

TRUMP PUTS OUR CELEBREZZE UP FOR SALE

The U.S. General Services Administration (GSA) announced it will initiate a public sale of the 32-story Anthony J. Celebrezze (AJC) Federal Building, 1240 E 9th St, in Downtown Cleveland that it claims could potentially save more than \$430 million in total annual operating costs.

By including the AJC Federal Building in President Trump's plan to shrink the government's real estate portfolio, the GSA said in an official statement that "We expect to save taxpayers over \$180 million in maintenance and redevelopment costs." Translation? We simply will not spend what we need to for maintenance in the building. That is NOT savings. We will spend much more than that over the next 30 years by relocating those 4,000 employees to rental property.

That is not saving the taxpayers any money. To the contrary.

GSA's projected 'savings' is an illusion as it fails to reflect the cost of where the 4,000 people among 30 agencies who currently work in the 1.2 million sf building will be housed in the future. And that rental expense - to say nothing of the cost to build out and furnish the new space - will be greater than what the GSA's annual occupancy costs are at Celebrezze over a 20-year or 30-year term.

Ownership is the least expensive form of occupancy, which means that if GSA leases space elsewhere for the government's staff, the occupancy costs over time will exceed those of maintaining Celebrezze.

And let's not forget that GSA spent \$270 million to put a new glass skin on the outside of the building and replace the roof in 2014, and another \$54 million approved to renovate six floors at a whopping \$245/sf, six times the average cost of interior tenant build-outs here. "Green" energy-saving elements of the project were also implemented.

GSA stopped contractor Whiting-Turner's work on the six floors with demolition in progress and new materials purchased and on site. GSA previously promised to provide more information about the cessation of this work but has failed to do so.

GSA says that the Celebrezze building has a backlog of \$175 million in repairs that are allegedly needed. The tower with its underground garage and adjacent plaza cost \$31 million build in 1966. GSA projects that it needs to lease 665,000 sf for the staff here and plans to accomplish this relocation within two years.

Heaven knows the downtown CBD would welcome the absorption of 665,000 sf of office space though it will be spread over a number of different buildings where GSA will have to spend heavily to repeatedly incorporate their access control and security requirements.

It is a terrible time to attempt to sell an office building in Cleveland as recent transactions indicate, and Celebrezze has at least two enormous strikes against it if offered for sale: The building's very large floorplates have limited appeal in this day and age for anyone who is not in need of large open plan layouts for large departments, which are no longer the norm. This also means that the floors are difficult and potentially inefficient to demise for multi-tenant or multi-family occupancy, which every prospective owner will take into consideration.

Additionally, if the building truly needs \$175 million in repairs, GSA will not be able to give the property away - at virtually any price.

And any prospective buyer will give no credit for the new second exterior glass facade GSA installed in 2014. GSA has claimed that the added skin 'saves' \$700k annually, but the second skin is open on the top, bottom and sides, allowing warm and cold air against the original envelope. GSA has never published a case study validating energy consumption before and after the added facade.

The design team that came up with the idea claimed that "The new facade, which will be placed 2.5 feet outside the original facade, will create a cushion of insulating air that will turn the building into a giant thermos." Not exactly. A thermos is enclosed. Celebrezze is not.



Above: Celebrezze Federal Building after the Facade Addition; Interactive Design; Chicago
Below: Celebrezze's original design and construction; Shafer Flynn & Van Dijk with Dalton Dalton Little & Newport and Outcalt Guenther Rode & Bonebrake; 1969





Above: Celebrezze Federal Building 2014 Facade Replacement Detail

Once the current Celebrezze staff are relocated, the building will be closed and likely offered to local and state governments first. If there are no takers, then it would go to a public sale offering by the GSA.

While the subject needs careful analysis, it may make for a highly functional and cost-effective new justice center - if it can be acquired for the right price.

The 2010 - 2014 project was intended to allow GSA to retain the existing building, thereby avoiding the expense and inefficiency of constructing an entirely new building - or leasing space in a number of existing buildings - and relocating the current building's occupants, which the Trump administration has now planned to implement instead.

Additionally, the 2014 renovation allowed GSA to preserve a historic asset. In 2011, the Celebrezze Building was determined eligible for listing in the National Register of Historic Places for its exceptional local historic and architectural significance.

The Celebrezze Building was added to the National Register of Historic Places in 2021, which will limit what a new owner can do in repurposing the building, which is likely to reduce further scant competition for the sale and depress its market value.

This historic determination rested on the Celebrezze Building's distinguished modernist design and its role in the history of the Erievue plan and the development of the modern Cleveland skyline. It also recognized Piet van Dijk as a master architect. Comparatively unknown at the time he designed the Celebrezze Building, van Dijk went on to become one of the Cleveland area's most celebrated designers.

Following the Celebrezze Building, van Dijk designed the Blossom Music Center (1968) in Cuyahoga Falls. Subsequently, his firm developed a global reputation for expertise in the design of performance venues. A committed preservationist, van Dijk was also a driving force behind the plan to save Cleveland's Playhouse Square theaters. Recognizing the need to address issues with the original design and construction of the Celebrezze Building, van Dijk supported and participated in the façade renewal project. Piet van Dijk passed away in 2019 at age 90.

The Celebrezze Building was designed during a period of grow-

ing public acceptance of Modernist design. The Modernist movement in architecture with its roots in Europe began to flourish in the United States following World War II as architects like Walter Gropius and Mies van der Rohe expanded their influence.

As the movement continued to thrive throughout the 1950s and into the 1960s, Modernism became the preferred style of architecture for office buildings across the country. Buildings such as the Seagram Building (1958) in New York City by Mies van der Rohe and Philip Johnson, as well as the Inland Steel Building (1957) in Chicago, Illinois by Bruce Graham and Walter Netsch of SOM, continued to push the envelope in Modernist design.

Significant Modernist skyscrapers in Cleveland include the McDonald Investment Center/ 800 Superior (1968) by Charles Luckman; the Cleveland Trust Tower/Ameritrust Tower (1971) by Marcel Breuer; the Diamond Building/ 110 Superior (1972) by SOM; National City Tower/ PNC Tower (1981) by SOM and Eaton Center/ 1111 Superior (1984) by SOM.

The Cleveland Federal Building was substantially completed in the fall of 1966 at a cost of \$31,968,000 - much less than the budgeted \$41.2 million, and officially opened in early 1967. The new building housed more than fifty government agencies that had previously been spread out in buildings throughout the city. In 1973, the building was renamed in dedication of Anthony J. Celebrezze, former Mayor of Cleveland, Ohio Congressman, Secretary of Health, Education and Welfare in the Kennedy Administration, and U.S. Appeals Court Judge. As mayor, Celebrezze was an early proponent of the Erievue Urban Redevelopment Project and helped in the process of bringing the Federal Building project to realization.

Following its completion, the building underwent relatively few significant alterations until 2009, when GSA utilized funds available through the American Recovery and Reinvestment Act (ARRA) to initiate the massive intervention addressing the condition of the curtain wall. Issues with the original detailing and installation, water infiltration, the action of wind forces, and the harsh Cleveland winters had resulted in advanced deterioration on the façade's various components.

Not surprisingly, assessments found the curtain wall to be strikingly deficient in terms of modern energy efficiency and security standards. Ultimately GSA decided to install a second skin on top of the existing façade, effectively over-cladding the original building with an entirely new window wall system.

THE VANISHING VALUE OF DOWNTOWN CLEVELAND OFFICE BUILDINGS

Congresswoman Shontel Brown (OH-11) has rightfully questioned GSA's assertion that the sale and lease of space for their employees will generate a \$149M savings. Because it won't. She has requested a 30-year net present value analysis – NPV - which is precisely what such a real estate transaction typically involves. Such an analysis compares the projected cost of maintaining the Celebrezze Building with the costs of leasing, moving, equipping and modernizing alternative locations over that term. And based on factored in escalation, the NVP compares each alternative in net present value dollars to determine which alternative is less costly over time. Without even knowing the exact cost of the alternatives, staying in the Celebrezze will be the lowest cost alternative, notwithstanding GSA's projection that the building still supposedly needs another \$175M in repairs.

To relocate the government's employees to 665,000 square feet, tenant improvements will likely exceed \$65 million, plus \$5 million to move, plus \$23+ million for fixtures, furnishings and equipment, plus \$5M - \$10M in security systems, plus \$5 million in telephone and communications hardware, and plus \$14 million annually for rent over 30 years, or \$429,000,000, for a total of \$532 million – *before* operating expense pass-thru costs are included which escalate annually with each location and will add \$1 million annually and escalate over the term, as will the rent rates.

Kudos to Brown who has also asked for an appraisal of the building and meaningful documentation in determining the space needs of the departments to be included in the proposed move. IF GSA provides the information she has requested, it will expose the flip-pant and ill-advised decision by the Trump administration to dispose of Celebrezze. A relevant issue is that the government's space needs now allegedly require only 55% of Celebrezze's space for today's headcount. This raises the question on whether the building should be converted to multi-tenant occupancy – notwithstanding the security/ access control challenge such a change entails. However, freeing up that 500,000 square feet for third-party uses also represents a potential income of \$11+ million annually, which over 30 years represents over \$336 million **gained** by keeping Celebrezze.

The erosion of employment in downtown Cleveland and the resulting elevated vacancies in multi-tenant office buildings have shattered the market values of these buildings in recent years. In 2024, the average rent rate in the downtown CBD for Class A office space was **\$21.19/sf/year** and the average sale price of a downtown office building was only **\$41.54/sf**. Properties are now selling for fractions of their assessed values. A summary of recent transactions reflects:

In April 2024, the **SOHIO/ BP America HQ/ 200 Public Square/ Huntington Bank Building** sold for a paltry \$54 million - 28.8% of what it sold for in 2019! At the time of the sale, its appraised value was \$136.7 million. Built in 1985, the building has 1.26 million square feet; Sale price = **\$43/sf**. Five years earlier, it had sold for \$187 million. The attached 757-car parking garage sold separately for \$31.25 million = **\$41.2k/ car**.

Huntington Bank/ Union Trust/ Union Commerce Building; 925 Euclid Ave.: 1,400,000 sf; \$22 million in 2015. Millennia paid \$40 million for the property in 2018: Sale price = **\$28.57/sf**.

