there

journal of architecture and landscape
volume 2

refuse

letter from the editors

The thematic ideas embedded within this issue of *t/here* came, as many architectural ideas do, from simple observations of our own surroundings. Hidden between two freeways in downtown Minneapolis lies a piece of land that has, thus far, mostly escaped the redevelopment craze taking the rest of the city by storm. Isolated from the city by Interstate 394, the area known as "Rapid Park" (see map on following page) is an urban wasteland filled with massive amounts of parking, decrepit industrial buildings, a variety of homeless shelters and charity services, the city's largest incinerator and a maze of one-way streets, dead-end boulevards and highway overpasses. These same characteristics (or at least the plentiful amount of parking) are what makes the site so appealing to the City of Minneapolis for the construction of a new baseball stadium for the Minnesota Twins. Suddenly, Rapid Park is about to undergo rapid development.

What of our urban and architectural heritage, we wondered, will we be losing when this massive change begins? We might examine the existing geography in terms of the quite necessary role Rapid Park plays in anchoring the whirlwind of city activity swirling around its edges. If we look deeper into what is currently of value on the site, we find utilitarian buildings that are both fully functional and architecturally sublime. And, as interviews with residents of the area suggest, we can begin to question where the hundreds of homeless on Minneapolis' city streets will go when condos, bars and restaurants replace the services and shelters on which they rely.

This issue is divided into three sections, each of which explores different global and local aspects of the term "refuse" and echoes issues raised by our investigation into Rapid Park. The first examines how designers respond to issues of waste in our society and focuses on how we can design in a post-industrial age to create a more sustainable, waste-free future. The second section investigates our design response to the people who are so often "refused" from society, particularly in the realm of housing and homelessness. Finally, our third section gathers examples of new and upcoming work that is seeking to reunite and (re)fuse our scattered design community around these issues of social justice.

In the aftermath of the devastating hurricane season of 2005, the issues discussed in this issue of *t/here* seem all the more pressing. What is our responsibility for designing shelter for those who have none? How can we transform New Orleans from a giant pile of refuse into a self-sustaining and lasting community once more? We refuse to watch the destruction of our neighborhoods, our environment, and our global relationships without asking what we, as designers, can do to help. That is the challenge we put forth to the design community both here in the Twin Cities and around the globe.

-The Editors

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refuse

're-"fyüs

that which is cast aside as worthless;
rubbish or worthless matter.

nuclear effigy mounds and catacombs

On the architecture and landscape architecture of radioactive waste burial sites

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The repertoire of burial sites has recently grown to include the most enduring and monstrous human-made handiwork—radioactive waste. From deep geological mausoleums to swelling earthworks, these new creations rival and reference the prehistoric catacombs of Rome and Alexandria, the Native-American effigy mounds of Iowa and Wisconsin, the ritual mounds of Cahokia, Illinois, and the earthworks of Silbury Hill and Avebury Circle in Wiltshire, England. The physical and iconic resemblance between the ancient and contemporary monuments is unmistakable. Both are grand and ludicrous; their price-tag is colossal.[1]   In both, the quest for an appropriate architecture and symbolism of the buried is paramount. But that's where the similarity ends. The former is built to house the dead or monumentalized revered gods; its counterpart entombs excess waste and hinders disaster. The ancient invites visitation; the modern deters it.

Created during the brief Cold War epoch, which spanned two generations, nuclear waste,[2] known today in professional jargon as legacy waste, will endure for centuries to come. The inescapable task of building twenty-first century atomic dumps for eternity calls on environmental designers and artists to devise new form, image, and sign. Their visual tools of representation and communication and the spaces they mold both reflect and shape public image and construct and deconstruct perceptions and experiences about nuclear dumps, and more generally about nuclear waste.

NUCLEAR EFFIGY MOUNDS

In 2002, Weldon Spring Missouri inaugurated the first radioactive effigy mound, known as waste disposal "cell," and opened it to the public. Blanketed with white stone cover, the trapezoid-shaped earth monolith covers 45 acres and rises 75 feet above the surrounding terrain. Stairs on a diagonal path lead to an observation platform with interpretive plaques and a bench from which on a clear day, one can view the St. Louis Arch.

At a cost of $448 million, the Department of Energy turned the 2,000-acre former uranium ore processing factory into a tomb for 1.5 million cubic yards of low-level radioactive soil and sludge gathered from various parts of the site. The surrounding, seeded with prairie grass cover and crossed by a bike trail, joins the abutting recreational zone of Busch Memorial Conservation Area and the Weldon Spring Conservation Area to the delight of many area residents who were barred from the area for years. The project was successful in building public trust in the government; a much needed support at a time when the projected cost of remediation programs of all DOE nuclear processing and production facilities through 2065 is $226 billion (BEMR 1996). Other defunct Department of Energy (DOE) properties, like the nuclear weapons complex in Rocky Flats, Colorado, and Fernald and Mound, Ohio, will follow suit, inviting the public to enjoy a reborn native landscape.

NUCLEAR MAUSOLEUMS

Dumpsites of high-level and transuranic nuclear waste have taken the tradition of burial to new extremes of distance, depth, and fortitude. The long road to approved high-level waste "deep storage" took more than 50 years since the opening of the first temporary repository in Oak Ridge, Tennessee, in 1944. In 1999, the first nuclear-age catacomb, the Waste Isolation Pilot Plant site (WIPP) where nuclear waste is buried in tunnels ½-mile underground in a salt formation, opened near Carlsbad, New Mexico. Because that site was limited to transuranic waste, the hunt for a high-level waste disposal site continues; the sole location considered is Nevada's Yucca Mountain, now scheduled to open in 2015.

The layout and spatial design of nuclear underground catacombs are in the hands of engineers and scientists. Since no human soul will be welcomed to the eternal glowing repositories following closure, the major task left for designers—deterrence—is paradoxical. Their task is primarily that of communication and durability (of communicable elements), both architectural and linguistic; of marking the site to inform potential intruders of its impending danger at some point in the distant future. Tom Vanderbilt summed up this enigmatic task: "How can you build it so they won't come?" (2001, 150).

Beginning in 1981, scientists turned to the past in order to learn what enables information to survive, incorporating their knowledge in the design of a marking system. Archaeology came to the rescue. Ancient monuments surviving 2 to 5 millennia were analyzed for durability and marking systems: the pyramids in Giza, Stonehenge in England, the Acropolis of Athens, the Great Wall of China, the Nazca Lines in Peru, and the Serpent Mound in Ohio (Kaplan and Adams 1986, 51). It was determined that written language was more effective in carrying meanings over time than are symbols and pictures, though a combination of the two could be productive. As for the survivability of languages over 10,000 years,
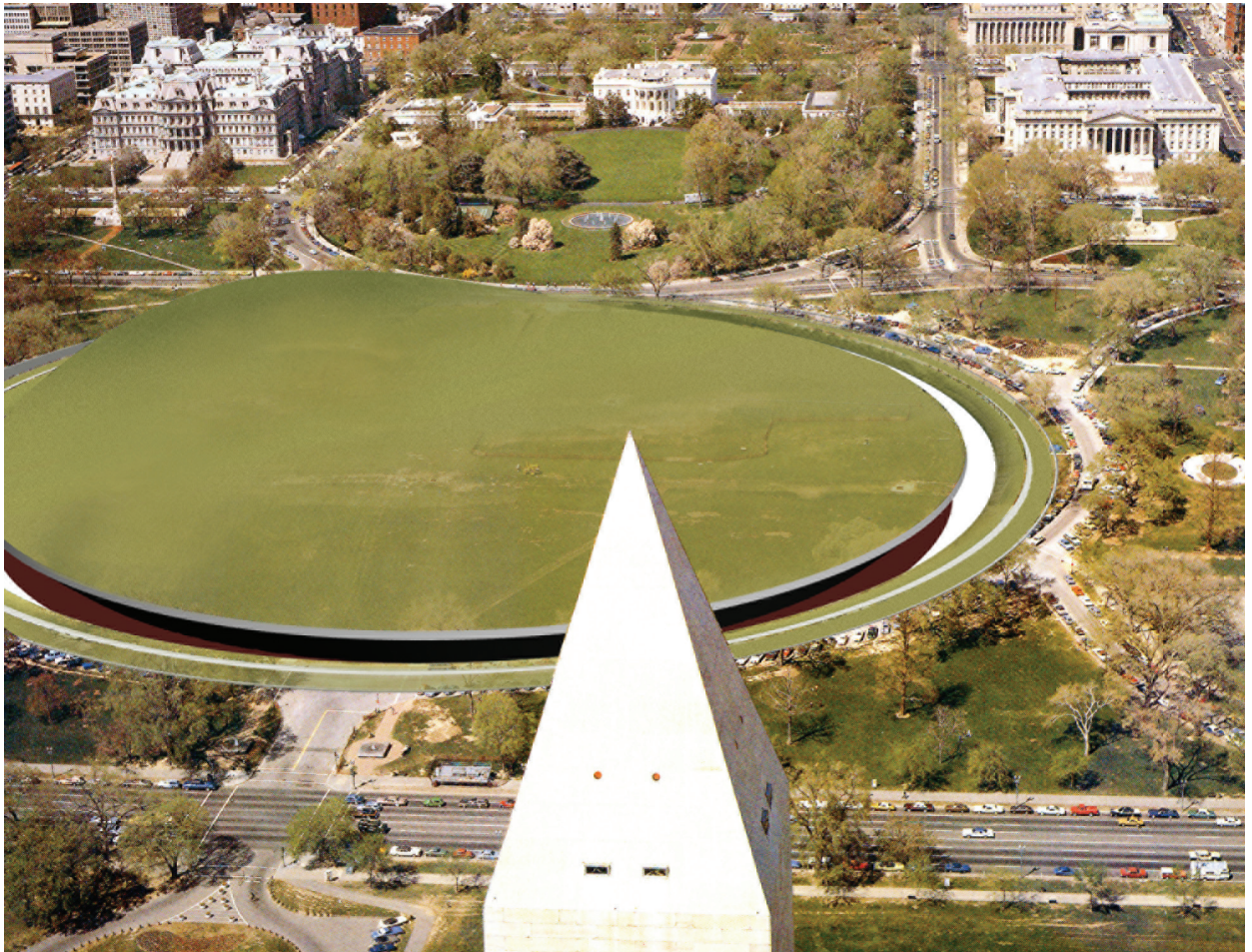
1.1 Designer Michael Simonian's 24110 was the winning entry in the Bulletin of the Atomic Scientists' "Plutonium Memorial" Competition in 2001. His design proposed a prominent storage facility south of the White House in Washington D.C., under a partly lifted circular lawn "carpet."

1.2

the archaeologists were uncertain. Stone monoliths and pottery shards were proven more reliable than metals, which showed a tendency to be dismantled and recycled.

Ten years later, for the only operating government-approved permanent dump at Carlsbad, New Mexico, the U.S. Department of Energy and the Sandia National Labs convened two groups—Futures Panel (1990) and Markers Panel (1991), each composed of multi-disciplinary experts.[3] The panels' task was to determine in detail the nature of the passive institutional control that will commence 100 years following the scheduled closure of the facility in 2030. "The Marker Project," as it was dubbed, debated, refined, and detailed proposed signs, texts, and spatial structures.

The improbable task of communicating with unknown future civilizations landed on unpretentious, scientifically-based, and practical design. The final recommendations include five elements: a 33-foot-high earthen barrier, tall stone monuments, warning disks, two on-site information centers, and archives stored in many locations around the world. Three concepts were proposed for the configuration of the most imposing feature—the earthen structure. The first concept consists of a large earthworks configured in the shape of a trefoil centered above the repository surface footprint center. A second configuration consists of a rectangular perimeter tracing the buried area footprint above ground. The third concept is a 'menacing earthworks' that includes 30 large earthen berms, each formed like "lightning," that "radiate" out from the footprint perimeter. This proposal was shaped by the architect Michael Brill, who introduced a design rooted in deeply held psychological archetypes, creating "landscapes of repulsion," or spaces that project a sense of danger—a spike field; huge black basalt slabs; menacing, jagged earthworks; and forbidding rubbles. Others preferred to avoid anything too unusual that might provoke unwelcome curiosity (Trauth et. al., 1993). Ultimately, the second proposal, the straightforward rectangular berm, 2500 x 2100 feet won.

As proposed in all three configurations, the stone monuments are placed around the repository footprint perimeter, near the berm, as well as at the edge of the larger control area. The monuments, 500 to 700 feet apart, consist of two separate granite stone monoliths joined by a 5 foot long inner tendon, buried 22 feet in the ground and rising 25 feet tall. Each monument has a warning message engraved in seven languages. Radar reflectors and magnets buried in the berm mark the site for satellite observation. One information center (40 ft. X 32 ft. X 10 ft.) is located in the geographical center of the repository footprint. The message in seven languages will be engraved on granite walls inside the Center. The center will be an open construction to permit observation of its contents using natural light. The second center, also called the Storage Room, (39 ft. X 22 ft. X16 ft.) is buried in the controlled area outside the berm and contains very detailed messages. The room is sealed and constructed of granite slabs fitted into cut slots. This technique avoids the

need for using grouts and metal attachments. Small disks made of three different materials (i.e., clay, ceramics, glass or sintered alumina) are buried at random intervals 2-6 ft. below the surface ground throughout the repository footprint. It is intended that some of the buried markers would be unearthed and serve as a warning to any individuals attempting to exploit resources via drilling and/or mining activities. A remote handler hot cell, a cell of concrete walls 4.5 feet thick and extending 60 feet above grade and 20 feet below grade constructed to provide a radiation shielded facility for unloading and manipulating containers of radioactive waste during facility operation period, will remain as an archeological monument after decommissioning the WIPP site (Trauth 1993; DOE 1996).

The Yucca Mountain project, is intended for the most-forbidding-of-all waste, is still deliberating its respective marker system as part of the ongoing tumultuous Compliance Certificate Application process. Meanwhile, a hypothetical and refreshing, although quite naïve, design endeavor has taken place.

The Plutonium Memorial Competition

Seeking solutions to the problem of plutonium disposal, in May 2001 the Bulletin of the Atomic Scientists called on artists, architects, and visionary thinkers to design a "Plutonium Memorial." The premise behind the competition was that if we build a prominent "storage" facility, possibly powered by the heat of radioactive decay, we would always know where the stuff was and "we would not have to worry about the human tendency to forget about burial grounds after two centuries," writes Linda Rothstein, the Bulletin's editor and the conceiver of the contest (2001, 29).

The winning entry by Michael Simonian of San Francisco was titled 24110 (the precise measure in years, according to
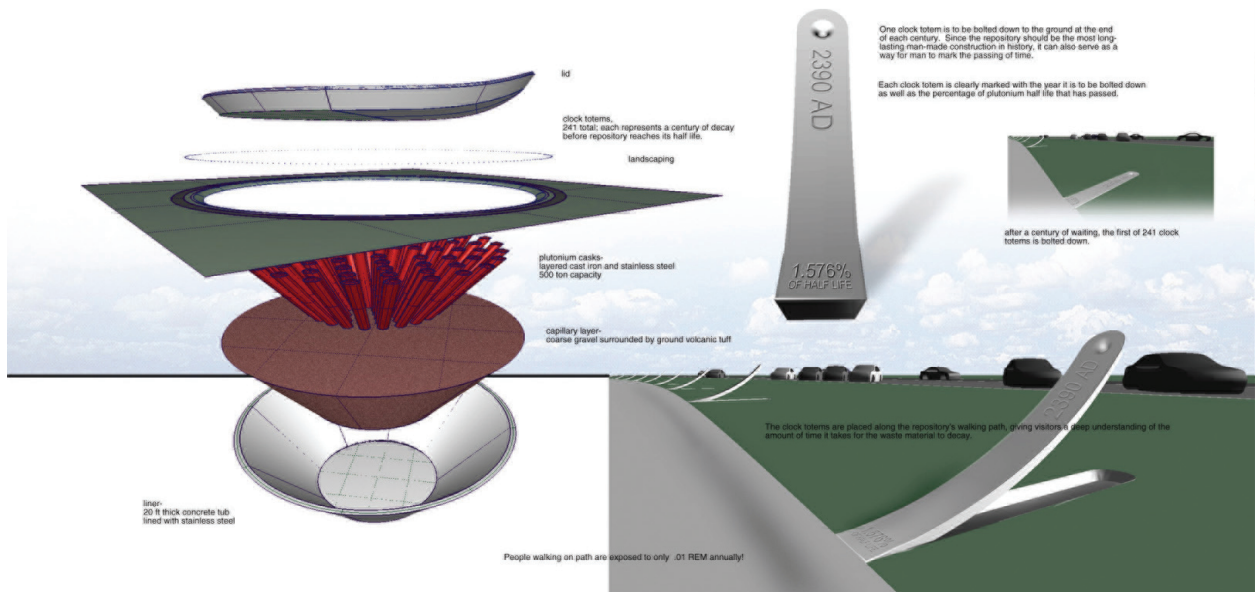
some scientists, of the half-life of plutonium-239); it located the memorial south of the White House in Washington, D.C. (as opposed to the Nevada desert), and under a partly lifted, circular lawn "carpet." A capillary layer of gravel and volcanic tuff covers the casks and a walkway is marked with "clock totems," a would-be 241 flared steel tabs, one of which would be bolted to the ground every century to mark the passing of a little plutonium half-life. The sitting turns upside down two sacred conceptions: the out-of-sight (and in the poor's backyard) and the great American lawn cover-up. It wittily states that sweeping the issue under the carpet is no longer an option.

Imagery and ideation in the Plutonium Memorial Contest. A jury comprising an artist, an architect, a Nobel Prize laureate, a board member of the Bulletin, and the Bulletin's editor reviewed the 150 entries from twenty countries and weighed each solution's appearance, elegance, novelty, sense of humor, and practicality. Competitors were not restricted to any specific format or medium; rather, they were asked to consider safe disposal and follow a simple guideline requiring that the almost 200 metric tons of plutonium piles awaiting disposal around the world be separated into small quantities of no less than 200 grams or more than 10 kilograms, and placed in airtight containers to prevent chemical reaction. My study of the top fifty submissions to the contest finds that the entrants, mostly but not all artists or designers, assumed one or more of the following roles: image maker, edu-

cator/social programmer, developer, and cultural critic.

The following four broad design concepts emerge: 1. Memorial as architectural monument: a building and a marker for people to see, know, and be aware of. This is primarily a formal, image-maker approach to the problem. 2. Memorial as public facility: a museum and/or an event center, an amenity overlaid on top of a liability. This concept is conciliatory, utilitarian, and mostly didactic in nature. 3. Memorial as tourist destination: commonly accompanied by entertainment and leisure activities. Taken as serious or humorous, this concept considers the memorial an economic investment. 4. Memorial as critical message and catalyst for change: primarily a political, symbolic act. This moralist approach informs the public and holds those most responsible accountable.

Memorial as architectural monument. Almost half of the proposals examined take the mere shape of a building as the prime task. Burying the plutonium underground in canisters, they search for an appropriate signifier above ground—and find it in traditional military symbols, such as bunkers, missile silos, rockets, submarines, or modern towers, forts, and moats. One of these proposals belongs to J. Brantley Hightower, the first runner-up, whose memorial located along I-55 between Chicago and St. Louis creates a radial geometry that emulates the impact area of the atomic blast in Nagasaki and disrupts the midwestern agrarian grid. Like a cita-

Labels in figure:
- lid
- clock totems, 241 total; each represents a century of decay before repository reaches its half life.
- landscaping
- plutonium casks- layered cast iron and stainless steel 500 ton capacity
- capillary layer- coarse gravel surrounded by ground volcanic tuff
- liner- 20 ft thick concrete tub lined with stainless steel
- People walking on path are exposed to only .01 REM annually!
- 2390 AD
- 1.576% OF HALF LIFE
- One clock totem is to be bolted down to the ground at the end of each century. Since the repository should be the most long-lasting man-made construction in history, it can also serve as a way for man to mark the passing of time.
- Each clock totem is clearly marked with the year it is to be bolted down as well as the percentage of plutonium half life that has passed.
- after a century of waiting, the first of 241 clock totems is bolted down.
- The clock totems are placed along the repository's walking path, giving visitors a deep understanding of the amount of time it takes for the waste material to decay.

1.4

del, tall, ominous modern buildings mark the edges of the radial rays and house the plutonium storage areas and the museum. The highway cuts across the space and channels people into to a large parking lot and then into a museum. Other proposals in this category allude to burial images of catacombs and mausoleums. Human skeletons and bones were used explicitly in two proposals, indicating in the first the danger of digging in the site, and in the second the deadly damage caused to bone marrow by exposure to radiation. A glowing light, the potent symbol of radiation, is evident in numerous proposals. Many of the architectural monuments are sited near an existing plutonium production, testing, or burial site, such as Rocky Flats, Colorado, or the Nevada Test Site.

Memorial as public facility. The creators of ten projects chose instead to relate to the monument as a public gathering facility, specifically a museum with the goal of educating visitors. The pure geometry of the pyramid, sphere, and dome, often used in civic buildings, dominates. Brian Phelps's Pu 94 uses ninety-four pyramids organized as orbiting electrons around a plutonium nucleus (based on the outdated

Niels Bohr model). The facility celebrates and educates viewers about the marvels of nuclear science. The sphere, the most popular symbol of perfection and spiritual wholeness, is used in six proposals, alluding to the fragility of planet Earth, its limits and preciousness. Michael Collins, the second runner-up, designed a courtyard in Florida in which visitors walk below a solar canopy lined with floating spheres of plutonium in shallow reflective pools on their way to an exhibition room, a large spherical museum.

Memorial as tourist destination. Seeking to create a tourist attraction, ten proposals capitalize on consumer culture sentiments and offer family entertainment for getaway weekends. Rides, restaurants, I-Max theaters, and souvenir shops are integral to these designs. Proposals locate these "memorials" near other major tourist destinations, such as Disney World or Las Vegas, or off major freeways and tourist routes. Several of these designs seek to provide a dramatic clash of fantasy and reality; others highlight compatibility and economic benefits. Three proposals incorporate a casino, one shaped in the form of a roulette wheel on a defunct oil rig in the ocean.

But the most outrageously witty design is Konrad Schwoerke's U.N. Plutonium Depository, a mushroom cloud–shaped building topped by a four-star restaurant and located in Orlando, Florida, with a connecting tram to Disneyland. This tongue-in-cheek proposal crosses the line and moves the concept into the fourth category—memorial as critic.

Memorial as critical message and catalyst for change. Consumerism also pervades some of the memorials intended to serve as cultural critics, perhaps implying that the key for change may require addressing rather than avoiding capitalist consumer culture, which is largely responsible for the militaristic government agenda. The thirteen proposals in this category can be divided into two groups: the pacifist-hopeful and the skeptical-subversive. They are characterized by mobile or decentralized and multiple memorials that "reach" those responsible for creating the problem in the first place. Two of the memorials chosen by the first group—a flying saucer and a dirigible—are mobile, moving between decision-making places (military and government sites) and docking at plutonium production sites. Everyday street el-

24110
permanent plutonium waste repository

©2002 Mike Simonian
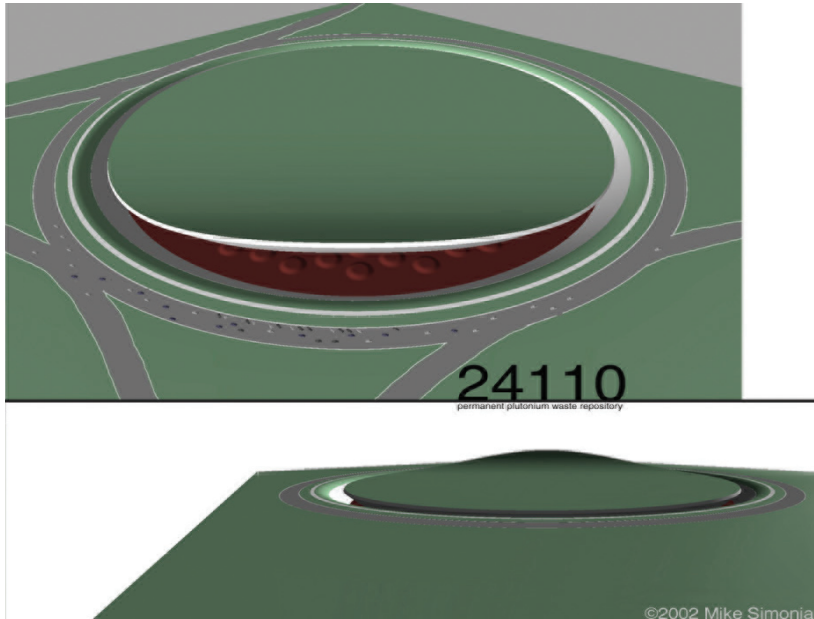
ements, such as seating and display props, are used in other proposals to contain and mark the plutonium. It is assumed that distributing the material to place it near all people might trigger actions powerful enough to stop plutonium production.

Proposals in the second, more cynical group in this category also use images of the everyday, but borrowed from personal, domestic, and utilitarian domains—an egg, an ice cube tray, jewelry, a silver ball game, and even human excrement. Icons are selected for their symbolic charge. In Eggs and Keepers, Friederike Huth and Almust chose the egg because its fragility and need for care. The egg-shaped container is to be shipped to the heads of thirty-three governments that produce plutonium for safe-keep. Jaren Joyce and Lang Boomer propose to "freeze" and "cool" the hot, glowing material in ice cube trays and place them on the lawn of New York's Central Park as public sculptures. Finally, Matteo M. Bologna's Pu Pile uses a naïve, cartoonish drawing to demonstrate his shit-shaped memorial. An equivalent of ancient monuments, our excrement will be our legacy and it can be placed where slag plutonium is excreted.

The competition initiators did not imagine anyone building such a structure. Skeptical about these proposals' practicability but serious about their discursive value, they hoped to provoke and invigorate the public. Meanwhile about 150 sites storing spent nuclear fuel, high-level radioactive waste and/or surplus plutonium across the country are awaiting proper geologic burial. The damage being done to underground water supplies and rivers and to entire ecosystems is irreversible. Also troubling is the possibility of a terrorist attack or an accident. Could we as environmental designers truly make a meaningful contribution to this urgent, unparalleled, and formidable task?

