LEFTOVER

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ХВАЛА МАМИ И ТАТИ ШТО СУ ВЈЕРОВАЛИ У МЕНЕ КРОЗ СВЕ ОВО СВАКИ ПЛОД ИЗ КОРИЈЕНА НИЧЕ

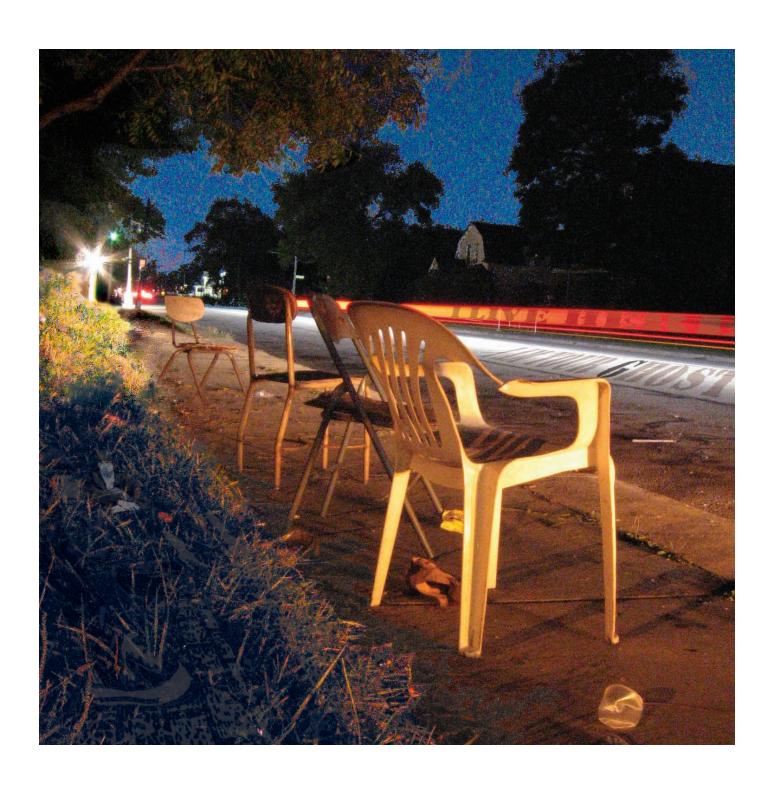
LEFTOVER

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ABSTRACT.....01





Dinner is served. Dinner is eaten. There are inevitably leftovers. What to do with them?

The family has a few options as to what they can do with the leftovers; their choice of action will determine the "leftovers' "designation in the network of the homes efficiency as well as the "leftovers'" nomenclature.

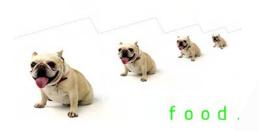
WASTE -the family has decidedthrow the leftovers away into the trash receptacle.

LUNCH -the family has decided to store the leftovers into the fridge until tomorrow.

FOOD -the family has decided to feed the leftovers to the family pet.

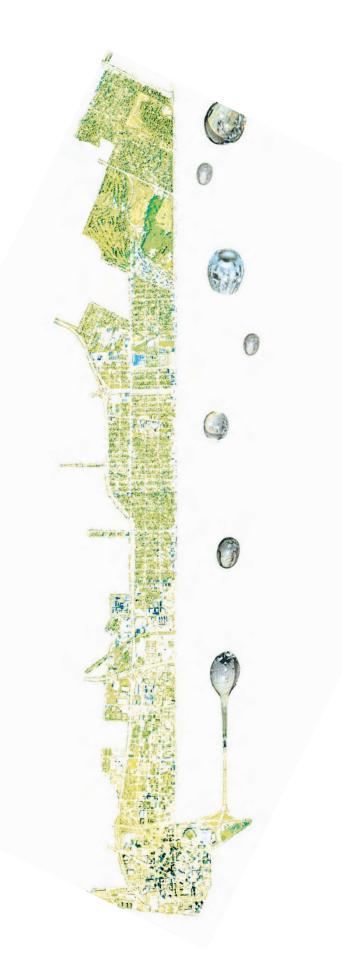
HUMUS -the family hasdecided to place the leftovers into the compost pile.

SLUDGE-the family has decided to process the solidfood through the trash "composter" in their sink.









All of the above are solutions to one single question that we are faced with on a daily basis in the context presented above as well as on a much larger scale; such macro scale that we as individuals don't even consider this question as a question to be asked at all. The capitalist machine can be viewed as the family at the dinner table - eating away at the resources, sustaining and furthermore fattening up the components of the mechanism (industry, economy, and politics) and leaving behind a considerable amount of leftovers. It is the totality of these leftovers and the innate potential within, which need further and more imaginative consideration.

The current approach to dealing with these leftovers of a supposedly maximally efficient system of capitalism, is failing in places such as Detroit and other similar frostbelt post-industrial cities and like cities around the world. Is it the over-abundance of the leftovers that the system (that has created it in the first place) has to deal with? Or is it the outdated and rigid political policy which halts creative and imaginative solutions? Or furthermore could it be the economic landscape which on paper actually benefits from all the detritus? Whichever one or combination of these causes is to be held responsible for the status quo is not of much importance past identification in order to propose solutions that can integrate and benefit all, or most of the parties One must acknowledge involved. that often times in such situations there may not be a compromising solution; furthermore one must also understand that in order implement change, the rules which prevent that change to happen must be altered or eradicated. This may dictate informal, ad hoc, impromptu and even illegal action to be taken on part of the catalyst, which, if properly deployed will be hard to negate in its own success and resulting benefit. The pros shall outweigh the cons.

PRECEDENCES......02

Landschaftsark	Duisburg-Nord
Country Park	
by	Peter Latz und Partners



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[A] Landschaftspark Duisburg-Nord Country Park



Duisburg-Nord Country Park is an adaptive reuse of a large blast furnace industrial park. When the last runoff from Blast Furnace 5 was witnessed in 1985 the operations of Thyssen Blast Furnace Works in Duisburg Meiderich ceased. The industrial park had reopened four years later in 1989 as a county park with financial backing of private investors from the community of Duisburg and by interesting the Emscher Park International Construction Exhibition as the permanent tenant.



The park is a hybrid space collapses that architectural intervention, landscape architecture. industrial natural world onto one another and onto itself. It is a place which was conceived as an observatory of purposely blurred boundaries between all of those disciplines and their respective edifices. As mentioned, the former industrial park has kept all its heavy industry beacons. They have been craftily adapted to accept new uses (such as the deepest scuba diving pool in Germany and the only place in Germany where one can get his/ her deep diving certificate). Adaptations were done in the least intrusive architectural sense: the reinvention of use was accomplished through minimizing architectural expression purely functional elements. is in line with the fact that the

whole complex is a product of a process; industrial process. Decommissioned rail lines and blast furnace viewing platforms (70 meters - 210 feet above grade) are all accessible to visitors and are all used to stage a different perspective on nature, industry and society as a whole.

Since its opening in 1994 it has been frequented by half a million people annually and it has become one of the most visited places in this part of Germany. Sometimes a risk has to be taken for something great to appear, even if it is right there in front of our eyes the whole time; the creators of the park found it natural that any person with least bit adventure in them would want to find themselves lost in the maze of industrial scaffolding, while the park critics found it absurd and unbelievable that anyone would.

















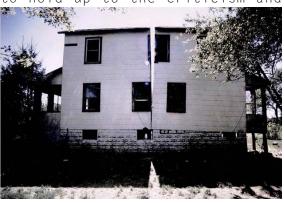


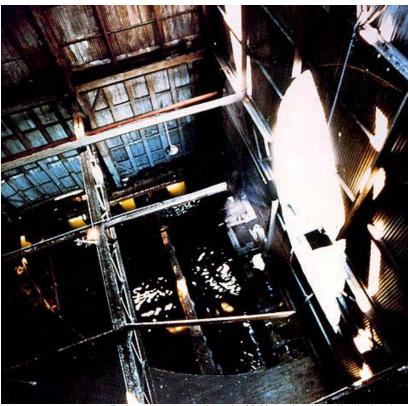


[B] Gordon Matta-Clark Building Cuts

Gordon Matta-Clark, an American artist, was interested in the notions of entropy, leftover space and metamorphic gaps within the built environment. He did most of his work throughout the seventies in New York City, during the time that NYC was notorious for being run down, corrupt and full of inexpensive, at that time, undesirable real estate.

Matta-Clark capitalized these factors and used them to his advantage; to legally acquire cheap property or to have his way with property and structures which have become leftover. He found a way to induce the right stimuli in order to release the potential within those structures. By simply cutting them apart, Matta-Clark was able to bring to the surface emotional responses related the built environment in a society that clearly discarded the built regularly. Either by slicing a family home into two halves or by opening a huge ellipse shaped hole at the end of a long pier building Matta-Clark cut the American consciousness and American Dream. He did it violently and unapologetically, yet the conceptual framework for his actions was strong enough to hold up to the criticism and





End cut on a pier building in New York harbor







Project for the Biennale in Paris: two intersecting conical sections taken out of town homes in Halles, Paris on future site of the Centre Pompidou.

opposition. He understood that there is something wrong with the way the American society discards things and he felt that it is imperative for the American society to bear witness to the residue that it is creating. In his actions he was critical of the American way of life as a whole, and of the idea of the American Dream. He started a project, which he didn't get to complete in his short lifetime, called Fake Estate which consisted of him purchasing multiple leftover and unwanted properties in New York City for \$25-\$75 per property. In this way Matta-Clark literally bought into the American Dream. He now became "landed gentry", but ironically enough he could do nothing with these 'estates' as they were deemed unusable for development or occupancy.

