to creativity. This stripping away of inherited ideas and beliefs was considered by Albers to increase creative potential. Albers believed that once the individual sought this void they were able to make new discoveries. In an interview with Albers at the latter part of his career he is said to have stated to his students, after they described themselves as amateurs compared to the master: "amateurism is a type of emptiness and I accept it because it has no preconceived ideas or rules applied to it. For me this is a most welcome situation." This concept of innocence and openness to new vision within Albers' courses at Yale does however, elicit certain reservations. I would argue the innocent eye is being handpicked and specifically trained in perception and observation. A selective and trained eye suggests a new imposed understanding and the notion of exclusivity or speciality. Implied is a specific tool for those able to engage and demonstrate proficiency in a specific task. Bourdieu, for example, asserts that a belief in pure aesthetics, of which the innocent eye is a manifestation, is founded on class distinction. He argues that:

Perceiving a work of art is an act of deciphering, decoding which presupposes practical or explicit mastery of a cipher or code. The cultural competence needed to perform this act is the result of our upbringing and functions as an indirect marker if class. Those who, at whatever cost, do make the successful transition to the innocent eye are able to put themselves in a position above the vulgarity of the masses.²⁰⁵

Bourdieu's views in regard to Albers teaching at Yale require consideration. Albers' concept of a universal language not only for artists but for everyone is magnanimous but as Bourdieu suggests it involves exposure to culture and education, which is not available or always considered necessary by the masses. Although in principle the Bauhaus had instigated a free policy of entry where gender, race and ability were not judged and Black Mountain was of a

²⁰⁴ John H Holloway, John A Weil, and Josef Albers, "A Conversation with Josef Albers," *Leonardo* 3, no. 4 (1970).

²⁰⁵ Bourdieu, *The Field of Cultural Production: Essays on Art and Literature* (New York: Columbia University Press,1992), 2.

similar standpoint there were still obvious demographic omissions to the patronage at Yale. Albers seems to be hand picking his "innocent" protégés from an already educated elite sector of society. Albers had explicit criteria, albeit liberal, that he wished the students to display upon being processed and interviewed.

Although this process could be considered overly selective and elitist in its criteria for student screening, Craig-Martin discovered during interviews with Yale alumni, that the students themselves considered the calibre of their classmates in Albers' courses to be challenging. They stated the diversity within the students of gender, class, ethnic background and style, brought about by the removal of academia as a prerequisite and enriched their experience. Craig-Martin went on to say: "There was an atmosphere of serious mutual endeavour and support combined with intense and forthright competition." The students were now in an environment of competitiveness where they were encouraged to prove themselves in a new light, a new way and therefore the students were unable to rely on established abilities. Under Albers and in this environment the students were required to start afresh. They were seemingly forced to not only see, as ordained by Albers, but to look again, for themselves under their own illuminations. "Put another way, to venture beyond seeing into vision." He maintained his strict doctrine for an economy of materials which led, like Itten's Vorkurs, to the ability to recognise and express the essence, the essential components, in an art work.

3.7 Albers Taught Me to See

In a poem written by Albers in 1964 called 'Seeing Art,' he described his approach to art and art education.

Art is not to be looked at

Art is looking at us

Thus art is not an object

but experience

To be able to perceive it

²⁰⁶ It is interesting that Craig-Martin would discuss the removal of academics from the student selections as all of the students were post graduates from prestigious universities.

²⁰⁷ Craig-Martin, "The Teaching of Josef Albers: A Reminiscence," 249.

²⁰⁸ Sandler, "The School of Art at Yale: The Collective Remininiscences of the Twenty Distinguished Alumni," 16.

we need to be receptive

Therefore art is there

where art meets us.

He explains in this piece that to experience a work of art we do not necessarily require knowledge of rules or criteria but more importantly we need 'vision.' Albers encouraged his students to go beyond problem solving, knowledge, skill and discipline into what he described as visual poetry. To venture beyond seeing was the quest. The training in observation offered in Albers courses was well utilised and popular amongst the Yale students. Students were mostly impressed by Albers' ability to see paintings with incredible discipline and focus. "Albers taught me to see" is the reply invariably given when graduates are asked by Sandler how they most benefitted from studies with Josef Albers.²⁰⁹ It is important to appreciate at this time that Albers investigations into colour theory became a principle component in his teachings. Not only were students being taught drawing and material qualities where the teaching methods of the *Vorkurs* were completely integrated Albers had reintroduced colour as an essential component to his teachings. His colour theories took the viewer beyond understanding relationships between colours but asked the viewer to gaze longer to see between the colours where he often revealed form and space. When commenting on Albers paintings during this time Craig-Martin stated:

Albers' space is utterly uncanny; in no way does it resemble natural space. While the shapes and colours are as concrete as they can be, the space sensations they project are weirdly ambiguous. In some instances they quiver and pulsate; in other instances they become muted and serene or entirely silent.²¹⁰

Albers' use of the education of the innocent eye as perceived by Pestalozzi and Ruskin and advanced at the Bauhaus by Itten falls into question at this point. Interestingly, Sandler considered Albers to now be ambivalent towards innocence. He argued that Albers believed in aspiring students finding their own way while at the same time wanting to impose his own

²⁰⁹ ibid.

²¹⁰ Burton M Wasserman, "Josef Albers: His American Years," *Art Education* 19, no. 7 (1966), 11.

attitudes and beliefs on the students. Sandler quotes Albers as having said: "Stay off the bandwagon. Your bandwagon is to follow me, follow yourself." Although Black Mountain had been considered an experiment in democratic education and Albers had been a fundamental component in its facilitation, I would assert that Albers' professed ideology at Yale offered a different educational structure. Albers demanded his students discard sentiment and self-indulgence and implied his profound insight as paramount. I would conclude Albers had embraced a Miesian approach in the studio which encouraged the master as an exemplar not a facilitator as Moholy-Nagy and Albers had practiced at the Bauhaus. There is no doubt that Albers students at Yale were requested, as the Bauhaus and Black Mountain students had been, to approach design with an innocent eye but an adversary to this ideology could interpret this as an imposed innocence.

I would argue that Albers' own investigations into colour theory, documented in his 1963 book *Interaction of Colour* moved his teachings beyond that of a universally accessible visual language to one of explicit exclusivity. The universal visual language was merely an entry level understanding of art that Albers, as a teacher, was profoundly committed to. But Albers the artist developed well beyond these teachings in his years at Yale. Former Black Mountain student Robert Rauschenberg (1925–2008) commented on Albers' later works saying: "with Albers one is never certain: for all his interest in the gestalt forms, his primary concerns were discrepancies and deception." At Yale, Albers was now more interested in ambiguities of perception than the truth of materials that was synonymous with the Bauhaus *Vorkurs*.

According to Borchardt-Hume, Albers complemented his new study of modern vision with an old attention to natural forms and found things.²¹⁴ Although Borchardt-Hume makes no connection to Itten's course in material studies that was the precursor to Moholy-Nagy and Albers' *matière* course, I would assert that Albers had reverted to Itten's pedagogical tenets.

²¹¹ Sandler, "The School of Art at Yale: The Collective Remininiscences of the Twenty Distinguished Alumni," 16.
²¹² Bauhaus in America, DVD directed by Judith Pearlman (1995, ed. Paul Goldberger (New York: Cliofilm Ltd, 1995). In discussion with the director of "Bauhaus in America" Philip Johnson says that although Mies van der Rohe believed in a universal visual language he encouraged his students to consider his aesthetic outcomes via this common language as the ideal. Howard Dearstyne, a former student of the Bauhaus and Mies argued that Mies taught the universal through his own vocabulary.

²¹³ Borchardt-Hume, *Albers and Moholy-Nagy.From the Bauhaus to the New World*, 100. While at Yale Albers began his painting series "The Homage to the Square." Albers investigated the illusions of space and perception and in some instances he engaged in pure deception.

²¹⁴ ibid., 98.

These tenets were after all, Albers first introduction to the Bauhaus when he arrived as a student in 1920. Albers' obsession with colour and the theories he discovered around it were further testament to a relapse back to the original Itten Vorkurs where composition, colour and materials were believed to be crucial in artistic endeavours. Both Pestalozzi and Itten had both encouraged the cultivation of a student's powers of seeing. Itten had written in one of his early diaries: "I want to train the eye and the hand and the memory as well. Clear simple thoughtful observation of that which can be perceived by the senses." 215 Although Albers had embraced Gropius 1923 manifesto of a new unity with technology, having graduated from Itten's preliminary course there was no trace of technology in his teaching or work beyond the Bauhaus. Sandler argued that Albers encouraged a spiritual quest of intuitiveness and instinctual responses which I would argue were not dissimilar to Itten's pedagogical tenets of thinking and feeling, intuition and intellect and expression and construction. Unfortunately Sandler also saw this shift to intuitiveness and emotion as a shift away from design. This interpretation of art being distinct from design would halter Gropius endeavours to include Albers in the teaching faculty at Harvard. Albers disagreed with these arguments. He asserted in a retrospective interview of his teaching Albers said: "The unique qualities of perceptual understanding in visual education are that they are applicable to all areas of art- architecture, fine art, design, photography, and all the crafts perceptual understanding is always relevant, since it transcends all styles and time frames- it is never out of date.²¹⁶

Albers taught his charges to comprehend spatial relationships, to better understand the illusion of form and to realise that in visual art, suggestion is equally as, if not more powerful, than delineation. Nicholas Fox Weber quotes Albers' own lecture notes: "An element plus an element must lead to at least one interesting relationship over the sum of the elements. In art 1 + 1 can equal 3." Varnelis asserts that Bauhaus masters Moholy-Nagy and Albers developed a coherent method of teaching space in art by linking visual language to John Ruskin's ideal of the innocent eye:

²¹⁵ Wick, *Teaching at the Bauhaus*, 106.

Rob Roy Kelly, "Recollections of Josef Albers," *Design Issues* 16, no. 2 (2000), 5.

²¹⁷ Nicholas Fox Weber is the director of the Josef and Anni Albers FoundationBorchardt-Hume, *Albers and Moholy-Nagy.From the Bauhaus to the New World*, 109. This quote also appeared in TIME Magazine in December 1938.

The act of perception had thus been divided into two events: what Moholy-Nagy called "vision in motion," leading the eye around the canvas, and the moment of illumination that would finally lead to an understanding of the work. The glance of the eye that Ruskin had defined had lengthened into a reverie.218

I would suggest that Varnelis was also suggesting that Albers had moved beyond a simple commonality of understanding a visual language to a more complex and educated analysis of what the viewer was to decipher. There is no doubt that Albers was considered highly in the world of fine arts and painting. Craig-Martin is only one of a number of historians that bestows emeritus accolades on Albers: "To assess the impact of Albers' teaching on American art is not easy because it was so extensive and profound. He made Yale the most important art school in the United States as he had previously done at Black Mountain." ²¹⁹

There is also no question that Albers had been a pivotal instructor at the Bauhaus. The duress under which he had left Germany in and the opportunities that had eventuated in the United States lead Albers down a more singular path that he may not have followed if the Bauhaus had remained open. Beyond the Bauhaus, Albers never attempted to translate his theories into three dimensional works. The lack of direct attempts at three dimensional works by Albers did not deter other Bauhaus émigrés from developing their ideologies into the built environment. In fact, in spite of Albers single focus on painting his theories of spatial perception were embraced by architectural pedagogues and students alike. Varnelis argues that Albers theories of ambiguity were the basis to a major shift in architectural language and understanding:

Just as the advent of modernism created a void in American art education that was filled by the visual language, a similar disciplinary crisis led to its translation and adoption in architecture. The development of a new visual language in architecture would be based on a translation of Albers, Moholy-

²¹⁸ Varnelis, "The Education of the Innocent Eye," 216-17.

²¹⁹ Craig-Martin, "The Teaching of Josef Albers: A Reminiscence," 252. Joseph Hudnut was the principle opposition to Albers appointment at Harvard. He believed Albers to be a painter and worried what he may bring from Black Mountain to Harvard.

Nagy and Kepes' (Moholy-Nagy's assistant in America) work into three

dimensions.²²⁰

The translation into three dimensions was undertaken most predominantly by Moholy-Nagy at

the New Bauhaus, and by Walter Gropius at Harvard University's School of Architecture.

Although Gropius fought to have Albers join him at Harvard his employers would not support

Albers appointment, in part due to the political dispositions associated with his leading role at

Black Mountain, but principally because Albers had never tested his theories in three

dimensional forms. Albers was fully aware of the struggles Gropius and Moholy-Nagy were

experiencing in their respective institutions and armed with this knowledge, Albers could see

the difficulties posed for architecture and design in the United States both politically and

economically. He chose to avoid that challenge. That is not to say that Albers would not

influence a large number of architects and designers with his pedagogy which due to his

popularity led to a vast number of guest lectures all over the United States.²²¹ Albers remained

at Yale for ten years until his retirement in 1960. He continued his paintings, principally his

Homage to the Square until his death in 1976 at the age of 88.

Although Albers had advocated for the universal understanding of the modern aesthetic

coupled with the science of visual perception, the social agendas imbued within the Bauhaus

pedagogy were not characterized in his work. These issues would have to wait for László

Moholy-Nagy to champion them within Chicago's industrial empire.

3.8 Part Two.

Moholy-Nagy: tests the Transatlantic Environment

Moholy-Nagy and Albers embraced Itten's polarities of feeling and thinking as principle tenets

of pedagogy. In doing so, they had helped establish a universal visual language. Both

pedagogues believed that this universal visual language would bring about a unification of art

and technology, culminating in new architecture and design, and just as importantly, social

²²⁰ Varnelis, "The Education of the Innocent Eye," 216. Varnelis suggests that Rowe and Slutzky laid the foundations for this new translation in their essay "Transparency: Literal and Phenomenal." The Texas Rangers would be the next generation of American architects and educators to explore these ideas.

²²¹ Wick, *Teaching at the Bauhaus*, 353.Albers would speak at Pratt University, Trinity College in Connecticut, Universidad Catolica in Santiago and the University of Hartford to name but a few.

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change. However in the translation of this universal visual language from Germany to post war America, the ideological component of social change was to a degree bypassed producing the formally defined and codified aesthetic of the International Style. Although within the American environment the Bauhaus aesthetic was embraced the rhetoric of social reform was principally ignored or discarded. With ten years of experience in the American environment post-WWI and pre-WWII, Moholy-Nagy asserted in his 1947 book *Vision in Motion*, that while new tools and new technologies for industry may facilitate social change, mankind's emotional prejudice remains the greatest hindrance to social reformation. His experiences within America's capitalist economy would include a false start, many acrimonious arguments with and about his teachings, and unfortunately his untimely death. But Moholy-Nagy did, in spite of the short time frame and the impediments mentioned, "gift design pedagogy the tools for a design literate population to evolve." 223

In 1937, just four years after Albers had immigrated to Black Mountain College, the Director of the Association of Arts and Industries in America, Norma Stahle, offered Walter Gropius the challenge of opening a New Bauhaus in Chicago. Having already accepted a position at Harvard University Gropius suggested his good friend Lázsló Moholy-Nagy as the best candidate. In his reply to Stahle, Gropius paid homage to his colleague describing Moholy-Nagy as "the best man you can get ... endowed with that rare creative power which stimulates the students." Moholy-Nagy was invited to cross the Atlantic on the first available ship in order to open the New Bauhaus in the short timeframe of just three months. Design historian, Alain Findeli described Moholy-Nagy's response to this challenge as enthusiastic and the rather short time frame as a detail that "was certainly not perceived as an obstacle by the fiery Moholy-Nagy." Moholy-Nagy was excited about the prospect of what he described "as being able, after all

²²² This book was published posthumously in 1947 a year after Moholy-Nagy's death in 1946. Laszlo Moholy-Nagy, *Vision in Motion* (Chicago: Paul Theobold and Company, 1947).

²²³ Fern Learner, "Foundations for Design Education: Continuing the Bauhaus Vorkurs Vision," *Studies in Art Education* 46, no. 3 (2005), 224

²²⁴ Alain Findeli and Charlotte Benton, "Design Education and Industry: The Laborious Beginnings of the Institute of Design in Chicago in 1944," *Journal of Design History* 4 no. 2 (1991), 93.Moholy-Nagy resigned from the Bauhaus just four days after Gropius. He and Gropius remained great friends and supported eachothers career paths and goals throughout their lives. Gropius would be required to speak on Moholy-Nagy's behalf several times.

²²⁵ Alain Findeli, "Moholy-Nagy Design Pedagagy in Chicago (1937-1946)," *Design Issues* 7, no. 1 (1990), 5.

these trivialities, to produce something positive again."²²⁶In the same correspondence to Gropius, Moholy-Nagy expressed his confidence in "the universal validity of the teaching principles of the Bauhaus and the possibility of adapting them in America."²²⁷ As with both Albers' and Gropius' experiences in America, Moholy-Nagy would need to make adjustments within his pedagogy to suit the new political and economic climate he now found himself teaching in.

Although Moholy-Nagy maintained a preliminary course and remained faithful to the ideal of holistic and interdisciplinary education in his American versions of the Bauhaus teachings he was put under pressure and consequently forced to accommodate certain market demands within his student training.²²⁸ For this he was criticised by some of his Bauhaus peers, namely Albers, but I would postulate that due to his untimely and premature death in 1946 his intentions were not fully revealed until after his second wife Sibyl Moholy-Nagy began to elucidate them in her writings.²²⁹

3.9 Albers and Moholy-Nagy's Pedagogical Differences

Although Albers and Moholy-Nagy had seemingly worked in a collegial and collaborative manner within the inter-disciplinary Bauhaus *Vorkurs*, the pedagogical demands of the new American environment and the advancement of specialisations within design placed the excolleagues in different economic and political realms. Albers and Moholy-Nagy found themselves to be on very distinct paths. In 2009 art historian Gabriele Diana Grawe wrote that both men: "were perceived as being mutually opposed, even virtually irreconcilable." The principle distinction made between the two *Bauhaüslers* was that Albers was now considered

²²⁶ Findeli and Benton, "Design Education and Industry:The Laborious Beginnings of the Institute of Design in Chicago in 1944," 98. Moholy-Nagy wrote this in a letter of gratitiude to Gropius. Moholy-Nagy referenced as trivialities the work he was doing in England where he felt unchallenged.

²²⁷ ibid.

Wolfgang Thoner, ed. *Bauhaus:A Conceptual Model* (Ostfildern: Hajte Cantz Verlag 2009), 349. These pressures were played out in the protracted series of varied transformation of the school and the methodology. Gropius would play a large part in the negotiations between Moholy-Nagy, the school's board and industry.

²²⁹ Judith Paine, "Sybil Moholy-Nagy: A Complete Life," *Archives of American Art* 15, no. 4 (1975), 16. Sibyl Moholy-Nagy was a loyal exponent of her husbands beliefs. Not only did she write his biography after his death she lectured and continued to write about design to ensure Laszlo's legacy was cemented in design history. ²³⁰ Thoner, *Bauhaus:A Conceptual Model*, 347.

an artist and Moholy-Nagy a designer.²³¹ A position that Albers, through his contentment at Black Mountain had seemingly, been happy to occupy. In 1966 during a candid interview with then Ph.D. student Leonard Finkelstein, Albers rebuked a connection to Moholy-Nagy saying: "when you relate me to Moholy, that's impossible because I hate that man because he was never original."²³² American art critic and historian, Hal Foster writes: "In the end Moholy and Albers are fraternal twins, like and unlike in equal measure."²³³ Foster asserts that although both men believed in art as an objective mode of experimentation and research, both tended to privilege perception over aesthetic appreciation. Even though both were modernists and humanists, they were deeply divided in their beliefs towards industry. As discussed earlier, I believe Albers the artist, reverted away from Gropius' theories of industrial integration to the subjective nature-based doctrines of Itten. Conversely Moholy-Nagy the designer, concentrated predominantly on the new doctrines of the mechanised and industrial world. One could conclude that the left leaning politics of Black Mountain where Albers had found his niche did not entertain the notions of the capitalist environment that Moholy-Nagy was attempting to educate and indeed integrate with.