Key Tower; \$400M to build in 1992; Millennia Cos. purchased it in 2017 for \$267.5 million; Sale Price = **\$223/sf**.

800 Superior/ Key Investments Bldg./ AmTrust Financial Bldg.; 587,118 sf; Built in 1969; Acquired in 2011 for \$7.46 million, including the adjacent parking garage; Current assessed value = \$29.7 million; Anticipated sale price = \$15 million = **\$25.52/sf**.

1100 Superior/ Diamond Shamrock Building/ Oswald Center; Built in 1972; 576,903 sf; \$22.4M was the asking price in 2024; previously transferred for \$47 million; \$53.75 million in 2007; Auction in July 2025; Asking Price Value = **\$39/sf**.

Ohio Bell HQ/ Ameritech HQ/ 45 Erieview/ The Bell; Built in 1983; 500,000 sf; Sold in 2022 for \$21.15M; Previous owner paid \$36 million in 2016. Renovated for apartments; Sale Price = **\$42.30/sf**.

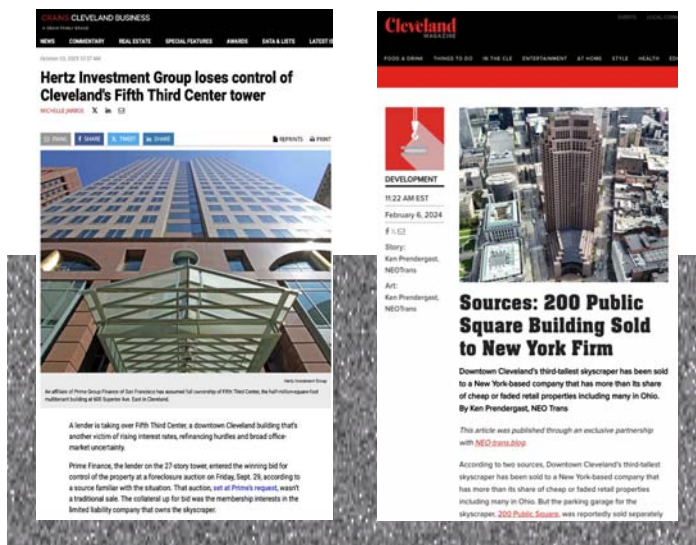
1111 Superior/ Eaton Center; 1983; 602,000 sf + 509-space attached parking garage; Purchased in 2014 for \$19.5 million; Sale price = **\$32.39/sf**.

Tower at Erieview; Built in 1964; 760,000 sf; Purchased for \$17.7 million in 2018, including underground parking garage; Sale Price = **\$23.39/sf**. Actually much less when taking Galleria and parking garage into consideration.

Fifth Third Center/ Bank One Center; Built in 1989 at a cost of \$70M; 508,000 sf; Sold in 2015 for \$53.75 million. Sale Price = **\$105.60/sf**.

Rose Bldg./ Medical Mutual HQ; Built in 1902; 380,000 sf; Sold in 2000 for \$47.8M; Sold in 2017 for \$37.7M; Sold in 2024 for \$11M; Sale Price = **\$29/sf**.

Rockefeller Bldg.; 261,264 sf; Sold for \$13.35 million in 2020; Renovation Plans Scrapped; Back on the Market; Sale Price = ?



HOW WILL WE FIND OUR WAY BACK?



Dee Haslam's presence on the board of the Greater Cleveland Partnership surely influenced the region's chamber of commerce to sell its soul to the devil and endorse the team's leaving our urban center. If the GCP board had members with a legitimate or even basic understanding of the dynamics of urban form, and a conscience that compelled them to think and act in an ethical manner in the interest of their constituents, they would have not made such a cowardly and damning endorsement.

But then GCP has always behaved as a whore for someone in recent decades. They endorsed their landlord's invisible site behind and below Terminal Tower as their preferred site for the Rock-n-Roll Hall of Fame when they were tenants on the second floor of Terminal Tower. Fortunately, architect I. M. Pei had enough drag to point out that GCP's proposed site was a disaster with regard to visibility and accessibility, so that reckless and transparent move by GCP was fortunately circumvented.

GCP pushed the narrative for the GOP Convention here in 2016, lying to us that the event would net \$300 million to the region. It delivered \$40M according to the statisticians at CSU.

GCP told us to renovate Public Square and that it would cost \$25 million and would involve no public money. The project cost \$50 million and was paid for almost entirely with taxpayer money.

GCP is always in favor of spending taxpayer money without a vote of the taxpayers. GCP's fingerprints are on the unvetted and purposeless \$800M Medical Mart disaster and the new Convention Center that was supposed to substantially enlarge the existing facility so we could be competitive with Columbus, Pittsburgh and Indianapolis. Thanks to the terrible design and management of the project, we ended up with a useless Medical Mart, and a convention center that was exactly the same size of the one we tore down, minus the 500-car parking garage we eliminated. It is an \$850M mistake and the principals have escaped accountability.

We taxpayers then went on to build a 600-room downtown Hilton Hotel next door with zero additional parking for all three of those facilities. And thanks to the attorneys involved, taxpayers are on the hook when Hilton does not make their pro-forma every year to give them money for the difference so they have zero risk, zero incentive or any real obligation to succeed. We have had to pay our tenant millions twice so far.

And GCP has been the head cheerleader for every taxpayer give-away without any citizen vote for hundreds of millions of dollars to constantly renovate and upgrade our football, baseball and

basketball sports facilities.

But the true shame of the Browns' move to Brook Park is the disgraceful manner in which the Haslams spread their money in Columbus with campaign contributions to buy the Ohio House and Senate's give-away to the uber-rich Haslams (\$14.4 billion) of \$600 million by stealing it from the State's unclaimed funds kitty.

Again – a decision of enormous significance without a vote of the public. The public's support for the move to Brook Park was only 28% of those sampled in two separate surveys. But the bought-and-paid-for legislators in Columbus decided that their pockets stuffed with Haslams' cash were more important than the wishes and well-being of the citizens of Cuyahoga County. They simply dismissed the profound negative impacts to Cleveland with the move by the Haslams.

And the back-door deals – one after another - with GCP and their cronies reek of dishonesty, just like the Browns' funding from the State. These so-called 'leaders' have failed our community for too many years while we continue to lead the nation only in child poverty and being dead last in job growth year after year.

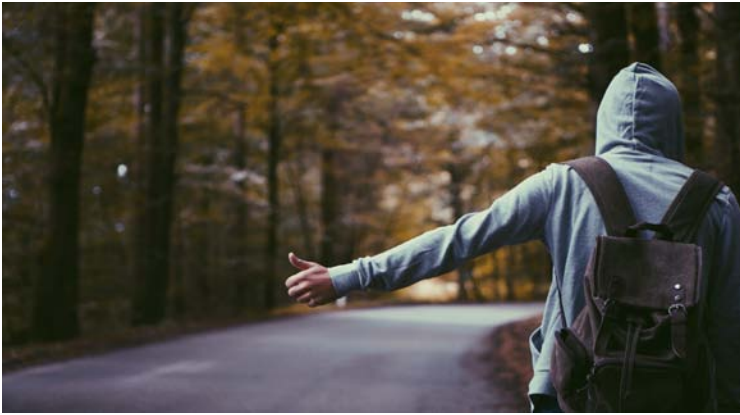
No wonder their back-door attempt to court the Amazon HQ2 project was an enormous failure because our team lacked critical thinking skills and we could not put together a workable site of adequate size to accommodate those 30,000 jobs. And when Intel came sniffing a few years later, we STILL had no arrow in the very same quiver. And today we *still* don't. Columbus and Syracuse put the answers and assets together and are reaping the job growth and economic rewards while we flatline.

County Executive Chris Ronayne and Mayor Justin Bibb are the only players with clean hands and the interests of taxpayers in this stadium debacle. They alone acted with the interests of the majority of citizens of our community. The damage to the downtown CBD, our food and beverage businesses here and those workers will not be on *their* hands. Remember the many villains when it is time to vote.

The *Crain's* article noted that the Guardians and Cavaliers are sitting down to solve the problem with the inadequate Gateway tax receipts to keep pace with the maintenance obligations of their facilities, and are doing so without the Browns around the campfire.

The *Columbus Dispatch* letter to the editor from Eric May of Columbus politely called the Haslams' raid on Ohio's unclaimed funds a "slight-of-hand trick bad for Ohio."

The Columbus lawmakers' repulsive act of giving the billionaire



The Cleveland Clinic's penchant for destroying Cleveland's most significant architectural landmarks appears to be approaching yet another two chapters.

In 2023, the Clinic demolished native son Philip Johnson's only Cleveland building, the Cleveland Play House. Later that year, the Clinic demolished the former exceptional TRW Headquarters in Lyndhurst, designed by Dirk Lohan, grandson of Mies van der Rohe.

Reliable sources reported earlier this year that now the Clinic plans to demolish the Franchester estate and with it, the significant legacy of the Bolton family in NEOH. The Franchester mansion has been owned by CCF since the Northrop Grumman merger in 2002 when TRW gifted the property to CCF. In the years since, CCF has maintained the residence for guests and events.

Now a reliable source has reported that the Clinic also plans to also demolish the historic Drury Mansion at 8615 Euclid Ave.

Designed by the distinguished Cleveland architectural firm of Meade & Hamilton, the Francis Drury Mansion was completed in 1912 and the 34-room 25,000 square foot structure served as the home of Francis Edison Drury until 1926. Drury was an industrial innovator and foundry owner who lived in the residence until moving to the equally grand Gates Mills mansion Cedar Hill Farm, now part of Gilmour Academy.

The red brick residence features recessed arches, an orange slate roof, Elizabethan chimneys, timbered gables, and dark wooden Tudor designs framing the windows and door. A large, crenulated brick tower rises above the home. The interior consists of carved woodwork, decorative plasterwork, ornate ceilings, elegant furnishings, and fine art. A giant staircase with oak newels dominates the entryway. The dining room ceiling has plaster reliefs of flowering trees. The mansion was featured in a 1915 issue of *Architectural Record*.

