

William T. Eberhard AIA, IIDA: ESSAYS ON ARCHITECTURE:

Early Influences

Cleveland, OH



EBERHARD ARCHITECTS LLC
2077 East 4th Street, Second Floor
Cleveland, OH 44115
216.452.2592

www.eberhardarchitects.com

Essays on Architecture:

Early Influences

Cleveland, OH

The formal architectural education of most architects begins with freshman classes in architectural history, basic composition and some introduction to architectural ideologies, and hopefully – but not always, progresses from there.

Before and after WWII, certain college programs had a defined ideology and offered only that ideology to its students. Before and after WWII, the architectural program at Pennsylvania was a traditional Ecole des Beaux-arts model, with a strict course of study that relied heavily on the great monuments of Greece and Rome, taught mostly by drawing from plaster casts of the Classical orders. I. M. Pei found the school to be a disappointment, feeling it lacked imagination and was stocked with students who possessed extremely proficient drafting skills, but no real thought on how to apply them. After only a few weeks, he transferred to M.I.T.

MIT was also anchored in the Ecole des Beaux-Arts in the 1930's and 1940's, but with a dose of technology.

At Harvard, Gropius and Breuer arrived in 1937 and quickly made Harvard the most progressive architecture school in the US. Their philosophy had been introduced to the US avant-garde in 1938 at the Metropolitan Museum of Art by in a show by Philip Johnson and Henry-Russell Hitchcock ("The International Style: Architecture Since 1922") that illuminated to US architects just how far ahead Europe was at that time.

Taliesin in Spring Green, WI was the hall of worship of Frank Lloyd Wright where his disciples revered Wright's free-flowing manipulation of horizontal spaces and his unorthodox combination of materials.

When I arrived at the University of Cincinnati in 1970, there was not a single ideology offered. There was, instead, a discussion about the Modern Movement and the degree to which the International Style had failed and warranted replacement or a complete overhaul at the very least. Like many faculties in programs across the US, the UC faculty featured a mix of young and mature faculty who had only ever taught, and were scholarly in their freedom from practice. And there was a contingent that practiced part-time and taught part-time. To many of us, the latter group seemed to be undistinguished at either vocation, and paired them to make ends meet.

Cornell's program was initially rooted in Beaux-Arts principles in which design was viewed as an art form. In 1962, Colin Rowe began his three decades of teaching at Cornell and the arrival of Oswald Matthias Ungers as department head in 1969 provided students



Above Left, Clockwise:

1. Walter Gropius
2. Marcel Breuer
3. Colin Rowe
4. Oswald Matthias Ungers
5. 1938 "International Style" Exhibition at the Metropolitan Museum of Art by Henry-Russell Hitchcock & Philip Johnson



with an intensive exposure to urban design in a studio setting, enhanced by the intellectual friction between Rowe and Ungers.

Rowe was perhaps an ideal choice to segue from the Ecole des Beaux-Arts history of the ideology at Cornell to a modern era. His unorthodox and non-chronological view of history enabled him to develop theoretical speculations such as his famous essay "The Mathematics of the Ideal Villa" (1947) in which he theorized that there were compositional "rules" in Palladio's villas that could be demonstrated to correspond to similar "rules" in Le Corbusier's villas at Poissy and Garches.

Although like his MA thesis, this proposal was impossible to



Above Left, Clockwise:

1. Camillo Sitte
2. SUNY Fredonia, NY Administration Building; Henry Cobb, I. M. Pei + Partners
3. SUNY Fredonia, NY Administration Building; Henry Cobb, I. M. Pei + Partners
4. SUNY Fredonia, NY Reed Library; Henry Cobb, I. M. Pei + Partners
5. SUNY Fredonia, NY Reed Library; Henry Cobb, I. M. Pei + Partners
6. SUNY Fredonia, NY Rockefeller Arts Center; Henry Cobb, I. M. Pei + Partners

support with any evidence, as a speculation it enabled Rowe to elaborate an astonishingly fresh and provocative trans-historical critique of both Palladio and Le Corbusier, in which the architecture of both was assessed not in chronological time, but side by side in the present moment. The originality of this approach had the effect of re-situating the assessment of modern architecture within history and acknowledged history as an active influence.

In the course of Rowe's influential academic career, he focused on developing an alternative method of urban design derived in part from the earlier work of Camillo Sitte but largely original, and based on the making of cities through a process of collage with superimposed pieces. The ideal model for this pragmatic, anti-doctrinaire approach was the ruined villa of the Roman Emperor Hadrian at Tivoli, outside Rome. Richard Meier has stated that he was profoundly influenced by Rowe's thinking and these very Roman ruins. In 1981, Rowe started the *Cornell Journal of Architecture* and contributed to issue 1 with "The Present Urban Predicament" and to issue 2 with "Program vs. Paradigm."

Rowe's chief significance was as a teacher and writer on these subjects, which greatly influenced architectural

thinking. His book *Collage City* (with Fred Koetter) is his theoretical treatise that sets out various analyses of urban form in a number of existing cities known to be aesthetically successful, examining their actual existing urban structure as found, revealing it to be the end product of a ceaseless process of fragmentation, the collision/superimposition/contamination of many diverse ideas imposed on it by successive generations, each with its own idea.

The move towards Postmodernism has occasionally snared Rowe as a foundational thinker and writer of the PM Movement, though Rowe's efforts and range place him outside the definition of any stylistic category.

I. M. Pei + Partners:

Henry Cobb's distinguished design of the Fredonia, NY SUNY campus in 1969 for I. M. Pei's firm moved me to understand the capacity of movement and light to powerfully define curved surfaces in both plan and section.

Essays on Architecture:

Early Influences

Cleveland, OH

The Administration Tower, Reed Library and Rockefeller Arts Center with their interplay of solids and voids in their monolithic poured concrete architecture created powerful places – a public hearth space – in an otherwise soul-less campus of disconnected structures.

These buildings presented an orchestration of gestures with each form calculated, though in 1988, Cobb stated that he thought his Administration Building was “all gesture,” falling short of Lou Kahn’s Kimball Art Museum and its power as a gesture within the idealized systemic order or ideology of his museum building.

I interpret Cobb’s great hung poured concrete deep shadowbox forms of the Library as books or portals to knowledge. The manner in which the forms were integrated with the site and even the poured concrete benches reflected superior craftsmanship.

I found the diagonal movement spline Cobb introduced to be a brilliant gesture to create exceptional viewpoints for his articulated forms, and it gave each structure the responsibility and opportunity to engage the spline by reaching out or pulling it in and creating added architectural drama for the effort.