Furthermore, unlike Albers' pedagogical methodologies at Black Mountain which were symbolic of academic freedom and an experimental spirit, the increasing specialisation and advancement of disciplines within design had led Moholy-Nagy's endeavours away from Albers tenet of learning by doing. Moholy-Nagy's pedagogy relied on objective knowledge and theory.²³⁴ Albers' vocal disapproval with Moholy-Nagy's shift into the capitalist environs again act as evidence that Albers' tenets now resembled a more ltten styled *Vorkurs*. I would suggest that the political and economic environment that Moholy-Nagy now resided in plus his denial of the Dewey inspired mantra ignited Albers' accusations that Moholy-Nagy now lacked originality. In Albers' opinion the importance of the 'innocent eye' was primary to innovation, therefore Moholy-Nagy's removal of this innocent viewpoint or naïve state from his pedagogy guaranteed a lack of originality. But, Moholy-Nagy had not, I would assert, exiled an innocent

²³¹ Ted Shen, "From Bauhaus to Her House. Hattula Moholy-Nagy Put Her Famous Father's Affairs in Order," *Chicago Reader*, April 25 2002, 2. Hattula is quoted as having said that even though her father experimented with photography,colour, materials and space: "Moholy always considered himself a painter first."

photography,colour, materials and space: "Moholy always considered himself a painter first."

232 Borchardt-Hume, *Albers and Moholy-Nagy.From the Bauhaus to the New World*, 109. Borchardt-Hume felt this statement by Albers was not justifiable. He believed this outburst told the reader more about Albers' cranky personality than the state of the men's real relationship.

233 ibid., 101.

²³⁴ Thoner, *Bauhaus:A Conceptual Model*, 349.

and open minded viewpoint from his pedagogy any more than Albers had. Both men were now in fact reliant on a greater understanding of what one saw than the mere innocence of the eye provided. Moholy-Nagy felt that the addition a third element, science to Gropius's 1928 canon "Art and Technology: A New Unity" brought with it a new insight and understanding just as Albers had intended with his use of perception. The adjustments both Albers and Moholy-Nagy had made to their teachings proffered an insight into the intended direction of both their pedagogies. Findeli considers Moholy-Nagy's developments to be extremely positive and assets that: "by introducing the scientific method into the basic structure of the Bauhaus curriculum, Moholy-Nagy made his program (in Chicago) the first and most ambitious of its kind." 236

3.10 The Reception of Moholy-Nagy's Teachings in Chicago

Moholy-Nagy describes his intention: "To rid every student of fear and self-consciousness, the most serious psychological hindrance in life and to make man, not the product, the end result." The framework of Moholy-Nagy's American programme effectively followed the Bauhaus structure of a compulsory *Vorkurs* now renamed Foundation Studies, followed by three years in a specialised workshop but the course contents were brought completely up to date. The workshops now were referred to as specialised laboratories and were geared towards professional practice. Industrial design, graphic design, photography and textile design now replaced the Bauhaus workshops of stone, metal, wood and glass. Moholy-Nagy did however continue to plan exercises that would "tap into the student's emotional and intellectual resources simultaneously." Interestingly, Moholy-Nagy's had not strayed far from Itten's *Vorkurs* intentions of combining the polar characteristics of thinking and feeling, intellect and intuition and expression and construction. These exercises illustrate an alignment of Moholy-Nagy's ideals closer to both Ruskin and Itten's beliefs in a holistic education than he had been happy to admit in his Dessau tenure.

²³⁵ Alain Findeli, "Moholy-Nagy's Design Pedagogy in Chicago (1937-46)," *Design Issues* 7, no. 1 (1990), 7. ²³⁶ ihid.. 9-10.

²³⁷ Moholy-Nagy, *Vision in Motion*, 26.

Findeli and Benton, "Design Education and Industry: The Laborious Beginnings of the Institute of Design in Chicago in 1944," 98. Physical, life and social sciences were added along with music, poetry, film and graphics to the traditional *Vorkurs*.

²³⁹ Laszlo Moholy-Nagy, "Moholy-Nagy and the Institute of Design in Chicago," *Everyday Art Quarterly* 3, no. Winter/Spring (1946-1947), 2.

Moholy-Nagy occupied a new political and economic landscape in the United States. He was determined to offer more than just the technical training that the American industrialists were demanding because he believed that the effects of the shortcomings of such an education would be counterproductive. Moholy-Nagy argued that: "only the designer who understands the social, biological and physiological implications of each problem will be able to produce completely satisfactory results." Findeli discusses that Moholy-Nagy's commitment to integration went beyond the bounds of art and technology to an integration that considered all aspects of human activity. When the relevance of Moholy-Nagy's ethical, environmental and social credo was brought into question by the industrialists, Moholy-Nagy retorted: "the artist's work is not measured by the moral and intellectual influence which it exerts not in a life time but in a lifetime of generations." In the face of capitalist agendas demanding immediacy and profit Moholy-Nagy's ideology fell predominantly on deaf ears in the United States.

Unfortunately, the conflicting ideologies of American industrialists made Moholy-Nagy's pedagogical position untenable causing the closure of the first iteration of pedagogy in the United States. Art curator Gabriele Diana Grawe argued that the pressure placed on Moholy-Nagy by industrialists caused him to compromise his ideals.²⁴² There is no doubt that Moholy-Nagy was put under pressure to modify his methodology and his pedagogy by his sponsors, and some of his more traditional students, but his beliefs and intentions, amid the economic and political pressure, remained true to those of the Bauhaus.²⁴³ Wick states, "these measures should not lead to a false impression that Moholy rejected his ideals of a comprehensive and broadly based training in favour of a fast and specialised professional training."²⁴⁴ Moholy-Nagy was profoundly committed to his endeavours in Chicago and his efforts were the most kindred of any other attempt made by a Bauhaus émigré to those of Gropius' 1923 manifesto. Indeed,

²⁴⁰ Ibid.. 2

²⁴¹ Findeli and Benton, "Design Education and Industry:The Laborious Beginnings of the Institute of Design in Chicago in 1944," 102.

²⁴² Bauhaus-Archiv Berlin et al., eds., *Bauhaus: A Conceptual Model* (Ostfildern: Hatje Cantz, 2009), 347. Grawe is also a contributing author on Rainer Wick's 2000 book *Teaching at the Bauhaus*.

²⁴³ Shen, "From Bauhaus to Her House. Hattula Moholy-Nagy Put Her Famous Father's Affairs in Order," 3. Even though the American industrialists wanted a Bauhuas training to train their new industrial design students many of the students and industry leaders still wanted a traditional education where teaching was more important than learning.

²⁴⁴ Wick, *Teaching at the Bauhaus*, 358. The restructuring of the curiculum was vital to the continuation of the Chicago based school but would never cease to be a bone of contention between Moholy-Nagy and his financial backers.

Gropius' continued and active involvement with any and all of Moholy-Nagy's pedagogical endeavours in Chicago supports this analysis.²⁴⁵

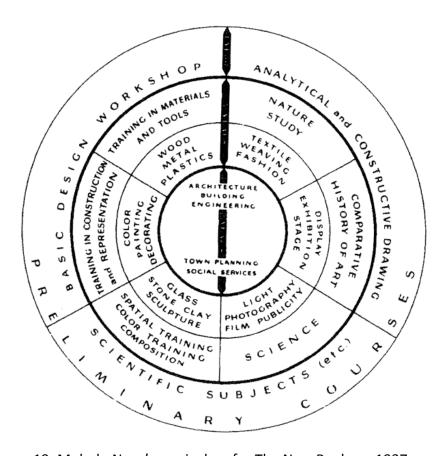


Figure 19: Moholy-Nagy's curriculum for The New Bauhaus 1937

3.11 The New Bauhaus: Chicago.

The New Bauhaus School of American Design was officially inaugurated on the 9th of November 1937. Gropius was a strong supporter of both the new school and its director, so it was no surprise he delivered the opening speech, entitled "Education towards Creative Design." In his speech Gropius affirmed the founding principles of the Bauhaus, and clarified the importance of 'how' over 'what' in both his and Moholy-Nagy's aesthetics and pedagogical beliefs. ²⁴⁶

²⁴⁵ Findeli and Benton, "Design Education and Industry: The Laborious Beginnings of the Institute of Design in Chicago in 1944," Walter Gropius was one of the school's sponsors along with Alfred Barr, John Dewey and Julian Huxley. Gropius acted many times as negotiator on behalf of Moholy-Nagy. .

ibid., 99. In this speech to his American audience Gropius gave his full support for his good friends project.

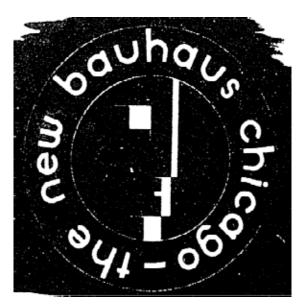


Figure 20: The New Bauhaus Signet 1938. Again a debt to Bauhaus Master Oskar Schlemmer's "A New Man"

The need for this clarification highlights the complications already experienced by Gropius himself in the translation of Bauhaus ideologies in the American context. Perhaps Gropius' words were also to serve as a warning to his friend of the difficulties that lay ahead. It would seem from the pressure placed on Moholy-Nagy and the problems he would imminently face in his transatlantic efforts that these warnings were not heeded by the emergent post WWI entrepreneurs, the industrialists in the audience. Gropius' and Moholy-Nagy's concerns for methodology or societal issues over aesthetics and consumption went unheeded. Although the founding principles of the Bauhaus offered hope for American design and industry it would be the economic demands of such a marketplace that would challenge Moholy-Nagy's principles most acutely. In his 1947 book *Vision in Motion* an extension to his previous work *The New Vision* Moholy-Nagy explains what he considered to be the fundamental difference between the American and the European environments for design: "Economic considerations deeply influence and direct design. For example, design in this country is basically different from that of Europe. America is rich in resources, raw materials and human ingenuity and can afford to be wasteful."

Chicago in 1944," 100. Vision in motion was published one year after Moholy-Nagy's death.

²⁴⁷ Findeli, "Moholy-Nagy's Design Pedagogy in Chicago (1937-46)," 6. Moholy-Nagy would be under constant pressure from the the school's board to bring his pedagogical programe in line with buisness demands.
²⁴⁸ Findeli and Benton, "Design Education and Industry:The Laborious Beginnings of the Institute of Design in

Moholy-Nagy's belief in the economy of materials and effort seemed irrelevant to the wealthy and consumer orientated pre WWII America. Moholy-Nagy went on to comment in the same passage that in comparison to European trends where design endeavours to produce long lasting goods to conserve raw materials that: "America has incorporated into its structure frequent change of models, by declaring models obsolete before their usefulness has ceased." He questioned what kind of cultural, social and economic concerns such a revision would cause. But he felt with certainty that, "one comment can be made: the theory and practice of artificial obsolescence leads-in the long run- to cultural and moral disintegration because it destroys the feeling of quality and security of judgement."249 These concerns kept Moholy-Nagy at odds with the American industrialists and would continue to plague the funding of his pedagogical endeavours. Moholy-Nagy's eldest daughter, Hattula Moholy-Nagy wrote in her essay, "Laszlo Moholy-Nagy: Transitional," that her father was "an open-minded, learned mana secular humanist who imagined a better world through design." 250 She like many of Moholy-Nagy's supporters also believed he had a deep social conscience and had, since WWI, been determined to make a contribution to society. Hattula also stated that: "Art, writing and teaching were seen by Moholy-Nagy as the most effective means to disseminate his ideals."251 Lázsló Moholy-Nagy's efforts to make such a contribution were cut short due to his untimely death from leukaemia in 1946 but not before he made a considerable impact on the future of design and pedagogy in the United States.

3.12 The False Start

Moholy-Nagy had felt from the outset of his journey to the United States that the Bauhaus teachings he would incorporate into his new iteration of design methodology were universal. Despite Moholy-Nagy's belief in the Bauhaus pedagogical code it was not long before his new employers would clearly voice their lack of confidence or perhaps a more accurate description of their feelings was frustration with Moholy-Nagy's discourse. Moholy-Nagy was a determined

²⁴⁹ ibid.

²⁵⁰ Shen, "From Bauhaus to Her House. Hattula Moholy-Nagy Put Her Famous Father's Affairs in Order."It is important to appreciate that Moholy died when Hattula was barely a teenager. She has gained her understanding of the man her father was through interviewing those around him making her view of him most relevant and unbiased.

²⁵¹ Borchardt-Hume, *Albers and Moholy-Nagy.From the Bauhaus to the New World*, 112. After her mother's death in 1971 and the unexpected death of her sister Claudia, Hattula, named after a favourite city of Laszlo's, became the sole curator of her father's life and work.

advocate and educator, and with Gropius's support he did not yield to the will of others easily. His relationship to both design and teaching has been described by both those who support him and those who do not as impassioned and fanatical.²⁵² His desire to integrate design with technology has also been describe in the same way. But Sibyl Moholy-Nagy's title for her husband's biography, *Moholy-Nagy- An Experiment in Totality*, perhaps offers the most clarity in portraying her husband's ardour for his beliefs.²⁵³

Moholy-Nagy's determination for the integration of art and technology within pedagogy seemed to progress efficiently, but the relationship between teaching this integration in readiness for a marketplace and industry's appetite for profits was less definitive. It is evident that the industrialists were not convinced by the pedagogical, social or environmental concerns central to Moholy-Nagy's work. Their discontent was apparent in their decision to cease financial support for the school. In principle, their requirement of the New Bauhaus and Moholy-Nagy was the education and integration of skilled industrial designers to design for mass production, and most importantly profit. The dilemma is made clear by Moholy-Nagy in his book "Vision in Motion," where he proclaimed:

Schools lost sight of their best potential quality: universality. On the other hand, prosperity increased. With this came the temptation to enlarge profits. Everyone seemed satisfied. Production figures and balance sheets "spoke for themselves," being sufficient justification of training for profit.²⁵⁴

The market's demands and capabilities in the United States were completely incongruous with Moholy-Nagy's European experiences. He vented: "Our curriculum doesn't fit into the competitive mood of an approaching post war boom, because we refuse to promise a two-semester training programme for a bread-winning job. I shall keep on considering the process of education more important than the finished result." Sibyl Moholy-Nagy stated that: "the

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²⁵² ibid.

²⁵³ Paine, "Sybil Moholy-Nagy: A Complete Life," 15. Sibyl Moholy-Nagy often felt her life too was effected beyond a tenable state by the demands her husband's beliefs placed on her and the family. Her release was writing which included Laszlo's biography "An Experiment in Totality."

²⁵⁴ Moholy-Nagy, Vision in Motion, 15.

²⁵⁵ Moholy-Nagy, *Moholy-Nagy: Experiment in Totality*, 216.

whole dilemma of endowed education centered on the simple fact that a school is not a business."²⁵⁶ Ultimately this belief would be the fundamental issue that dogged Moholy-Nagy's relationship with his employers. The New Bauhaus was closed on the 11th August 1938 just short of a year after its establishment due Moholy-Nagy was told, to a financial crash. But subsequent history, unveiled by Gygöry Kepes (1906–2001) implies this to be a pretext for more profound motives.²⁵⁷ Findeli explains: "What Moholy-Nagy was selling and what Chicago was buying were two very different products."²⁵⁸ This short tenure of the first iteration of Moholy-Nagy's pedagogical endeavours would be described by historians as a false start in Moholy-Nagy's impact on American design pedagogy.²⁵⁹ For many this would have spelled the end, but one would be mistaken to underestimate Moholy-Nagy's resolve or his resourcefulness. Moholy-Nagy said of himself: "My strongest personality trait: that I am an optimist."²⁶⁰ With the assistance of philanthropist and president of the Container Corporation of America, (CCA) Walter Paepcke (1896–1960), Moholy-Nagy audaciously moved the school to a Downtown loft.

3.13 New Beginnings: The School of Design

On the 22nd of February 1939 Moholy-Nagy reopened The New Bauhaus now renamed the School of Design. On the school's administrative board were Paepcke, Barr, Dewey, philosopher Julian Huxley (1857–1975) and of course, Gropius. Although financial support was precarious and teachers were for the most part unpaid the large communal studio in which all students were now tutored was described by Findeli as "a hive of industry in which the spirit of initiative of students avid for initiation into modern art, architecture and design constituted the principle resource." The original and ambitious programme set out by Moholy-Nagy for the New Bauhaus, to structure the school around the new laboratories dominated by the architecture

²⁵⁶ ibid.

²⁵⁷ Findeli and Benton, "Design Education and Industry:The Laborious Beginnings of the Institute of Design in Chicago in 1944," 99. Gygöry Kepes, also a Hungarian was a protégé of Moholy-Nagy's in Europe and came to America to teach with him in Chicago. He also worked with Rudolph Arnheim after Moholy's death.

²⁵⁸ ihid

ibid., 98. Findeli and Benton used this phase to aptly describe the speed in which the New Bauhaus was conceived,lived and died in.

²⁶⁰ Borchardt-Hume, *Albers and Moholy-Nagy.From the Bauhaus to the New World*, 112. Additionally Moholy-Nagy said "What I love most about myself is that I can be happy; at least: that I have a tendancy to become fanatical." ²⁶¹ Findeli and Benton, "Design Education and Industry:The Laborious Beginnings of the Institute of Design in Chicago in 1944," 100.

studio was for the time being abandoned. The new accommodation was not optimum but embracing this new challenge with his usual self-proclaimed optimism, Moholy-Nagy welcomed his students to the first term at the School of Design by saying: "At this point we can confess that this school is actually not a school at all in the usual way. Indeed we like to see this place as an experimental collective."²⁶²



Figure 21: 1942 Moholy-Nagy is garlanded by his students in celebration of his birthday

3.14 The Problems the School of Design Faced

Paepcke along with Norma K. Stahle were the leading protagonists in the use of the Bauhaus model in Chicago. Paepcke would, due to his own efforts within his company continue to pave the way forward in the relationship between design and industry.²⁶³ Despite such illustrious support for his work Wick elucidates one of the fundamental obstacles Moholy-Nagy faced in the establishment of the Bauhaus model in Chicago in his statement "little or nothing was

²⁶² ibid.

²⁶³ Wick, *Teaching at the Bauhaus*,359. Paepcke had employed an artistic director to his company (CCA) to encourage visual communication between the manufacturer and the consumer. He was also very supportive of environmental issues therefore aligning him to Bayer and Moholy-Nagy.

known in Chicago about the significance of architecture at the Bauhaus in Germany, as *the* discipline uniting all branches of art or about a Bauhaus philosophy." This general ignorance of the Bauhaus tenets in the United States, particularly Chicago, not only made progress difficult for Moholy-Nagy's endeavours but led to both a lack of government funding and academic status for the course. In 1940 Paepcke's commitment to Moholy-Nagy's project and the new specialisations embraced in his pedagogical structure led Paepcke to begin to support the school with cash resources thereby "representing a valuable contribution towards the schools ability to make a name for itself as a place of training of product design." The reputation of Moholy-Nagy's Chicago based Institute as a leading school for "industrial and interior design" was acquired principally due to the efforts of the Association of Arts and Industries. The Association had initiated and assumed the responsibility for the founding of the New Bauhaus but the inclusion of the disciplines of graphic design, photography and film seemed to go some way towards the school's adaptation of itself to the demands of the American consumer culture. But the struggle was not over yet.

