

The Adaptive Reuse of Industrial Buildings:

Sustaining Urban Regeneration in America

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THE GHOSTS OF OUR PAST

In America and throughout the world, many of the cities that once thrived on industry, today are in a state of serious decay. Built on the personal and civic wealth generated by the industrial revolution, many of these cities now lie virtually abandoned and economically depressed, inhabited only by those who cannot escape from the confines of their remains.

To make matters worse, in many of these cities, massive urban interventions during the 1950s and 60s, designed to accommodate the growing importance of the automobile, further defaced these cities, creating physical and economic divisions in the urban fabric. What can now be seen as flawed principles of architecture and planning enforced by so called experts in positions of authority led to the decline of the liveable American city. During that time most people who could left the city for the country, settling in suburban neighborhoods. Governments were less and less willing to invest money into the cities, which were subsequently allowed to fall into disarray.

Buildings once standing as symbols of prosperity and affluence and technological innovation quickly came to represent the loss of those very things. As the processes and economies that first necessitated the erection of such buildings became obsolete, so to did their apparent usefulness. America and the rest of the developed industrialized world is riddled with these abandoned industrial buildings. No longer useful according to their original purposes, they have remained as reminders on the landscape of a time when prosperity once took the place of abject poverty. For these old buildings the question remains of what to do with them: do we tear them down and build afresh or do we invest in their revitalization? This is the challenge that faces us as architects, planners, and citizens of the increasingly urbanized world in which we live.

ERASING THE PAST

Most people in positions of influence it seems care little about the longterm impact of their urban interventions on the evolving character of a city and the lives of its inhabitants, more focused on the potential for profit that their actions provide. In America, private investors can

do whatever it is they want with their investments, even when they have a detrimental effect on the well being of the public realm and population. As is there are no regulations in place. With each new building that is erected it seems, America's cities are further dragged towards a grim future of soulless urban space and disillusioned people and communities.

As such in America, sadly the choice is all too simple for most developers and politicians interested in pursuing the cheapest and easiest solution to this problem. Most are unwilling to invest in the renovation of these buildings, seeing it as too costly and of little value to their economic or political interests. Rather than viewing these buildings as assets, they tend to view them or at least paint them as images of urban decay. The attitude or so it goes is that it is far more advisable to replace what are seen as ancient, obsolete structures with shiny new constructions, more in tune with the illusion of prosperity that sells all too well in America.

OUR TASK FOR THE FUTURE

In his essay, "The City. Becoming and Decaying," Marcus Jauer writes: "The future of the world lies in the city. It is where the fate of humanity will be decided. What happens to the city also happens to us." [1] So it is time to make sure those cities work. We have undergone transformation from the old to the new. It is now time to reflect, to fix what has failed and to fill the gaps in order to build better places to live. While some of the developments in architecture and planning principles (as well as individual architects and buildings) have been positive for urban growth, the vast majority have been destructive, creating broken cities, too dependent on the abstract wealth that



Fig. 04. South Congress, Austin, TX. Imaginative reuse of old shopfronts.

filled their coffers annually, yet unable to sustain themselves in the long run. The adaptive reuse of our urban fabric is becoming increasingly important.

A report produced by the Bundesministerium für Verkehr focuses on the effort to collaborate between all aspects of the building industry and society in order to ensure that German building practices remain at the forefront of the industry. In the report, it is concluded that "in the cities, working with the building stock will continue to assume greater importance: basically, the city for the coming decades is already built. At the same time building culture is threatened by the increasing privatization of public space, suburban development, neglected inner-city neighbourhoods and a general belief that low building costs are best value for money." [2] This assessment is coming from German builders aware of the effects of capitalist interests in their own country. One can imagine how much worse the situation is in the United States, where there are far fewer codes

and regulations in building, as well as a far less developed understanding and appreciation for the importance of building culture.

