

Charles Biederman: A Brief History

Karel (Charles) Joseph Biederman was born August 23, 1906 to immigrant Czech parents in Cleveland, Ohio. Interested in art from an early age, he attended classes in figure drawing and watercolor painting at the Cleveland Art Institute as a teenager, and eventually took an apprenticeship doing layout work for a local ad agency. There he learned a lesson that stayed with him all his life-- that there are two kinds of artists: commercial artists who get paid for their work, and fine artists "who sure as hell don't." Despite his success as a layout man he chose the latter course. Though he lacked a high-school diploma, having dropped out of the eleventh grade to help pay the family's new mortgage, he convinced the School of the Art Institute of Chicago to accept him on merit.

Biederman moved to Chicago in 1926. He chose to work odd jobs for low pay rather than return to the more lucrative commercial work, which he considered an unacceptable compromise. He financed his studies with janitorial duties in the morning, bussing dishes at noon, and ushering at the Apollo Theater at night. His student work was of a well above average quality. He was an excellent draftsman, as evidenced by a large series of portraits drawn from life with the unforgiving sharp edge of a square litho crayon. His student paintings were influenced heavily by an absorbing interest in the Art Institute's recently acquired Helen Birch Bartlett Collection, which he visited regularly despite warnings of dire consequences from his conservative instructors. The Bartlett collection featured the best of late nineteenth and early twentieth century European modernism; Picasso's "Blind Guitarist," Van Gogh's "Bedroom at Arles," Seurat's large "Le Grande Jatte," and other such works. But it was Cézanne's small painting "The Basket of Apples" that struck Biederman like a blow to the solar plexus. It pulled him in immediately, though his response was purely instinctive at the time. Only later would he develop his meticulously thought-out theories about Cézanne's work; why it is so compelling, so important, and so generally misunderstood. For the moment the painting simply slaked thirsts that he hardly knew he had, and he drank it in greedily. He began painting in a style reminiscent of Cézanne's, but using the muted colors of the old masters he loved so well. Paintings like "Still Life, Chicago 1929" show Biederman's potential plainly. The composition is tight but not overly constrained, thanks to his natural feel for three dimensional space and the organizational skills he learned as a layout man in Cleveland. Devices such as multiple perspectives and subtly fractured spatial divisions show an intelligent understanding of Cézanne. The draftsmanship is flawless, though not yet as fluid as it would eventually become. The brushwork is confident, at times even delicate, and the work is animated by a nuanced lighting and subtle transitions that belie the heavily geometricized structure. His instructors recognized all this, but didn't know what to make of him. On the one hand they wanted to acknowledge his obvious talents with prizes and scholarships; on the other hand they were frustrated with his obstinate refusal to attend basic courses like anatomy and art history. Biederman finally came to believe that he had nothing more to gain there, and dropped out in December 1929, just two months after the crash on Wall Street.

The early years of the Depression were especially difficult. Again Biederman refused to revert to commercial work. He slept on park benches at times, and subsisted on what little he could afford-- biscuits dipped in ketchup one day and mustard the next. He scavenged and scraped down canvases discarded by students at the Art Institute School until he finally discovered a way to size old flour sacks with a ground that could support oil colors. His interests soon expanded to include abstract idioms, especially cubism and biomorphic surrealism, which he pursued with mixed results. He moved in with a Danish friend, Daniel Massen, who let him earn a portion of his rent by assisting with Massen's interior design contracts. Biederman's economic woes were lessened further upon meeting John Anderson, the brother-in-law of a classmate, who

became a close friend and patron. Anderson, a photographer and abstract painter himself, was independently wealthy and willing to help out his new friend. His patronage started out slowly enough, but by the late 1930s he was Biederman's sole source of income-- not that Biederman ever lived high off the hog. At one point he was desperate enough to want to apply for government help, but after walking halfway across town to make the application he reconsidered and turned back. Painting rural landscapes for wages was a compromise he just wasn't willing to make.

By 1934 Chicago could no longer meet Biederman's needs. His own efforts had progressed well beyond anything else being done in the city, where it was rare that work more advanced than Blue Period Picasso could be seen in the original. He needed to associate with more progressive artists and to see the latest trends in European modernism with his own eyes. He moved to New York City in September. By March 1935 his reputation was not only well established, he was one of the leading painters in New York. A.E. Gallatin included him in the "Five American Concretionists" show, along with Alexander Calder, John Ferren, George L. K. Morris and Charles Shaw. Fernande Léger visited his studio, as did Alfred H. Barr, director of the Museum of Modern Art; James Sweeney, a leading critic of the day; and a list of artists that reads like a Who's Who of the times. He was given a one-man show at the Pierre Matisse Gallery. But as his letters of the time make plain, Biederman disdained anything or anyone that smacked of hypocrisy, prevarication, cronyism, nationalism, or official patronage. He had a fierce and uncompromising independence that was absolutely fundamental to his being and an opinionated candor that owed a great deal to his Czech upbringing; one said what one had to say in as unambiguous terms as possible and let the chips fall where they may. He may have been well respected in New York, but he was by no means popular.

Prompted in part by Barr's 1936 "Cubism and Abstract Art" exhibition at the MOMA and in part by the fact that Anderson's patronage made it financially doable, Biederman decided to leave New York and "go to the source." He arrived in France in October, preceded by the "Concretionists" show which traveled to both Paris and London. Biederman was well received in Paris. With the help of Sweeney and Charles Ratton, a French collector of African art he'd met in New York, he was able to meet all the major players: Miró, Mondrian, Brancusi, Picasso, Vantongerloo, Pevsner, Arp, Domela, and others. But once again he was disappointed in what he saw. After two weeks he felt he had come too late; that Paris was "washed up as an art center," and that the various artists were more concerned with petty infighting than with furthering the cause. He spent a couple months making the rounds, then settled down to work on his own. Establishing a pattern that came to typify his life, he began to decline offers for which most artists would have given their right arm. When Léger asked him to exhibit together, he refused. He returned to New York in June 1937, convinced that Europe was suffering under the burden of an overly imposing cultural heritage and that only America could provide the fresh start needed for the establishment of a truly "New Art."

