facultad, y encaran los programas informáticos como juegos de ordenador, no existe una relación directa entre lo que están haciendo y la realidad. Están haciendo aquello que tiene que hacerse, pero no están construyendo un edificio, y eso es algo que tiempo después cuesta que cambie.

Es diferente en mi caso, que aprendí cuando no había programas informáticos, y por lo tanto cuando llegaron yo ya tenía esa parte resuelta, y lo que hicieron fue ayudarme. Ahora no, ahora ya se tiene el programa informático en la cabeza antes de tener la necesidad de usarlo, esa es la cuestión. En el trabajo, en términos de diseño, básicamente trabajo a mano. En el cálculo no, se concibe algo, alguien lo calcula, y después se analizan los resultados: cambia esto, cambia aquello, etc., hasta que se llega a un nuevo punto. Pero en términos de diseño todo comienza por la mano, al menos yo, que no sé trabajar en AutoCAD.

¿Cuál es el papel de la técnica y cuál el de la intuición en AFA Consult?

¿Qué es la intuición? La intuición es la convocación de una memoria. Si no se tiene memoria no existe la intuición, y por lo tanto, la cuestión de la intuición depende de aquello que conseguiste almacenar en la memoria. Por eso es peligroso confiar en la intuición en una fase inicial, porque falta todavía mucho. Ahora bien, la intuición es siempre el primer paso. La intuición no excluye el respectivo análisis a través de la razón, y es la razón la que va a validar la intuición.

Hay dos arquitectos brasileños que significan técnicas diferentes. Niemeyer, al finalizar el diseño de los proyectos, cogía un A2 (un formato extraño, dos A3), y describía el proyecto, a mano, con pequeños esbozos. Y eso era la memoria descriptiva, un A2 dibujado a mano, de las cosas más bonitas que hacía. Él decía siempre que si cuando llegaba al final del A2 no había sido capaz de describir el proyecto, hacía otro proyecto. El proyecto tenía que poderse describir en un A2. Esto es muy interesante porque es muy profundo, tiene muchas implicaciones: la idea del proyecto debe ser tan fuerte que se pueda resolver en una sola hoja.

Mendes da Rocha tenía otra técnica fantástica. Cuando llegaba al final del proyecto, o cuando ya estaba bastante avanzado, elaboraba un discurso marxista basado en la dialéctica que consistía en destruir el proyecto. Decía: está mal. Está mal por esto, y por esto, y por aquello. Hacía el razonamiento inverso, el de desmontar cada decisión del proyecto. Y cuando llegaba al final del razonamiento echaba la vista atrás en las respuestas y decidía si estaba bien o estaba mal. Pura dialéctica. Y es muy interesante el resultado; esta decisión pide en realidad esto otro, esto no debería ser así, debería ser asá, etc. Llegaba al final y decía, vale, ahora que tengo las dos perspectivas, puedo tomar una decisión.

¿Puede la arquitectura reducirse a un algoritmo? ¿Desempeñan algún papel las IA en vuestro gabinete?

No, de ninguna manera, en el despacho no trabajamos con algoritmos. Pero lo acabaremos haciendo. Acabaremos resolviendo problemas con algoritmos como casi todo lo demás, que también se acabará resolviendo así. Es más o menos inevitable a causa del mercado, que lo nivela todo por lo bajo. Claro que continuará habiendo, qué sé yo, vivienda. Pero tú le dirás al algoritmo: "Saca un apartamento de 50m2", y lo hará, será así, no hay ninguna duda. De hecho, ya está ocurriendo. Pero no, las IA no han desempeñado ningún papel en el estudio.

INVESTIGACION

A new life for the Battersea Power Station in London

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ABSTRACT

The article explores the redevelopment of the iconic Battersea Power Station, which was originally built between 1929-1955 to provide energy to London from burning coal. 30 years after it its closure, it now brings a new kind of energy to the city from the people and capital that it has attracted. It has created a new destination that brings people from all over the world to build a life and work there. The architects involved in the design are all international: the masterplan is by Rafael Viñoly from New York, The Power Station is by Wilkinson Eyre from Australia, the residential and retail is made by Foster + Partners from London and Gehry and Partners from LA. The firm Wilkinson Eyre was selected in 2013 for the mixed-use redevelopment of the iconic station, which preserved the old façade and completely replaced the interiors to host residences, offices and commercial spaces. The two residential projects by Foster and Partners and Gehry architects are in contrast with the historical building emphasizing even further its Art Deco features and brick façade. This new development is also key for the city, as it revitalized an abandoned part of town. Strategically located next to the Thames river and close to the city center, it has all the conditions needed to become a thriving new neighborhood.