By the mid 1940's acceptance was growing towards modern design by the world of commerce and business. In 1945 Paepcke held a very successful exhibition entitled "Modern Art in Advertising," and with the introduction of an annual design conference in Aspen Colorado titled "Design as a Function of Management" emphasised a link between designers and industry. Although this support was of great benefit to the School of Design, the demands of a profit-seeking consumer based industry sat diametrically opposed to the original utopian Bauhaus ideals. In his 1983 book *The Romance of Commerce and Culture,* James Sloane Allen posed the question: "having embraced the aesthetics and economic benefits of modern design, what need had the consumer commerce of the modernists' metaphysics and cultural anthropology?" Additionally, prominent Chicago architect Harry Wesse (1915–1998) asked "who needs to go to the Bauhaus anymore to learn about space and volume?" It was against such attitudes that both Moholy-Nagy and Gropius would need to so venomously fight in order to maintain continued relevance for the Bauhaus principles on American soil. Fortunately for both men

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²⁶⁴ ibid.

²⁶⁵ Allen, *The Romance of Commerce and Culture*, 76.

²⁶⁶ Wick, *Teaching at the Bauhaus*, 359. The exhibition at MoMA in 1932 named "The International Style" played a large part in shaping America's view of the Bauhaus. By the late 1930's the Institute of Design would find itself in the crossfire of divergent interests and beliefs.

Paepcke had shown a great deal of commitment to Moholy-Nagy's project and began a policy of patronage which would last until the end.²⁶⁷

Despite the constant scepticism of some industrialists and patrons, Moholy-Nagy had gained a great deal of respect within pedagogy and American industry. Subsequently he had a number of powerful supporters. Paepcke, Barr, Dewey, Huxley, and Gropius, had continued to remain in his defence. Crucially though, of all Moholy-Nagy's supporters, it was Paepcke who developed the most devoted passion for the social, environmental and pedagogical endeavours within the Moholy-Nagy campaign. Although Gropius would always lend his intellectual and professional weight to Moholy-Nagy, Paepcke offered not only constant financial support but also practical and emotional support. ²⁶⁸ All of this support would be needed as Moholy-Nagy was soon to face his biggest and unfortunately his last debate with his industrialist benefactors. It was due to Moholy-Nagy's unmitigated tenacity toward his endeavours that Paepcke referred to Moholy-Nagy as the "experimenter in totality." It was Moholy-Nagy's total commitment and determination coupled with Paepcke's and Gropius' support that enabled enrolments at the second incarnation of Moholy-Nagy's Bauhaus teachings, to slowly increase even in the face of low salaries and worsening economic conditions due to WWII. The first graduation was held with great enthusiasm within the school in 1942 with five graduates. In a moving ceremony, Moholy-Nagy acknowledged the seriousness of America's political situation and the financial insecurity of the school and he re-emphasised the importance of the School of Design's pedagogical task.²⁷⁰

3.15 Preliminary Studies in Chicago

Although Moholy-Nagy faced a constant barrage of criticism from industrialists hungry for production, consumption and profitability he continued to consider the fundamental Bauhaus

²⁶⁷ Findeli and Benton, "Design Education and Industry: The Laborious Beginnings of the Institute of Design in Chicago in 1944," 100. Paepcke's support continued beyond Moholy's death. Paepcke's ongoing involvement precured a secure environment within Chicago's IIT for Moholy-Nagy's courses to continue.

²⁶⁸ ibid., 104.

²⁶⁹ ibid., 98.Moholy has already been described by himself and others as fanatical. This also made him a dogged and determined opponent to his industrial opponets.

²⁷⁰ ibid., 101. The school held daytime and evening courses to aid financially and ensuring that those already in the profession could also attend classes. In fact the evening classes had more enrolled students than the daytime classes.

pedagogy relevant in an American context. His continued resolution and commitment towards a universal visual language and the integration of technological advancement, environmental concerns and holistic education were evident in his work, his teachings and with those whom he chose to collaborate.²⁷¹ Moholy-Nagy encouraged a perceptive process like that of Albers where seeing became insightful vision. In order to properly outline a design problem Moholy-Nagy promoted "eyesight to insight." ²⁷² The polar contrasts of light and dark, soft and smooth, or curved and straight, coupled with the skill of diagrammatical analysis outlined in Itten's *Vorkurs* were augmented into Moholy-Nagy's technological doctrines and continued to play a vital role in his preliminary studies.²⁷³

It is in the preliminary exercise named 'hand sculpture' that the synchronization of Moholy-Nagy's integrated and holistic methodology is best illuminated. Moholy-Nagy suggested this exercise could be understood "as a space—time diagram."²⁷⁴ Moholy-Nagy explained that by documenting the process and results of carving a piece of wood to be rounded, anthropomorphic, and pleasing to the hand, the diagram or drawing would visually encapsulate the resistance of the wood to the forces applied by the tools and the intensions of the maker.²⁷⁵ The process Moholy-Nagy encouraged in this exercise essentially illustrates the pedagogical process for which the American industrialists had little time and sympathy. Conversely, when the project was undertaken and understood in totality, the integration of ideas with technology and economy was overwhelming. The integration of the workshops and disciplines was considered exemplary. I would argue that through their ignorance and impatience the industrials failed to recognise that the morphed forms could then act as moulds allowing a sheet material to be stamped or pressed over it. The beauty is in the analogy of this methodology, where the mould acts with great similarity to a single photographic negative allowing numerous unbroken prints to be cast. Moholy-Nagy saw the correlation and

²⁷¹ Ellen Lupton is a curator of contemporary design at the Copper-Hewitt in New York and the director of the MFA programe at Maryland Institue College of Art. Ellen Lupton, "Writing Lessons: Modern Design Theory," (New York: City University of New York 2009), 1. Moholy-Nagy had employed Gygöry Kepes at the New Bauhaus and Kepes followed Moholy to the School of Design. Both men were keen to give the visual language a scientific rationale.

²⁷² Findeli, "Moholy-Nagy's Design Pedagogy in Chicago (1937-46)," 12. Gygöry Kepes, Moholy's fellow countryman, friend and colleague presents a convincing application of this in his book *Language of Vision*

²⁷³ Lupton, "Writing Lessons: Modern Design Theory," 4. Itten's exercises in analysisng the Old Masters allowed the student to translate the artistic energy into a diagram or an objective language.

²⁷⁴ Moholy-Nagy, Vision in Motion, 73-74.

²⁷⁵ ibid., 73-74.

opportunity to further these studies into "furniture, moulded without joints."²⁷⁶ The elegant fusion Moholy-Nagy creates in this single exercise between man, nature, technology and economy is testament, I believe, to his convictions. Lupton argues that Moholy-Nagy assigned both social and aesthetic value to the moulded object, and saw the process as an agent for the elimination of the division of labour and the ability to bring cheap goods to mass production.²⁷⁷ The process was unappreciated and unsupported by the industrialists but the result was highly regarded. As Gropius had warned in his early speech this economic environment valued results over method. But Moholy-Nagy, with Gropius' and Paepcke's support, continued to believe whole-heartedly in his teachings of a process. Moholy-Nagy elucidates his concerns for result and profit based design in his criticism of the fashion orientated streamlining made synonymous with American modernism by the U.S designer Raymond Loewy.²⁷⁸ A frustrated Moholy-Nagy wrote: "High-pressured by the salesman, the industrial designer succumbed to a superficial "styling." In the last ten years this has meant "streamlining," just as a generation ago it meant ornamentation."²⁷⁹

Moholy-Nagy referred to his enhanced methodology as "organic functionalism." The functionalist aspect of this methodology engaged the students in careful analytical, essentially scientific investigations where they would gather all pertinent information about their design problem in order to define function not only in purely material or technological terms by also biological, psychophysical and social terms. Moholy-Nagy argued that: "the ingenuity of man has brought forth excellent results in every period of history when he understood the scientific, technological and aesthetic." Beyond the foundation course Moholy-Nagy's interlocking of nature with technology can be seen as one of the inaugural steps within design and architecture to integrate nature's processes into design. Moholy-Nagy identified diagrams produced by natural and technological processes and used them as explanatory tools. A drawn

²⁷⁶ ibid., 51-54.

²⁷⁷ Lupton, "Writing Lessons: Modern Design Theory," 6.

²⁷⁸ Nicolas Maffei, "Both Natural and Mechanical The Streamlined Designs of Norman Bel Geddes," *Journal of Transport History* 30, no. 2 (2009), 141-67. Maffei gives a comprehensive overview of streamlining in this article ²⁷⁹ Moholy-Nagy, *Vision in Motion*, 15.

²⁸⁰ Findeli, "Moholy-Nagy's Design Pedagogy in Chicago (1937-46)," 10.

ibid.

²⁸² Lupton, "Writing Lessons: Modern Design Theory," 4. Kepes was also a strong advocate for these developments and would along with Rudolf Arnheim and Christopher Alexander continue to investigate these theories.

line no longer just represents a geometric linear boundary. It is now an expression of motion from point to point.

Moholy-Nagy's acknowledgement of insightfulness within his newly developed scientific and systematic approach brought him closer to Itten's ideology of sensory discovery. Also a Mazdanan follower, although denounced prior to his appointment by Gropius at Dessau, the spiritual and transcendental qualities of Moholy-Nagy's light modulator work exhibit a depth of intuitiveness that Moholy-Nagy would now also require of his students.²⁸³ He now positioned his own work and self-expression closer to Itten's ideals than he had been comfortable in doing so during the anti-Itten era at the Bauhaus pre 1928. Importantly for design Moholy-Nagy began to alienate himself from his earlier Bauhaus persona as a stalwart for technological advancement and now embraced a wider understanding of mechanical and scientific advancement. Moholy-Nagy proposed the addition of emotional literacy to the intellectual literacy offered in design education. Although Albers was critical of Moholy-Nagy's teaching process and believed Moholy-Nagy's approach to be too knowledge and theory based, the introduction of two fundamental corrections to his 1928 pedagogical tenets render Albers' opinions redundant. Moholy-Nagy now employed only teachers who were artists as he felt they needed to be familiar with the intuitive process and he encouraged his students to consider themselves as individual living organisms, physically and spiritually. He asserted that, "creativity is not imposed from the outside but developed from the inside." Peder Anker states that: "Moholy-Nagy believed the future held the possibility of a new harmony between humans and their earthly environment if forms of design followed biological functions."285 Findeli claims that Moholy-Nagy's concern for the whole man and increasingly the whole

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²⁸³ Wick, *Teaching at the Bauhaus*. In 1922 Moholy-Nagy stated that the transendental spirituality of previous times was now obsolete. Although he did not follow Mazdanan at the Bauhuas he did begin to favour the characteristics of psychology as a guide to sensory perception.

²⁸⁴ Findeli, "Moholy-Nagy's Design Pedagogy in Chicago (1937-46)," 13.

²⁸⁵ Anker is an Associate Professor of Environmental Design at Harvard University and author of the 2010 book *From Bauhaus to Ecohouse*. Peder Anker, "Graphic Language: Herbert Bayer's Environmental Design," *Environmental History* 12, no. 2 (2007), 256. Herbert Bayer was Moholy's friend and Bauhaus colleague and he understood Moholy's struggles within America to gain acceptance for the environmental and social concerns as both men had brought these tenets to America within their ideologies.

environment as a habitat was steadfastly maintained within his teachings in an economic time that could easily forgo these concerns in order to maintain profitability.²⁸⁶

3.16 The Moholy Affair

This next period in Moholy-Nagy's pedagogical career is known quite aptly as the "Moholy Affair," principally because it was laborious and highly charged emotionally.²⁸⁷ Gropius and Paepcke remained steadfast supporters of Moholy-Nagy's experiment but it would be the latter that would be required to, at every turn and iteration of Moholy-Nagy's cause, placate and convince commercial enterprise of the value in his words. With a full appreciation of Moholy-Nagy's belief in his cause and dogged determination, Paepcke had decided that Moholy-Nagy's pedagogical project should succeed come what may. It was to this end that Paepcke began to search for a host institution for the school.



Figure 22: Gropius and Moholy-Nagy at the School of Design during the Moholy Affair

The next iteration of The School of Design came in 1944. Paepcke became President of the Board of the newly named Institute of Design (ID) with Moholy-Nagy as acting director. New management and financial backing demanded Moholy-Nagy brought the school's philosophies more in line with industrial requirements. His position was constantly under threat as the

²⁸⁶ Findeli, "Moholy-Nagy's Design Pedagogy in Chicago (1937-46)," 10 -12. Moholy-Nagy's concerns for the environment and the world were seen by the majority of his employers as distractions at a time when their need for profit was never more threatened with WW11 on their doorstep.

²⁸⁷ Findeli and Benton, "Design Education and Industry: The Laborious Beginnings of the Institute of Design in Chicago in 1944," 104. To see everything in this relationship, lay at the heart of Moholy's methodology. This tenet differentiated Moholy's school and the Bauhaus from all other schools but encouraged a transparancy between buisness and education that still defies resolution.

financial backers and some detractors from within faculty became less convinced of Moholy-Nagy's ability to run a school. Moholy's failing health and undiagnosed leukaemia exacerbated the situation. He was exhausted, and in this state his fanaticism became more overt making his actions appear to his detractors as incompetence rather than passion.²⁸⁸ At this point it fell once again to Paepcke to navigate a transition. Due to the delicate nature of this requirement and the resistance Paepcke knew he would face from not only the Board and the industrial sector but Moholy-Nagy himself, Paepcke called upon the assistance of some of Moholy-Nagy's closest supporters: Gropius, Bayer and Giedion. ²⁸⁹ Despite the diplomacy required to gain full Board of Trustee support Paepcke met success. In short, Gropius would be called upon to diplomatically reassign duties. Moholy-Nagy would reluctantly reorganise his initial curriculum and revise some of the basic principles to come into line with consumerism.

To continue to discuss the distress and acrimony during Moholy-Nagy's final years seems futile. Moholy-Nagy left a legacy, in spite of constant bickering and unsupportive actions. A discussion of his holistic concerns is more informative. In spite of his illness Moholy-Nagy's considered his endeavours to cement a Bauhaus pedagogy within America far from over. During the final years of his life, amid constant administrative stonewalling, Moholy-Nagy continued to expand the Institute of Design's curriculum to help cultivate a 'social conscience' that would complement the artistic, scientific and technological training offered to his students. He introduced philosophy in the hope of "helping the young generation to acquire a philosophy of life." Beyond all the difficulties faced, low student numbers and faculty departures Moholy-Nagy and Paepcke were able to sustain the Institute of Design. By 1946, just three months before Moholy-Nagy's death at fifty-one, enrolments were at a high of eight hundred students and twenty-eight faculty members.

It may have taken six years of negotiations, but in 1949 Walter Paepcke succeeded in convincing the President of the Illinois Institute of Technology (IIT) to incorporate the Institute of Design. Serge Chermayeff (1900-1996) was to be Moholy-Nagy's successor. Although this

²⁸⁸ ibid., 104. In December 1944 a member of the Rockefeller Foundation suypporting the school initiated the queries and anxieties over Moholy's ability to act as the administrator.

ibid., 106. These discussions and arrangements were made in clandestine meetings without Laszlo's or Sibyl's knowledge by these men to ensure solidarity before discussing the decisions with Laszlo.

²⁹⁰ Timothy J Garvey, "Laszlo Moholy-Nagy and the Atomic Ambivalence in Postwar Chicago," *American Art* 14, no. 3 (2000),28.

arrangement certainly solved the financial issues burdening the school, it now faced a larger more heartfelt obstacle. To the great disappointment of Gropius, Chermayeff, who had always declared his leadership and would remain faithful to the heritage of Moholy-Nagy, was to be considered unwelcome at the Illinois Institute of Technology or as Findeli described it, "in the temple" of none other than Mies van der Rohe who had years ago at the Bauhaus in Germany: "made a pedagogical decision, namely, against the "generalized study" in Gropius's sense and in favour of specialised study.²⁹¹The preliminary course was no longer a required and for him reflections on questions of aesthetic education in the sense of a unified education were totally irrelevant."292 Moholy-Nagy's experiences within America's capitalist economy and aesthetically orientated pedagogical institutes would include a false start, many acrimonious arguments about his teachings, his untimely death and the removal of his pedagogical tenets from the Illinois Institute of Technology. In spite of these impediments Moholy-Nagy is considered by many historians as: "one of the great teachers of our time" with Herbert Read (1893-1968) stating: "it was the age that failed this visionary pioneer. We have a duty to ensure that the lead ha gave is not lost."293 His pedagogical brilliance, his commitment to the Bauhaus philosophies of interdisciplinary preliminary education and insightfulness never diminished, and were continued after his death by Sibyl Moholy-Nagy. In addition, his legacy was carried forward to future generations of designers in the pedagogy and writings of Rudolf Arnheim (1904-2007), Chermayeff and Gygöry Kepes (1906–2001).



Figure 23: Moholy-Nagy's second wife Sibyl circa 1932

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²⁹¹ Findeli and Benton, "Design Education and Industry:The Laborious Beginnings of the Institute of Design in Chicago in 1944," 110.

²⁹² Wick, *Teaching at the Bauhaus*, 83-84.

²⁹³ Learner, "Foundations for Design Education: Continuing the Bauhaus Vorkurs Vision,"217

The impact of Moholy-Nagy and Albers pedagogical endeavours within artistic and creative endeavours cannot be under-rated. Albers teachings were accepted into numerous art schools and universities and would continue to be introduced into pedagogy without opposition. Moholy-Nagy had obviously faced huge difficulties within a new consumer based culture and he would in his short time never come to terms with or accept it. His untimely death was a deciding factor in his ability to amalgamate his ideas and impact the American design industry, particularly industrial design within his own lifetime. But, as discussed his legacy continues to be relevant in an ever modernising world. The efforts of both Albers and Moholy-Nagy to disseminate a universal visual language within artistic and design education were considerable but not without effort as the culture of design education in America was not as interdisciplinary or open minded as the Bauhaus masters may have hoped for. Gropius was to address the need for a truly and totally universal visual language in his attempts at pedagogy at Harvard which will be explored in the final chapter of this journey by Moholy-Nagy, Albers and Gropius.

Chapter Four

Gropius' Contribution to the Bauhaus Translation

4.1 Gropius to Harvard

Gropius would in his time at Harvard's Graduate School of Design transform it from its old mould as a school of architecture influenced by the Beaux-Arts into a "Harvard-Bauhaus." ²⁹⁴

It is generally perceived that Gropius achieved this transformation single-handedly and without opposition. However, upon clarification of this period by Jill Pearlman, Professor of Architectural History at Bowdoin College, it would be imprudent to continue to suggest that Gropius alone had forged a new path forward for Harvard, as much of the groundwork had been laid out before Gropius's tenure was even under consideration. I will argue that it would also be incorrect to believe that the acceptance of Gropius's ideals or the Bauhaus teachings, although greatly anticipated by many in the United States during the 1930's, was as absolute or as eagerly embraced as some historical reports have suggested. I will elucidate this scarcely remembered preparatory path to Gropius' invitation to teach at the Harvard Graduate School of Design by the GSD's founder, Joseph Hudnut (1986-1968), and endeavour to give a more accurate picture of Gropius's contributions to modernist pedagogy within the GSD.²⁹⁵ I will show that within the American translation of Bauhaus ideals, particularly the universal visual language, misunderstandings, misrepresentations and misinterpretations occurred. A clash of egos also transpired, over personalities and ideologies causing tensions between what a number of American architects and designers considered modernism and European modernism as expressed by Bauhaus émigrés. Gropius' contributions to modernist theories, interdisciplinary education and the universal visual language were profoundly challenged, principally by Hudnut, within the Harvard environment.