ADAPTABILITY

These industrial buildings are highly adaptable. Given that they were built to house large scale processing systems and industrial machinery, they provide vast spaces within their interiors to be adapted for various uses, including cultural programs, such as museums, libraries, performance space, and the like that require a great deal of area. In this they provide a unique opportunity. In building today, where costs are minimized as much as possible, no one will pay for space. It is a luxury that we do not have. We are so used to being contained in tight economically profitable space that these vast interior spaces are viewed and treasured as a major asset. As such these buildings offer a unique spatial condition. [3]

Further still, these buildings, originally

designed to maximize the efficiency of the workplace, provide a great deal of natural daylight, ideal for all kinds of human activity. In converting these structures this wealth of natural daylight can be manipulated according to the needs of the new use. Such daylighting can provide pleasant working living, or social environments. Additionally, as these buildings were designed prior to indoor environmental conditioning, they are maximized in their designs to take advantage of natural properties of ventilation and shading, so as to create as comfortable as possible environments. Considering all of these things, it is clear that these buildings offer great potential for adaptability.

Furthermore, in the interest of sustainability, we should in fact make every effort to preserve these building and reuse them, rather than building new. When we consider sustainability, we cannot only consider sustainable technologies, such as solar panels, heat collecting vacuum tubes and wind turbines, but we must consider all aspects of building, including the question to build altogether. It is far more sustainable to reuse these buildings than it is to expell the energy required to deconstruct the buildings, to transport new materials for construction and to erect brand new buildings. The fact is that these buildings are perfectly adequate for housing a variety of programs, and given their cultural value are even more important. There is no need to destroy them, only to reimagine their usefulness.

BUILDING CULTURE

Perhaps what gives them their greatest value as adaptable structures is the fact that these buildings are unique parts of our heritage and are integral to our



Fig. 04. South Congress, Austin, TX. Imaginative reuse of old shopfronts.

culture. In this they have an undeniable value, and if we look at examples across America and the rest of the industrialized world, we find that they are greatly appreciated and when properly revitalized a major asset to social, cultural, and economic growth. Professor Allen Plattus from Yale University discussed this in his lecture at the TUM, identifying the wealth of traditional architecture existing in many cities as providing the building blocks on which to build a revitalized urban core. [4] While Europe may have a far older and richer stock of historical and culturally important buildings, America has a very strong and important heritage of industrial sites with similar value. These structures add character to a place, enriching the urban fabric and providing great potential for cultivating the life of the city.

CREATIVE REIMAGINING

In his essay "Build-On-Architecture" Lukas Feireiss writes: "Given the fact that in most parts of the world our built environment is still largely determined by already existing buildings and constructions rather than new develop-

ments, one of the greatest tasks faced by today's architects is the creative handling and inspiring transformation of such architectural remains." [5] This is what gives cities character: the response of creative populations in shaping their environment.

With the right imagination these buildings can be reinstated as important structures, having the potential to revitalize entire neighborhoods. This has been proven time and time again throughout the world with such projects as the revitalization of a coal plant in Essen, Germany, 798 Art District in Beijing, the Tate Modern in London, and the loft buildings of SOHO in New York. We have a great resource available in our cities: even the most socially and economically bankrupt ones. When they are revitalized effectively they have provided some of the most exciting examples of urban renewal in the past decades.

In large part the repopulation of cities and the renovation of these industrial sites has been due to the activity of artists. Encouraged by the cheapness of

these rundown neighborhoods, located within the city center and possessed of this authentic nature, they move into the neighborhoods, using their creative expression and imagination to transform the neighborhoods into hotbeds of artistic activity and interaction, creating galleries, happenings, bars, cafes and the like. This is the way many of today's most coveted neighborhoods have been revitalized. During the 1960s it was this kind of cultural renaissance that revitalized areas of San Francisco and New York's Greenwich Village, which are now the most coveted neighborhoods within those cities. Since then, we see it all over the world: recently in East London, in Berlin, in Hamburg, and in Williamsburg, Brooklyn, to name a few. Through the cultivation of the character and culture of a place, through artistic intervention and collaboration, the buildings and neighborhoods are made more attractive, encouraging growth and investment.