In 1915, Drury purchased the 5-acre F.A. Arter estate across the street. That property was transformed into "The Oasis," a formal garden with reflecting pools, waterfalls, a lily pond, greenhouses, a pagoda, an amphitheater, and a flower-lined path. The formal gardens were highlighted in the 1921 issue of *Country Life Magazine*. The landscaping was designed by landscape architects, Vitale Brinckerhoff and Geiffert.

In 1924, Drury sold the home to Francis Thrall King, the acting president of the Cleveland Museum of Art. The garden land was donated to the Cleveland Play House to build a new theatre complex. The King family remained in the home until 1937.

On 11 June 1939, the exclusive Drury Club acquired the house. In 1946, the Florence Crittenton Home, a maternity home for unmarried mothers and their children, purchased the property. The home housed 15 unwed mothers during their pregnancy, a part-time nursing staff, and a visiting physician.

Haslams money from the state's unclaimed funds kitty demonstrates the reprehensible way in which this has unfolded with the Haslams' political contributions greasing their gift for a project that citizens do not want, that will hurt the community economically, socially and culturally and that none of the local political leaders want.

This perversion painfully demonstrates how broken our political culture and public funding system is here in Ohio - a true cesspool.

Republican senator Jerry Cirino from Kirtland is at the head of the class of the disreputable legislators who created this gift for the Haslams. Eric May labeled Cirino's move a "sleight-of-hand tactic to provide a handout to Mr. Haslam" and not a good use of taxpayer money.

Plain Dealer and *Cleveland.com* editor Chris Quinn called out Ohio lawmakers for their sleaze in giving the Haslams a get-out-of-jail free card on the Modell law:

"In the middle of the night Tuesday into Wednesday, at the 11th hour of writing the state's next two-year budget, our sleazy lawmakers rewrote the Art Modell law to say it only applies if a team leaves the state. No discussion. No hearings. No chance for Cleveland to object. No shame."

"Single subject? How can you possibly argue that the Art Modell law is budgetary? But lawmakers have been violating the constitution for so long and so boldly that they no longer even consider the legality."

"... Will we ever wake up to the fact that we live in a state that is boiling with crooked lawmakers who repeatedly violate their oaths to uphold our constitution? Or will we keep telling ourselves that the water is just fine?"

Tom Suddes of MSN observed, "Officially, the budget is called House Bill 96. But given the measure's highest profile outlay, it should be called the Dee and Jimmy Haslam Wealth Protection Act."

Bill DeMora in the *Columbus Dispatch* wrote, "I recently introduced legislation that would ban any public money from going to professional sports franchises unless they have a winning record in three of their previous five seasons."

"The Public Access to Professional Sports Act would also require any franchise that leaves the city where they play to pay back every cent of public money to the taxpayers."

The Haslams and state lawmakers have brought their toxicity to Cleveland.



In 1973, the Crittenton Home leased the mansion to a program focused on parole violators.

In 1989, Cleveland Clinic (CCF) acquired the property for use as an event and conference center, renaming it the Foundation House.

Pittsburgh's Shell Monaca (left) facility has three polyethylene reactors and one ethane cracker as 70% of US polyethylene customers are within a 700-mile radius of Pittsburgh. The facility which opened in late 2022 has 600 employees at 100%.

In Columbus, job growth has been "sluggish" for the last four years by their standards, adding 4,500 jobs in 2025, a "measly" 0.4% growth in a market of 1.16 million workers, the same as Pittsburgh. Last year Columbus added 5,200 jobs, up 0.5% from the prior year.

Obstacles to greater job growth in Columbus are a lack of qualified workers, particularly in the health care sector, rather than a lack of employment opportunities, which is Cleveland's problem. Columbus economist William Lafayette observed that help wanted ads are up 20%; "Employers are putting out postings that can't get filled."

Last November, a whopping 3,500 ads for Registered Nurses were posted in Central Ohio, with 1,000 ads posted for truck drivers or heavy equipment operators, and 1,000 openings for software developers.

For Columbus, Lafayette forecasts 5,100 new health care jobs, 2,200 new construction jobs and 1,400 new local government jobs this year. The offset he predicts is a loss of 1,100 retail jobs, and losing 2,400 professional and business jobs.

One problem for Columbus is that among the 54 largest cities in the US, Columbus has the largest economic disparity between racial groups, making better educating youth, particularly minority youth, a prime objective, along with effective career counseling and occupational needs analysis.

In Columbus, job growth for 2030 is projected to be 9.4% - 300,000 jobs, with Cincinnati's at 6% (53,294 new jobs) and Cleveland's at 4.5% with 46,272 new jobs.

Benchmarking vs. Pittsburgh & Columbus:

Pittsburgh's unemployment rate has been 1.4% lower than the US and much lower than Cleveland's. In 2023, the seven-county MSA region averaged 1.16 million employed. The region's job growth is above pre-pandemic levels. Six of Pittsburgh's industries grew with Educational Services at the top with a growth rate of 4.9%, followed by Health Care & Social Assistance (3.9%), Leisure & Hospitality (2.2%), Government (2.1%), Utilities (1.9%), Other Services (1.7%) and Financial Activities (1.2%).

While, like Cleveland, Pittsburgh's population is not growing, their labor force participation among prime working age adults (25-54) is 3% above the nation's.

Shell Oil has taken a 386-acre former Koppers and Horsehead Corporation zinc manufacturing site and developed a \$14 billion Petrochemicals Complex because the site was central to the Marcellus natural gas development in the region. Shell began site development in 2015 and by 2019, 5,000 construction workers were on the site.



BENGALS' STADIUM DESIGN PROVES HASLAM'S LIE ON LAKEFRONT RENOVATION BUDGET:

The Browns' Haslam's told us that it would take one billion dollars to renovate our lakefront stadium to meet their standards.

The terse narratives they provided on most all of the scope of work they were contemplating were neither convincing or necessary. Many whispered that Haslam's were simply goosing their numbers in order to make their Brook Park alternative appear not that much more expensive. They were right. Their trick worked - in Columbus.

But the Bengals' comprehensive renovation of Paycor Stadium, which in addition to the stadium's complete renovation, includes a new adjacent practice facility, team offices and fields as well as continuation of the riverfront park that has been judged to be one of the very best urban parks in the country. That scope is thus far more substantial than that proposed by Haslam's, yet its cost is \$470 million, 60% less than Haslam's BS.

And the Bengals and Hamilton County asked the State for \$350 million of the total project cost of \$470 million.

Cincinnati's existing 65k seat stadium, home of the NFL's Cincinnati Bengals Franchise, will be enhanced with a new North End Zone, Expanded and enhanced South End Zone, New Plaza and Vertical Transportation Towers, and also be completely renovated and updated at every level – from the service operations to the upper bowl. The proposed expansions are designed to fit within the unique architectural form and aesthetic of the building, completed in 2000 and the only stadium in the country to win an Honor Award for design from the American Institute of Architects.

The plan also features an extension to Cincinnati's world-renowned redeveloped riverfront with community-use parks / open space, including a new "Bengals Promenade" and "Paul Brown Way" pedestrian space, and new green space that can double as outdoor tailgating and festivals during games, concerts, and other events on the riverfront.

A new Team Headquarters and Training Complex will be developed on the site of existing practice fields and concrete plant, which enhances the community use of the

main stadium by allowing the Bengals to have a 24/7 operations center. The completed vision will provide for a sustainable and top tier NFL home for the Bengals franchise, while also expanding the community use of this iconic stadium venue, a Gateway to Ohio and Greater Cincinnati.

The county board voted 2-0, with commissioner Alicia Reece abstaining. Dating back to at least last year, Reece has expressed concern about the funding structure for a potential new stadium and the county's financial commitment compared to the Bengals. In the deal approved in late June, Hamilton County's participation will be capped at \$350 million. The Bengals and the NFL, as part of the league's G-5 loan program, will contribute \$120 million.

"Essentially, this is a loan from the NFL," said David Abrams, a consultant for Inner Circle Sports who was contracted by the county for this negotiation. "The NFL will be contributing, but it is basically on the back of the team to make good on their promises to the league."

Including 2025, the proposed new lease will have 11 base years that will run through June 2036. There will also be five two-year extension options, which also existed in the original lease the county and the Bengals signed in 1997.

This one, however, contains a unique wrinkle. Previously, the team exercised full control over each option. In the current proposal, Hamilton County can execute the first option automatically if the Bengals rank 24th or better in total revenue among the league's 32 teams. This lease also forces the Bengals to pay \$1 million in rent in each of the first three years and then \$2 million in each subsequent year.

"Compare this to other renovations going on around the country, this is probably a lower cost of initial capital than just about anywhere that I'm working in the NFL," Abrams said.

Throughout the last two major plans, the Bengals' financial commitment has remained at or around \$120 million. On June 27, the county's presentation noted that its



Above & Below: Bengals' Paycor Stadium Renovation Design



BENGALS, cont'd:

funding of 75% of the total cost was lower than in other cities such as Charlotte or Baltimore. The Carolina Panthers' current stadium construction is subsidized to the tune of 81.25%. The Ravens are committing just \$20 million to its renovation of M&T Bank Stadium that will cost around \$490 million, with the remaining money coming from state funding.

The Bengals and Hamilton County have sought state funds for Paycor Stadium renovations. While none have been allocated yet, Ohio's legislators have appropriated a chunk of money from the state's unclaimed funds bank for the Browns and Bengals. The Cleveland Browns are receiving \$600 million in state dollars for their project that supposedly also includes \$2 billion in private funding.

But while all of the final Benagls' details, including ultimate execution of the lease, are yet to be ironed out, negotiations with the Bengals' team and county have involved "spirited" discussions.

At the announcement of the agreement, Hamilton County commissioner Stephanie Summerow Dumas said, "I really didn't think we'd be here today at all. Not that I was negative, but things were just going in different ways, it was described that way. I'm just really happy about being here. Our team and their team have worked hard to become a winning team."

It merits noting that the design integrity of the work scope presented for the Bengals' stadium renovation and expansion project is top tier compared to the Browns' mediocre metal shed proposed to be pushed 80' underground in Brook Park.

BROWNS STILL NEED MORE \$:



Even with the State's \$600 million gift to the billionaire Haslams, the Browns are still \$600M short of their stated goal. Haslams think they are getting it from Brook Park where they expect to be able to get their hands on \$480 million from Brook Park from taxes on stadium-related activities, meaning fans will pay even more - lots more.