Biederman had only a vague idea of what this New Art might be at the time, but he was convinced that while it would be radically different from what had come before, it would nevertheless ultimately build on the past. He left Paris with two convictions which occupied him for the next ten years: that the Dutch De Stijl movement had the "proper subject" and that Russian Constructivism had the "proper medium" for this new direction. This requires some explanation.

De Stijl's "proper subject" was a geometry of pure forms and colors derived from the study of nature. The cubists were unwilling to embrace the natural outcome of their own structural studies-- they brought mimeticism to the brink of pure abstraction but were ultimately unwilling

to give up references to representational subject matter. At this critical juncture De Stijl's originator Piet Mondrian did not falter. Biederman admired the Dutchman's use of orthogonal geometry and primary colors, outgrowths of his earlier studies of trees, piers and oceans. In later years Biederman came to believe-- and not without reason-- that Mondrian had turned his back on nature, an unpardonable sin. But for the decade from 1937 to 1947 Mondrian's work was very much on Biederman's mind.

The second major influence at this time was Russian Constructivism, a movement that reached a high point with Antoine Pevsner, whose studio Biederman had visited outside of Paris. Like De Stijl, Constructivism had moved beyond representational mimesis to pure abstraction. The Constructivists were proponents of a technological age. Their works, often based on mathematical models, celebrated a machine aesthetic and the inherent qualities of industrial materials. The "proper medium," then, was the machine. Unlike the Constructivists though, Biederman gave the machine no aesthetic significance. For him it was only a tool; a means, not an end in itself. The same was true of his use of industrial materials, which were selected for their functional properties, not for any inherent aesthetic value. The philosophical differences between Biederman and the Russians are great and can be seen in details as seemingly insignificant as the joining of one part to its neighbor. The Constructivists exalted in the technology which made their work possible; they proudly showed all the fasteners. Biederman hid the fasteners carefully; having no intrinsic value they served only to distract from the business at hand.

One might invert the question and ask, "If De Stijl could supply only the subject, what was lacking in its medium? And if Constructivism supplied only the medium, what was lacking in its subject?" Both these questions hark back to what Biederman later came to call the "crisis of mimesis" which, in oversimplified terms, was an outgrowth of the same nineteenth century advances in science and technology that seemed to dethrone religion and had intellectuals ruminating on nihilistic and existential themes. These influences bore on the fine arts as well. Western painting's role in supporting and celebrating the moral authority of religion diminished and was gradually supplanted by more humanistic and nature-based concerns. Biederman saw Courbet as the greatest-- and last-- of the natural landscape painters. Plein-air painting held the attention of European artists for some time, and art acquired a moral authority of its own as a celebration of the manifest creations of nature. But the refinement of photographic processes threatened to doom the painter's craft to obsolescence with the click of a shutter. Not only was the validity of the painter's medium suspect, but doubts about the ultimate significance of nature herself were being aired. If mankind could be reduced to sterile combinations of chemicals reacting blindly to equally sterile external stimuli, how was one to understand one's individual human existence? Sartre's unsettling image of a purposeless humanity adrift in a meaningless universe typifies the sorts of existential pressures bearing on the intelligentsia of the day. If one held these two premises to be true-- first, that there could be no further viable development of an illusionistic tradition in painting after Courbet and the advent of photography, and second, that nature, the very subject of that illusionistic tradition, was essentially meaningless-- then there were few conclusions to be drawn which left an artist much room for viable action. Biederman was by no means the first to identify this "mimetic crisis"-- he had read Ortega y Gasset and other major theorists-- but his assessment of the situation and the solution he ultimately proposed were unique and seminal.

Biederman traced out the historical reactions to this crisis in a number of his writings. Symbolist painters such as Gustave Moreau and Odilon Redon, skeptical of both reason and direct visual perception and trusting only their "inward feelings," strove for a new reality based in the

subconscious, creating fantastic images derived ultimately from perceptual nature but seen through a "mirror of distortion." By turning their vision inward they hoped to find truths which could somehow transcend those of the tangible world in which they lived. In the twentieth century surrealism took this search for a super-reality to extremes, while movements such as dada and Duchamp (a one-man movement if ever there was one) revelled in the chaos let loose as the crisis unfolded.

Diametrically opposed to the Symbolists and their kin were Claude Monet and Paul Cézanne, who refused to give up on nature as the source of creative inspiration in painting. If Courbet had taken the pure mimetic tradition as far as it could go, then it was time to begin digging beneath the surface, past the natural objects themselves to a study of human perception, and finally, to the very methods nature employs in structuring our world. Monet began a serious and prolonged investigation of the interrelationships of light, color, and form in human perception. Cézanne, taking up where Monet left off, researched the very organization of space itself. His later landscapes-- especially his watercolors-- distill nature down past the level of tangible, space-displacing forms to near-abstract arrangements of planar elements of light and color based on keen and direct observations of nature.

This brings us back to Biederman's thinking upon his return from Paris in 1937. The De Stijl movement had the "proper subject"-- a geometric and non-representational aesthetic based on direct perception of nature-- but he considered its medium, two-dimensional hand-made oil painting, archaic and obsolete. The Russian Constructivists had the "proper medium"-- machine-made three dimensional forms-- but their subject, an aesthetic of mathematics and technology, was misguided. Biederman set himself the task of forging a new art based upon these two suppositions, and spent the next decade working out the details. Rather than representing natural scenes with paint on a flat canvas, why not create actual three-dimensional forms upon which the changing play of real light over time could be directly observed? To carry on the Monet-Cézanne legacy the color relationships and compositional arrangement must "parallel Nature's Structural Building Process"-- the work, although non-representational, must be based upon the same careful and direct observation of nature that informed the work of Cézanne and Monet. And to ensure that the artist avoided the pitfalls of arbitrary decision-making while this new approach was in its infancy, only the simplest and most manageable formal elements should be employed, hence Biederman's preference for machined geometry over hand-made organic form.