KEY WORDS: Battersea power station; London; historic preservation; urban renewal; Mixed-use development; Wilkinson Eyre; Foster + Partners; Gehry and Partners.

The iconic Battersea Power Station was originally built to provide energy to London from burning coal. Now, it brings a new kind of energy to the city from the people and capital that it has attracted. It has created a new destination that brings people from all over the world to build a life and work there. This new development is also key for the city, as it revitalized an abandoned part of town. Strategically located next to the Thames river and close to the city center, it has all the conditions needed to become a thriving new neighborhood.

The Battersea Power Station was abandoned for many years and after 30 years it finally found the right mix of visionaries, experts, administrators, and capital that brought it back to life. The design of the old building has now a new life – preserving its historical heritage while upgrading into one of the most iconic places in London and the world.

The new development is all about the architectural contrasts: old and new, minimalism and exuberance, water and land, brick, stone and glass – even the pavement of the square are different. It's a striking combination between historical and contemporary architecture; between industrial and residential buildings; between typologies – residential, office, commercial, entertainment, parks, etc. What unites them is that they all strive to be iconic and

Standen Leonard Pierce. The original architects were J. Theo Halliday and they worked with Halliday & Agate Co. as consultants. After the initial opposition to the project for its environmental and visual impact on the city, Sir Giles Gilbert Scott was invited to design the exterior of the building and give it a more pleasing appearance in his signature Art Deco and Neo Gothic style. Interestingly, the exterior of the building and the chimneys that he designed are the only ones that have been preserved until today.

The Battersea Power Station was built in 1929-35 and expanded in 1937-41 delayed for WW2 and completed in 1955. Sir Giles Gilbert Scott design was constructed in the 1930s in Art Deco style and made with steel structure and over 6 million bricks. He also designed the Bankside Power Station, later transformed into the Tate Modern art museum with designs from the Swiss architects Herzon and de Meuron. We can see similar vertical brick lines on the facades of both buildings.

The Power Station was decommissioned in 1975 and 1983 and given Grade II status of historical heritage in 1980. The iconic building was abandoned for many years, but its powerful energy lingered and was transformed as it became the location for festivals, events, celebrations, and community projects and hosted fashion shows, concerts, and art installations. It appeared on the covers of Pink Floyd's 1977 Animals album. It was also used for the filming location for Batman film The Dark Knight.

The Redevelopment Initiative to Create a new destination

For 30 years, developers had not been successful at offering a viable solution for the site. Yet, the globalized world we live in made it possible to attract international talent and capital for the project. In 2012, an agreement between EY and the Malaysian consortium was made to redevelop the 42-acre Power Station and surrounding area. The developers of the site are a consortium of some of the most respected property development and investment businesses of Malaysia, Sime Darby Property, SP Setia and the Employees' Provident Fund.

The architects are also international: the masterplan is by Rafael Viñoly from New York, The Power Station is by Wilkinson Eyre from Australia, the residential and retail is made by Foster + Partners from London and Gehry and Partners from LA, The Malaysia square by BIG from Denmark and the subway station by Grimshaw. The developers chose to work with architects that are really different from each other. Perhaps, this was a good way to bring diverse ideas and designs that would meet the taste of all potential clients. Having such a large area made sense to use a variety of architectural languages for the design.

PABLO GUTIÉRREZ SALAMANCA y GLORIA OCHOA son estudiantes de tercer ciclo de Barcelona y Valladolid. extraordinary. It has everything that a neighborhood should have in order to offer full experience to its residents and guests.

History of the Battersea Power Station

The Battersea Power Station is located on the south shore of the Thames river, in the Nine Elms area. The area has good parks yet has not been developed so far because it was industrial. The position was chosen initially because the power station needed to receive coal by boats and also use water for the turbines.