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NOTES

1. The projected price tag for the high-level nuclear repository in Yucca Mountain is $50 billion for 70,000 ton waste; for WIPP at New Mexico the projected cost is $9 billion for 174,000 cubic meter of TRU and some mixed waste. The money spent for environmental management clean up of nuclear waste sites has surpassed the cost of weapons production in the Department of Energy's total budget, making it the agency's largest program.

2. Radioactive waste is divided into 3 main types: High level (HLW), Transuranic waste (TRUW), and Low level (LLW). According to the DOE, HLW is "the highly radioactive material resulting from the reprocessing of spent nuclear fuel, including liquid waste produced directly in reprocessing and any solid material derived from such liquid waste that contains fission products in sufficient concentrations;" TRUW (waste with atomic number greater than 92, that is of Uranium) is defined "without regard to source or form," it is "waste that is contaminated with alpha-emitting transuranium radionuclides with half-lives greater than 20 years and concentrations greater then 100 nCi/g." Most TRUW is in solid form and consists of materials such as protective clothing, rags, tools, etc. that are contaminated with TRU elements," such as plutonium; LLW is "any radioactive waste not classified as high level waste, Transuranic waste, or uranium mill tailings."

3. The disciplines on the Markers Panel included anthropology, archaeology, architecture, astronomy, communication, design, engineering, geology/geophysics, modern languages, linguistics, materials science, psychology, semiotics, and sociology. The Futures Panel included individuals with backgrounds in history, future studies, economics, law, physics, sociology, geography, engineering, political science, risk analysis, agriculture, climatology, history, and demographics (Trauth et. al, 1993.)

4. Plutonium -239 is a fuel for nuclear fission, produced in nuclear reactors from uranium-238.

IMAGE CREDITS

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refuse to see

Brownfield development in the Czech Republic

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One of the world's largest concentrations of brownfields exists in a region which contains parts of southwest Poland, the former East Germany, and North Bohemia, aptly known as the Black Triangle. Blame for this environmental devastation falls on communist coal consumption from 1948 to 1989, the impact of which was not only deforestation but also an explosion in the number of cancer cases in the region. This environmental degradation was so severe that it stimulated grassroots political action and motivated, in part, the revolutions that brought the Warsaw Pact to an end. With the fall of communism came massive layoffs and the closure of the largest tracts of factories and storage facilities in Europe.[1] Today, although these nations are fully integrated in the global economy, they have only just begun to address the environmental and economic impacts of these brownfields.

My studies focus on this landscape because of the extent of its emissions and its role in the temporal politics of global warming.

HERITAGE

Heritage embodies culture passed on to subsequent generations through tangible and intangible ways of knowing the world. It is what a culture perceives as valuable to its contemporary identity, a view of the past lodged in their collective memory. Memory is shared over generations through myth, performance, ritual, and in the tangible embodiment of cultural objects. Embracing the totality of

2.1 Guben, Germany. A power plant near the Polish border set near a recreational corridor.

these emissions as their heritage activates a cultural memory and indicates the destination of the region.

The Black Triangle remains socially and politically contested. In July of 2005 people joined hands in the village of Horni Jiretin to protest Mostecka Uhelna, a Czech coal mining company whose activities threatened a nearby three hundred year old castle.[2] Jiretin Castle is valuable to the sector of society which stands in opposition to the underlying causes of the decaying landscape.

The castle's deterioration is the result of a historically pervasive conflict between economics and the environment. Coal consumption, which began 400 years ago, was more recently hastened by the Council for Mutual Economic Assistance, a Soviet-led regional development organization, whose goals were driven by profit.[3] The Council, as an agent of the State, had a monopoly on information gathering and dissemination in regards to the environmental impact of these factories. Due to the state-imposed regulations, even the scientific community was prevented from offering environmental critique. In the 1960's and 70's, coal dependency was so strong that 80 German and 117 Czech villages were destroyed, and regeneration of the sites stopped completely.[4]

By the 1980's forests on the Krusne Hory mountains between the Czech Republic and Germany were dead from acid rain. Environmental protest became an expression of discontent with the power structure, linked to concern for human rights and justice. Protest finally became the act of liberation. In February 1988, Polish officials were the first to admit that ecological problems existed in the area. By the end of that year, the Academy of Sciences reported that twenty-seven areas covering a tenth of Poland had suffered 'a complete breakdown of a state of natural balance.'

After the 1989 revolutions, support for environmental groups waned. The end of

2.2 Grossrachen, Germany. Erosion along the edge of a brown coal mine before water inundates the space to manufacture a recreational landscape.

the communist regime reduced the occurrence of sulfur dioxide when coal production temporarily decreased as society adjusted itself to the political transition. The European Union's pre-accession period was seen as an opportunity to clean-up public life and public spaces.[5] EU funds helped update smokestacks and decrease immediate public health threats while reforestation efforts were bolstered by donations from abroad.

The Czech Republic and Poland joined Germany in the EU in May 2004. Socialist era transboundary environmental disputes and territorial battles became obstacles to the funding of restoration projects. Despite ideological change, the land use pattern persists. In the postmodern period, physical change to the industrial landscape generally occurs when infill or restoration makes financial sense. Sites remain vacant for the same reason. Socialism could not afford to regenerate mine pits in the last days of its hold on society; global democratic capitalism cannot afford to remake the ruins. The North Bohemian landscape erodes because it produces fossil fuel energy for a global economy.

GLOBALIZATION

Globalization is another name for the sequence of events that led up to the deterioration of the Communist Bloc. When the Czech Republic (split from Czechoslovakia in 1992) moved toward the EU, it joined a broader movement that is reshaping the landscape at an un-

2.3 Cinovec, Czech Republic. Numerous political and ecological shifts along the Czech/German border is expressed in landscape character.

precedented rate. The last fifteen years of globalization are different than previous globalization eras because of narrow time gaps between technological innovation and the implications of moving messages and capital across space.[6] Knowledge intensive economies accumulate information and trade it for material goods. The hardware of modern life, "bent metals" like cars and

appliances, are the most electricity intensive commodities. Coal is the main global source of electricity to the power grids. It accounts for nearly 30% of all global fossil fuel consumption and 37% of fossil fuel emissions of carbon dioxide, the chief agent in global warming.

The Czech economy has grown at the fastest rate in eight years; last spring the World Bank labeled the Czech Republic an advanced economy. According to the Czech Statistical Office, the bulk of this growth derives from international trade. "CEO Briefing: Corporate Priorities for 2005," a report by the Economist Intelligence Unit, found that the Czech Republic ranks third behind India and China as a site for global offshoring. Indians invest in offshore opportunities there almost as frequently as Americans. The report surveyed 500 senior executives who noted the country's attractiveness due to its favorable business environment, cultural ties and proximity to emerging and established markets in Europe. CzechInvest, a state supported development organization, offers incentives such as access to clean, subsidized industrial sites and infrastructural amendments.

Clustering is a planning tool that allows optimal infrastructural investments. The Usti region, epicenter of Socialist environmental devastation, is the national cluster for chemical production, heavy industrial manufacturing and lignite, or brown coal, mining. Brown coal generated electricity is fed almost immediately to the power industry in the cluster accounting for 47.7% of the total national energy consumption.[7] At the moment there is no official brownfield legislation in the Czech Republic. However, the Ministry of the Environment, in cooperation with CzechInvest, offers a system of incentives for recovery of industrial sites.

What we see in the landscape is that the preference for greenfields surpasses the economic benefit of restoring an industrial wasteland. The knowledge economy, or the economy of service production, re-

2.4 Lauchhammer, Germany. After coking, coal is stored in the relic silos at a site undergoing restoration.

lies on laws to produce income, whereas the global economy, containing the most polluting of corporate acts, is far removed from the viewshed.

THE WORLD IS (STILL) NOT FLAT

In his first work on globalization, "The Lexus and the Olive Tree," Thomas L. Friedman captures the waste issue in a quote from Baxter International, Inc. a health products company: "It is better to have all our international waste today go to reputable waste sites. Thus we can be in better shape to avoid big potential liabilities in the future."[8] The irony of contemporary capitalism is that as wealth increases, it requires an increasing amount of space to deposit its waste, making large tracts of land less valuable.

Despite the borderless nature of globalization, regulating waste sites is a national (or state) activity. Friedman quotes Glenn Prickett, vice president for corporate partnerships at Conservation International, "There is no hiding place for bad corporate behavior in a world of globally interconnected activism."[9] He goes on to explain that this is why the Ford Motor Company is funding CI's research on the Brazilian Pantanal. However, in the Czech Republic, Ford operates through subsidiaries in a way that cancels conservation claims. In 2001, Nemak, a Ford subsidiary that produces high-tech aluminum automotive components, built a factory on remnant agricultural land in the township of Hlavna in the Usti region. The plant's operations are expected to release toxic substances; contaminating the food supply as well as the landscape."[10] This site was chosen despite

the availability of brownfields where environmental impact would be lower.

A statement by a Nemak spokesperson reveals the investor attitude: "Investors like greenfields. There are brownfields, but why would we build a factory in the middle of a former coal pit? They would have to pave the roads with gold for us to go there."[11] Legislating brownfields frees a corporation from responsibility and smooths capital growth. Brownfields become placeless sites of crisis redeemed by knowledge-based professions in law, public health and administration. For the Czech Republic to achieve its remarkable rate of GDP growth, investments cannot be made in the landscape. A legislated system of waste disposal transforms matter into ever less traceable forms.

To compete in the global marketplace technology must be constantly updated. In the present framework capital accumulation exposes its alter ego in the abundance of unavoidable refuse. Mountains reforested, the denuded Black Triangle landscape exists in the memories of the people who lived and worked in the region under Communism. The appearance of global warming in scientific literature indicates how quickly humans forget their mistakes in the spirit of growth.

FUTURE HERITAGE

A report released by researchers at the MIT Joint Program on the Science and Policy of Global Change states that the absence of penalties or restrictions on carbon dioxide emissions implies coal use for electricity generation will grow over this century due to its abundance and relatively low price compared to other sources of energy.[12]

In the decades ahead, China, the world's largest coal consumer, will become the worlds largest economy. In his second globalization work, "The World is Flat," Friedman's view sharpened on the energy issue. He states, "This [Chinese urban migration] will spur a huge surge in demand for cars, houses, steel beams, power plants, school buildings, sewage plants, electricity grids-the energy implications of which are unprecedented in the history of Planet Earth, round or flat."[13] For the moment China consumes only two-thirds the energy of the United States. Both countries top the list of coal consumers who refused to sign the Kyoto Protocol.

Tim Edensor, writing an antithesis to the placeless heritage industry, says, "Ruins have long symbolized the fear that civilizations eventually crumble, that empires eventually fall."[14] Guidebooks instruct tourists not to venture to Black Triangle cities. It is an archetypal production space, where manufacturing spaces relate to dwelling through the act of work and pollution. The heritage frame around production redirects the public gaze and enables enactments in

liminal industrial places. The living landscape becomes text read by a global cast to reveal complex narratives that move beyond national borders.

The problem does not belong to the Czech Republic. We are all collaborators in the unfolding atmospheric drama. The problems of the global culture are too intertwined to be well resolved in the nation-state framework but the dual issues of coal based electricity and material consumption will be worked out in this system. Heritage here links contemporary ideology to the loss of Communist meaning in an ongoing destructive performance. Gazing at this landscape under the blanket of global warming tells us that the capitalist production landscape is nearly as obsolete. The Black Triangle as our global heritage opens ideological questioning: as we walk through the stream of debris, the region affords a glimpse at the epic scale of transitions that await us in the truly post-industrial world.

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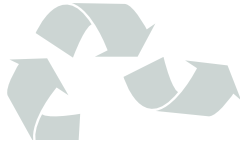[13]Friedman, T. 1999. *The World is Flat.* New York: Farrar, Straus, Giroux:409
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techno-green

Can new technology help us design an end to waste?

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We live in a culture of desire. Because of our consumerist longings, we bear daily witness to a prolific stream of refuse and pollution. In our guilt, we have begun to act: we've called on industry to clean itself up, we've incorporated recycling into our daily routines and we've started exploring greener energy sources. Meanwhile, our consumption has accelerated and shows no signs of slowing. In the face of this seemingly intractable problem, a growing number of thinkers are shifting their focus away from culture and industry to another culprit: design. Since design drives the cycles of fashion and style that produce so much waste, shouldn't designers be responsible for finding a solution?

Around the world, many designers are beginning to see themselves as well poised to address this issue. Intriguingly, their solutions bear only passing resemblance to traditional environmental thinking, combining design sensibilities with materials science, digital technology and cutting-edge business practices. With these tools, proponents say, designers could not only help clean up the mess we've gotten ourselves into but keep our economy racing along in the process.

All of these developing solutions primarily stress a complete understanding of the life cycles of various products. In most traditional efforts to address the waste issue, importance is placed on integrating green thinking into a linear series of events. This sequence of events starts with cleaner production and increased product longevity and ends with an effort to recycle as many resources as possible before they end up in the trash. Increasingly, this view is coming to be seen as incomplete. Though product durability, clean factories and ease of recycling are crucial elements in any solution, many in the field want to push beyond these methods in order to close the life cycle loop. What's being suggested in this new model is a way of designing a product that is not just about creating a physical object but about designing a complete logistical plan for the entirety of the object's life-span. This includes explicit instructions regarding materials to be used, fabrication methods, distribution modes and exactly what should happen when a

3.1 Bruce Sterling at a recent nanotechnology exhibit at the University of California Los Angeles.

product's owner decides to dispose of it. These products would be meticulously designed with individual roadmaps that take the guesswork out of each step of the process. If toxic trash, overfilling landfills and depleted resources are unintentional consequences of design, they can, theoretically, also be designed out of the system. Several plans of attack have been developed which incorporate different, but mutually supportive, methods.

THE CRADLE TO CRADLE MOVEMENT

William McDonough, one of the major proponents of life cycle thinking, has a vision of the future in which landfills and garbage incinerators are obsolete. To get there, he thinks we need to abandon our current "cradle to grave" way of thinking in which waste is accepted as

a fact of life and we try to manage it as best we can. He proposes instead a "cradle to cradle" approach that eliminates the very concept of waste. Instead of being thrown away, used products are recaptured and separated into what he terms technical and biological nutrients. Technical nutrients are materials like metals and plastics that can be eternally reused by industry to make new products. Biological nutrients are the biodegradable elements of the product that could be safely discarded. Designs would take into account the disassembly of products into these two component categories, clearly communicating how to get the technical pieces back into the flow of production and the biological pieces returned back to the earth.

Trained as an architect, McDonough works with high profile clients, including Fortune 500 companies and governments around

the world, to design green solutions for their buildings, materials and industrial processes. These types of organizations are traditionally the worst environmental offenders which is what makes McDonough's work extraordinary. He has shown his clients that being a conscientious global citizen and running a profitable business are not mutually exclusive activities. For example, his firm, McDonough Braungart Design Chemistry, designed materials and processes for a Rohner Textile Plant in Switzerland. When the design was finished, the by-products of the industrial process were wastewater clean enough to drink and fabric trimmings that can be used as mulch. Success stories like this are sporadic thus far but do demonstrate a clear potential for greener industry through good design.[1]

THE SCIENCE FICTION OF SPIMES

A somewhat different yet complimentary set of ideas about green design comes from science-fiction writer Bruce Sterling. An unexpected source, Sterling professes to have little in the way of traditional design ability. Nonetheless, he's currently spending a year as visionary-in-residence at the Art Center College of Design in Pasadena, California, working with students to explore the next generation of design methodologies. Like McDonough, Sterling recognizes the potential for design to revolutionize the landscape of consumption, seeing no incompatibilities between a fast-paced economy and solutions to environmental problems.

Sterling envisions products evolving into green data-collecting objects that he has named spimes. A spime starts its life on a computer screen where it is designed. The design information (including lists of components and materials, corporate contact information, and repair and disassembly instructions) is stored in the spime when it is fabricated. Throughout its life, the spime records information about its location, current market price and any available product upgrades. The product's owner could easily access all of this information at any time, and at the end of the spime's life, the information would determine how to properly dispose of the product. Because the object and all of its components and life events, like repairs and

A MORE COMPLETE PRODUCT LIFE-CYCLE

DESIGN	Green Concepts
FABRICATION	Green Materials
DISTRIBUTION	Green Transport
SALES	Green Promotion
USE	Green Decisions

Large Stream of Reusable Resources

CURRENT END OF LIFE PROCESS
• Recycling, Landfills and Incinerators

NEW END OF LIFE PROCESS
• Redistribution, Reprocessing and Natural Decomposition

Large, Hazardous Waste Stream

Small, Safe Waste Stream

3.2

modifications, are recorded, it can be intelligently redistributed, piece-by-piece, thereby seamlessly folding back into the flow of production. Connect the spimes together and you get what Sterling calls an "internet of things" that know everything about themselves, including where their components could be best reused, should an owner decide it's time for something new.[2]

REDUCING OUR RATE OF CONSUMPTION

For strategies like Sterling's and McDonough's to make the greatest impact, their constituent parts need to be put in place concurrently. For instance, Sterling's spimes would have little environmental benefit if they became widespread before a system for keeping them out of landfills was developed. Tim Cooper, in an article titled "Slower Consumption," calls attention to the danger of technology outpacing industrial and cultural practices.[3] Cooper argues that a major component of any sustainable consumption strategy should be increased product durability, measured as the time between the purchase of an item and its disposal. This takes into account traditional meanings of durability like craftsmanship and reparability, but also expands the definition to include factors like

fashion and technological obsolescence which significantly impacts how long a product is in use today. The more durable a product, the longer it stays out of the landfill. In this way the environmental damage incurred during the making, distribution and disposal of an object can be amortized over a longer period of time. Along with the inclusion of green materials and processes, slower consumption could yield great benefits.

Unfortunately the enormous cultural changes that would need to take place to actually slow down consumption, especially in the face of growing global affluence, mean that concurrent solutions working on a faster scale need to be developed. Slower consumption also means slower economies, a step few wealthy nations and increasingly few developing nations want to take. New strategies like Sterling's and McDonough's offer the incredible prospect of satiating our need for speed, while saving us from ruining our planet in the process.

THE FUTURE OF GREEN DESIGN

As these plans unfold, not only will we see companies focusing on the design and production of better products, but new industries will also emerge to manage the logistics of dealing

with what was formerly considered waste. New businesses will be needed to track, redistribute and reprocess a stream of eternally recyclable products. These are solutions that, if carried out thoughtfully, could ensure that as dirty industry is designed out of the system, a cleaner version is developed to take its place. The goal is a lateral shift, maintaining jobs and economic growth, while removing inefficient behavior.

Calls for action from people like McDonough and Sterling tap designers as the authors of these ambitious plans. Countless independent thinkers, loosely connected by an increasingly ubiquitous global communications network, have taken up their challenge (see sidebar on previous spread). What these activists all have in common is the desire to design a bright green future while keeping, and even celebrating, our current culture. Though designers have been complicit in their role as sellers of this culture, new plans are on the table that don't condemn them but designate them as the standard-bearers of this new consumerism without waste. Efforts to decelerate consumption may make headway somewhere down the road, but at a time when millions of people are looking to buy their first computers, cars or houses, actions that put green products into their hands are necessary right now. Technologies and processes need to be developed to produce clean, safe and smart products and to turn what was formerly trash into nutrients for industry and earth, all at a pace that keeps up with the global marketplace. Before this happens, designers will need to convince consumers, clients and themselves that they can reinvent their discipline in order to create this faster kind of green.

NOTES

1. William McDonough's strategies are detailed in a book coauthored with Michael Braungart called *Cradle to Cradle: Remaking the Way We Make Things* (North Point Press, 2002.)
2. In a forthcoming pamphlet in the Mediawork series from MIT Press titled "Viridian Design," Bruce Sterling will discuss his framework for building a techno-green future.
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what termites can teach us about our trash

A biomimicist's view on waste in nature

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When it comes to new and innovative design, some of the best ideas come from the most ancient sources of the natural world. Take, for example, the waste-processing system of the termite. Their mounds, which, compared to their body size, are significantly larger than any of our most technologically advanced skyscrapers, are made from the cellulose "waste" of the forest. Termites process the wood with their own saliva to make a clay and wattle system that is both strong and naturally waterproof. That, says biomimicist and life scientist Janine Benyus, is a natural process that designers can emulate.

The term "biomimicry" describes an emerging methodology that has been attracting devotees from the disciplines of biology, design and material science since Benyus published the first book on the subject, *Biomimicry: Innovation Inspired by Nature, in 1997*. All species of life have evolved over the last 3.8 billion years, making them extremely well-adapted to living within the confines and constraints of their own environments. Biomimicists look to these extremely efficient and complex natural systems for cues as to how we, as humans, may live more sustainably within our own ecosystems.

In a recent interview, I asked Benyus to describe how nature deals with waste, if, that is, the concept of "refuse" is indeed found in nature. Benyus first described the toiletry patterns of the Kingfisher, a common bird found along sand banks. "When kingfishers poop, the poop is encapsulated within a sort of membrane," said Benyus. "The male or the female picks it up, in its own little bag, and flies out and drops it. So, certainly there is a case in which fecal waste has to get far enough way. The reason is not that it is excrement and that it is smelly, but that it is delicious – to certain organisms, like bacteria, which are not so good for the kingfisher young." All natural waste, then, is actually food for something else, and it is only detrimental if it's in the wrong place at the wrong time. Excrement that is "inside the kingfishers' burrow," continued Benyus, "is in the wrong place simply because there's also going to be bacteria there that will be breaking down the waste – or what we call waste."

> "The reason that there is no waste in the natural world is that it is all designed to be easily used by something else, by some other part of the economy."

The upcycling of nutrients through the life cycle is a theme that is found in all of nature's waste processing systems. That is a fundamentally different way of approaching waste than we as humans traditionally view it. "There is waste in our society," said Benyus, "because there are things that people don't want or that people can't use. There is a design problem there. The reason that there is no waste in the natural world

is that it is all designed to be easily used by something else, by some other part of the economy." In our current recycling methods, we send products to one singular plant for them to be disassembled and the parts then shipped away. In the natural world, that same task is completed by a variety of organisms in different trophic levels, each contributing individually to the decomposition of the product while simultaneously benefiting from the nutrients it provides. To demonstrate this process, Benyus described the decomposition of a leaf: "The first level might be some insects that come in and break it down into larger pieces. What they're doing is getting the molecules that they need; they are going to upcycle those and create an insect body out of them. But in the process of getting their needs met, they've broken it down and made it more digestable. Suddenly it has more surface area. Then, maybe another smaller insect can get to it, and the same thing happens. Follow that little insect all the way up, and you can find the little bird that is eating it, and the bigger bird that's eating that small bird. It is getting upcycled in those bodies." Most importantly, all of the organisms that participate in the process are not recycling, but building. "We think of it as if they are affecting decay. They don't think of it that way," said Benyus. "They're building bodies."

This way of thinking is beginning to influence the way we manage waste, especially in the cycles of agricultural production. The Zero Emissions Research & Initiatives Group (ZERI), for example, has been working to redefine waste as a resource, not as garbage to be cast aside. Benyus described one ZERI project with Brazilian coffee farmers, where "they will go in and say, 'What are you doing with the shells of those coffee beans?' 'Well, nothing. We're throwing them out. They're waste.' 'Why don't you take the shells of those beans, put them in burlap, add a little water to them, and grow some shitake mushrooms?' " The conversation does not end there. ZERI workers then ask, " 'What are you going to do with the spent grain when you pluck the mushrooms?' 'I don't know; we were going to

4.1 Janine Benyus leans in to examine a spider at a biomimicry workshop held in Costa Rica in April 2005. From left to right behind her are participants Christopher Briceño, Anya Fiechtl, and Craig Tovey. The Biomimicry Guild often hosts week-long workshops at various locations throughout the world to encourage designers and biologists to work together at the design table.

4.2 Biomimicists look to natural processes like the waste processing systems of these termites as inspiration for design ideas.

throw it.' 'Well, why don't you feed it to these pigs?' " The cycle continues, from the production of pork to the growth of expensive spirulina algae that feeds off of the pigs' waste. This type of approach, says Benyus, leads to marketing of a whole ecosystem, instead of one single product. "You will go to Whole Foods some day," she explains, "and you won't buy coffee. You'll buy coffee, dried mushrooms, and spirulina algae, and you get a story. You buy the whole thing." That is a demonstration of the power of upcycling at its best.

The benefits of emulating natural processes are not limited to biological and agricultural examples. Benyus has begun to hold a number of workshops specifically aimed at architects and landscape architects who wish to incorporate the principles of biomimicry into their design processes. A recent workshop in the Virgin Islands challenged architects to design a recycling center for the island of Mahoe Bay. At first, the participants planned a traditional centralized facility that would serve as a drop off point for the collection of waste. Then they looked back to the termite, the native "builder" and "recy-

cler" of the island's ecosystem, as a source for inspiration to design an entirely new waste treatment system. Instead of serving as immobile collection points for waste, the termites go out to various sites to find it. They then chew the waste and process it into building material as they continue along the route to their next destination. In imitating this process, the workshop

"We think of it as if they are affecting decay. They don't think of it that way. They're building bodies."

participants "designed a service in which a truck, sort of like a cement mixer, would go to a site where there was waste, take the waste, and, while driving on the highway, be processing the waste, sort of like a termite stomach," described Benyus. Instead of bringing the material back to a central storage facility, the trucks would continue to the next building site for reuse. "Where is the waste in that equation?" asked Benyus. "It is always in the process of becoming a new building material."

The life of the termite is only one small example of how we can design based on natural processes. As the biomimicry movement gains momentum, natural forms and systems will continue to inspire new innovations for designs that are more sustainable than current practices and grounded in the adaptations of the natural environment. With more than a million other species of insects alone left to examine, what will inspire the next generation of waste management?