What we seldom are willing to admit in our own field is that artists have done more to revitalize urban neighborhoods than architects, planners, theorists and law makers combined. The activities of these players are important, but practically useless without the pioneering of these creative types. As such the hope of man and society over the past century does not come from high architectural discourse, the so-called intelligensia, with their theories and concepts of what works. These overly constructed, controlled visions provide urban communities and their population with little benefit. True growth strangely enough comes from those acting in opposition to this thinking and the resulting degradation that they initiated. It is born of these artists, expressing their dissatisfaction through the expression of beauty in an urban fabric otherwise devoid of it. In many



Fig. 05 Industrial Building Converted to artists' studios, Williamsburg, Brooklyn.

of these neighborhoods, it was the old industrial fabric that provided the quality buildings.

As symbols of urban degradation and abandonment, there is something very poetic about the most horrible, degraded aspects of the urban landscape, becoming the most beautiful and hopeful elements of our modern cities. It is the history of these structures as part of the urban landscape and its history, worn by time and nature that gives them their particular character. As with the preservation of the bullet holes in facades both in Munich and in Berlin from World War II, it is important to preserve these scars, while celebrating the rejuvenation. The characters of these buildings are made that much fuller by the richness of their history. Furthermore, by displaying their history of abandonment and delapidation, the transformation into something beautiful and culturally enriching is that much more inspiring and meaningful. It is an

expression of the victory of the creative human spirit over the forces of greed and neglect. Through such interventions, these places and these buildings are given new value.

DEVELOPER DRIVEN INVESTMENT

These instances of creative urban renewal are somewhat isolated. Generally speaking, in America, when developers do build, driven only by the interest of their personal investment, the result is very different. We are left with cities characterized by an increasingly generic, sterile environment that is like any other. It is cheaper to buy mass produced materials and components and when maximized profit is the goal the resulting buildings begin to all look alike. This global trend is increasingly leaving our cities looking remarkably similar, and unimaginative.

This approach does not promote the character of a place, it destroys it, making it indistinguishable from every oth-

er city in America or the world for that matter. What we need in our globalized world is a greater sense of identity and a greater connection with our sense of place. This is what is most lacking in our modern world, and as a reaction to this, it is what seems to be increasingly desired by socially and culturally minded people. Thus, the attraction to these older buildings of greater character, and the far more "bottom up" approach to the urban environment stands in "opposition to modernism's functionalization and realization mechanisms for architecture and town planning." [6]

In Austin the sheer volume of projects that are being undertaken is considered progress. Government officials eagerly push all new development forward, only interested in the tax revenues that they generate. Yet this is not the path to building a great city. It is in promoting the special character of the buildings and the city that Austin may grow into the city it is in parts and can be in full. The city is full of great industrial buildings from the typical one story brick storefront we find on South Congress to old factories and powerplants, such as Seaholm, to the Warehouse district downtown and the historical buildings of 6th street. This is what draws people to Austin and keeps them there. It is not the frost tower or the Monarch. The qualities that make these structures so special need to be exploited and the sensitive appropriation of these buildings through them cultivated. The more this character is jeopardized through the naive development of condo and skyscrapers the less appeal the city will have and the less bright its future will be. It will only be another American city as lifeless and generic as the next. We need to realize that new and large does not necessarily equal good.



Fig. 06 Akademie der Bildenden Kunst, Munich, Germany. Flexible, spaces.

THE VALUE OF THE OLD

It seems that above all else it is this very quality of authenticity that these industrial buildings have that makes them so valuable to artists and laymen alike. In his analysis of the development of this particular adaptive reuse appearing in the book, "Transformer", Lukasz Zagala writes, "The preeminent value of the old remains its authenticity, rather than its historic, symbolic, emotional, utilitarian or economic value." [7] They are relics from when things were as they were, not what they were promised to be or pretending to be.

In his essay Build-On-Architecture, in the book Build On, Lukas Feireiss explains how "Post-industrial remains were not created to possess the values of beauty but still seem inspiring to many of us" and then goes on to quote a late nineteenth century observer, Henry Van de Velde, who in 1899 wrote: "The beauty created by an engineer arises from the fact that he is not conscious about its creation." [8] It is design in its purest form. These industrial buildings tend to be possessed

of simple geometries, uncorrupted by theory, architectural showmanship, provocative form and the vastness of space.