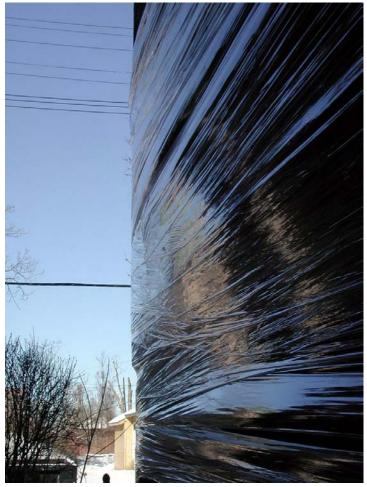
Through such critical actions, Matta-Clark nearly ridiculed the notions of American consumerism in which he himself was a product of. The notable thing is that he finds ways to express his concerns/criticisms within this system; using the residue of this

system as his milieu.



Fire Break houses are an act of a practicing architectural firm Detroit. DCDC (Detroit Center for Collaborative Design) is a not for profit architectural firm that deals with specific architecture as a social and political act; be it in constructing mobile heritage museum or a community center or in a speculative realm of the Fire Break houses. Fire Break has risen from a Detroit specific phenomenon. Arson seen on Devil's night in Detroit has been a media spectacle, a police and fire department nightmare and a tangled legal mess for the lawyers and insurance companies in Detroit. has been reported that between 297 or 810 homes were burned on Devil's night 1984 (Devil's night is a three night event in Detroit, hence the numerical discrepancies). The DCDC, under the direction of Dan Pitera has been looking at the residue that is left behind these social acts; as well as considering all the social and political circumstances which made the act possible. Pitera's views the urban fabric of Detroit as something that cannot be considered with the same parameters applied to most cities. Due to its turbulent





past the city of Detroit has become a specific circumstance; one that has seen some of the worst population shrinking in the world, one which has a third of its land mass vacant or occupied with derelict structures. This is why Pitera understands that the ground in Detroit cannot be considered as static, as set. One has to engage in a

Venture of peculation [which] requires being risky - existing on shifting ground. To ground oneself is to set limits. It requires the understanding of what is inside and outside of those limits knowing one's ground. This ground (we think we know) is malleable - perpetually indeterminate. At the same time, it is definable, although the boundaries of its definition may be subject to further speculation. The ground, or territory, which will be the subject of this speculation, will focus on Detroit. We will be performing acts of urban, cultural and architectural anthropology, 1

The acts that they have engaged in have been concentrated on burned houses. Each one carries a commentary or a message or an inquiry into the social and political realm in which this condition is allowed to exist.



House Wrap - a victim house is wrapped in its entirety in cling wrap, a body bag. The house marked beginning of new affordable housing project on the site.

(Pitera)

Pitera, Dan. "Mutant Geographies: Speculations on the Urban Transformations of Detroit." <u>Dichotomy 15: Ground</u> (2004): 57.





House Breath - entire house exterior is draped in light nylon material. The nylon catches the breeze and playfully reveals the scared skin of the house.













This thesis is an exploration of the possibility of architecture which occupies and operates in the sphere of overlooked consequences of corporate capitalism in the struggling de-industrializing cities. It is a response to cookie-cutter, streamlined approaches to dealing with the condition of leftover in our built, social and economic-scapes. These approaches rely too often on infill, redevelopment and in general, immigration of outside capital. This common approach has been observed to systematically demolish existing networks and relations, displacing residents and with them intricacies of established urban culture.

This thesis attempts to dissect the system which supports the underpinning forces responsible for issues at hand. By attaining understanding of the forces that create it, the existing condition will be addressed via series of proposals of alternative realities in our built environment; ones that operate outside set









boundaries of what is and what is allowed; ones that deal with networks that should not exist but are the life force of most disintegrating urban-scapes.

There are two, mutually dependent forces that are central to the creation of leftover: endowment of considerable economic and political power to corporations and the lack of checks in place for making sure those corporations are responsible citizens. Both are direct products of advanced capitalist system. Alongside the consumerist euphoria, commonly welcomed by the population, corporate capitalism creates vast amounts of trash; trash in the form of material goods, technology, materials, architecture, infrastructure and land.

It is this "trash" and the circumstances that are responsible for its creation, which this thesis attempts to observe in depth. This 'trash" is viewed in a more optimistic/realistic light - as it is not trash at all, but a leftover. A leftover can be identified as an unused portion of matter with embodied energy waiting to be released with the appropriate stimuli induced. Labeling something as "trash" speaks to general disinterest in that something's further use and as such gives free reign to those who choose to tinker around with it. This makes the concept of leftover fascinating, as it affords a broad arena of study. To gain an understanding of it, one unavoidably has to consider the concept of capitalism and its advanced form as experienced in the United States today. Secondly, a study of this type has to look at the issue through two lenses -macro and micro, continually zooming in and out to grasp the totality of the picture.

As aforementioned, advanced corporate capitalism is the driving force behind much

of detritus thriving throughout American cities. It is curious that a system which was conceived as a model for efficiency and conservation should be a culprit blamed for the status quo. Competitive capitalist model embraced in America was conceived on the principles of reduction of inefficiencies in order to maximize profit. This would allow a manufacturer to lower the unit price and beat out the competition, while still obtaining a satisfactory profit margin. For this reason the Ford Motor Company designed the shipping crates that were reused as floor boards for its famed Model T. American auto manufacturing could be seen as a pivotal institution for yet another transformation to the capitalist model. Coupled with specific circumstances United States was dealing with in post depression years and pre World War Two years, technological advances in manufacturing allowed a handful of companies in America to benefit from power of scale.

Although a corporate structure, defined as:

An association of persons into an autonomous legal unit with a distinct legal personality that enables it to carry on business, own property and contract debts¹

has existed as a legal entity for a long time prior to World War Two, it wasn't utilized to its full economic potential until the Ford Motor Company and other manufacturing giants realized the power of a loosely defined yet legally accepted economic and legal entity. In its most basic form, corporate structure yields a greater economic reach to its holders than any one holder could attain on his/her own. Respectively, corporation limits the economic and legal exposure of all its members only to that which they invested



STOP CENTER OF ROLE



into the corporation; thus acting as a safeguard against exposure of personal gains. Aforementioned definitions are near extent of legal description of a corporation. This makes the corporate structure a perfect milieu for excessive growth and with that, excessive and unchecked economic /political power. This is what makes the corporation such a powerful as well as a dangerous legal/economic entity and a political influence.

John Kenneth Galbraith wrote extensively on American economic transition into corporate capitalism and with that of America into a corporate state. his most noted and controversial work The New Industrial State he accurately depicts American society as one in which "the individual has far more standing [...] than the group"2. This was an especially prominent sentiment during the height of the cold war and the fear of Marxist oppression. is then extremely peculiar that Galbraith bluntly (and correctly) asserts that:

It is not to individual but to organizations that power in business enterprise and power in the society has passed. And modern economic society can be understood as an effort, wholly successful, to synthesize by organization a group personality far superior for its purpose to a natural person with the added advantage of immortality.³

This assertion brings to light the impotence of the individual as a governing body and a catalyst for change in the corporate capitalist system.

It is essential to understand that any capitalist business enterprise has as its axiom generation of profit. This fact is seemingly benign, but when one considers that a corporation is a business first and foremost then the impact of the corporate structure and its collective governing

becomes troublesome. It becomes troublesome when unchecked growth, limited liability to the individual and collective consciousness are coupled with end goal of profit and nothing but. This is when a corporation and its actions can become detrimental to all else which is not concerned with profit. Due to the fact that there is a governing body, composed of many likeminded businessmen/women, and not individuals, the chance for alliance to anything else than corporate wealth is diminished; as room for moral and human values is many times squeezed with the weight of calculated, quantitative business logic.

What Galbraith foreshadowed in his books and life work was a system in which we operate and live in today. A system wholly governed by corporations. At the time of Galbraith's writings this system was still in its infant stage as only a handfull of corporations in America had fully exploited the corporate structure. General Motors Company was one of the first to capitalize on all the economic and political benefits of a corporation. It had grown to unimaginable size and with it established economic power. This economic power in 1965 measured \$20.7 billion, "about equal [to] that of [...] three million smallest farms in the country - around ninety percent of all farms"4. It is also important to understand that a corporation that big is in a position of monopoly of planning. A corporation that big has the economic weight which allows it to control supply quantity, supply price and, respectively, control the selling market. When GM in the 1960's decided to purchase steel from a certain steel factory, that factory would sell that steel at a lower than going rate. This is because of two factors: First, GM set the price and second, the steel factory knew





what it seemingly lost in profit margin per unit they would surely gain in the quantity sold. Similar principle applied to the control of auto market pricing; if GM decide to keep its automobiles at a certain price, smaller companies had to conform because they knew that an attempt to undercut that price would mean entrepreneurial suicide. General Motors could, considering its size and economic might, reduce the unit price of a vehicle to a point at which smaller companies could not follow and thus would be exterminated.

Due to the unnatural size and economic power of these mega-corporations, political currents had no option but to conform to the flows and eddies that mega corporate machine had dredged. This is where one can start to see an emergence of a clear relation between corporate world and the built environment. Politicians and municipal policy makers, entrusted with the power to shape American cities naturally became an extension of the corporate system. Most city governments are corporations themselves. This is not constructed necessarily for the ease of growth or profit gain. It's organized in such a manner in order to make money handling and transaction easier, as most large accounts paid to the city government and its numerous branches are made by corporations. Thereby, corporate decisions affect the financial base of the city much more than individual or group taxpayer pools. Another bargaining tool for corporation's achievement of their political goals is the fact that they provide jobs for the residents of a community; naturally a positive attribute. This is what essentially gives corporations their political influence. Our built environment is thus influenced, indirectly, by corporate decisions. This is not the only governing

factor, of course, but it is a large part of the agglomerate which guides the growth of our built environment.

