

The portrait of Industrial Artefacts: the Trigger of a New Appreciation

MARÍA CABRERA VERGARA

Abstract

This paper intends to acknowledge the essential role that photography has played in the generation of a new appreciation within the architectural discipline, triggered precisely by the portrait of some artefacts which, paradoxically, had been during decades completely overlooked by it: the industrial storage structures. The aim of this text is threefold:

First, to retrace how the first unintentional portraits of industrial artefacts taken during the early years of the 20th century unleashed an aesthetic fascination and transformed them into a fundamental source of inspiration for the new forms of architecture.

Second, to examine how the later work of subsequent photographers of second half of the 20th century unveiled diverse conceptual facets of these industrial structures, and exposed their architectural nature.

Finally, to evidence how this evolutionary process towards a conceptual interest contributed to challenge the parameters of what, till that moment, defined what was assumed as a valid source of interest and inspiration to the architectural discipline.

Keywords

Industry, Architecture, Photography, Artefacts

[Fig. 1] Grain elevator published by Walter Gropius in the *Jahrbuch des Deutschen Werkbundes*. Source: BANHAM, Reyner. *A Concrete Atlantis: U.S. Industrial Building and European Modern Architecture, 1900-1925*, MIT Press, 1986.



Contrary to what many might think, industrial artefacts have not always drawn the attention of the architectural discipline. For a long time, the rural and industrial history of our societies remained mainly unknown due, among other factors – historical, social and territorial – to its *rough* appearance¹. Despite having a certain bucolic dimension – widely portrayed in paintings –, its mechanical aspects resulted unattractive at first.

Originally designed by engineers as pure functional elements, their colossal scale² together with their sealed walls and their inaccessible interiors led architects to acknowledge them as artefacts rather than as architectures, and despite their constructive and structural qualities, to consider them outside the area of interest of the discipline.

However, against all odds, their destiny started to change how and when one could least expect it: their appearance switched from being a major issue to become their main asset and source of admiration, not only according them the attention they deserved but providing them a new role in the architectural world.

But how and why did this interest arise in the first place? How did the perception of these artefacts start to change?

First Innocent Eyes

The awakening of an interest towards these artefacts arose back in the early 1920's with a set of images taken by naive eyes which, passing through several hands, ended up constituting the foundation of an entirely new architectural movement. It is in 1986 when Reyner Banham, the well known British Architectural Historian, in his work *The Concrete Atlantis*, retraces and acknowledges the significance of such chain of events.

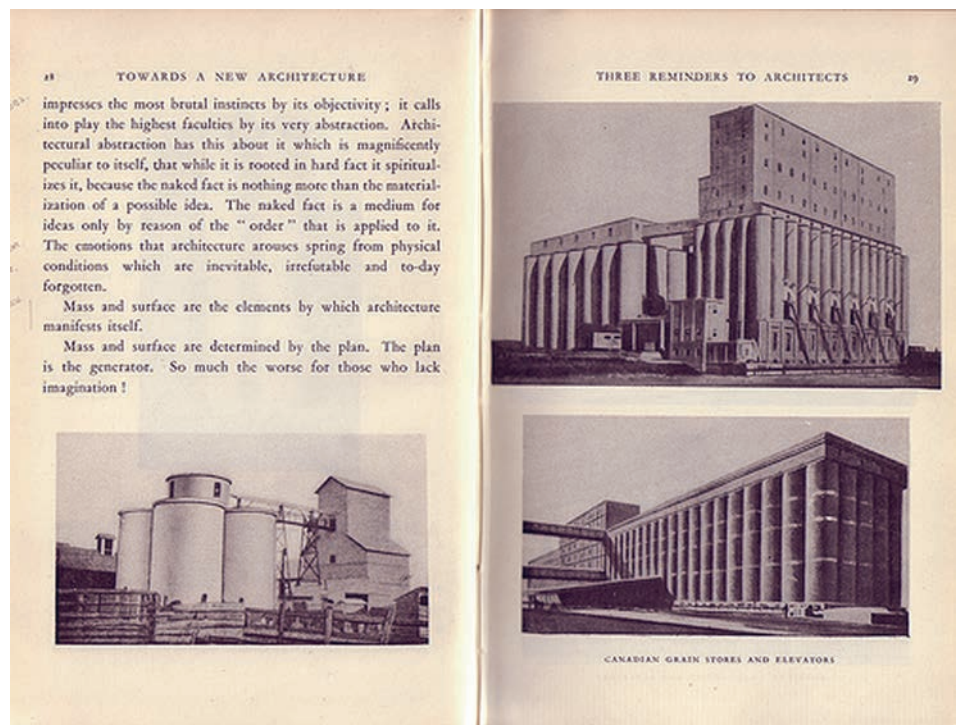
As Banham recounts, these images of American factories and grain elevators³ appeared for the first time in the *Jahrbuch des Deutschen Werkbundes* in 1913 [Fig. 1] linked to an article entitled “Die Entwicklung moderner Industriebaukunst” (The Development of Modern Industrial Architecture) of Walter Gropius⁴.

The illustrations portraying structures that till then had been completely disregarded left no one indifferent. They immediately reached the greatest impact across Modern Europe, as one can appreciate, for example, in the early work of Antonio Sant'Elia and Mario Chiattone – two of the main representatives of the Italian Futurist

- 1 The knowledge we have of industrial artefacts is rather limited. It is a set of impenetrable structures, usually only contemplated from a distance, either from the train or the car. However, these *industrial colossi* are at the same time an indisputable part of our lives: while in the past, they have sustained and enabled our economy, today they maintain an unavoidable physical presence, structuring visually and physically the surrounding environment.
- 2 The volume of a single silo is often bigger than the one of a public building.
- 3 The seven pages of illustrations, placed with a major introductory article by the Werkbund President, Friedrich Naumann, turned out to be the first thing that the reader could admire when opening the publication.
- 4 During the previous ten months that had gone into preparing his article, Gropius had been collecting these pictures, requesting them to various sources in the United States and Canada.