What makes these old industrial buildings so special is that they are honest. They were built to serve their purpose. They are functional in the purest sense of the word. The forms these buildings take are nothing more than the expression of the processes and mechanisms that they once held. One could say the same is true in nature to a certain degree. All organic forms are reduced to their most essential, necessary form. The beauty of the design one could say is the purity of the expression. Their forms are nothing more than the realization of what they are and what they do. The same is true of these industrial buildings. They are relics from when things were as they were, not what they were promised to be or pretending to be. Everything today seems to be in opposition to this concept. Within our culture, it is all about the marketing and branding than it is about actual substance. While many of us may be oblivious to it, more and more we are

coming to reject the artificiality of this approach.

Furthermore, when we look at most everything that is built today by developers, they merely create the illusion, or at least try to, of being finally made, but in reality they are cheap, copies masked as that. It is for this reason that the authenticity of these structures makes them so special.

The result of the base function of the old is beauty. Rather than expressions of an architect's style or artistry, as is too often the case in architecture today, they were simply about housing the activities of the people in the best possible way. We see this distinct difference in comparing the old building of the Academie de Bildenden Kunst in Munich with the modern annex done by Coop Himmelblau, an interesting comparison made by Professor Juan Santos in conversation. [9] In the design of the original, the intention of the architect was not about dictating the activities of the people, but rather about providing for them. It is the activity of the people that colors the space, not the imposed vision or dictate of the architect. Though it is an institutional building it functions like a factory. The Coop Himmelblau building in contrast is a very interesting space: a great work of architecture. Yet the people within it are but extras to the oeuvre. There is little room to express themselves or to place their mark within the space. So desperate are architects to create interesting, evocative works, they often forget about the life of the people using it. Similarly, these industrial sites provide the kind of openness to adaptability, allowing for the free expression of the activity or intervention that is to go in to it.

REINVENTING THE OLD



Fig. 07. Remington Ammunition Factory, Bridgeport, CT.

To just restore these structures to what they once were does not give them as great a relevance and significance to us, as when we creatively reimagine these structures and their programs, so as to make them our own. Through our interventions we make them part of our own culture, which in turn gives them new found value. In a sense they come to belong to us more fully, rather than just acting as reminders of the world of the past. Professor Santos in his recounting of his own adaptive reuse of a factory in Granada explained the importance of giving the building new life, in response to the character as found. In this he "preferred to depend on my intuition in the experiencing of the place." [10] His example is one of many. In discussing some of the most attractive designs for the adaptive reuse of old buildings, Lukas Feireiss ex-

plains: "Given the fact that in most parts of the world our built environment is still largely determined by already existing buildings and constructions rather than new developments, one of the greatest tasks faced by today's architects is the creative handling and inspiring transformation of such architectural remains." [11] This is what gives cities character: the response of creative population in shaping their environment. It is not only the history of the building, but also it is about the quality and imagination with which such reimaginings are undertaken. It is not just about reusing these buildings by turning them into museums or generic developments, but rather it is about revitalizing them in a way that has meaning. It is about creating an interesting dialogue. As Feireiss explains, "The city was proclaimed a dynamic place of change and transformation; a stage for the informal

interplay between the past, the present and the yet-to-come; a thing that does not conform to any master plan.” [12] In truth, the development of these places comes from the lives of the people, what they can relate to, engage, use, and build on.

In Austin we see buildings given new life all around the city. These buildings, however, express a new spirit. Perhaps it is the fact that those responsible for such homegrown efforts are unable to build new and are forced to use what they have. Through their creative and imaginative rethinking though, these individuals give these old structures a whole new, “funky” flare. We see it on South Congress, where simple one story, brick storefront buildings are transformed through bright paint, graffiti and signage into festive, inviting structures. This is true of the most successful examples of adaptive reuse around the world. We must learn to celebrate these things.