This system functions well enough in most cities in order for the city carry on, function, prosper or at least exist. With adaptation of global business practices to the modern age of efficient, inexpensive transportation of information/goods and globally standardized legal systems, the so known Globalization has been a two sided sword for some of the American and European cities which host/ed mega corporations. Detroit is one of those cities. Home to, at one point, two largest automotive manufacturers in the world (General Motors Company and The Ford Motor Company) it became its own victim. As prices of labor and standards of living went up in the United States, aforementioned corporations sought out a way to produce their product at a lower cost. Technological advances provided the edge that companies needed for a while, until the worker became the most expensive piece of the puzzle. This is when corporate giants started to seek international expansion. In Detroit's case the technological and economic precedence that Detroit set forth became its own downfall. The auto industry moved much of the blue collar operations to developing countries and left behind a vast wasteland in the middle of American Midwest. This "wasteland" is now Detroit.

These are some of the forces that lead to the creation of leftovers. The leftover itself, manifested in many forms, is an indicative of the econo-political state of a place. The leftover condition manifests itself in many forms. The leftover of the built environment is often manifested as space or building which lost occupancy and has not been re-developed since. It



materializes also in the form of unused infrastructure directly tied to industrial flows - such as decommissioned railroads. Socially, the leftovers take shape in form of unemployed, derelict citizens who (much like the architectural leftover) have no choice but to either sit inertly or adapt to the new set of governing conditions - ingenuity from necessity.

Whatever forms the leftover assumes it is generally accepted that it is a discarded portion of total environment and thereby, for whatever composite of reasons, is not envisioned as a component necessary for progress. Thus by looking for the leftover in our built environment we can pinpoint actual geographic locations in which the network of detrimental forces is most persistent. This location is often consistent with places which have seen influence of megacorporations corporations; which industry/manufacturing oriented. We will, also inevitably find alongside the visible leftover, other invisible networks which develop from the same set of circumstances that breed the visible leftovers. These networks, socio-economic in nature, are much like the visible, material leftover allowed to exist and thrive as they are labeled as unimportant and valueless waste. In the same way that the derelict architecture is observed as insignificant in value, the sub-economy of urban-scapes is also disregarded in its value. Yet it's exclusively the strength of these networks that keeps some urban areas afloat. individual and community ingenuity that arises from need presented by the postindustrial, capitalist system breakdown, in places like Detroit, is truly remarkable.

According to the Social Compact Inc. a "national not-for-profit corporation [...] whose mission is to help strengthen

neighborhoods by stimulation private market investment in underserved and underdeveloped communities"5, the sub-economy sector in Detroit city is estimated at \$800,000,000 annually. This is a fair chunk of capital that is accumulated within this illicit economy which is a product of a defunct capitalist system. Illicit enterprises are not necessarily activities including illegal goods or services, rather activities that go unnoticed by the IRS as they are not claimed as taxable income anywhere. the most part they are the haircuts and braiding at the neighbor's house, the oil change at the guy down the street, the guy who comes and cuts your grass for cash, the guy selling flowers and teddy bears off the truck on St. Valentine's day, the guy selling shirts and knock-off jeans on the corner, the mobile shoe salesman and many other food and drink concession stand men and women around the city. All of these businesses offer a product and service at a price less than its structured counterpart only because of the nature of their enterprise is not burdened with the fees and regulations that the regularly run businesses have to deal with.

On the other hand this type of economy has to deal with its own set of governing pressures which are a direct product of the mainstream capitalist economy and politics. Limited market exposure, limited ways of marketing or advertising, new client acquisition is just a few of the issues that the sub-economy entrepreneurs have to deal with because of the legal or political issues surrounding their market sector. This is where a revision of the current system has to take place. The sub-economy in urban areas is what often times provides a major part of means by which that urban area sustains itself, thus



there needs to be a better inquiry into ways of dealing with this phenomena. It was long thought that illicit economy was a product of Third World immigration, but it is recently becoming apparent that this type of economy is actually a product of an advanced capitalist system. It is a product of an economic system set up to perform according to logical laws which the system itself is defying. It is a product of logic breakdown that happens in advanced capitalist systems.

It is in this realm of the leftover condition that the role of an architect/ designer needs to be rigorously questioned. The accepted role of the architect is to be an expert who is hired by a developer or another body to propose a solution to a design issue without much knowledge or concern for the socio-economic or political state of the place in which the project is to be inserted. The only economic concern is the budget constraints set forth by the owner and thus must be closely monitored in order to bring the project to fruition. Most infill development projects, which have become default answer to urban decay, don't concern themselves with the presence of the leftover condition and the socioeconomic networks that accompany it; past the fact that empty lots and derelict houses present opportunity for development. This is a logical capitalist answer to a problem which was created with the same logic that the answer arises from. The fact that the built environment in the urban areas. such as Detroit, is in the state that it is in, is due to poor planning and understanding of the important forces which are present and which should be informing any project from inception to completion. These forces are the same as those which are creating for a favorable climate for sub-economy to



develop, for leftovers to go on unused and so forth. Introducing a foreign body to this unstable system can only destabilize the system further. As seen in many infill projects in the city of Detroit, there is an uneasy tension between the native population and the culture therein and the transplants. Sometimes the transplant population and the support network for their survival obliterate the native population and the networks in place. Is it not then the duty of an architect to consider all of the forces involved when working in this realm? It should be.

This thesis proposes а different approach, an approach which is concerned with the native population and its existence in this world which is the growing ground for the leftover condition. This is a proposal for a realm of architecture/ design which will concern itself with the currents of the urban sub-economy in postindustrial, advanced capitalist, corporate America (and beyond). This designer is to be inserted at the commencement of the revitalization process, instead of being the expert concerned with the end product. The designer in this scenario is to consider all the forces in place, all the networks that exist. all the leftover that is available for use and then to create a network matrix which will strengthen all the aspects of that community in order to be able to take on the impact of infill development in the future. This work is to be done in those forgotten or seldom tread areas of cities which are the main contributors to the \$800 million sub-economy; the rim which is not conceivably ready for any sort of development; the area where the volatile forces of survival come right up to the surface and can be witnessed, touched even if involuntarily.



This realm of architecture/design would be seldom concerned with the edifice of architecture. Instead it would capitalize on the democracy of the design process; the capability of an architect/designer to listen to all those voices which become the internal logic of a project. It would also anchor on architects/architecture's capability to be an organizing mechanism for a multitude of disciplines. The main goal for this type of work is to strengthen the existing networks by connecting them internally and thus internally cycling capital. This way of dealing with the existing enterprises, minimizes their cost of operation which then can be invested in expanding the operation; which in an upward spiral may result in some of these illicit enterprises becoming legit businesses. Legitimization of these neighborhood enterprises creates jobs for the community, increases the tax base and in general starts the domino effect for all positive things that one wishes to happen in any place. Thus it is imperative to understand what is available and then to work with those components in order to set up a system which has a potential for gain.

This is why an architect is well fit for this type of work. Architectural education teaches one ask questions and seek answers. It is also one of the few renaissance (multidimensional) educations out there. This is what prepares an architect to gain a sense of what expertise is necessary to address the problems at hand; and an architect can start to get that sense just by closely observing the built environment and the flows of those that occupy it. An architect, inserted into this system would serve well to identify the key issues and to create an organizational system by which the appropriate expertise can handle



corresponding issues. This thesis project begins to address some of architecturally concerned issues which would serve to strengthen the existing socio-economic makeup of places where the leftover condition is present and persistent. It seeks to ask questions which address the most appropriate moments of weakness within the existing networks and then to propose answers which are grounded in feasibility, affordability and honesty while still remaining provocative enough to spark discussion. The discussions that this thesis hopes to spark are centered on the position of an architect in the economic landscape, the social responsibility of architecture as a profession, the forces which govern the creation of our built environment etc.

The architect is an agent of the society in which he/she functions and as such he/she has to be concerned with the entirety of the built environment, not just the designed end product



¹ Harry G. Guthmann and Herbert E. Dougall, *Corporation Financial Policy* Second edition (New York: Prentice –Hall, Inc., 1948), p. 9.

² John Kenneth Galbraith, The New Industrial State Edition 58 (Boston: Houghton Mifflin Co., 1969) p. 60.

³ John Kenneth Galbraith, *The New Industrial State* Edition 58 (Boston: Houghton Mifflin Co., 1969) p. 60-61.

⁴ John Kenneth Galbraith, The New Industrial State Edition 58 (Boston: Houghton Mifflin Co., 1969) p. 76.

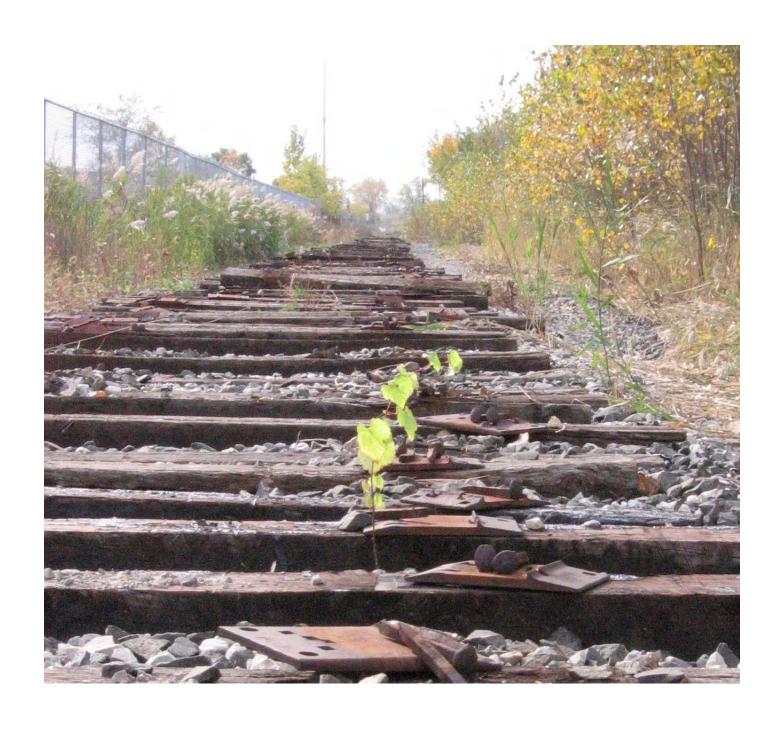
⁵ Taken from the mission statement of The Social Compact Inc., as published in their Neighborhood Drilldown study on the city of Detroit.