Interviewed after the State approved a budget with a \$1.7 billion cash drawer filled with money from the State's \$4.8 billion unclaimed funds deposits, County executive Ronayne observed that the Haslams previously told the county that they no longer need county money to proceed with the Brook Park stadium. Ronayne then said to Haslams, "Then pick it (the \$600M) out of your own pocket. Don't pick it out of the pocket of Cuyahoga county taxpayers."

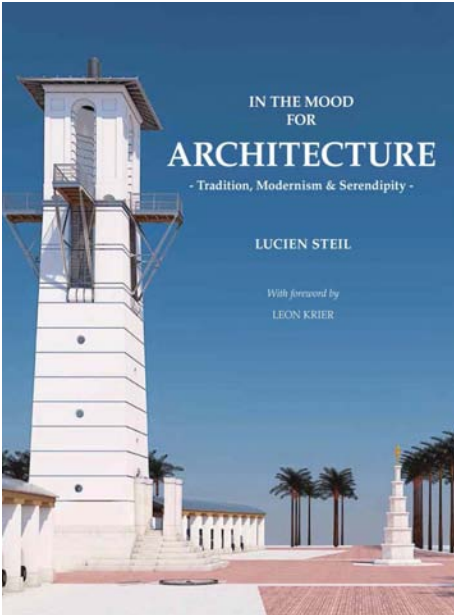
When then asked if the county had changed its position on issuing bonds for the Browns, Ronayne replied, "We have no intention of issuing bonds for the Browns' stadium in Brook Park... They have swum halfway across the river and they either come back which we are encouraging them to do, or if they keep going, they do it with their own money." Ronayne said that the State's budget also fails to fix the sin tax to help the Guardians and Cavaliers adequately fund maintenance at their facilities because it dilutes the issue by including the Browns, "and that dog is not hunting."

Haslams are still not yet home with the unclaimed funds assignment. That money is a pool accumulated from abandoned paychecks and security deposits that have not been claimed after a decade or longer. If the state experiences claims that exceed what is left in the kitty after the gifts to the Browns and Benagls, the state would have to pay those claims out of the general fund.

A legal challenge is expected over the use of those funds. Former Ohio Attorney General Marc Dann and former state Rep. Jeff Crossman announced June 25 they would immediately file a lawsuit in Franklin County Common Pleas Court when the plan passes.



Book Review: “In The Mood for Architecture...”



Book Review: “In the Mood for Architecture: Tradition, Modernism & Serendipity,” Lucien Steil, Pub, 2018 by Ernst Wasmuth Verlag Tubingen, Berlin; ISBN 978 8030 0832 9; \$60.

“Lucien Steil is an author, educator and architect who believes that Traditional cities and architecture have always represented the ideals of harmony and beauty in a destabilized and disrupted world.” Steil is a prominent figure in the development of the Modern Classical movement with his built work, writings and academic activities. He is currently as Associate Teaching Professor at the University of Notre Dame.

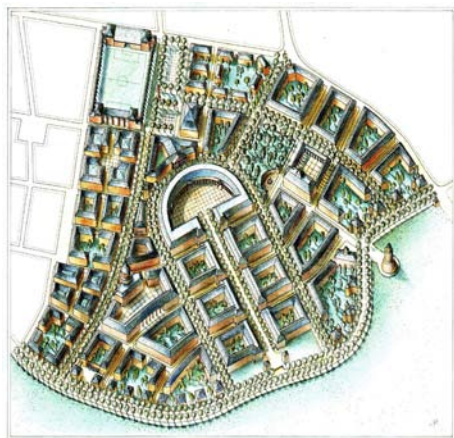
Steil was born in Brazil and moved to Luxembourg at the age of five. He studied architecture and urbanism in Paris and Vincennes and graduated as a Diploma Architect. After a brief internship in Luxembourg, he moved to Brussels where he collaborated with Maurice Culot and Léon Krier at the ‘Archives d’Architecture Moderne’, and started simultaneously to do his own ‘counter-projects’ in Luxembourg, following up on a social housing competition where he was commissioned to build a number of affordable apartment blocks in his hometown which were constructed in 1986.

Upon invitation by Academy Edition in London, Steil guest-edited three issues on traditional architecture and urbanism and got his first teaching position at Oregon School of Design in Portland Oregon (1986-1988). At his return at the end of 1988 he started collaborating with Irish architect Colum Mulhern of ‘Mulhern & Steil’ who produced a wide range of design work in traditional urbanism and traditional architecture from 1989-1997.

Their built work was dedicated to social housing and public projects with small municipalities. Steil left his practice after 1997 and dedicated most of his professional life to teaching, publishing and advocacy for traditional architecture and urbanism. He has organized courses, workshops and evening classes for laymen and academics and has taught sketching classes in high schools and juvenile detention centers.

Steil views traditional cities and architecture as desirable models of cultural identity, home, urbanity, and civilization. He maintains that the traditional city remains a good and desirable place to live, and that tradition is a good home for modernity and originality. It has proven to be compatible with modern life, despite an array of pressing challenges, and is to be considered as opportunities rather than as limitations. For Lucien Steil, ‘this is both a tangible reality, time-tested and perfected, and a realistic, buildable, operational and necessary project for contemporary civilization’.

Rather than becoming obsolete, the traditional city has suddenly gained a new vitality as a remedy to the ‘inconvenient truth’ of global warming and climate change. Both its morphological and typological components, as well as its socio-economic and convivial patterns and paradigms seem best adapted to refresh and adjust to the dramatic challenges of a post-pandemic urban civilization and a new ecology of ‘Città Slow’ and ‘Glocalism’.



Above: New Kaltreis Quarter axonometric View’ Lucien Steil; 1982; Rendering by Gerard Becker, 1992
Middle: Mixed-Use Ensemble, Main Elevation; Place des bains, Esch-sur-Alzette; Mulhern & Steil, 1993
Bottom: Lucien Steil



Steil has a romantic view of cities. In the forward of the book by the recently departed Leon Krier, Steil is characterized as being from a group of architects who have “succeeded in freeing themselves for the corrupt principles of modernism...” Steil, to his credit, has authored a book that capably combines projects and critique that competently denounce what he calls the corruption of Modernism. The eight chapters and epilogue are richly illustrated with Steil’s drawings and photos of work by Pier Carlo Bontempi, Leon Krier, Luigi del Sordo, Brulio Casas, Nicholas Duru, Zaha Hadid, Michael G. Imber, Peter Eisenman, Frank Gehry, Santiago Calatrava, Francois Sperry, Joze Plecnik, and others.

The rebuilding of Luxembourg is an object lesson in contextual design with a patient narrative. Lisbon, Dresden, Potsdam, Rotterdam, and the reconstruction of the World Trade Center site are given thoughtful attention.

Pertinent quotes from a broad range of sources are incorporated throughout to reinforce Steil’s narratives. Steil sees the mainstream and architectural media to be resistant to change, suffering from an “ethical deficit” in favor of Modernism at the expense of the lessons from traditional and classical examples.

Steil asserts that change must come from “the pressure of public opinion, compelling elected representatives to do their job and actually run the city. For dazzled by the star system, they have most often abandoned their responsibilities deferring to architects whom they naively expect to solve all their problems. We have then to address the public rather than the architects, stuck in their gesticulating immobility.”

“This can only be achieved by engaging critically with the media, writing in mainstream magazines, publishing leaflets and pamphlets as the Futurists and Surrealists did, establishing architectural awards like the Richard H. Driehaus Prize and the Philippe Rotthier European Prize for Architecture, setting up alternative schools such as the School of Architecture at Notre Dame or The Prince’s Foundation for Building Community, keeping the flame of the architectural heritage alive through countless publications, and helping residents formulate their demands by means of counter-projects... We also need to rehabilitate style, which is architecture’s smile and the sign of appurtenance to a lineage, Neo-Gothic, Neo-Maya, Neo-Basque, Anglo-Norman, Neo-Russian and so on.”

Lucien Steil maintains that contemporary traditional architects and urbanists provide a counterbalance to an opportunistic architectural and planning establishment that clings nostalgically to past paradigms of Socialism, Capitalism and Modernism, and has resigned in its social and cultural mission for a better and more harmonious world.

For Steil, they are poets, idealists, craftsmen, and artists who invent, design and build places and buildings of durable quality in a perspective of ‘firmitas (strength, durability), utilitas (usefulness, function), venustas’ (beauty), allowing people of our time to live in comfort, security, harmony, enlightenment and pleasure.

Lecture Series: The **Stephen Semes** Fall Lecture is now scheduled for September at the Union Club at 6:00 pm.

Archive Update: We continue to incorporate color photographs of significant NEOH architecture and scan drawings. We are in the process of engaging interns to develop metadata for our digital images to render them searchable online.

Video Interviews: Due to the pandemic and staffing changes at the Cleveland Public Library, our collaboration with CPL has slowed. We recently met with the two senior people at CPL responsible for our work together and we are now getting back on track. CPL will be hiring four new people in its Digital Collections Department which will allow our two video interviews to begin active film editing.

Neighborhood Tours: Our trolley bus tours of historic neighborhoods have been suspended while we attempt to arrange for the replacement of the Lolly the Trolley service as this business has been discontinued.

Encyclopedia of Cleveland History: We continue to provide CWRU with color photographs and digital files of drawings of buildings both already in the ECH as well as those that are deserving or were constructed after 1990 when the ECH’s original photographer Eric Johannesen passed away.

Architect Database: We are constructing a searchable database of Cleveland architects and their significant works. This is a substantial task that also involves an external consultant’s efforts.