IMAGE CREDITS

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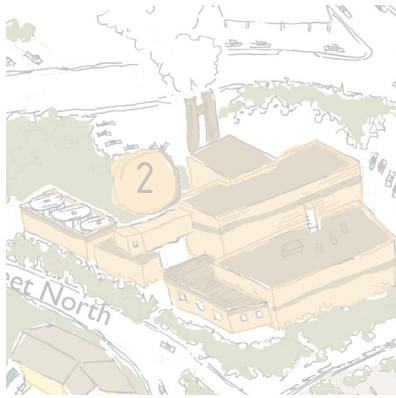
trash, trucks and tubs
The architecture of utility

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There has always been a need for architecture, just as there has also always been an architecture of need. We need structures for certain practices of our society. These practices, and often the architecture that is created to accommodate them is not glamorous. But these sorts of structures have been needed, and built throughout time. The Roman aqueducts, the iron bridges and train stations of the early twentieth century, and even the parking garages and power plants that concern us

5.1 Flowers amid discolored wire spools, 5th street north.

A Typical COVANTA
Waste-to-Energy Facility

1. Tipping Floor
2. Refuse Holding Pit
3. Grapple Feed Chute
4. Feed Chute
5. Martin Stoker Grate
6. Combustion Air Fan
7. Martin Ash Discharger
8. Combustion Chamber
9. Radiant Zone (furnace)
10. Convection Zone
11. Superheater
12. Economizer
13. Dry Gas Scrubber
14. Baghouse
15. Fly Ash Handling System
16. Induced Draft Air Fan
17. Stack
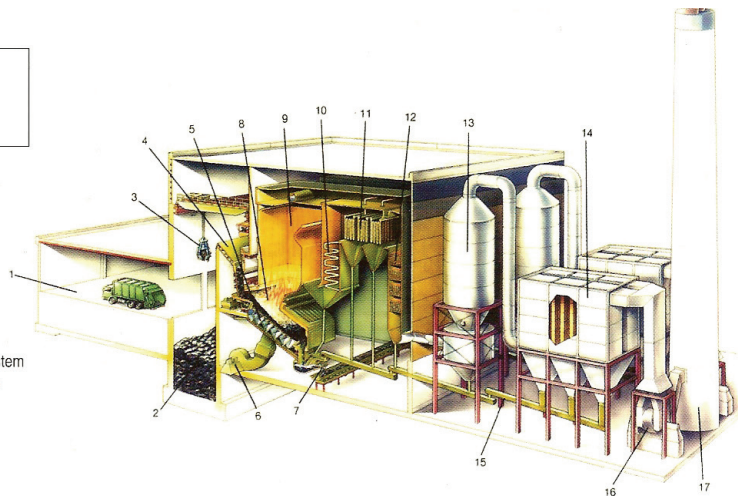
5.2 Diagram of the operation of a typical incinerator.

today all attest to the power of utility as a driving force in architecture. If we are to discuss the architecture of utility, we must first define the two different meanings of utility. The first: utility as a state of being useful; the second: the moral and political rightness of an action is determined by its *utility*, defined by Jeremy Bentham as its contribution to the greatest good of the greatest number. This present examination of the architecture of utility is concerned with the tension between these two different meanings as they are embodied in the infrastructure of a particular portion of the city of Minneapolis.

In a triangular area east of downtown, Minneapolis has its own district for architecture of utility, bounded by Interstates 94 and 394 on the east and west and highway 55 to the north. A leftover space, it houses most of the city's shelters for the homeless, as well as three pieces of its waste stream infrastructure. It is a place of "placelessness," a place to house that which is needed, but needs to be out of view. Here trash, trucks, and tubs have emerged as the focal point of the area. The collision of these three different aspects of the city's material waste system within the same space is not an accidental one.

As exemplars of the architecture of utility, the Hennepin County incinerator, the Currie Maintenance Facility, and Tubs Inc illustrate the duality inherent in this type of architecture. Because they all share in both

the city's waste stream and a neighborhood defined by unwanted things, these facilities and the specific functions that they house illustrate the way in which we design for utility, and rarely *utility*. As architects we need to start seeing projects like trash incinerators as opportunities to shape architecture around *utility*. If this were the case, the trash, trucks, and tubs of Minneapolis might become more than objects of necessity.

TRASH:

Hennepin Energy Recovery Co. (HERC)
Minneapolis Incinerator

No one wants to live next to an obnoxious neighbor, which explains the location of the Hennepin Energy Recovery

Co. (HERC). But burning garbage aside, the facility turns the things we throw away back into useable energy. It accomplishes this feat with minimal emissions of sound and smell. As it stands, much of the city's trash finds its way through the doors of the incinerator, but we as citizens rarely think about our waste after we leave it out on the curb. We either forget, or are oblivious to the simple fact that this waste does not just disappear. Matter cannot be created or destroyed, only rearranged into a different state. However well we design an incinerator, it is never going to change this simple fact about our world.

Every piece of the incinerator is designed to hide the material waste from view. The

5.3 Exterior view of gas scrubber and fly ash bagging system.

5.4 Currie Street Maintenance Facility main entrance.

waste arrives in trucks that stagger their arrival times so there is never a backup of garbage trucks in the neighborhood. From the main entrance, the garbage trucks follow a road behind the incinerator, wrapping around the facility to a large opening at the east end. A quick-closing door has been added to this opening to decrease the amount of time that the surrounding area is exposed to the smell of the garbage inside. From this point, the garbage is housed in the tipping room until it is harvested by a crane operator that feeds garbage into the feed chute. This chute leads to the combustion chamber. From here fly ash is separated and is fed to a discharge area where it is bagged and sent to landfills along with other particulate matter separated out from other portions of the process. The combustion process causes water to change to steam in the boiler and is then pumped to a turbine to store the recovered energy. Gases from the

boiler are then passed through multiple filters to remove more than 99 percent of the particulate matter in the gases. Eventually it finds its way out of the stacks and into the atmosphere. There must be a shell that houses these operations, but does it necessarily have to conceal?

If we are to explore the *utility* of the incinerator the answer to the previous question might be no. It is of course a matter of public good, because trash is both unsightly and hazardous to human health, but we should also consider the costs to human health in perpetuating the invisibility of waste. All of the efforts to disguise the type and amount of waste we produce only further alienates us from it. Much research has been spent in recent years studying termites and the way that they reuse their own "waste," eliminating the concept of waste altogether. If we were to approach the incinerator as a design

problem with this new mode of utility in mind, we might find an architectural solution that allowed that waste to be visible. It might be possible to use the incinerator both as a means to reclaim energy, and as a tool to show the public what it is throwing away.

TRUCKS:
Currie Maintenance Facility

Maintenance garages are usually nondescript, anonymous pieces of the city. The award-winning Currie Maintenance Facility, designed by Architectural Alliance, is intended to be both obvious and oblivious. It serves as a centralized location for the maintenance of the city's fleet of vehicles. Built to the scale of a truck, it is thus functionally organized around that spatial unit. Located on Currie Avenue, at the gateway of downtown; the maintenance facility has a prominent visual posi-

tion, however, it is still subdued against its backdrop of nearby industrial buildings. But this is not entirely an industrial neighborhood. Many of the city's displaced and unwanted citizens inhabit these "industrial" buildings, and an architecture of *utility* might begin to acknowledge that fact.

As an object within the landscape of the city, this facility is meant to be industrial, both in practice and in aesthetic. From the moment one peers through the large windows on the Currie street façade looking into the cavernous truck bay, it is clear that this facility is meant to serve trucks. The exterior is clad mostly in corrugated metal, giving it a sleek, mechanical appearance. Its low rectilinear proportions are consistent with those of its neighbors. Few buildings in the area rise above two or three stories, and most expand linearly rather than vertically. All of these physical characteristics come together to make a building that is somehow unremarkable, but remarkable for being so.

In spite of its disappearing act, the facility also has a sense of openness and vibrancy. The large windows on the street façade give the rather mundane and uninspiring task of truck maintenance a new life. Spaces like this rarely find their way into the glossy pages of magazines, but in this particular facility, it is the functional and aesthetic heart of the building. The feeling of openness is also enhanced by the skylights over the truck bay that admit abundant natural light into a space that in most buildings would be lit with dull fluorescent track lighting. The simple gesture of allowing the maintenance bay to emerge from the heart of the structure shows an interest in the literal functions of the building. Utility is aesthetized into a sort of diorama on the exterior façade of the building.

The Currie Maintenance Garage is a beacon of activity in the community. It manages to stand out and fit in at the same time, but this is only the case when one considers the industrial neighborhood

that it is housed in. The homeless and displaced community that resides in a complex network of shelters and treatment centers that surround the maintenance facility are unrepresented in this view of the neighborhood as industrial. The garage's industrial exterior virtually ignores its social context. It is another instance of utility trumping *utility*. An architecture of *utility* might attempt to be inclusive to this "invisible" population. This is not to say that architects can end homelessness, but if we begin to change our architectural value systems to no longer be satisfied with mere utility in structures of this sort we may surprise ourselves. Maybe the idea of the Currie Maintenance & Homeless Shelter is not as far fetched as one might think.

TUBS:
Tubs, Inc.

The tub is a transitory spatial entity, designed to house waste for a short period of time, and then to be emptied and reused again. Tubs act as temporary and mobile disposal units for waste within the city, forming a continually changing network of waste removal sites. The space inside a tub is most frequently used by homeowners as a receptacle for discarded building

materials, and that fact makes the tub an icon of failure for the architectural community. Architects are often charged with the duty of designing a building that will last, both physically and fashionably, for fifty to one hundred years. But often the tub arrives at the site in much less time than we, as architects, might like.

The unassuming garage that serves as Tubs, Inc.'s distribution facility is unlikely to be a stop on an architectural tour of Minneapolis, but eventually some portion of most residential architecture will pass through this facility and its army of rentable tubs. This is the utility of the tub. The current housing and real estate boom has caused many to pick up a hammer and a crowbar and go to work on some of Minneapolis' best examples of outmoded residential architecture. Though few of these current residences were ever touched by an architect, their transformation under the hands of energetic homeowners results in the removal of material waste. Whether this occurs due to taste or necessity, the result is the same. A tub comes to the site, it is filled with debris and discarded building materials, and then the tub is removed and its contents are shipped off to various disposal facilities. It is an extremely simple and efficient process that brings waste

5.5 Tubs Inc. facility, 5th Street North.

from all over the city into a single site near downtown Minneapolis.

It is now well understood by most architects that almost half of the waste in most landfills comes from the building trade. It is also now quite well understood that we need to change the way we design, build, and remove our buildings. Intelligent design can lead us to a reduction in material waste finding its way into tubs.
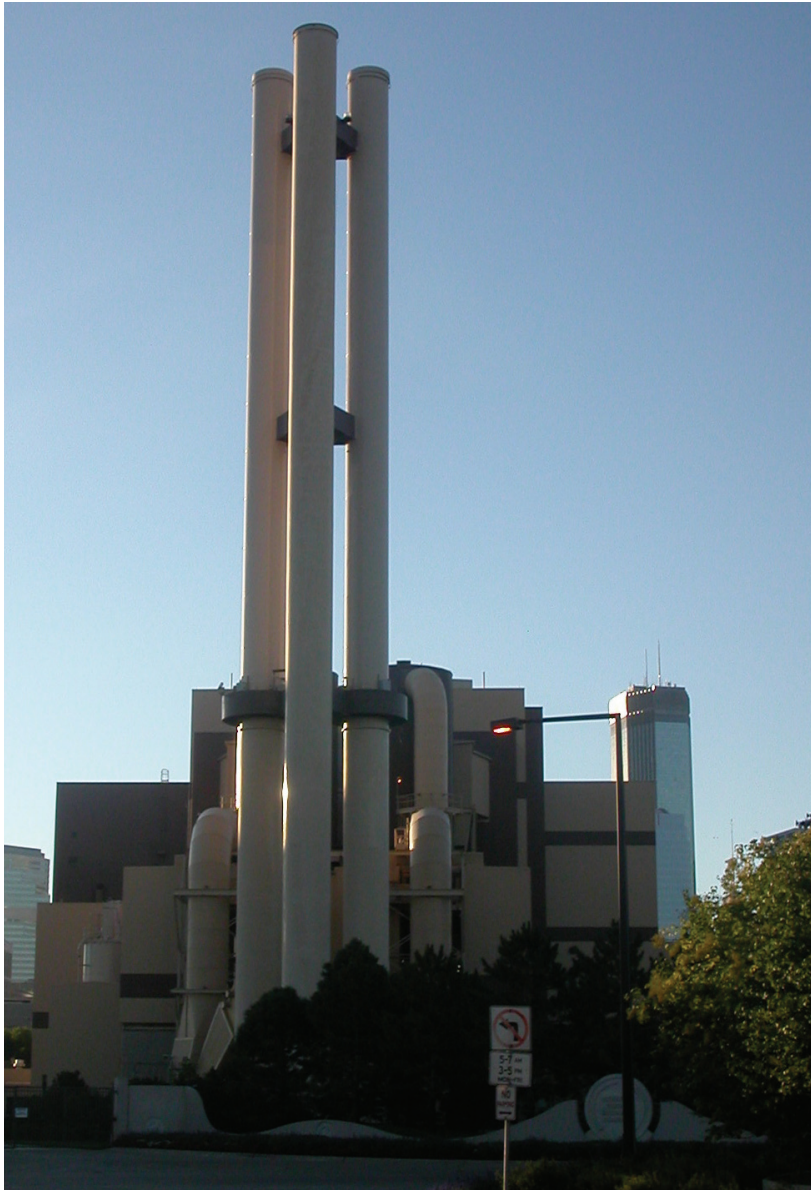
There are many design philosophies that can make an impact, including the use of recycled or recyclable materials, designing for dismantling and reuse, and designing for longer lifecycles. But there will still be a need for the tub. The *utility* of the tub is seen not in its individuality, but in the unit as a collective network. We do not improve the tub by making a prettier one; we improve the design of the system as a whole. If we focus on *utility* rather than just utility, the system might become a productive part of the architectural cycle. One possibility is to capitalize on the transient nature of the tub, and create a weekly parade of tubs on their way to the landfill. This type of cultural event would illustrate to the public just how much impact architecture has on the waste stream of our city.

UTILITY VS. *UTILITY*

If the architecture of utility is built to satisfy a need in order to illustrate the point that merely satisfying a need is not good enough. If we are to laud architects who create a perfectly functioning incinerator, but make no attempt to affect the community around that object, we are doing that community a disservice. Such a project doesn't have layers of meaning, and we don't learn from it; it just burns garbage really, really well. Utility as the state of being useful, even taken to the limits of perfection, produces merely an object that works for its intended purpose. The removal of architecture from the social context that surrounds it strips architecture of its potency. It is naïve to believe that architecture alone can save the world, but to simply remove the goal of achieving something beyond functionality and treating architectural objects as if they existed within a vacuum is equally naïve. If this is so, it is time to shift our thinking about functionally driven architecture. It is time to replace the architecture of utility with an architecture of *utility*.

IMAGE CREDITS

5.6 Incinerator stacks looking east.

refuse

ri-'fyüz

rejected, cast off; declined; denied.

the faces of mary's place

On the 25th of March, my mother sat and told us that after March 31st, 2005, we wouldn't have a place to live. As she spoke these words, tears were in my eyes and we all started to cry. She was quick to comfort us. She told us that a counselor at Saint Davis had given her a number to a nice shelter where we all can go. On March 28th at 10:00 we all came to Mary's Place. There we received a warm welcome and Mary Jo herself told my mother that she had a place for us. On Monday March 28th, we moved in and now we have a place to stay. Given a week to do whatever I wanted to make someone's life better, I would volunteer my time at Mary's Place when I'm old enough.   -Ashley, age 11

In October of 2003, the Wilder Research Center conducted a one-day study of homelessness throughout Minnesota. The Center found that 20,347 people were homeless or precariously housed on that one night. About half of them were children, and 59% were homeless for the first time in their lives.

One of the many charitable organizations that seeks to serve this ever-growing homeless population in the metropolitan area is Sharing and Caring Hands, a privately-funded resource

6.1 Mary's Place

6.2 Natasha Jennett

6.3 Tashanna Jennet

founded by community activist Mary Jo Copeland. In 1995, Copeland opened Mary's Place, a transitional housing shelter adjacent to Sharing and Caring Hands that contains 92 fully furnished private units. Catering to families, Mary's Place provides childcare, laundry facilities, counseling, medical care and job search resources to its residents to help them get back on their feet. That process takes anywhere from a few weeks to, in some cases, up to a year.

To find out what it's like to call Mary's Place home, the staff of *t/here* interviewed four families currently living at the shelter. What follows are excerpts from our conversations.

NATASHA JENNETT
Three children, ages 4, 7 and 8
Length of stay at Mary's Place at time of interview: 12 days
Last place lived: Denver, Colorado

They call them transitional apartments. The bigger families have the bigger apartments, and it's just like having your own apartment. And you don't pay for anything! My apartment is a two bedroom. The living room and the kitchen are together, and then you have the bathroom and the kids have their own room and I have my own room. You have your own telephone, you have a voicemail to set up on your telephone, you have free cable TV. The resources are great.

At first, when I first came here, it was [hard to accept all of that.] But now, I'm adjusting. I've never been in a shelter. When I first came here, I cried for days. It wasn't bad; it was just the situation. I didn't want to be here. Sometimes you think that when you go into a shelter, people look at you differently. I'm like, okay, everybody's going to look at me like, "Why is she here?" It was really just me, trying to adjust. That's all it really was. It was hard for me, but since I've been here for a couple of days, it's okay. I look at it as, it didn't hurt me - it's helped me.

6.4 Jasmine, Hezekiah and Tamara Leflora

TAMKIO AND ROBERT LEFLORA
Six children, ages 10 days, 1, 3 4, 6 and 9
Length of stay at Mary's Place at time of interview: 3 weeks
Last place lived: Chicago, Illinois

Out here, people believe in helping. Out there in Chicago, they help, but we don't get the help that we get here. It's way different. In Chicago, they don't have shelters like this. We're staying in Minneapolis! We can walk out the door, and people speak to us. We don't have to worry about anybody shooting us or sticking us up. We can go to the bus. Sure enough, there's a lot of homeless people out here, but they still say, "Hi, How'you doing, do you need help?" Back at home in Chicago, we walk out the door and have to hold purses really close. It's a really different environment.

It's a hard time, but people are still wonderful here. We got a lot of help since we've been here. We came with just two bags of clothes, and now we have a big bag and a lot of toys. It's a wonderful environment.

This is like home. You can make it your home, if you obey by the rules. The only thing they ask is to keep your room clean. You can cook in your room, bathe in your room, the laundry is free, and the kids have an after-school tutoring program. It's really convenient for everybody. This place is about trying to better yourself.

6.5 Ariel LeFlora

MISTY GREEN
Three children, ages 4, 6 and 8
Length of stay at Mary's place at time of interview: 2 months
Last place lived: Topeka, Kansas

We took $300 and got on a Greyhound bus, took what we could carry in the luggage, and came to Minnesota. We were living in Topeka, where there are just no jobs, no schools. There weren't any opportunities, and I knew I wanted to go somewhere. I knew I wouldn't have any money. I wouldn't have a place to live, so I wanted to live in a place that offered opportunities. I called all sorts of places. I would just call grocery stores and police stations and ask questions. In Minneapolis, everybody I talked to took the time to talk to me. There were hardly any states that offer a shelter for a family. Most of them do not want men. There were only three out of all the large cities that would consider letting a man in, and I am married.

I didn't know about Mary's Place until we got here. We just came here, and it seemed that everywhere we went, somebody told me, "Have you heard about Mary Jo?" I was like, well, I guess I should check this place out! I came up here and we walked in to Sharing and Caring Hands. It was during lunch, and there was a huge line of people. It was freezing outside. Usually when you think of a shelter you think of one room with 100 people all sleeping on the floor, all sharing a bathroom. We had no idea what to expect. So we came up here, and literally, five minutes after we walked in the door, we were standing in our apartment. We walked in and couldn't believe it, that we actually had our own place, with beds. It's a wonderful, wonderful place.

What makes it such a good place is the resources. Somebody could put you anywhere, and say, "You have three months. Do what you can and get out." But [Mary's Place] has the things you need to better yourself – that's what makes the place. It's not just the fact that you have

6.6 The Green family

a room and a bathroom and a shower. It's that I have the ability to learn more. I have a computer, a phone. That's how you get a job. The tutoring room for the kids, the playroom, the outside area, the little basketball games – those are the things that make [Mary's Place] what it is.

Sometimes, people come and look at our room. My walls are just covered in art-

work from the kids. That's what we do all weekend long: paint. Every time Monday comes, we have a whole bunch more pictures. I write the dates on them, and that's something that we'll always have to be able to remember where we started. I'll always bring them. That's what makes it home – something that I'll always bring with me forever.

6.7 Cyris Green

JACQUELINE PHELPS
Four children, ages 2, 5, 12 and 14
Length of stay at Mary's Place at time of interview: 1 month
(This is Jacqueline's second stay at Mary's Place. The first time, she stayed for three months.)
Last place lived: Northern Minneapolis

My rent was $1100, and once you get one month behind, you're in debt. My landlord was pretty nice, but I just came back and asked Mary if I could stay again. All my money was going towards rent – rent and utilities! We couldn't go out to eat, really, or barely buy food, because once you start working, they take everything.

After that point, it just got pretty rough. The rent is so high! I'd love to stay here in Minneapolis, but I don't have degrees to get a good job. There are a lot of things I can do and I'm a quick learner, but I just need a job. It's really the rent – why is it so high? It's ridiculous, and some of these places aren't even worth it.

What Mary provides for you is wonderful. It's a chance for you to get on your feet. She said, "This time, take your time, and try to find something." She understands about how high the rent is. I see what she's saying now. It really is a struggle, and I've seen that. Even with a two-parent income, just trying to maintain and survive – it's pretty rough.

Being here, I wish I could stay. I think they need more places like this for people. It makes you feel like you're at home, even though it's temporary.

A lot of people say you're only one paycheck away from being homeless, especially the way the economy is today. I understand that, because that's how it was for me. Some people can understand, some don't. Because I didn't, before I became, you know, homeless. But I understand now.

IMAGE CREDITS

Figures 6.1-6.8
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6.8 Jacqueline Phelps

6.9 Letrell and Lyric Ford
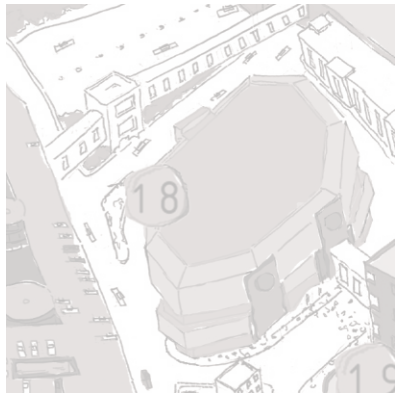
home among the homeless

Thomas Fisher
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On a side street near downtown Minneapolis, among older houses not far from a highway, there stands a modest, cream-colored church, whose basement serves as a food shelf during the day and as the Simpson Shelter for single homeless women at night. The food shelf has a door to the street, but to enter the shelter, you have to go down the alley behind the church and around the other side, to a narrow space next to a neighboring yard. There, you'll find an unmarked door that leads to the basement shelter. It may seem like a labyrinth getting there; but for a few dozen women, this is home.

When we first went to the Simpson Shelter to serve the women dinner, I couldn't find the place, even with the address in hand. This, I thought, is one reason why we have a homelessness problem in this country: we keep homeless people so out of sight that they remain out of mind. Places like Simpson play an unwitting role in this. While it gives women much needed shelter, it also shelters the rest of

us from our responsibility to deal with the problem by removing the homeless from view. Of course, this happens only at night. The Simpson Shelter's doors open at 6 pm, but the women must be out by 7 am the next morning, having to walk the streets, ride the bus, or occupy public places the rest of the day. The homeless, in other words, are very much in view, although few of us seem to register their presence, often walking by them as if they didn't exist. We have rendered the homeless psychologically as well as architecturally invisible, not seeing what is in

7.1 For a few dozen women, this is home.

plain sight, in much the same way that we do other aspects of the urban environment, such as telephone poles, trash cans, overhead wires. I had come to Simpson for many reasons, one of which was to stop my own habit of "not-seeing" these people.

When I finally found the shelter, I parked the car and walked to the back door, wondering if the homeless women who slept there wanted that unobtrusive entrance,. This reminded me of the often unseen entrances to the homes of the very wealthy, behind high walls or down long driveways. Why, I wondered, do both the richest and poorest seem to yearn for the same thing: privacy? The word privacy has the same Latin root – privatus, which means,

"taken away," and privare, which means, "to rob" – as the word privation; and it may be that one leads to the other. The privations of the homeless women who come to the Simpson's unmarked door may yearn for privacy, having been deprived of it by living all day on the street. And yet, the privacy that the wealthy can afford robs them of something else, the deprivation of having so few interactions with anyone unlike themselves. Although very few Americans ever become wealthy, the ambition to be so may be one reason why we so value privacy, and why we so impoverish ourselves by minimizing our contact with anyone at all different. Maybe our blindness to the homeless stems from a certain blindness about ourselves?

7.2 There stands a modest, cream-colored church, whose basement serves as a food shelf during the day and as the Simpson Shelter for single homeless women at night.

I rang the buzzer by the shelter door and waited, balancing the food we had brought for dinner in my arms. After several moments, the door opened and an elderly janitor popped his head out, looked at the food, and said with a smile, "Oh, they're going to eat well tonight!" His friendliness and sense of humor echoed in the laughter I heard coming from the bottom of the stairs, which caught me by surprise. I had prepared myself for a somewhat grim evening, among people who I thought would be dour, given the situation they face. Instead, I found an unexpected light-heartedness, not only with the janitor, but also among those who run the shelter and many of those who stay there. Philo, the Roman philosopher, once said that those who "neither commit an injustice nor return it unto others … lead a life full of joyful laughter." We so often think that laughter comes when we have everything we want, but it may be that true lightheartedness comes from the opposite, from our not wanting anything, which leads us to not take account, said Philo, "of physical discomforts or exterior evils."