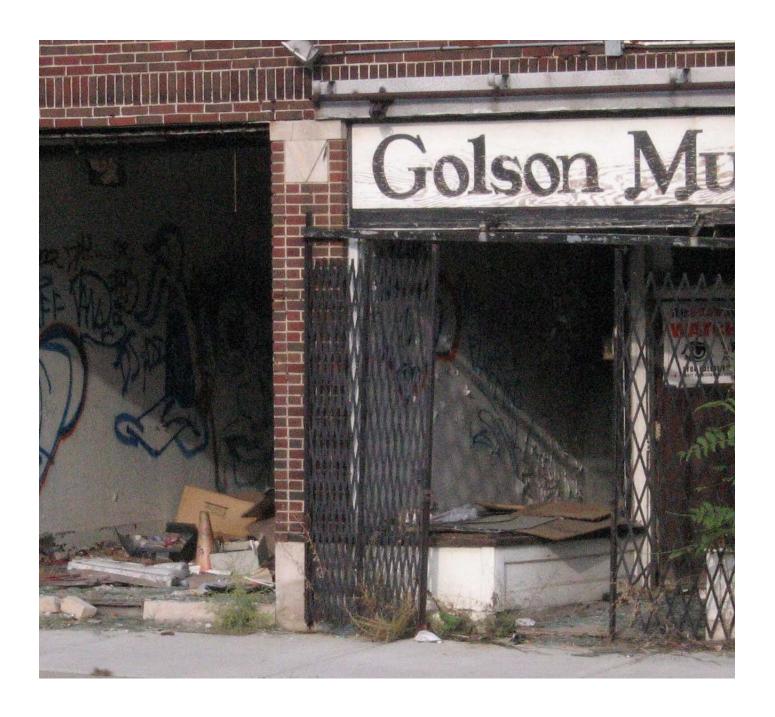
The city of Detroit is an excellent laboratory for someone who is interested in testing any hypothesis related to post-industrial age or advanced capitalism. Detroit has gone through all the steps of industrialization and in a very violent manner. The city has swelled with workers in early 1900's and came to its population peak of just under two million people in the early 1940's. It has since shrunk and deteriorated to just under one million citizens. has done so in a decentralized manner, meaning that there is no one area with great density. Instead, Detroit is sprinkled with pockets of dense neighborhoods throughout. This has created large areas of vacuum in the city fabric. These moments of vacuum are so numerous that they have become the accepted norm for most of the city fabric. Outlined circumstances all point to the fact that there is a great prominence of the leftover condition. The leftover condition in Detroit is apparent in the built environment, in social life as well as in industrial and consumerist waste streams. These are some of the issues that this thesis attempts to address.



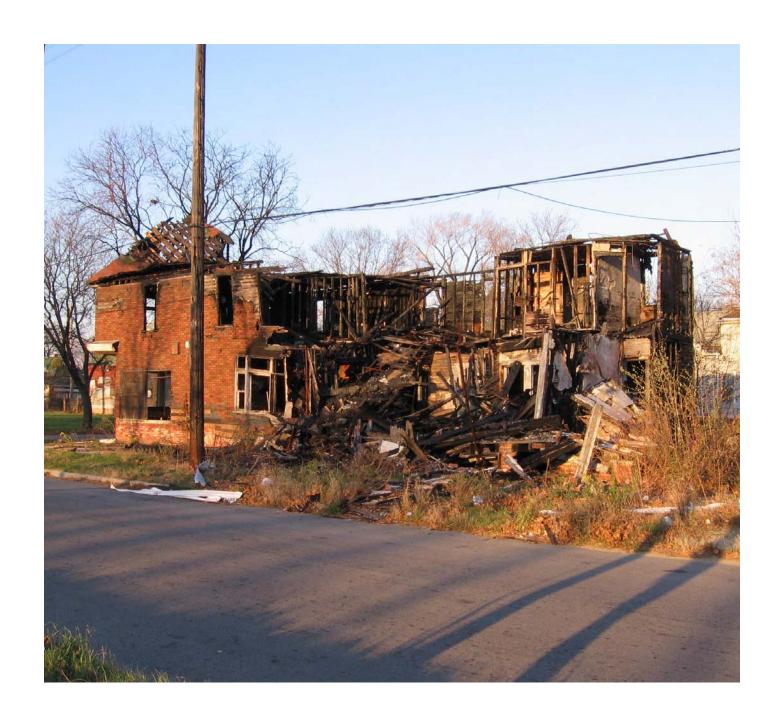
Boarded up windows and store fronts are a common site in Detroit, so much so that they have become a suitable canvas for city artists. In order to "clean up" the city image for the 2007 XL Super Bowl which Detroit hosted, the city took over most of the vacant shop storefronts in the down-town area in order to make them into an exhibit area for city artists, university, college and high school art programs, and thereby more presentable to the many visitors to the city.



Some of the industrial leftover is the decommissioning of once extensive railroad network which cuts through the city. This type of leftover is interesting because it yields a fairly constant result in terms of leftover material and space.



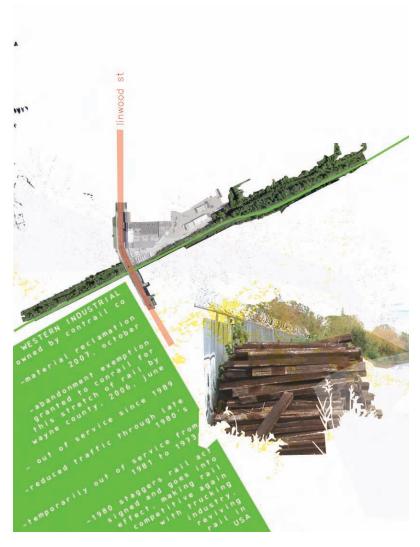
Once a bustling business center of the Midwest, now Detroit is host to vast numbers of vacant and derelict commercial space. Most of these enterprises, if not cleaned out of any valuables by the owner, will become a target for various thieves who are after whatever is of value; copper, metals, goods... Sometimes these places just become targets of senseless destruction.



The city of Detroit is host to some 12000 derelict homes in various states of decay. The city is also loosing 10000 citizens annually. With a long list of properties for demolition and a slow pace of demolishing (1200-1500 homes per year) there needs to be a more innovative approach to dealing with these structures.

INITIAL RESPONSES.....05

The decommissioned railroad system is not a condition that is specific only to Detroit, it's a national phenomenon. Due to the inability of the railroad to deliver goods to flexible locations, as the trucking . industry is capable of, there has been a wave of rail decommissioning all across the United States going on since 1960's. It is an interesting condition as it leaves a consistent leftover upon rail decommissioning. The consistent residue is space, railroad ties and gravel. The rail company will mostly take back the rails themselves as they have value as steel or can be reused on lines that are still in use. Often times they will pull up the rail ties and stack them up for possible reuse. The action performed here capitalizes on the linear space which cuts through the city and across many of its main traffic arteries and on the ties as the materials to work with. It also examines the power of individual and individual's action and its impact on the built environment. Can a single person or a small group of organized people make a profound change in the urban fabric? Can individual action induce a stimuli needed for change on mass scale?



This action consisted of two people simply using what is leftover and found on the site and then releasing the potential in the material to most of its potential. Railroad ties were simply stacked in Jenga-like formations, flanking the busy crossroad. During the day these structures function as sculptural elements, while by night they are activated with road flares and in 20 minute intervals they become lanterns; activating the space, attracting attention and providing interference to the accepted concepts related to urban fabric in Detroit













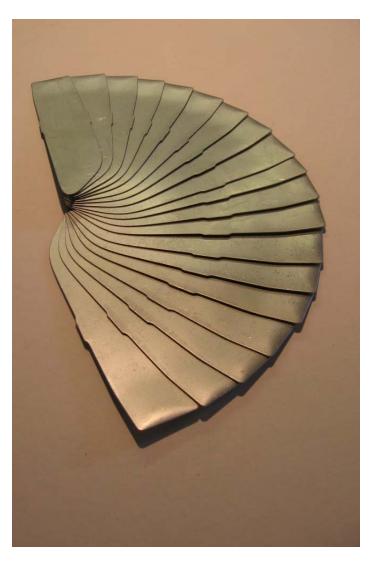






MATERIAL STUDY......06

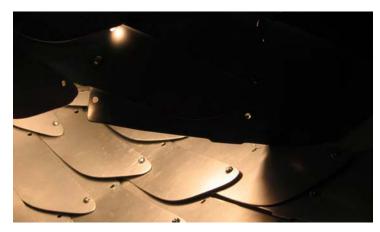
AUTOMOTIVE INDUSTRY STEEL



This material study was inquiry in industrial waste streams and efficiency of the automotive industry. The study was done in cooperation with the Ford Motor Company. Inquiry in the way that the Ford Motor Company deals with leftovers in their stamping plants revealed possibilities for improvement of efficiency. In a process of stamping out car hood templates, which are same for many models ranging from the Taurus, to the Mustang and some trucks, an effort is made to shed some of the unnecessary weight. This is achieved by stamping out the smallest composite area which still allows the hood template to function for all the aforementioned car models once it gets to the press and it still sheds the most weight possible. These cut-outs or "off-fall" is then collected and scrapped to an outside recycling company. Ford Motor Company or Delaco Kasle Processing (in the case of this particular study), one of the companies in Ford's network which does stamping for Ford, sells these leftovers to the scrapper at \$0.30 per pound. The scrapper sells the automotive grade steel to the smelting facility for \$0.35 per pound, who then melts it down, rolls it out into sheets that Ford purchases back at \$0.50 per pound*. This process seems to be rather inefficient for Ford as there is a missed opportunity with the leftover. If the leftover can be intercepted at the moment where it's created (stamping plant) and given for consideration in another industry as a material, could that yield some profit for Ford and for the other industry involved? This is what this study set out to consider and propose an alternative for Ford motor Company.