INSURING AUSTIN’S FUTURE

It has been proven throughout the world, and we can see this particularly in the case of Germany’s own building culture, that in the long run, it is far more economically and socially profitable for a city and its inhabitants to cultivate a city’s character through its buildings, then it is to build with the consideration of maximizing profits alone. In considering the future of Austin, we must build on the city’s local character in its best parts, expanding those typologies and the lifestyle they create through the new buildings we build, as well as the ones we save. As explained in the report by the German Building Ministry, “The quality of building culture in cities and villages affects the well-being of a community, the readiness to invest in it as well as



Fig. 06 Seaholm Powerplant, Austin, TX. Industrial Authenticity.

visitors’ interest (tourism).” (p.14) There is a definite attraction to these buildings. They add character to a city. It is important that we exploit these assets, rather than overlook them, as in a city like Austin, dependent on tourism, they are in fact our greatest assets. It is important that the city makes an effort to preserve its character.

In terms of encouraging this kind of positive growth in our cities, however, it is important that we do so with a great deal of finesse. Trying to enforce it through taxation and regulation will not yield the kind of transformation needed. Such action only breeds animosity and contempt and ultimately a greater desire to do the opposite on the parts of the developers. In America, people don’t like being told what to do, especially from a detached higher authority. This is the attitude on which our nation was founded. Real change in our country occurs from the ground up. Real change must occur from the people demanding better places to live, better buildings, as well as from innovators and entrepreneurs provid-

ing better models. The new found appreciation that we have for these structures and their new found importance comes from exactly that: artists, architects and activists reimagining their potential and showing us what that potential is. Already we have seen a major trend toward the embracing of our industrial heritage and its physical remains. We must show that our methods have greater value and developers will follow.

This action can and should be combined with action within the government and the building industry. As is in place in Germany, what we need in Austin is a council of qualified architects, sociologists, planners, citizens, and other qualified people to approve buildings, so as to ensure that the city of tomorrow is one from which we can all really benefit. As discussed in this report, Germany has “effective programmes to support heritage conservation and urban planning... The interest of citizens, as those “affected” by building, and the commitment of developers are also crucial.” (p. 12)

In Europe, “many countries have formulated a national “architecture policy” with corresponding budgets and institutions, which foster public interest and appreciation... advises communities and clients and conducts a dialogue on quality.” [13] In the US, such a system is lacking. So devoid of culture in many parts, it seems we are unaware of its value or even of its existence. The will is there among people in Austin, which is a rare and brilliant fact that must be exploited. Yet there is a lack of leadership and effective collaboration, which is where the problem lies.

We can go one way or the other at this point. We can either destroy ourselves through greed or cultivate something special and sustainability through creativity and collaboration. Austin and America in general faces a dilemma. What legacy will we leave for future generations? As far as the developments we see riddling our nation, no one will want these cheap developments in ten, twenty, fifty, or one hundred years. They are not built for that and they do not have the value to be used in this way. Following in the wake of this kind of cheap, reckless short term thinking and the buildings it produces, no one will find any use for them. That we can be sure of.

Such an effort as that of the Building Ministry in Germany is hard to imagine in the US with such divergent private interests. In order to achieve such a collaboration and commitment to building culture would take a monumental effort. What we need is a massive effort on the part of all involved from the individual citizens and government to the builders and developers, clients and architects. Above all else, however, we need strong leadership. Not just from those who are educated and seasoned

in politics, as too often is the case in America, but those who understand the dynamics of city life. Who really appreciate the importance of culture and the character of a place in the positive growth and development of cities. It is these things that bring people to a city. It is about the quality of a place and the lifestyle one leads there. We must look to the successful examples of development within Austin. It is from this homegrown approach, springing from the culture of the people, that this kind of positive growth happens and economic and social success comes to a city, like Austin. We see this happening in Austin through small gestures. On the other hand we see moneyed interests, represented by developers and businessmen, who are only interested in their own short-term economic gains. If Austin is to develop in the right way, we need to cultivate this unique culture and the attitudes and actions that bring it into being. We must show those who are investing and developing the city how they are successful and create a system of reward of this kind of investment. Likewise we should discourage soulless investment and development, which ultimately only benefit national or global investors, who have no vested interest in the wellbeing of the city, its growth and its people. Real progress comes from these moves that cultivate something special, and lays the grounds for a truly great city.

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