Of course, not wanting anything and not having anything are not the same. It depends upon whether we choose such a course or have it imposed upon us by others or simply by the circumstances of our lives. As we set out the dinner in the kitchen, I listened to the women as they slowly filed into the large room that served as their dining hall and dormitory, with its series of mattresses spaced out along both side walls and a few tables and chairs set up at one end. The women greeted each other almost as a family would, with stories about their day: how one had talked to her daughter after many months of estrangement, how another had told her abusive boyfriend she wasn't coming back, and how a third had a good day of tips in her job as a maid at a downtown hotel. The woman who ran the shelter explained that many of the women had been here for a long time, either continuously or in spurts. They would leave

7.3 There, you'll find an unmarked door that leads to the basement shelter.

to make a go of it and then return if it didn't work out. "They may be homeless," she said, "but this is home for many of them." She also said that a sizable number had either mental illness or addiction to deal with, which made holding a job and finding a home very hard.

I remember growing up, listening to my psychologist father talk, with great bitterness, about the government closing many of the mental hospitals and criminalizing many of the addictive drugs without funding the half-way houses or drug-treatment centers needed to help the people affected by it. Those policy decisions, in turn, prompted the precipitous rise in the number of homeless people in downtowns over the last forty years, with few places for these people to go for help or shelter. I wondered if the politicians would have

made such decisions had they ever stood in a place like the Simpson Shelter and actually listened. These women were anything but lazy or dependent. They had incredible endurance – hauling all of their worldly belongings with them all day, walking miles without giving it a thought, going out into a Minnesota winter at 7 am with no place to go – and amazing optimism about the future, despite the lack of help or hope from the rest of us. I'd like to see one member of Congress survive more than a week this way.

With the food set out in the kitchen, the women formed a line, with trays and silverware in hand, seeming surprised and pleased to be served by those of us volunteering that night. Some of the women seemed very hungry, with one of them saying that she hadn't eaten all

day, while others picked at their food, as they talked about their diets. After about a half hour of conversation, the women busied themselves with chores – washing the dishes and cleaning up the kitchen, doing laundry and taking showers, and unpacking their bags beside their assigned mattress. By 8 pm, those of us serving had packed up our plates and platters, leaving leftovers behind in case the women needed food the next day. By 9 pm, the lights were out in the shelter, with a 6 am breakfast beginning another day for them on the street.

Such is the ordinary quality of the extraordinary lives those women lead. In a nation so dominated by utilitarian values, with public policies so often pitched to the prejudices of the greatest number of constituents, small populations of people

who don't fit the norm, like single homeless women, often get ignored. They become politically insignificant. But for an architect or an urban designer, the homeless have a professional significance that far outweighs their numbers. If doctors have, as their fundamental task, the provision of health, and lawyers, the provision of justice, architects and urban designers surely have as our essential duty the provision of shelter, of a home for every person. Our political system does make that very difficult, with exclusionary zoning, restrictive building codes, insufficient social services, and under-funded housing agencies. But such obstacles do not obviate the duty we have to those who most need our services, those with the least ability to pay.

As I drove home that night, thinking about how I take for granted that I have a home to go to, and as I awoke the next morning, wondering what it must like to be back out on the street at 7 am, carrying everything I own, I realized that the architectural community has far more power to change the lives of the women of the Simpson Shelter than we think. We sit on zoning boards and help write building codes; so why do we allow situations where, for example, many zoning codes allow only churches to provide homeless shelters, while many building codes make it almost impossible for the churches to comply? We often have, as clients, the wealthiest and most powerful people in a city; so why don't we use that access to show how the relatively small investments needed by the homeless can bring large amounts of re-investment in downtowns? And we have our own professional responsibility to look after the public's health, safety, and welfare; so why aren't we relentlessly speaking out about homelessness in the popular media and in public forums?

Maybe we all need to see the problem firsthand. Go serve a meal at a shelter. Offer pro-bono service to a housing non-profit. Start seeing the homeless on the street. Professions must profess something, stand

7.4 When I finally found the shelter, I parked the car and walked to the back door, wondering if the homeless women who slept there wanted that unobtrusive entrance, which reminded me of the often unseen entrances to the homes of the very wealthy, behind high walls or down long driveways.

for something other than their own self-interest, and I can think of no better stand to take than that every person has an inalienable right to a home.

IMAGE CREDITS

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ex-topias:

The eradication of the heterotopic urban landscape.

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You step out of the door of your residence. It is a location; a fixed place by geographical standards. It possesses an indicator of both street and number. It has a longitude, and latitude as well as a host of other positional paradigms common across the globe.

You walk over to your car and enter, starting the ignition. At this point in time your car is in a fixed position with its own location. But with you in it, your position begins to exist with multiple location signifiers: you are both in the car, and in a geographic location where your car is parked.

Drive out onto a highway and the signifiers begin to multiply. You are both on a road, in a car, and at a specific location which changes with each passing second. You are also moving from a certain place and to certain places each having their own location. Furthermore, these roads are only inhabited by the automobile, and not by the individual. The human presence, independent of their vehicle, is non-existent in this space. These simple sets of relations have begun to compound rapidly, both in number and difficulty as we attempt to classify them into distinct categories.

8.1 Minneapolis waking up.

8.2 Skyways connect to the garages creating a physical divide.

Michel Foucault used a similar set of relations to define sites of transportation, only instead of the automobile, he spoke of a train which he illustrated as "an extraordinary bundle of relations because it is something through which one goes, it is also something by means of which one can go from one point to another, and then it is also something that goes by."[1] To exist in multiple contexts is something we are very familiar with in contemporary culture. We often find ourselves fitting within an enormous assemblage of different networks and classifications of people, places, and organizations of varying function. In March of 1967, Michel Foucault gave a speech entitled "Des Espace Autres," which translates into "Of Other Spaces." It is precisely these "other spaces" of which I wish to speak. In this speech Foucault presented a theory of a sort of non- or anti-utopia that he described as having six ordering principles and existing as one of three types of realities that we attempt to bring into existence, the heterotopia. These six principles serve as the theoretical basis for establishing an area as a heterotopia as well as to describe the essential role it plays in the urban environment.

Currently, these in-between spaces, or heterotopias, are being quietly removed from our urban environments and replaced with environments that are thought to be more beneficial to the city. Socially active programs which are financially strapped are displaced in favor of condos filled with tax payers that will bring extra revenue to the downtown metropolitan areas. This action has caused further blurring of the boundaries between urban and sub-urban. In the struggle for dominance, the heterotopias are often mislabeled as refuse. Therefore, if the heterotopias of the urban landscape are eradicated, what does their absence mean to the city?

WHAT IS A HETERTOPIA?

It is almost easier to describe what a heterotopia is not than it is to describe what it is. Foucault's reasoning is that in the human mind, there exists the concept the of utopia, which consists of "sites with no real place. They are sites that have a general relation of direct or inverted analogy with the real space of society. They present society itself in a perfected form, or else society turned upside down, but in

any case [they] are fundamentally unreal spaces." He juxtaposes these places with a sort of hyper-reality that is formed "in the very founding of society." These sites are a "kind of effectively enacted utopia in which the real sites, all the other real sites that can be found within the culture, are simultaneously represented, contested, and inverted." Operating in contrast to the utopian ideal, he dubbed them heterotopia, and asserted that although they may possess geographic locations, they have boundaries that are in a state of constant flux and exist on a number of different planes of existence depending on who you are and how you experience these spaces.

THE MIRROR

In addition to the heterotopia, Foucault also speaks of another ordering concept of space: the mirror. Described as "a sort of mixed, joint experience," the mirror qualifies as both a utopia and a heterotopia under Foucault's guidelines. It is both a placeless place, and at the same time exists in our plane of reality. It does not constitute any place of reality, instead reflecting your image and thereby displacing you. "I see myself where I am not, in an unreal virtual space that opens up behind the surface; I am over there, there where I am not, a sort of shadow that gives my own visibility to myself that enables me to see myself there where I am absent: such is the utopia of the mirror."

Alternately there is an aspect of the mirror grounded in reality which serves services to create an alternate version of your person, redefining your place in real space. "From the standpoint of the mirror I discover my absence from the place where I am since I see myself over there. Starting from this gaze that is, as it were, directed toward me, from the ground of this virtual space that is on the other side of the glass, I come back toward myself; I begin again to direct my eyes toward myself and to reconstitute myself there where I am." The reality of the mirror creates an alter-

nate image which serves to make you more firmly entrenched in your space in reality by making you hyper-aware of your surroundings. The key is that you can only find that hyper-awareness of your placement in space by passing through that mirror to a virtual place and back to reality. This is paramount to the understanding of how space is manipulated in not only the mirror, but also the heterotopias of our urban landscapes.

THE SIX PRINCIPLES

With the establishment of Foucault's three typologies of space: the utopia, the heterotopia, and the mirror, we can shift our focus to the Rapid Park area in terms of Foucault's six principles of the heterotopia. Each principle will differentiate aspects of the area and show how this space and the heterotopia in general serve as a vital thread of the urban fabric.

THE UNIVERSAL SPACE

First Principle. There is probably not a single culture in the world that fails to constitute heterotopias. That is a constant of every human group. But the heterotopias obviously take quite varied forms and perhaps no one absolutely universal form of heterotopia would be found.

While we are examining one area in Minneapolis, by definition, these spaces exist across the globe, in every culture. Heterotopias form the infrastructure upon which the city functions and has roots inseparably intertwined with those of a city's formation and evolution. Furthermore, Foucault states that by its nature, the city requires a place in which deviations may manifest themselves, where people may go when they do not fit into the norm. Pregnant women, the elderly, the mentally atrophied, or the adolescent male making his transference to manhood all fall into this category according to Foucault and were traditionally sent from the village to perform or endure these deviations away from common society. In contem-

porary society many of these still manifest themselves within the realm of heterotopy including nursing communities, prisons, shelters, strip clubs and psychiatric wards. They are places that are found beyond the traditional boundaries of society, and usually isolated from view. These safe havens for the 'less fortunate' or 'less accepted' fall between the cracks of the contemporary urban landscape, and when 'discovered,' they are oftentimes displaced or discarded altogether.

THE EVOLUTION OF THE CITY

The second principle of this description of heterotopias is that a society, as its history unfolds, can make an existing heterotopia function in a very different fashion; for each heterotopia has a precise and determined function within a society and the same heterotopia can, according to the synchrony of the culture in which it occurs, have one function or another.

Rising out of the Mississippi River, Minneapolis was built on the shoulders of the

8.3 Barbed wire surrounds a business in the industrial part of the city.

flour industry, which utilized the power generated by Saint Anthony Falls to run its mills. As a direct result of this economic prosperity, the northern loop and warehouse district of Minneapolis began to develop, gaining prominence over the community of Saint Anthony across the river and eventually overtaking its "twin city" of Saint Paul as the financial center of the state. At the heart of industry and commerce, there emerged an industrial district north of the warehouses and trading floors in the city center. Comprised predominately of one- to three-story buildings, this area was progressively closed off from the downtown as the highway corridors entering the city and the development of the Target Center entertainment complex necessitated a number of parking garages housing up to 20,000

cars a day. This chain of automobile storage forms a sort of battlement, separating the financial identity of Minneapolis from its industrial nature. The heterotopias that emerged during the advent of the city and the vital role they played and continue to play is disregarded and devalued.

Add shelters and other 'fringe' establishments to the mix and they all get tossed over the metaphorical fence and out of sight. But what happens when someone wants to expand? It's not so easy to just pick up the fence and move it, especially when it's worked into the transportation infrastructure of the city. Metaphor aside, what happens when developers realize that they can take advantage of a growing compulsion among the young and privileged to move into vibrant urban areas?

To some, these areas are the underbelly of the urban environment. To many others they represent home, jobs, neighborhoods, and communities. The desynchronizing effect of suburban sprawl, and now gentrification of the urban landscape from the loft boom, has weakened our understanding of the essential role that heterotopias play. Rising out of the fluctuating needs of a city, these spaces may realign and shift roles in order to facilitate the changing face of the city. But, whether grand or grim, these urban spaces fulfill a basic need not met in any other region of the city. Therefore these heterotopias will re-emerge in the urban fabric to fit a continuing need regardless of how many times they are removed or relocated.

THE EPOCH OF SIMULTANEITY

The third principle is that a heterotopia is capable of juxtaposing in a single real place several spaces, several sites that are in themselves incompatible.

At all times and places in contemporary society we are engaged in a multiplicity of webs and networks comprised of thought, economy, emotions, acquaintances, and information that, when examined, may be broken down into separate existences, but not made separate from one another. These networks transcend conventional physical aspects of the built environment, producing a new dichotomy between the built and designed environments. "Connectedness is the spirit of the city, it will most probably remain so for all time with one important qualification: in an era of progressive virtuality, connectedness need not be physical."[2] Foucault adds "We are in the epoch of simultaneity: we are in the epoch of juxtaposition, the epoch of the near and far, of the side-by-side, of the dispersed. We are at a moment, I believe, when our experience of the world is less that of a long life developing through time than that of a network that connects points and intersects with its own skein."

8.4 Move it out.

A quarter of a century later, architectural theorist Charles Jencks attributes these same qualities to what some would consider a vastly different built environment. But these same multivalent tendencies, which become open to a variety of interpretations, along with the juxtaposition of radically different concepts, illustrate the complexities of contemporary life. In Jencks' own forays into the search for unity in this juxtaposition of ideas, time, form and unification through multiplication we can further indulge this thought process and begin to apply it to the site in question.

What happens when many aspects of the urban environment are bundled together despite their numerable differences? In today's society they become heterotopia non grata, the unacceptable space.

THE BREAKING POINT

The fourth principle is that heterotopias are most often linked to slices in time - which is to say that they open onto what might be termed, for the sake of symmetry, heterochronies. The heterotopia begins to function at full capacity when men arrive at a sort of absolute break with their traditional time.

With the exponential increase of technological efficiency, we have arrived at an impasse. The advent of the 21st century is the break with the traditional conception of time of which Foucault speaks. The developed world is wholly dependent on the computer, and virtual networks have spread across the globe combining with pre-existing networks. This creates an ever increasing numbers of avenues available to the individual. With all of these networks acting upon and independent of each other, each striving for their own sense of dominance, it is amazing that people can still view the built environment with the same monochromatic vision they did half a century ago.

Just as Jacques Derrida criticized Heideg-gerian thought as searching for a stable
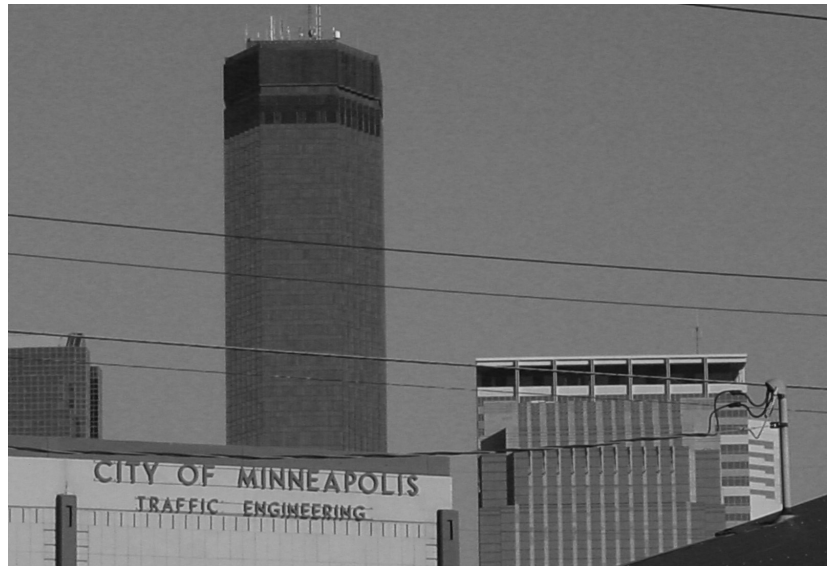
8.5 A view of the city from the farmer's market.

ground or some kind of foundation, the conventions of traditional time no longer apply in the same contexts. What if, as Derrida suggests, the grounding of our ideas of this phenomenon are unstable and fragmented? There is a general desire to feel grounded and stable, to arrive at some sort of cathartic impasse, but the simple fact of the matter is that based on the current complexity of inter-relational contexts, there is the very realistic possibility that we shouldn't feel stability at all. These contexts in reference to the heterotopia are ripe for reinterpretation for the urban environ.

In fact, I would argue that these same overly stable dichotomies are obtuse and outdated, stemming from a society that strove for answers which could be realized and agreed upon as absolute truth. In a contemporary heterotopic state, if full capacity is to be reached, we must breach the confines of a traditional urban environment and allow these spaces to mix with those surrounding them in order to sustain the creation and retention of the heterotopia. Instead of "identifying spaces that represent either a quasi-eternity, like museums, or are temporal, like fairgrounds,"[3] the urban fabric possesses

a third, contemporary, transient space. The redefinition of social boundaries and their acknowledgement and acceptance are paramount to their survival.

THE CITY WALL

The fifth principle is that heterotopias always presuppose a system of opening and closing that both isolates them and makes them penetrable. In general, the heterotopic site is not freely accessible like a public place. Either the entry is compulsory, or else the individual has to submit to rites and purifications. To get in one must have a certain permission and make certain gestures.

From Minneapolis and the individual metropolis and stretching world wide, the heterotopia resides directly adjacent to what one might consider normal or familiar spaces. In Minneapolis, Rapid Park is literally a bordered space with the parking garages and other city utility facilities creating the aforementioned parapet separating from the downtown. But, in many metropolitan environments the change is just as drastic, but more subtle and free of the visual borders of the site under examination. Take the Grosse Point areas surrounding Detroit, Michigan.

8.6 The city wall

THE SPACES OF DENIAL

The sixth principle of heterotopias is that they have a function in relation to all the space that remains. This function unfolds between two extreme poles. Either their role is to create a space of illusion that exposes every real space, all the sites inside of which human life is partitioned, as still more. Or else, their role is to create a space that is other, another real space, as perfect, as meticulous, as well arranged as ours is messy, ill constructed, and jumbled.

Where Foucault describes this sixth principle as an either/or statement, I would make the assertion that the current urban heterotopia is a combination of the two. What better than hetertopias to examine the hustle and bustle of the urban dweller? By observing these spaces and the discordant rigor and motivation which fuels them, the rapid pace and ridiculous motions we go through every day may be brought to light. At the sound of an alarm we all pack into our automobiles or onto buses and head to work. Another bell chimes at nine o'clock, another around noon, and again at five o'clock signaling the time for us to pile back in our cars and return home once again.

The human body is governed by our circadian rhythms and a schedule which is delicate for the most part, allowing some pushing and pulling of our boundaries, but not without consequence. Our over-compensation for this allows for our lives to become ultra-regimented based on the human need for pattern and stability. The problem that arises from this is that our own lives are truly strange, overly regimented, speed-driven existences viewed as normal, so much so that the existence of the heterotopia, despite its invaluable infrastructural and social significance, is viewed as the other, the periphery. And once something is labeled as periphery, it is instantaneously something lesser than the center, possessing less potency and significance.[4] By labeling it as such, we instantly create a dialogue by which we

Driving through the upscale and middle class neighborhoods, you will recognize an immediate change when you reach its borders with Detroit and in a matter of a block you will find yourself in the middle of a heterotopia.

While it may seem devoid of Foucault's compulsory rites or purifications, there is a certain language to such areas, a certain permission one must have that is unannounced, but most certainly necessary to acceptance. Other places in the Midwest such as Chicago's Cabrini-Green easily fall into the same subtle yet pronounced shifts. By walking in a five block radius away from the center of one of the most notorious housing projects in American history, you will find yourself in a host of upscale neighborhoods including Gold Coast and Lincoln Park, two of the most affluent of Chicago's neighborhoods. Furthermore, look at our nation's capitol of Washington D.C., where the head of the most powerful nation on the globe resides within miles of some of the poorest, worst-educated areas within America's urban fabric.

In all of these metropolitan examples, stepping across the street means a whole separate world of circumstances as you pass into an urban heterotopia. The question remains, is this a fundamental flaw in the urban landscape due to infrastructural neglect or will these spaces always exist in direct opposition to the clean and polish of the urban economic centers?

may devalue the space and who and what inhabits that space when it comes time to expand the center outward. Once periphery becomes centralized, it becomes valued, but not until its characteristics have been augmented to fit the hyper-regulated nature of the center. We struggle to create a rigor and order that Foucault discovered can only be found in the natural materialization and re-materialization of the heterotopia.

Unfortunately, an identical hyper-logic is applied to the urban landscape and as a result, we unwittingly reinforce the monotony and obliteration of diversity and adopt the promotion of segregation of thought, class, and race in favor of an order, free from interruption or irregularity. One hitch that many fail to acknowledge, which would allow them to see this prejudice, is the ill-formed logic behind the attempted eradication of these urban heterotopias. The fact of the matter is that these in-between spaces will crop up elsewhere in the urban fabric. By "eliminating" or "renewing" a heterotopia, you do nothing but transpose it elsewhere within the urban fabric. No matter how hard you push or pull, heterotopias are the spatial form of urban energy. They may be displaced, but as the first law of thermodynamics states, they can neither be created nor destroyed, but simply are.

RECLAIM OR REFUSE

Foucault describes that "in the Middle Ages there was a hierarchic ensemble of places: sacred places and profane places: protected places and open, exposed places: urban places and rural places." But as we continue to blur the lines between these we are fueling a paradigmatic shift from solitude as punishment to solitude as independence that the gentrification of urban heterotopias thrives upon. This 'metropolitan manifest destiny' is akin to a hack surgeon performing a face lift on our cities that is neither desired, nor necessary to reconsider or 'beautify' the urban heterotopia. "We hunger for change,

self-transformation, and greater speed in transportation and information. We want to do what we have to as fast as we can do it, so that we will have the pleasure of remembering it."[5]

In dramatic contrast to this craving, Foucault exalted "the ship [as] the heterotopia par excellence. In civilizations without boats, dreams dry up, espionage takes the place of adventure, and the police take the place of pirates." With so many more aspects of our lives in transit, mechanized and moving at the speed of light, where are the ports at which to dock? Compare the significance of the ship to the airplane in our culture and you may begin to see the significance of Foucault's statement. It begs the question: in present-day society, have we have forgotten the ship altogether as we race from place to place, unaware of the journey and completely focused on the destination?

While it may not be apparent, these in-between spaces serve their purpose and must not be overlooked or cast away. As our own modern Leviathan continues to identify and displace these heterotopias we have an obligation to search these places out and evaluate the heterotopia as a mirror for our own lives. The city is about balance within chaos, a teeming mass of humanity gathered for a purpose. The heterotopia is a contemporary port manifested from that chaotic facet of urban life, and in the acceptance of it, we have the opportunity to realize that balance.

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IMAGE CREDITS

the eddy next door:
What happens when the forgotten is found?

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Two centuries ago, when the city of Minneapolis was not, and the State of Minnesota was yet to be, the ground along what is now the corner of Third Avenue North and Third Street North was a muddy wetland with a creek running through it. This swatch of land was adjacent to the only natural falls on the Mississippi River, called MI-NO RORA (curling water) by the Dakota, and Kakabikah (the severed rock) by the Ojibwa. In 1680, Father Louis Hennepin renamed the waterfall St. Anthony Falls. The falls were important to the Dakota and the Ojibwa for their religious significance. For early white settlers, the falls were important as a source of power and profit. But the adjacent area, known loosely by several names—Rapid Park, the Warehouse District, Heritage Park—was as unremarkable to the Native Americans as it later was to the European settlers.

Rapid Park has been set apart from the rest of Minneapolis since it was platted at a 30 degree angle from the established grid of downtown. Hennepin Avenue marks the edge, the last street to follow the downtown gridiron; west of Hennepin, the streets go diagonally northward at a thirty degree angle and their cross streets run perpendicularly to the new datum. Twin Cities writer and historian Larry Millet called this area of Minneapolis "…an urban backwater that over sixty-five years has managed to maintain much of the same character." Millet's metaphor is apt; this area to the northwest of what has become downtown proper has always been a sort of wasteland, an eddy next to the rapid flow of downtown, where flotsam mires in the still- forgotten. Since Minneapolis' mill days, debris of various kinds have found home here: industrial plants, warehouses, flop houses, and in more recent times: homeless shelters, sex shops, the city incinerator, transit stations—in short, places that tend to be in proximity of city centers, but which cannot afford or would not be tolerated in higher rent districts.

Moreover, the eddyness of Rapid Park has been fundamental to its development as an urban form. The dictionary defines eddy as a "current, as of water or air, moving contrary to the direction of the main current." Importantly, an eddy is defined by two things: firstly, by fluid movement; and secondly, and a little more abstractly, it is defined by something other than itself—its adjacency and contraryness to something of greater importance. The eddy requires the main current, but the eddy itself is not the main current. It is the other, the backwater, some place next to but separate from the real and proper movement of energy.

Rapid Park has been defined first and foremost by the mighty Mississippi, and more importantly by the falls. The falls had been a dynamic feature of the river, having moved from St. Paul to their current location as the power of the river slowly pushed a layer of hard Platteville Limestone left by the glaciers, effective-

ly grinding away the soft underlayer of sandstone. The location of the falls next to Rapid Park was, geologically, a temporary phenomenon; it was the forces of the milling industry which, in the early 1800s, with timber and concrete, stayed the recession of the falls and gave Rapid Park its antecedent. Initially, the river itself was the main current to which Rapid Park was adjacent. As the area around the creek developed, its flat terrain attracted the railroads who marked this patch of land and its use for the next century and a half. Trade and commerce became the main current of Minneapolis, and transportation—the railroad—its literal embodiment. Rapid Park was the slow recess along side the seat of action where unloading, storage, and reloading could happen. The land itself was tangential. Its most prominent feature, Basset Creek, was tunneled underground by 1885. The creek was secondary; of primary importance was the area's proximity to more valuable land. Later, with the decline of the railroad, a new transportation system filled in the void that is Rapid Park. A primary interstate highway, and later acres of pavement as well as a series of gargantuan parking structures for storing vehicles, came into Rapid Park, effectively maintaining the eddy.

At present, for a person driving a vehicle in Rapid Park, the one-way streets and mandatory turns either spin one back into downtown or launch one out onto the freeway system, the first exit of which is several miles beyond the downtown. For a person on foot (or a bicycle!), the labyrinth is even more treacherous. Bridges are built without sidewalks. City streets turn into motorized-vehicle-only entrance ramps. And cavernous openings through structures loom forebodingly. The only comfortable space for the pedestrian is the elevated skyway to lead one by the civilized hand back to the car and out of the city.