 $\ensuremath{^{\star}}$ the figures are synthesized in order to illustrate a point.



Preliminary study testing a connecting/patterning method - made







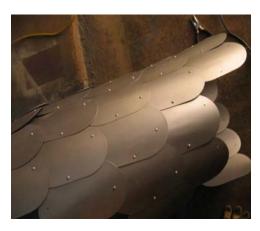




Study using the hood off-fall from Kasle Delaco Processing Co. plant. The aim of this study was to create a prototype for a shingling/skinning system that could be used on a building. This particular prototype was constructed with a program that demanded for human body interaction. This particu-









lar object became something to sit on or perhaps to take refuge underneath during bad weather or night. This particular object was displayed at the CAID - the Contemporary Art Institute of Detroit - as part of their Urban alchemy exhibit. The exhibit was centered around the idea of synthesis from the urban fabric; creation by using what exist around us in Detroit - Recycling Detroit.











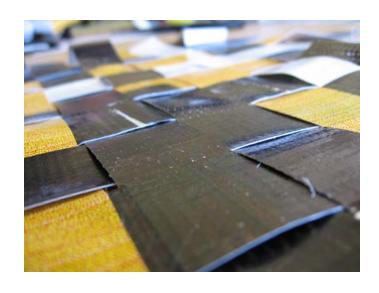
MATERIAL STUDY.....07

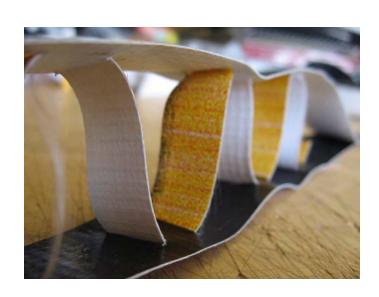
POST USE BILLBOARD VINYL

Look up! Billboards have become as ubiquitous as human suffering, as difficult to ignore as a beggar's outstretched fist. Every time you leave your couch or cubicle. momentarily severing the electronic umbilicus, you enter the realm of their impressions. Larger than life, subtle as war, they assault vour senses with a complex coda of commercial instructions, the messenger RNA of capitalism. Every time you get in a car, or ride a bus, or witness a sporting event, you receive their instructions. You can't run and you can't hide, because your getaway route is lined to the horizon with signs, and your hidey-hole has a panoramic view of an 8-sheet poster panel.



Billboards are as permanent in North American landscape as the Grand Canyon or the Rockies; they are the other, more common and unassuming beacons constantly reminding us that we're home. Less breathtaking (sometimes arguably) than the natural and built wonders of this land yet equally if not more powerful in the eye and mind of contemporary iNation of Starbucks addicts. Billboards give shape to more of American environment by the day. According to the, Outdoor Advertising Association of America, there are some 170,000 billboards lining the highway system in United States which equals for 127,500,000 square feet of PVC vinyl surface. That is 2,927 acres or 4.57







Study using billboard vinyl as a sail for a building in a wind tunnel location on campus.









square miles, 6,375 tons (based on 751b per billboard banner) or 340,000 cubic feet (2 feet cube to fold up a typical banner) of space required at the land fill to accommodate the un-recyclable vinyl. This could be illustrated if compared to something that we all can picture in our heads - like the empire state building; the combined weight of the empire state building (331,000 tons) will be contributed to the land fill in 2 years and 2 months by the combined weight of the 170,000 highway billboards, if the ad campaign turnover is about 2 weeks. These numbers are staggering and they get considerably more so when taken into consideration that the advertising campaigns only run for a few weeks at a time and that the number of 170,000 is only referring to the advertisement along the highway system - not taking into account all the billboards adoring the rooftops and sides of buildings in urban areas. This is good news for those who like to ponder trash - there's a lot of it! For now.

How did it get to be this way? all dates back to 1835 in New York Jared Bell printed composite posters (larger than 50 square feet) for circus advertisement. These were first of the large American advertisements, but weren't outdoor yet billboards as they were painted or adhered to the sides of barns or other buildings. First recorded instance of leased, constructed billboard for the purpose of advertising occurred in 1867 and by 1870's there was 300 small bill posting and printing companies in existence. In 1900 the invention of the standardized structure for the large outdoor advertisement ushered in the era of national branding; as companies could be sure that the same advertisement could be reproduced and hung in New York and Chicago. Companies like Cocacola were first of the bunch to start a national branding campaigns, thus one could conclude that the commercial and

iconic stature of coca-cola is in part due to the invention of billboards. As billboards were available in all urban centers by 1912, a practice of "filling" empty billboards with public services messages was adopted. This practice runs today and is due to actions of what is now known as the Outdoor Advertising Association of America; an organization that deals with various types of research and legislation in relation to outdoor advertising. This practice was put to use recently upon the collapse of a highway bridge in Minneapolis on August 1st 2007, when Clear Channel Outdoor-Minneapolis released the control to all their digital billboards to the Minnesota Highway Authority in order to faster warn the public of the collapsed bridge. In the early 70's a collective of companies commissioned the team at MIT to explore the possibility of computer printing of billboards and the birth of vinyl billboard was on the horizon. In the early 90's hand painted billboards become entirely extinct and much improved technology printing takes

Most outdoor advertising in America today is computer printed on polyvinyl chloride derivative, a PVC coated vinyl or a soft PVC. PVC is no stranger to humans; as one of the most commonly used plastics in fabrication of objects of our lives, it is omnipresent in everything from toys to clothing to carpets to piping. In its primary state it is a rigid, clear plastic that can be made flexible by addition of phthalate esters as plasticizers. It then can be dyed into any color under the sun but mainly supplied in white, grey and black color for most industrial uses. Vinyl has good or excellent resistance to UV rays. dilute and concentrated acids, alcohols, bases, aliphatic hydrocarbons, mineral oils, vegetable oils and oxidizing agents and as such is a great choice for many external uses. It is not



well suited for exposure to Aldehydes, which are found in ethanol, methanol, butane and other similar organic fuels; to esters found in nail polish remover, some paints, model airplane glues and pineapple; Aromatic and Halogenated Hydrocarbons that are found in benzenes and such that are produced by microbial biodegradation. Vinyl has the tensile strength of 6,500 psi and the melting point of 176 F or 80 C with the operating temperature range from 158 F (70C) to -13 F (-25C). Vinyl will absorb 0.06% water by volume². Thereby if one has the moral calling to deface whatever message of consumerism, bearing down on us from its high perch on a billboard. one can fling rotting pineapples upon the 672 square feet of disagreeable vinyl and watch as it slowly disfigures with the drippings of rotting matter full hydrocarbons. of esters and

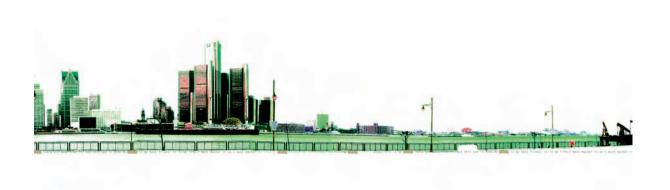


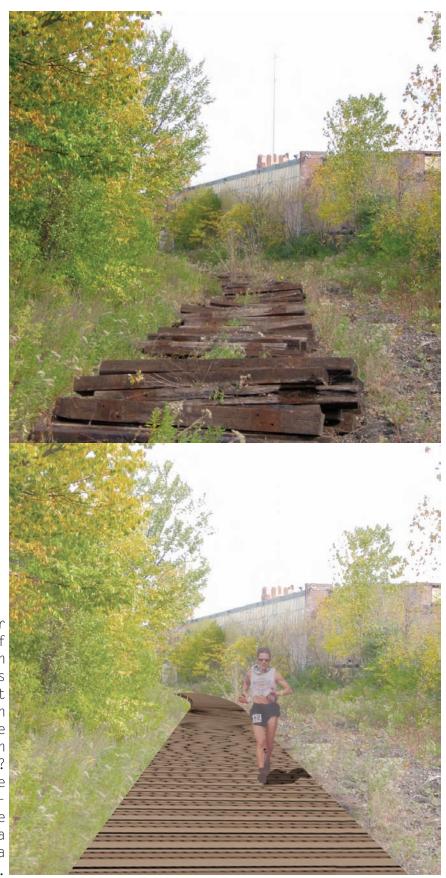
- 1 Historical information gathered from various articles posted on the Outdoor Advertising Association of America's web site; www.oaaa.org.
- The chemical properties of vinyl are compiled from the information provided by Dynalab Corporation as specified on their web site: http://www.dynalabcorp.com/technical_info_pvc.asp.

This project is an exploration of the possibility of architecture which occupies the sphere of overlooked consequences of a corporate capitalist system. It is aimed at de-industrializing urban scapes throughout the world. It has used the city of Detroit as its precedence and testing grounds, but it is not necessarily catered specifically to Detroit. This project deals with the sets of underpinning forces which create the condition of a leftover. Leftover is defined as an unused portion - something with a potential which can be released with the appropriate stimuli induced. The leftover condition is often times mistaken for waste or trash; in the form of built edifice, material, space, technology etc. but it is more accurate to look at what is labeled as trash and rename it as leftover - as much of waste generated by the consumerist-capitalism is still usable if reimagined as a material vs. trash. This project is a response to the conditions which have made our built environment so - and an exploration in the reversal of architecture/design role in the process of rejuvenation. It is a response to cookie cuter approach to rejuvenation of the urban environment; and approach which relies on external capital immigration. In the approach before you this is reversed, inserting design/designer beginning at the stages of the rejuvenation process, thus coming to an understanding that a dilapidated cityscape with socioeconomic issues has more to lose from infill or gentrification than to gain. Introduction of foreign bodies into an unstable system, only destabilizes the system further. Thus, this project attempts to deal with the instabilities



which are a product of an overarching political and economic system, and are the cause for the current composition of the socioeconomic state in cities like Detroit. Detroit city, once a shining beacon of modern America, has come to resemble cities in developing countries. Past burnt down buildings one starts to understand that there is a system in place which is keeping this place so. It is the economic pressures which make it more cost effective to tear a rebuild able house in Detroit than to repair it. It is also these economic pressures which push the residents to new levels of ingenuity in their quest for sustenance. In many cases this results in second jobs or odd jobs which slip under the radar of the IRS. This stream of illicit economy in the city is estimated to be \$800 million annual industry, proving that there is money in the city. One then can say that if this economy was to be spurred on and guided in such a way that it recycled the capital through the city then one could start to see some of the issues which make the system unstable alleviated. This in turn would prepare a more stable and more fortified system which could stand the impact of gentrification and infill but has no need for either for its economic survival. The proposal you see deals with strategies which could be implemented in order to guide the existing economies of the city into symbiotic relationships with the socio-economic make up of the city and its built environment.