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²⁹⁴ Jill Pearlman, *Inventing American Modernism* (Charlottesville: University of Virginia Press 2007),1. Upon their invitation America Both Mies and Gropius would be directly ushered into high ranking positions at Illionois Institute of Technology and Harvard repectively and be part of MoMA exhibits

²⁹⁵ Jill Pearlman, "Joseph Hudnut's Other Modernism at the Harvard Bauhaus," 452.

4.2 The Preparatory Path of Modernism towards Harvard

By 1781 the first American born architect, Charles Bulfinch (1763–1844), had graduated from Harvard having studied mathematics and perspective. In 1800, Bulfinch suggested to the university's governing board that they introduce the instruction of architecture to the Harvard programme. In response to his request the board stated that "this ornamental and useful art" had not yet gained sufficient character to admit it to the company of scholars. By 1895 Herbert Langford Warren (1857–1917) finally managed to establish a Department of Architecture within Harvard becoming the United States' ninth School of Architecture. Warren's aim in establishing the architectural programme at Harvard was not just as a response to the practical need for architectural training but also for the noble purpose of aiding in the fulfilment of the cultural and social destiny of America. Warren's views portray the beginning of Harvard's path that Hudnut would in the short span of forty years be asked to continue. In a 1902 edition of the Harvard Engineering Journal Warren asserted:

In our day and country we are almost without traditions, and, however much we deplore the fact, we cannot change our circumstances. We must take our birth right as we find itThere is only one thing which can substitute for tradition and prevent architecture from running, as it so often has, into parrot–like imitation of bygone styles or hopeless and vulgar extravagances and that is Scholarship.²⁹⁷

In the years preceding Hudnut's appointment at Harvard much would be established within the schools pedagogical beliefs. Anthony Alofsin, a contemporary American architect, art historian and professor clarifies in his book *The Struggle for Modernism*, Warren's belief that "architecture was essentially fine art, the practice of which would be based on a thorough knowledge of construction." Science and engineering would provide the practical necessities to form the foundations of the Harvard architectural programme, coupled with knowledge of culture and the societies that produced it. Alofsin concluded that architectural education at

²⁹⁶ Anthony Alofsin, *The Struggle for Modernism. Architecture, Landscape Architecture and City Planning at Harvard* (New York: W.W.Norton and Company Ltd, 2002), 17.

²⁹⁷ ibid., 18.

²⁹⁸ ibid.

Harvard was to be a balancing act of art and science that, as noted in the Harvard register of 1902, included "the study of historic examples to learn the practice and theory of design." Over the next forty years prior to Hudnut's appointment as Dean of Architecture Harvard's curriculum would continue to be challenged. Within the writings of Alofsin and Pearlman it is apparent that the advent of modernism at Harvard, particularly the European model that was to be accompanied by Walter Gropius, proved to be as much of a defining moment in Harvard's architectural history as the faculty's establishment had been.

Jill Pearlman asserts: "The credit for breaking the barricades of sterile tradition in this country and opening the frontiers of modern practice must go to Joseph Hudnut."300 This mantel is generally handed to Gropius or Mies van der Rohe's efforts at Harvard or Chicago's Illinois Institute of Technology respectively. 301 Gropius himself had described Hudnut as "on account of his modesty, to be much too much in the shade." This modesty was possibly a contributing factor to Hudnut's anonymity. In her book, Pearlman specifically investigates Hudnut's obscured contribution to Harvard and the emergence of the university's reputation described by James Conant, Harvard's President in 1935 as "the leading school in modern architecture on this continent and perhaps the world." Pearlman argues that Hudnut played a vital role in the years leading up to Gropius's arrival in America and that Hudnut's progressive educational views played a large part in the path toward modernism and his, not Gropius' founding of the Graduate School of Design within Harvard's academic programme in 1936. 304 Pearlman explains in *Inventing American Modernism*, "Three experiences in particular determined Hudnut's path to modernism: first his "civic design" work with the German planner, Werner Hegemann; second, his sustained interest in the history of architecture; and third, his engagement with the democratic educational philosophy of John Dewey."305

²⁹⁹ ihid

³⁰⁰ Pearlman, *Inventing American Modernism*, 8.

³⁰¹ ibid., 3. As Hudnut had given up designing in the 1920's he was now seen predominantely in history as a dean who wielded power behind the scenes. He was merely as a broker between students and modernists.

³⁰² ibid., 2.

³⁰³Jill Pearlman, *Inventing American Modernism* (Charlottesville: University of Virginia Press 2007), 104.

Pearlman, "Joseph Hudnut's Other Modernism at the Harvard Bauhaus," 452. This accolade has at times been incorrectly handed to Gropius throughout architectural history. He did not arrive in America till 1937 and the GSD was founded by Joseph Hudnut in 1936.

³⁰⁵ Pearlman, *Inventing American Modernism*, 44.

Hudnut had studied law at Harvard, unsuccessfully, before enrolling in the School of Architecture. He left Harvard before completing his architectural degree to work in Chicago as a draftsman. Having spent two inspirational years there he completed his architectural degree with distinction at the University of Michigan in 1917. The architectural programme at Michigan differed from most of the other universities in America at that time with the more privileged universities aligning themselves with the French *École des Beaux Art* methods of training.



Figure 24: Beaux-Art styled class work where drawings are copied at Harvard 1925

Selection into these programmes was competitive, learning was by rote, and mainstream examples of Roman and Renaissance architecture were emphasized, drawing was meticulous and abided to strict conventions, and sculptural decoration was highly prized. The mid-western universities followed a more engineering—based technical approach to architecture. Michigan University sought to mesh these approaches emphasising both the art in architecture and the practical construction component. While studying at Michigan, Hudnut was influenced by the theories of educational reformist John Dewey through the Dewey disciples teaching at the University. Hudnut elucidated these influences in speeches he later made to national audiences of architects. In these speeches he made clear his belief that "education was an experience not an instruction." One such Dewey disciple was Denman Ross at Harvard's Department of Fine Arts from 1899 to 1935, whose theory of Pure Design was infused into the first year design

ibid., 41. There is no record of Hudnut ever engaging in any serious study of Dewey's pedagogical theories. It is believed he became aware of these ideals at Michigan University and began to utilise them at Columbia where he was dean of architecture from 1934.

programme at Michigan. In 1906 this course was mandatory for all students wishing to advance into the architectural programme. 307

4.3 Pure Design: the Progression of Modernist Theories in American Education

Pure design was the culmination of theories developed by Arthur Wesley Dow (1857-1922), a director and educator of Fine Arts at Columbia (1904-1922) and Denman Waldo Ross (1853-1935) a design theorist, art educator and collector who taught architecture at Harvard (1899-1909) and then Fine Arts within the same university until the mid-1930s. In the 1890s both Dow and Ross began to independently develop a series of exercises that relied on the abstraction of design elements: dots, lines, shapes and colour. The exercises were not intended to create a new style in architecture or fine art but were presented as an alternative pedagogical approach to the Beaux-Art method. Both men felt that Beaux-Art methods of instruction were too "restrictive and mechanical." Although Dow and Ross are usually considered collaborators, in this development they did not share identical views. 308

Both men knew of each other but they worked on the development of their theories independently. The most significant departure from the commonalities of their theorising was that, "Dow used the exercises to foster subjectivity whereas Ross aimed at objectivity." Both Dow and Ross wrote of composition awakening creative faculties, training the eye to appreciate beauty, a beauty which would be found in harmony, balance and rhythm. 310 Ross believed that contemporary artists and educators had strayed too far from science. Ross hoped with his objective approach to provide a scientific understanding of universal principles and used geometry and the new science of psychology to argue for the "union of art and science through design."311Ross looked for objective ways to bring order to the composition of design elements rather than rely on the subjectivity of feeling in composition as Itten and Dow had

³⁰⁷ Marie Frank, "The Theory of Pure Design and Architectural Education in the Early Twentieth Century," *Journal* of the Society of Architectural Historians. 67, no. 2 (2008), 262. Emil Loch (1870 - 1963) taught the principles of Pure design in his Elements of Design course taken in the first year at Michigan University in 1906. This course was a prerequisite to all architecture studies. 308 ibid., 251.

³⁰⁹ ibid.

³¹⁰ ibid., 252. In 1899 Dow published "Composition: A Series of Exercises Selected from a New System of Art Education" and Ross wrote in 1907 "A Theory of Pure Design: Harmony, Balance, Rhythm, with Illustrations and Diagrams."

³¹¹ ibid.. 255.

pursued. Ross investigated the eye's perception of form thereby signalling his awareness of one of the newest sciences in the late nineteenth century, physiological psychology and a link to the yet to be developed theories of Josef Albers.

In identifying a number of similarities between the theories developed in 1919 within the Bauhaus' *Vorkurs* and Ross and Dow's endeavours with Pure Design in the United States we have seen some fundamental commonalities and influences that both theories share but there does seem to be a chronological anomaly. We read time and again from architectural theorists that the Bauhaus theories were the answer to the revolt against the *Beaux-Art* teachings and methodologies. Yet, Pure Design had been adopted into the architectural programme by Michigan University in 1906 along with a preliminary interdisciplinary course in design fundamentals and universal understanding. As discussed by Dr Marie Franks, a professor in Art History at the University of Massachusetts Lowell, other universities in the United States had also been exposed to the Pure Design theories and teaching methodologies prior to the Bauhaus pedagogues arriving in the United States. 314

In addition to the similarities of ideals already discussed between Pure Design and the Bauhaus it is within the early stages of study that another vital likeness in pedagogical methodology appears between these two methodologies, the *Vorkurs*. This preliminary interdisciplinary course was one of the most distinctive reformative tools used by the Bauhaus in both Germany and the United States. All Bauhaus pedagogues teaching in the United States during the period of pre to post WWII namely, Albers, Moholy-Nagy and Gropius certainly included, or in Gropius' case, vehemently argued with limited success to include, in their pedagogical programmes preliminary courses based on the *Vorkurs* teachings of design fundamentals. Within this course creativity and independent growth were encouraging through experience and experimentation which would allow form and space to be expressed objectively using a universal visual

³¹² Varnelis, "The Education of the Innocent Eye," 215. Varnelis wrote "The Bauhaus refugees' new visual learning filled a gap left by disciplinary conditions (Beaux-Art) of American education."

Pearlman, "Joseph Hudnut's Other Modernism at the Harvard Bauhaus," 262. Lorch, the most influencial of Ross's students was the first educator to make Pure Design a foundation course for all programs within architecture at Michigan University in 1906.

³¹⁴ Frank, "The Theory of Pure Design and Architectural Education in the Early Twentieth Century," 263. Ross held summer classes in Pure design in the 1920's that were undertaken by instructors in architecture, art and design from the Chicago Art Institute and Drexel, Cornwell, Syracuse, Pennsylvania, Columbia, Wisconsin and Toronto Universities.

language. However, in 1906 the Deweyites, namely Emil Lorch (1870-1963), Ross's most influential student, had already introduced a foundation course within the Pure Design curriculum, named Elements of Design. In her 1965 article "The Diaspora" Sibyl Moholy-Nagy described herself as a self-appointed "beach-comer of history." She took particular interest in that which involved her husband and any of his Bauhaus associates. She wrote "American architectural school programs were reformed in the Bauhaus image. In the design field, Dewey's Art as Experience, published in 1934, propounded educational tenets that were straight from the Bauhaus theory." 316 Mrs Moholy-Nagy makes no acknowledgement of a preexistence of Dewey-inspired Pure Design theories prior to the Bauhaus ideals in the United States, nor does she mention that Pure Design courses had begun to replace the Beaux-Art methods of teaching in the United States some twenty years before the Bauhaus theories were invited onto American soil. The absence of accolades within historical references for Pure Design's contribution to reformative ideals in architectural education in the United States is perplexing, and it would seem that the Bauhaus ideals were given the predominant recognition for the reforms and expulsion of the Beaux-Art system over and above any efforts made by Pure Design. Perhaps the lack of a visible public persona to carry Pure Design's torch explains this, as the dominant figures of the European movement arrived with the support of exhibitions and elevated pedagogical platforms from which to expound their ideals.³¹⁷

Amid the accolades bestowed on the Europeans, Hudnut would nevertheless endeavour to forge a path forward with his pedagogical and architectural beliefs. He considered himself a progressive architect and teacher. Hudnut cited social reform, cooperative effort and experimentation, the meshing of ideas and action and democratic education as his defining contributions to pedagogy. In his position as Dean at Columbia University, Hudnut "immediately launched a first attack on the French system with a decisive blow." In place of Columbia's Americanised *Beaux-Arts* program Hudnut introduced "a progressive agenda based,"

³¹⁵ Moholy-Nagy, "The Diaspora," 24. Moholy-Nagy described herself this way clarifying that she was an unaffiliated digger of treasure and debris under the tides of conformity. She was eloquent and outspoken and tried to stimulate controversy to clarify the essential meaning of design.

³¹⁶ ibid., 25. Having emigrated to America with Lázsló Moholy-Nagy, his second wife Sibyl held a particularly insightful position in the efforts of the Bauhaus in America in particular the efforts of Laszlo Moholy-Nagy and by association Walter Gropius at Harvard.

³¹⁷ Upon invitation to America both Mies and Gropius were ushered into high ranking teaching positions at IIT and Harvard respectively. Their work was also favoured by the directors of the MoMA and therefore exhibited widely. ³¹⁸ Pearlman. *Inventing American Modernism*, 41.

in large part, on the democratic educational principles of Dewey."³¹⁹ Having created a new kind of educational programme at the school Hudnut now needed to employ new teaching staff to disseminate the knowledge. In 1934, it was suggested to Hudnut by Lawrence Kocher, the then editor of Architectural Review, that he invite Gropius to Columbia, and although Hudnut considered this he hesitated as he knew that the Columbia administration would have considered Gropius far too radial a choice. Pearlman suggests that Hudnut himself was perhaps not ready to engage with Gropius either, writing that "perhaps Hudnut may have felt that his programme there and his ideas for modern education were not yet ripe enough to include the formidable founder of the Bauhaus."³²⁰

By the mid-1930s, the development of educational reformation in both fine arts and architecture through Dewey, Ross, Lorch and Hudnut was running parallel to the Bauhaus courses being taught in the United States. These courses were being taught on different campuses but on common soil. They would traverse common ground during this period within architectural education in only one university, Harvard. 321 The theories of objectivity taught by Ross and Gropius, influences of Ruskin's theory of the innocent eye, Pestalozzi's reforms, Froebel's gifts and both the Bauhaus' and Pure Design's use of exercises in composition to analytically expose the abstract and awaken the creative faculties, all showed principle commonalities within the aims of the Bauhaus and Pure Design. Both schools of thought had also sought to establish a common language of visual expression within the foundation courses they offered. With such fundamental intersections between these pedagogies, it would be the inclusion of a preliminary course and a common, universal language, fundamental to both methodologies, along with the relevance of historic reference within Harvard's architectural programme that would specifically set Hudnut and Gropius apart. Their distinctions would outline the venomous debate that would dog Harvard's GSD for some fifteen years. It is important to recognise the centrality of introducing a preliminary, interdisciplinary design course containing a universal visual language in art, architecture and design education. From

ibid. Hudnut gleaned two principles from Dewey and his mentor, Werner Hegeman. To build in a meaningful way an architect must have a wide understanding of social, economical, technical and intellectual currents and a sound knowledge of historical roots.

³²⁰ ibid., 45.

³²¹Pearlman, "Joseph Hudnut's Other Modernism at the Harvard Bauhaus," 496. Dewian and Bauhausian theories also intersected with Albers at Black Mountain. But Albers never tried to assimilate these teachings into three dimensional work. Any efforts to bring Albers to Harvard were thawted by Hudnut for this very reason.

Pure Design in 1906, through the Bauhaus in 1919, and again in the three translations disseminated by the Bauhaus émigrés in the 1930s this inclusion was critical. In spite of this legacy Gropius would need to vigorously defend the inclusion of such a course within the GSD programme against Hudnut's questionable reluctance.³²²

4.4 Hudnut to Harvard and the Establishment of the Graduate School of Design

By 1935, and having "completed as much damage as I could possibly do at Columbia," ³²³ Hudnut accepted a position at Harvard. By this time Hudnut had established strong ties with a number of New York architects who were also concerned about the social agendas facing architecture. Through Columbia University Hudnut was also affiliated with those of influence at the Museum of Modern Art, Alfred Barr, Philip Johnson and Henry-Russell Hitchcock. These associations had enabled Hudnut to gain considerable confidence in his own pedagogical and architectural voice by the time he reached Harvard. ³²⁴ Through both personal and professional associations Hudnut had solid support in his appointment as Dean of Architecture from Harvard's President James Conant. ³²⁵



Figure 25: James Bryant Conant Harvard president 1946

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³²² Frank, "The Theory of Pure Design and Architectural Education in the Early Twentieth Century,"267. Gropius took twelve years to establish a "Basic Design" course. Hudnut had opposed it for a number of reasons although it was also thought that he was playing tit for tat. If Gropius opposed a history course then Hudnut would oppose a basic design course.

³²³ Pearlman, "Joseph Hudnut's Other Modernism at the Harvard Bauhaus," 457. Hudnut heeded Dewey's call for democratic education and had abolished the Beaux-Art education at Columbia. He had introduced collaborative based design studios that worked on community projects.

³²⁴ Richard Oliver, ed. *The Making of an Architect* (New York: Rizzoli International Publications Inc, 1981), 188.

³²⁵ Alofsin, *The Struggle for Modernism. Architecture, Landscape Architecture and City Planning at Harvard*, 117.

Hudnut had been strongly recommended to Conant by his brother-in-law Harold Bush-Brown, a Harvard graduate and chairman of the Dept of Architecture at the Georgia Institute of Technology.

Alofsin asserts that Harvard had established a commitment towards a modernist reform prior to Hudnut's appointment. Modest changes had begun to appear in the fundamentally *Beaux-Art* styled curriculum. Although architecture was still considered to be a fine art based on knowledge of construction, with the history of architecture still viewed as essential for the growth and meaning of architectural forms as discussed by Harvard's first Dean of Architecture Herbert Langford Warren nearly half a century before, the reformist developments lay subtly, in the idea that history was no longer a precedent to be use blindly, but instead to be engaged with "intelligently and with freedom." By the 1930s, in addition to their own curricular developments at Harvard reform efforts were further fuelled by their awareness and support of the European developments in modern architecture. The European styles characterised by American detractors as "an unemotional, planar vocabulary and the idiom *neue Sachlichkeit* or new objectivity" were now available in United States through periodicals, guest lectures and exhibitions and would quiet rapidly come to dominate the United States post-WWII. 1928

Alofsin asserts that Harvard's School of Architecture lacked the faculty to drive the school forward as much of the teaching staff was of the old guard and not impressed by the European developments. Conant, who himself had made strides toward a functional architecture saw Hudnut as a great ally. From the immediate outset of his time at Harvard Hudnut began as he had at Columbia, to usher in the modern era. In a very short time Hudnut had brought Harvard forward from its *Beaux Art* past by introducing co-operative design studios, practical group design problems, and experiments with materials and techniques of construction. Hudnut maintained that architects should have a wide understanding of the society they were building for, knowledge of its social world as well as an appreciation of economic, technological, and intellectual currents. Additionally and in accordance with Dean Warren's founding thoughts knowledge of its historic roots still remained fundamentally important. In Hudnut's early years at Harvard, the inclusion of history within the programme is the only obvious difference between Gropius' Bauhaus ideals for architectural education and Hudnut's convictions. There is

³²⁶ ibid., 81.

ibid., 82.