Officers: William T. Eberhard AIA, IIDA; President
David H. Ellison AIA; Vice President & Treasurer
John Roush AIA; Archive Chairman

Below: Al-Esch perspective view; Lucien Steil, 1979



BOOK REVIEW: "THE GREAT MISCALCULATION: THE RACE TO SAVE NEW YORK'S CITICORP TOWER"

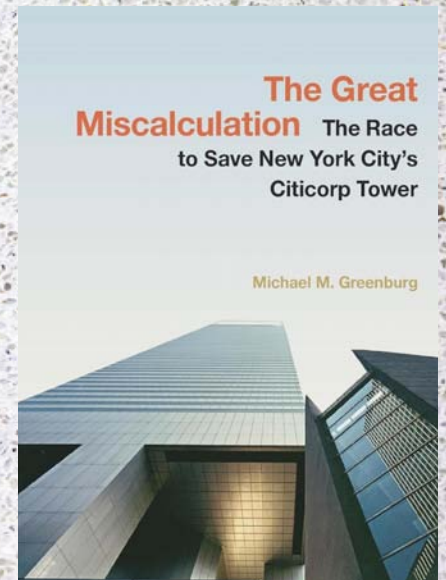
Author Michael M. Greenburg patiently paints a complete context for the project, beginning with the two Julian Studley brokers walking the neighborhood in the early 1970s to begin the process of assembling of parcels, followed by the academic and professional backgrounds of architect Hugh Stubbins and structural engineer William LeMessurier.

Greenburg paints a full picture of the project's evolution with the novel deal to replace a Lutheran church in exchange for the ability to use 63% of the air rights above for the bank tower offices, to the original napkin sketch that LeMessurier made at lunch with Stubbins at a Greek restaurant in Cambridge before the project got going to the pairing of two architects and two structural engineers engaged to execute the project.

LeMessurier's design and calculations – all done by hand - stipulated welded connections to achieve the necessary rigidity and effective load transfer. But during construction, the steel contractor proposed to save time and \$250k by substituting bolted connections instead.

Only one individual – not LeMessurier, at the structural engineers' office approved the change "without much examination." The complex was completed in 1977. LeMessurier passed away in 2007.

In the summer of 1978, project engineer Joel Weinstein in Le Messurier's office got a telephone call from a Princeton University undergraduate structural engineering student, Diane Hartley, who was doing her senior thesis on the \$179 million Citicorp project.



The project's first challenge was acquiring sufficient land. A deteriorating St. Peter's Lutheran Church owned the corner where the tower was intended to go. Of the seven alternative solutions proposed by Stubbins, the church was given a new freestanding home above which the 915-foot tall tower floated, resting on four huge 112-foot high columns in the middle of each elevation.

Stubbins' design created a unique urban solution, providing a separate space for the church, a splendid sunken plaza that functioned both as an entry to the tower as well as a kind entry/ exit to two underground subway lines and a multi-level mixed use annex and atrium that provided a true urban neighborhood for residents and tower tenants. A sloping roof provided a top for the project that, coupled with the light aluminum skin, gave Citibank a distinctive identity in a city with many towers and strong identities for competition.

To manage the loads of and on the structure, LeMessurier utilized diagonal wind bracing to direct forces to the column center points of each façade in clusters of eight floors each. The connections where each floor meets the lateral bracing columns were critical. LeMessurier had the tower tested in the wind tunnel for perpendicular loads to confirm his design and calculations.

Citibank and LeMessurier's offices had shared all of their calculations and documents with Hartley. Hartley's analysis indicated that quarterly winds caused the structure to be overloaded by 42%, and she only found calculations for direct loads on the documents. Hartley was also unaware that the connections had been bolted, not welded as LeMessurier had specified.

LeMessurier initially dismissed Hartley's concerns but her call got him wondering. In June 1978, Messurier's project engineer Joel Weinstein was answering questions via a subsequent telephone call with a young architectural student, self-identified more than 40 years later as Lee DeCarolis. Those phone calls and the bolt substitutions convinced him to recalculate the wind loads, including the diagonal quarterly wind loads.

LeMessurier got the wind tunnel test going again – this time with the quarterly loads. He discovered Hartley's calculations were correct and that the connections were not welded which meant that the loads on the building's bolts were 160% greater in a strong sustained quarterly wind lasting five minutes.

Such winds were anticipated in New York every 16 years. And the approaching hurricane seasoned looked to present a very real threat to collapse, threatening a 16-block



BOOK REVIEW: “THE GREAT MISCALCULATION: THE RACE TO SAVE NEW YORK’S CITICORP TOWER”



radius of carnage. LeMessurier discovered that the diagonal bracing was unusually susceptible to quarterly wind loads.

He flew to NYC to talk to his team and found that they had only considered perpendicular wind loads as New York City's code required. The combination of tension and compression induced by the quarterly loads put pressure on the joints to resist the differential forces. The margin of safety mandated by the American Institute of Steel Construction had been disregarded because LeMessurier's team viewed the diagonal wind braces as trusses, not columns, which were exempt from the safety factor.

Greenburg, a practicing attorney, was fortunate for access to LeMessurier's candor and integrity in clearly addressing the problem and its chronology. LeMessurier retreated to his vacation home at Sebago Lake, Maine to evaluate his options. He considered suicide just as the architect and contractor had done after the collapse of the roof of New York's Knickerbocker Theatre in 1922, killing 98 and injuring 117 after 28 inches of snow overloaded a flat roof.

To counteract any unintentional movements of the high-rise building, LeMessurier had incorporated a fully automatic "tuned mass damper" as part of the building's original design. This was unprecedented in New York. A 400-ton concrete block was placed on an oil layer and hydraulic arms were used to counterbalance any sway of the building, unless a power failure kept the hydraulic pump from operating. Estimates at the time suggested that if the mass damper was disabled by a power failure, the building could be toppled by a 70-mile-per-hour quartering wind, with many fatalities and huge property damage. The tuned mass damper was given an emergency backup generator and extra staff was assigned during the structural reinforcement.

Calculations for quartering winds were not required by the building code at the time, and were not common practice in the industry. The reinforcement effort was kept secret until May 1995 when a *New Yorker* article by Joe Morgenstern revealed the saga after interviewing LeMessurier. Morgenstern was a freelance writer who had heard rumors about the Citicorp tower problems. He had done an earlier piece on Frank Gehry and the two had become friends. When he called Gehry and asked him if he thought such a story could be true and kept quiet for so long, Gehry replied, "Sounds like bullshit." Gehry said he knew someone at the contractor's office and would check. He called back ten minutes later and said, "I'll be damned. It's true."

Greenburg provides a detailed chronology of the thinking, communication, decision-making and step-by-step action steps by the team's players to effect corrective action in a stealth mode – not an easy task. Construction crews worked under the cover of night to weld 2" thick by six foot long reinforcement plates at each of the 200+ susceptible connections. The media went on strike and was unaware while the Red Cross and local authorities worked in secret to prepare for the worst-case scenario.

Hurricane Ella approached New York in the summer of 1978 with winds of 137 mph, and at the last minute, changed paths and moved out to sea. Fortunately, the reinforced connections involving weld-

BOOK REVIEW: "THE GREAT MISCALCULATION: THE RACE TO SAVE NEW YORK'S CITICORP TOWER"

ing the thick steel plates over bolted connections were completed two months before Ella at a time when all three of the city's newspapers were on strike. As a precaution, strain gauges were placed on critical beams and weather forecasters were engaged. Citicorp and local officials created emergency evacuation plans for the immediate neighborhood.

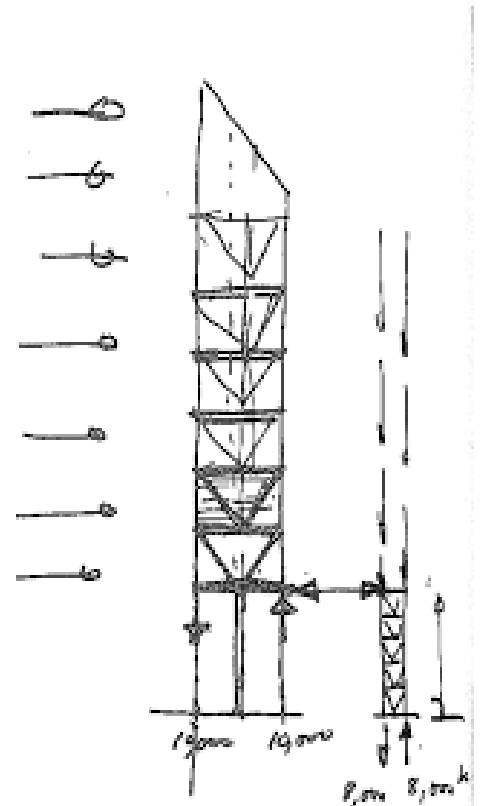
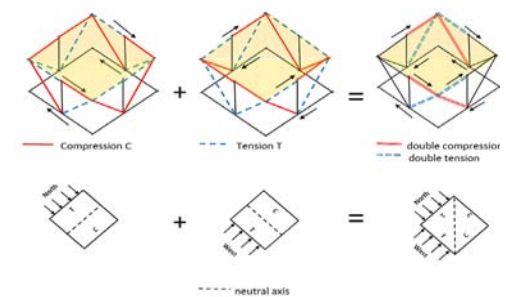
LeMessurier later detailed these mistakes in a thirty-page document called "Project SERENE"; the acronym, both rueful and apt, stands for "Special Engineering Review of Events Nobody Envisioned." What is clear from this document which had been confidential until 1995, and from interviews with the principals involved is not malfeasance, or even negligence, but a series of miscalculations that flowed from a specific mind-set. The first event that no one envisioned took place when LeMessurier sketched on a restaurant napkin a bracing system with an inherent vulnerability to quartering winds. None of his associates identified this as a problem, or understood they were compounding it with their fuzzy semantics. In the stiff, angular language of "Project SERENE," "consideration of wind from non-perpendicular directions on ordinary rectangular buildings is generally not discussed in the literature or in the classroom."

The details of the repairs, the communication and team coordination of the effort in every detail make fascinating reading. Unlike what might be anticipated to be a hostile and aggressive legal process, Citibank was not interested in punitive damages. The problem had been successfully and secretly addressed. Citibank had not been embarrassed publically. The building was a critical success with the architectural press and the city of New York. And the city's code had not required engineering for quarterly wind loads at the time.

While the repairs were in progress in the summer of 1978, Citicorp's top management team kept the lawyers on the sidelines. But on September 13th, Citicorp served notice on LeMessurier and Hugh Stubbins, whose firm held the primary contract, of its intention to seek indemnification for all costs. Their estimate of the costs, according to LeMessurier, amounted to \$4.3 million, including management fees. A much higher total was suggested by contractor HRH's Arthur Nusbaum, who recalled that his firm spent eight million dollars on structural repairs alone.