Using the consistent leftover from the de-commissioning of the railroad system one can construct some logical answers to what could happen in that place. Since the extraction of material is part of the condition, what would happen is one continued the process? Taking away the rails and the gravel - leaving behind a linear depression throughout the city - one could envision a watershed, a boardwalk, a trail or a canoeing waterway.

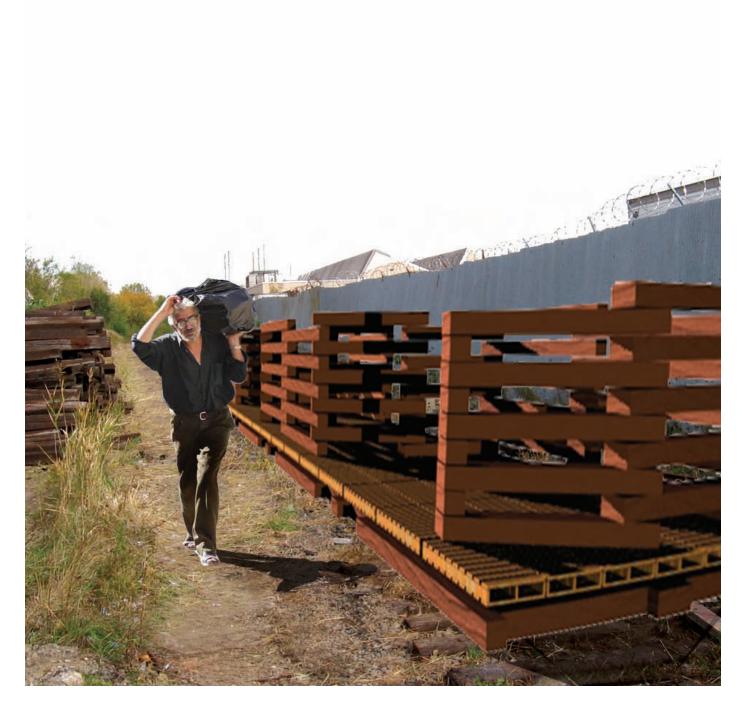


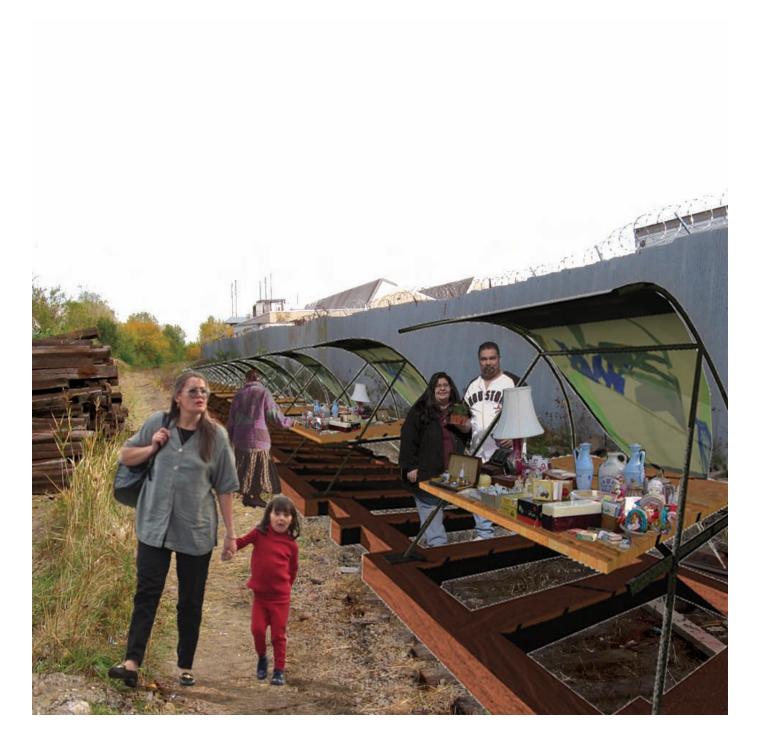
Similarly working with the social circumstance surrounding the decommissioned railroads and acknowledging what inevitably happens there one could work with these notions in mind. Unused railroads have a habit of becoming illegal dump sites. One mans trash can be another's treasure. Why not construct a place to dump using the rail ties? Could you turn the habit of dumping into a more constructive endavor - such as a flea market?











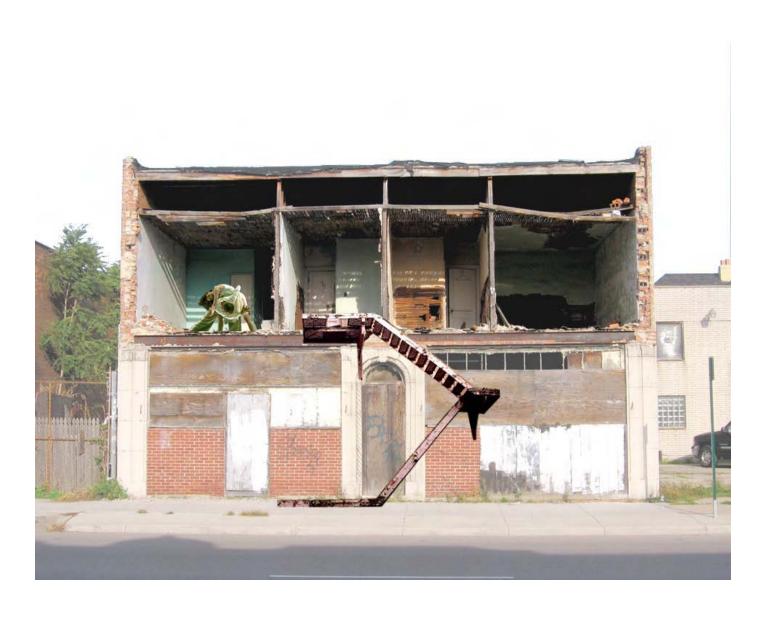


An another consideration of a leftover condition and how could it be addressed with minimal investment. Placing a stairwell which leads to the second floor of this building capitalizes on many opportunities that the decaying space on the second floor is inherently suitable for.