³²⁸ ibid. Harvard Society of Contemporary Art exhibited Bauhaus artists in 1929 and Harvard School of Architecture and the Fogg Museum sponsored the seminal exhibition at MoMA in 1932 introducing the International Style.

³²⁹ ibid. On the relevance of students visiting a Bauhaus exhibition in 1925 Hudnut's predecessor, George Edgell commented "I suppose such an exhibition might be useful in instruction the students what to avoid."

³³⁰ Pearlman, "Joseph Hudnut's Other Modernism at the Harvard Bauhaus," 457-58.

no real evidence yet that this difference would ultimately become an insurmountable division. Hudnut's reactions toward the historic environs at Harvard certainly gave rise to the belief that like Gropius he was committed to the removal of the turgid past as it was felt it impinged innovation. Not only did Hudnut dismember the traditional academic approaches to teaching architecture, he also physically dismantled the buildings. He purged the building that housed architecture at Harvard, Robinson Hall, of all vestiges of the old academy which included its symbols and signs of the past. In addition to this he also "destroyed the plaster casts of antique building fragments and sculpture that had filled the academy and stripped the walls of Old Master copies and *Beaux-Arts envois*, repainting them a pristine white." During his tenure at Harvard, Hudnut had preferred to leave the teaching to others and concentrate on the larger goals of pedagogical direction, curriculum and hiring progressive faculty. However, he did initially teach a history course called Contemporary Architecture in which he discussed new approaches to architecture and city planning in relation to modern techniques and ways of living. This allowed for his personal views in relation to the value of architectural history and the methods by which it should be taught to be disseminated within the new pedagogy.

Upon Hudnut's arrival in 1935 the faculties of architecture, landscape architecture and city planning were all operating separately. Hudnut came to Harvard proposing to merge the three schools into a single new school. Hudnut firmly believed that this was essential in order to shape a new modern architecture and a sound modern city.³³³ In February 1936, less than a year into his deanship at Harvard and with Conant's full support the university approved Hudnut's proposal to dissolve the old Faculty of Architecture and merge its three separate schools into a single new inter-disciplinary faculty the Graduate School of Design. This was not accepted without reservation between the faculty's academics which were described by Jane Loeffler in her 2002 Harvard magazine article "Recovered Memory" as 'turf wars and personality clashes.'³³⁴It would ultimately be Hudnut's convictions toward the relevance of history in his pedagogical theories that would lead to his most significant turf war within his yet to be established relationship with Gropius.

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³³¹Pearlman, *Inventing American Modernism*, 55. Not only did Hudnut strip Harvard buildings of the traditional aesthetics he had all books published pre 1936 removed from the library and transfered to archives.

³³²Pearlman, "Joseph Hudnut's Other Modernism at the Harvard Bauhaus," 460.

³³³ ibid., 459.

³³⁴ Jane Loeffler, "Recovered Memory," *Harvard Magazine* 2002, 31-32.



Figure 26: Joseph Hudnut in his Graduate School of Design office 1946

Warren's 1895 founding manifesto for Harvard's School of Architecture which included interdisciplinary collaborations and both cultural and societal concerns, which coupled with Hudnut's own more modern version of these beliefs were embedded within his pedagogical agendas. This aligned him, in principle, to the European mould of modernism and its education. Additionally Hudnut's beliefs in a Dewey styled education which shared the mantra of 'learning by doing' with the Bauhaus methods of teaching brought him into line with Gropius' developments for an interdisciplinary education for architecture. Both the Bauhaus and the Dewey system, through its influence of Pure Design, believed in an inter-disciplinary preliminary course which would allow the discovery of common visual keys. But a significant distinction between which disciplines and exactly who both Gropius and Hudnut believed architecture should share a common language or turf with would set up a debate that outlined a primary distinction between Hudnut and Gropius' aims for both Harvard and architecture.

Although Hudnut sought a common understanding between Harvard's disciplines of architecture, landscape architecture and city planning, he did not fully embrace the initial concept of the *Gesamtkunstwerk*, the total work of art that had been sought by Gropius and his colleagues within the Weimar manifestation of the Bauhaus. This concept of unification had never been included in the Pure Design ideology or the Dewey principles. This distinction

between the Dewey and the Bauhaus methodologies would become another disparity between Hudnut's intensions and Gropius' agendas for not only Harvard's curriculum but architecture as a whole.

The fundamental differences can be seen between Gropius profound belief that within the preliminary course an objective universal visual language that could be used and understood by everyone in a collective and collaborative community would be discovered and disseminated. Gropius sought "a universal language of form that would represent the elimination of social as well as national barriers." Hudnut, translated Gropius' aims as "impersonal and endlessly standardised therefore excluding the joyousness of life." Hudnut believed that architecture could only reach people on an emotional plane if it spoke "its own language in an eloquent way." It would seem that the development of an elitist language of form specifically by architects for architects to eloquently discuss and explain their idiosyncratic aims and ideals flew in the face of any ground made to this point in architectural history in uniting architecture with man's physical, emotional, or psychological needs. Gropius and other Bauhaus disciples felt the attributes of universality and egalitarianism were vital components in bringing art and architecture into the hearts and minds of those who used it. When discussing Gropius' fundamental aims within architectural education in the United States Pearlman stated:

At the Bauhaus and now at the GSD, Gropius was seeking to end the individualistic era so utterly unrelated to the collective life of man. With a new language providing the 'common key' for understanding the visual arts people can believe again in the basic importance of art and architecture in their daily lives.³³⁸

³³⁵ Naylor, The Bauhaus Reassessed.Sources and Design Theory, 9.

³³⁶ Pearlman, "Joseph Hudnut's Other Modernism at the Harvard Bauhaus," 21. As discussed by Wick "Morris beliefs in the joy of ones efforts manifesting in the end product failed to completely mesh with industrialisation and mass production by remaining too expensive for the middle class therefore his work remained elitist."

³³⁷ ibid., 471. I would assert the notion of a private language, architecture's own language, leads architecture down a path of elitism and seriously limits the notion of a universal understanding not just between architectural and design disciplines but mankind.

³³⁸ ibid., 470. It is also important to appreciate that this universal visual language was to serve as a "common denominator' for the understanding of all visual arts.

4.5 Gropius Joins the Harvard Turf Wars

On arrival in 1937 Hudnut greeted Gropius with: "Welcome to America where happiness and success awaits you." 339



Figure 27: Ise and Walter Gropius, New Hampshire 1930

The majority of the old guard Harvard faculty members found it increasingly difficult to function within the new modern regime of the GSD and one way or another they became casualties of it. Gropius would join the school and the impassioned discourse that prevailed in 1937, but he had impressive competition for this position. Hudnut had initially carried out his search for a new design professor in secret. He kept only Conant and Barr from the MoMA informed. Barr had approached J.J.P Oud, Mies van der Rohe and failing these two Gropius about the possibility of working in collaboration with an American architect on a museum building in New York. Oud declined for personal reasons which left Mies and Gropius. Due to lack of support from the museum trustees the collaboration was never to eventuate, but Hudnut quickly took up the conversation with the Europeans. Hudnut visited Mies in Berlin

³³⁹ Alofsin, *The Struggle for Modernism. Architecture, Landscape Architecture and City Planning at Harvard,* 119. On arrival in New York Gropius was greeted by this telegram from Hudnut.

³⁴⁰ Pearlman, *Inventing American Modernism*: 65. Barr proved to be insightful to Hudnut's search as the museum had been looking to engage a European modernist to collaborate with an American architect on a new building at the museum.

³⁴¹ ibid.

³⁴² ibid., 17.Hudnut believed Oud would be the most successful in America, Mies to have given little to education but was the most original of the Europeans and Gropius was a leading educator and more likey to forge ties with industry.

and Gropius in London during the summer of 1936. Mies was the preferred candidate as Hudnut summarises in a memo written to Conant after his meetings with both men:

Mies is perhaps the most original architect among the modernists. He impresses me as a vigorous and altogether honest person who seems to have every quality for leadership in the teaching of architecture. He is somewhat vain and I imagine that he might be more difficult to work with than Mr Gropius.³⁴³

Pearlman points out that Conant's scientific background and a strong interest in German culture and education inclined him towards modern architecture and ultimately the Bauhaus, virtually guaranteeing Mies' or Gropius' selection.³⁴⁴ Ultimately Mies' vanity and personality was his downfall and Gropius' perceived affability won over Conant, who had as much to say in the final decision as Hudnut.³⁴⁵ In December 1936 Gropius was offered a life appointment at the GSD and assured that he would be "the greatest possible value to the cause of architects in this country."³⁴⁶ As Herbert Read's speech to farewell Gropius from England to Harvard in 1937 gives a clear appreciation of the magnitude of Gropius's support within international architecture at that time. Read stated: "Gropius belongs to the whole world."³⁴⁷ In contrast to the perception that Gropius was a highly valued, affable, well dressed and stylish European, Hudnut was described by a colleague as "the least modern individual you could find."³⁴⁸ His tweeds, his unremarkable appearance and his modesty belied his innovation and intellectual prowess. The stylish Gropius and the understated Hudnut would attempt to work side by side for some fifteen years at Harvard's GSD. Despite the differences that would mount between

³⁴³ ibid., 67. Needless to say Mies' vanity, impatience, his dislike for Gropius and the fact that Gropius was also being considered for the position cost him the job opportunity.

³⁴⁴ James Conant, "Mr Conant and Germany; A Presidential Autobiography " *Harvard Alumni Bulletin* 38 (1936), 812-19. Conants beliefs in the German education progress would ultimately be beneficial to Gropius as the relationship between Gropius and Hudnut became untenible and Conant would have to play peace keeper and eventually make decisions over both men.

³⁴⁵ Pearlman, "Joseph Hudnut's Other Modernism at the Harvard Bauhaus," 464.

³⁴⁶Pearlman, *Inventing American Modernism*, 70. Gropius had startegically negotiated the terms of his position particularly in relation to retirement. This proved to be strategically potent in out foxing Hudnut's plan to outlast him at the GSD.

³⁴⁷ Harlan Hoffa, "Walter Gropius Innovator," *Art Education* Vol 14, no. 1 (1961), 12. After working in London for three years Gropius was the guest of honour at a dinner in London on the occasion of his departure to Americas.Guests included Breuer, Moholy-Nagy, Maxwell Fry, Sigfried Giedion, Wells Coates and Julian Huxley.

³⁴⁸ Pearlman, *Inventing American Modernism*, 11. Hudnut was was considered to be quiet and shy with an unremarkable presence unlike his more fashion conscious contemporaries Gropius and le Corbusier.

these two colleagues, Pearlman claims that, "The GDS was so successful in disseminating its brand of modern architecture and urbanism in an era of unprecedented building that is no exaggeration to say that the school transformed the physical landscape worldwide." ³⁴⁹

Upon arrival at Harvard's GSD in 1937 Gropius' initial statements were ambiguous; perhaps in hindsight they illuminated Gropius's skill for dual and persuasive rhetoric. Faculty member Holmes Perkins (1904-2004) recalled: "on the one hand Gropius resolved to collect a thorough knowledge of the country first before presuming to help Hudnut shape a new pedagogy. On the other hand he told numerous American audiences that the Bauhaus education had universal validity and regarded it as a master plan." ³⁵⁰

Almost immediately a fracture began to manifest between the aims of Hudnut and Gropius. In an explanation of his views on a "Harvard-Bauhaus" to his colleagues Hudnut stated, "it is far from our idea to establish an imitation of the Bauhaus here. Any system of education has to be judged in reference to time, place and circumstance and that any philosophic abstractions in respect to it are decidedly dangerous." Hudnut had wanted to employ a modernist architect for the GSD not an educational blueprint. Unfortunately for Hudnut, this was not what he would to receive, as Gropius would clearly demonstrate. Initially both Hudnut and Gropius collaborated well in revamping the curriculum to ally the three disciplines of architecture, landscape architecture and city planning towards each other and modernism. Gropius and Hudnut also worked well together to build a new faculty. It was only as Gropius began to attempt to recruit other Bauhaus masters that the tensions would emerge. 352 Gropius' selection of Bauhaus masters considered appropriate to disseminate the Harvard- Bauhaus curriculum was influenced by an important credo within the Bauhaus ideals-the universal. Gropius wanted all members of society to become appreciative of art and architecture. Therefore the teachers would need to also be interdisciplinary and understand form when expressed two dimensionally and three dimensionally. Hudnut was not a disciple of the

³⁴⁹ ibid., 1.

³⁵⁰ Pearlman, "Joseph Hudnut's Other Modernism at the "Harvard Bauhaus"," 464. Gropius was keen on arrival at Harvard to pick up where he had left off ten years earlier in dessau.america clearly met Gropius' expectations.

ibid., 467. Holmes Perkins stated in an interview with Jill Pearlman that he felt Gropius would never had said directly that he wanted to impose something foreign as he insisted on democracy. But he did really want to recreate the Bauhaus at Harvard.

³⁵² ibid.

universal but instead wanted commonality of understanding and appreciation only within the disciplines of the GSD. 353

It is obvious from the debates between Hudnut and Gropius that reconciliation between the two men over how and where the Bauhaus methods should and would be used was not to eventuate. Unfortunately for Gropius, Hudnut was his superior and therefore Gropius would need to formulate his way forward carefully. As an effective propagandist of his own beliefs, the opportunity to hold a prestigious post at Harvard was not lost on Gropius. Harvard was a highly visible stage for him to occupy and spread his ideas on modern architecture.³⁵⁴ Gropius had felt that his architecture had never been fully appreciated in Europe, but prior to his arrival at Harvard he had felt confident that his work would reach a wider and more receptive audience in the United States.³⁵⁵ It was believed by many that American architectural pedagogy had not found a home-grown comprehensive alternative to the Beaux-Art pedagogy and system of design which was becoming increasingly irrelevant to architects within the rapidly changing environment they were now designing for. 356 Thus, Gropius' arrival was keenly anticipated by many American architects and viewed as a remedy to this situation. 357 Gropius would find great support for his arrival from those that knew him. Acclaimed historian and art critic Siegfried Gideon (1888-1968) wrote, "The power to diffuse his influence over his surroundings is an attribute of this great educationalist. Walter Gropius was predestined for this role."358

Enrolment in architectural schools generally surged in the United States in the few years prior to its involvement in WWII. This was due to economic improvement and constant talk of

³⁵³ ibid., 466. Unlike Morris, Ruskin or Gropius, Hudnut had always argued that architecture differed from all other arts in the part in played towards building communities.

ibid., 464. Although Gropius was dubious about a university as a breeding ground for architects he was reassured by Hudnut's rejection of the Beaux-Art system.

³⁵⁵ ibid. Hudnut had promised to help Gropius set up an architectural practice in Cambridge America and find commissions and advisory positions upon his arrival.

³⁵⁶ Pearlman, "Bauhaus in America." Edward Larabee Barnes stated that the Beaux-Art method of drawing in itself was totally irrelevent to the contemporary architectural practice as it was excessively slow and contained little expression of construction techniques.

Alonfsin also states that The International Style exhibition of 1932 solidified Gropius as a celebrity and gained a cultural imprimtur of his work.

³⁵⁸ Sigfried Giedion, *Walter Gropius* (London: The Architectural Press, 1954), 53. Giedion wrote this book to coincide with an exhibition celebrating the awarding of the "San Paulo Prize" for contribution to contemporary architecture to Walter Gropius in 1954.

building. Most architectural school's enrolments jumped twenty-five per cent whereas with Gropius now completing his first full year Harvard's GSD, enrolments there jumped by forty per cent. The lure of the Bauhaus master was great and Bruno Zevi (1918–2000) a former Harvard student and art critic referred to Gropius' arrival at Harvard as "a bomb being placed in the foundations of academic training." Hudnut, as a pioneer in the path towards modernism in American architectural pedagogy, was well aware of the state of both architecture and architectural education in the United States and was initially genuinely eager to have Gropius at Harvard. This eagerness, for reasons we will investigate, would subside.

Before addressing Hudnut's difficulties or regrets and any perceived or real contributions Gropius' made to Harvard's GSD, it is again necessary to acknowledge that Hudnut had not employed Gropius for his pedagogical doctrines. Hudnut had wanted an architect to push the modernist agendas within architecture itself. Hudnut saw the GSD was a platform for this. The ideas of collaborative work between the disciplines of architecture, landscape and city planning in practice was one of Hudnut's principle goals and Gropius' architectural examples and voice were, I believe the tools Hudnut felt would advance these agendas.³⁶⁰

As eager as Hudnut was initially to have Gropius at the school, Gropius' was equally as eager to have his Bauhaus colleagues Albers and Breuer there as well. From the moment Gropius arrived at Harvard he began urging the GSD to bring these two vital personalities from England and Black Mountain College respectively. "Gropius insisted that both Albers and Breuer could offer GSD students a modern design education that no American instructor could match." 361

4.6 Harvard and the Bauhaus Artist - Albers

To both Gropius and Hudnut, Albers personified the Bauhaus' first year preliminary course. Unfortunately although both men shared this view it was this parity that would illuminate the

³⁵⁹ Pearlman, *Inventing American Modernism*, 216. Bruno Zevi, a Gropius student from 1940-1940 went on to become one of Italy's leading architectural polemicists. Although he had supported Gropius's efforts at Harvard initially Zevi did eventually find fault in Gropius teachings.

³⁶⁰Pearlman, "Joseph Hudnut's Other Modernism at the Harvard Bauhaus," 465-66. Pearlman also discusses that after WW11 Gropius had never intended to return to Germany and the oppotunity to work in America clearly met his expectations of being able to start again where he had left off with the Bauhaus.

³⁶¹ ibid., 467.

reasons why Gropius wanted Albers and Hudnut did not. The first year preliminary course had served as the moral fibre of the Bauhaus' curriculum and in Gropius' eyes, Albers was the backbone of the preliminary course. Gropius wanted a preliminary course at Harvard to serve as an "indispensable prerequisite" to all further study, just as it had within the Bauhaus. 362 Gropius wanted all GSD students to undertake a preliminary course for six months before embarking on their chosen discipline. Gropius believed that the preliminary course, if taught as Albers instructed it, embraced the two primary aims at the Bauhaus. These aims were, to foster individual creativity and to establish a universal language of form accessible to all people, regardless of nationality or social status.³⁶³ Hudnut claimed budgetary limitations as the reason he could not engage Albers. He did in fact have several misgivings about Albers. Albers' leftist politics and his approach to design were at the forefront of Hudnut's concerns. Although the universal nature of a visual language was also a focal issue for Hudnut it was most perceptibly the fact that Hudnut considered Albers a painter engaging with form and space in two dimensions not an architect who engaged three dimensionally that worried Hudnut. This concern made Hudnut feel unsure as to what Albers might bring to the GSD. 364 This illustrates the disparity of Hudnut and Gropius' opinion about Albers. The fact that Albers was an artist was the precise reason Gropius wanted him.