Though living in New York City, ground-zero of the American avant-garde, Biederman worked on these new ideas in virtual isolation. His contention that Paris was "washed up" and that painting was no longer a viable medium effectively alienated what few contacts remained. It didn't help that he refused to join the newly formed American Abstract Artists group, claiming that their outlook was overly nationalistic and that they lacked discrimination in their selection of members. In his own words, he "became an untouchable." He found himself with a non-existent social life and plenty of time to work, and he made the most of it. In an early attempt to fuse Mondrian with a three-dimensional geometry, he began by experimenting with low reliefs based on De Stijl. It wasn't long before he left the strict discipline of primary colors, horizontals, and verticals behind and began exploring a larger vocabulary of curves, diagonals, spheres, transparent planes, arrays of string and wire, inscribed lines, and the like. In her 1999 essay "Charles Biederman and American Abstract Modernism," Susan C. Larsen noted how these new works display "not an ascetic sensibility bent upon a machine idiom but a richly sensuous one capable of inventive, even playful, variations on a clearly stated theme." Nevertheless, these works were largely experimental. He had not yet found his way.

Returning to New York from a visit to the Andersons in 1938, Biederman stopped over in Chicago to attend a week-long seminar on General Semantics with the movement's founder, Alfred Korzybski. Korzybski's complex teachings, described in his magnum opus "Science and Sanity"-- a book that Biederman read numerous times and insisted that everyone around him do as well-- revolve around reconciling the disconnect that exists between natural reality and the language we use to describe it. In a key phrase that Biederman quoted constantly, Korzybski points out that "whatever we say an object is, it is not." Stated differently: don't confuse the object with the word-symbol which describes it. Biederman later developed a short-hand version that fit his own agenda more neatly: Nature is NOT words. The significance of this idea to his overall development will become more apparent as we progress. Korzybski's thinking was far more sophisticated than this simple example suggests, and he proved enormously influential to Biederman, more so than any other single individual save Paul Cézanne. Biederman's innate distrust of language had been strengthened over the years by art critics and political propagandists, two "breeds of protoplasm" that had earned his highest disdain with their manipulative linguistic machinations. Korzybski cut through that distrust, teaching that language not only could, but must, be used responsibly if clear communication and meaningful results were to be achieved. Further, Korzybski's advocacy of dispassionate analysis regardless of consequences struck a resounding chord as well, considering Biederman's own insistence on clarity and candor at the expense of tact and diplomacy. The Korzybski seminar not only opened Biederman's eyes to semantics and the scientific method, but it focused his thinking regarding the evolution of western art and started him on the path to writing his own ambitious book, "Art as the Evolution of Visual Knowledge," a project that he anticipated would take a him year or two to complete. It took ten.

By 1941 he had returned to Chicago. New York had begun to resemble Paris in Biederman's eyes, with partisan bickering, uninspired painting, and an urban modernist aesthetic heavily derivative of the European example. Biederman sought refuge in the American midwest and found a studio near a park in an attempt to reestablish the strong relationship with nature he had cultivated as a boy. He began to explore new directions in his art works, which he now called "constructions." Inevitably, some of these investigations were more successful than others. An entire series of three dimensional sculptures consisting of a hodge-podge of painted sheet metal cutouts, spheres, wires, rods and strings was eventually scrapped. The few remaining photographs show why; the works were affected and ill-conceived. But another series of early constructions made for the Interstate Medical Clinic in Red Wing, Minnesota was much more successful. One particularly elegant work marks the first use of fluorescent light in the visual arts-- an experiment Biederman later decided was premature and which he never repeated.

Meanwhile, he was making some headway on the social front. He had reconnected with Mary Katharine Moore, the beloved sister of John Anderson's wife Eugenie. Charles and Mary had met and enjoyed each other's company on a number of occasions over the years, but Mary had been engaged the first time they met and married the next. Her marriage finally ended in divorce. She had become frustrated living with a friendly but highly conventional man who seemed to lack any interests beyond his workaday career and the sports pages. Biederman, on the other hand, was anything but boring and anything but conventional. Charles and Mary were wed in a simple civil ceremony in Red Wing on December 25 1941, with John and Eugenie Anderson as witnesses. Mary's importance to Biederman's work cannot be overstated. In the catalog to the 1976-77 retrospective exhibition at the Minneapolis Institute of Arts Biederman wrote:

I exist today, my work exists today, because throughout my life individuals, in greater or lesser ways, have given moral and/or material support to my work. All that would have

been in vain, however, but for my late wife Mary's dedication throughout the most difficult period when my art was virtually ignored in my own country. In every way open to her, Mary made it possible for me to devote myself entirely to my art. She also played a major role in my writing. Indeed, my art and my writing are as much hers as mine. When the fundamental implications of my work are understood, the importance of Mary's achievement will become apparent. My debt to her is beyond any sense of measure.