Similarly, Pei’s partner Amaldo Cossutta’s **Christian Science Center** in Boston (1964-1970) also employed bold gestures in poured concrete to organize distinct program elements. Poured concrete was selected to match the color and texture of the Mother Church’s rich limestone exterior. The 28-story administrative tower with its deeply articulated facade and its faceted core at its west end mark the end of a 670-foot long reflecting pool and fountain.

Cossutta’s Colonnade presents a rounded – albeit segmented - poured concrete eyelash to meet the sky which recalls Le Corbusier’s Chandigarh’s Secretariat Palace of Assembly, finished in 1953. Sasaki’s formal landscape integrated brick pavers into formal seating areas on the south side of the reflecting pool, complimenting the tiered form of the Sunday School’s upper level cantilever.

The complex combined powerfully long lines – the lengthy Colonnade with its balance of vertical fin walls which support the elevated flying beam below the eyebrow; the reflecting pool mirroring the Administrative Tower – with an excellent balance of the curves of the end of the Tower, the eyebrow of the Colonnade and the Sunday School assembly theatre. This is high stakes architectural compositional theatre at a high level and scale (10.4 acres).



Top Down: Christian Science Center, Boston, MA; Amaldo Cossutta, I. M. Pei + Partners





Top Down: Everson Art Museum; Syracuse, NY; I. M. Pei + Partners



Below: Herbert F. Johnson Museum, Cornell University; Ithaca, NY; I. M. Pei + Partners



The Sunday School Building at the west anchors the end of the church's property and creates a dialogue with the adjacent Mother Church. While far smaller and more diminutive than the Mother Church, Cossutta's school holds it own with its crisp notches and curving auditorium. These rich forms translate literally to warm and functional spaces on their interior.

Pei's small but powerful **Herbert Johnson Museum** at Cornell University in Ithaca, NY (1973) is impressive for its clarity and strong presence despite being a rather small project. The museum occupies a tall prominent knoll at the northwest corner of the Arts Quad. Pei artfully stacked the galleries and support spaces to push galleries up, delivering fantastic views of the Cornell Campus and Cayuga Lake.

The fifth floor gallery cantilevers over the third floor open-air sculpture garden. By pulling the program elements into a vertical stack, Pei preserved views of Cayuga Lake from the other buildings on the Quad. Pei employed butt-joint gazing set into the poured concrete with hung concrete sunshades. Again, the composition is a thoughtful balance of vertical and horizontal elements. The museum draws 80,000 visitors annually.

Pei's small **Everson Museum of Art** in Syracuse, NY (1968) involves a series of cantilevered galleries on its upper level to present its collection of American Art. The poured concrete structure has a more textured exterior surface than the Fredonia, Cornell or Boston projects by the firm. Pei's use of box-like forms with cutting out their ground level and projecting the cantilevers for dramatic shadows also served to create well-scaled gallery spaces. His spiral stair defines the movement with a pure sculptural form which I would recall when given the opportunity.

These projects were strong lessons that architecture was art and that a capable architect needed to be adept at giving shape and form to the elements of the client program that spoke to the values of faith, strength and refuge.

I drove to see these projects almost always as soon as they were completed and published. Pei and his partners were form-giving architects who had the discipline, skill and commitment to shape program elements to create forms and relationships that revealed the shape of their function honestly and could support symbolic interpretation and rise above the more simple craft of just building shelter and accommodating social order and function. Like Kahn, they were sculpting space and using light and the

Essays on Architecture:

Early Influences

Cleveland, OH

materiality of concrete to create monolithic structures and urban neighborhoods with real character and quality.

Richard Meier:

Richard Meier's **Smith House** (1967) in Darien, CT is striking. Like Pei's coherent materiality with his poured concrete inside and out, Meier used flush cedar siding on the exterior which he painted white - and white painted drywall on the interior. His elegant sense of scale and manipulation of planes was clever. His determination to separate the structure from the 'walls' created an interplay that enlivened the spaces and the reading of the form.

Meier managed the grades to not allow the slope to induce a compositional default and instead, brought you in on the middle level with the groceries to descend to the kitchen and dining area which was symbolic to me: the primal act of 'hunting,' cooking and eating was at grade with the social aspect elevated to the middle level. Sleeping and the study were atop the stack with a private zone to the approach side of the house so that the 'front' of the house to the water was all glass.

Meier squeezed the program to get it to work with site and budget. Three small bedrooms occupy the upper level with a single simple bathroom. The house propelled Meier's career and has come to represent the first clear step in defining his ideology/ design philosophy. The house recently celebrated its 50th anniversary.

The Smith house signalled that one need not build everything out of poured concrete nor have an exorbitant budget to create legitimate architecture. Such a simple lesson gives a young aspiring architect in Cleveland, OH hope.

Richard Meier has commented: "I was working out of one room of a two-room apartment shortly after leaving the office of Marcel Breuer. One day I had a call from Carole Smith asking if I would be interested in designing a weekend house for her in Darien, Connecticut. She was looking for a young architect who would give full attention to her house."

"Soon thereafter, I went to look at the site she had purchased with her husband. They showed me a set of drawings for an unbuilt ranch-style house that had been designed for the previous landowner. It was immediately clear to me that a one-story house with a spread-out plan was the most expensive type to build on this site because blasting the rock for the foundations would be a massive undertaking. It was obvious that a smaller footprint that extended vertically instead of horizontally would be both more cost-effective and more interesting spatially, given the rocky, coastal landscape. This was the beginning of the design process."

The Smith House, built amidst the rocks and trees of a one-



Above and Below: Smith House; Darien, CT; Richard Meier





Left Above: Smith House; Darien, CT; Richard Meier
Right Top: Hanselman House; Ft. Wayne, IN; Michael Graves



and-a-half-acre site, overlooks Long Island Sound from the Connecticut coast. A dense cluster of evergreens stands at the entrance to the property. Behind, the land clears and rises to the center of the site, then drops sharply to the rocky shoreline and a small, sandy cove. The spatial organization of this house hinges on a programmatic separation between public and private areas.

The private side of the house is at the entrance facing land, woods, and road. A series of closed, cellular spaces, these private areas are organized through three levels behind an opaque facade, which is intermittently pierced by windows. The public spaces, where the family meets and entertains, are to the rear of the house, overlooking the water. This public sector consists of three levels nestled within a three-sided glass enclosure; from the outside, the ground and upper levels appear as solid slabs held fast in the white mullions of the glass shell.

The dramatic view of sea and sky that greets one upon entering is framed and intensified in the transparent skin of the rear facade. Placed directly opposite the entry, a painted brick fireplace pushes to the outside through the tight frame of mullions. Suspended between the chimney and the steel structural columns, the glazed wall creates a subtle tension that draws the occupant across the living space to the outside. The balustrades of the lower and upper levels are set back from the glass, amplifying that tension.”