Despite Gropius' relentless efforts to have Albers join the Harvard faculty it never eventuated. Hudnut had made a somewhat empty offer of a position at Harvard to Albers on considerably less remuneration than Albers was receiving at Black Mountain at the time. Albers declined. Pearlman suggests that Albers did make a few short visits to Harvard where he gave several lectures to the Fine Arts and GSD students. By limiting Albers' pedagogical influence to sporadic and fleeting visits and failing to meet Albers expectations financially, Hudnut had, in one most strategically placed cut effectively limited the volume of Bauhaus voices at Harvard. Gropius had believed that Albers was crucial to the preliminary course and therefore crucial to the implementation of the universal. As discussed in an earlier chapter Albers was always aware of

³⁶² Hans M Wingler, *Das Bauhaus*, 1919 -1933 Weimar, *Dessau*, *Berlin* [The Bauhaus: Weimar, Dessau, Berlin, Chicago] (Rasch: Bramsche 1962), 108.

Pearlman, "Joseph Hudnut's Other Modernism at the Harvard Bauhaus," 469. Gropius' views that a universal understanding of architecture should be accessible to everyone never changed. Hudnut seemed to only want certain academic disciplines to share a knowledge of the fundamentals. Leaving architectural appreciation as elitist.

³⁶⁴ ibid.

Gropius' struggle within this elite and time honoured university and had, I believe, deduced himself that the advancement of the universal visual language within form was a more foreboding challenge within the GSD than any he encountered at Black Mountain or Yale in the Fine Arts department. Theodore Dreier stated in an interview with film maker Judith Pearlman that upon returning to Black Mountain after a short sabbatical at Harvard Albers stated he would find it impossible to work in "such a mausoleum." 365

4.7 Harvard and the Bauhaus Architect- Marcel Breuer

Conversely it was without any internal struggles or debate between Hudnut and Gropius that architect and furniture designer, Marcel Breuer, who had studied and taught at the Bauhaus, joined the GSD in 1937 only a few months after Gropius. He remained at Harvard and as Gropius's partner in their Cambridge architectural practice until 1946 when a falling out with his Bauhaus and Harvard colleague saw Breuer leave Harvard and Cambridge to set up his own architectural practice in New York. Interestingly, the relationship was seen on the surface as a successful one, as Breuer flourished in the role of teacher at Harvard and his architecture was well received in the United States. Within Gropius and Breuer's nine year period together on the GSD campus their roles within pedagogy congealed, with perhaps Breuer's role rising to the top. Students had looked to Gropius for more of a philosophical perspective and they looked to Breuer for inspiration, spatial relationships, practical direction and the behaviour of materials.³⁶⁶



Figure 28: Breuer with GSD students

³⁶⁵ Pearlman, "Bauhaus in America." Film maker Judith Pearlman is no relation to author Jill Pearlman.

³⁶⁶ Pearlman, *Inventing American Modernism*,111. Upon graduation from Harvard Harry Seidler, worked with Breuer in New York before emigrating to Australia where his Breueresque works a still celebrated some fifty year later.

The skills Breuer had acquired and become renowned for with his Bauhaus furniture, particularly the Wassily Chair had remained paramount in his later works and permeated into his Harvard teachings. Harvard student Edward Larrabee Barnes (1915–2004) said on visiting the home Breuer had designed for himself in Lincoln Boston: "I was dazzled by the sureness of his touch, Breuer's ability to combine totally dissimilar elements and materials and yet not crowd the space. All unrelated yet held together by their exact placement. This quality of tension and contrast seems to be a true expression of our lives at that time."³⁶⁷



Figure 29: Breuer at home, Lincoln Massachusetts 1940

Breuer was looked up to as having tremendous design ability, and more so than Gropius or any other faculty member Breuer was considered the "taste-maker "and the "artist" of the studio. These accolades afforded to Breuer, not Gropius, highlights the question of Gropius' agenda in the United States as an architect as Hudnut had hoped for, or as the educator Gropius was also determined to be. These agendas would colour Gropius' relationship with Breuer who had always, even during his Bauhaus days, seemed to be able to accommodate within his own abilities both the roll of eminent teacher, architect and designer par excellence

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³⁶⁷ Edward Larrabee Barnes, "Remarks on Continuity and Change," *Perspecta* 9/10(1964-66), 292. Gropius and Breuer were among a group of modernist architects that built homes on land owned by Boston philantropist Helen O Storow who also undertook to pay building costs. She rented these homes back to the architects with an option for them to buy.

³⁶⁸ Pearlman, "Joseph Hudnut's Other Modernism at the Harvard Bauhaus," 467.

without needing to rely on any other faculty member for support. ³⁶⁹Gropius had, at every turn in his career, as an architect or an educator sought and succeeded in surrounding himself with some of the best artists, designers and architects of the time. He had succeeded in this at the Bauhaus, with his engagement of such eminent artists as Itten, Klee, and Kandinsky. Additionally within his architectural practices Gropius had relationships with Peter Behrens, Adolf Meyer, (1866- 1950) Maxwell Fry (1899-1987) and now Breuer. ³⁷⁰ Gropius had also due to his inability, lack of confidence and dislike of drawing engaged draftsmen to ensure his designs were received with appropriate respect. ³⁷¹ He had again now achieved success with Breuer by his side at Harvard.



Figure 30: Frank house by Gropius and Breuer Pittsburgh Pennsylvania

Award winning architectural critic Ada Louise Huxtable wrote that "The work of Walter Gropius was uneven, seemingly influenced in quality by the men with whom he collaborated." Recognition of authorship of the work done by the Gropius/Breuer architectural practice had also become an issue, with Breuer feeling that Gropius gained undue credit for the firm's work. Chermayeff, who had replaced Moholy-Nagy after his death in Chicago, stated that, "Marcel

³⁶⁹ Christopher Wilk, "Marcel Breuer: Furniture and Interiors," *MoMA* 19(1981), 2. Wilk, stated in the 1981 MoMA Breuer exhibition that Breuer alone had fulfilled Gropius' desires.

³⁷⁰ Gropius would in his next association form The Architects Collaborative with a group of Harvard Alumni.

Pearlman, *Inventing American Modernism*, 20. Gropius referred to his lack of drawing ability as "My absolute inability to bring even the simplist design to paper." His remedy to the situation was to decide that drawing was a "support activity" to architecture.

³⁷² ibid., 110.

Breuer did all the work that Gropius claimed. He (Breuer) had left Gropius because he claimed all to be the author, the designer of their projects together."³⁷³ This dispute would lead to a downfall of their relationship. It could be concluded that Breuer had become aware of his role in Gropius' personal agenda within the American context or perhaps he had always been aware but was now, having himself used Gropius' fame for his own advancement and established enough credibility in his own right could now, successfully move on alone.

4.8 Gropius and Hudnut-A Symbiotic Relationship

It seems fair to say that Gropius was not averse to conflict during his pedagogical career from fractions both external and internal. The unrelenting political struggles he engaged in as founder of the Bauhaus at Weimar have been well documented, as has his conflict with Itten who bore the brunt of Gropius' shifting ideals while shaping the Bauhaus toward industry. Within the United States there would also be groups harbouring animosity toward Gropius and his work. Shortly after crossing the Atlantic, Gropius lectured for a number of Boston Architects and included slides of his own work. The audience, many of whom were Harvard alumni, "were repelled by Gropius' work, seeing not architecture, but engineering; their disenfranchisement from Harvard began immediately." ³⁷⁴ Gropius' personality and perception of his role at Harvard also created tensions of their own. Some faculty members felt that Gropius perhaps took Read's accolades too literally, seeing himself in far too favourable a light. After a time short time in his new position at Harvard President Conant would describe Gropius as "acting as if he were the Dean and the centre of the world of architecture. He was not a convenient or pleasant man as a faculty member." Amid undertones of mistrust and dislike of Gropius and his modernist leanings, Hudnut would emerge as the next major opposition to Gropius. Patterns reminiscent of Bauhaus conflicts would also emerge.

Like Itten, Hudnut and Gropius had seemingly begun with a common goal but just as at the Bauhaus, time had revealed otherwise. Suffice to say Gropius was a committed but, more

³⁷³ ibid. Scholars J.Driller and W.Nerdinger both credit Breuer with the majority of the houses Gropius and Breuer built together as "principally or entirely" the work of Breuer.

³⁷⁴ Alofsin, *The Struggle for Modernism. Architecture, Landscape Architecture and City Planning at Harvard*, 135. Nerdinger wrote of a number of lectures given by Gropius that also received criticism.

³⁷⁵ ibid., 239. Richard Filipowski who was Gropius choice of teacher of his Harvard preliminary course, although fond of Gropius also discusses in his writings that Gropius could be very aloof.

importantly a strategic opponent. The relationship between Gropius and Hudnut at the GSD had proved within the first few years of their fifteen years together to be a difficult one. Their personalities and their apparent beliefs would be exposed and challenged in a very personal and public way on the Harvard stage. Their difficulties with each other would become quite public and intrusive to both members of the faculty and student body alike.³⁷⁶ While both men continued to clash at Harvard, this particular intersection of personal characteristics illuminates some interesting dependencies each man had on the other. I would assert that Gropius and Hudnut had a symbiotic characteristic to their relationship. This reciprocator-like manifestation between the two men played a significant role in their failure, not their success, to augment a cohesive pedagogical programme together. 377 Both were dominant personalities within the Harvard environment, with strong agendas to address, but I would contend that neither man was able to successfully reach their goals alone. In considering the discourse surrounding both Gropius's and Hudnut's successes and failures I have noted that although Hudnut had anticipated Gropius would be the other half of his modernist crusade in the United States, and Gropius had certainly initially needed Hudnut as an ally in his own American endeavours, both men seemed to require one another for something more to fill the voids in their individual competence. Each of these men's strengths and weaknesses seemed to act as a counter to the others. Although Hudnut could draw with the precision equal to that of a Beaux-Art graduate he was no longer a practicing architect. Therefore he lacked the ability to lead by example. Gropius on the other hand still practiced as an architect but oddly lacked drawing skills. Hudnut himself described Gropius as "an excellent propagandist able to weld great influence." 378 Indeed Gropius enjoyed the public domain whereas Hudnut was less egocentric on a public stage. Hudnut was remembered by some from his lectures as "a small man with a lisp, audible only as far as the second row."379 Although both men were accomplished writers, Gropius wrote and spoke predominantly to a scholarly architectural audience while Hudnut, in response to his own lack of oratory skills, developed a highly eloquent writing style that reached both

³⁷⁶ Pearlman, "Joseph Hudnut's Other Modernism at the Harvard Bauhaus," 473. Harvard student publication "The Crimson" depicted the dispute as completely personal and not based on philosophy. Gropius tactically used the student publication and student voice to rally support when Hudnut cancelled the preliminary course in 1952.

³⁷⁷ Varnelis, "The Education of the Innocent Eye," 216. Varnelis states that due to fixations at Harvard it failed to stake out an autonomous position in the field of teaching.

Pearlman, "Joseph Hudnut's Other Modernism at the Harvard Bauhaus," 464. In believing that Gropius would be a great example as a modernist architect not a teacher, Hudnut had underestimated the charismatic nature of Gropius' personality and the 'devotion and personal enhtusiasm" his students would afford him.

³⁷⁹ Alofsin, The Struggle for Modernism. Architecture, Landscape Architecture and City Planning at Harvard, 237.

academics and mainstream the United States in writings for journals. Hudnut purposefully aimed at a wider demographic than Gropius, including academics and the general public in his readership.³⁸⁰

It becomes clear the longer these two men engaged on the Harvard stage that Hudnut was in fact mistaken in his initial thinking that Gropius would be any easier to get along with than the autocratic Mies. The successes and accolades given to the achievements of the GSD on the architectural landscape in the United States during this period bellies the struggle contended between Gropius and Hudnut and their pedagogical agendas. Beyond the distinctions of aims and personalities, it would be the relevance of history within architectural education and the inclusion of a preliminary course, predominantly because it contained a universal visual language that would create the impasse. Unfortunately Gropius and Hudnut both failed to overcome these differences. Hudnut would ultimately not find Gropius to be the affable and agreeable colleague he had expected.³⁸¹

4.9 The On Going Fight between Hudnut and Gropius

In 1937 as the school reopened for the year Hudnut stated, "I think it highly probable that we shall think of nothing but war now for the next five or six years"³⁸² Although the United States were not committed to the initial WWII war effort, by 1942 the impact of the war had reached Harvard. During this period John Humphreys, an elder faculty member, stated to a colleague, "the school is very grim these days the students we have nowadays are an odd lot-mostly 4-Fs and foreigners- the men that is, and of course the women don't count."³⁸³ His somewhat patronising account illustrates the changing situation towards an impending cultural swing and the emergent, more democratic, student landscape which brought with it a period of change and vibrancy at the GSD. In 1945 faculty members returned from the war effort and war

³⁸⁰ Pearlman, *Inventing American Modernism*, 127. Hudnut wrote in both academic journals to reach his scholarly colleagues worldwide but he also wrote in House and Garden and Mamoiselle to assist the "perplexed housewife in her quest for good taste." He aimed to widely share his reviews on architecture.

³⁸¹ Pearlman, "Joseph Hudnut's Other Modernism at the Harvard Bauhaus," 464.

³⁸² ibid., 200. Harvard would undergo many changes during the war with staff leaving to assist in the war effort, women being taken into the programme and buildings being used to accommodate soldier training. Some of these changes were temporary and some permanent.

³⁸³ ibid. From the end of WW11 women were merely retained within the progamme till in 1948 when the faculty voted officially as quoted by Pres.Conant " as a matter of nothing more than convenience and custom" to admit women on a permanent basis.

veterans crowded into the School of Design. The GI Bill's financial support for veterans brought the enrolment policy at the GSD closer to President Conant's view of a democratic institution and broadened the student demographic by allowing many well qualified students who would not normally have afforded a professional education the opportunity to enter the programme. The removal of both the economic and gender barriers allowed a particularly talented group of students to enrol.³⁸⁴

The post WWII climate at Harvard seemed to play right into Gropius' hands in a number of ways. In spite of or perhaps because of his eroding relationship with Hudnut, Gropius' fight towards a Harvard-Bauhaus seemed to gain momentum. One of the most significant contributions Bauhaus pedagogy had offered education to date was the *Vorkurs* and this postwar period was possibly Gropius' most opportune moment during his tenure at Harvard to press his case for a Harvard version of the Bauhaus *Vorkurs*.

Of primary assistance to Gropius' cause was the increase in student numbers during this time, which increased the need to engage additional staff. Secondly, the student body was now made up of both men and women, a phenomenon accepted, albeit for the same reasons of depleted student numbers due to a war, as years earlier at the Bauhaus. Thirdly, the inescapability of change in the United States brought about by WWII offered Gropius numerous opportunities to mark out new paths forward within the GSD, particularly in relation to his Bauhaus ideals and methodologies. The most obvious stage for the dissemination of his ideals was the studio, and since the increased numbers in students meant that Gropius would need to employ new teaching staff, beyond seeking to employ Bauhaus masters and graduates, Gropius utilised a Bauhaus tradition of students becoming teachers. He employed several of his past Harvard students to assist in the studios which certainly helped disseminate the Bauhaus ideals throughout the courses gaining some degree of commonality within the visual language prior to any principle *Bauhaüsler* delivering it.

³⁸⁴Pearlman, *Inventing American Modernism*, 201. The GI Bill was brought about in 1944 under the Pres. Franklin Roosevelt. It was an omibus bill that allowed veterans higher education. In 1956 by the time the original bill ended 7.8 million WW11 veterns had participated in educational programmes.

4.10 The Preliminary Interdisciplinary Course

Gropius, ever the strategist, would continue throughout his entire fifteen year tenure at Harvard's GSD to fight the larger battle against Hudnut in defence of his Bauhaus inspired preliminary inter-disciplinary course that included a universal visual language. 385 Also aiding Gropius in his charge towards the inclusion of this course was the introduction of a greater demographic of students which seemed more in line with Gropius and President Conant's desires for democratic education. This would, due to Conant's interest in democratic education and the German education system align Conant³⁸⁶ with Gropius and assist in his most decisive battle with Hudnut who Gropius now saw as his nemesis. 387 The frustration Gropius felt toward Hudnut is confirmed in a conversation Gropius had with his close ally architect and teacher Chermayeff where Gropius said: "I have fought like the dickens in favour of a decent Basic Design course in our School: and, on account of non-understanding on the side of Dean Hudnut, I have never succeeded." ³⁸⁸ Gropius had been unable to establish a *Vorkurs* before the war but he had in an informal way managed to bring many of its tenets into the Harvard curriculum. From the late 1930s Gropius and a number of American GSD instructors intrigued by the Bauhaus principles had been incorporating Vorkurs exercises and principles into their studios. 389

The post war era would mark the beginning of Hudnut and Gropius' final and most decisive battle. Hudnut leveraged his superior administrative position and took numerous definitive steps to limit the influx of Bauhaus ideals into the Harvard programme because he feared that

³⁸⁵ Alofsin, *The Struggle for Modernism. Architecture, Landscape Architecture and City Planning at Harvard*, 229. Gropius had from his first contact with Harvard negotiated the security and continuation of his tenure. He used this 15 years later to outfoxed Hudnut by staying on beyond retirement age and thawt Hudnut's aims against the preliminary course.

³⁸⁶ Pearlman, "Joseph Hudnut's Other Modernism at the Harvard Bauhaus," 459. Pearlman states that Conants deep interest in German culture and education would ultimately align him to Bauhaus thinking. In the final battle for Gropius' preliminary course Conant would be led by Gropius.

ibid. Pearlman states that Conants deep interest in German culture and education would ultimately align him to Bauhaus thinking. In the final battle for Gropius' preliminary course Conant would be led by Gropius.

³⁸⁸Pearlman, *Inventing American Modernism*, 206. Gropius blamed Hudnut directly for thawting any and all aspects of the Basic Design Course and limiting the influx of Bauahus principles particulary the refusal to engage Albers at Harvard.

³⁸⁹Pearlman, "Joseph Hudnut's Other Modernism at the Harvard Bauhaus," 470.

"the whole GSD would be taken over and become a Bauhaus." Gropius, in response, used his highly developed lobbying skills to continue in his battle to bring the Bauhaus to Harvard. But the preliminary course Gropius sought was still some years off.

When the post-war era began at Harvard, a new and much anticipated curriculum for first year students began to be established. This new programme required all first year students of architecture, landscape architecture and planning to enrol in two papers, Planning One and Design One. The planning course was considered the central course for first year students and exposed them to and explored the common principles between the three disciplines. It was also taught by a team of inter-disciplinary instructors. This course was considered, by most faculty members, including Gropius, as a strong addition to the GSD programme.³⁹² The first year design course Design One, as it was known, was afforded no such salute from Gropius. This was not the course Gropius wished to see at the centre of the first year programme. In 1946 in what Gropius described as "infuriating behaviour" Hudnut hired a young American teacher George Le Boutellier to teach the first year Design One theory class. 393 Le Boutellier renamed the course Theory and Practice of Design. He introduced students to "the fundamental concepts of space, form and function and the relationships by which these are expressed and controlled." ³⁹⁴ Gropius described Le Boutellier as "a half-baked teacher" and his course as "never being sound." ³⁹⁵ In a very superficial way Le Boutellier's course drew on Bauhaus principles by introducing the manipulation of materials but the course is remembered by students as "weak with no real understanding of why we did things." ³⁹⁶ Unfortunately for Gropius, because Hudnut had strategically engaged Le Boutellier's as an instructor in Architectural Sciences in Harvard College and not the GSD, Gropius was powerless to replace

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³⁹⁰ ibid., 467.