See: BANHAM, Reyner. *A Concrete Atlantis: U.S. Industrial Building and European Modern Architecture, 1900-1925*. Boston: MIT Press, 1986.

[Fig. 2] Grain Elevators photographs republished in *Vers une Architecture* of Le Corbusier. Source: LE CORBUSIER. *Vers une Architecture*. Éditions Crès, Collection de "L'Esprit Nouveau", Paris, 1923.



- 5 BANHAM, Reyner. *A Concrete Atlantis: U.S. Industrial Building and European Modern Architecture, 1900-1925*. Boston: MIT Press, 1986.
- 6 In 1919, Le Corbusier -who would not travel to the United States until sixteen years later- wrote to Gropius to request these photographs that depicted the grain elevators, in order to publish them in his journal *Esprit Nouveau*. A year later, one of them appears in an article by Mendelsohn, who in 1924, takes a journey across the United States and confesses to succumb to its beauty. His photographs would be later collected in his book *Amerika*. In *Modern Architecture*, published in English by the German architect Bruno Taut in 1929, appeared not only some buildings like the Crystal Palace, but also grain elevators of Buffalo and Canada. The last time they appeared devoid of historical commentary, was in 1969 in the book *American Architecture and Urbanism* by Vincent Scully.
- See: MENDELSON, Erich. *Amerika*, Paris, Ed. du Demi-cercle, 1992.
- See: TAUT, Bruno. *Modern Architecture*. London: The Studio Limited, 1929.
- See: SCULLY, Vincent. *American Architecture and Urbanism*. New York: Holt, 1988.

7 LE CORBUSIER. *Vers une Architecture*. Éditions Crès, Collection de «L'Esprit Nouveau», Paris, 1923.

8 BANHAM, Reyner. *Op. cit.*

9 As explained by Banham, images of factories and grain elevators soon became "a usable iconography, a formal language through which Modern Architects could make promises, show adherence to the creed of the Modern Movement and point the way toward a new kind of technological utopia."

See: BANHAM, Reyner. *Op. cit.*

10 BANHAM, Reyner. *Op. cit.*

11 BANHAM, Reyner. *Op. cit.*

movement –, or in the sketches of the "Imaginary Projects" by Erich Mendelsohn⁵. Only a few years later, the images were handed and reused by key figures such as Le Corbusier, Erich Mendelsohn, Bruno Taut or Vincent Scully⁶. However, according to Banham, it was thanks to their publishing in *Vers une architecture* (1923)⁷, that they reached the widest dissemination and the artefacts started to be considered as icons of Modern Architecture [Fig. 2]. Le Corbusier turned out to be the only master of the Modern Movement who studied and described these industrial prototypes in detail. Yet, he claimed the grain elevator more for its forms – which evoked the so longed purity and simplicity –, than for its ingenious design concept.

Unfortunately, the photographs were soon forgotten: the Second World War ended the dreams of progress, the process of deindustrialization began to wreak havoc, and the industrial structures, damaged and empty, were abandoned. Nevertheless, "Gropius had caused a crucial revolution in the sensitivity of modern architects (...)"⁸, and the onset of these pictures in the architectural scene supposed two key contributions to the field:

On one hand, the International Style arose as an imitation of the American industrial models and became the first architectural movement based almost exclusively on photographic data. This was -and still is- something revolutionary, as it differed completely from the traditional techniques of study through hand drawing on site⁹. From that moment on, the sole visual presence of industrial elements in buildings became the proof that these were as functional, economic and contemporary as the American factories that Le Corbusier had praised so much.

On the other, these photographs unveiled the reason why these industrial artefacts had such an impact on the architectural discipline and still keep moving us: their powerful primitive forms. As Banham points out¹⁰, their design based on geometry makes them a perfect example of what Wilhelm Worringer explained as the transcendence of the purity forms because of their essence as "primitive signs of all the arts and cultures"¹¹. This geometrical purity, emphasized by the cleanness of black and white photography, made them the perfect models of a new architectural expression which sought to discover the fundamental truths of the discipline, and also explains why when revisiting them today, we feel such a profound connection. Banham described it superbly after visiting a grain elevator



[Fig. 3] Gasholder. Bernd and Hilla Becher. Source: BECHER, Bernd and Hilla. *Typologies*. Cambridge (Mass.), The MIT Press, 2004.

abandoned for more than three decades, whose inward curved walls produced a baroque effect:

“This spatial sequence (...) is reminiscent of ancient Rome: the catacombs to be exact, though here, the spatial complexities could remember details of the Villa of Adriana or the Domus Aurea of Nero Emperor. This may seem exaggerated or fantastic, but how the remains of these adoptive monuments of the Modern Movement couldn’t reach our sensitivity if they didn’t link at some point with the ancient traditions of good construction?” It is possible that the founders of the Modern Movement were mistaken and deceive themselves, with much of what they observed in these photographic icons, but the feeling of rediscovering the ancient truths in timeless architecture certainly seems appropriate in places like the catacombs of the Marine A elevator¹².

This first stage of aesthetic fascination was crucial, but the interest towards these industrial *colossi* did not end there and evolved in amore transcendent way.

After the WW II, the progress of technology went faster than the production of these objects that soon became obsolete, and were abandoned or tired down. After thirty years of relentless deindustrialisation, abandonment and destruction, soon only a few artefacts remained still up, and most of them were in state of ruin. However, the atmosphere of that moment of profound social changes, artistic exploration and ecological concern in which artists were searching for new references and redefining their own role in the society, also contributed to give them the farsightedness of acknowledging the pressing phenomenon of deindustrialisation. Artist not only were fascinated by this new reality but felt responsible to dedicate their work to make people aware of the silent but unstoppable disappearance of these magnificent artefacts that had once played a fundamental role in our societies, and to warn the society about the probable terrible consequences.

Despite that more than three decades of oblivion went by till this interest revived, the later rediscovery of these artefacts was as powerful as the one in the 1920’s, and had an impact still tangible today.