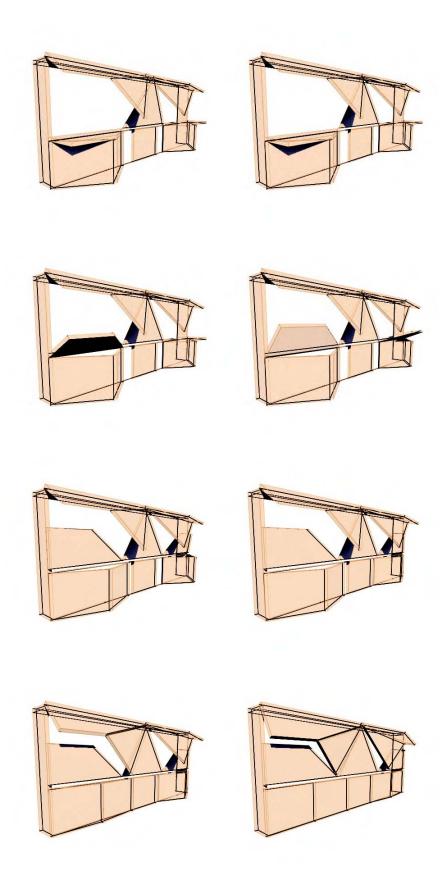




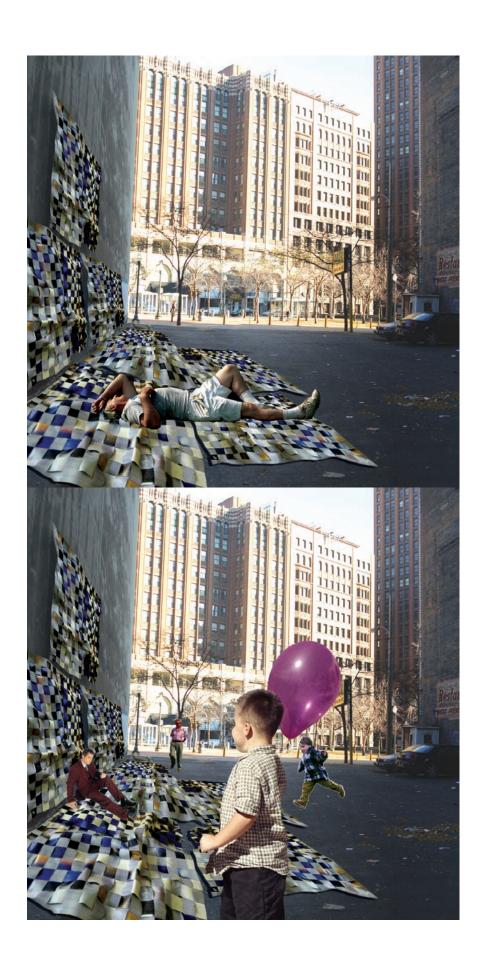


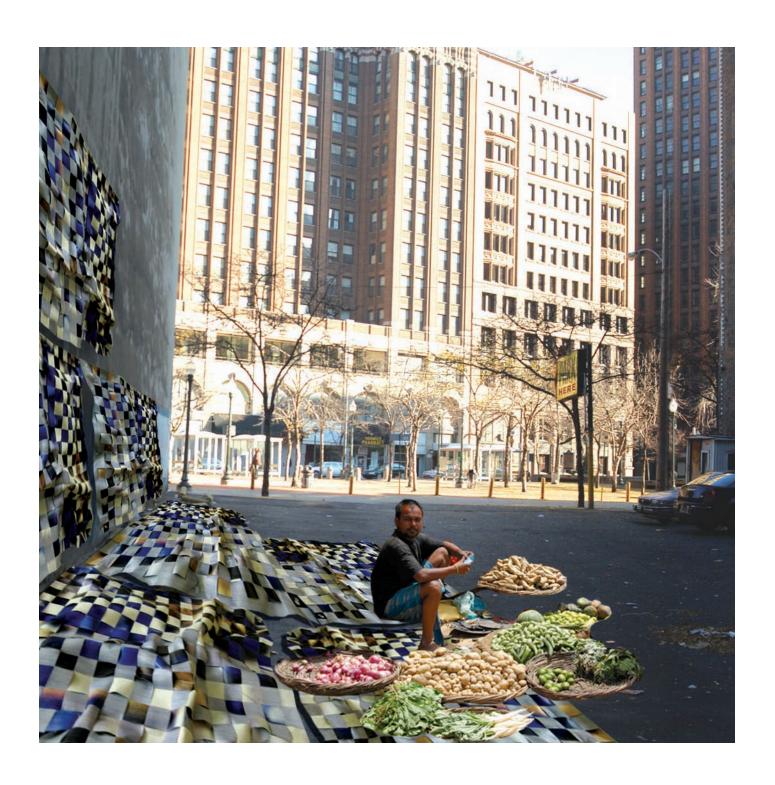
Investigating possibilities of parasitic structures which on their own have no program and only with impromptu interaction are activated into the possible uses.











The following portion of the project is concentrated on the sub-economy of the city as outlined in the thesis paper. It is an exploration of where does a designer fit into that unexplored and inaccessible landscape. To begin this portion of the project it was imperative to consider the sub economy and to understand at least some of the branches that it is composed of. Some that were identified were:

The Sunday mechanics - since the city of Detroit is so infused with the automotive industry its easy to understand that many people who work or have worked in the industry have carried their mechanical knowledge into their garage and use it as a means of primary/secondary income.

Landscapers -because of the ease of starting this type of enterprise or the rudimentary skill set that is needed to perform it, Detroit neighborhoods are often groomed by sign-less, cash-only landscaping "companies".

Home caterers - secondary/primary means of income for many single mothers or stay at home moms. Common occurrence but one that is hard to gain insight to or much reliable information about.

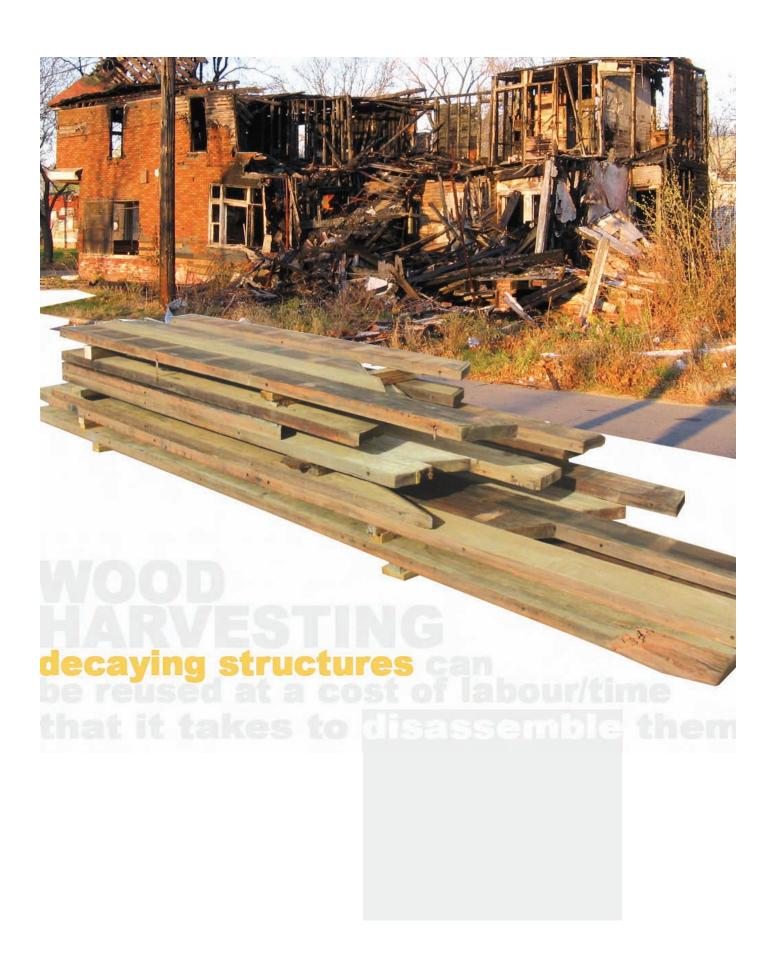
These branches have been identified as most common occurring enterprises that compose a part of the \$800 million illicit market. As such they were explored in terms of what are key issues within each that a designer could address and more importantly a study of over arching strategy of how designers could impact these branches was conducted. Some of the responses are architectural in nature and others are reliant on social networking.















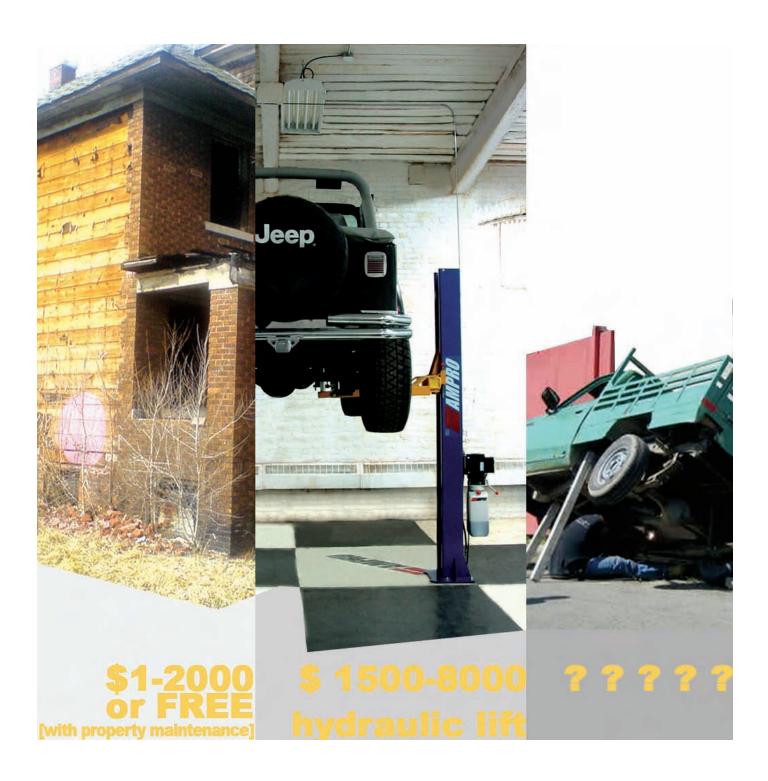


12000 abandoned homes 1500-2000 demolished per year 10000 people leaving Detroit per year



if left unattended potential for drug house potential for rodent infestation general hazzard