³⁹¹ ibid., 218. Gropius efforts were sustained. After 12 years of battling Pres. Conant finally stepped in and funded the course with a \$25,000.00 contribution from his own fund superseeding Hudnut's cries that the school that the school could not afford Gropius' course.

³⁹²Pearlman, *Inventing American Modernism*, 203.

³⁹³ ibid., 206. By this stage in the GSD students and faculty alike were beginning to believe that the dispute between Hudnut and Gropius was not philosophical but personal. Pres.Conant had to attend all faculty meetings to act as a broker between the two men.

³⁹⁴Pearlman, "Joseph Hudnut's Other Modernism at the Harvard Bauhaus," 470.

³⁹⁵Pearlman, *Inventing American Modernism*, 206. Gropius was extremely upset by the course content and the fact that Le Boutellier was brought in as he described it as "over his head." Hudnut had used his authority as Dean to ignore Gropius' ideas for the preliminary course.

³⁹⁶ ibid.

him.³⁹⁷ Still Gropius had a completely different course in mind for first year students, and the debate between Hudnut and Gropius over the use of a universal visual language within this course was fundamental to their acrimonious relationship.

In fact, this preliminary course was considered by Gropius to be essential in the education of all designers, no matter what their field of specialisation.³⁹⁸ The Basic Design course, as Gropius would refer to it, would in Gropius's eyes develop the student's imaginations to the fullest and enable them to discover a path towards creativity. The course was essential for the establishment of a "common language of visual communication."³⁹⁹ Basic Design was to "foster creativity and develop a new language of vision. These were to be integrally related," synonymous with the Bauhaus aims. ⁴⁰⁰ It is well established in historical writings that Gropius had always seen a version of the Bauhaus *Vorkurs* as the best opportunity to spread the Bauhaus doctrines, and the GSD Basic Design course was his most opportune moment to embed the *Vorkurs* teachings into Harvard. In 1950, Gropius finally succeeded in directly exposing the GSD student to the *Vorkurs* in a retooled version of Le Boutellier's Design One. In a surprising move and against Hudnut's advice President Conant provided the funds and supported the course. Richard Filipowski (1923–2008), a teacher at the Chicago Bauhaus with Moholy-Nagy, before his untimely death, was employed to deliver the course for a two year trial period. ⁴⁰¹ The Basic Design course was now renamed Design Fundamentals.

Hudnut remained unsupportive by reiterating to Filipowski and Gropius the temporary nature of the course. Gropius was not deterred and he proceeded to set up the workshops believing that abstract design would finally achieve the pivotal place he had always wanted for it.⁴⁰² An end of year exhibition was held in 1952 to display the results of the retooled course, and the catalogue, with a Herbert Bayer inspired graphic content explained that the work represented

³⁹⁷ Alofsin, *The Struggle for Modernism. Architecture, Landscape Architecture and City Planning at Harvard,* 229. Gropius was not consulted on the appointments for the preliminary course.

³⁹⁸ Pearlman, *Inventing American Modernism*, 204.

³⁹⁹Pearlman, "Joseph Hudnut's Other Modernism at the Harvard Bauhaus," 469.

⁴⁰⁰ Pearlman, *Inventing American Modernism*, 204.

⁴⁰¹ Alofsin, *The Struggle for Modernism. Architecture, Landscape Architecture and City Planning at Harvard*, 230. Filipowski, a Polish emigrant to Canada taught for forty years in America and his work moved fluidly between two and three dimensions. This would have made him a more comfortable choice for Hudnut than Albers who remained two dimensional.

ibid. The introduction of workshops into the curriculum via Gropius' Design Fundamentals was another factor that Hudnut found to be a principle distraction from the "architectural experience" as he felt they were too construction and technologically based.

the discovery by the students of the "fundamental architectural elements of function, space, scale, light and colour. The control of these elements gave form and through further experiments led to the organisation of space." Alofsin noted that Gropius was very pleased with the success of the course and that many faculty members were enthusiastic. Alofsin also noted that Hudnut was "appalled at the results of the experiment; the course embodied the abstract formalism in modern architecture, another sign of Gropius' success, that he had fought against. Removing it would become a central objective for Hudnut."

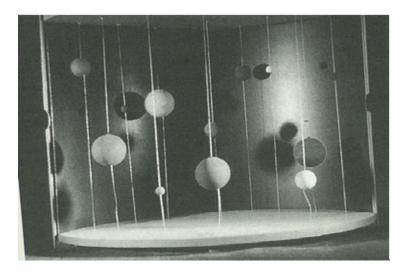


Figure 31: Three-dimensional design exercises by GSD students in Design Fundamentals

Gropius' course, Design Fundamentals in its 1952 mode, symbolised a victory for Bauhaus ideology over what Hudnut had tried to develop as the American system. With the trial period over and both faculty and students overwhelmingly endorsing the course it was possibly not surprising that Hudnut would step in to cancel it. Gropius was, of course furious that Hudnut had cancelled the course he had been fighting for since 1937 and immediately began a campaign for its reinstatement. Gropius was solid in the knowledge that most other American architecture schools now had similar courses modelled after the Bauhaus. He was also well aware that his "whole faculty was in favour of Design Fundamentals." Gropius began to campaign through all available means to reinstate his course that he felt had been dropped

⁴⁰³ ibid.

⁴⁰⁴ ibid., 231.

⁴⁰⁵ By this time Albers was at Yale having left Black Mountain after sixteen years and both Moholy-Nagy and Mies had been very affective in Chicago at IIT.

⁴⁰⁶ Pearlman, "Joseph Hudnut's Other Modernism at the Harvard Bauhaus," 473.

"solely because the dean is against it."⁴⁰⁷In 1952, to alleviate the deafening conflict between Hudnut and Gropius and a climate Alofsin referred to as "engendered jealousy among faculty members, who were increasingly unwilling to collaborate," a committee was formed to consider the future of the Gropius' Design Fundamentals course run by Filipowski. ⁴⁰⁸ Hudnut defended his initial decision to drop Design Fundamentals saying that the GSD could still not afford such a course, and that it was unnecessary and clashed with other more crucial courses, therefore not allowing the student enough time to study professional training or the Planning One collaborative course. To Gropius' dismay, Le Boutillier, who "represented the very approach Gropius rejected," headed this committee. ⁴⁰⁹ The result was that Hudnut jettisoned Gropius' Design Fundamentals course based on Bauhaus principles and combined the old Design One and Planning One courses into one course named Design A. This resolved nothing but time tabling issues, ignoring Gropius' pedagogical content. In protest to Hudnut's dismissal of Design Fundamentals, budget cuts and increased teaching workloads for the now sixty-nine year old, Gropius decided a year before his planned retirement, to resign. ⁴¹⁰

4.11 Universal versus Elite

Gropius's 1919 Bauhaus manifesto, despite his alterations to it in 1928 and in his 1939 American manifesto, *Blueprint for an Architects Education* written for his Harvard scholars never wavered in the call for a universal understanding and appreciation of simple forms and proportions and honest workmanship. His founding request that "architects, painters and sculptors must recognise anew and learn to grasp the composite character of a building both as an entity and in its separate parts" also never changed even as he advanced the Bauhaus theories further into the twentieth century and design education in the United States. ⁴¹¹ Marcel Francisconi discusses in his book *Walter Gropius and the Creation of the Bauhaus in Weimar* that Gropius at this time called for "the development of an artistic culture to be as

⁴⁰⁷ ibid. Gropius used the student magazine The Harvard Crimson as an effective weapon to reach a university wide audience not just that of the GSD.

Alofsin, The Struggle for Modernism. Architecture, Landscape Architecture and City Planning at Harvard, 231. Hudnut was very aware that to allow a preliminary course to succeed so close to his own retirement would diminish all his efforts to retain history as the success of one would mean the demise of the other.

⁴¹⁰ Pearlman, "Joseph Hudnut's Other Modernism at the Harvard Bauhaus," 473.

⁴¹¹ Gropius, "Bauhaus Manifesto and Program."

broadly based as possible and that would not depend on idiosyncrasies of the artistic elite."⁴¹² Gropius believed that to base art on such subjective notions as taste and feeling led to an artist's "sad isolation."⁴¹³ Gropius' belief in Ruskin's theory of the innocent eye, Itten's denouncement of preconceived ideas and both Moholy-Nagy and Albers' consolidations of these theories illustrated a clear commitment by Gropius that the preliminary education should be devoid of influence by anything other than a universal understanding. It is central to note that Gropius sought an individual response using the universal or as he referred to it in his 1948 article "Teaching the Arts of Design" a "foundation of solidarity" to enable each student to respond with their "own spontaneous expression."⁴¹⁴

The references to Gropius 1919 manifesto continue to be obvious within his later manifesto for Harvard, The Blueprint of an Architect's Education. The request for unification of all the disciplines of practical art-sculpture, painting, and hand-crafts as inseparable components of a new architecture are no less evident. The insistence by Gropius that as an introduction to a student's preliminary creative education there be three dimensional experiments harks back to the reformations of Froebel and Pestalozzi. The inclusion of composition in space and experiments in materials were like the three dimensional experiments, pedagogical theories introduced by Itten to the first Bauhaus Vorkurs and subsequent iterations by both Moholy-Nagy and Albers. Tools for self-discovery are listed by Gropius as personal, sensory and practical, therefore once again acknowledging the worth of Itten's pedagogical demands involving students head, heart and hands. Moholy-Nagy's and Albers's course in materials and matière is also referenced with investigations of surface structure and texture. Again in Gropius' Blueprint for an Architects Training Gropius asserted that during the preliminary course: "He [the student] develops his own language of form in order to be able to give visible expression to his ideas. After he has absorbed the elementary studies, he should then be ready to attempt composition of his own inventions."415

⁴¹² Franciscono, Walter Gropius and the Creation of Bauhaus in Weimar: The Ideals and the Artistic Theories of its Founding Years, 68.

⁴¹³ Pearlman, "Joseph Hudnut's Other Modernism at the Harvard Bauhaus," 470. The limitation and isolation experienced through elitism, subjectivity and individuality had been steadily challenged by Goethe (1749 -1832) within the theories of visual perception in his 1810 treatise Zur Farbenlehre.

Walter Gropius, "Teaching the Arts of Design " *College Art Journal* 7, no. 3 (1948), 160. This article clearly defines Gropius's ideas and vision for pedagogy within multiple disciplines. He discusses art, industrial design and architecture as requiring the same motivations in the preliminary year.

⁴¹⁵Pearlman, "Blueprint of an Architect's Education," *Twice A Year* 2(1939), 53.

Although Itten was cast aside in 1923 with his detractors citing his preliminary course as too subjective, his analytical and reductive simplifications to discover the essence within compositions or materials remained relevant to the developing modernist theories of unadorned functionality. Despite Itten's early departure from the Weimar Bauhaus, many of the principles within his version of the preliminary course continued to remain fundamental at the Dessau Bauhaus and beyond, into Gropius' proposals at Harvard. Moholy-Nagy and Albers also continued with many of Itten's fundamental pedagogical goals of democracy, respect and the removal of preconceived ideas that had so succinctly expressed the Bauhaus ethos and distinguished it so unambiguously from the *Beaux-Art*.

For all the claims that the clashes between Hudnut and Gropius were personal and not theoretical I would assert that the issues both men fought over were so entrenched in their personal ideologies that to separate each man's professional methodology from his personal beliefs would be impossible. It would also be misleading to discuss the issue of inclusion or exclusion of their courses in isolation as the courses were totally interdependent on the use or disuse of the opposing doctrine. How and at what stage in the student's education Gropius intended to teach a universal visual language is possibly in hindsight, irrelevant to the argument. Simply put, Gropius wanted this commonality of expression and Hudnut did not. This same belligerence on behalf of both men would also exist in their debates on the inclusion of architectural history in the Harvard curriculum. In addition to the seemingly unambiguous arguments between a preliminary course and history, the differing ideological definition of collaboration was also fundamental to the debate. Notions of who was to collaborate with whom and how collaboration would function vastly differed for both men. Gropius wanted a universal approach and Hudnut wanted a selective collaboration. This created the basis for what I have come to assert is one of the fundamental origins in the failure of architectural pedagogy to meet Gropius's lofty aims of placing architecture universally into the hearts and minds of those who use it.

In short, I would emphasize my belief that the collaboration of an architecture that included only the three selected disciplines of the GSD, as purported by Hudnut, encouraged an elitism that Gropius had denounced some fifteen years earlier in his 1919 manifesto and had never retreated from. The inclusion of a universal language within preliminary inter-disciplinary

education positions the language in a primary role. Gropius and his Bauhaus disciples believed this tactic allowed a more complete dissemination of an understanding and appreciation of architecture, art and design to a much boarder demographic than Hudnut would have encouraged. We already know from Albers' efforts at Black Mountain and Yale and Moholy-Nagy's work in Chicago that the Bauhaus disciples were wholly committed to a wide diffusion of the appreciation of art, design and architecture. At the risk of turning Gropius's manifesto into a catch cry they never flinched from their commitment to the ideology of unified work. Pearlman stated: "For Gropius the collective was everything and "individuum" had always meant only bourgeois narrow-mindedness and egotism." 416

In summation, Bauhaus pedagogy, whether taught in Germany or America, was committed to democratic education and a collaboration of art, design and architecture that could resonate with and for society. Within Gropius' suggestion that all creative disciplines should culminate within architecture and lead to the unification of the arts there is perhaps a parody or perhaps a misunderstanding. Gropius called for sculpture, art and architecture to be embraced together, rather than for art and sculpture to culminate within architecture. The translation of Gropius' proposition in the United States has lead, not to a democratic unification of the disciplines but to an elitist subordination of all other creative disciplines to architecture and this has allowed architecture to characterise itself as the definitive discipline and therefore nullifying the relevance of the universal. Acting as an adversary to Gropius' efforts, I will argue that the adoption of the Moholy-Nagy's New Bauhaus into Mies van der Rohe's (1886–1969) Illinois Institute of Technology (IIT) following Moholy-Nagy's death, Mies' removal of the interdisciplinary aspect of architectural and design pedagogy, and eradication of the preliminary course all together and the tyrannical nature of Mies' pedagogy, coupled with the popularity of his high-rise commissions, inflicted a significant blow upon the understanding of the Bauhaus. As Wick states, "for Mies van der Rohe, who was virtually given a free hand in the conception of a new curriculum at the IIT the Bauhaus teaching methods associated with the name Gropius were virtually irrelevant."417

⁴¹⁶ Pearlman, "Joseph Hudnut's Other Modernism at the Harvard Bauhaus," 471.

⁴¹⁷ Wick, *Teaching at the Bauhaus*, 348. Wick also discusses that Mies and his staff disassociated themselves from the preliminary course and the different orientations of Gropius and Mies in the field of architectural training were recognised by those in that field immediately.

4.12 The Elite

Pearlman implies in a number of her writings that Hudnut was the single loudest voice and obstacle to the inclusion of a universal visual language in American architectural education. One could also, from both her writings, and those of Alofsin, conclude that Gropius was a committed opponent to the inclusion of architectural history within American preliminary design or architectural education. Gropius, supported by Albers, had abolished history in the Bauhaus courses and he wanted to do the same at Harvard. In a memorandum circulated by Gropius during his tenure at Harvard he argued: "as long as we flounder about in a limitless welter of borrowed artistic expression, we shall not succeed in giving form and substance to our own culture." All Conversely, Hudnut would ponder "How without history, shall we hope for expression in architecture?" Yet quizzically, early in Gropius tenure and at the celebration of Harvard's three hundredth anniversary President Conant stated that "the study of the history of knowledge could foster the spirit of essential unity and point to the fundamental unity of feeling which binds together the professors in a twentieth century university." All the study of the professors in a twentieth century university.

Initially perhaps, President Conant had hoped history could unite the two feuding GSD professors. This was not to be with the relevance of historic knowledge providing a principle distinction within the debate. Gropius saw history as an elitist threat to innovation and conversely Hudnut believed historical references enriched the experience of architecture. Gropius had never viewed history as the enlightening force that Hudnut viewed it as. For Gropius it was a clear cut situation. History, the past, "bore no relation to present creation in design." Gropius never succeeded in completely eliminating history from the Harvard curriculum but he did manage to demote it to a much minimised status. The first concession to Gropius' argument came in 1939, two years into Gropius' tenure. History, in the GSD was reduced from three courses to one. Another concession came in 1946, during Gropius' postwar hiatus; and the history course was further demoted to an elective. Hudnut's somewhat

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⁴¹⁸ Pearlman, "Joseph Hudnut's Other Modernism at the Harvard Bauhaus," 471.

Alofsin, The Struggle for Modernism. Architecture, Landscape Architecture and City Planning at Harvard, 228.

⁴²¹ Gropius, "Blueprint of an Architect's Education," 53

indignant response to the post-war diminishment of history was to suggest that "ten courses in history would serve the students well." 422

Both Pearlman and Alofsin discuss the significance and the impact of the International Style on Hudnut's understandings of modernism and how this influenced his understanding of European and by default Gropius' modernism. Alofsin claimed that Hudnut saw the International Style as a reductive functionalism that discarded cultural, spiritual and emotional contexts and symbols from design. From this discourse I would argue then that this influence played a large part in Hudnut's assertion that history was required in pedagogy to enable architecture to retain cultural significance. This was a fundamental driver in Hudnut's desire to retain history within American architectural pedagogy. 423 Sybil Moholy-Nagy certainly believed that the MoMA exhibition in 1932 of the International Style did not convey to America the truth behind European modernism and claimed in 1965 at the second Symposium for Modern Architecture in Columbia that "neither the Dewey disciples or Hudnut, who played such a decisive part in bringing Gropius to America, caught on to the fact that 'Science and Technology' was purely a poetic term used by the European functionalists." ⁴²⁴ This particular misinterpretation of the Bauhaus rhetoric brought to light by Mrs Moholy-Nagy was one of the most poignant indicators that the European Bauhaus ideology was misconstrued in the American context. Although in principle Warren, Conant, Hudnut and Gropius all spoke of similar social and cultural agendas Gropius differed from the other three Harvard academics in how to secure this. In earlier chapters it became clear that Gropius' call for unity within the Bauhaus was derived from both national pride and the needs of all individuals. Conant, like his Harvard forefathers felt that a sense of unity within the American society could be reinforced by the study of history in the broadest sense. He stated: "In the study of our national culture we may find the principle that is needed to unify our liberal arts tradition and to mould it to suit this modern age." 425 Here Conant expresses the belief that looking back can offer the keys for moving forward. Hudnut, who agreed with Conant's tenet not only felt that cultural significance was lacking within the

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Pearlman, "Joseph Hudnut's Other Modernism at the Harvard Bauhaus," 472. Some critics have questioned Hudnut's adimant defence of history at this late stage of Modernism in America by suggestion that Hudnut having achieved modernity in the 1930's now rejected it and was returning to the Beaux-Arts.

⁴²³ ibid., 471. In 1945 Hudnut coined the phrase 'post modern" He called for humanistic modern architecture, history, spontaneity, contexturalism and individual concerns. Although it is not believed that his former students, Venturi among them were aware of this term.

⁴²⁴ Moholy-Nagy, "The Diaspora," 25.