Charles and Mary, expecting their only child Anna, settled permanently in Red Wing, Minnesota in October 1942. Biederman started his career in Cleveland and, as his quest drove him to seek out the sources of modernism, he moved first to Chicago, then to New York, and finally to Paris, where he concluded that what he needed the mainstream could simply not supply. His retreat from the world's art capitals had an ironic symmetry; from Paris back to New York, then back to Chicago, and finally to Red Wing, a rural community about forty miles south of Saint Paul. These were the war years and military draft was a very real possibility. Biederman, a political cynic and bred-in-the-bone pacifist, had considered escaping to Mexico with Theodore Roszak, an American abstractionist he had met in school and continued to associate with in New York. In the end, however, he remained in the United States and was eventually excused from active duty because of eye trouble-- he had suffered from severe conjunctivitis since childhood, a problem that plagued him throughout his life. During the war years Biederman spent the days assisting John Anderson with some military medical research projects and the evenings with Mary working on his art history which was finally self-published in 1948, financed by selling his entire 1947 output to the Andersons and their friends and relatives.

Art as the Evolution of Visual Knowledge: even the title is imposing. Biederman had spent countless hours haunting the public libraries of New York and Chicago, researching everything from photography to crystallography as he hunted down evidence to support his central thesis-- that true progress in the visual arts has always been the direct result of an evolution of perceptual awareness, and that the next logical imperative in this long chain of "visual knowledge" stretching all the way back to the cave paintings of central Europe was a non-representational art of three dimensions, grounded firmly and entirely in the artist's direct and prolonged observations of Nature-- with a capital "N". The book is a wild ride through art history with an opinionated and charismatic autodidact as chauffeur, but it is strongly argued and has stood the test of time well; a lengthy excerpt is included in Stephen Bann's authoritative "Documents of 20th Century Art: The Tradition of Constructivism." Initially dismissed as idiosyncratic and insignificant in the United States, the book hit the nail squarely on the head for a small but well-educated and highly sympathetic foreign readership. Before long, a small school of followers sprang up in England, including Victor Pasmore, Anthony Hill, Mary Martin, Gillian Wise and others. Similar movements established themselves elsewhere over the years; in the Netherlands under the leadership of Joost Baljeu and in Canada under Eli Bornstein. Biederman escaped his largely self-imposed exile by corresponding with these artists extensively and contributing numerous articles to their various journals. In the end, though, he disassociated himself from the lot of them, believing they had strayed from the true path for lack of real understanding or lack of will. This is not necessarily surprising. Few twentieth century artists had convictions or stamina that could match Biederman's, and he had little time for those less committed than he. His standards were high and uncompromising. Friendships with other artists were almost predestined to fail.

By the late 1940s Biederman had achieved the clarity and direction he had been seeking since his return from Paris. He had reconsidered his output of the previous decade and found it lacking. Granted he had made some exciting things, but in retrospect he found much of his work arbitrary and forced, with decisions having been made for short-term effect rather than long-term progress. A retreat to the rural landscape and slower-paced life of Red Wing made it possible for him to step back and reconsider his approach. He realized he had been moving too quickly, rushing things. He needed to slow down. If he was to succeed he must ensure that each new step was a natural outcome of what had come before. True forward progress in art could neither be dictated nor rushed, it must evolve at a pace and in a direction determined by its own necessity. Once again Biederman pared his plastic vocabulary down to the simplest elements: thin planes of painted aluminum attached in horizontal and vertical relationships to a painted back-plane. This is reminiscent of his position back in 1937, only this time around there was a distinct difference. He had rediscovered Paul Cézanne.

Saying that Biederman rediscovered Cézanne actually understates the case. He in fact believed that he had discovered Cézanne's true significance-- his true intent, which had eluded other followers-- and that the turn-of-the-century modernists who claimed Cézanne as their predecessor had misinterpreted him and were false heirs to his legacy. Biederman's 1958 "The New Cézanne" argued the case effectively, though its main premise is clouded by some curious hypothesizing about mechanically derived "concentrics," a position he later recanted. The basic argument is this: Cézanne was a painter whose every move was guided solely by what his careful eye could see in nature, and who believed that nature was the sole wellspring of valid artistic activity. His was very much an extroverted perception. He did not look inward like the Symbolists for guidance and inspiration, he looked outward, to nature. Biederman included numerous Cézanne quotes to drive home this point:

To realize progress, there is only Nature.

Truth is in Nature; I will prove it.

Before Nature one learns to see.

But he didn't arrive at this understanding by reading Cézanne's limited writings, he arrived at it by looking at his paintings. Anyone who has been stirred by a mature Cézanne landscape will understand this easily. Cézanne's translation into paint of what nature put before him was an almost unfathomable mix of sophisticated intellect and pure instinct, all guided by keen observation. Yet he did not content himself with merely reproducing what he saw. Like Monet, Cézanne valued subject matter only as far as it provided a vehicle for investigating deeper aspects of nature. "Nature is not on the surface," he said, "it is in the depth." Biederman wrote:

In the objective of Cézanne, man is no longer a mere spectator of nature; he amalgamates man with nature in his art. The literal or "surface" image of the eye is altered by the "sensation" of man penetrating to the "depth" of nature. The isolated categories of man and nature vanish, and a oneness takes their place. ...To secure this unity of man with nature, Cézanne insists that it is not merely a matter of arbitrary sensations, that the artist is not free to deal with nature however he pleases. ...This is to say, the artist must "submit" to nature. Therefore: "if he intervenes, if he dares, he, the wretch, interferes arbitrarily in what he ought to translate, if he filters it in his own pettiness, the work is inferior." The artist, if he is to translate nature properly, must not let his sensations be interfered with by the pettiness of the arbitrary. He will not seek to go beyond nature. All such efforts will fail. The artist must comprehend this new relationship with nature with the utmost acuity if the art is to be realized. For this reason [Cézanne] will say of

the artist: "Hear me well. His whole will ought to be composed of silence. He ought to make quiet in him all the voices of prejudices, to forget, to forget, to establish silence, to be a perfect echo." An "echo" of the process of nature.