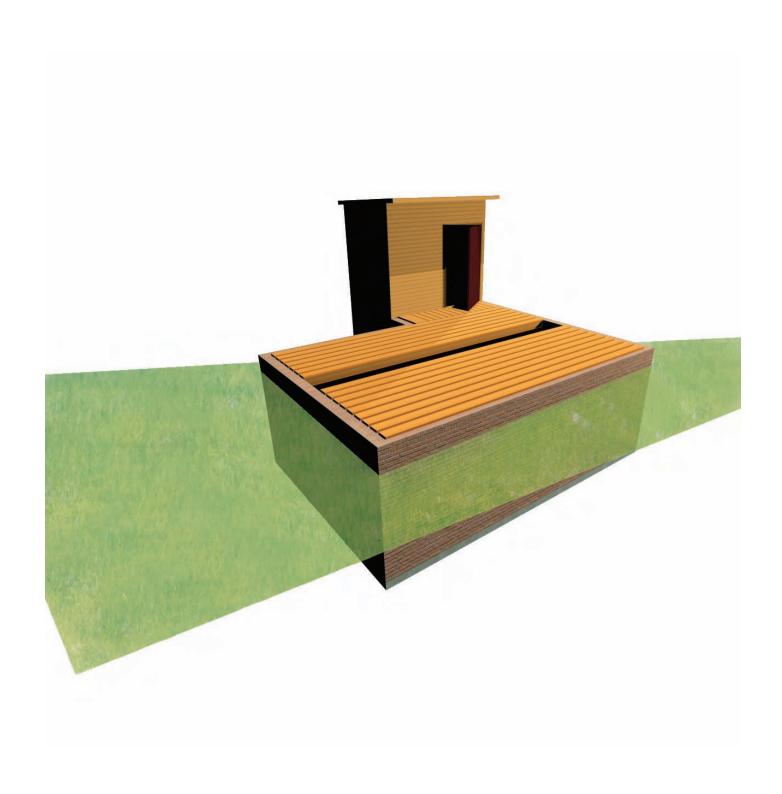


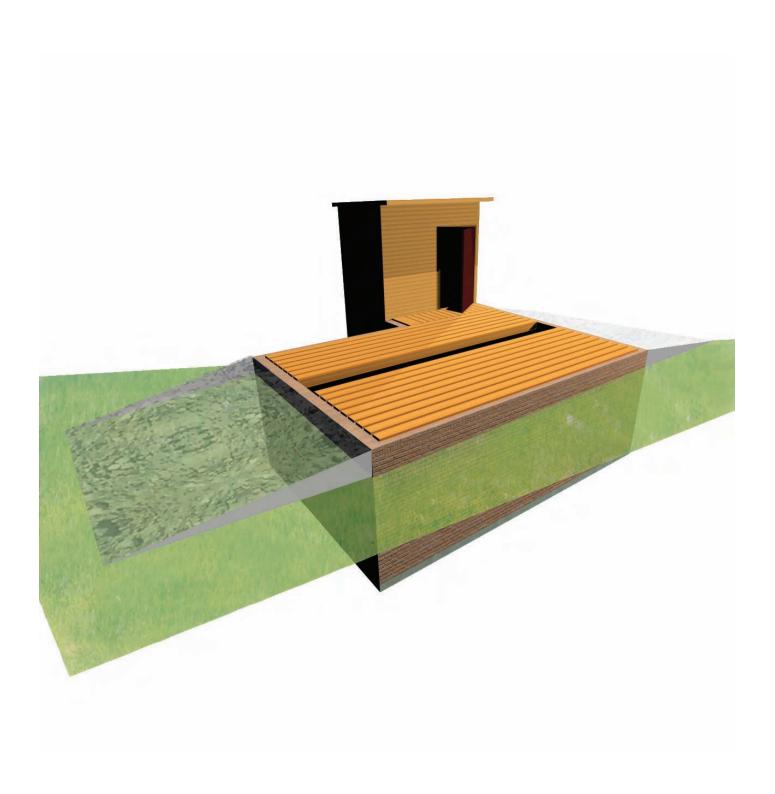












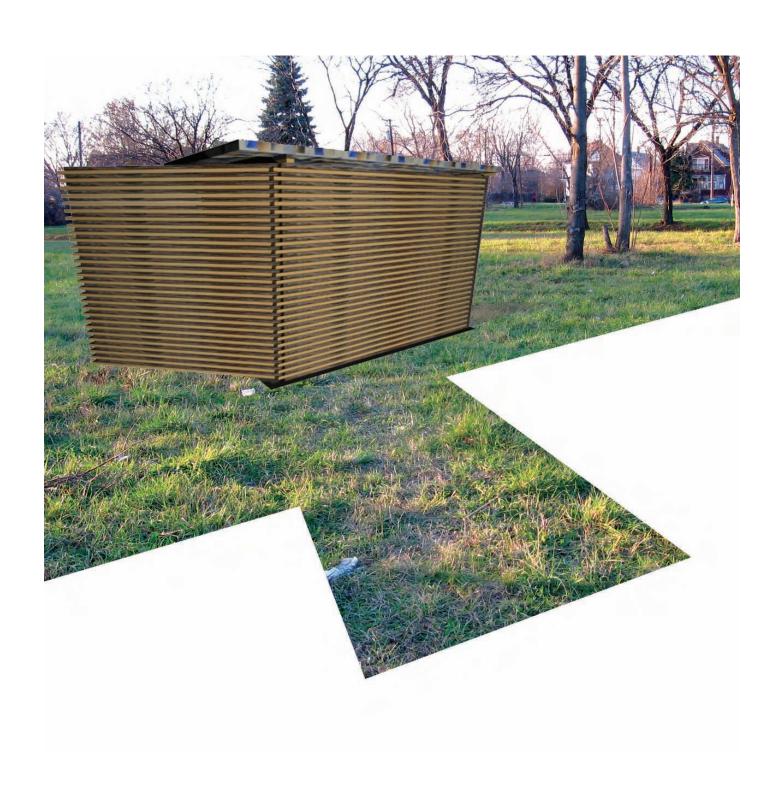


PROVIDES SUPERB SECURITY
IS INSULATED
IS THE SIZE OF MY TRAILER
CAN BE A GARAGE IN SEASON
AND A SHED OUT OF SEASON









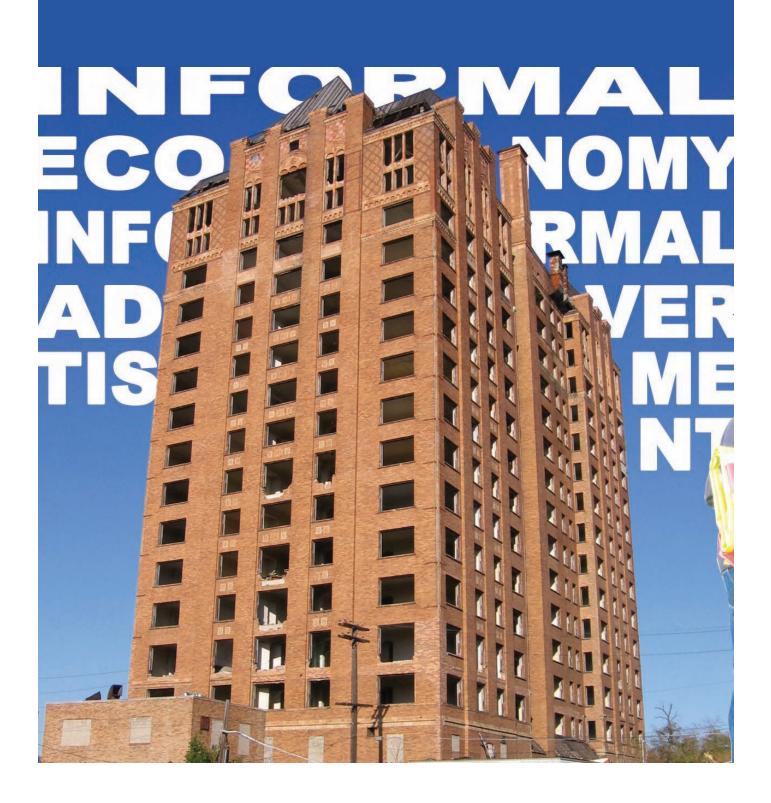




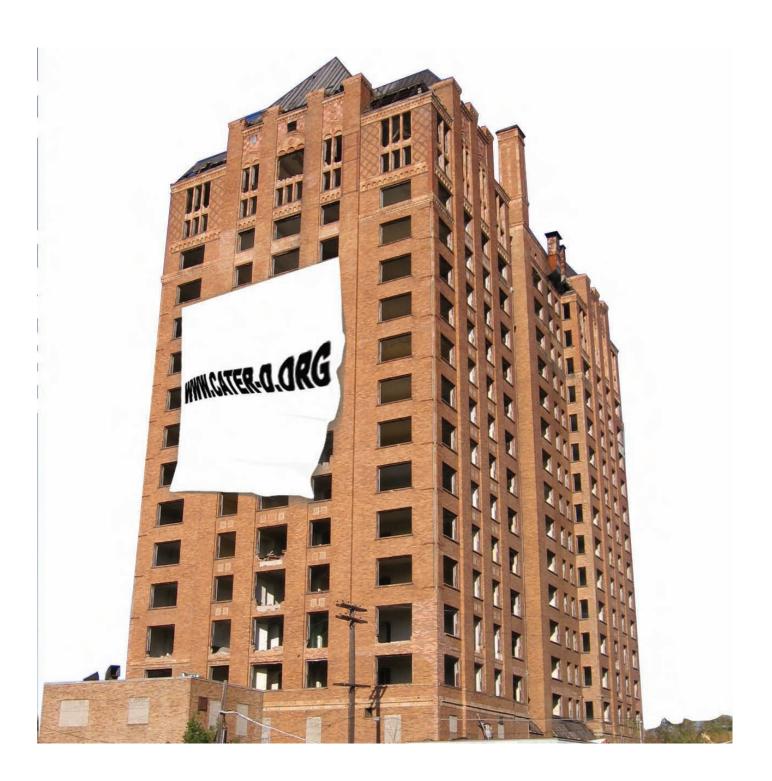




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Annoted Bibliography

Architecture for Humanity. Design Like You Give a Damn: Architectural Responses to Humanitarian Crises. New York: D.A.P./Distributed Art Publishers, Inc., 2006.

Dougall, Harry G. Guthmann and Herbert E. Corporation Financial Policy. New York: Prentice-Hall, Inc., 1948.

Ed, Bryan Bell. Good Deeds, Good Design: Community Service through Architecture. New York: Princeton Architectural Press, 2004.

Faoro, Dan. "Contemporary Movements: Examining the use of materials in architecture and the visual arts." Dichotomy16: Trash (2006): 46-69.

Ferguson, Neall. Colossus The Rise and Fall of the American Empire. Toronto: Penguin Group Canada, 2004.

Galbraith, John Kenneth. The New Industrial State . Boston: Houghton Mifflin Co., 1969.

Hawken, Paul. The Ecology of Commerce: A Declaration of Sustainability. New York: HarperCollins Publishers, Inc., 1993.

Heartfield, Ian Abley and James. Sustaining Architecture in the Anti-Machice Age. Toronto: Wiley-Academy, 2001.

Herscher, Andrew. "Warchitectural Theory." Journal of Architectural Education (2008): 35-43.

iCUE, Kyong Park and. Urban Ecology Detroit and Beyond. Hong Kong: Map Book Publishers. 2005.

John Kenneth Galbraith, The New Industrial State Edition 58 (Boston: Houghton Mifflin Co., 1969) p. n.d.

McDonough, Michael Braungart and William. Remaking the Way We Make Things Cradle to Cradle. New York: North Point Press, 2002.

Paul Hawken, Amory Lovins, L. Hunter Lovins. Natural Capitalism: Creating the Next Industrial Revolution. New York: Hatchette Book Group USA, 2000.

Pitera, Dan. "Mutant Geographies: Speculations on the Urban Transformations of Detroit." Dichotomy 15: Ground (2004): 55-68.

Rajchman, John. Constructions. Boston: MIT press, 1998.

Topham, Sean. Move House. New York: Prestel Publishing, 2004.

Vergara, Camilo Jose. American Ruins. New York: The Monacelli Press, Inc., 1999.

Whyte, William H. City Rediscovering the Center. New York: Bantam Doubleday Dell Publishing Group, Inc., 1990.

Zumthor, Peter. Thinking Architecture. Basel: Birkhauser, 2006.