9.1

9.2 *Stealthy* – hidden "public" space. These are mostly small parcels of land, hidden between private spaces, or tucked behind visual barricades. The public could assemble there, but no one knows it's there.

DEFINITIONS

Steven Flusty, in his 1994 article "Building Paranoia: The Proliferation of Interdictory Space and the Erosion of Social Justice", developed terms to describe the way that the public arena has been revamped such that it is no longer readily usable by the public. Flusty uses the term interdict, which he defines as "stayed bombardment of enemy positions, routes or supplies, for the purpose of delaying and organizing the enemy's progress, to cut off authoritatively from certain functions and privileges." He likens the modern city to war strategies, and names the developers' and planners' weaponry "exclusionary design strategies" (16). His terms are apt for Minneapolis' eddy:

9.3-9.4 *Slippery* – public spaces that are not really accessible, no easements to public arena.

Stealthy – hidden "public" space. These are mostly small parcels of land, hidden between private spaces, or tucked behind visual barricades. The public could assemble there, but no one knows it's there.

Slippery – public spaces that are not really accessible, no easements to the public arena. Slippery spaces in Rapid Park are especially those which were designed at the scale—both in terms of size and speed—of the car. A person could not comfortably access them on foot. Third Street North turns into a freeway entrance. For a person on foot, the street effectively ends. The sidewalk extends just far enough to provide access to a building and then abruptly ends. The three-quarter mile, uncovered, exposed Fifth Street North Avenue bridge has a wooden stair midspan. The stair is both slippery and stealthy. Stealthy, because no one would know it was there; and slippery, because it connects (only for the able-bodied pedestrian) two places that are not places a pedestrian would want to be: the middle of an inhospitable bridge, or the "road" below, which is appropriately named "MTC Turnaround." (Metro Transit Center)

Crusty – spaces with obstructions, walls, gates, check points in short, spaces with physical barriers. The typology of the parking ramps resemble Medieval fortified cities, complete with ramparts and moat-like freeways. The parking structures are located just west of the Target Center, Block E Entertainment Mall, and the restaurants, bars and theatres located in the portion of the warehouse district known as the Entertainment District. The parking ramps were designed to hold the cars of the people coming to be entertained. To a smaller extent, they were intended for daytime workers' cars as well, but less so—as the parking ramps in the various downtown skyscrapers are more convenient for this need. The parking ramps A, B and C each extend

9.5-9.6 *Crusty* – spaces with obstructions, walls, gates, check points, in short, spaces with physical barriers.

9.7-9.8 *Prickly* - space that is uncomfortable to occupy.

for more than one city block, having incorporated streets into the bowels of the ramps (Ramp A, Second Avenue North) or having just unincorporated the street (Ramp B, Fifth Street North). Where the ramp has internalized the road, the passages are dark and have inadequate sidewalks. The stair towers resemble the form of watchtowers; the skyways are like drawbridges, only allowing certain groups admittance. The interstate and the parking structures have effectively walled off downtown from the other, the eddy that is Rapid Park.

Prickly - space that is uncomfortable to occupy. To the west of the parking ramps, but still to the east of the highway, there are a few stranded blocks, a sort of island between two crusty spaces. This island is one of the prickliest spaces in Minneapolis. The area is poorly lit and the streets are dirty. There are signs on nearly every door, lamp post, fence or horizontal surface—no loitering, no trespassing. There are few trees or shrubs, and of the ones that are there, almost half are dead. It is a place that feels unsafe. It is also here that certain businesses and charities have buildings. There is a pawnshop, Catholic Charities, and the Salvation Army. These are places that only certain portions of the public, the non-general public, frequent. These populations, al-though welcome inside in the buildings, at certain times for certain purposes, are not welcome in the public realm. The public spaces in the surrounding area have thus taken on this anti-accommodating stance—or perhaps these private spaces chose to be located in an appropriately unaccommodating public realm. The space is prickly. Go away, it says.

Jittery - active monitoring by roving patrols. The industrial area west of both interstate 394 and the remaining railroad tracks, is the most jittery area in Rapid Park. This area includes the city incinerator, the bus maintenance land, and many smaller industrial plots and warehouse space. The land is meant to

9.9-9.10 *Jittery* - active monitoring by roving patrols.

be used for and by industry. Your garbage when you are done with it, your bus when you are not on it, your paint and your metallurgy before you buy them off a nice store shelf—anything but you, yourself, is here. Industry is what happens to products when the public doesn't see them; retail is where we see them. As such, industry doesn't want you, or anyone else, around.

The infrastructure of Minneapolis, its street layout and freeways, along with the fortress-like architecture of the parking garages have effectively created spaces that are stealthy, slippery, crusty, prickly, and jittery. These inhospitable spaces have served to maintain and increase the historical separation of Rapid Park from downtown. There is injustice in this practice; one of the most expensive hotels in the state is less than a half mile from the Salvation Army, but you couldn't walk from one to the other, nor can you visually see one location from the other. Our surroundings direct our movement in such a way that these two worlds do not and cannot intersect. But there is magic in this sleight of architecture.

The magic of an eddy is that it becomes its own microcosmos. In fast moving rivers, fish, insects and plants that cannot survive the river's currents live in the eddies. In Minneapolis' eddy, in addition to the several thousand parking spaces for our car habit, there are other micro-environments. The space under the bridges is home to an urban sand volleyball arena. Due to its seasonal and occasional use, courts of this kind and in this number would have trouble locating elsewhere within the city. Similarly, the farmer's market makes the area along Interstate 94 come alive for a few hours every weekend in the summer. There is life here, life more fragile than in downtown, life that could not live anywhere but in the relative still of the eddy.

The proposal to build a stadium would be altering the inherent adjacency of

Rapid Park. It would be the equivalent of removing the critical rock that redirects the flow of the river away from the eddy. If Rapid Park is consumed by the fast paced energy of downtown, what becomes of the lives of those that live in the waters of the eddy?

CHOICE
IMAGE CREDITS

9.11

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9.12

visions of a just society:

Getting beyond "the best we can do"

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Richard Milgrom is an architect, planner, urban designer and activist. His practice engages with issues of social and environmental justice.

Four score and a hundred and fifty years ago our fore fathers made us equal as long as we could pay
Yeah, well maybe that wasn't exactly what they was thinkin' version six-point-o of the American way
But hey we can just build a great wall around the country club to keep the riff-raff out until the slump is through
I realize that ain't exactly democratic but its either them or us and it's the best we can do.

-Steve Earle[1]

Waste in western contemporary societies consists of those materials that no longer have value to the market. Unfortunately, it is not much of a stretch to suggest that there is also human refuse -- those people who are not included in mainstream society and, perhaps more importantly are unable, or refuse, to participate in the market. Architecture and urban design are not currently being employed in ways that mitigate or afford a reduction in the growing gap between rich and poor in urban centers. Rather, design strategies are being deployed to allow the more affluent segments of society to defend themselves against the threat that they perceive those less fortunate present. Steve Earle's lyrics comment on this, suggesting that those responsible for this situation (and design is certainly implicated here) feel that they are doing the best they can, given the current political, economic and ideological situations, a situation that appears to pit those who have, against those who have not.

10.1 Containing poverty in public housing. Regent Park, Toronto.

10.2 Poverty displaced by the market ambitions. Vacant public housing, Chicago.

In order to maintain a perception of safety and security of those who can afford to live comfortably, the "riff-raff" must be kept at bay, and the design profession are playing significant roles in this project. Steven Flusty goes as far as to suggest a typology of these defensive spaces, and *Building Paranoia* argues that this approach to the design of privatized urban enclaves is eroding spatial justice by specifically excluding populations that are considered undesirable.[2]

Current neoliberal ideologies that are dominant in all levels of government in the western world have all but abandoned playing any role in social welfare and are withdrawing from providing services for citizens in need. Now the role of governments is to facilitate the smooth functioning of the market. Neil Brenner and Nik Theodore note that "the linchpin of neoliberal ideology is the belief that open,

competitive, and unregulated markets, liberated from all forms of state interference, represents the optimal mechanism for economic development."[3] David Harvey argues that rather than addressing the needs of the population as a whole, "structural adjustment and fiscal austerity have become the name of the game and the state has to some degree been reduced to the role of finding ways to promote a favorable business climate".[4] This has helped foster a "free market juggernaut, with its mantras of private and personal responsibility and initiative, deregulation, privatization, liberalization of markets, free trade, downsizing of government, draconian cut-backs in the welfare state and its protections."[5]

One result of the rise of neoliberalism has been that most western governments have decided to "get out of the housing

business." Canada has had no federal social housing policy since 1993.[6] The UK sold off much of its public stock in the years following Margaret Thatcher's election. And the US has been dismantling its public housing stock for the last couple of decades, replacing it where necessary with vouchers (Section 8) that subsidize individuals renting in the private market.[7] The typical rationale for the cancellation of housing programs has been to suggest that if there is a need for affordable housing, or alternative forms of accommodation, the *market* would provide it. There is a perverse conclusion to this logic: if the market does *not* provide it, there must not be a need. Housing is treated as a commodity rather than a social good or even a right.

Of course poverty and homelessness are not new phenomena. But neither is the

desire of policy makers to hide rather than address the issues. While many activists mourn the loss of housing programs that provided decent affordable accommodation, the genesis of many of these programs came not from a concern for the people housed, but for the health of the economy and the safety of capital investments in the inner city. Toronto can serve as an example of how business interests, rather than social justice, have driven the provision of housing programs.[8]

Urban renewal in mid-twentieth century Toronto can be viewed as an integral part of the process of Toronto's suburbanization.[9] While it is common for discussions of suburbanization to focus on the building of residential neighborhoods outside the city's core, urban politicians were also concerned with maintaining the city centre as a place of employment for the new suburbanites. Goldrick notes that as the municipal government encouraged the development of suburbs, it had to ensure

that the centre of the city was safe for continued investment, as it remained the primary employment centre.[10] This approach was two pronged, encouraging residential development around the periphery, while strengthening the centre as a place of employment, and connecting the two with

10.3 Marketing community. Suburban sales signs, Toronto Region.

new transportation routes. The City of Toronto, understanding that it had a role to play in the emerging corporate economic system, encouraged development that was intended to preserve the city as a place for capital accumulation.[11] This required that the core appear as a safe location for

10.4 Housing as Commodity. Suburban sales signs, Toronto Region.

10.5 Fortress of exclusion, Los Angeles.

10.6 Undefendable space, Regent Park, Toronto.

the investment of capital, a condition that was challenged by the presence of "slums" and "blighted" neighborhoods. Magnusson notes that, like other cities, when the City of Toronto undertook some of its own development it was "in ways complementary to private enterprise."[12] The "slum clearance" associated with the development of Regent Park, Toronto's largest public housing neighborhood, was

just such a project. Although it addressed earlier reports about the conditions of housing in the inner city it was "justified as a means of preventing the social and economic deterioration of the inner city, and hence for preserving a favourable climate for private investment."[13]

In many cases, public housing was not intended to provide permanent hous-

ing – it was to accommodate households only until they were able to actively participate in the marketplace again. The apartments were designed to discourage getting settled (to discourage dwelling) – lacking basic amenities like doors on built-in closets.[14] These were neighborhoods for those in short-term crisis, much like homeless shelters are intended to be today. Although he does not specifically refer to public housing and shelters, Michel Foucault's concept of *heterotopias* could be applied here. Foucault suggests that there exist

> real and effective spaces which are outlined in the very institutions of society, [that] are at one and the same time represented, challenged and overturned: a sort of place that lies outside all places and yet is actually localized. In contrast to utopias, these places which are absolutely *other* with respect to all the arrangements that they reflect and of which they speak might be described as heterotopias.

Giving the concept a historical perspective, Foucault speculates that in primitive societies these comprised "privileged or sacred or forbidden places that are reserved for the individual who finds himself in a state of crisis with respect to the society or the environment in which he [sic] lives: adolescents, women during the menstrual period or labour, the old, etc.."[16] While these specific examples may be vanishing from our own societies, others are emerging – "heterotopias of deviance occupied by individuals whose behaviour deviates from the current average or standard."[17] Foucault cites examples of prisons and rest homes, but clearly, dropping out of the housing market is a sign of deviance in contemporary North America. And those households that do not participate are accommodated in these localized places that are invisible, or at least obscured to the mainstream population until their presence interferes with the market.

There are certainly many who would ar-

gue that social justice, housing policy and inequities are not architectural problems. However, architecture has social impacts and as Anthony Ward notes "its social practice has both supported and reinforced existing social hierarchies and has operated mostly as a mechanism for oppression and domination."[18] Perhaps the most significant deviation from this cozy relationship with power came in the early 20th century as modern architecture was developing. Ward stresses the importance of Hannes Meyer's attempts at the Bauhaus to engage architecture with social science in attempting to "solve" social problems. Although Ward recognizes that this may have been naïve (and perhaps slightly arrogant to think that architecture could "solve" social problems) this indicated engagement with broader issues and the everyday lives of urban dwellers than the more conventional "architecture-as-an-art-object paradigm" that Ward argues still dominates architectural practice. Unfortunately, Meyer and his followers soon lost influence, displaced by leaders like Le Corbusier who continued to push the modernist utopian project but with a more conservative agenda:

> An abstracted and aestheticized concept of rationality was used to justify an elitist aesthetic, the explicit purpose of which was the liberation of the masses (who were not in any case consulted), but the subtext of which was the creation of a market to serve the interests and reproduction of an elite corps of cultural gatekeepers.[19]

Although modernism had a social project to improve the lives of urban inhabitants it was not sincerely addressed by many practitioners – Ward refers to their work as "Modernist style architecture", rather than modernism. The failure of the many progressive projects attempted by modernists resulted in the rejection of the style but also their social goals. Tom Dutton and Lian Hurst Mann suggest that this "disengagement" involves "a virtual army with multiple regiments, aligned to

critique modernism in architecture, has organized to actually retreat from progressive social practice through their generation of new strategies that attempt to separate architecture from its social soul" denying the possibility of social agency for the discipline and its work.[20]

Dutton and Mann outline a number of the regiments of retreat, the most obvious being the "Retreat to Tradition" that was characterized by the neo-classical postmodernism of the 1980s. Advocates of

this practice understood architecture as a language and suggested that the most pressing problems were loss of cultural meaning in the built environment and continuity of those meanings with past generations: "Architecture is not understood as an agent for social change but as a language capable of signifying cultural meaning."[21] Critics of this practice point out that it was still the architects who determined, or thought that they determined, the meaning of the built environment doing little to address the cultural

10.7 No tailgating, Atlanta.

10.8 Defending space, south central Los Angeles.

10.9 Controlled Access, Atlanta.

elitism that they accused modernists of practicing. And relying on historical examples in the built environment[22] also made reference to existing or previous power relations, rather than challenging the status quo and addressing issues of social justice and inequity. New urbanist developments present a current example of this, relying on the "traditional" aesthetics to produce an *image* of community, but in so doing make clear who belongs in the neighborhood and who is excluded. This issue is particularly relevant as North American cities become more culturally diverse. New urbanist designers rely on local history for their precedents and models, often without consideration for the cultures that now inhabit urban area.[23]

Dutton and Mann are similarly unimpressed with those who retreat to strate-gies of "negation." This approach, they suggest, attempts to develop new interpretations of the language of architecture to produce built forms that shock, challenging traditional forms and the powers that they represent incorporating postmodern concerns with difference. However, the architects attempt to retain power over the production of these images, and as such, Dutton and Mann argue, they do not "offer socially viable strategies to challenge hegemonic powers."[24] Ward is more explicit taking on the work of Peter Eisenman:

Eisenman says that he seeks a "dangerous" architecture, yet the real danger of Eisenman's work is that it appropriates the liberatory ideas of postmodern critique and uses them for conservative ends. What we are seeing is the depersonalization and commodification of difference. Difference here is transformed from an ontological condition into a commodity, serving directly the needs of designers looking for novelty in the pursuit of the next commission in a bitterly competitive consumer economy."[25]

While both of the previous examples take on formalistic approaches to architecture, Dutton and Mann are also critical of designers who suggest that a social responsible practice is a matter of process and that the product itself is of little relevance. While they do not deny the importance of processes that involve inhabitants and users of the built environment in its production, they note that in many cases, the outcomes of these processes are indistinguishable from those produced by more conventional means. They argue that, while the process oriented practitioners

are willing to grant aesthetics the power to bolster hegemonic powers, they "retreat from the potential of aesthetics as an apparatus of power to promote oppositional cultural production" [26]

The inner city in many North American municipalities was the territory of the poor, those who could not afford to "escape" to the suburbs, for the last half of the twentieth century. However, current market-driven strategies to rejuvenate city centers seek to bring back economic prosperity. Redevelopment to address this goal have been reshaping central city areas as places of pleasure and amusement, and safe havens for the affluent. This desire to lure moneyed suburbanites back to the city, however, threatens to displace people who do not have choices about where to live.

Housing for low- to moderate-income people has been pushed off the agenda for downtown redevelopment as the value of land increases. As was the case in the mid-twentieth century, when public housing was built to protect investment in the city, advocates for social and affordable housing now only seem to make advances when they can make the case that housing is important for business (to house workers) in its attempts to structure a city competitive in the global market place.[27]

Architecture again, plays a central role in this reshaping of cities. Individual practitioners and the profession as a whole continue to retreat from engagement with social issues that have not vanished, despite attempts to mask them with aesthetic, and often exclusionary strategies. While some may claim to understand that this is not ideal, many will retreat into the excuse that it is "the best we can do," and that overcoming inequities is not within the realm of architectural practice. But those that have been citied here would point out that if architecture can be used in the name of power, to reinforce the status quo, and to defend the lives and interests of the affluent in society, then surely it can

be deployed in the creation of alternative vision of urban spaces that would support more socially equitable and just societies. While these are not *solely* design issues, the defensive, exclusionary environments that are now being built are the products of architectural practice.

In her distopian visions of the future, Margaret Atwood builds on the trends she has observed in present day societies. In her latest work *Oryx and Crake*, the urban environments she describes suggest the world that might be designed if the physical manifestations of social inequities that are emerging now continue on their present trajectory. The affluent live in safe "compounds" that are connected by high speed rail lines that are secured from the dangerous "pleeblands" through which they traveled. Compound dwellers know little of the people who inhabit these territories – the two peoples live in almost complete isolation from each other.[28] Although fiction, Atwood's work is intended as a cautionary tale – one that questions if designers should be asking if the urban environments we are producing are really "the best that we can do."

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IMAGE CREDITS

designers making a difference

The story of "Search for Shelter"

Rosemary Dolata
Search for Shelter

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The "search for shelter" is a continual quest, an ongoing journey of countless narratives. Each of us seeks refuge in a place of serenity, a home. For those with adequate means, there are many options. We live in houses, condominiums, apartments. We live with families, roommates, alone. What we share is the comfort of knowing that there is a place, though possibly very modest, where we belong - a place where we are safe.

Unfortunately for many people within our society, the search for shelter is a circular path - a journey without a clear destination. Many families and individuals in Minnesota, our neighbors, lack the solace of a safe home.

As architects and designers, we are both blessed and burdened with the incredible responsibility of shaping the world around us. Homelessness and insufficient affordable housing are certainly economic, social and political issues. But at the end of the day, a home is a physical reality,

a real structure with an actual address, not a policy printed on paper.

THE ROOTS OF SEARCH FOR SHELTER

Poverty and inadequate housing are problems that have directly affected the lowest

tiers of society throughout our nation's history; however, in the early 1980's the problem of homelessness reached epidemic proportions. As government policies removed safety nets, the reality of the situation became too great to ignore. As the 1984 Chairman of the American Institute of Architects Housing Committee, Minnesota

11.1 Volunteers design high-density affordable rental housing for families in north Minneapolis.

architect Louis Lundgren, FAIA, asked national committee members to focus their attention on the problem of homelessness for the first time. Mr. Lundgren's appeal inspired a ripple affect. His initial three-day meeting in St. Paul was followed by symposiums in Seattle and Washington, D.C.

In 1985 local visionaries Ralph Rapson, FAIA; Dennis Grebner, FAIA; John Cuningham, FAIA; and John Klockeman, AIA; joined forces with Lundgren to address the situation in Minnesota. These leaders recognized the value of design in creating change. Working in tandem with architects throughout the country, the Search for Shelter Design Charrette was born.

In the fall of 1987, the first Search for Shelter Charrettes occurred simultaneously in dozens of cities across the country. Students from thirty schools of architecture participated. Inevitably the myriad of workshops varied in form and size, but within the space of a weekend, the understanding of all involved grew. The experience gave each participant new insight into our society, its beauty and its challenges. Since 1987, Minnesota volunteers have organized 24 Search for Shelter Design Charrettes.

SEARCH FOR SHELTER IN ACTION

A typical weekend charrette begins as the workweek ends. Students and professionals gather on Friday evening to share a light dinner with service providers. Agency representatives, who serve as the workshop's clients, explain their work to those assembled. Designers learn about existing programs and facilities, as presenters strive to articulate their visions for the future. Following these introductions, volunteers are divided into teams and assigned to various projects. Team members interview their clients at length to learn as much as possible about the proposed projects before breaking for the night.

Early Saturday morning the teams regroup to begin work in earnest. Often the first or-

11.2 Students and professionals work together in the courtyard of the College of Architecture and Landscape Architecture to address the need for affordable housing.

der of business is a site visit. The remaining hours of the day are devoted to generating design solutions. Budgets are understood to be limited, but there is no cap on new ideas. Design work sometimes stretches into the wee hours of the night.

Sunday morning the teams come together once more. At this point, the focus is on documenting the thoughtful solutions developed. All work must be completed and mounted to presentation boards by noon.

It is within the frenzy of Sunday morning design sprints that one comes to understand the true nature of a "charrette."

Charrette is the French word for cart. Early last century architecture students at L'Ecole Des Beaux Arts in Paris knew for certain that they were out of time when the charrette was wheeled through the studio. All projects were to be placed on the cart as it passed, no exceptions, no additional minutes. Likewise, Search for Shelter volunteers, full of energy, scramble to compose their presentations.

As the morning ends, clients return full of anticipation. In the space of an hour, all the design work developed during the rigorous weekend is presented to agency representatives and fellow participants.

The clients are consistently amazed by the depth of the solutions created within such a seemingly short amount of time.

As the program ends, participants and clients tend to linger a bit. Neither is quite ready to return to the typical grind. Within the period of an intense weekend, professional architects have guided the designs of their less experienced peers, while at the same time sharing a voyage into a precarious world. Students and interns have worked directly with actual clients and their very real needs. And, the power of design has been made real to champions of the poor, who understand the individual faces of poverty more easily than the realities of physical place-making.

Following the charrette, the production output of the weekend – building programs, schematic plans, unique diagrams and perspective sketches – are turned over to the clients. These presentation boards become treasured artifacts, which service providers polish to create a clearer vision, entice funders, and gain neighborhood understanding.

CHANGING ATTITUDES

In the nearly two decades since Search for Shelter began, the process has changed very little. Computers and digital cameras have been added to the tool kit and Kroy machines have disappeared from the scene, but the most important details have remained intact. Underserved populations receive valuable design input, and designers, both seasoned and novice, are provided with the opportunity to shape the social fabric of the world around us.

In the same way that individuals are able to grow in the space of a weekend, the movement to address homelessness has also grown over time. When Search for Shelter was developed in the mid-1980s, emergency shelters were being created as a stop-gap solution to homelessness. It was a reactive and fitting response.

11.3 Designers strive to develop appropriate housing for the Midtown Greenway during the 2003 Charrette. The group was challenged to avoid obstructing winter sun from the greenway, which is approximately 22 feet below adjacent streets.

A publication created to document Minnesota's first charrette in 1987 describes the effort this way: "With borrowed tools and donated supplies, the teams developed plans for converting the buildings into adequate and appropriate shelters for the homeless." In 1987 designers and homeless advocates worked in close collaboration to understand existing needs and recognize untapped potential. That year, five projects were developed. All of the programs reused existing structures and were designed specifically to accommodate homeless individuals and families. One team planned an expansion for an existing St. Paul shelter, another created a safe refuge within a vacant Minneapolis convent. Creative solutions were born from necessity coupled with fresh vision.

The work of the early charrettes focused very much on the creation of emergency shelter and transitional housing, both of which are temporary fixes. At that time many advocates for the poor believed homelessness was a problem that would be addressed by making enough beds available.

Today we understand better that homelessness is actually a painful symptom of many larger problems, which our society has failed to adequately address. We are beginning to recognize the true complexity of the situation.

In some instances, homelessness is truly unpredictable. Natural disasters occur, resulting in the destruction of homes and livelihoods. Domestic abuse erupts without warning. For these unique situations, emergency shelter is appropriate and necessary.

Chronic homelessness however can not be successfully treated with "emergency" shelters. To proactively address the problems, which may result in homelessness, we must try to understand the fragile circumstances which make individuals vulnerable.

For some people, homelessness is the outcome of a failed educational system. For others, it is linked to one's legal status, based on circumstances of birth and national inequities. For many, it is a re-

flection of an inaccessible or inadequate healthcare system. In some cases, mental illness, including post-traumatic stress syndrome, prevent individuals from successfully integrating into the larger community. And, very often homelessness is simply an economic reality. Many workers are unable to earn a living wage.

CREATIVE SOLUTIONS

Since its inception, Search for Shelter volunteers have been striving to better understand and meet the needs of the underserved in our population. The focus of projects included in design charrettes has broadened through the years. Charrette designs have included a surprising number of program and building types. Project scales have ranged from the addition of a modest accessible toilet to a master plan for seven city blocks. Project sites have varied from historic downtown buildings, to a mobile home park in rural Wisconsin, to hypothetical lots not yet acquired.

Through the years, emergency shelters have remained in demand, especially for women fleeing abusive relationships. Transitional housing projects continue to offer support to individuals battling chemical dependency. Search for Shelter has also helped to create assisted living opportunities for adults with developmental disabilities, as well as patients with HIV/AIDS and their families. Options for supportive housing have been explored for senior citizens, former prostitutes, and young adults transitioning from fostercare. S.R.O. (single resident occupancy) units have been developed for very low income working adults who could not afford more standard apartments.