The power station was built by the London Power Company and designed by their head engineer Sir

The project aspires to be the home of 25,000 people, host 250+ shops, cafés and restaurants, along with a village hall, community hub, medical center, hotel and an event venue for 1,400 people. This neighborhood's goal is to be one of the largest retail, leisure, culture and office quarters in London. The tech giant Apple has leased 500,000 sq ft of space within the Boiler House, making the Power Station its new London campus for up to 3,800 employees.

Masterplan by Rafael Vinoly

Initially, a previous version of the masterplan for the area was developed by Sir Nicholas Grimshaw, which defined the program for the site. However, the project used for the current development is by the New York based architect Rafael Viñoly. From his sketches, we can guess that Viñoly's idea was to wrap the powerplant with new buildings while opening towards the Thames River.

The project is envisioned as a net zero development that regenerates the area. It puts at the center the iconic power station and surrounds it with a circular avenue. The reflective pools offer views and cooling of the area. The new surrounding buildings are opening up to allow the Power Station to be seen from the river. The Power Station is the focal point between the Vauxhall / Nine Elms / Battersea Opportunity Area and the base for creating a vibrant community. At the same time, it is accessible from three streets and also from the riverwalk.

The typology used are the traditional London terraces as there are specific guidelines about the architecture. Yet, the emphasis on diversity was there from the beginning. The residential buildings around the Power station have varied styles. Their glass facades contrast with the bricks of the historical building. Their shape is curved and they have deep opening terraces, creating unique visual experiences both for the residents and the visitors.

There's a big emphasis on how power is generated and distributed to the buildings around. The project is part of London's largest Combined Cooling, Heating and Power (CCHP). The restored Power Station, with its new function, will become one of Europe's largest Net Zero carbon buildings.

The architects at Rafael Viñoly commented: "Given the phased nature of a development of this scale, the master plan provides a set of design guidelines that establish different degrees of prescription of the design according to the sensitivities of different areas of the site, with the most detailed guidelines pertaining to the architecture and setting of the heritage building. The high-density plan makes the project financially viable, justified an extension of the London Underground system, and ensures that project will serve as a catalyst and anchor for the regeneration of the surrounding neighborhood."

Battersea Power Station Renovation by Wilkinson Eyre

The firm Wilkinson Eyre was selected in 2013 for the mixed-use redevelopment of the iconic station. The spaces are distributed between offices, residential, shopping mall and entertainment. Only the brick shell of the turbines and the concrete chimneys of the original power plant designed by Sir Giles Gilbert Scott have been preserved and all the infrastructure of the power plant has been removed.

The revamped powerplant project also makes links to conceptual art from the 60s with the ready-made art by Marcel Duchamp. He stripped objects from their original purpose and turned them into ready-made artworks. This concept is directly applicable to the Battersea Station development, as the power plant is no longer used for making electricity but has become the home of offices, a shopping mall, entertainment and residences. Similarly to Duchamp, the architects from Wilkinson Eyre changed the original use, and the old buildings were turned into large-scale artworks in public spaces.

Here is what the architects at Wilkinson Eyre say about it:







"The designs respect the integrity of the historic landmark whilst also creating a new state-of-the-art events space; shops, restaurants and cafés; a public viewing platform; large open-plan office spaces, and a series of villas, apartments and penthouses positioned around a garden square above the Boiler House, and to either side of the Power Station.

The careful expression of the contrast between old and new is vital to the success of the project, so that wherever the user is within the building they are reminded of the existence of its original fabric."

Apple will have 1400 staff from all over the UK offices and take 6 floors from the building with a total of 46,000 m2. They feature flexible, open spaces with an industrial

Images © Wilkinson Eyre







design aesthetic. The tall atrium in the center of the space brings natural light to the offices and offers views of the sky and the chimneys.

Apple probably had a say in the building renovation design – it's clean and simple, but at the same time in tune with the historical heritage of the building. It's also interesting that Apple decided to locate their offices on one of the symbols of the industrial revolution – a coal power plant. The 19th century industrial revolution symbol meets the 21st century tech giant. The power of the past will be inhabited by the power of the present.

The residential spaces consist of apartments and villas that are split in three areas: two in the former Switch Houses on the east and the west of the site, and one above the Boiler Room. All of them offer unique views of the city and of the historical building. The residents of the Switch Houses enter their homes from the side squares, while the ones above the boiler room through a glass elevator.