To understand this phenomenon in depth, it is necessary to examine the work of different key photographers of this period, who contributed – through their own point of view and technique – to the evolution in the perception and theoretical comprehension of these structures.

A photographic journey of ‘re-discovery’

Nowadays, on the walls of the most important museums of Modern Art can be found, among paintings and sculptures, some exquisitely framed series of ‘portraits’ of industrial structures. This kind of images, that because of their delicacy and unusual topic could go completely unnoticed, have however the virtue to catch the viewer’s attention. These are the product of the imagination of Bernd and Hilla Becher, two of the most important artists – and teachers – of German post-war photography who in 1959 initiated what would end up being a lifetime project: the portrait and analysis of industrial artefacts in ruin in Europe and North America.

The Bechers were not only the undisputable pioneers in the rediscovery of these artefacts, but they also created a unique way of working¹³, whose contributions to photography were numerous. Three of them are particularly worth to be highlighted:

The first and probably most significant is their personal style when it comes to portraying these structures¹⁴, in which the object is presented pure and isolated in black and white against a clear sky [Fig. 3]. Pictures were taken systematically from eight different angles – capturing their front views and the complementary ones, forty-five degrees apart – in order to provide a three-dimensional perception of the object, despite photography was only two-dimensional, as if they wanted to

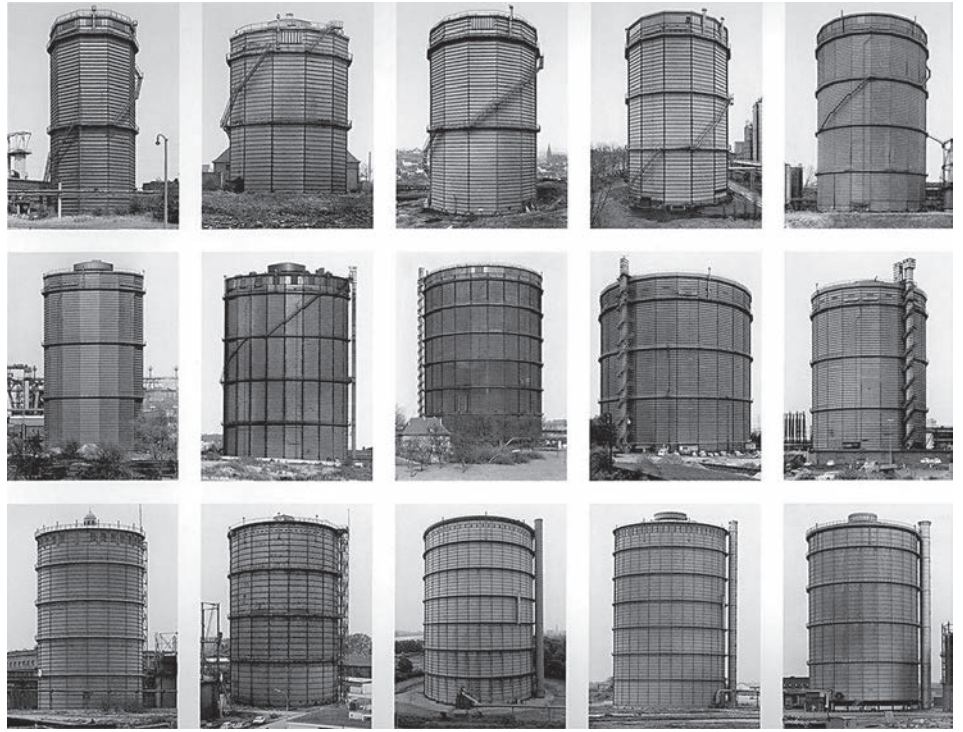
12 BANHAM, Reyner. *Op. cit.*

13 As one can appreciate in their work, a number of technical elements are repeated, which not only give consistency to the theoretical and material result, but contribute to reinforce the intention of the work itself on the viewer.

14 The first and most widespread type depicted the industrial object from a frontal point of view, pure and isolated. A second type, less frequent, focused the attention on some detail considered key. The third sought to analyze more complex structures in their context, trying to prove that the object was not always isolated, but interconnected to functional units, and altogether conformed, as if they were mini cities. These pictures were called “landscapes”.

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[Fig. 4] Water Tanks. Bernd and Hilla Becher. Source: BECHER, Bernd and Hilla. *Typologies*. Cambridge (Mass.), The MIT Press, 2004.



[Fig. 5] Grain Elevators. Bernd and Hilla Becher. Source: BECHER, Bernd and Hilla. *Grain Elevators*. Cambridge (Mass.), The MIT Press, 2006.

reconstruct a spatial experience as exhaustive and accurate as possible. Without any artifice or pictorial effect, they brought objectivity to the extreme.

The second technical aspect is the stylistic and methodological guidelines they followed when presenting the snapshots arranged in linear or gridded series. Exposing them juxtaposed wasn't an arbitrary decision but arose from the way they analyzed their work in their own studio, and precisely played a key role enabling to transmit to the viewer what they intended. The Bechers' distinctive layout has often been compared to botanic notebooks, in which representations of different plant's species are organized in this way to facilitate the comparison and analysis. And this is precisely what they were looking for [Fig. 4]. Images, arranged in grids – the grid being an element that evokes the capacity of endless expandability, and at the same time, of a contained or constrained form – are under a structure that becomes an invitation for comparison¹⁵.

15 The photographs are not only images to contemplate, but documents to be analyzed. At first, it is the general similarities of these structures, geographically distant and with a design corresponding to specific industry functionality, which call the attention of the viewer. Then, the images demand a closer look, challenging the viewer to engage himself more. After further inspection, and thanks to the grid structure, you begin to see what is that makes each structure unique.