Creative approaches to housing have been explored with many agencies participating in Search for Shelter design charrettes. Volunteers worked with one group hoping to merge five turn-of-the-century homes into a co-housing project. Another team joined forces with a service provider that pairs young adults volunteering to serve as "Urban Neighbors" with low-income families in renovated duplexes and four-plexes. With Search for Shelter's help, historic warehouses have been reborn as live/work studios for artists. One ambitious organization proposed a four phase project intended to serve homeless and refugee children from North Africa. Assistance was sought by a neighborhood group wishing to relocate housing stock being cleared for a new elementary school. Another group proposed the renovation of boarded up buildings at historic Fort Snelling by veterans, in order to provide both housing and entrepreneurial opportunities for veterans and their families.

During charrettes, volunteers are often asked to look for development opportunities in areas anticipating change. Design projects have been focused around planned light rail stops and along the Midtown Greenway, as well as in blighted and burned-out areas. One 1994 project team proposed a 2-story traditional-style building for the site of a tragic explosion. Another Search for Shelter team was asked to preserve the value of a typical post-WWII neighborhood by improving its suitability for life in the 1990's.

Though some charrette designs lead directly to the creation of new housing units, most serve as steps within a larger process. With actual designs in hand, service providers are better able to evaluate and understand their needs and options. Agencies are in a stronger position to receive financial support from available funding sources, and are better prepared to engage and gain the support of affected neighborhoods.

The opportunities for design to improve the quality of individual lives and neighborhoods are seemingly infinite. Architects and designers offer unique skills, which bring to life possibilities unseen by others. In the past 19 years Search for Shelter has demonstrated this gift over and over again.

Though Search for Shelter began as a national force, today only Minnesota continues the tradition. Our commitment remains strong. We are confident that our ongoing work will help to create many new narratives. Our desire is that one day all of our neighbors will have a safe place to call home.
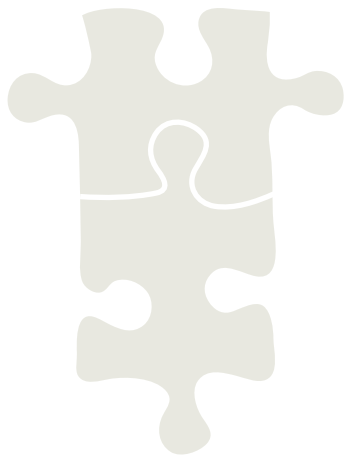
re-fuse

rE-'fyüz

to fuse together again;
unite into one whole.

drift house
Shelter in transition

SLV Design: Marc Swackhammer, University of Minnesota; Blair Setterfield, Rice University; Pat McGlothlin; Aaron Davis.
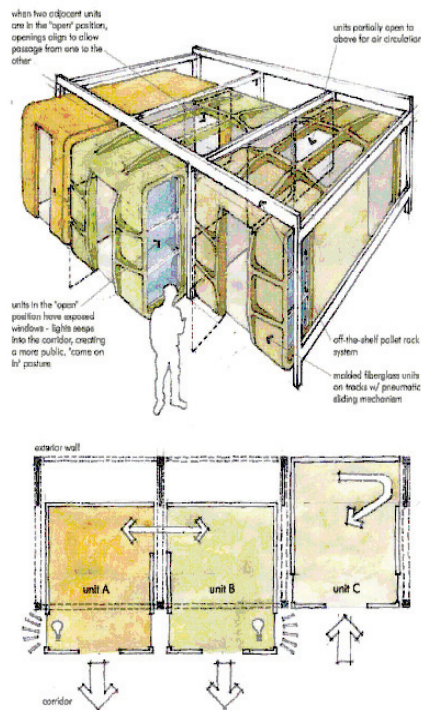
12.1 Conceptual sketch at potential installations.

This small project is a temporary homeless shelter sited in an existing building in the "Bowery" neighborhood of Manhattan. The building has common bathrooms and showers on each of its nine floors. A program brief from First Step Housing, Common Ground Community, and The Architectural League of New York asked SLV Design to design, detail, and provide technical specifications and accurate cost estimates for 146 new housing units within this existing building. The units were to be 60 – 88 square feet with a minimum of 19 units per floor. The brief charged us with considering the units as glorified pieces of furniture: brought to the site in a nearly complete stage, set in place, and assembled. Other programmatic and technical requirements included:

• Minimum of one bed @ 6'-6" x 2'-6" with air circulation underneath, one closet/storage space, one desk, and one chair as part of the design.
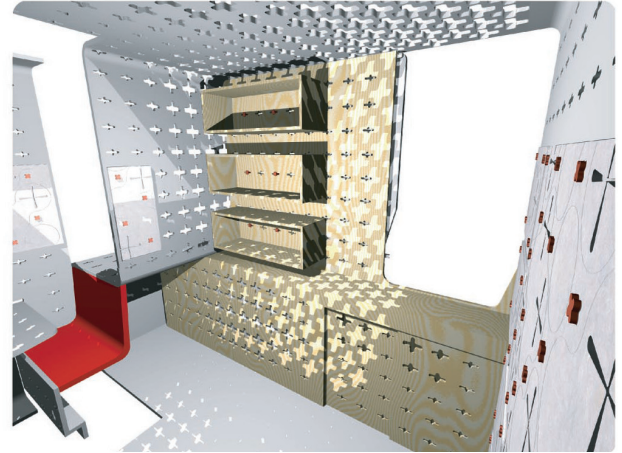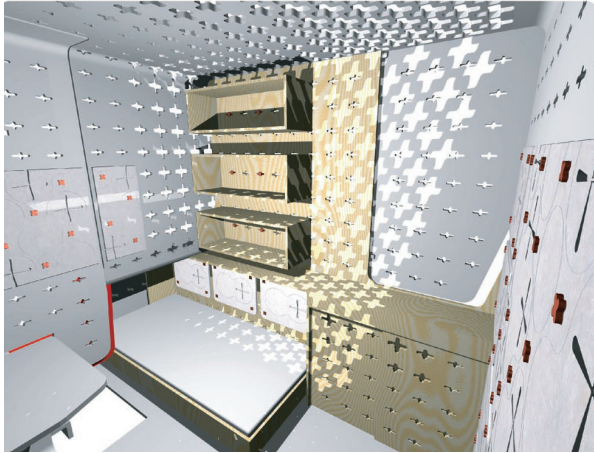
12.2 Interior view with unit closed and with unit open.

- Cost not to exceed $5000.
- Private and secure.
- Modular and easily replicable through prefabrication and/or a kit of parts approach.
- Possibility of individualization by the end user.
- Air flow through each unit.
- Light infiltration from overhead existing fixtures and natural light from existing windows.
- Consider the role of the corridor.
- Durable, low maintenance materials.
- Maximize storage and shelving for clothes, radios, televisions, clocks, fans, small box refrigerators.

DRIFT (from WordNet ® 2.0, © Princeton University 2003)

n 1: a force that moves something along

n 2: the gradual departure from an intended course due to external influences

n 3: something heaped up by the wind or current

n 4: general meaning or tenor: "caught the drift of the conversation"

v 1: be in motion due to some air current

v 2: wander from a direct course or at random

v 3: be driven or carried along

Our proposal, Drift House, is an environment that grows, shrinks, shifts, and adapts according to the living requirements of its inhabitants. A series of incremental changes in size and shape allow it to gradually fluctuate, or "drift," from one state to another (open to closed, public to private, light to dark).

The unit's primary drifting component is a large sliding aluminum shell along its front elevation. When "open," the unit expands. When "closed," the unit collapses, shifting its volume outside the unit to a public "porch" space. Four units share a porch space, adjacent to the building's public corridor, encouraging chance encounters and neighborly conversation.

Minor drifting components inside the unit allow residents to fine tune their environments. Generally, there is a day
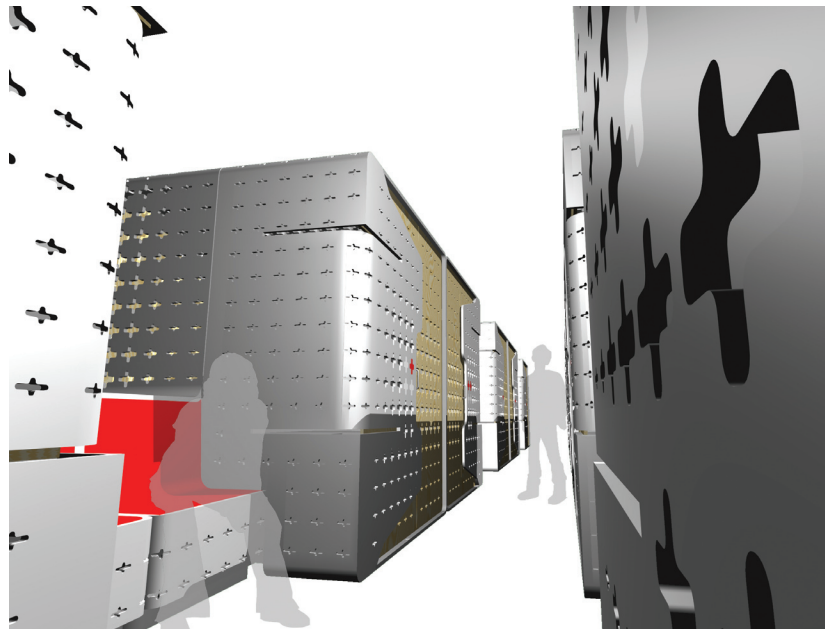
12.3 Perspective of units corridor.

and a night condition. In the daytime, the bed is folded into a wall recess, accommodating an accessible 5' turning radius. A large perforated sunshade is open and a moveable bent plywood chair is slid out into the room for watching TV, reading, or visiting with a guest. At night, the bed frame folds down, the sunshade is closed, and the moveable chair is stored away. "Drift" also refers to the unit's porosity. We envision Drift House as a series of breathable skins that allow light and air to freely flow in and out of the unit.

Finally, "drift" suggests informal, flowing exchange. By this we mean exchange between multiple residents, exchange between residents and their units, and exchange of old life styles for new ones.

The surface pattern on Drift House emerges from a universal addressing system used by residents to identify their units. The addressing system consists of groups of primary shapes (circles, squares, triangles, hexagons, and plus signs). Once a unit is "tagged" with its address shape, that shape becomes a "primitive" for the unit's surface pattern. We multiply this primitive shape across the entire surface of the unit to establish a regular pattern. Then, that pattern is stretched, pushed, and pulled by the programmatic requirements of the space. In some cases the holes shrink to become narrow slits to allow for air infiltration while maintaining residents' privacy. In others, they change to accommodate hardware for hanging storage pockets or shelving or they dilate to allow light infiltration from overhead building lighting. The resulting effect of the pattern is

12.4 A day in the life of Drifthouse.

ornamental, suggesting some kind of foreign system is at play. Simultaneously, however, one can understand the pattern as grounded in logic – responsive to a wide array of quantifiable site flows. Ultimately, we aim for the surface imprint on Drift House to reside somewhere between the technical and the intuitive- for the residue of its

rational foundation to be inexplicably decorative.

Since Drift House's initial conception, we have developed it substantially. Primarily, we have rethought its fabrication, not as a large continuous surface of material, as shown in the mock-up, but rather as a series of smaller, self-
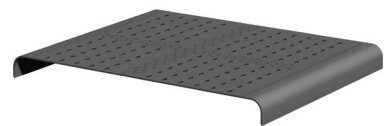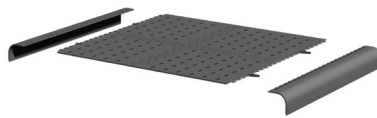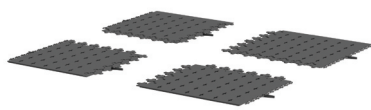
12.5 Visual Assembly as a wall piece. (continued onto next page)
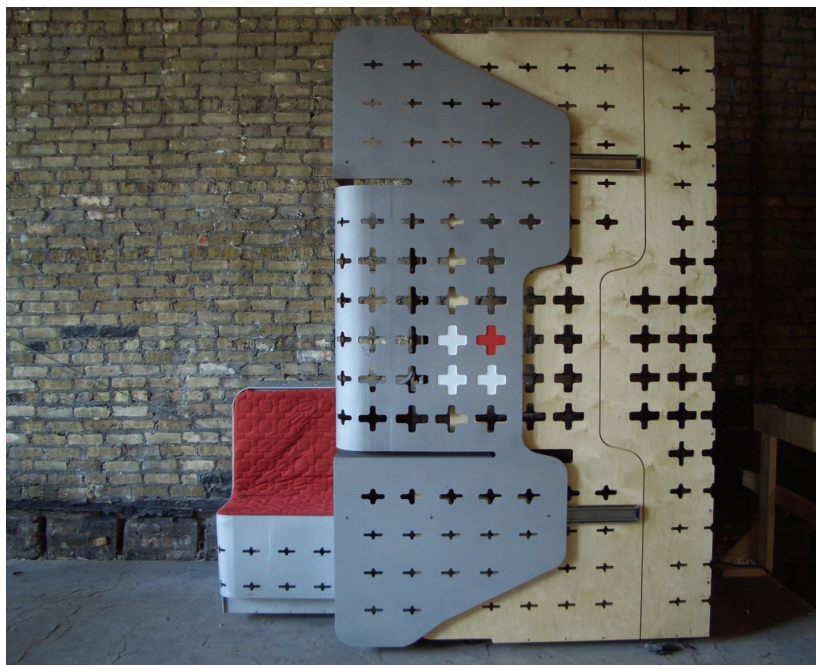
12.6 Prototype in closed position.

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supporting panels, joined by a permutation of the unit's original primitive. Consisting of 4' x 4' panels with built-in structural ribbing and pre-formed corner connectors, the unit is easily and quickly assembled and disassembled by as few as two people. Additionally, the changes render it less expensive to fabricate and easier to mass produce. We envision an opportunity, through strategic partnerships and proper funding, for the unit to be a mass-produceable product that can, within a matter of days, be deployed in an existing space, no matter how briefly that space is available. It could provide valuable temporary shelter while a building sits unoccupied, and then be dismounted quickly and shipped to another location. Drift House, in its latest form, proposes an alternative, perhaps more responsible program for surplus refuse space rampant in not only the Twin Cities but also in other metropolitan centers throughout the country.

shims
Storage and Housing in Motion

William Dohlman
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University of Minnesota

William Dohlman is a recent graduate of the Master of Architecture program at the College of Architecture and Landscape Architecture at the University of Minnesota.

This thesis changes the face of the rigid urban landscape through the development of small, temporary structures that support the transient populace. Architecture alone cannot solve the social problems of homelessness, but the lack of public amenities, storage, and shelters is one that we as architects cannot overlook. This series of small support structures evolved from a desire to resolve the difference between the city's static architectural fabric and the transient nature of the homeless population and experience. In reaction to the existing, immovable structures that define our urban experience, SHIMS adapt to the ever-changing needs of the city to provide adequate storage, shelter, and other services for the numerous displaced individuals that call the streets their home. Because SHIMS are unanchored structures, their total number in any given context could change according to the specific needs of a city or neighborhood. My goal is not to just provide support for the transient population, but to extend the urban fabric to the city's left-over or undefined spaces. As the empty spaces contract within the city, SHIMS will be able to contract in location, number, and program as well.

Through a close examination of the Minneapolis shelter system and areas transient groups tend to gather, I was able to develop an appropriate design that responds to the needs of the city as well as the needs of the homeless. The final design allows the city a consistent platform to introduce new urban amenities to the city's streetscape.

This simple system of support structures suggests a new way to infill the numerous void or ill-designed spaces within the city. Through a truthful analysis of transient populations and openings within the urban fabric, any city can implement the number and type of SHIMs they need. The variation and flexibility of the system allows it to evolve with the needs of the city.

Typically, homeless shelters are designed as mega-structures that only operate during the evening and morning hours. The needs of the homeless and transient populations extend far beyond a simple meal and shelter for the night. This project provides a means for the city to provide an incremental mega-structure, when viewed on the regional scale, that is still able to fit into the unused or derelict areas of the city. By breaking the mega-structure into smaller programmatic components, one is afforded the opportunity to adapt each design to the site's specific context and needs. The negative sentiments many of the homeless have towards institutions is broken down by the fragmented nature of the system.

The system's foundation in a modular unit allows the city to provide places for one, few, and many to gather. The reason many people choose to live on the streets instead of within a shelter is mainly attributed to the desire for independency and isolation. Therefore, if the city provides places for both the individual and the group, a higher percentage of the homeless would be reached.
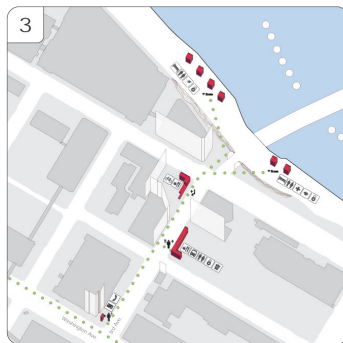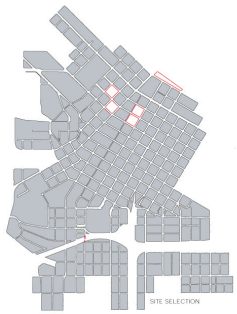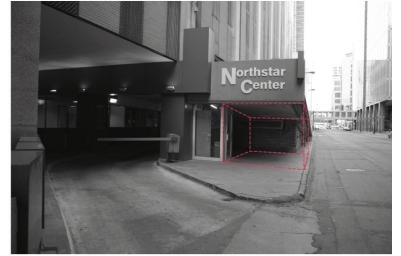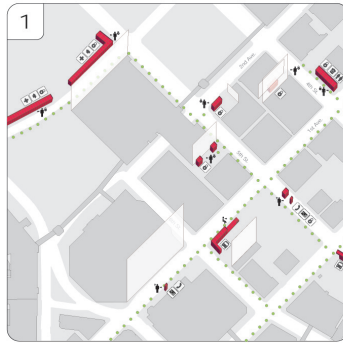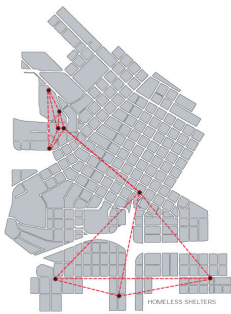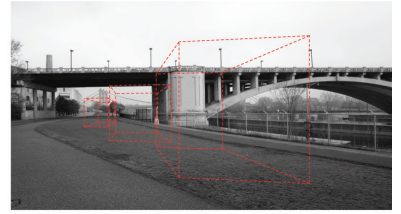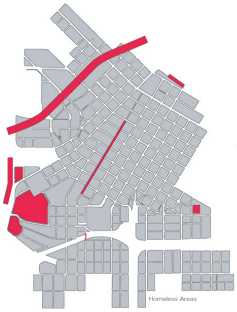
13.1 Site and local transient need studies

1. STORAGE LOCKERS
2. FIRST-AID AND BEDDING SUPPLIES

PLAN: 1/2" = 1' - 0"

BOUNDARY SHIM

SITE: LINING THE SURFACE PARKING LOT ON MARQUETTE AND 4TH ST.
PROGRAM: HOLDS THE STREET EDGE ALONG THE VOID AREAS W/IN THE CITY, WHILE PROVIDING POSSIBLE INCOME AND SERVICES FOR TRANSIENT POPULATIONS.
FEATURES: LOCAL SUPPORT INFORMATION

TRASH TOILET TOILET

COFFEE

BUS

ELEVATIONS: 1/2" = 1' - 0"

COFFEE **CITY LOCKERS**

BOUNDARY

This project impacts the architectural community by suggesting a different approach towards societal problems. Often times we as a society try to solve complex social problems with one large brush stroke, rather than several smaller thoughtful moves that individually solve specific sub-issues while adding up to solve the large issue. By defining smaller sub-issues the design becomes less generic and encompassing and is capable of focusing on the more intimate and crucial topics within a larger issue.

The use of a specific site and context as the driver for the design of the structures could develop further with a more thorough investigation of the chosen sites. With a more detailed study of the site, full-scale models could be constructed and tested within the city.

DESIGN STRATEGY

To establish a sense of place, while displaying local stories and traditions, a series of sculptural volumes are placed along the river. These structural nodes could serve as small cultural billboards displaying how the river has shaped our local way of life. Within this cultural wrapper there exist several small emergency shelters, similar to Japanese capsule hotels that offer a clean, warm, and safe place to rest for the transient populations.

An important aspect of my design is the public display of information that occur and several layers. To those that live on the streets, information can be more valuable than an actual roof over one's head for the night. Therefore, each support structure carries a specific set of information defined by program, context, and user. I have named these support structures SHIMs, which stands for Storage and Housing in Motion. The surface of every SHIM would display not only its specific set of information, but also the services and amenities offered by the structure itself through a series of simple icons. In all, there exist four main types of SHIMs:

CONTACT SHIM

These support structures handle primary information, which denotes the basic location and contact information of homeless ser-

vices provided within the metropolitan area. Contact SHIMs would be placed on heavily trafficked urban paths and intersections to help those transient groups who are new to the city find the support and information they need. Displayed behind glass panels are the local contact information for homeless shelters as well as a city map marking the location of every SHIM. Besides contact information, these support structures offer free access to used newspapers and phone services.

STORAGE SHIM AND BOUNDARY SHIM

This group of support structures handles secondary information, which highlights the location of homeless services within a five block walking distance. Therefore, if one is in immediate need these nodes will locate the nearest place of shelter, protection, or instruction. These support structures also offer a place for non-profit organizations to display their ads to the general public. Placed within the many void areas throughout the city, storage and boundary SHIMS patch and maintain the existing urban fabric. The amenities offered by these structures vary greatly depending on local context and need, which range from simple storage to coffee and newsstands.

RIVER SHIM

This series of support structures handle tertiary information, which removes one from the concept of homelessness by offering abstract site information that begins to establish a sense of place to the immediate site. In this case, River SHIMs discuss the transient history of the Mississippi and mark the many cities and towns that settled on its banks. These support structures act as sculptural elements lining the river path during the day and open into emergency shelters at night. The skin of the SHIM folds upward to reveal eight places of shelter, a restroom, and simple medical and bedding supplies.

IMAGE CREDITS

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1. SECURITY SCREEN
2. STORAGE LOCKERS
3. NON-PROFIT ADVERTISEMENT

STORAGE SHIM
SITE: ALONG THE PARKING LOT ON 1ST AVE AND 4TH ST.
FUCNTION: SECURE STORAGE WHILE SLEEPING ON THE STREET OR IN THE SHELTERS
FEATURES: SUPPORT INFORMATION WITHIN THE WALKABLE AREA

1. SHOWER/TOILET/MEDICAL
2. MOVABLE INFO SCREENS
3. SLEEPING/STORAGE CAPSULES

RIVER SHIM
SITE: ALONG THE MISSISSIPPI RIVER BETWEEN HENNEPIN AND 3RD.
PROGRAM: EMERGENCY SHELTER CAPSULES DURING THE NIGHT
FEATURES: ABSTRACT SITE INFORMATION

MIS SISS IIPI RIVER

1. USED NEWSPAPERS
2. CONTACT INFORMATION
3. LIMITED ACCESS TELEPHONE

CONTACT SHIM
SITE: LIGHT RAIL STATION AT 1ST AVE. AND 6TH. ST.
PROGRAM: ACCESS TO NEWS AND PHONE SERVICES
FEATURES: CONTACT INFORMATION ON HOMELESS SHELTERS FOR THE CITY OF MINNEAPOLIS

reinventing place
Transforming Sumner Field into Heritage Park

Edward G. Goetz
Associate Dean for Academics
Hubert H. Humphrey Institute

Edward Goetz, a professor and Associate Dean for Academics at the Hubert H. Humphrey Institute of Public Affairs, has recently released a book entitled *Clearing the Way: Deconcentrating the Poor in Urban America.*

Heritage Park is one of Minneapolis' newest and largest residential districts. When finished it will be a community of 800 units of new housing, ornamented by a parkway cutting through its center, and spread over 73 acres of land less than one mile from the central business district of Minneapolis. Ten years ago the land was home to four different public housing projects, concentrating more than 900 very low-income families together on one site. When Heritage Park is complete the transformation of the area will be both physical and social; the old housing has been demolished and new streets, new structures and even a new creek will replace them. Similarly, the low-income residents who used to live there have been moved away, and they will be replaced by a mix of households across the economic spectrum. This transformation was brought about by a class-action lawsuit (Hollman v. Cisneros), filed by Legal Aid and the NAACP on behalf of the public housing residents alleging discrimination in

the concentrating of public housing in the city's predominantly black north side neighborhood. The Hollman case was settled by a consent decree in 1995 that called for the redevelopment that has resulted in Heritage Park.

14.1 Typical Sumner Field Townhomes before the start of Heritage Park.

It is not the first time this part of Minneapolis has been remade. In 1938, the near north side had some of the worst housing in Minneapolis. The neighborhood suffered from high rates of infant mortality and pulmonary tuberculosis. The hous-

ing routinely lacked central heating, adequate toilet facilities, baths, gas or electricity.[1] The next year, the federal government funded the construction of the Sumner Field Townhomes, the first public housing project in the state of Minnesota and one of the first in the entire nation. While Sumner Field transformed the site on which it was located, it failed to generate any improvement in the surrounding environment. Thus, a second round of redevelopment occurred in 1959 and 1960 when the Lyndale, Glenwood, and Olsen Townhomes and the Bryant senior highrises were added. Each of these projects replaced more slum conditions. This second round of redevelopment expanded the site across Olson Highway, making a much broader impact on the physical geography of the City's near north side. But, because all of the new housing added was public housing, it became by far the largest concentration of subsidized housing in the state. As public housing residents rapidly became poorer relative to the rest of the population, the Sumner Field area became the city's greatest concentration of extreme poverty.