⁴²⁵ Alofsin, The Struggle for Modernism. Architecture, Landscape Architecture and City Planning at Harvard, 130.

current mode of modernism he also felt that it was devoid of a basic humanistic approach. Hudnut had admired the groundwork laid by European modernism but saw their work only as the first step.

The unity that Warren, Conant, Hudnut and Gropius all sought was not, in Gropius' eyes, to be found by seeking the clues in the past. Nor did Gropius see this unity as anything other than completely universal. In order to integrate art and architecture into the modern life and to allow these disciplines to be intelligible and useful to society a new objectively valid language was required to remove it from the isolation that subjectivity and "taste and feeling" had forced it into. In an effort to clarify the situation Gropius wrote: "For a long period no common denominator has guided our expression in the visual arts. But today after a long chaotic period of l'art pour l'art – so utterly unrelated to the collective of man – a new language of vision is replacing individualistic terms like taste and feeling with terms of objective validity."426 Gropius believed a new language based on visual facts pertaining to "optical illusions, the relation or solids and voids in space, light and shade, colour and scale- scientific facts instead of arbitrary subjective interpretations of formulae long since stale," held the key to this collective understanding and utility not history. 427 The inclusion of what Gropius had described as stale and outmoded formulae hindered his aim for architectural education to provide, within its preliminary course, the building blocks of an architecture that epitomised the modern world. It is interesting to note, perhaps even an anomaly, that Gropius was not completely averse to learning about architectural history. He wrote in 1957:

A student in architecture will learn more from architectural history in an advanced stage of his development. I have found that a very young student, who hasn't found his own ground to stand on, is sometimes rather discouraged when he faces the old masters. If however, he understands already some of the basic issues in architecture in the later years of his training historical studies are much more fruitful for his own doings.⁴²⁸

⁴²⁶ Gropius, "Teaching the Arts of Design, " 161.

⁴²⁷ Pearlman, "Joseph Hudnut's Other Modernism at the Harvard Bauhaus," 470.

⁴²⁸ Walter Gropius, "History and the Student " *Journal of Architectural Education* 12, no. 2 (1957), 8 . Gropius believed that in order to understand the methods of the old masters beyond technical approaces the student should be able to recognise the spiritual goals of architecture.

Another incongruity that remains unclear still, to many historians, is why from a seemingly sympathetic position at the outset of Harvard's path to modernism in the early 1930's did Hudnut waver. One critic wrote of Hudnut's seemingly nonsensical shift, "Once a strong champion of architecture grown increasingly squeamish on the subject, Dean Hudnut now speaks with fond rotundity of his favourite Georgian age and architecture." 429 Hudnut had played a vital role in achieving modernity at Harvard. Had he achieved all this only to ultimately reject it and return to the original Beaux-Arts roots of paper architecture impregnated with historical references and devoid of handwork, material experimentation or spatial understanding? Pearlman asserts Hudnut had always posited that history was an important component of his modernism. Hudnut believed that studying history afforded students an "experience of architecture." 430 When Hudnut arrived at Harvard in 1936 his actions led his colleagues and students to believe that he would never have described history as the cornerstone of architectural education. Hudnut's modernist crusade at Harvard had begun with the admonishment of the Beaux-Arts academic methods which were steeped in traditions and dogmas. Having achieved this Hudnut's next opponent, Walter Gropius, was much less passive against these academic challenges. This battle was against Gropius and what Hudnut saw as an anti-historical modernism. 431

To concur with Pearlman, I would assert that Hudnut's belief that history held a place in architectural pedagogy never changed. I would argue that Hudnut, through a more fluid approach than his adversary to the relevance of history within pedagogy, was attempting to wipe the slate clean in order to allow an American modernism to be expressed. Hudnut recognised as President Warren had that America needed its own architectural references. Hudnut also identified that the pre-existing condition of the *Beaux-Art* held no relevance to the establishment of American traditions on American soil and began what he saw as the remedy. President Warren's 1895 manifesto and call to avoid "like imitation of bygone styles or hopeless and vulgar extravagances" had never lost validity for Hudnut and would continue to grow in relevance within American architect's recognition of regionalism and postmodernism.

⁴²⁹ Pearlman, "Joseph Hudnut's Other Modernism at the Harvard Bauhaus," 472. These comments were written in the 1947 July edition of Architectural Forum.

⁴³⁰Pearlman, *Inventing American Modernism*, 210. Pearlman believes that Hudnut's personality and lack of political and personal prowess failed to make his arguments as compelling as Gropius'.

⁴³¹ ihid

⁴³² Alofsin, The Struggle for Modernism. Architecture, Landscape Architecture and City Planning at Harvard, 18.

By the time Hudnut's tenure was over he had come to believe that history, spontaneity, contextualism and individual concerns were the way forward to achieve "genuine modern form" that was "more than merely relevant to our day."

The conflict between Gropius and Hudnut did not diminish with the either man's retirement from Harvard. Their fractious interactions had spawned a generation of thinkers, critics and insurgents who would go forward, not with one voice, but certainly with verisimilitude. Colin Rowe (1920-1999), Kenneth Frampton (1930-), Bruno Zevi, Harry Seidler (1923–2006), and Philip Johnson would be some of the frontrunners to either move forward with Gropius' Bauhaus tenets or use them as a counterpoint to their own work. Either way, the Bauhaus would continue to be a constant protagonist within architectural and design theory and education.

⁴³³ Pearlman, "Joseph Hudnut's Other Modernism at the Harvard Bauhaus," 465.

Epilogue

Each of the Bauhaus *Vorkurs* masters, Albers, Moholy-Nagy and Gropius carved a path for the Bauhaus in the United States which, as we have established drew upon each other's strengths and when weakened they wove together to become stronger. The Bauhaus ideals disseminated in the *Vorkurs*, and future versions of it giving its students the grounding on which to become some of architecture, art and designs most formative voices. This epilogue is a transitory preface to the next generation of disciples and critics inspired by the teachings of Albers, Moholy-Nagy and Gropius in the United States.

The untimely death of Moholy-Nagy significantly limited the dissemination of his legacy. Sibyl Moholy-Nagy was certainly the most visible and vocal protagonist in the continuation of Moholy-Nagy's work. As European modernism came under scrutiny, Sibyl Moholy-Nagy was resolute in her determination to gain acknowledgement and a clearer understanding of both her late husband's and other European Modernists' contributions to American modernism. She criticised Hitchcock's and Johnson's 1932 The International Style calling it a, "mixture of truth and opinion" and accused both men of having "slew the anti-aesthetic, expedient, economic and socially conscious tendencies "of the European Modernists with inadequate and illinformed arguments. 434 Although her husband had written two books, *The New Vision* (1932) and Vision in Motion (1947), her own emergent career as a fiction writer was side-lined as she turned her skills to teaching architectural history and to the documentation of her husband's biography, the illuminating and acclaimed, Moholy-Nagy: An Experiment in Totality. Following Moholy-Nagy's departure from the Dessau Bauhaus, fellow Hungarian, artist, theorist and critic Gygöry Kepes joined Moholy-Nagy in Berlin, London and Chicago. Kepes had written his influential book Language of Vision in 1944 and while teaching with Moholy-Nagy in Chicago he continued to develop his theories around the education of vision. Kepes theories of bringing a modern aesthetic to the masses via contemporary technology and his methodologies for the abstraction of visual forms to replace written language are a direct extension of Moholy-Nagy's 'typophotos' where an image could completely replace text. Kepes would go on to teach with

⁴³⁴ Moholy-Nagy, "The Diaspora," 25. Miesian disciple Howard Dearstyne took offence to Mrs Moholy-Nagy's comments and the fact she felt qualified to have an opinion and called her in a letter written in 1965 to the the Society of Architectural Historians a "an idle or viscious vagrant."

Russian- born Serge Chermayeff a great friend of Gropius'. Chermayeff, on Gropius' recommendation replaced Moholy-Nagy as Director of the Chicago Institute of Design in 1946. Both Chermayeff and Kepes had endeavoured, to no avail, to merge, what was in its original state, the New Bauhaus, into IIT under a Miesian dictatorship. Neither survived the tenuous union. Both Kepes and Chermayeff continued to teach intersecting with Gropius at Harvard and Albers at Yale. Kepes had asserted: "Visual communication is universal and international. It knows no limits of tongue, vocabulary or grammar." Interestingly, Chermayeff would go on to collaborate with Christopher Alexander (1936-) who, at no point acknowledges any Bauhaus influence in his endeavours to rationalise through observation his fifteen categories of visual distinction. Alexander proposed a new platform from which architecture could gain new content and meaning. This new truth, as Alexander refers to it, is based in observation. Although not part of this thesis I would argue Alexander too, owes a debt to Ruskin, Itten, Albers and Moholy-Nagy.

Although interrupted, Moholy-Nagy's work was highly influential towards the use of a universal visual language and the amalgamation of interdisciplinary works. And although Moholy-Nagy's own efforts were to be cut short his authority can be seen clearly in Breuer's works, who was his Bauhaus student and later educational colleague. Breuer, as we have established would also go on to enlighten the next generation not only within his teachings infused into Gropius' Harvard Graduate School of Design programme, but also and just as importantly, by example in his and his disciples many acclaimed buildings, furniture and spatial compositions. Gropius, who struggled in such an enduring way to introduce the preliminary, inter-disciplinary and universal tenets into the elitist environs of the GSD at Harvard University, would have to contend with his teachings being, for the most part, confined to the Masters programme. This in itself, as we have established frustrated Gropius as he believed the foundation year to be pivotal in the understanding of the formative principles. The elitist notions of an educated understanding of architecture and the position of architecture in society were not completely understood within the Masters programme.

⁴³⁵ Gygory Kepes, *Arts of the Environment* (New York: G.Braziller, 1972).

⁴³⁶ Christopher W J Alexander, *The Process of Creating Life. An essay on the Art of Building and the Nature of the Universe. Book Two, The Centre of Environmental Structure* (California: Berklely, 2002).



Figure 32: Gropius with GSD masters students 1946

The misunderstandings, misrepresentations and some of the most hostile critiques of European Modernism would emerge from under Gropius' own wings. Forming some of the graduate contingent of architectural voices from Gropius' 'Harvard-Bauhaus' were I.M.Pei (1917-), John Hejduk (1929–2000), Seidler, Johnson, Zevi and Rowe. I would suggest these graduates had also taken from Gropius' programme the importance of a commitment to an ideology. Gropius had, by example, fought for what he believed even when he faced certain condemnation, if not defeat. He had quite strategically, attempted to surround himself and his students with some of what he considered the finest contributors to the education of creativity and innovation in a changing world.

Also, deserving of some contemplation is the influence that Albers had on Gropius' GSD scholars. Albers had never accepted or been offered, depending upon on whose recollections you rely, a position at Harvard. In retrospect, I would suggest that perhaps Hudnut, an astute, yet underwhelming and insecure character, could see quite clearly the impact and validity of Albers' pedagogy. It was widely acknowledged that Albers was a formidable and infectious instructor and to position both Gropius and Albers under Hudnut's tenuous watch would most likely have rendered Hudnut and his pedagogical tenets obsolete years before his retirement. Albers as both a teacher and a painter would influence both art and architecture beyond the expectations of his chosen discipline, never experiencing struggles to the same degree as faced by Gropius or Moholy-Nagy. Whether his immediate choice at Black Mountain to concentrate

on painting suited the American educational climate better or whether his personal convictions allowed him the indulgence of subjectivity, it cannot be denied that Albers as a painter and in his teachings as a painter enabled a collaboration between art and architecture that had not been achieved by any of his Bauhaus colleagues in the United States. He would continue these collaborations and his methodology would continue to serve as inspiration until his final days. His influence on architectural forms through his teachings at Black Mountain and Yale University continued to evoke inquiry and respect. Celebrated art historian and critic Will Grohmann (1887-1968) stated in a tribute to Albers: "Whoever succeeded in his work with Albers reached at least one of the possible goals, if not in the fine arts then another in industrial design, architecture or the crafts. The architects who owe him enlightenment are as many as the painters and sculptors." 437

After all Gropius' fortitude and determination it is almost a disappointment that his ideals of a pedagogy that offered preliminary interdisciplinary education and universal understanding would not be acknowledged as the most prolific manifestation in the legacy of the Bauhaus in the United States. I will assert that it was Albers who was the most successful in the distribution of the Bauhaus doctrines. This may be because it contained none of the political, economic or social stigma that Moholy-Nagy's or Gropius' European Modernism was associated with or perhaps Albers was just the more determined and culturally savvy instructor. Professor of Art at the Pratt Institute, Eva Díaz noted that Albers: "avoided explicitly politicized or revolutionary rhetoric. He used a language of careful change, reform and improvement." But whatever the reason that made Albers' theories more palatable to artistic or architectural pedagogy, the next iteration of teachings inspired by the Bauhaus within American architecture would be as reluctant to openly credit Gropius, Moholy-Nagy or Albers in its establishment as the these pedagogues had been to acknowledge Itten. But importantly, the next shift would include both graduates of Gropius GSD programme and a number of Albers students and disciples.

In 1951 Californian architect Harwell Hamilton Harris (1903–1990) brought about a new movement in architectural pedagogy when he began his appointment as Dean of Architecture at the University of Texas, School of Architecture in Austin, Texas. Harris tailored an

⁴³⁷ Will Gronhmann, "A Tribute to Josef Albers on his Seventieth Birthday," *Yale Art GAllery Bulletin* 24, no. 2 (1958), 27.

⁴³⁸ Eva Diaz, "The Ethics of Perception: Josef Albers in the United States," *The Art Bulletin* 90, no. 2 (2008),281.

architectural faculty of individuals "to teach in any way they found productive" and "be able to ignite sparks of creative energy," that was to become known as The Texas Rangers. 439 Curiously, although not a supporter of European modernism, describing the work done by both Gropius and Breuer in particular as Bauhaus clichés, Harris was quietly impressed by the approach to design he saw as championed by Albers. 440 Art historian and author Lisa Germany describes Harris as a gentle and modest man who never lacked confidence. She asserts that although not a follower of Gropius' doctrines, "Harris seemed never to have accepted the notion that Modern Architecture had anything to do with the creation of the International Style. Harris' work existed outside a codified style. It was an attitude toward design, rather than an adherence to a creed that made Harris a Modern." 441 Furthermore Germany asserts: "His [Harris'] work was understood and appreciated and that says something not only about the strength of his Modern attitude and his ability to communicate it but something too about the rich diversity and complexity of the movement as it took shape in this country." ⁴⁴² By 1951, Bauhaus pedagogy had been prevalent in American art and architectural education for close to twenty years. Therefore I would conclude that Harris' predisposition to method not result, his appreciation that the notion of the International Style as a Bauhaus Style was a misinterpretation of Bauhaus ideology and his concerns for architecture that could be understood universally aligned him more closely to the Bauhaus tenets than he was possibly comfortable with.

I have established that certain pedagogical methods attributed to the Bauhaus existed in America prior to the arrival of any *Bauhaüsler*. But there was no establishment of any environmental, communal or adjustments in teaching or learning a new visual perception in the United States before any of the Bauhaus émigrés arrived. I have also established American Modernism, as taught by Hudnut, did not support a universal visual language that Germany purports as intrinsic to Harris' work. In a letter to a colleague in 1986 Harris stated: "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." Although, these comments smack of the theories espoused by

 $^{^{439}}$ Lisa Germany, *Harwell Hamilton Harris* (Texas: University of Texas Press, 1991), 144.

⁴⁴⁰ ibid.

⁴⁴¹ ibid., 1.

⁴⁴² ibid., 2.Harris was adamant that modernism had been evolving in America well before the Buahaus architects arrive

⁴⁴³ ibid., 142.

Froebel, Pestalozzi and Itten and most strikingly of Albers, Harris continued to be openly unimpressed by the Bauhaus émigrés and referred to them as "salesmen who had to portray a new product to sell and take credit for it." But, having met Albers while visiting Yale Harris, quizzically Harris consulted Albers when seeking to employ an artist for the Texas faculty. Perhaps believing the Bauhaus doctrines belonged to that of an artist and not Gropius the architect, made the pill easier to swallow.

The infusion of a Bauhaus legacy into the Texas Rangers did not stop there. Harris employed Robert Slutsky (1930–2005) and Irwin Rubin (1930–2006) both Albers disciples, Hejduk from Gropius' GSD Masters programme and two British architects Rowe and Bernard Hoesli (1923–1984).



Figure 33: Harwell Hamilton Harris' faculty, from left to right: Hugh McMath, Lee Hirsche, Joseph Buffler, Goldwin Goldsmith, Hugo Leipziger-Pearce, John Hejduk, Harwell Hamilton-Harris, Robert Slutzky, Colin Rowe, Bernard Hoesli, Martin Kermacy, Kenneth Nuhn, and Robert White

There is no debate that the American modernists were rather irritated by the European Modernists, basically Germans. The blame for the attribution of Modernism in America to Europeans (and not Americans) cannot be placed at the feet of Gropius and his fellow Bauhaus émigrés. Germany states that Russell-Hitchcock and Johnson had in their book *International Style* heralded the Europeans as having saved American architecture from languishing in eclecticism. She states that: "to many architects, critics and historians who had been observing the years preceding the Bauhaus architects' arrival, the claim was greatly overstated and even erroneous." ⁴⁴⁶ None the less Harris' reliance on Albers' teachings of the perception of space,

⁴⁴⁴ ibid., 104.

ibid., 144. The influence of Harris partner Richard Neutra is not discussed in this paper. But Neutra had met
 Gropius at the CIAM III 1930 conference and following this Neutra taught at the Bauhaus as a guest for a month.
 ibid., 102.

even if not acknowledged by Harris, it was most certainly acknowledged by his Rangers. 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 based on a translation of Moholy-Nagy, Albers and Kepes' work in three dimensions." Rowe and Slutsky would go on to lay the foundations for this translation in their 1964 essay "Transparency: Literal and phenomenal." It was the ambiguity of space discovered in Albers work and teachings that the Texas Rangers wished to explore. The Rangers encouraged Moholy-Nagy's techniques of vision in motion. Students would draw continuously in order to achieve Ruskin's innocent eye, removing their preconceptions as demanded by Itten and learn to see space a new. In Alex Caragonne's 1995 book *The Texas Rangers: Notes from an Architectural Underground,* he describes an epiphany, "a mysterious change of vision," that took place for the student. Slowly, imperceptibly, our vision changed. We began to see the world differently. New relationships began to emerge. The spaces in between began to assert themselves, pressing forward into our consciousness. Then we were ready to begin the study of architecture."

As we witness a dramatic transformation in technology and digitization, similar to that which formed the backdrop to the development of a universal visual language by the Bauhaus, it is again time to reconsider the interdisciplinary articulation of aesthetic education. Thus, the importance of a universal visual language, predicated upon notions of the 'innocent eye' and devoid of academic preconceptions has become critical once again. Such an approach offers the architect or designer new agency amidst the interdisciplinary teams that characterize the art of making and building today. Gropius' desire for "the development of a broadly based artistic culture devoid of the idiosyncrasies of the artistic elite," is vital once again as architecture and design increasingly overlap and the boundaries between disciplines are eroded. 450

⁴⁴⁷ Varnelis, "The Education of the Innocent Eye," 216.

⁴⁴⁸ Alexander Caragonne, *The Texas Rangers. Notes from an Architectural Underground* (Cambridge: MIT Press, 1995), 162.

⁴⁴⁹ ibid., 162-63.

⁴⁵⁰ Franciscono, Walter Gropius and the Creation of Bauhaus in Weimar: The Ideals and the Artistic Theories of its Founding Year,68.

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