After a semester in England to start fifth year, two of my classmates and I decided to give a presentation to junior and senior classes on The New Brutalisms. This naturally obligated us to cover the Old Brutalisms first. We had our slides of the Smithsons and the English prerequisites from our time at the AA. Our approach to the subject was that many architects – Rudolph, Meier, Eisenman – even Pei, were occasionally so

committed to a formal compositional approach that the semantic qualities of spatial experience assumed a potentially secondary importance in some of their projects.

And we argued that while beton brut had a certain cause for the label to appear, materiality was not the determining factor in whether a work was Brutalist or not. And the point of the presentation was the opening of a dialogue about how we characterized, experienced, labeled and discussed Architecture – which some of us felt the faculty had failed to do, so it was up to us.

We determined that to do the presentation properly, we needed our cameras, lots of film and a road trip to the East Coast to see and document first hand the more important projects that illustrated our perspective. The book *Five Architects* had just come out, featuring the early works of Meier, Graves, Eisenman, Charles Gwathmey and John Hejduk. So we headed off with most of our stops in New Haven and New York City. We made arrangements and confirmed everything before we left to stop in New York on Saturday morning to meet Richard Meier and dupe some of his 35mm slides of his projects for our presentation. We got to his office at exactly the right time with our bellows.

Meier acted like we were committed unarmed robbery. He was a prick but finally allowed us to duplicate the slides. His office naturally had these exquisite models of his houses under plexi covers on elegant pedestals in his lobby and the primary circulation spline through the office. On the Smith House model, a staffer had placed a pink flamingo

Essays on Architecture:
Early Influences
Cleveland, OH



Above Left: Snyderman House; Ft. Wayne, IN; Michael Graves
Above Right: House II; Peter Eisenman
Below Top: House II; Peter Eisenman
Below Middle Left: House II Isometric; Right: House III Isometric; Peter Eisenman
Bottom: Olivetti USA HQ Model; Richard Meier



– perfectly in scale – on the lawn outside the living room windows. Our Brutalism presentation involved 1200 slides and lasted just under four hours.

Michael Graves:

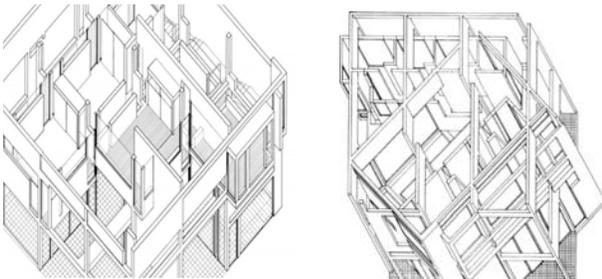
The book *Five Architects* exposed me to the rigorous ideology of Eisenman and the compositional skills of Richard Meier in looking at the program elements of a home and manipulating those elements to create poetic spaces that achieved a modest grandeur. Graves' Hanselman house in Ft. Wayne was particularly interesting in its small scale and elevated entry. We made a field trip since one of my classmates was from Ft. Wayne and somebody in the family knew the owners. The wife was so gracious, describing their objectives and modest budget.

At one point, she confessed, "We were so interested to see it come together and at one point, I recall being here when the men were installing the windows. They were walking all around, carrying the glass up and down the stairs, and trying to figure out which piece went where. I didn't know until later that they were working hourly. I could have saved thousands by telling them where each piece went."

What was particularly compelling about the Hanselman house was its context - a neighborhood of half-acre lots with your typical colonial MacMansions. The contrast was striking – and amusing. Graves would go on to explore a postmodernism with historical details he would distort or apply in a pastiche-like collage that lost its artfulness for me.

Peter Eisenman:

Eisenman's ideology and grid plays were intellectually





Top: Rogers Library; Columbus, IN; I. M. Pei + Partners with "Large Torso" by Henry Moore
Middle: Occupational Health Center; Columbus, IN; Hardy Holtzman Pfeiffer
Bottom: North Christian Church; Columbus, IN; Eero Saarinen



stimulating. UC brought him in for a lecture and a classmate and I hosted him for dinner and had the most entertaining conversation over four hours. The quote I remember most: "As soon as you wonder why something I've done is the way it is, I've got you! Now you're trying to figure out what my game is and you are therefore questioning your own predispositions about what Architecture is." Though such a baseline tolerates any and all nonsense, Eisenman has never been short on dogma or ideology.

Columbus, IN:

My first trip to Columbus, IN was in 1975 when the critical mass of exemplary projects by exemplary architects had reached a consensus threshold. Four of my AA classmates who hailed from Italy arranged to come to visit us and see as much as they could in two weeks, so I drove us up. We saw everything there was to see. Three works stood out:

1. Pei's **Rogers Library's** collaboration with the terrific Henry Moore torso sculpture out front is well done. I now own the maquette for that sculpture which sits on my nightstand. Pei's library not only offers a calm respect for Eliel Saarinen's church across the street, it is a canvas for the artful presentation of Moore's bronze.
2. Hardy Holtzman Pfeiffer's **Occupational Health Clinic**; The energy delivered by the diagonally slashing roof monitors that start at the parking lot and carry through the entire building are fun and powerful. The colors on the steel added to the energy and excitement.
3. Saarinen's **North Christian Church**; The raw power of this simple sculptural element from miles away as a beacon to an intimate spatial experience that uses scale, texture and light to create an reverent environment for prayer and worship nearly overwhelmed me. As one comes closer, the building is much larger and impressive than it first appears. For a typical suburban church, it would be unaffordable today.

James Stirling:

The duality of Stirling's Florey dormitory in Oxford, England is fascinating. Approached from the riverwalk, one comes upon a facet of the sloping rear mostly opaque red tiled walls, whereupon the building opens its horseshoe shape in a completely glass waterfall of dorm rooms facing the river.

The weathervane Stirling made out of the exhaust from the cafeteria kitchen was clever and fun. This rather boring program of repetitive rooms had been

Essays on Architecture:

Early Influences

Cleveland, OH

gently manipulated into not only a brilliant plan but an interesting section. This crafting of simple program elements to a form with great interest and vitality which also served to deliver most every resident a stunning view of the river and the various Oxford campuses.

Stirling had established his originality with his Leicester Engineering Building and the Cambridge History Faculty projects, but those projects had a scale to them that Florey did not.

From the parking lot and opposite side, the opaque red tile mass with its concrete columns presents a strong and almost unfriendly presence, like Meier's Smith House and Shamburg pavilion in defining 'public' and 'private' in stark contrast to one another.