By 1992, Sumner Field was over 50 years old, and the rest of the housing there was more than 30 years old. Built on unstable land, the buildings were cracking. Basset Creek, which runs through the site, was covered during the early part of the century, resulting in the instability of the soils above it. Some residents said they could see outside through the cracks in the building facades. Mice and cockroaches overwhelmed residents. "[Cockroaches are] inside my washer, they're in my radio, they're in my telephone, and when I turn on my microwave, they come running out. The roaches even used to get up in the smoke detector and set the thing off," said one resident.[2] Architecturally, the buildings were out of date. Built in the modernist tradition, they were arranged in large superblocks that interrupted the neighborhood grid pattern, emphasized public and shared space, and incorporated a minimum of detail. As one journalist wrote in 1995:

> Garbage carts are as likely to stand by the [door] that looks most like the front door. Doors open directly to the outside, without a vestibule or any way to personalize the entry. Most of the original canopies have rotted away. Yards belong to everybody and, therefore, no one. And the 5.2 miles of sidewalks that crisscross the six square block project make all spaces open to strangers.[3]

14.2 Heritage Park 2004, very close to the city's downtown, yet cut off by the freeway to the railroad tracks and parking garages.

In 1995, as in previous decades, the solution to the architectural and social problems identified on the north side was a radical re-creation of the community. The agreed upon plan resulted in the demolition of over 900 units of low-cost public housing. In their place would be a shining new community of middle income and affluent homeowners and renters, mixed in with lower-income families living in subsidized units that were to be architecturally indistinguishable from the market rate units. The architecture in general would be dramatically different from the spare modernist townhouse design of the projects. The submerged Bassett Creek would be brought back to the surface and made the centerpiece of a park area that would serve the new residents of the neighborhood.

Proponents focused on the new vision for the area, emphasizing the great improvements that were going to take place, and the "once-in-a-lifetime chance to create the kind of amenities on the north side that have made the southwest side so desirable."[4] Then-city council president and north side councilmember Jackie Cherryhomes called it "the most important thing that's happened in the Fifth Ward and north Minneapolis in the last 30 years."[5]

Others were more occupied with concern for what was being thrown away. Recent Southeast Asian immigrants had, by 1995, become the single most populous group of people living on what is now the Heritage Park site. As is typical of first generation immigrants, they had rapidly created a community on the site that provided social, psychological, and economic support. Formal assistance organizations and service agencies such as the Hmong American Mutual Assistance Association, the Lao Assistance Center of Minnesota, and the Southeast Asian Community Council were located on the site or nearby. The close proximity of other immigrant families provided the support of extended families and clans. The demolition of the housing and the dispersal of families threatened the system of supports created by the immigrants. One agency feared, "When families must move away from Sumner-Olson, social order will disappear…With the demolition of the public housing, young people will be even more isolated. They will be harder to reach, harder to teach."[6]

The immigrant families also feared the difficulties of navigating the housing market. Not only was the vacancy rate very low at the time, symptomatic of a lack of rental units, but many worried that the housing market lacked enough larger units to accommodate their large families. "Five-bedroom apartments are virtually nonexistent outside of public housing. I'm worried that I would not find a place big enough for my family," said one immigrant.[7] One Hmong woman "bought a rope and plans to hang herself if she has to move. 'Here I can see the sky. Here, when I feel sad, I can walk to friends or the park and relieve my sadness.'" Another resident said, "it would be better to be dead and be living with the Americans in the cemetery," than to leave Sumner-Olson.[8]

African-Americans have a claim on this land that is even longer than that of the Southeast Asian immigrants. This part of Minneapolis is the historic home of the black community. While some in the black community welcomed the attention of city officials to this part of the community, others did not. The split was largely along class lines. Homeowners occupying homes in the surrounding community were anxious to see improvements made at the Heritage Park site because they felt it would mean a safer community and an improvement in their property values. Others were concerned that the redevelopment was the first step in a process of gentrification and neighborhood redefinition that would eventually lead to their removal from the neighborhood. This sentiment was strongly conveyed by the words of Nellie Stone Johnson, a long-time labor and civil rights activist who wrote about the demolition plan in 1995:

"For over 50 years black people have had their babies, raised their families, and buried their dead in the near north area of Minneapolis. Now, before I meet my maker, I see what it all comes

14.3 Current Heritage Park development.

14.4 Current Heritage Park Development.

down to: the liberals selling out the only black land we have ever known in Minneapolis to a bunch of development interests, with black leaders from the mayor to our community organizations falling in line.

Shame on the Minneapolis NAACP for participating in this terrible attack on our community. Shame on the NAACP for allowing itself to be used by the City and the other parties to the Hollman "settlement" to make it appear that this theft of our land has the approval of the black people. It does not.[9]

The suspicion that Heritage Park was simply a way to move the black community out of the near north was often repeated between 1995 and 2001 when the redevelopment was taking place. One African-American newspaper with a wide circulation on the north side, *The Minnesota Spokesman-Recorder*, ran a series of articles that attacked the redevelopment plan as a thinly-disguised effort at gentrifying the north side. "Is this a wise strategy for reducing the residential segregation or is it a convenient way to get these people off that property?" the

newspaper asked in 1998.[10] Concerns for gentrification and displacement of current residents increased when news spread that the city was considering the demolition and disposition of hundreds of units of additional subsidized housing surrounding the Heritage Park site.

Opponents focused on the twin issues of displacement and gentrification. One opponent of the redevelopment spoke at a community forum on the north side, "Have you noticed the beautiful view of downtown from where the rowhouses used to be? Who do you suppose will enjoy that beautiful view when this project is completed?" The Reverend Curtis Herron, pastor of Zion Baptist Church in north Minneapolis likened the resettlement to the 'ethnic cleansing' that was receiving worldwide attention in 1998 during the Bosnian conflict. Even the Minneapolis branch of the NAACP, one of the co-plaintiffs in the lawsuit that produced the redevelopment plan, criticized what it called "the disruption and the gutting of the North Side's black community."[11]

One activist organization took words directly from the City's Heritage Park plan

and added their own twist to produce the following flyer that they used to drum up opposition to the plan:

"Five years from now the drive down Olson Highway will look much different than it does today.

New parks, ponds and playfields... Mixed income housing... Jobs and training..."

TOO BAD YOU WON'T BE HERE TO ENJOY IT.

Opponents organized protests against the demolition. They picketed outside the offices of the Minneapolis Public Housing Authority. They picketed on the site itself, placing themselves between the bulldozers and public housing units slated for demolition. They marched to then-Mayor Sharon Sayles-Belton's office to demand that she stop the demolition.

The official consensus in favor of redeveloping the north side site, however, made such protests irrelevant. The Olson Townhomes and the Bryant Highrise projects were demolished in 1997. The Sumner Field buildings came down in 1998, and

14.5 Olson Memorial Highway running through Heritage Park.

the Glenwood and Lyndale projects were torn down in 2000. Over 900 units of low-cost public housing were removed in just over four years. The redevelopment plan said that 200 of them would be replaced on-site, while more than 500 others would be created in communities across the metropolitan area.

Hundreds of families were forcibly moved from their homes during these years. Many left willingly, tired of the run-down buildings and high crime. Half of the families, however, would have stayed if they could have.[12] The desire to stay was especially notable among the SE Asian immigrants. Families were given monetary assistance to help with the move, and they were given "mobility counseling" to help them find new homes.
Where did these families go? Most stayed

in the city, moving to nearby apartments or homes on the north side (54%), or moving to the lower-income neighborhoods on the city's south side (27%). Only 13% moved to the suburbs and most of these moved to lower-income first ring suburbs on the city's north side. Almost two-thirds of the families stayed within a three-mile radius of the north side site.[13] This pattern of relocation is not surprising for at least three reasons. First, it is the pattern typical of families involuntarily displaced from their homes.[14] Second, most families did not want to move into the suburbs or beyond. Three-quarters of the families who were displaced expressed a preference to stay in the city, and most of them did. Third, the distribution of affordable housing units (the kind which these families were looking for) made it highly likely that they would stay nearby. Those who wanted to

move to the suburbs had difficulty locating units that were appropriate and landlords willing to rent. In fact, only one in two families who expressed a desire to move to the inner-ring suburbs ended up there, and only one in three families who wanted to move beyond the inner ring were successful.

By and large, families moved to other distressed neighborhoods. On average their new neighborhoods had a median income that was only 65% of the area's median income, and had more than three times the poverty of the region. One-half of the families moved to other neighborhoods that met the redevelopment plan's definition of high poverty concentration, high minority concentration, or both. Moving families away from such concentrations was the justification for the redevelopment plan in

the first place. Finally, it should be noted that the neighborhoods to which families moved were gaining minority residents and poor residents at rates roughly 50% faster than the city as a whole. In other words, the neighborhoods to which they were relocating were becoming more concentrated in poverty and minority status. Will many of the original families move back to the site? Experience tells us to not expect it. For some families, five or six years will have passed between the time they were relocated from the site and the time any of the affordable units are made available. They will have settled into new lives in different homes and become reluctant to disrupt them for a move back to Heritage Park. For others who are willing to move back, many will not survive the scrutiny of the tenant screening process run by the private company that now manages the site, a set of standards much more formidable than what they had faced with the public housing authority. For projects like this around the country, the research shows that only about 19% of the original families ever find their way back to the new, improved neighborhoods that are created. [15]

An assessment of Heritage Park is complicated by the several contradictions that are playing themselves out on those 73 acres. Tantalizingly close to the city's downtown and entertainment district and therefore a potential extension of those districts, it is nevertheless cut off from those areas (and others) by significant man-made boundaries (freeways and railroad tracks). It remains therefore both part of the city's extension of its core, and part of one of the city's lowest income neighborhoods. Though ostensibly built to improve the lives of the very low income families who had previously lived there, the project was opposed by a substantial number of those families, and is unlikely, in any case, to house many of those families in the future. Though supported by one segment of the city's black community, it has been condemned by another.

In the summer of 2005, the Heritage Park redevelopment is still under construction. A final analysis of what this community will look like (racially and socially) is several years away. But 10 years after the redevelopment plans were first announced dramatic changes in the physical and social landscape of the site are apparent. The families that called this area home have been moved away, primarily to other lower-income neighborhoods in the city. The tired and monotonous structures that housed over 3,000 very low-income people have been demolished and cleared away. This part of the city represents once again, as it has in the past, a place that has been fundamentally remade.

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designing an end to homelessness

A panel questions the premise

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One of the greatest social problems existing today could be solved with the help of the design professions. Homelessness, according to the U.S. government, is the biggest crisis facing America, as a persistent and growing problem. This problem, which crosses all ages, ethnicities, religions and income brackets, is growing at an alarming rate. By some estimates, over one quarter of the population, covering a broad-cross section of the nation, is affected by homelessness. Yet the design professions, which some consider best equipped to reverse these trends, have stood nearly silent on this matter. Because the issues involved with homelessness stretch across many disciplines, it is imperative that urban designers, architects, landscape architects and city planners, begin to work together to envision solutions to the housing crisis.

To encourage this type of multidisciplinary discussion, the editors of t/here sponsored and mediated a roundtable discussion at the Planner's Network Conference held at the University of Minnesota in the spring of 2005. A series of questions were posed to a five-person panel, whose areas of expertise were as varied as their personal viewpoints. The panel consisted of two planners, one architect, one ethicist and one housing specialist. The panel discussion was invaluable in initiating a shift in how both students and practicing designers act on and are educated about issues of homelessness. What follows are the four questions and a summary of the panel discussion.

Statistics show that one of the main trends "responsible for the rise in the number of people who are homeless is the lack of affordable rental housing."[1]

THE RIGHT TO SHELTER

There are many factors that have contributed to the increase in the number of homeless people in the United States. One factor that appears to be making the problem worse is the proliferation of government regulations that ban such acts as loitering and begging. Our forefathers sought to protect our civil rights, ensuring that life, liberty and the pursuit of happiness were given to all Americans. Yet, although it may be inferred, shelter is not specifically mentioned in this bill. This begs the question: Can the problem of homelessness be solved if it is not considered a right? With the amount of legislation and the number of regulations increasing, the worry is that those rights, which we consider the basis of our existence, are slowly being whittled down to nothing. The questions for designers are: how can we ensure that what is considered a human right also becomes a civil right, and what political processes, ordinances and ideologies are preventing this from happening?

In a large part the government has made it difficult to be homeless, adding insult to injury. John Petroskas, Catholic Charities, points to the fact that the government has "made certain behaviors, things you would do in your own home, illegal to do on the street," thus making it impossible for someone whose home is on the street to participate in the mundane tasks of living such as drinking, sleeping, and urinating. But as the panelists point out, that is not the only problem; housing is also an issue. One could argue that these regulations are helping keep people off the streets; however, it does not address where they can or should go. "Ordinances currently in place in Minneapolis limit shelters to religious institutions," says Petroskas, thus narrowing the band of possible shelters to a very limited set of buildings and providers. With a swift and decisive move, the government has made it difficult, if not "illegal," to be homeless while at the same time eliminating opportunities for housing.

Unfortunately, this problem is not just a local one, for it can also be found at the highest level of our government. Richard Milgrom, University of Manitoba, points to the 1996 Habitat Conference in Istanbul as an example of this: "One of the discussions there was that housing should be a human right. The U.S. basically blocked that resolution from coming out of the conference, in part [because] higher agencies were concerned that if it were declared a right, the government would be responsible for housing the people. The government didn't want the liability or economic responsibility." Peter Marcuse, Columbia University, who attended that conference added, "The U.S. [thought] that the resolution would distort the market." The contention here was that, according to Marcuse, "if housing were a right, nobody would save their money to buy or rent privately." If the government and the public as a whole are guided by fear of the unknown, it seems unlikely that shelter will ever be a human right.

How can we ensure that this problem is not increasing? Todd Rhoades, Cermak Rhoades Architecture, believes it starts with taking responsibility; "Our responsibility as a citizen [and designer] is to understand how to build a city, [to] think about what our responsibility is for housing citizens and [to understand] what voice they have [and need]."

15.1 New housing options include multi use structures that allow for residents to live above where they work.

DESIGNING *WITH,* NOT *FOR*

Students often design with no client, taking a sky's-the-limit approach. By the time students become designers they have failed to learn the art of inclusion. It seems impossible to design an end to homelessness if the homeless population itself is not engaged in the conversation. Designing for this diverse group of people is hampered not only by our inability to find a forum for discussion but also by the public's prejudices and fears. Bringing the diverse ideas, ideals and opinions to the table is an uphill battle. The job of the designer becomes one of educator, facilitator, visionary and finally artist. Removing any one of these ensures failure for the whole. Panelists were asked how designers can begin to infuse the needs of the homeless into the built world, engaging them in a design solution that is right for their situations, while at the same time making the design of an end to homelessness appealing to the public at large.

These questions, in and of themselves, brought up an important issue that certainly must be addressed. Inherent in the questions are implications that people who are homeless are all the same, and that there can be one solution to solve this problem. Milgrom was quick to challenge this notion: "There are many homeless populations, and envisioning *a solution* may be impossible. There are many solutions and models; I wonder if the problem is that we have too few models and ideas

about what communities and neighborhoods might look like, [thus] reducing ourselves down to a bunch of templates. And [inevitably] people don't fit in that." Opening ourselves to multiple solutions allows for the flexibility needed for the varying communities and clients.

Where do designers and students look to find examples of flexibility and ingenuity that create usable solutions? Perhaps, suggests Petroskas, it lies in the Rural Studio at the University of Auburn, where "Professor Mockbee's [studio] is designing with found materials for the rural poor." Although this may not work for urban populations, it is a wonderful example of how creative design can be when it addresses a community as individuals rather then lumping them together under the title of the "rural poor." Can that model work in an urban setting? The answer is yes, assuming communication exists. After talking to many homeless people, Petroskas has found that although each person envisions a different home, they all have a similar first response. "They

want a door", says Petroskas, which gives them, most of all, "privacy." For them the door represents the quintessential idea of home and "helps separate them from other homeless people."

A door itself is much easier to come by than the separation it creates between homeless people. The current design trend is to build large spaces that house as many homeless people as possible. Two ideas are being implemented currently in the Twin Cities: 'housing-first,' which uses one or two spaces in existing market-rate apartments to house the homeless, and the formation of community activism groups. The benefits to 'housing-first' are the ability to use existing structures and, according to Petroskas, "it eliminates the isolation that is felt when the housing is [pushed to] the outskirts of town." Community activism brings once homeless people into community meetings in order to put a face on the homeless. Recent projects by Cermak Rhoades have used this method to relieve community fears and promote community acceptance.

15.2 Less dense single family units create their own community.

15.3 By designing with the existing community and the homeless population new neighborhoods fit seamlessly into the whole community

John Song, University of Minnesota, reminds us, "[The] demographics of homelessness shows it's people like you and me who can't afford to pay rent. Everybody has different needs, but wanting shelter, wanting safety, wanting food- they are basic needs shared by most people." It is critical that we change our perceptions if homelessness in order to understand and mitigate it. Song reminded us, "The only thing differentiating them from people who have homes is that they don't have a house!"

THE POWER OF EDUCATION

In every aspect of our consumer-driven lives, the idea of 'throw away' society has been ingrained and perpetuated. It should be no surprise that this has also come to include people. These attitudes and actions are learned behaviors. So then, how and where can they be changed and evolved into a more humanistic system? As students it is not only our right but also our responsibility to focus our education in a productive direction and to provide a foundation that can guide future generations. The panel, which consisted of four educators, was asked how, in our consumer-driven society, we can change the public perception such that people are not treated as disposable commodities.

It might be difficult to bring social justice into the design curriculum without some example of how that might be accomplished or statistics that prove its benefits. On many campuses, including the University of Minnesota, the medical schools are leading the way. Song, who believes that educational institutions have the responsibility to address social issues, says, "There is a lot of literature to suggest that when individuals are exposed to underserved populations early on in their careers, they are more likely to work with these populations later." He goes on to say, "There is a direct correlation between [the number of] contact hours spent serving this population

15.4 Mary's Place is a transitional housing facility that prepares residents for independant living.

and the likelihood that it will continue after school." Medical schools across the country could serve as models for design schools, giving other schools a good working example.

> "I think we should be talking about social justice in architecture schools, but I don't think we can do that in isolation."   -Richard Milgrom

It seems unlikely that this exposure alone would change the status quo. But, if this was combined with an "interdisciplinary [approach] so that architects can figure out their roles," interjected Milgrom, then forums like this could be used to begin "advocating for policies" that have a possibility of working because the solutions are arrived at by a broad spectrum of professions. Regardless of the ideas that come out of these forums, clearly nothing can be accomplished without education. After all, as Milgrom points out, "Educa-

tional institutions are the key to changing perceptions."

DO NO HARM

Just as the medical profession touches every human, so does the design world. Medical professionals sign a Hippocratic Oath that states they will do no harm, and legal professionals agree to do a certain amount of pro bono work. Should the design profession be subject to the same sort of ethical standards, and if so, what would a stipulation to 'do no harm' look like?

For Song, 'do no harm' should have a positive implication. In fact we may "have an obligation to [go] beyond not "harming people," but instead we might have an obligation to actually help: to advocate, to be activists." With the medical profession, this obligation starts with medical school and the trust that non- and under-insured patients put in medical students. These patients allow the students to examine them so that they become proficient at their craft. But, do design students have the same connection?

15.5 This interior of a homeless shelter in Los Angeles shows that the spaces need not be institutional to be effective.

"The cause of homelessness is neither the stupidity nor the ill will of architects and planners." -John Song.

Unlike the medical profession, the public at large will not meet the designers of the buildings that surround them. However, Song says, by living with these structures, the public implicitly says, "We trust you that we can walk down the street safely, that we don't have to worry about a building falling upon us. [Thus] a positive obligation is created." Even with this positive obligation, Song feels this issue is not the responsibility of one profession," but rather, "the responsibility of citizens in a democratic society."

As part of that society, designers and students alike have begun to seek out venues that give them direction. The AIA has, in a small way, begun to address the problem of ethics and the obligations of the profession in the AIA Code of Ethics. This code consists of five provisions that were simplified by Marcuse:

First: Make no unsubstantiated claims.
Second: Use your specialized knowledge as   a citizen.
Third: Take responsibility for the pro-
gram you are given to implement.
Fourth: Do no social evil.
Fifth: Submit to the enforceability of these standards.

At first glance these provisions set high standards, but in actuality there is not a positive obligation. The provisions direct members to 'do no evil', instead of to 'do good.' If these standards are not enough, where do we turn? An activist group called Architects, Designers and Planners for Social Responsibility has taken a stand on issues like the planning of prisons that they see as inhumane. Although their boycotts may seem extreme, they have captured national attention. Marcuse explained that part of the organization's plan is to enforce "sanctions on professionals who act in ways that are unethical," which in this case means building new prisons.

"As a profession, we say we are improving the quality of life for people. That in itself, is an advocacy position." -Richard Milgrom

LOOKING FORWARD

Homelessness is a condition whose face is 'everyman.' It knows no boundaries and has no prejudice. Because homelessness touches such a diverse group, there cannot be one solution to the problem, nor can the responsibility for that solution fall to a small set of the population. This panel discussion opened the door for the kind of interdisciplinary approach that must be taken. As with the practice of architecture, the panel discussion gave us more questions then answers. Although we may not have the answer, this panel gave some direction. If homelessness is to be reduced or eliminated in our lifetimes, we as designers must use not only our educations but also using ourpower as citizens to change the status quo.

NOTES

WHO IS HOMELESS?

In a publication by the National Coalition for the Homeless, May 2004, the demographics are startling:

By age – 39% of the homeless are children, 51% are between 31-50.

By gender – 41% are single men, 14% are single women.

By ethnicity – 49% African-American, 35% Caucasian, 13% Hispanic, 2% Native American,1% Asian.

By wage – 17% of the urban population that is homeless are working.

1. www.nationalhomeless.org, 7-8-2005

IMAGE CREDITS

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15.1-15.3 Cermak Rhoades Architects
15.4 © Rebecca Celis 2005

architecture for humanity minnesota

Coming together to design like they give a damn

Cassie Neu
Colin Kloecker
Architecture for Humanity-MN

Cassie Neu is a landscape designer with LHB in Minneapolis. She joined AFH MN because of her passion for design as a means to help people. Her design philosophy is focused on restorative community design.

Architecture for Humanity (AFH) has found its way to Minnesota. Founded by seven individuals with varying design backgrounds and driven by shared passion and dedication, the Minnesota Chapter of Architecture for Humanity (AFH MN) upholds the same message to which its founders, Cameron Sinclair and Kate Stohr, originally committed themselves: "To promote architectural and design solutions to global, social and humanitarian crises."

AFH MN has grown to include 20 members and is still growing. The organization is simultaneously a bridge between architects, landscape architects, and planners, as well as between students and practitioners. When compassionate designers come together to promote humanitarian design, good things will happen. Some of the projects already begun by the newly-formed group include a charrette to help design a community center for Sri Lankan villages affected by the 2004 South Asian tsunami, an innovative idea for a Clean Hub that will provide clean water and energy to communities in disaster, and a new

joint architecture and landscape architecture studio at the University of Minnesota dedicated to the aftermath of the tsunami.


16.1 Cameron Sinclair at AFH-MN's meeting place, Anodyne Cafe in South Minneapolis. Featured left, clockwise, are Nancy Grist-Franchett, Cameron Sinclair, Kathryn Matenson, Maureen Ness and Cassie Neu.

AFH MN started out strong during the spring of 2005 in preparation for the arrival of Cameron Sinclair for a lecture at the College of

"Design Like You Give a Damn": A lecture by Cameron Sinclair

By Jeffrey Swainhart

Edited by Maureen Ness

At Cameron Sinclair's lecture at the College of Architecture and Landscape Architecture at the University of Minnesota in April 2005, the audience was left with three distinct impressions. The first is that Sinclair, in the words of Janet Abrams, Director of the Design Institute, "is amazing." When she introduced him, she knew what the audience would quickly find out: that Sinclair, with his sense of humor and his sense of history, would entertain and amaze with stories of inspiration that could only come from a life devoted to humanitarian service. He told of his first inclination to "do something" after watching a documentary on the humanitarian disaster in Kosovo. He showed how with a little bravery even a 24-year old designer could make a real difference in the lives of people across the globe.

After seeing that documentary, Sinclair, in a flash of inspiration, called the United Nations High Commission for Refugees to see what he could do to help house those returning to Kosovo after the ethnic cleansing. Two days later he was talking by satellite phone to the refugees themselves, asking about their housing needs and the resettlement efforts. What fol-
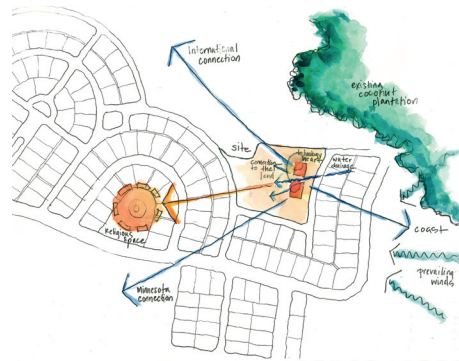
16.2 Water is a dominant element that finds its way through the entire site of the community center and expresses the connection between Sri Lanka and the lakes of Minnesota.

Architecture and Landscape Architecture at the University of Minnesota (see sidebar). Impassioned by Sinclair's wit and enthusiasm during a post-lecture breakfast, the Minnesota group set out to do what he encouraged: find great projects, unearth ways to raise money to make them a reality, and always "design like you give a damn."

A DESIGN CHARETTE FOR SRI LANKA

Sometimes destiny is about being at the right place at the right time, and sometimes it is about knowing how to be at the right place at the right time, believing in something so much that you can make it happen. Through involvement and networking with like-minded organizations, AFH MN has begun to make the connections it needs in order to make a difference on a global level. Word of mouth brought Sishir Chang, the founder of the Pan Asian Tsunami Healing Group (P.A.T.H.), to AFH MN. As an umbrella organization, P.A.T.H. brings together over a dozen Twin Cities Asian entities to help the tsunami survivors and victims' families. The Minnesota Sri Lanka Friendship Foundation (MNSLFF) is one of the participating groups. Its members raised funds for a community center on the Monrovia Estate in Hikkaduwa, Sri Lanka but had no means to design it. That is where AFH MN stepped in.

AFH MN and MNSLFF soon began exchanging information and ideas. The community center will serve a new village on the

southern coast of Sri Lanka. On-site construction was already underway on fifty homes designed by the Sri Lankan Urban Development Authority (UDA) so AFH MN needed to act quickly. The overworked UDA also provided MNSLFF with a conceptual plan for the community center. MNSLFF asked AFH MN to pick up where the UDA left off and design a flexible, functional, and energy-efficient community center that would also be a beautiful space in which people could socialize, learn, and receive medical care.