Peterson and Greenburg observed, whatever the actual cost, Citicorp's effort to recoup it was remarkably free of the punitive impulse that often poisons such negotiations. When the terms of a settlement were first discussed - without lawyers by LeMessurier, on one side, and Citibank VP's DeFord and Dexter on the other, LeMessurier spoke of two million dollars, which was the amount that his liability insurer, the Northbrook Insurance Company, had agreed to pay. It was the limit of his policy. "DeFord and Dexter said, 'Well, we've been deeply wounded here,' and they tried to play hardball," LeMessurier says. "But they didn't do it with much conviction." After a second meeting, which included a Northbrook lawyer, the bank agreed to hold Stubbins' firm harmless and to accept the two-million-dollar payment from LeMessurier and his joint-venture partners. As a result of the settlement, no litigation was ever brought.

In 2001, Boston Properties acquired Citycorp Center and renamed it 601 Lexington Avenue in 2009. In 2016, The New York City Preservation Commission designated Citicorp Center as a landmark. Public spaces were renovated in 1995 and 2017.



... WHICH TRANSMITS ALL WIND LOAD TO BASE OF TOWER, WHERE SHEAR IS TRANSFERRED TO THE CORE.

OHIO KILLS ITS HISTORIC TAX CREDIT PROGRAM



If Ohio's give-away to the Browns' Brook Park stadium wasn't enough of a blow to Clevelanders, the Senate Republicans' budget eliminates the Ohio Historic Preservation Tax Credit Program after 2027, following 20 years of success in enabling important historic renovation projects throughout the state.

The impact of the death of this program cannot be overstated.

Matt Wiederhold, executive director of Heritage Ohio, the state's non-profit preservation organization states, "The historic tax credit has been transformative for communities large and small across the state. To take that away would be catastrophic."

Wiederhold observes that the consequences of the Senate's actions not only will significantly kill many worthwhile renovation projects with borderline or unworkable financials, it will diminish architect, engineer, developer and contractor work and income as well.

Since 2007, Cuyahoga County alone has had 153 historic tax credit projects that have utilized \$430 million in tax credits. To date, 105 of those projects have been completed. In the past year, nearly 40 applications were submitted.

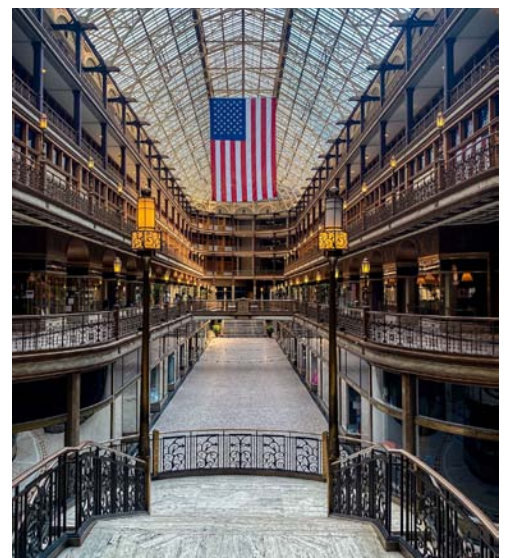
Cleveland and Cincinnati have been the two largest beneficiaries of the state's historic tax credit program. In June, Heritage Ohio testified before the Ohio Senate Finance Committee and encouraged the State to increase its \$60 million per fiscal year allocation to \$120 million, which had previously been proposed by Gov. DeWine in March.

These tax credits only cover up to 25% of a project's rehabilitation or renovation cost up to \$10 million. With a \$10 million cap per project, doubling the kitty was expected to double the number of projects that could be funded in this manner.

The Greater Ohio Policy Center also released a statement opposing the Senate's budget, terminating the program. GOPC executive director Alison Goebel said, "It cannot be completely done with the expectations that mortgages and rents will fully cover the loans that developers need to utilize to do these projects. That's why these tax credits are important."

The program was enacted in 2006 and has had 34 rounds of applications with assistance provided to 722 projects which have resulted in the rehabilitation/ renovation of 975 historic buildings in 91 different Ohio communities.

Notable local projects that have received historic tax credits locally with total project costs in parentheses include Terminal Tower (\$179M), Park Synagogue (\$144M), the Agora complex (\$15.5M), The United Church of Christ HQ Renovation at 700 Prospect Ave. (\$40M), Alcazar Hotel Renovation (\$16.25M), Keller-Kohn and Heller Buildings (\$50M), CSU's Fenn Tower (\$50.4M), Broadview Savings & Loan (\$5M), South Brooklyn Savings & Loan (\$41.4M), Cedar Branch YMCA (\$8.8M), CSU University Tower (\$91.6M), Columbia Savings (\$1.1M), Kerns Hall (\$20.6M), Vitrolite Building (\$3M), the Samsel Building (\$38M) and the Rose Building (\$100.1M).



HASLAM'S LOSES Cosm TO GATEWAY

Bedrock announced in July that the entertainment venue Cosm would land at East 4th and Prospect Ave. downtown instead of in Brook Park next to the Haslam's new domed stadium.

The Browns' renderings had shown Cosm next to the stadium, but a Cosm spokesperson said that the Browns' architect, HKS, never got permission to add their logo to their renderings; "Cosm's branding was not approved to be included in HKS' renderings at any point." Instead, the technologically immersive entertainment facility will occupy the northern half of the block that Stark had envisioned as a dense office-apartment complex that the market had no demand for.

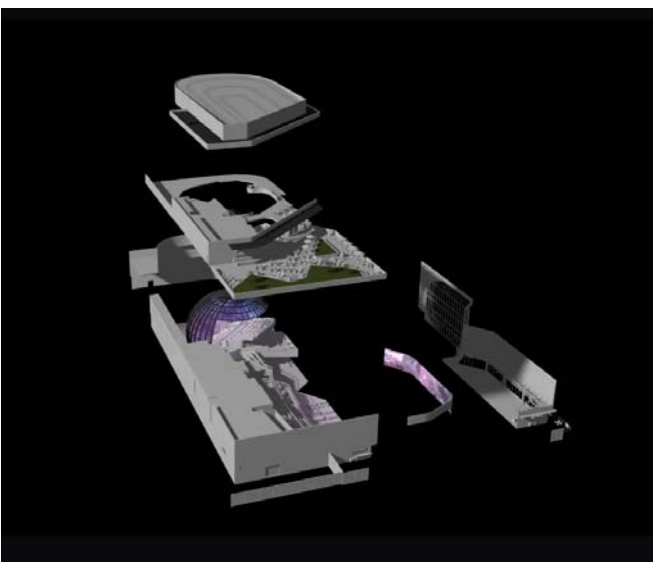
Dan Gilbert and David Blitzer invested \$250 million in the Cosm business two years ago and facilities in Dallas, Los Angeles, Atlanta and Detroit have been completed. Architecturally, they are very weak and would be aesthetically incompatible on Prospect Ave., but with a weak local design culture and an even weaker Downtown Design Review Committee, holding your breath could be risky.

The announcement is positive in a number of ways. Gilbert has been big on promises to Cleveland in the past, but comparatively weak on delivery. The riverfront casino that was promised never happened and the Higbee casino that was supposed to be temporary turned out to be permanent. The Bedrock Riverfront project has been long on concepts and big talk with no specificity on what would develop when. Phase I was scaled back substantially - there is no demand for all of it.

The Cavaliers-Cleveland Clinic Sports Performance facility is happening because two paying tenants made the construction fundable. Who is the actual owner of the project?

The obvious second benefit of Cosm is the addition of an active use facility to what has been a parking lot which only fills up - despite the \$40 - \$70 gouge - when the Guardians or Cavs have a game. The Arena District which is already short on parking when events occur will need to find a solution. Businesses in the area are scrambling to find alternatives which are slim.

Bedrock and Downtown Cleveland Inc. are relieved that downtown will add energy and a range of activities with live sports, cultural offerings, experiential cinema and entertainment year-round which will take away a measure of the sting of the Browns' move to Brook Park. Cosm's facility in Cleveland will be smaller than the other four existing projects which range from 65,000 - 70,000 square feet, but will still deliver the 87-foot diameter, 12K resolution LED dome. *NEOTrans* has reported that Cleveland's Cosm will be 49k - 53k square feet.



THE IMPLICATIONS OF AI ON ARCHITECTURE & DESIGN:



Much has been written in the mainstream media and technical press about the potential rewards and risks of AI and ChatGPT. The implications in the architectural and design professions are debated. *You Tube* shows a mediocre space plan for an office occupancy that was developed via AI. It reflects no genuine creativity or breakthroughs.

Bill Gates recently offered a prediction, warning that only three types of jobs are likely to survive the AI revolution, with all others destined to be replaced. As AI grows faster and smarter, Gates believes that we are headed for a future where traditional careers will disappear or be reshaped by automation. Gates believes that the safest roles are:

- Positions in health care where human empathy and patient interaction still matter;
- Engineering and AI development roles which are needed to build and manage these complex systems;
- Creative jobs such as artists, architects, designers and writers where original thinking and human expression still matter.

But Gates cautions that not even these professions are safe. Only jobs that rely on human emotion, creativity or deep technical expertise will stand the test of time. As AI tools such as ChatGPT, Grok and Gemini evolve rapidly, many fear an approaching wave of mass unemployment and job displacement. Gates is urging governments and industries to prepare now for re-skilling workers, rethinking education and focusing on human-first roles.

A recent article in *The New Yorker* (7-1 - 7-7) by Hua Hsu brought a number of issues into focus. OpenAI released ChatGPT on November 30, 2022 and within six days, OpenAI Chairman Sam Altman announced it had reached one million users.

Large language models like ChatGPT do not think like humans. When asked a question, they draw from data sets they have been trained on and they build an answer based on predictable word patterns. Early experiments with AI-driven chatbots “sputtered upon release.” Microsoft’s 2016 “Tay” bot was shut down after 16 hours because it started spouting racist rhetorics and deny-

ing the Holocaust. But ChatGPT can hold a conversation and break down complex ideas into easy-to-follow steps. Within one month, Google’s management declared a “code red” on the program because it feared AI would have an adverse impact on its search engine business.