But beyond that, the third and perhaps most important contribution is their use of rhythm and repetition in order to give the photography of these structures a certain level of 'abstraction' [Fig. 5]. Bechers' photographic studies have often been characterized as "industrial archaeology" or as "a contribution to the social history of industrial work". However, their photographs offer little socio-historical or archaeological interpretation, or any detailed aspects that could be useful for these areas of study¹⁶. Rather, they used photography as a tool to take these industrial buildings out of their context, liberate them from any association in order to offer the audience a 'grammar' that allows them to understand the different structures.

But one may then wonder, what is ultimately the value of their work for the architectural field? In fact, it is in the universal nature of the Bechers' project and vision, in the objective treatment, comparison and abstraction, where the virtue of empowering the anonymous character of these artefacts lies. Thanks to this 'anonymity' brought through their pictures, they generated a work open to multiple interpretations while providing an occasion for an 'aesthetic experience'¹⁷. The pictures present modern industry in a manner that denies its social, political or economic value, and in doing so, they create room for an alternative category: the value "with no underlying interest"¹⁸, or what is the same, the aesthetics.

In 1990, the Bechers received the International Award Leone d' Oro XLIV at the Biennale of Venice in the sculpture category, for their exhibition entitled "Bernd & Hilla Becher: TIPOLOGIE, Typologien, Typologies". Although photography is their only form of artistic expression, the recognition in this other category was a clear sign of the achievement in the creation of an art expression that went beyond the theoretical parameters of the photographic discipline. Indeed, their photographic methods allowed to invoke as well as to reinforce the sculptural and architectural aspects of these structures which the own Bechers ended up often calling 'anonymous sculptures'¹⁹: Ultimately, through their work, they ended up elevating these artefacts to the category of 'art', and in the long run, made them worth of architects' consideration and adoption.

Despite the Bechers were the undisputable pioneers, numerous photographers followed their wake, and tried to dissect the essence of these industrial giants, each one contributing with a new point of view or adding a new layer of knowledge, that influenced the architectural discipline in a singular way²⁰. Born in 1942, Frank Gohlke has been for three decades a leading figure among American landscape photographers. In his work *Thoughts on landscape: collected writings and interviews*, he recounts how in 1971, after seven years in New England, he moved with his family to the Midwest. The windows of his new apartment in a building on top of a hill gave a full view of the Midway, a stretch of one mile of road flanked by grain elevators and tracks on the border between Minneapolis and St. Paul²¹. Initially fascinated by their forms, he felt as attracted to them as the European Modern architects and his encounter with these grain elevators caused him an enormous impact:

"At first, I could only savour the strong emotions that the place provoked in me: a mixture of admiration one feels in the presence of monumental architecture, with the eager curiosity of an archaeologist in a new place. The place favoured fantasies of lost worlds, of disappeared empires, of abandoned cities (...). Concrete extensions, ten -or more- storeys high and hundreds of meters long, without any windows, produce a strange feeling of dislodging when you're near them. The curved sides of the concrete elevators generate unexpected shadow effects (...). The sounds from inside the elevators -creaking, groaning, and humming- reverberate in the deep alleys between rows of containers. The light seems to come from far away. In its surroundings is rare even meet with someone else"²².

However, later, while investigating their history, Gohlke discovered their former fundamental role in the functioning of rural communities. Going beyond his

16 The Bechers made great efforts to erase all those details that would be of interest to historians of any kind.

17 Bernd and Hilla Becher never talked much about their work, and none of their books has more than a page of introductory text. They pursued to provide and preserve a free interpretation.

However, in an interview in 1969, Bernd Becher unveils the secret of his fascination with these structures, "*These things are so full of fantasy, that it makes no sense to try to paint them; I realized that no artist could have done them better*". And Hilla Becher confessed: "*I think that these buildings have souls, memory and personality*".

See Interview for PhotoEspaña: http://elpais.com/diario/2005/06/04/cultura/1117836011_850215.html

18 Art and industry are opposed in the work of the Bechers in a different way from their ancestors of the machine era, because here the project seeks "*to aestheticise the industrial, rather than industrialize art*".

See: STIMSON, Blake. *The Photographic Comportment of Bernd and Hilla Becher*: London:Tate Papers, 2004.

19 Their pictures became a work of art in itself which greatest virtue was the ability to function perfectly as a strict documentation as well as a fascinating conceptual art form. Later on, these pictures inspired artist to go and explore those sites that were holding such an unknown treasure, and to act, giving rise to the Land Art.

20 These images, together with the work of other significant photographers and filmmakers, were in the 60's a powerful inspiration for many renowned artists such as Robert Smithson, Gordon Matta Clark, or Nancy Holt, among others, who discovered this disrupted landscapes and felt *pushed* to abandon the exhibition rooms, and go to the landscape to act in order to recuperate this places.

21 "*After my experience of intimate and busy landscapes on the East Coast, I was in a place where my eyes could reach great distances. Gradually, Midway grain elevators began calling my attention. Their scale, monotonous surfaces, and simple repetitive forms occupied my mind, but I could not even fully understand*".

See GOHLKE, Frank. *Measures of Emptiness: Grain Elevators in the American Landscape*. Baltimore: Johns Hopkins University Press, 1992.

22 GOHLKE, Frank. *Op. cit.*



[Fig. 6] *Grain Elevator*. Frank Gohlke. Source: GOHLKE, Frank. *Measures of Emptiness: Grain Elevators in the American Landscape*. Baltimore: Johns Hopkins University Press, 1992.

[Fig. 7] Grain Elevator. Frank Gohlke. Source: GOHLKE, Frank. *Measures of Emptiness: Grain Elevators in the American Landscape*. Baltimore: Johns Hopkins University Press, 1992.

[Fig. 8] Grain Elevator. Frank Gohlke. Source: GOHLKE, Frank. *Measures of Emptiness: Grain Elevators in the American Landscape*. Baltimore: Johns Hopkins University Press, 1992.

obsession with the formal qualities, he became aware of their even greater importance as milestones on a uniform and flat landscape, something which from that moment on, he tried to show through his portraits [Fig. 6].