That Cézanne's work is grounded in nature may seem obvious, but the theoretical implications are less readily apparent. One relates to idealist philosophies, which have roots extending back to classical Greece. Biederman noted that Cézanne rejected idealism, criticizing the Beaux-Arts painters for believing they could "trace the truth through preconceived types." The classical tradition saw nature as striving for a perfection she somehow never achieved. In this view nature had in mind an archetype, an ideal toward which she strove with each individual creation, but try as she might she somehow always missed the mark. The artist, though, could divine nature's intentions and achieve this elusive perfection in his art. Cézanne saw this as just so much hogwash-- introspective theorizing; verbalisms at the expense of simple perception:

I do not want to be right theoretically, but before nature!

Not theories! ...Theories ruin men. It is necessary to have a damned vigor, an inexhaustible vitality to resist them.

Don't have a word when you need a sensation.

The idea that omnipotent Nature, the source of our own being and of all that we know, was somehow not "getting it right" didn't sit well with Biederman. In his estimation, nature's refusal to satisfy humanity's desire for mathematical perfection didn't point out flaws in nature, it pointed out flaws in our understanding of the limits of mathematics and the fundamental nature of reality. Part of Biederman's legacy is his insistence that nature is not a closed system, but rather a process; a dynamic, open-ended, and supremely creative process. This is a point he hammered home with each opportunity. Biederman recognized no other creator than nature herself, and was always careful to capitalize both the word "Nature" and the ubiquitous phrase "Nature's Creative Process" in his writings. "Imperfections" in nature's creations are not mistakes, they're fundamental to her process. They are how she does her work-- if not for errors in the replication of DNA we wouldn't even exist. "Perfection" is a human conceit and mathematics a human invention, both products of minds extraordinarily well equipped to extract broad generalizations from myriads of particulars. Attempts to quantify nature have limited application-- there are significant aspects of reality that will never be adequately described by any formal symbolic system. This objection to idealist, reductionist and absolutist world-views is not new-- it comes out of humanist philosophers like Goethe and Whitehead-- but its application to the visual arts is unprecedented.

All the elements were now in place for Biederman to proceed, to add his link to the chain forged by the artists he admired most: Leonardo, Courbet, Monet and Cézanne. He started with the fundamental idea that nature is the ultimate source, informing the efforts of all artists, whether they're aware it or not. Only if they recognize this and seek to understand their relationship with nature will they succeed, else they'll end up confused and misguided. Further, nature is open-ended-- driven by process, not by goals or events. Biederman traced the path of progress in the visual arts through a chain of perception-based realism which recognized this fundamental fact. Granted it encountered a mimetic crisis in the nineteenth century, but it emerged with a new direction established by Monet and Cézanne which, he believed, pointed toward a completely non-mimetic art of three dimensions that would "parallel nature's structural process"-- that is, it would proceed in methods analogous to nature's own. As an art of process, it too would be forever open, never dead-ending as did so many modernist experiments. It would not copy nature's creations, only her methods. It would be what Cézanne had in mind when he said that

subject matter was merely a pretext for his ultimate goal: an art of "only creation." This art would be completely visual, completely non-verbal, for "Nature is not words," as Korzybski taught. It would be an art of pure perception, not an after-the-fact illustration of theory or the principles of mathematics, for "Nature is not numbers" either. As Biederman reminds us again and again, art must be grounded completely in the artist's direct observations of nature, for an art which puts theory before perception is destined to fail. It would be as non-arbitrary as possible, starting with the simplest of means, with no contrived or gratuitous distortions allowed-- how dare the cubists with their "pathological manipulations" claim Cézanne as their predecessor? And it would evolve slowly, commensurate with the artist's gradually unfolding understanding of nature's process. This "New Art" would be true to its heritage and true to its source. Like the art of Monet and Cézanne it would celebrate nature's process as revealed through our eye-brains and extend that process by allowing the artist to participate in it, producing independent human creations in harmony with nature's own.

It seems paradoxical for Biederman to have insisted so adamantly on a non-verbal art and yet to have written more theory than any other artist of the twentieth century. How could he possibly work in purely visual terms when the credibility of his entire output seemed to rest in a cradle of theory? The answer is simple. There is no paradox, for theory did not inform Biederman's art. Perception did. Biederman always put art before theory, and the study of nature before art. His many writings were largely intended to drive home this simple fact.

In 1954 Biederman was able to scrape together enough money to buy a small farmhouse about seven miles outside of Red Wing. Just behind the house was a hill leading up to a wooded valley. Weather permitting, he climbed this hill every day and sat for a few hours, simply studying nature. He did this for the better part of half a century, always sitting in exactly the same spot. The view was neither exotic nor spectacular, but he found it inexhaustible. The theoretical underpinnings we've been examining were left behind when Biederman climbed his hill. Cézanne once remarked that every time he saw nature it was as if he had never seen it before, as if he saw it each time with the eyes of a child. Biederman too learned to disconnect his mind while he looked. He simply drank nature in with his eyes, and accepted what he saw unquestioningly. This is where Biederman's "New Art" was really forged, not in the studio, not poring over books of theory and philosophy. Out in Nature, with a capital N.

The first mature reliefs were conceived in the late 1940s, but very few could be executed for lack of funds. There were long stretches when Biederman could afford to make no finished works at all, having to content himself with sketches and the occasional three-dimensional model. Twenty years passed between his 1942 retreat to Red Wing and the first significant exhibition of his new work, at the Stedelijk Museum in Amsterdam. But he was an artist's artist-- he once called himself "the best known unknown artist in America." His reputation was growing, but it was not accompanied by regular sales. The family finances were extremely tight. John and Eugenie Anderson's regular patronage had tapered off in the late 1940s and stopped completely around 1953. Twelve more years went by before Biederman's work began to sell even modestly. Mary supported the family during these most difficult years-- she taught elementary school by day and helped Charles with his writing at night. She proofread his work for both content and form, typed his manuscripts, and translated his correspondence with French artists as necessary: both sides of a six-year correspondence with Jean Gorin went through Mary's hands. In the meantime Biederman worked non-stop as he always had, fifteen or sixteen hours a day, every day.