Educators panicked. In the middle of school terms, they were unable to develop and deploy coherent policies for what looked like “a homework killer.” In seconds, ChatGPT can collect and summarize research and draft a coherent essay. Many large campuses have tried to regulate ChatGPT and its inevitable competitors without success.

Hsu spoke with college students across the country and found heavy use of AI and ChatGPT and other applications. A 2024 PewResearch Center survey of 13-17-year old students found that 25% currently use ChatGPT for schoolwork, double the use from 2023. Many students view the applications as “no different from Google.” But that is far from accurate.

Before AI, if you were tasked to do something difficult or complex, you were taught or discovered how to accomplish it and in the process, could appreciate the process of learning. But AI now means that you can now bypass the process - and the difficulty - altogether. OpenAI recently released a report that claimed one third of college students use its products. Hsu: “...these are low estimates.”

If you grew up using Google for your information and Grammarly to polish your work, it seems reasonable to view AI as just one more productivity tool. And some use it for just that purpose. But it has English departments everywhere wondering why they should bother trying to teach writing any more.

But the way we write shapes our thinking. We process the world through the composition of text dozens or hundreds of times each day in what literary scholar Deborah Brandt calls our era of “mass writing.” Brandt observes that the ability to write original and interesting sentences will actually become more important in a future where everyone has access to the same AI assistants. When a college professor of political science saw his 13-year old daughter produce an essay that was as good as his college undergraduates could

THE IMPLICATIONS OF AI ON ARCHITECTURE & DESIGN:



produce after a semester of work, he stopped assigning take-home essays and for the first time in his 30 years of teaching, and he now administers only in-class exams.

That professors has observed that college students are more comfortable with excerpts than entire articles. It is a logical extension of the Cliff Notes culture: "I don't get the sense that they have the kind of literary or cultural mastery that used to be the assumption upon which we assigned papers." A study published in 2024 at two Midwestern universities found that 58% of English major students had so much difficulty interpreting the opening paragraphs of Charles Dickens' "Bleak House" that "they would not be able to read the novel on their own."

In the 1960s, college students spent 24 hours a week on school-work. Now it is 15 hours a week. A *Harvard Crimson* survey reports that 80% of the 2024 class reports a GPA of 3.7 or higher but "lack the diligence of their forebearers." A Harvard dean observed that students feel compelled to find distinction outside the classroom because they are largely indistinguishable within it.

Neuroscientists have found that the "embodied experience" of writing by hand taps into parts of the brain that typing does not. And yet, Harvard researchers in 2023 monitored a self-paced popular physics course and found that students utilizing the AI tutor reported higher levels of engagement and motivation and performed better on a test than those who were learning from a professor.

University of California, Riverside philosophy professor Barry Lam who applies philosophical modes of inquiry to everyday topics in his podcast observes, "Now students are able to generate in thirty seconds what used to take me a week."

Human intellect has declined since 2012 according to a study from the Organization for Economic Co-operation and Development. The study assessed tens of thousands of people from nearly 30 countries and found an overall decade-long drop in test scores for math and reading comprehension. OECD director for education Andreas Schleicher observes that the way we consume

information today through short social media posts is a contributing factor in our decline in literacy.

Cheerleaders abound, touting that AI is now a powerful tool reshaping architecture around the globe. And AI has the potential to be highly relevant and a troll to improve the vast amounts of time to date and automate time-consuming tasks. Some are less confident about AI's ability to generate truly creative solutions. The programming of a datafield for AI to generate "creative" architectural solutions that effectively integrate climatic context, applicable site/ urban design conditions, multiple code requirements (often in conflict with one another) social contexts, local vernacular traditions, cost parameters, functional requirements and related criteria implies both cognitive and intuitive skills that are not necessarily linear and rational.

The Role of AI in Architecture:

AI's relevance in architecture stems from its ability to process vast amounts of data, automate time-consuming tasks, and generate creative solutions. This has the potential to streamline workflows, enhance designs, and promote the creation of sustainable structures. Its capabilities are being harnessed across various stages of the architectural design process, from early-stage planning and conceptualization to physical construction.

Various sources in the press of technology and architectural fields have championed the potential benefits of AI to the field. Potential and reality have yet to align in dramatic fashion those process is evolving.

Locally, Vocon's technology director Brandon Dorsey reports the firm's design staff use multiple AI tools. Design concepts are drawn by hand before they are plugged into modeling software for massing studies and exploring material selections via text prompts. Multiple alternatives are generated quickly, far faster than manually, with Evolve Labs as their modeling software. There now 40 users in the firm's 200 professionals in Cleveland and New York. Dorsey reports that their AI software costs 9% of the firm's annual expenses.

THE IMPLICATIONS OF AI ON ARCHITECTURE & DESIGN:



AI algorithms such as Generative Adversarial Networks (GANs) and other generative AI technologies push the boundaries of traditional architectural design. These systems can analyze vast datasets of existing designs, cultural artifacts, and natural forms to generate new, unexpected design concepts. Tools like DALL-E illustrate how AI can create entirely new forms and aesthetics, providing architects with innovative ideas that they might not have conceived independently.

This symbiosis between human creativity and machine intelligence opens new frontiers in architectural aesthetics, allowing for the creation of structures that are both unique and functional. For instance, AI can suggest organic forms inspired by nature, leading to biomimetic designs that are sustainable and visually stunning.

Increased Efficiency:

AI can dramatically enhance efficiency in architectural workflows by automating time-consuming tasks. Tasks such as drafting initial floor plans, analyzing structural integrity, and optimizing spatial layouts can be performed swiftly by AI, freeing architects to focus on more complex design challenges. AI-driven software can analyze a site's environmental data to optimize the placement of windows for natural light or the orientation of a building to maximize energy efficiency.

This not only speeds up the design process but also can result in more refined, practical, and cost-effective solutions. Additionally, AI can manage project schedules and resources, predict potential delays, and suggest adjustments, ensuring that projects stay on track and within budget.

Improved Accuracy:

AI tools enhance the precision of architectural plans and construction documents. By leveraging machine learning algorithms, these tools can detect and correct errors that might be overlooked by human eyes, ensuring higher safety and compliance standards. For example, AI can cross-reference building codes and regulations with design plans, flagging potential violations before they

become issues.

This meticulous attention to detail can minimize costly rework and delays during construction. Also AI can simulate and analyze structural performance under various conditions, providing architects with critical insights into the durability and safety of their designs.

Cost Savings:

AI can contribute to meaningful cost savings throughout a project's lifecycle. It can optimize certain design and construction processes and reduce material waste, labor costs, and energy consumption. Predictive analytics can foresee maintenance needs, allowing for timely interventions that prevent expensive repairs. For example, AI can monitor the health of building systems, predicting when equipment is likely to fail and scheduling maintenance before issues escalate. Additionally, AI can optimize supply chain logistics, ensuring materials are delivered just in time and in the right quantities, further reducing costs associated with storage and wastage.

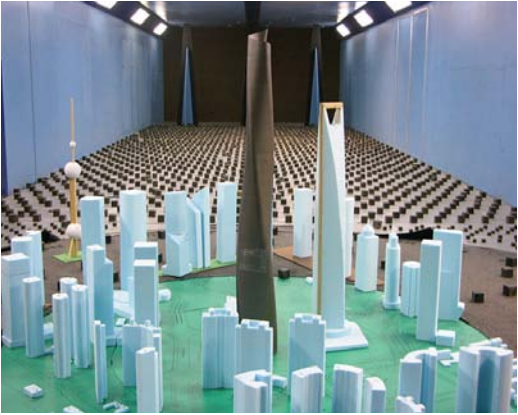
Improved Project Management:

AI can enhance project management by providing tools that improve scheduling, resource allocation, and stakeholder communication. AI-powered project management systems can track progress in real time, identify bottlenecks, and suggest corrective actions. These systems can facilitate seamless communication among architects, contractors, and clients, ensuring everyone is on the same page. For instance, AI can automate the distribution of updates and reminders, reducing the likelihood of miscommunications and delays. Additionally, AI can analyze project data to forecast future trends and outcomes, helping managers make informed decisions and mitigate risks effectively.

Example: The Shanghai Tower

The Shanghai Tower (above) is a substantial beacon of AI-driven architecture. Utilizing AI for energy efficiency, wind resistance, material selection, and construction management, KPF's tower exemplifies how AI can enhance sustainability and structural integrity.

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AI systems optimized the building's aerodynamics to minimize wind loads and reduce sway, ensuring stability and comfort for its occupants. AI also facilitated efficient resource management and safety protocols throughout construction.

Example: The Edge, Amsterdam

The Edge in Amsterdam (right) showcases AI's capability in smart building management. AI-driven systems optimize energy consumption, regulate climate control, and manage space utilization, creating an energy-efficient and adaptive environment. The building's AI infrastructure continuously learns and adapts to user behaviors, enhancing comfort and productivity. This intelligent approach to building management demonstrates how AI can lead to more sustainable and responsive architectural solutions.

Will AI Replace Architects?

The question of whether AI will replace architects is a common concern. While AI can automate certain tasks and offload repetitive tasks, it cannot replicate the creativity, intuition, and critical thinking that human architects bring to the table. Human intervention remains essential for interpreting AI-generated results, making informed decisions, and ensuring that designs meet the needs of clients and communities.

The National Council of Architectural Registration Boards - NCARB - views AI as an 'enhancer' of the practice of architects and not a replacement. At NCARB's inaugural Futures Symposium, architect and technologist Phil Bernstein, FAIA, was quick to answer "no"—or at least, not yet. It will be some time before AI can design a building completely. Doing so effectively with creativity is a more challenging benchmark to determine. During NCARB's Futures Symposium, three experts weighed in on how the profession should respond to AI's evolution:

AI as Augmentation:

Autodesk's Senior Principal Research Scientist John Locke, AIA, encouraged architects to see AIA as a tool to augment their skills:



"AI is an enhancer of the architect's creativity, not a replacement or a challenge. The more ways we can empower the architect of the future to think better, to (better) expand their scope." Rather than seeing AI as competition, architects should approach AI the same way they approach other technologies: as a tool that can help them execute their vision better, faster, and more effectively.