Eager to begin their first large-scale project, AFH MN decided that a two-day design charrette open to professional architects and landscape architects as well as students was the best way to help MNSLFF design this new community center. On the night of Friday, July 15 2005, AFH MN and MNSLFF met at the SmithGroup office in downtown Minneapolis to kick off the charrette. Members of MNSLFF gave a brief history of their group and then began to explain the programmatic elements for the community center that will include a Montessori school, medical clinic, and library. Before leaving SmithGroup for a good night's rest, the 16 participating designers processed as much information as they could about Sri Lankan culture, local building materials and styles, the site and natural environment of southern Sri Lanka, natural cooling and ventilation techniques, and ways in which the architecture of the community center could connect the people of this new village with each other as well as with the rest of the world.

lowed was the first Architecture for Humanity (AFH) design competition. The resulting participation of over 300 designers from 30 countries demonstrated that the competition was a success by any measure. Perhaps most importantly, the competition established AFH's reputation for cutting edge humanitarian work.

The second thing that impressed the audience was the shear variety and creativity of the solutions offered to humanitarian problems around the world. Slide after slide illustrated elegant solutions to the challenges of shelter and medical care for refugee populations. Shelters were created from pallets, from inflated hemp covered with concrete, and from the screen-formed rubble of bombed-out buildings. Shelters were created with cardboard tubes and shipping containers. Shelters were created that would generate energy and collect water. And with each slide, Sinclair would inspire the audience with stories of the people and situations that educated, entertained and engaged all who listened.

Sinclair also discussed AFH's work with design competitions, specifically one for mobile health clinics to combat HIV/AIDS in sub-Saharan Africa. This competition involved over 1400 designers on 530 teams from 51 countries. After six years of continuous hard work by the two unpaid founders, AFH has
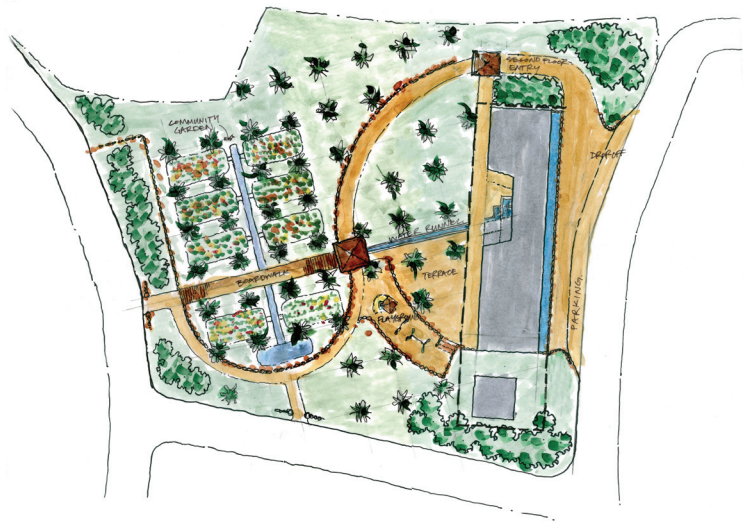
16.3 The community center will be a gathering place for Sri Lankans displaced by the 2004 South Asian Tsunami and will include a library, medical clinic and preschool.

The next morning the designers regrouped over donated coffee and bagels and got to work. After some discussion, they decided to form smaller groups to look at four primary issues: heating/cooling/ventilation, space planning, landscape site design, and global/local connections. After three intense hours of small group work, the large group gathered to review what had been accomplished. As each team presented, it became clear that certain elements would become integral components of the design throughout the process: the movement of water through the site, the technology center as the heart of the community center, and a sensitivity to the village's history and culture. They then broke for lunch before hitting the final stretch of the charrette: refining the work already done and producing a finished design to present to the UDA for approval.

A NEW COMMUNITY CENTER WITH MINNESOTA ROOTS

At every step of the process it was important for the charrette participants to respect the reason why so many Sri Lankans are being relocated from the coast to the new village on the Monrovia Estate. These people who have lived on the coast for generations were now being asked to move two miles inland from the water to prevent future damage done by tsunamis. In understanding that a healing and

recovery process must take place while residents are at the same time looking forward to new lives, the group of designers realized that connections to the coast and the former villages are important, as well as connections to friends in Minnesota like MNSLFF. With this in mind, water - like that found on the coast of Sri Lanka and in the 10,000 lakes of Minnesota - was chosen as the common element and developed as a design feature throughout the site.

A spring-fed pool adjacent to the south side of the community center will cool the interior as prevailing southern winds pass over the water and through the building. The pool will also act as a daylight mechanism when the sun reflects off the water and into the building. The spring water will then run under the building, exit in a social courtyard and finally will be channeled to end in an irrigation sieve to nourish community gardens at the base of the site.

Moonstones (Sri Lankan circular stone slab thresholds), made of donated Minnesota granite or limestone, will be scattered throughout the site at major entry spaces, spring water collection areas, and within community gathering places. Inscriptions in the stone will tell the story of the community, where the people came from, where they are today, and who

harnessed the design community's desire to use their professional knowledge and talents to solve human problems. It took AFH to create the conduit that allows designers to use their skills to meet the needs of the world's less fortunate peoples.

The third impression? After hearing all of the stories of remarkable people making sacrifices to help others across the world, the audience could reflect on their own comfortable lives and how they too could make a difference. And after seeing all of the elegant solutions with their creativity and simplicity, the audience could reflect on their own creative efforts and how, with a little inspiration, they, too, could, "design like they gave a damn."

Jeffrey Swainhart owns Swainhart Construction Services, a construction and consulting firm that specializes in green and sustainable construction and design. Grounded with over 20 years of construction experience he brings a practical expertise to resolving energy and environmental design issues.

Maureen Ness is an architect with LHB in Minneapolis. She was a founding member of AFH MN. Her design philosophy is focused on sustainable architecture, and she feels that providing affordable housing and developing community are essential to sustainability.

their friends are in Minnesota and abroad.

The building's expression of passive heating/cooling and natural ventilation incorporates the region's ecology and geography. The prevailing coastal breezes enter the building from the south and are directed through the building and up and out a stack ventilation system. A large veranda on the north side of the building shades the interior space while also providing outdoor circulation space.

First floor circulation is exterior, shaded by a veranda. With its series of columns, the veranda lends a monumental feel to the building, which is entered from the north.

The first floor accommodates the Montessori school, the medical clinic, and an office. The second floor can be accessed by stair from the first floor or by a gently sloping ramp from the east pavilion. Access is again by the veranda, repeated from the first floor. The second level accommodates the library and a technology center, seen throughout the charrette as the heart of the building: a link to connections between friends and family across the world, a link to information, and a link to the future.

At the end of the day, in return for the participants' hard work and in celebration of the new connection between the two groups, MNSLFF provided an incredible meal of traditional Sri Lankan cuisine. While all ate hungrily, the smaller design teams re-grouped and took turns presenting the finished design to MNSLFF members. Everyone involved declared the charrette a great success.

AFH MN's work with MNSLFF's community center is not finished. It is currently under review by the UDA, after which AFH MN will respond to any revision suggestions and prepare construction documents for their use. Construction is scheduled to be finished by the one year anniversary of the devastating tsunami.

FUTURE DIRECTIONS FOR AFH MN

The humanitarian work of AFH MN is far from complete. Although there are too many

social issues to resolve, there are enough ambitious and passionate people in this organization to continue the work. Upcoming projects, competitions, and creative solutions for AFH MN are many and varied. One AFH MN member helped launch one of the organization's first design ideas: the "Clean Hub." This compact life vessel will hopefully leave its mark on communities worldwide where clean water and energy are needed in cases of catastrophe or within daily lives in urban slum environments. Each unit is powered by the sun, using it as a source of energy and purification, and is constructed of local materials. The hub is more than a life-saving device; it is the potential hearth of a community.

On an academic level, an upcoming studio for architecture students at the University of Minnesota's College of Architecture and Landscape Architecture will be co-taught by John Dwyer, a member of AFH MN. Coined the "Urban Slums Studio," this class will attempt to address some of the many social, ecological, geographical, and political issues that are ever-evolving in the lives of over 900 million slum dwellers.

Architecture for Humanity's chapters around the world are connected to AFH MN through an online project network and group email lists, as well as by collaborating on AFH's international competitions. The AFH Competition "Rethinking Tent City" is underway this fall. Minnesota's chapter will promote local commitment to this humanitarian issue to bring the chapters even closer. But this is not surprising, since that is the true nature of AFH: to help people come together locally to address farther reaching issues, whether they lie on local, regional, or international ground.

IMAGE CREDITS

Figures 16.1-16.3 © Architecture for Humanity Minnesota 2005

North 2nd Ave
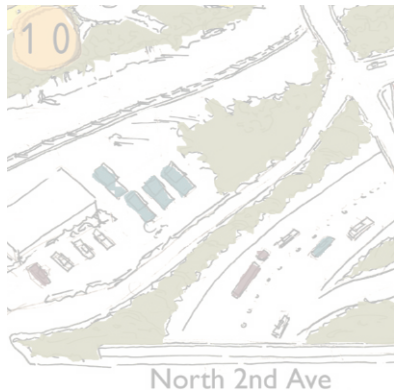
rapid park, rapid development
Twins Stadium brings new front door to Minneapolis

William Welsh
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William Welsh is a thesis student in the College of Architecture and Landscape Architecture at the University of Minnesota.

The Minnesota Twins believe that they need a new baseball stadium. The most likely site for the proposed stadium is in Rapid Park, northwest of the Target Center, butting up against the Covanta Waste-to-Energy Facility, between 5th and 7th Streets. The stadium represents an enormous potential change to an area that has always been the backdoor to downtown Minneapolis. Here, large, inexpensive pieces of property have attracted those things that are utilitarian, unsightly, and regrettably quite necessary. This is the place where we house the homeless, it is where we recycle our waste, and it is the place where we build the infrastructure of downtown. This place accommodates those things that we don't want to see (or smell) resulting from our consumer driven society.

Bruce Lambrecht and Richard Pogin are the president and CFO of Investment Management Incorporated. They manage parking lots and small storage facilities throughout the Twin Cities, including 2,000 surface parking spaces between the Target Center and the nearby railroad tracks. About six

years ago Lambrecht realized the tremendous potential this parking lot had for the hotly contested Minnesota Twins baseball stadium. The existing infrastructure seemed more than adequate to accommodate a stadium while offering spectacular views of the downtown skyline.

The *"Proposal to Governor Tim Pawlenty's Stadium Screening Committee"* outlines all of the obvious advantages to the site. The site is full of infrastructure that already supports the entertainment existing in the Warehouse district. The three major parking garages that feed the Target Center represent about 23,000 parking spaces that already exist and could be utilized for the new baseball stadium. At an estimated value of $15,000 per parking space, this is a sizable advantage over other potential stadium sites. The new light rail can bring fans directly from the Minneapolis International airport to the proposed stadium, creating a direct connection with the Mall of America. In addition, the construction of the Northstar line will bring people from St. Cloud directly to the

Rapid Park site as well. The combination of Interstate 394, the skyways, and the parking garages means that people can comfortably go to the games without having to engage the city at all. They can enter the garage directly from the interstate, and enter the stadium without walking through city streets. According to the information put out by DJR Architects, the skyways, privately owned and controlled, offer access to "172 food and entertainment establishments and 3,395 hotel rooms."

The stadium itself is planned to accommodate as many as 42,000 fans, with 60 private suites and club seating for 4300. Originally the Twins wanted a retractable roof as well, though that need seems to have dissipated. Modeled after the old-world feel of Wrigleyville in Chicago, the new stadium attempts to tie into the aesthetic of the existing warehouse district. Including the retractable roof, the total cost was estimated to be around $531 million. However, the stadium itself is only half the project. DJR has been developing "Twinsville," a series of

ten- and fifteen-story loft apartment buildings that sits on the north and south side of the stadium along the railroad tracks. Along with the 2,000 units of housing, Twinsville will have shops, restaurants, and a community center. The plan calls for the unearthing of the long buried Bassett Creek to allow it to flow the length of Twinsville. Bruce Lambrecht estimates the value of this development at $500 to $600 million. This amounts to more than a billion dollars of development going into a place that has always been the backdoor to Minneapolis. It's a new front door.

Dean Dovolis (principle at DJR), in an interview with *t/here*, explained the traditional pattern of urban development in Minneapolis. Originally downtown started on the riverfront, near St Anthony Falls. He explained that, "the money went south due to the better topography and lakes," creating the upscale neighborhoods of South Minneapolis, Edina, and Minnetonka. The labor classes moved north to form cities like Blaine. This radial expansion according to status has been the typical development pattern for the last hundred years. Dovolis explained that this stadium proposal consciously attempts to re-orient this pattern of expansion by creating a middle- to upper-class neighborhood on the back side of downtown. Bruce Lambrecht describes it as creating the 83rd neighborhood in Minneapolis.

The current cost of the proposed stadium site, without the retractable roof, is $360 million. The Twins have offered to pay $125 million and the rest comes from the combined effort of local, county, and state tax dollars. During the 20th century, Americans have spent more that $20 billion on professional sports stadiums. Of that total, conservatively $14.9 billion has been paid by tax dollars. According to Raymond Keating of the Washington-based Small Business Survival Committee, the facts do not support the notion that these stadiums actually provide economic benefit for the cities in which they reside. "Indeed, the results of studies on changes in the economy resulting from the presence of stadiums, arenas, and sports teams show no positive economic impact from professional sports – or a possible negative effect." He shows how the subsidies given to professional teams for new stadiums go directly to the pocketbooks of the players and the owners. Cities, competing for the best standards of livability, desperately want to be included in the number of cities with professional sports teams; therefore they subsidize the team, allowing the owners to pay for really expensive players. Professional baseball has extensively exploited the perception that it is an indispensable urban amenity. Major League Baseball Commissioner Bud Selig has made it clear that the Twins will leave if they don't get a more profitable stadium from the taxpayers. While it is true that the best way to attract the best players is to offer the most money, the financial system of baseball represents, according to Keating, "another example of government action whereby the few and the influential benefit at the cost of the many."

During the early years of base ball (that's the original spelling) players were allowed to search out their own destiny. They could play for whatever team offered the best deal. Players would change teams every year as they searched out the best salaries. Unfortunately they were making it extraordinarily difficult for ball clubs to manage their money. The teams failed regularly, with years going by in which there were no teams playing. Eventually, all of the teams got together to create the Reserve Clause, which for the first time, truly aligned all of the clubs into a single entity. The teams agreed not to pursue players who were on other teams' reserved lists. Each team was allowed to have 5 of their best players on their reserved list. This stabilized the finances of the individual baseball teams, but had unexpected adverse effects on these players. The "reserved" players, at first, wore this recognition as a badge of honor. However, the notion that they had reached the highest level of accomplishment was thwarted when they slowly realized that they had been shackled to the team, without any other options. Soon the number of players on the reserved list went to 11 for each team. By the 1950's all players had been placed on the reserve list, thereby giving the league total control of the salaries, benefits, and placement of its players. Since the American League and the National League were the only place to play baseball, this amounted to a complete monopoly of the game.

Baseball came up against anti-trust law on several occasions, including once just a few years ago, but the United States Supreme Court has consistently upheld the notion that baseball is just a game and is exempt from the anti-trust laws because they are not buying and selling an actual commodity. It is just a game. Baseball teams have always been thought of as clubs, not businesses enterprises.

Recent changes in baseball contracts have fixed much of this, but for 75 years, the greatest of our baseball players have been under strict control of the league. Salaries, on the average, have been comparable to middle class salaries until recently, while professional baseball has turned into a multi-billion dollar industry subsidized by tax dollars. The current annual minimum salary for a major league player is $300,000 with many players making many millions of dollars per year. The only way these salaries are possible is if the government funds the infrastructure of baseball.

ESPN's list of favorite stadiums shows that many of our very favorite ball parks come from a time before state subsidies were the norm. Wrigley Field (Chicago-1914), Fenway Park (Boston-1912), and Yankee Stadium (New York-1923) are considered to be among the most American of experiences that one can have, and they were all built without any help from the state. When baseball was operating within normal rules of business, it had to think carefully about what was possible to build, even considering what was appropriate.

Modern sports are one of the primary cornerstones of the $480 billion entertainment industry. In our contemporary culture, the
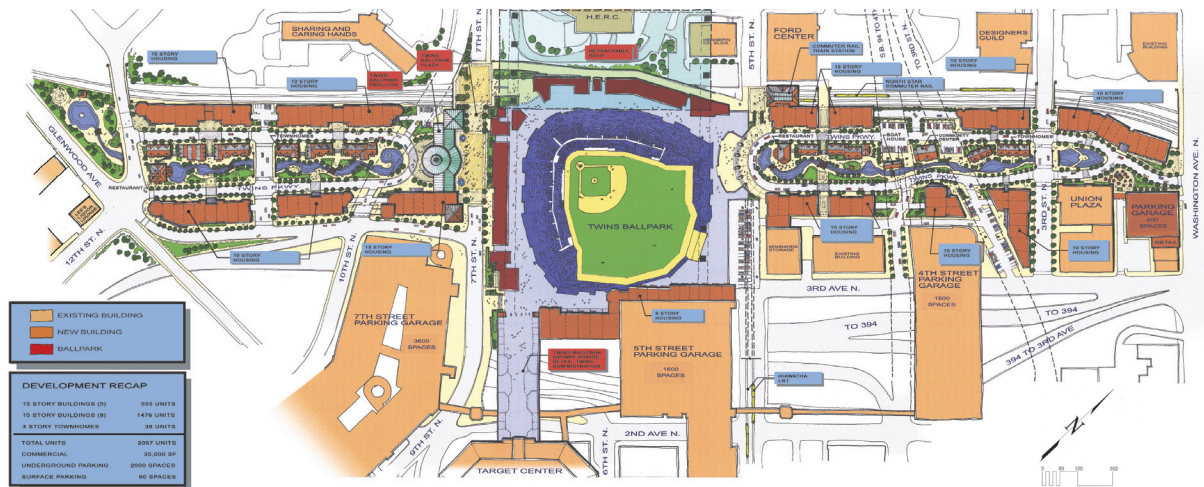
17.1 Twinsville masterplan showing Bassett Creek uncovered and the variety of buildings planned.

power of technology and advertisement have come together to completely change the way in which we experience modern entertainment. Professional sports stadiums facilitate the blending of advertising, entertainment and technology. They bear names like Staples Center, Target Center or America West Arena. They use giant rotating electronic screens to replay the events on the field while saturating the audience with a constant stream of advertising. The Texas Rangers Stadium includes a shopping mall as well as office buildings and restaurants. The outside of Rangers stadium is surrounded by a man-made lake and the interior is modeled after Chartes Cathedral. The Kansas City Royals play in Kaufmann Stadium, named after Ewing Kaufmann - their owner. He paid for the $2.7 million dollar scoreboard and the $750,000 waterfalls within the stadium, thereby earning the right to advertise himself.

Guy Debord, in 1969, claimed that, "In societies dominated by modern conditions of production, life is presented as an immense accumulation of spectacles. Everything that was directly lived has receded into a representation." He was making the claim that we no longer engage the life that is directly in front of our eyes. Instead, Americans tend to engage the spectacles that are continuously presented to them. Advertising and technology are two powerful forces that are highly suited to create spectacular promises

that skew reality in the favor of business. The corporate skyscraper is a wonderful example of technology being used to quietly teach the capitalist values of strength and power. While people are enamored with the incredible height of these structures and the unique experience of standing atop them, people are also subtly being taught corporate values of progress, dominance, and separation. Spectacle, according to Debord, is "not a collection of images; it is a social relation between people that is mediated by images." People build their relationships through conversation about the shared knowledge gained by some intermediary device. In other words, television, newspapers, books, and the internet represent just some of the media outlets through which we build our knowledge and form our interpersonal relationships. All of these outlets operate by the rules of economic competition and must fundamentally advertise themselves and their supporters. We must remember that our knowledge is severely skewed by this fact. It seems obvious to say that we cannot possibly know what it is to fight hand-to-hand combat in the Persian Gulf by watching the video game version of it on CNN, but unfortunately people talk as if they know something because they've read it in a few different newspapers.

The business of professional baseball is fundamentally a corporate entity based in entertainment. Debord wrote, "Separation is the

alpha and omega of the spectacle. The spectacle is capital accumulated to the point that it becomes images." This begins to suggest that corporate baseball fundamentally cannot be about community. Spectacle is the modern complement to money, and the creation of a spectacle tries to place the viewer in awe. Spectacle derives from the Kantian notion of the sublime, where something overpowering, infinitely larger and stronger than they are creates a feeling of fear and awe. People like the feeling of surviving the experience of something infinitely more powerful than they are. Unlike Kant's notion of the beautiful, the Sublime (including spectacle) always maintains an element of separation between the viewer and that which is viewed. As the modern movement has rejected the notion of the beautiful and replaced it with an insatiable appetite for the sublime, we have also fundamentally embraced separation as a core value.

The values of baseball, or any sport, are based on a celebration of excellence in technique. Douglas Kellner says that, "Today, sports are a major part of the consumer society whereby individuals learn the values and behavior of a competitive and success-driven society." The technology that supports the spectacle in our society further reinforces separation and difference between people. Our constant quest for new and improved technology is only a reflection of our quest for

17.2 Night rendering of the stadium designed by HOK.

the one best way. Technology is the direct manifestation of technique. Jacque Ellul explains that, "it might be said that technique is the translation into action of man's concern to master things by means of reason, to account for what is subconscious, make quantitative what is qualitative, make clear and precise the outlines of nature, take hold of chaos and put order to it." The quest for the "one best technique" has invaded every aspect of our lives, to the point that there are proper techniques for relaxation. There is a technique to driving a car and if it is not followed very specifically we are severely penalized. There is a technique for every single thing we do, and professional baseball is predicated on this quest for the perfection of technique.

Ellul explains that the "one best way" excludes thousands of potential ways to take any action. A small group of people somewhere decides, based on a given set of criteria, what the one best technique is. The people that follow the approved technique are rewarded and the people who do not are rejected and penalized. We place little value on the random act of spontaneity, frequently forbidding it altogether. Technique is in direct odds with freedom and individual expression. As long as the most effective technique is known, no other method is useful in our highly competitive society.

Our current celebration of science, reason and technique is subverting our ability to create community. Consider, for a moment, that a group of surgeons can come together from across the world, not knowing each other in the slightest way, and do a highly complex surgery. They do not need to know each other; they simply need to know the technique. We create people that are highly specialized in certain fields of study, but have nothing in common with their neighbors. The places that we do come together are spectacular, but usually empty of concrete relationships. One of our central meeting places is the television set. It is Ellul's contention that it is a far different thing to play

baseball with some neighbors than to go to a professional baseball game.

Professional sports are fundamentally about the commodification of spectacle and technique. These are the bases of the competition and the business. The fans consequently (and possibly unknowingly) subscribe to a set of values that are about the separation and stratification of community. Baseball coins itself as the distinctly American pastime, but what are the ethical and legal responsibilities of the state and the design profession? Encouraging baseball to operate as a virtual monopoly while it grew into a multi-billion dollar industry could be considered un-American in the fact that it is antithetical to the laws of the free market. Baseball professes to teach the values of competition, individual success, and playing by the rules. However, baseball also claims that it cannot operate by those rules itself, asking to maintain a monopoly on its players and fans, as well as asking for tremendous state subsidies to build its stadiums. Is it possible to build

a baseball stadium that is fundamentally about creating connection, not separation? What would a stadium look like if the goal was to build community through our (publicly paid for) build environments? Can the stadium honestly be considered a private ballpark if tax dollars pay two-thirds of it?

In my interview with Dean Dovolis, as in conversations I've had with other architects and planners, it became clear that when this stadium is built, the social service network that exists in this area will be pushed out. The land value, as well as the property taxes, will skyrocket. Many organizations, like Catholic Charities, the Salvation Army, and the Men's Shelter, that have benefited from cheap land and low rents will no longer be able to stay. Dovolis recognized that many of these organizations are already working with Hennepin County to figure out what to do. Most will probably ride out the increase in property value, and then move to escape the high property taxes. As Dovolis said, "The need that these social services have for money far exceeds the need that these places have for location. They will make a profit then use that money to help the people that they serve." It would seem that baseball's idea of community is at the expense to anything that stands in its way.

Ellul said that, "Economic technique has no use for non-producers, coupon-clippers, social mis-fits, and sabeteurs. The police must develop methods to put these useless consumers to work." These people are citizens of our state and are human beings. Poverty is a socially constructed and maintained condition, based in the very ideas of division and separation that corporate baseball aspires to and teaches. Why in a country with a Gross National Product of $12,373.1 billion do we allow poverty to continue? Why is it that 11.3 percent of the U.S. population lives in poverty? Why is it that 40 percent of these people living in poverty are children and 42 percent of the impoverished adults have jobs? It seems impossible for anyone to form a justifiable argument for spending hundreds of millions of tax dollars on an entity whose sole worldview is to manifest societal values of spectacle and separation, which at least indirectly leads to poverty and homelessness. It is a civil rights issue, and it is the responsibility of the government to protect the rights of all of its citizenry.

Modernism has worked very hard to separate the good from the ethical and the beautiful. We must, as we move into the future, re-imagine ways to re-connect with each other through acts of kindness. Our society is on the verge of destroying the environment and each other to protect our separated and stratified way of life. The design professions, like the professions of medicine and law, have a fundamental purpose to do good in society- beyond the simple task of doing no harm. This requires us to see that we need a built environment based on interconnectivity rather than extreme separation, and inclusion rather than exclusivity. Since the time that this article has been written, the master plan for Twinsville has been continuously developed within a local architectural firm, as well as the halls of the state capitol. If the stadium is thought of as a large public venue, paid for by government taxes, it must be accessible to everyone, manifesting ideas of community and protecting the civil rights ensured by government. If it is thought of as a business, then the business leaders should be charged with the same burden every other business must endure. They must build it themselves. Professional baseball should not get the best of both worlds. A level of appropriateness can return to baseball, with the clarification of what professional baseball is, and possibly some of the charm of old world baseball could return as well.

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17.3 Aerial perspective of stadium showing only half of the Twinsville development.

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