He started to produce series of snapshots, and never stopped for three decades. These were always taken in a black and white and square format, but one can appreciate a strong conceptual evolution through the years. In the beginning, like the Bechers, Gohlke used to take frontal snapshots, portraying the whole object in its immediate context. In a second phase, and in a groundbreaking way, he got closer to the elevators, and started portraying details, evidencing his fascination with the game of shadows and volumes, that resulted in abstract compositions [Fig. 7]. Later on, he started to explore the interstitial spaces of these monumental buildings, and portrayed his perception, in order to make the viewer live a similar visual experience. Finally, he took a conceptual leap, moving completely away from the objects. The horizon, placed in the middle of the composition, gave as much attention to the grain elevator drawn against the grey sky, than to the surrounding wasteland. In the latest snapshot of the series, the camera zoomed out so much, that the black stripe of the road took all the protagonism [Fig. 8].

After five years (1971-1975) of persistently photographing silos from different distances and heights, he concluded that the ultimate view “is obtained through the windshield of a car or truck while travelling on a road between Kansas and Oklahoma and the Texas Panhandle. It’s not a static view, but rather begins right when the grain elevator starts to become visible above the centre line, about three miles out of town, and continues until it disappears in the rear-view mirror”²³.

His work ended up being driven by this desire of framing the landscape as a man-made construction: a product of the way we live, a projection of human action. He therefore believed that that the landscape couldn’t be understood without looking at human culture, and neither could a structure be understood without understanding the landscape in which it was inserted. He not only unveiled this layer of conceptual content, but forged a new of understanding them from the architectural point of view.

In 1975 when, after an exhibition entitled “New Topographics: Photographs of a Man-Altered Landscape”, this American artist revealed himself as a member of a new generation of landscape photographers, who for the first time, questioned the paradigms of the romantic landscape image, and suggested a new vision of the landscape ‘altered by man’. His vision showed how industrial development -decadence and urbanization- affected our notion of landscape. His influence reached domains of Conceptual Art, Land Art and Architecture, as his photographs not only provided with a new understanding of the phenomenological experience



[Fig. 9] Water Tower. Fon Brasser. Source: BRASSER, Fons. *Water Towers*. Rotterdam, 010 Publishers, 2005.

[Fig. 10] Water Tower. Fon Brasser. Source: BRASSER, Fons. *Water Towers*. Rotterdam, 010 Publishers, 2005.



of these structures, but exposed their fundamental presence and role in the landscape, both aspects which demonstrated the genuine architectural dimension of these industrial artefacts.

Less than a decade after, the renowned Dutch sculptor and photographer Fons Brasser²⁴ went a step further, focusing his work on the photographic study of the evocative artefacts interiors, particularly, the water tower ones.

Industrial storage structures are elements particularly conspicuous and yet deeply rejected and unknown. Historically, there has been a deep resistance to the presence of these industrial artefacts, especially in residential areas, so they were usually designed to be the least annoying and obstructive possible. All efforts were made to ensure that these bulky objects melted into their surroundings as smoothly as possible, and their designers did what they could to distract the attention of the artefacts' main function and structure²⁵. However, never inhabited or visited by anyone, their inaccessibility became a constant source of fascination and increased its mysterious appeal. The discrepancy between form and content, this combination of engineering rationality, familiarity of external forms and hidden interior fed our curiosity about what actually was happening inside [Fig. 9].

That is the reason why Brasser's images were executed with the intention of revealing the true essence of the water tower they were portraying, its architectural soul. The photographer proved to have a special talent for capturing the most characteristic and mysterious element within each tower, but what is more significant is that every architectural and engineering detail he selected through his lens, provided an objective basis of study of these magical interiors [Fig. 10]. Despite the photographs were very personal, the level of abstraction of Brasser's work did pick up a universal sense of what might be termed as the essence of these industrial artefacts²⁶, what had the virtue to evidence their true nature, that echoes the meaning of the most traditional architecture.

Another work less known but as fascinating is the one from the Dutch photographer Rien Zilvold focused on the exploration of their role as a testimony of the industrial culture. Through his photographic work, collected in 1987 in the book *Industriële Monumenten*²⁷, Zilvold tried to make visible the Dutch industrial heritage which, despite having strongly shaped the thought, behaviour and culture of the country, had never been taken into account and studied in sufficient depth²⁸.

24 BRASSER, Fons. *Water Towers*. Rotterdam: 010 Publishers, 2005.

25 Their functioning required few demands in relation to their appearance -they did not even need windows- and designers had a great freedom to manoeuvre. In the course of their history, their outward appearance reflected a wide range of architectural approaches. The result is often wondrous structures whose designs contrasted starkly with their technical purpose, suggesting instead an important public function.

26 These interiors are the opposite of Bernd and Hilla Becher neutral and objective photographs of the exteriors. What unite both collections are their unparalleled visual impact and the fact that each one differently, shows the viewer the intrinsic characteristics that make a tower what it is.

27 ZILVOLD, Rien. *Industriële monumenten*. Amsterdam: Fragment, 1989.

28 In that year of 1987, in which all these factories were being destroyed, is when suddenly arose in Holland a greater interest towards these "industrial objects", as called by Zilvold himself. These structures, which for him had been the materialization of one of the most important aspects of Dutch culture, had to be saved. The photographer tried, through his work, to collect evidence of their existence, and thus preserve the soul of all these objects, despite their demolition.



[Fig. 11] Water Tower. Rien Zilvold. Source: ZILVOLD, Rien. *Industriële monumenten*. Amsterdam: Fragment, 1989.

[Fig. 12] Sugar Silo. Rien Zilvold. Source: ZILVOLD, Rien. *Industriële monumenten*. Amsterdam: Fragment, 1989.

The prologue of the book emphasizes that aesthetic considerations played no role in the selection of the protagonists of the snapshots. Its author, Peter Nijhof believed that as Zilvold shows, “these notions are inappropriate”²⁹ when trying to interpret the relics of the industrial past, and that the issues of fashion or taste should never concern or affect our judgment [Fig. 11]. Still, his work couldn’t be more aesthetic.