Kevin Roche:

With the early death of Eero Saarinen in 1961, his chief design architect Kevin Roche who was finalizing the Ford Foundation HQ in New York at the time came to the forefront to continue Saarinen's great tradition as a stellar form-giving modern architect.

Roche completed the North Christian Church in Columbus, IN in 1964 and also designed the US Post office there, numerous projects for the Cummins Engine enterprise, and the Irwin Bank, all of which struck me with their muscle and power.

The Ford foundation was a particularly significant to me for it was a complete solution - its materiality was integrated completely between its exterior and its interior, which was something I found in few architects - Pei and Meier - and very few others.

I made a point to see Roche's work at Rochester Institute of Technology. Here was an architect committed to masonry who was smart enough and disciplined enough to not resort to gratuitous material changes to break up large opaque surfaces.

Roche's brilliant compositions - concrete at the UMass Arts Center in Amherst and solid 16" limestone blocks at Wesleyan University allowed the power of his massing to shine.

I was fortunate to see these projects as well as the Knights of Columbus Tower and Convention Center in New Haven, CT and the College Life Pyramids early in my career which aptly demonstrated to me the power of bold form-making that owed much to the Baroque traditions of axiality and massing.



Above: Florey Dormitory, Queens College; Oxford, England; James Stirling

Below, Clockwise:

1. US Post Office; Columbus, IN; Roche & Dinkeloo
2. Cummins Engine Plant; Columbus, IN; Roche & Dinkeloo
3. & 4. Ford Foundation HQ; New York, NY; Roche & Dinkeloo
5. & 6. Fine Arts Center, University of Mass, Amherst; Kevin Roche & Dinkeloo
- 7., 8. & 9. Fine Arts Center, Wesleyan University; Middletown, CT; Kevin Roche & Dinkeloo





Above Left, Clockwise:

1. Umberto Eco
2. Charles Jencks
3. Peter Cook
4. Kenneth Frampton

Ideology:

“Where the built environment is merely useful, it fails to be architecture by its contamination. Ethically, architecture must rise to art. Modernist morality establishes that good architecture arises out of good social intentions (Cobb, 1998).”

In college, I was interested early on in architectural theory – the *why* architects do what they do – and the process by which users have meaningful experiences from and with architecture. It simply seemed to me that the objective had to have purpose and reason behind it. And there had to be principles to guide the action steps to produce a design for anything beyond its essential function.

This inquiry came at a time when most schools in the US were struggling with the question of what to teach. There were factions that argued with considerable evidence that the Modern Movement had failed to produce an enlightened or enriched society. There were scores of bad buildings everywhere in the forms of schools, churches, hospitals, banks, factories and commercial buildings.

And yet there were marvelous form-givers who were

producing exceptional works that were both elegant and beautiful and carried a message about society and its values. Saarinen’s TWA Terminal in New York and Dulles International Airport in Washington, DC, Roche & Dinkeloo’s Ford Foundation HQ, Wright’s Fallingwater and Robie houses, Le Corbusier’s Villa Savoye and Ronchamps, SOM’s Air Force Academy, Pei’s Mellon Art Center at Choate, Kahn’s Salk Institute at La Jolla, Johnson’s Glass House, and Neutra’s Kaufman House were celebrated works because they were in varying ways excellent modern architecture.

Yet I was unable at the time to embrace the work of Mies at IIT and Lake Shore Drive. At the time, they seemed to be all about building and ‘technique’ and not architecture in the broader sense I was seeing as our task and obligation. And while I initially was unable to provide a coherent narrative on why it was so, I perceived a profound difference between ‘building’ and ‘architecture.’

Like their counterparts in most other university programs, our professors did not have answers beyond their own idiosyncratic take on who was doing what – they were mapping instead of synthesizing and helping to define and differentiate the polemics or ideologies attributable to the various movements and architects. It was like looking for recipes and the foundation for cooking only to find descriptions and examples of the various ingredients as isolated elements, void of any relationship to one another and their role and contribution to the dishes of which they became a part.

The opportunity to spend a semester at the Architectural Association School of Architecture Inc. in London was appealing because most all of the serious thinkers and authors in the field of architectural theory were teaching at the AA at the time: Charles Jencks, Peter Cook, Kenneth Frampton, Richard Bundt and Umberto Eco.

I caught nearly every lecture/ discussion with every one. The sessions with Jencks and Cook were entertaining while those with Eco were particularly stimulating. Many in the field were debating the role of linguistics in developing a coherent theory of architecture as an example of a shared language with a shared system of communication with shared meanings. The tyranny of Christopher Alexander’s “A Pattern Language...” had most all of us interpreting architecture as a language of communication tools since everyone desperately felt the need to avoid the use of the word ‘style.’

But architecture is an individual experience. We all have different personal interactions with buildings and architecture as we go through life, and the meanings we ascribe to the spaces, forms, light, textures and other attributes are inevitably varied. Eco’s seminars were lively discussions with terribly bright people.

At the time, AA was the consensus top architectural school in the world and the brightest (and wealthiest) people from all over the world were there because of it. I was not the only American to be surprised to discover that many/ most of the students in architecture school in Europe have no intention of becoming an architect or practicing. They study architecture to enhance their understanding and appreciation of it, perhaps because their architectural heritage is so much richer, older and better than ours in America.

There were usually 14 – 18 in the Eco classes. Zaha Hadid was one of the larger people and personalities in the class. She was one of a handful of strong challenging voices as Eco trotted out his well-developed perspective on semiology as a suitable replacement for linguistics in addressing architecture as a sign and symbol system with a structure where intended meanings mattered and were offered to the user to decode and to which meaning and significance could be attached in the process.

Eco's thinking was coherent and rational as he was finalizing the book he would publish - *A Theory of Semiotics* - the following year in 1975 and would be with four dozen of us in Tampa later that year when we met for the first symposium on the subject as founding members of the Semiotic Society of America. With the encouragement of one of my professors at UC, Dennis Mann, we were exploring Descartes and Hegel and phenomenological theory and philosophy, which seemed to have a cause-and-effect appeal in addressing how we perceive and attach significant to our experiences.

Finally in fifth year, I got around to a book Eco had suggested and it finally made sense. Suzanne K. Langer's *Philosophy in a New Key* is not intentionally about architecture. It is about life, perception, experiences and how we attach meaning and significance to those experiences.

After reading Langer, I wrote my design philosophy and wanted to elaborate on it and do my senior thesis as a paper. But UC, as a school that invented the co-op program, would not hear of it and insisted that my thesis be a building. From my promotions at the firm where my co-op experience began, I had an opportunity to do a real building for my thesis, which to me, seemed a logical extension of the co-op program. But the prospect of a real client with a real site, a real program and a real budget proved intimidating and they made me design a pretend project on a pretend site.