As expected, one of the most prominent spaces in the project is the former turbine hall, which is now used for retail. Just like in Tate Modern, this large scale space can host a wide variety of shopping spaces given how many residents are in the area. Here is also what the architects from Wilkinson Eyre said:

"Utilizing the magnificently restored Turbine Halls, open to the public for the first time, the power station will be one of London's most exciting retail destinations. Through the preservation of the existing fabric and finishes, the major volumes within the building are used to their best advantage. Spanning over three levels, a wide array of restaurants, shops and event spaces will create a vibrant and positive atmosphere."

The architects kept one of the most distinct features of the design – the chimneys. Now that they are no longer needed for taking the smoke out, they are used as icons and for bringing people up to the top. Inside one of them is a large glass elevator carrying up to 50 people to 109m above the base so they can enjoy the spectacular views of London. The chimney is thus carefully reused High Line) and LDA Design. It offers a space for relaxation above the busy Electric Boulevard. The expansive Roof Gardens have 360-degree views across London, marked by the magnificence of the nearby Battersea Power station and Battersea Park.

The building's shape and position was predefined by the masterplan, but Norman Foster added the curves and embraced the idea of the large terraces. The glass-cladded façade has large openings that allow natural light to come through. The building creates a direct contrast with the historical brick façade of the powerplants, which activates the site even more.

Prospect Place by Gehry Partners

On the east side of Electric Boulevard, the architects from Gehry Partners designed an assembly of 5 residential buildings called Prospect Place. It includes about 650 units and also double-height retail spaces at street level, a community park and a multi-use community hub, and the distinctive "Flower" building. The residents have access to the lounge, commercial spaces and amenities. The building's design is inspired by the blowing sails of ships. In between the buildings is the Prospect Park Community Hub, offering a beautifully designed private garden to its residents.

The architect Frank Gehry explained his design by saying: "It is important we create social places for future generations and our goal from the start has been to create a neighborhood that connects into the historic fabric of the city of London, but one that has its own identity and integrity." Thus, the interior designs are inspired from the materials, atmospheres and lifestyle of both the local site in London and also LA, the city where the architect is based. Each apartment is different as the façade is also different with the changing geometry of the buildings.

According to Gehry, the goal for the development was for it to read independently while also framing and connecting to Battersea Power Station. Frank Gehry said: Here we find a similar approach which emphasizes the historical power station.

The importance of the redevelopment project

The Battersea Power Plant development is saving an iconic historical building by giving it a second life while developing a new neighborhood of London. The developers mobilized global talent and capital to create a new project and bring good design to an abandoned neighborhood of London. They created a new vibrant and global destination for London and the world.

This new project provides homes, offices and jobs to thousands of people, and will hopefully give people of different economic backgrounds great conditions for living and working. It has also attracted top international companies to set up offices, shops, homes and bases.

Good design has the power to save buildings through time and resist the changes and challenges of technology. Most of the infrastructure that the actual plant originally had were removed and only the walls and chimneys – the design – remained. Within that inspiring design, a diverse and international team of architects have managed to create a new place that will undoubtedly become a hallmark in the urban fabric of London.

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as a viewing platform and exclusive event space, giving a new life to the iconic structures.

Skyline, Battersea Roof Gardens by Foster + Partners

One of the unique buildings on the site called Battersea Roof Gardens (formerly the Skyline) was designed by Foster + Partners and features approximately 650 apartments, of which 103 affordable housing, private pool, gym, hotel and retail.

Residents enjoy access to a unique 250m rooftop garden designed by James Corner of Field Operations (who was also part of the design team of New York's "I love London. It has culture, history and diversity and the buildings we have created at Battersea Power Station are designed to stand artfully on their own amongst all of that, whilst also framing an internationally recognized icon."

In his early works, Gehry made oversized binoculars and other objects. Here at the Battersea Power Station, the scale of the powerplant is already big because of its original use, but now that its function has changed, it becomes a natural icon. The creation and reuse of an industrial icon is the dream of postmodernism. However, while postmodernism uses fake historical icons made new, here we have an actual real one. During postmodernism, architects and artists often relied on the change of scales as one of the ways of creating icons. IVAN RUMENOV SHUMKOV is Doctor in Architecture (UPC) and Visiting Professor at the International University of Catalonia.