What differentiates Zilvold’s work and supposes a contribution to architecture is that it offered a unique interpretation, and elevated what was assumed as mundane and serial to the category of masterpiece. On one hand, Zilvold chose to capture the widest range possible of typologies and sites -from singular projects to the most representative of the industrial culture- and completely independently from their formal qualities. On the other, he did not portray industrial objects as a passerby would see them but tried to offer innovative points of view which resulted in powerful abstract compositions. Both strategies were intentioned to unveil the uniqueness of what – paradoxically – was created in a standardised manner and was assumed to be lacking of interest because of its uniformity [Fig. 12].

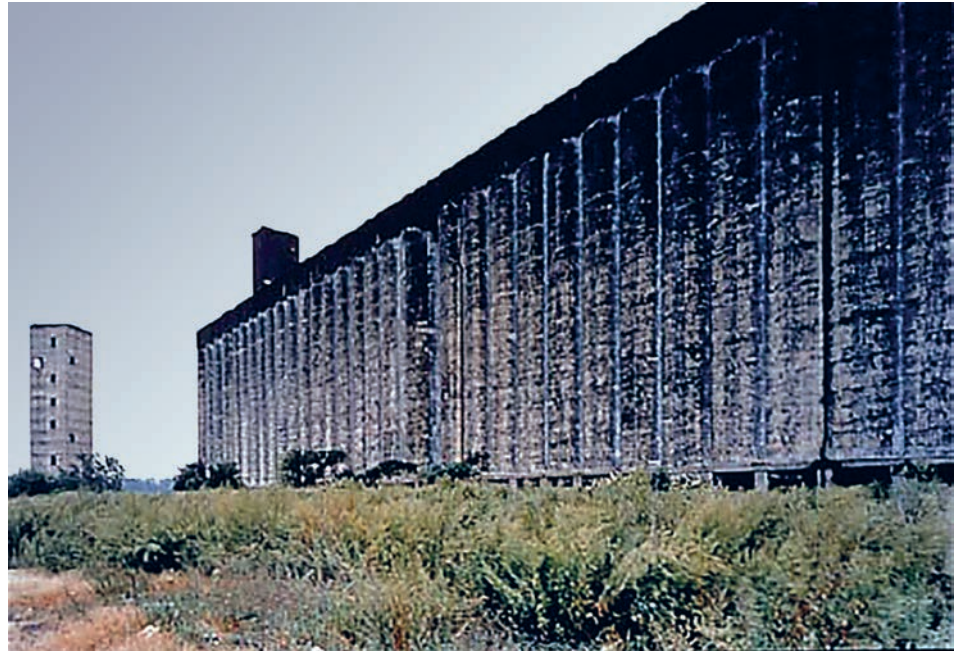
In 1997, the German photographer Gerrit Engel, just graduated in architecture and photography, decided to go with his camera in the area of Buffalo River District – previously described by Reyner Banham and many others –, with the desire to re-discover these industrial icons, to re-examine their power of inspiration, and to evaluate their condition by himself. The photo tour conveyed in the book *Gerrit Engel: Buffalo Grain Elevators*³⁰ gathered thirty snapshots that intended to reveal the inevitable decay and eternal beauty of these historic structures.

Engel’s photography is sober. Nothing is added and nothing is removed. Like the Bechers – his mentors –, he isolated the buildings in order to free them from their context, create a new perception of the seemingly familiar and make them gain meaning. However, he distinguishes his work by not addressing the subject of his shots uniformly and frontally – so that the images could be compared with each other – but instead offered a new perspective, where objects appeared as what they are: unreachable giants [Fig. 13].

Engel said to have always been inspired by the simple yet remarkable work of Eugène Atget and August Sander, and counts among his photographic series striking snapshots of Manhattan skyscrapers to grain elevators in Buffalo, melancholic places in Berlin or beautiful Soviet-Era homes, all impregnated with what seems a similar ethereal atmosphere of this masters. Every building was different, each one had a typological and morphological quality but all had in common the fact of being witnesses of their time, of the societies and the people who built, used and lived in them. The protagonists of his work always distinguished themselves for

29 ZILVOLD, Rien. *Op. cit.*

30 ENGEL, Gerrit. *Buffalo Grain Elevators*. Verlag der Buchhandlung Walther König, 1999.



[Fig. 13] Buffalo Grain Elevator. Gerrit Engel.
Source: ENGEL, G. *Buffalo Grain Elevators*.
Munich: Walther König, 1997.

their beauty, their ugliness, their state of disrepair, or all at the same time. Engel's interest clearly lied in the expressivity of these architectures [Fig. 14].

His large sized snapshots with saturated colours and made from innovative angles, show abandoned colossus, piles of rubble and peeling paint that reveals the armour of the old concrete walls. This is what remains of the buildings that for decades were considered as the ultimate expression of the Modern spirit. As the Bechers did, Engel's pictures of these silent giants in their state of ruin became an allegory of the artefacts' souls. They were made with the intention of linking these artefacts to history and expose their architectural dimension. However in this case, these ruins not only bring memories back, but raise questions about their future [Fig. 15].

Once the different works analysed, evaluating the outcome of each work allows to find out what could architects discover through the photographs, and how these discoveries contributed to the evolution of the architectural field.