The creation of a Biederman relief was a long process. It began with daily visits to Biederman's "spot" on the hill, observing nature and taking notes. Biederman filled dozens of small notebooks with thoughts inspired during these sessions, selections of which were published in his 1993

book "Nature, Art, Anew." Back in the studio, he made preliminary colored sketches as compositional ideas came to him-- and they came abundantly, as fully formed visions. In the early years these studies were tight and mechanical, made with a T-square, but over time they achieved a surprisingly organic immediacy and fluidity. Doubts about Biederman's debt to nature are quickly dispelled by a review of these exquisite sketches. From a group of fifty or more such studies Biederman would pick a half-dozen or so to develop further. A second drawing would often be made, with a tighter and more precisely resolved composition, and perhaps including a side view or other structural detail. A half-scale three-dimensional model would follow, made of wood and illustration board, and hand painted with gouache. Details of color and composition would be constantly refined as the model took shape. Once the model was complete, Biederman would prepare a set of mechanical drawings in full scale, with all the requisite views and dimensioned details of each individual part. Revisions would inevitably be required once scaled up to full size. A parts list was then prepared and the entire package was delivered to a machinist, who fabricated the parts in aluminum and returned them in kit form. The construction was then assembled in an unpainted state. Again Biederman often found it necessary to make modifications to the size or placement of the various elements. This was a painstaking process. Eventually, though, the work reached a compositional finality. It was then disassembled and all the parts were individually acid etched, primed, sanded, and spray-painted. Contrary to popular belief Biederman avoided industrial enamels, using only the finest artist's oil colors, diluted with a solution of painting medium and damar varnish. Though reflections and shadows create dozens of colors in any given work, rarely were more than six or seven colors used at a time. Once the parts had dried thoroughly, they were assembled with a combination of small threaded fasteners, dowel pins and epoxy glue. Because of the time involved, only six to ten finished works could be made each year-- fewer yet if the money wasn't there.

The relationship between Biederman's art and nature can be difficult to grasp, perhaps especially so for those who have studied his theory extensively but have seen only one or two original works. It's difficult to understand how something so pristine and geometric as a mature Biederman relief can have any connection to sprawling organic nature... but then it isn't a question of understanding. Grasping this link is not an intellectual exercise. It's a gut-level realization bordering on epiphany and based entirely in looking, not thinking. It is extremely difficult-- perhaps impossible-- to grasp this connection without having a chance to spend some time with original works, preferably alone, in diffused and changing natural light, and over an extended period of time. In such circumstances the organic qualities of the work manifest themselves abundantly.

A Biederman needs to be looked at in the same way it was created-- the viewer must disconnect the intellect and drink the work in visually. Whatever is in us that makes us respond so passionately to the beauty of nature then takes over, and we experience a startlingly analogous response to the work of art. Everyone has had a moment or two in nature when the landscape suddenly "falls into place"-- those rare and spine-tingling instants when everything seems intensely beautiful and one feels almost urgently in-and-of nature. These are entirely visual experiences; they bypass our intellects and go straight to the cores of our being. Our spines chill because of what we see, not because of what we think. Our species evolved in nature, we're part of it, and we are predisposed to respond to its beauty in an almost visceral manner.

What does it mean, then, to say that Biederman's art "parallels the Creative Structural Process of Nature?" Simply that he has looked carefully at how Nature does her work and tried to distill her lessons into his art-- as did Monet and Cézanne before him. How does vertical struggle against horizontal in a gravitational field? What are the forces affecting branching? How do Nature's

forms inter-relate in space-- what striving for growth, or warmth, or seeking after sunlight or water places the forms in their relative positions? Where does symmetry leave off and asymmetry take over? When do similarities become differences? How do our eye-brains resolve Nature's wild array into a harmonious composition, despite constantly changing viewpoints and lighting? How are large and small groupings distributed proportionately across our field of vision? Why do the proportions change as we vary our depth of focus? How do the reflections and shadows affect our perception of colors as they interact with their neighbors? Why are there so few instances of pure local color in our perceptions of nature-- why are all almost colors relative? How does the dancing shimmer of detail reconcile with the static solidity of underlying structure? What is fleeting, and what endures? Why do we find nature so achingly beautiful? And so on-- and on and on-- ad infinitum. Small wonder that Biederman never tired of his spot on the hill. If he could succeed in translating his observations to his work, as Monet and Cézanne did, then the receptive viewer would respond to the art work in a manner paralleling Biederman's own response to nature: with the urgency and passion one feels when encountering unadulterated truth.

This is not to say that all Biederman reliefs are equally successful. He was constantly experimenting and constantly striving to evaluate his results as dispassionately as he could. He often backtracked, believing that he'd either strayed down a rabbit trail or forced a development before he was really ready for it. At such times he would resimplify his approach, returning to an earlier stage at which he felt he was truly in command of his means, then strike out anew. Early on he dropped the use of blending two colors on a single plane-- the modulations should be effected by light, not by pigment. In the mid 1950s he quit placing planes parallel to the backplane, believing they restricted the free flow of space. A later series of works allowed the foreground planes to extend past the edges of the backplane. This too was dropped, ruled out as contrived and giving an affected and overly architectural effect. Numerous forays were made into the use of diagonals and branching, each time pushing the limits to the point where the overall organization was finally compromised and retreat was considered necessary. But a successful relief-- and there are many-- is an unusually eloquent visual statement: a sensuous and endlessly varying fugue of color and light accomplished with stoically limited means, and a structural composition so open that it almost floats, activated by nuanced changes of lighting and subtle shifts in the viewer's position.