I had begun my co-op experiences in my second academic year with Visnapuu & Gaede Inc., Architects and Planners on the 17th floor of the Keith Building in Playhouse Square in Cleveland. V+G was a classic general practice architectural and planning firm with a staff of 22 when I joined. Initially, I was a draftsman and would work with the job captains and project managers to help pull the details together to complete construction documents.

The range of projects was wide and provided me a great learning experience – a large custom home for a Standard Oil executive, an Ohio National Guard Armory, a number of churches, an athletic club, historical renovations and restorations, a 14-floor precast apartment building in Cleveland Heights, row house public housing in the Detroit-Shoreway area along with a twelve-story apartment building for seniors and two other apartment projects in Lima, OH.

I had been drawing mechanically since junior high and in high school worked for a metal stampings company drawing their parts and tooling dies. My boss there had been a German who came to the US after WWII and had a thick accent. He actually was a good instructor who would always tell me, "Beeill, you've got to push more the pencil," which was his way of telling me to make my lines darker and of appropriately varied line widths.

So by the time I started working in an architectural firm, I understood line weights and was comfortable on linen, Clearprint or mylar. They were surprised at my speed and kept giving me more work and soon I was working with Robert C. Gaede FAIA as his boat monkey. Bob loved to render with a #945 Sienna Brown Prismacolor pencil on yellow tracing paper and he drew at a ridiculously small scale. He would hand me schematic sketches for a church that were close to 1"=20', but were not quite to scale. So it became my job to draw the sketches up at 1/8" = 1'-0" and correct corridor widths and door sizes to make it code compliant. And I got to tweak his elevations and start to play with scale, materials and structure.

The first two projects with Gaede were churches – one small and one quite large. For the smaller one – a Methodist church in Avon Lake, I suggested laminated wood arches and an exposed wood deck, which Bob approved. The second church was a complex program for a growing Lutheran congregation in Westlake. The seating capacity required a large sanctuary that implied a semi-rigid steel frame, clad in wood. We created a monumental stained glass art widow as the altar backdrop facing north. The complex connected to an existing undistinguished school. We placed a new brick campanile between the school and the new sanctuary in front with an elegantly tapered copper steeple to give the composition of masses a balance and pull the eye off of the school.

Gaede was also an enthusiastic preservation architect and was always working on campaigns for the restoration or preservation of historic buildings throughout northern Ohio. He also designed a number of historic districts in Coshocton, Burton and the Ohio Historical Village in Columbus next to the Ohio History Center.

Herk Visnapuu was an Estonian architect who escaped the Soviets and Germans in WWII under a tarp in a fishing boat to Sweden, ending up at Oberlin. Visnapuu was the marketing principal and Gaede was supposed to be the design partner. But the best church of the 100+ the firm did was a Community Church in Chesterland that Visnapuu actually designed with a Scandinavian-like Bermuda roof atop the wooden laminated arches that brought daylight in above at the ends. The simple, elegant and inexpensive church won the firm its second national AIA Design Award.

Gaede would typically write the contracts for his small restoration studies. He would take photos, write a report on what needed to be done, what it was likely to cost, make a small rendering of the completed project and have offset covers printed and give the client 100 or so copies of the report for their fundraising. Shortly before I was to leave for England, one morning Visnapuu came back to the drafting room to speak to Gaede who was with me going over sketches for something. Herk was livid; "God damn it Bob, I just got the bill from the printer for your study for the Westervelt Hall Renovation," a handsome 1874 public school in Oberlin, OH, that was abandoned at that time.

Gaede, an elegant gentleman and Michigan graduate who prided himself on his vocabulary and eloquence, simply replied, "Yes?"

Visnapuu was red with anger, "Well, the entire fee you quoted is \$2000 and the printing bill alone is \$2200! And you and this young man have spent dozens and dozens of hours on this thing! I can't afford this bullshit, Bob! You do this every time! I've had it! I'm buying you out of this firm!" And he stormed off.

Gaede looked at me with puppy dog eyes and walked after Herk, as if this had happened twenty times before. Their two offices were 100' away down the hall but we could all hear the shouting – mostly Herk. Gaede was gone in a week. Visnapuu always resented the fact that Gaede was not motivated by money. He had married the only daughter of a wealthy family who owned jewelry stores at Shaker Square and Chautauqua and while Gaede never said so, he didn't need to work. He worked because he loved it.

A third partner, Kohei Ishikawa had been added a few years earlier to handle the design of commercial and institutional buildings since Gaede was born 100 years too late. Kohei had done a nice job designing the District Administration



Building for Cuyahoga Community College at East 9th St. and Carnegie Ave. (above), south of what is now Progressive Field for the Cleveland Indians. The original building was a nice composition with a truncated pyramid skylight over a central reception/ waiting atrium. Careless additions have since horribly disfigured and abused the building, obscuring the quality and integrity of Kohei's original design.

My first week on the job, they sent me - long hair and all - to observe the pouring of the concrete entry plaza steps and ramp which had electric snow-melting cables in them. I asked one of the job captains what I should be looking for. He told me to make certain that they had the cables up off the ground so that the aggregate and slurry were a cushion under the cables as well as a cover so that when they went to finish the surface, they did not cause the stone subbase to abrade against the cables and short them out.

The flatwork contractor had plastic U- clips every two feet so the cables sagged and touched the stone in between. I went up to the foreman and superintendent and pointed to the specification and said that if the cables shorted out, it would be an expensive tear-out and redo.

They looked at me like I would have looked at me and took no corrective action. Five hours later, the snow melt system shorted out and when I came back the next day, I handed them the letter from the job captain demanding that they tear it all out and redo the entire area. It cost them \$40,000 (\$1972) and that prime contractor went bankrupt on the project (along with three of the other four prime contractors).

Shortly after Gaede was bought out, Herk came back to talk with Kohei who had a 16' x 16' studio next to the drafting room. Visnapuu had a Dodge report in his hand that said Kohei was the architect for a \$400,000 renovation of Huron Road into a

Essays on Architecture:

Early Influences

Cleveland, OH

pedestrian mall. Herk said, "Kohei, I didn't know we got this job. That's great!" Kohei replied, "That's my job, Herk, not the firm's."

Visnapuu replied, "Kohei, you are a partner in this firm. I'll be right back with your last check. You are finished here. Give me the keys to the Mercedes (his company car)." The next week, Visnapuu hired someone to be the firm's Director of Design. He was around a few weeks before I took off for the AA in London. Four months later, I returned and he was working on the design of a new fire station for the City of Cleveland.