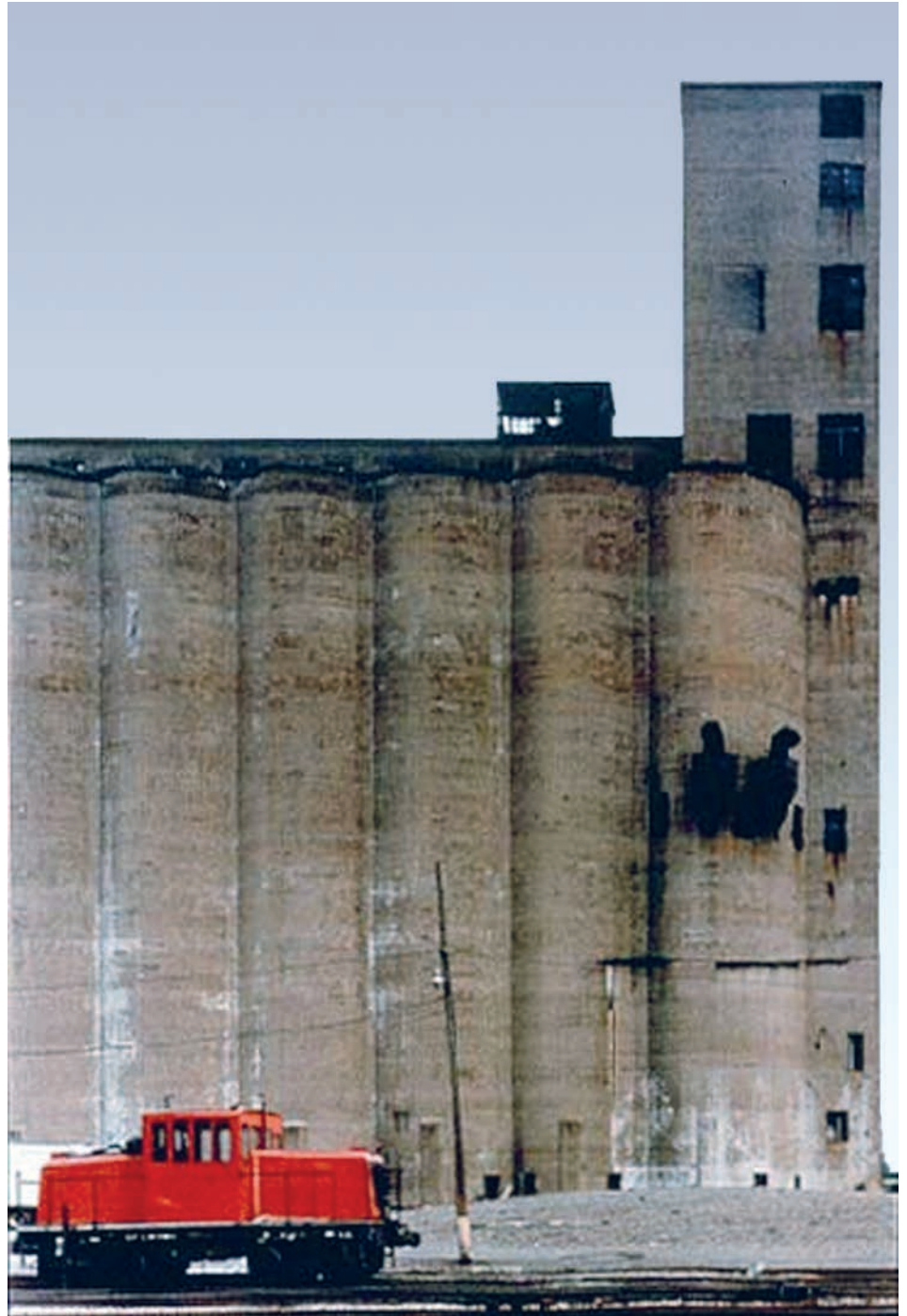
A new understanding

As evidenced in this paper, photography was decisive in the rediscovery of industrial artefacts. After the publishing of Gropius's paper in 1916 and the praise of these images by the Modern Movement, several photographers – such as Margareth Bourke White, Albert Renger-Patzsc, Edward Burtynsky, Andreas Gursky, Lewis Baltz or Thomas Ruff, among others – started to portray the industrial world. However, despite some of them felt attracted to their impressive machinery or their workers, few paid attention to the artefacts for themselves. At that moment, the Modern Movement was mainly looking for references outside the discipline in order to break away with the academic architecture, so during this first stage, artists did rescue several pieces of industrial legacy with their lenses, but above all, unleashed an aesthetic fascination.

However, during their rediscovery in the 1950's everything changed, as photography provided not only an aesthetic experience, but a new way of 'comprehending' what was portrayed. Inspired primarily by Bernd and Hilla Becher, these new photographers made possible, through their snapshots, what seemed impossible: to give an 'emotional' and 'conceptual' value to these objects. As a result, an interest for the artefact itself arose, but also a concern about its present situation and a glimmer of enthusiasm about the potential it enclosed for the future.

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[Fig. 14] Buffalo Grain Elevator. Gerrit Engel.
Source: ENGEL, G. *Buffalo Grain Elevators*.
Munich: Walther Konig, 1997.

Throughout history, photography has been unparalleled when it comes to expose aspects that otherwise would go unnoticed. That is the reason why, as the Swiss architect – and former photographer – Christian Kerez points out, photography is a magnificent way to study and rediscover architecture. Despite being a limited representation, in which it is necessary to make an effort to translate the three dimensions to a bi-dimensional plane, “there are aspects that photography can capture better than any other medium, such as light, and how the perception of a space is changed”³¹.

In this particular case, the previous comparative analysis of the different perspectives taken on the same objects reveals the diverse layers of conceptual content that artists were able to unveil through their mastered use of the camera.

The pioneer objective treatment, the method of comparison and the formal abstraction of Hilla and Bernd Becher’s work allowed empowering the anonymous character of these structures, not only providing an occasion for an aesthetic experience but reinforcing the sculptural and architectural aspects of these structures, and therefore elevating – for the first time – the artefacts to the category of art.

31 MÁRQUEZ CECILIA, Fernando. *Christian Kerez: 1992-2009*. Madrid: El Croquis, 2009.



[Fig. 15] Buffalo Grain Elevator. Gerrit Engel.
Source: ENGEL, G. *Buffalo Grain Elevators*.
Munich: Walther König, 1997.

While exploring their role in the landscape, Frank Gohlke exposed instead the phenomenological experience they embodied, as well as evidenced through his work how these artefacts couldn't be understood without their context – and vice versa.