Biederman considered a 1965 retrospective exhibition at the Walker Art Center in Minneapolis his break-through show. A few works were sold to the museum trustees and, as interest increased steadily following the exhibition, more sales followed. Finally Biederman's work was able to meet the modest needs of his family, and Mary could resign her teaching position.

All the while he was creating visual works Biederman was writing prolifically as well-- fortunately a solid financial base wasn't required for the pursuit of this secondary passion. In the early 1940s he attracted a small group of followers in Chicago including Joan Saugrain, Aspasia Voulis, and others. After moving to Red Wing he maintained these contacts by mail. Excerpts of letters to Saugrain comprised his second book, "Letters on the New Art," published in 1951. We've already examined his third book, "The New Cézanne." Initially intended as a commemoration of the fiftieth anniversary of Paul Cézanne's death in 1906, it went unpublished until 1958-- as Biederman noted in the introduction "every effort to secure funds for 1956 publication met with failure." As with all of his books it was self-published in a limited edition, promoted primarily through word of mouth, and not widely read.

In addition to the books, Biederman wrote dozens of articles for a variety of foreign art journals. He carried on lengthy correspondences with numerous artists as well, generally stimulated by

their interest in "Art as the Evolution of Visual Knowledge" which struck them as an impressive, optimistic and forward-looking vision compared to the floundering introspection that characterized so much art of the times. In the September 1969 issue of "Studio International," largely devoted to Biederman, Mary Martin summed up his impact succinctly: "The overwhelming quality which one perceived in Biederman was his passionate detachment and maintenance of a world-view. At that time one was surrounded by Provincialism, the Paris School of Abstract Art and the first waves of Tachism and Action Painting-- and without some detachment one could not have survived." The "Studio International" issue was published in conjunction with a retrospective exhibition at the Hayward Gallery in London, Biederman's largest to date and one which demonstrated the primacy of his visual work. Up to this point he had been known almost exclusively through his writings. By all accounts the English were overwhelmed by his work, especially by his bold use of brilliant color, as the majority of reproductions they'd seen had been black and white.

Biederman maintained another important link to England during the 1960s-- a prolific nine-year correspondence with the renowned physicist David Bohm, an American who had fled McCarthyism in the 1950s and eventually settled in London. Biederman, who had developed a strong interest in exploring the relationship between art and science, contacted Bohm in March 1960 after reading his book "Causality and Chance in Modern Physics." Bohm had begun his career as a strong proponent of Niels Bohr's Copenhagen interpretation of quantum theory, but influenced in part by discussions with Einstein, grew concerned with the fundamental indeterminism of Bohr's approach and began working for a full unification of relativity with quantum phenomena. This search, carried on simultaneously with his correspondence with Biederman, culminated in a holistic formulation which he eventually published as "Wholeness and the Implicate Order." Bohm was keenly interested in exploring alternative understandings of reality and proved an energetic correspondent for Biederman. The entire correspondence numbered over four thousand pages, the first portion of which was published by Routledge in 1999 as the "Bohm-Biederman Correspondence," edited by Paavo Pylkkanen. Numerous reviews appeared in the year following publication, all emphasizing the importance of the dialogue as a historical meeting of minds and marveling at the lively discourse on such topics as creativity, determinism, order, perception, consciousness, structure, and the ultimate nature of reality itself. Bohm's biographer F. David Peat states that "it will be clear to anyone who reads this correspondence that Bohm was being deeply stimulated by Biederman and that in discussing order in art he was also forming insights into the nature of order in physics." Biederman though, in characteristic style, felt that he was getting nowhere with Bohm. Bohm's willingness to give serious consideration to the teachings of the Indian philosopher Jiddu Krishnamurti finally put Biederman off completely. He ended the correspondence just prior to visiting London for the Hayward show; the two correspondents never met.

The Hayward exhibition passed virtually unnoticed in the United States, save a small write-up in Time Magazine, but it was followed seven years later by a major retrospective at the Minneapolis Institute of Arts in late 1976. Here finally was the recognition which had largely eluded Biederman on American shores. With about 250 works, roughly half of which were three-dimensional constructions, this was the most extensive show of his career and earned a well-considered review by Donald Kuspit in the May/June 1977 issue of Art in America, the first major article in a US journal. But it was a bittersweet success. Biederman's confidant, collaborator, trusted friend and beloved wife Mary died just months before the exhibition opened.

Mary's death plunged Biederman into even deeper isolation. Living alone on a dead-end country road without a car, he relied on a few friends and neighbors for the occasional trip to town. He had so few social contacts for a decade or more that he almost lost his voice, he used it so rarely. He worked as feverishly as ever, but lacking Mary's domestic concerns he let the housekeeping go completely. His ubiquitous cigars (he smoked a hundred a week) sooted the walls, carpeted the floor with ash, and burned holes in his clothing, but he was well content so long as he could work uninterrupted.

The major New York galleries began courting him following the success of the Minneapolis show but he was suspicious of their motives, having been down the same road before. After including Biederman in the 1964 "Mondrian, De Stijl and their Impact" exhibition, the Marlborough-Gerson Gallery had made similar overtures. Biederman's recollection of the event, recorded in a 1976 interview for the Archives of American Art, is telling:

They had talked to me on the phone. They wanted to take me into their group. I didn't know anything much about New York. And I came to this slick gallery. And I was watching it because the people looked different; they were all so slick looking. When I lived there, the phony guys dressed like everybody else. But here the phony guys were phony on the outside; it was very obvious, you know. You can't imagine how that looked to me after twenty-four years in the country seeing farmers, guys in overalls. I watched them. And after the place got hot I saw the liquor come on, trays all over the place and after a little booze all of a sudden there were all these salesmen coming out of the woodwork just like worms coming out there and tapping all these guys. It was really sad. I was standing there watching it. It was just so flagrant. And some of these people submitting to it. And then a couple of days later Mr. Lloyd took me into his sumptuous office there and told me all about how great they were. I didn't say anything or commit myself to anything. I was going to let him say it. He did say it. He said, "Well, we'll meet again." ...So I saw some of the hanky-panky that was going on there and I cleared out. They were going to take my exhibition over to London and sell it in Europe.