Minimize Mundane Tasks:

First—and perhaps most frequently cited—AI can be used to supplement formulaic or time-consuming tasks, such as code compliance. Automated tools like UpCodes or CodeComply.AI can research and analyze code requirements, help project teams understand and apply codes, and increase team collaboration. By taking these tasks off the to-do list, architects and their project teams have more time to focus on creativity, design, and problem-solving tasks that AI cannot do.

Iterate and Optimize:

Similarly, AI design tools can help architects iterate quickly—creating optimized floor plans and design variations for clients to review—and even help reduce materials costs. Dity Ayalon, AIA, of ARK™, demonstrated how ARK's intelligent design tool can help architects at every phase of design, from conceptualization to construction. By determining which layout works best and optimizing for density and profitability, tools like ARK enable architects to work with their clients to find a design solution that works for them—quickly. According to Ayalon, "AI will not replace architects, but architects who use AI will replace those who don't."

"This pre-empts the need for aimless post hoc scrutiny of design options that generative design often leads us into," said Locke. "Instead, we pave a path for purposeful exploration, allowing for a synthesis of both controlled directives and serendipitous design outcomes."

Enhance HSW and Sustainability:

By gathering, using, and generating data, AI design tools can

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also enhance architects' understanding of and relationship with Health, Safety, and Welfare, especially the difficult-to-define "well-being" aspect. Using intelligent tools to predict and analyze building performance data, architects can begin to quantify, evolve, and improve well-being in their design.

In addition, AI-based tools can also be used to support sustainability in the design process, from informing material selection to quantifying and minimizing a building's carbon footprint. "The AEC professions need to redefine the relationship of HSW and, in doing so, employ these technologies in a way that improves our value proposition," said Bernstein.

For AI to be an invaluable tool to helping architects support sustainability, an enormous amount of data from a huge cross-section of manufacturer and testing laboratory resources must be integrated into the AI database. And this database must be continually updated with product enhancements and new product introductions for the work of the architect to be of value.

Similarly, building and zoning code information from all pertinent authorities must be integrated into the AI database and updated continuously. Many relevant resources are currently unprepared to contribute such information and update it as needed.

Maintain Responsible Control:

Ultimately, the architect is currently accountable for maintaining responsible control at every stage of their project, including any stage that uses artificial intelligence. With much of AI dependent on being fed accurate, reliable data, responsible control of the future may include overseeing the work of data scientists who help feed information into intelligent design tools. For the foreseeable future, whatever the input, tools, or design process, the architect of record will continue to maintain responsibility for the output.

Current Skill Gaps and Opportunities:

While AI excels at optimizing processes and generating design options, it cannot replicate the uniquely human skills essential to architecture. These include creativity, intuition, and the ability to

understand complex emotional and cultural nuances that inform design decisions. AI may suggest solutions, but the architect's critical thinking and experience ultimately evaluate those options and make the final call. AI currently lacks the empathy and interpersonal skills required to effectively communicate with clients, understand their needs, and translate their desires into a built reality. The ability to negotiate, collaborate, and build relationships remains firmly in the domain of human architects.

AI Training:

Equipping architects with AI skills is no longer a luxury but a necessity. As AI becomes increasingly integrated into the architecture industry, architects who possess AI literacy will have a distinct advantage. Understanding how to leverage AI tools effectively allows architects to streamline their workflows, explore innovative design solutions, and deliver projects more efficiently. Furthermore, AI proficiency empowers architects to interpret and critically evaluate AI-generated data, ensuring the technology is used responsibly and ethically. By embracing AI training, architects can position themselves at the forefront of the industry, driving innovation and shaping the future of the built environment.

According to a survey conducted by Chaos and Architizer, a staggering 60% of architecture professionals currently have no formal training in using AI tools for architectural design, with only 4% currently taking some sort of training. That alone poses an important obstacle to adopting AI tools in the industry, as the same survey found that only a mere 18% of the interviewees are planning to receive formal training in the near future.

Human Creativity vs. Machine Efficiency:

While AI excels at processing data and optimizing solutions, the essence of architecture lies in the irreplaceable human qualities of creativity and intuition. The ability to conceive original ideas, envision spaces that evoke emotions, and weave cultural narratives into designs remains uniquely human. AI can offer suggestions and variations, but it is the architect's intuition that guides the selection and refinement of those options.

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Human architects possess a deep understanding of how people interact with spaces, drawing from personal experiences and cultural contexts to create designs that resonate on a deeper level. This inherent creativity and intuitive understanding of the built environment are what elevate architecture from mere construction to an art form.

Artificial Intelligence in Architecture:

The future of AI in architecture is bright - to a technical extent. Emerging technologies like generative design, machine learning, and robotics promise to impact the industry further. The collaboration between human creativity and AI's computational power should lead to innovative and sustainable architectural solutions that address many - but not all - of the challenges of the 21st century.

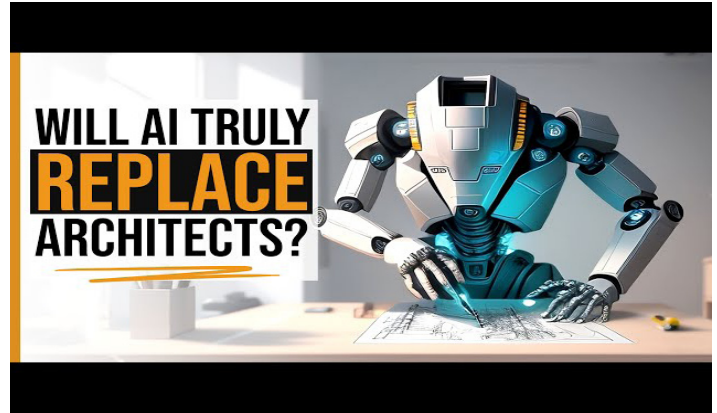
Emerging AI Technologies:

Generative Design: This technology can be used to create new and innovative designs that would be difficult for humans to come up with on their own. For example, generative design could be used to create a perfectly optimized building for energy efficiency or to design a city that is more resilient to climate change.

Machine Learning: This technology can train AI models to recognize patterns and make predictions. In architecture, machine learning can begin to predict how people will use a space or identify potential problems with a design, though varying cultural values and patterns will likely limit the breath of such efforts.

Natural Language Processing: This technology can be used to understand and respond to human language. In architecture, natural language processing could be used to create AI-powered design assistants that can help architects create designs that meet the needs of their clients.

Virtual Reality/ Augmented Reality: These technologies can create immersive experiences that allow architects to explore their designs more realistically. VR architecture and AR could also be used to collaborate with clients and stakeholders on designs.



Robotics: This technology could automate construction tasks, making construction faster, cheaper, and more efficient. Robots could also create more complex and intricate designs than would be possible with human labor.

AI's Trajectory:

Google, OpenAI, Meta and Anthropic are collectively dedicating more than \$14 billion to develop artificial general intelligence - AGI. That technology can do almost anything a human can - drive a car, learn, talk, solve problems, create more.

At present, AI models excel at one or two tasks such as generating text and images or solving mathematical equations. The ability of these systems to take in and process data at lightning speed with the number of parameters inside models - connections like synapses in the brain - are going from millions to billions to, within a few years, more than a trillion. Industry experts believe that it is only a matter of time before a system reaches artificial super intelligence - ASI - a form of AI that surpasses human intelligence in every way and can make its own decisions.

CEO of Google's DeepMind believes that AGI's arrival will usher in "an era of maximum human flourishing which will eliminate disease and poverty and witness the colonization of space. Not everyone is quite so optimistic. Daniel Kokotajlo, a former OpenAI researcher refused to sign a non-disparagement agreement when he resigned this April sees "something like a 70% chance" that AI will catastrophically harm or wipe out humanity.

In 2024, OpenAI's o3 model which measures fluid intelligence - the ability to solve logical problems and recognize patterns without prior knowledge or training - scored 87.5% on the ARC-AGI test. I

In March, University of California, San Diego released a preprint study that suggests two AI models - OpenAI GPT-4.5 and Meta's Llama 3 passed the Turing Test, formulating answers that'd human interrogators to conclude the bots were human over 50% of the time. Better than Hal.

A recent survey of 2,778 top AI researchers found that they believe

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there is a 50% chance of a system outperforming humans in all tasks by 2047 - with some believing it will not take that long. AI2017, a detailed forecast co-authored by Kokotajlo predicts that within two years a single AI system will be doing the work of 50,000 coders at 30 times their current speed.

This flood of innovation has compelled some to predict that AI-optimized biomedical research could put us “on track to eliminate minor cancers and double lifespans” according to Anthropic CEO Dario Amodei.

AI's Large Carbon Footprint:

AI-specific data centers used enough electricity in 2024 to power 7,200,000 homes. But OpenAI CEO Sam Altman has predicted with confidence that AI technology will soon unlock nuclear fusion to provide plentiful climate-friendly energy.

Potential AI Dangers:

A super-smart AI might represent a serious risk in the wrong hands. A recent State Department-funded report observed, “A simple verbal or typed command like, ‘Execute an untraceable cyberattack to crash the North American power grid’ could yield a response of such a quality to prove catastrophically effective.” AI-powered drones could overwhelm military installations. And just as AGI can be tasked to create breakthrough medicines so could it be craft to create lethal bioweapons.

There recurrently limits to how much data can be fed into AI servers and how fast the chips that power AI systems can be manufactured. Brian Chau, head the nonprofit AI Alliance for the Future observes that AI 2027 leads “like a confession from a psychiatric ward” because AI innovation “is getting harder, not easier.” Current AI models do not display humanlike multi-faceted intellectual agility or even a solid sense of our world.

Economic & Social Implications:

Even without AGI, Anthropic’s Amodei model says unemployment could surge to 20% within only five years, swallowing jobs in law,



finance, coding and consulting. Executives in Silicon Valley believe that the government will need to provide a universal basic income to avoid a spike in poverty and social unrest.

If ASI is achieved and the utopian dreams of tech’s optimists are realized, people will be forced to address the psychological challenge of finding purpose and meaning in a world where AI has made their learning and purpose obsolete as workers, creators and decision-makers.

Computer Scientist Louis Rosenberg: “Relying on super intelligence that can out-reason you, out-plan you, out-negotiate you, and do it all more creatively than you ever could - that will surely hit at the essence of what it means to be human. How could that not feel demoralizing?”