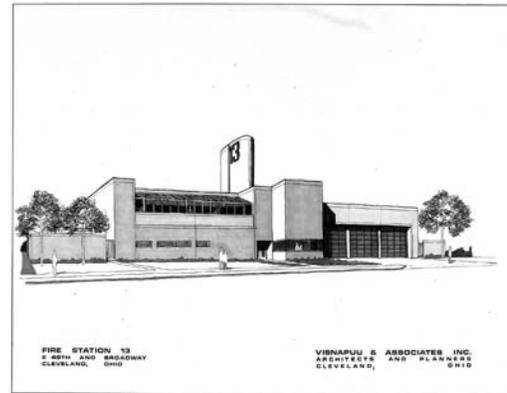
One morning, Herk was walking around delivering the day's mail and noticed that he had a magazine on his board next to a rendering he was doing of the fire station. The magazine photo had a large circular porthole cutout in a wing wall that projected in front of the building mass, which he was copying into the fire station. Herk was pissed and fired him on the spot.

I was not in the office at the time to hear the conversation, but when I came back, Herk gave me the job of Director of Design. He walked into the drafting room and announced it to the guys. There was silence. I was a pre-senior in college. The 12 guys in the drafting room were graduate and licensed architects. The average age was 38. Virtually all were graduates of the architecture program at Case Western Reserve University. Case had lost its accreditation in 1972. None of the guys were strong in design, but they all understood building science very well and really knew how to put a building together and develop a comprehensive set of outstanding contract documents.

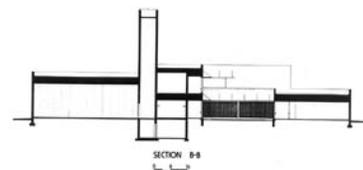
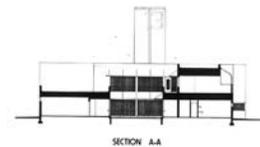
Two of them in particular were pissed that this 22-year old kid who hadn't even graduated college was being given the opportunity and responsibility to design the firm's projects, which they would then have to detail. The two marched up to Visnapuu's office to complain. Herk told them if they didn't like it, he would cut them their final check right then and there. The Arab Oil Embargo had begun 15 months earlier, and the economy was tightening - and so was the job market for architects in Cleveland. They went back to their desks and I redid the Fire Station #13 design with intended symbolism, applying my philosophy with enthusiasm.

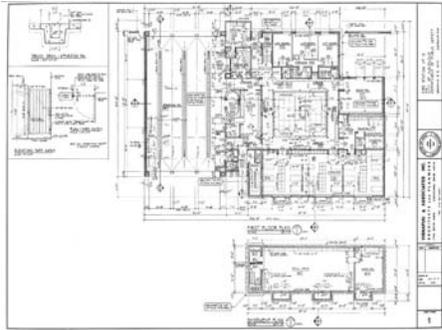
Fire Station #13:

My first solo (high) wire act without a net was a fire station for the City of Cleveland in the Old Broadway area. I went and met the commanders of two of the three shifts to understand their issues and the equipment. One of their more annoying challenges was drying their equipment and clothing when they returned from a call. Everything was wet. When they put their boots on the ground, the insides stayed wet for a long time. I designed a series of cantilevered stainless rods to hold boots upside down at an angle so they drained. The coats were on spread hooks above so they also got air and the hats were on



Fire Station #13; Cleveland, OH; Visnapuu & Assoc., Inc; William Eberhard, Director of Design





Fire Station #13; Cleveland, OH; Visnapuu & Assoc., Inc; William Eberhard, Director of Design

stainless rod shelves above. The fire hoses went up into the hose tower and I had the MEP engineer introduce the make-up air low in the apparel room so the air movement dried the clothes as it was drawn up into the tower to dry the hoses.

I rounded the tower to reflect the hose shape and announce its function and plastered a huge number 13 on the side as the station number. Because the site was an inner city lot at a V-intersection, we were able to have a drive-through Apparatus Room and I arranged the support functions, dormitory room and captain's quarters in a doughnut around a central courtyard so the men could have an outdoor space close to the Ready Room and Apparatus Room when calls came.

Firemen spend the majority of their time cooking, eating and hanging out. So food is a big deal. The courtyard enabled the men to grille without the neighborhood seeing them. The Ready Room was placed above the three captain's bedroom suites on the second level and I pulled the wall down and inserted a greenhouse-glazing element, creating a kind of inverted heroic arch. The Watch Room where personnel control traffic and change traffic signals when a call requires their response projects out from the face of the station with the space above a solid masonry mass, connoting the danger and dogma of the fireman's function.

The building was designed to be rendered in a maroon iron spot face brick to fit the neighborhood with its red and burgundy commercial and industrial buildings with stone sills and headers. I felt the scale of the building was modest, so I simply articulated openings with soldier courses of the same face brick. My first project was also my first disappointment. The bids came in right where we expected. Yet the City decided it was too expensive and since they were trying to build two stations, they took a design of a former station and used it two more times, and my design was relegated to the 'almost' pile.

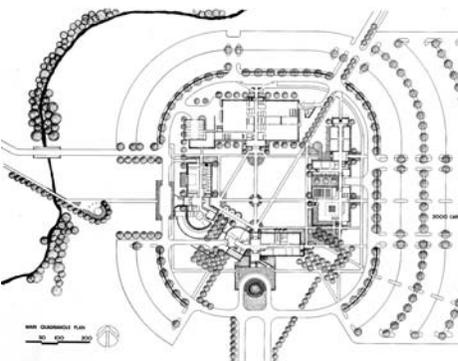
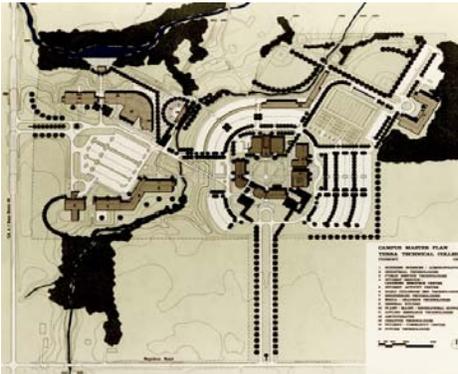
Terra Technical College

In order to take full advantage of the opportunity presented to me by Visnapuu, my last two years at UC involved me commuting back and forth weekly. With a M-W-F class schedule, I requested and received an exemption from my Wednesday UC classes so I could drive back to Cleveland every Monday night and work Tuesday through Thursday in the office, and drive back to Cincinnati every Thursday after work. The opportunity to design a new master plan for a new technical college and its first building was adequate justification for a program which brags about being the first co-op program in the country to cut me that much slack.