Any other artist would have jumped at the opportunity to be represented by Marlborough, but Biederman valued his integrity above all else and instinctively avoided anything smelling even vaguely suspicious. When the Fifth Avenue galleries began showing a renewed interest he devised a simple test of their intentions. He invited the owners to pay him a visit in Red Wing; those serious enough to make the trip would be considered. Only Grace Borgenicht did so, and was duly rewarded with a contract which lasted from 1979 until her gallery closed almost twenty years later.

1979 also saw the publication of "Search for New Arts" which summarized Biederman's thinking as it had developed beyond the earlier books, pulling architecture and the photographic arts into the mix as well. SNA gives a good introduction to the theoretical and historical context in which Biederman wished to be viewed, as well as providing some fine color reproductions of his work, which can otherwise be difficult to find. By the time this fourth book was published Biederman had dropped the terms "Constructionism" and "Structurism" which he had originally used to describe his work, and settled simply on "New Art", a phrase he borrowed from Cézanne.

In the 1980s Biederman developed an association with the PRO Foundation, a Dutch organization dedicated to promoting constructivist art and architecture internationally. PRO arranged a 1988 European tour for Biederman, with stops in the Netherlands, Belgium, West Germany, Switzerland and France. This was followed up by a second trip a year later to attend and participate in the third PRO conference "Constructivism: Man vs. Environment" at which

Biederman's 1988 book "Art-Science-Reality" was introduced. Biederman's interest in the PRO Foundation declined in subsequent years as he came to believe that its membership was overemphasizing mathematics and science at the expense of simple perception and the lessons of nature.

In 1991 Biederman agreed to bequeath the artistic and archival portions of his estate to the University of Minnesota Art Museum (now the Frederick R. Weisman Art Museum) in the belief that an institution of learning would be a fitting repository for a body of work such as his. He placed the materials comprising the promised bequest-- some 1400 works of visual art, a large library, and reams of writings and correspondence-- in the Weisman's custody in the late 1990s, where it now resides. This is the largest single collection of Biederman's work, with all phases of his development well represented.

By the mid 1990s the elderly Biederman's eyesight had deteriorated to the point where he could neither make constructions nor read printed materials. Undaunted and determined to keep on working, he began meditating on a holistic worldview based on his theories of art, reality, and humankind's relationship with nature. He was unable to read up on the subjects that concerned him and worked primarily from memory and intuition, journaling key ideas in a slow scrawl that was all but illegible. Because writing was such a laborious process-- he could see only one word at a time and had trouble controlling his pen-- these notes were necessarily abbreviated. Once transcribed, they were printed out in a large font and returned to him for review and revision. The final drafts were collected annually and published in book form. The resulting volumes make for fascinating and thought-provoking reading, but to readers unfamiliar with the progress of Biederman's thinking they can seem a disjointed series of pronouncements with little thematic order. The first of these journal-based books, and the most readable, is "The End of Modernism, Figurative or Abstract," containing a selection of entries spanning from 1983 to 1992. As Biederman's eyes grew weaker the typeface grew larger, the entries shorter, and the supporting information sparser, making the content even less accessible to the uninitiated reader. Nevertheless these last books trace a remarkable effort as Biederman strove to constrain science, mathematics, psychology, philosophy, child development, art, music and related disciplines within a framework bound by a few core beliefs: that nature equips naked humanity with the ability to fully understand her fundamental reality; that science and mathematics are by definition limited to static and quantitative descriptions of a broader reality which is essentially fluid and qualitative; that vision is the pre-eminent means by which we receive information about our world; and that progress in the visual arts-- the "evolution of visual knowledge"-- provides the key to a full understanding of humanity's place in the universe.

While artists in Paris and New York worked to produce definitive masterpieces, with their canvases growing larger and larger with each passing year, Biederman deemphasized the individual work and concentrated instead on refining his overall vision. The resulting body of work, stretching from the late 1940s to the mid 1990s when his eyes finally failed, comprises one of most prolonged, focused and sustained efforts in twentieth century art. The mature reliefs, none of which are much larger than a traditional easel painting, are among the most refined, visually satisfying, and intellectually stimulating works of our time. Still, evaluating Biederman's ultimate significance has been difficult for most commentators. He is simply too different from the mainstream to know what to make of him. His work is different in kind, not in degree. Though his mature work is now universally acknowledged as a significant, seminal, and uniquely eloquent contribution to the artistic output of the twentieth century, his gut-level, all-or-nothing theorizing still disturbs many thinkers. Contentions that art-making is primarily a "problem of reality" allowing of and even demanding forward progress, or that the humanities

rather than science hold the key to mankind's salvation, or that the only artist on the true path since Cézanne is Biederman himself, have alienated many a potential ally. Kuspit's review is not atypical, characterizing Biederman as "an `original' having about him something of the crackpot and crank, but also something daringly true."

History will decide which assessment holds. Biederman, who still lives and works in Red Wing, Minnesota, is convinced that the market and career driven machine which the art world has become has too much momentum and too much at stake to acknowledge his lone voice in the wilderness. He wrote me in 1993 that he felt "as one speaking to the wind as it blows by and disappears." But he keeps on just the same, trusting his fate to the thin thread that he believes carries art forward and to future generations who might sympathize with his core beliefs and work to pick up where he left off.

Neil Larsen

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