Later on, Fons Brassers focused his attention on their mysterious interiors, selecting with his lens representative details that intended to make visible the essence of these industrial artefacts, and he was able to expose their spatial complexity, unknown till then.

With the intention to reclaim their cultural significance, Rien Zilvold focused on evidencing the singularity of what was – at first – assumed to be lacking of interest because of its standardized nature, and was indeed successful to exhibit their uniqueness.

Finally, the photographer Gerrit Engel, mesmerised by the allegorical power of the ruin, ended up laying out the profound bond between these artefacts and their history or memory, and in doing so, granted them a monumental dimension.

However, the most interesting fact is that, despite the diversity of ways of looking and tools employed, all the contributions ended up sharing or bringing to light three common matters:

The first aspect one can note is the deliberate visual isolation of the artefacts. This apparent isolation – intended to free them from their physical and theoretical context – allowed instead to present these objects in a pure way, without artifice, for what they were and not for what they were used for. The photographers realised that this was the only way they could lead the beholders to contemplate them in a renewed way, so they could discover their conceptual content. Indeed, Christian Kerez³² himself explained that it was while photographing industrial structures in his early years of career, that he realised that these constructions were in fact extremely conceptual: “Their aesthetic effect is a direct consequence of precise focus and sometimes purely technical. The construction of space and its relationship to the landscape is defined in a more elementary and direct way, than in many contemporary architectures”³³.

The second aspect that all the works here analysed evidence is that even taken out of context, despite their use might have changed and their condition might be deteriorated, these structures have a profound connection to the past and to the future, and thus a temporal dimension much more significant than any other mundane object.

And finally, the third and probably most important matter they expose is the spatial complexity of these objects. Despite their apparent standardised nature, the snapshots reveal that the artefacts have indeed unique interiors and keep a particular territorial relation with their surroundings, therefore constituting a unique phenomenological experience.

32 Christian Kerez defended vigorously the importance of their presence in the field of contemporary architecture: “Long ago, the largest buildings used also to be the most important. The monumental size of medieval cathedrals was a direct reflection of their category. Today, however, the larger buildings are infrastructures and industrial complexes that respond to a specific functionality. Their size reflects only technical requirements and economic needs; they do not respond to architectural or social objectives, and their scale is set depending on the hosted machines, not according to the number of people. Usually, this type of construction is only appreciated when contemplated from a nostalgic point of view, or when it has become an historical relic, and rarely is valued as manifestations of the present”.

However, as he points out “Contemporary architects and famous buildings of the 1990’s haven’t left an indelible mark on the landscape of cities such as did highways, dams or power plants. The architecture, at the time, was less interested in the landscape design, and more, in creating small isolated objects, oblivious to their surroundings”.

See: MÁRQUEZ CECILIA, Fernando. *Op. cit.*

33 MÁRQUEZ CECILIA, Fernando. *Op. cit.*

34 Because of their plastic qualities or the evocative quality of the ruins.

35 It is undeniable that photography wasn’t the only agent in the rediscovery of industrial artefacts. However, it definitely played a decisive role in pointing and highlighting the beauty of these elements.

Nonetheless, the conceptual nature, the temporal dimension and the spatial complexity are not only fascinating aspects unveiled by these works, but together they suggest a crucial matter: that these industrial artefacts have actually an architectural essence. Although photography is an artistic discipline, paradoxically, these artworks had the virtue of posing a fundamental architectural debate. This is the reason why, besides being an important contribution to the field of photography, this process of rediscovery of the mid-century also played an essential role in the evolution of architecture.

Despite photography has mainly been acknowledged for its contribution to the consideration of industrial artefacts as an aesthetic referent³⁴, the initial fascination from the formal point of view later shifted towards a conceptual and social interest which, over time, became even more relevant, as it transformed the way architecture valued these -and other- elements, originally considered alien to the discipline³⁵. When studied jointly, the different photographic works constitute a sort of fascinating timeline that reflects not only the evolution in the way these object have been perceived and valued, but how the aspirations and interests of the architectural field changed through the years.

Ultimately, by ‘claiming’ the architectural dimension of these artefacts, these photographic works not only lead to reconsider elements foreign to the discipline in a new way, but over time inspired the desire to transform these icons of modernity once contemplated for their forms and geometry, into new architectural sceneries where our present and future could happen. These captivating portraits became the trigger of a ‘new way of appreciating’ the surrounding reality, but eventually also ended up challenging the boundaries of what, till then, had been assumed as a valid field of interest and source of inspiration for the architectural discipline.

Bibliography

ANDRÉ, Carl. *CUTS, texts 1959-2004*, pg 65-66. Boston: MIT Press, 2005.

BANHAM, Reyner. *A Concrete Atlantis: U.S. Industrial Building and European Modern Architecture, 1900-1925*. Boston: MIT Press, 1986.

BRASSER, Fons. *Water Towers*. Rotterdam: 010 Publishers, 2005.

ENGEL, Gerrit. *Buffalo Grain Elevators*. Verlag der Buchhandlung Walther König, 1999.

GOHLKE, Frank. *Measures of Emptiness: Grain Elevators in the American Landscape*. Baltimore: Johns Hopkins University Press, 1992.

GOHLKE, Frank. *Thoughts on landscape: collected writings and interviews*. New York: Hol Art, 2009.

LE CORBUSIER. *Vers une Architecture*. Paris : Éditions Crès, Collection de «L'Esprit Nouveau», 1923.

MÁRQUEZ CECILIA, Fernando. *Christian Kerez : 1992-2009*. Madrid: El Croquis, 2009.

MENDELSON, Erich. *Amerika*. Paris: Ed. du Demi-cercle, 1992.

SCULLY, Vincent. *American Architecture and Urbanism*. New York: Holt, 1988.

TAUT, Bruno. *Modern Architecture*. London: The Studio Limited, 1929.

ZILVOLD, Rien. *Industriële monumenten*. Amsterdam: Fragment, 1989.