Given the chance to help select a new site for a growing two-year state technical college in Sandusky County as a pre-Senior still in college, I attempted to gauge the scope of the buildings that would eventually be required, given a projected enrollment of 2500. With programs in the areas of business,

Below:

1. Terra Community College Campus Master Plan; Fremont, OH
2. Campus Main Quadrangle Detail



Essays on Architecture:

Early Influences

Cleveland, OH

industrial technologies, early childhood education and law enforcement, it was anticipated that the school would add programs as the region required workforce development outside the boundaries of the area's state public colleges – the University of Toledo and Bowling Green State University.

Of the alternatives identified for me to evaluate, a 106-acre farm on the west side of Fremont adjacent to a state highway bypass was the most attractive and appropriate. It had 90+ developable acres, excellent access and it featured a handsome swale and creek that gave the flat boring landscape in the area a bit of character not found on the other alternative locations. Sanitary service could be obtained with a relatively inexpensive lift station and connection to an existing collector just north of the site. The adjacent land uses were agricultural with a small regional airport to the south. Their east-west land strip orientations posed no problem or conflict for the college's land use.

I proposed a central quadrangle of core academic and student service occupancies on the central land mass with parking off to the east of a ring road to keep pristine the views of the creek and swale to the west. The entry sequence was a 1500-foot promenade with the phase one administration and business science building as its terminus with a two-story entry foyer as a symbolic door to the school.

It bears noting that at the time, State Architect Don Welsh echoed the values of the Ohio Board of Regents, which was that technical colleges were not entitled to 'architecture'- they got buildings. Architecture was reserved for four-year state colleges. In fact, the building the college had outgrown was a one story brick and block bar joist beast next to Fremont's vocational high school north of town with precast concrete surrounds at the few windows that were incorporated into the envelope. It was depressing.

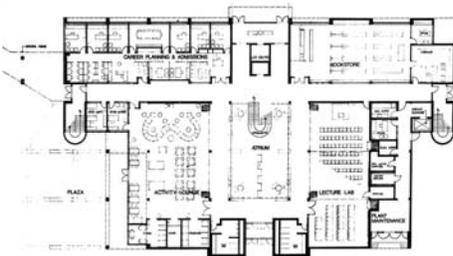
I felt that the Phase I building on the new campus needed to accede to the eye to be legible to the adjacent bypass and access road and that it therefore should be light in its tone. I proposed Indiana limestone for the exterior skin, which was not costly and would fit within our humble budget of \$45/sf for the 48,000 sf of programs. Welsh told us that they could not approve limestone even though it was the same cost as brick – "Then every other technical college will want its buildings built out of limestone." I did not see the problem, but Welsh was insistent. So I selected a limestone-colored face brick. He wanted to object - but could not.

I was impressed with the energy delivered by the diagonal movement spline in Henry Cobb's Fredonia intervention, and proposed such a pedestrian spline to link the main quadrangle to the northeast quadrant of the site which I earmarked for future programs. This gave both areas a

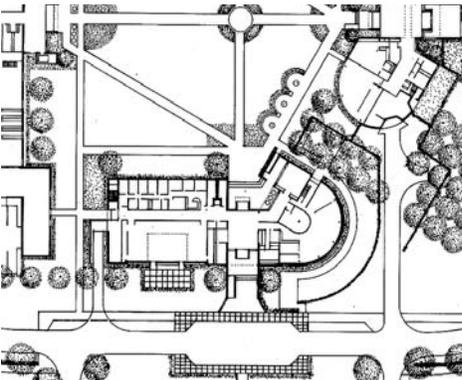


Above: Terra Phase III Student Service/ Learning Resource Center
Below Top: Terra Phase III West Elevation
Below Bottom: Terra Phase III Atrium





Top: Terra III Learning Resource Center
 Above: Terra III SS/LRC 1st Floor Plan
 Below: Terra Phase IV Early Childhood Education Center Plan
 Bottom: Phase I Business Science & Administration Building



potential for kinetic energy and the opportunity for non-orthogonal building shapes and movement patterns as it connected to the spline and the main quadrangle.

With the college still in its youth, their ability to predict with clarity their future academic initiatives was not strong at the time of the original master plan. Initially, a library/ learning resource center, student service and general classroom building for core curriculum classes was contemplated as the eastern component of the main quadrangle. With the second industrial technology building under way, we and the college proposed that the eastern edge of the main quad be instead a pair of structures: a student service/ learning resource center and library, with a more flexible general classroom building adjacent to the north.

The sketchbook rendering illustrates my attempt to allow the resource center/ library building to incorporate a series of tiered floor plates around a hearth-like atrium to both shade full-height glass at the library and present strong shadows to the SR 53 bypass in order to give the building and campus a strong visual presence and legibility.

But the Arab Oil Embargo compelled the State to be more cautious and stingy with its spending and the resulting Phase III 48,000 sf building pulls all of the program elements together around a central three-story atrium with a cantilevered scissor stair. I had introduced the warmer brick and sloping limestone windowsill vocabulary in the Phase II Industrial Technology Laboratory Building because the Board's aspirational image of itself was a Yale-like collection of buildings of warm masonry with light stone articulations at its fenestrations.

I am not terribly proud of the Phase I and Phase II buildings because of the compromises imposed by State Architect Welsh and my own lack of experience and compositional skill. I had designed the Phase I building with the administrative elements in a curved element on the west end canted to the northwest to acknowledge the diagonal movement spline of the master plan. I appreciated how Richard Meier's unbuilt Olivetti HQ in Fairfax, VA (1971) created strong shadow lines and I shamelessly proposed a similar curved wrapper at the western administrative office mass as a warm and welcoming form as this was the initial facility everyone would see on arrival.

Despite the fact that it was cost neutral with our poured concrete frame and the fact that the radius was so large that it did not require a special brick, Welsh objected because he and the Regents believed that curves of any kind added cost and technical college facilities were not considered eligible for such extravagances. Our firm's principal convinced Welsh to allow us to keep the essence of the design and just cut the corners of the canted curved form with 45 degree angles by telling him that we could just cut the ceiling tiles diagonally, thereby not causing any waste or added cost.

Essays on Architecture:

Early Influences

Cleveland, OH

The effect of the sellout is brutal and undermined the grace and balance the original composition intend. It also compromised the symbolism of the soft approachable form selected for the administrative personnel of the college, which was to imply their humanity and approachability, intentionally contrasted against the western linear and rational portion of the building housing the vocational programs.

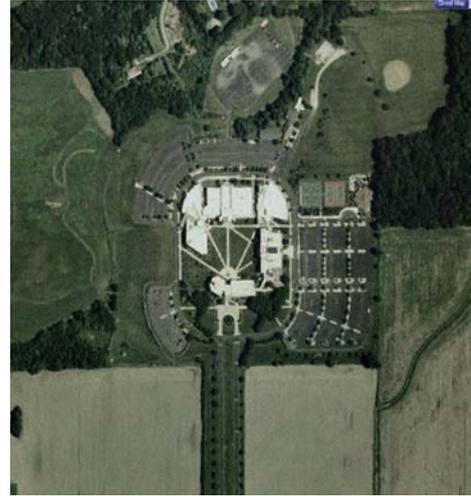
I am more proud of the Phase III Student Service/ Learning Resource Center. Since the Phase II Industrial Technologies Building had set a precedent of recessed limestone sills and vertical forms with its stairs and elevators, the Phase III building exploited the grammar and employs bookend rounded stair towers with curved mirrored glass block glazing between landings. I created a waterfall-like glass transition to a second level bridge, linking the Phase I and Phase III buildings, overlooking a brick patio on the south side of the building, which has seen a welcome heavy use by students.

The west elevation facing the highway bypass to the west features recessed windows and sloping limestone sills as well as hung limestone sunshades at the third floor library. The library's reading area projects over the balcony at the Dean's offices below and is given daylight by a trio of hip-ridge skylights (Father, Son and Holy Ghost). There are fourteen different types of glass on the building given its varying needs for shading, reflectance and light transmission. Despite the fact that the design put the Dean and faculty offices together in the Phase III building, as the building was under construction, the college's new President, an egomaniac, decided that he would take the Dean's suite for himself and locate the Dean in the Phase I building in his former office.

I wanted the Phase III building to have scale and an open feel. I also knew that the State Architect would challenge tall floor-to-floor heights, so I exposed the poured concrete pan joist structure. But to soften it, we mixed in some white aggregate and rose pigment – like Pei did in the National Gallery East Building - to give it a warmer hue that complimented the same warm brick of the exterior that I brought inside, anticipating the building's heavy use. Where acoustical absorption was needed, I avoided lay-in ceilings and utilized sonic foam sheets typically utilized in recording studios on the slabs of the concrete pan forms.

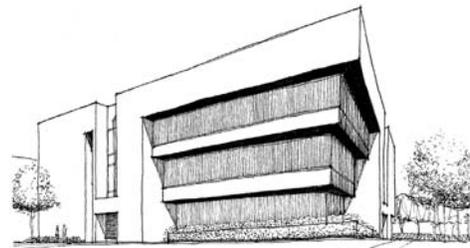
By exposing the structure, we were obligated to use cable-hung aluminum indirect lighting, which was uncommon and costly at the time, as well as neat spiral ducts, which I insisted had curvilinear diffusers incorporated so the cylindrical shapes above one's head were pure in form. In an attempt to circumvent further compromises to the design imposed by the State, I worked closely with cost consultant Al McNulty to develop a detailed and verified budget breakdown of the building to successfully prove to State Architect Welsh that these perceived luxury features were within the budget allocated.

Lecture lab areas feature acoustically-rated folding wall assemblies to allow larger seminars and events to be accommodated. Glass



Top to Bottom:

1. Terra Community College aerial; Fremont, OH
2. Master Plan Learning Resource Center Conceptual design
3. Master Plan Early Childhood Education Center Conceptual design
4. Phase III Student Service Learning Resource Center in 2018





Above: Wayne Dalton Corporation HQ; Mt. Hope, OH; 1993

railings at the atrium enable large group gatherings and all-hands kind of events when needed.

I had envisioned the west building of the main quadrangle to be a two-story mass that incorporated the early childhood education programs and a student dining/ café element overlooking the swale and creek to the east. I designed it with a curved southern end that came back to the 30-degree movement spline and felt I could sell it because its largest program function was the primary Early Childhood Lab, which I designed with a central observation room for students and faculty, which was programmatically required.

The curved form kept the unobstructed sight lines to all children and students reasonable in length from the observation room. The sloping masonry sills on the curve were a cost issue - Pei's Christian Science Sunday School building was an inspiration in reconciling the arc tangents, but the \$2.2 million requested was not a big enough number to jump out at anyone looking at the biennium funding bill. Or so we all thought.

It was never funded. Instead, a Toledo firm fifteen years later designed an informal and jagged building that reflects a pastiche of architectural clichés and incorporates a hodge-podge of various unrelated programs and violates the axes of our approved master plan. I attributed this to the marginal design skills of the architect and the inability of the college to work with its legislator to impress upon the State the legitimacy of its different programs and the need to allow them to be defined architecturally to accommodate growth and development as the market required, which was also a challenge during our 10-year run with the school. This has been a problem for all technical colleges or schools in smaller ex-urban areas where the political clout of citizens and elected officials struggles to compete with those in established schools and larger metropolitan areas.

Terra was founded in 1968 and was elevated to the status of a state community college in 1994. With Owens Technical College – with similar programs - less than 30 miles away in Toledo, Terra was always a commuter school, drawing from a limited geographical area. In 2017, Terra broke ground on the second only student housing project at a community college in Ohio.

Terra President Jerome Webster resigned in May 2018 in response to mounting concerns about his administration in the wake of the cost assessment of the dormitory project. Prior to opening the 225 units in the fall of 2018, the last published report stated that only 71 students had applied for residency and only 18 had signed leases.

The college currently has 2434 students. The initial dormitory demand analysis somehow projected enrollment at 5000. Questions concerning the college's exposure for project costs and room rentals have yet to be answered by school officials. Local manufacturers had also complained about the college's graduates being unprepared for job openings.

The Gospel According to Eberhard:

The purpose of the built environment requires that the responsibilities of the Architect are threefold:

1. **Shelter:** Make life secure, comfortable and enduring.
2. **Order:** Provide a framework where the intended activities and experiences are not just permitted - they are encouraged, enabled and facilitated.
3. **Symbol:** Represent that values, beliefs, aspirations of the client/ community so the result stands for something.

The user is the enactor of the aesthetic event. But the architect must encode the potential for symbolic interpretation. Absent the ability to be interpreted with symbolic content, the built environment fails to be art or architecture and is therefore just 'building (1975).'

"When the built environment is merely useful, it fails to be architecture in its contamination. Ethically, architecture must rise to art. Modernist morality establishes that good architecture comes from good social institutions (Cobb, 1998)."

January 2019



Left Above, Clockwise:
1. Genesis; Independence, OH
2. Technology Learning Center, Cuyahoga Community College
3. First National Bank Tower Renovation; Akron, OH
5. American Heritage Motorcycles; Cincinnati, OH

