The Urban Exploratory Circus

infrastructure for corporeality, connectedness, and virtuosity

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“Even in the most casual meeting, where no words are exchanged, by a glimpse, by desire, by admiration, shock, recognition, one mind is born from another.”

— Susan Griffin
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A traditional form of cultural critique, the circus rests its appeal in presenting extremes of the familiar and by removing perceptual barriers between people. Rather than directly confronting problems, the circus generates ideas of living and creating, seeking the unfamiliar to frame a new understanding.

This proposal operates at regional, urban, architectural and bodily scales to provide a forum for exploration. Travelling structures facilitate a circus school and a deployable autonomous infrastructure to generate sites. Once set in motion, the ongoing event of the circus cultivates meaning through this connection in scales, sites, and people to create a narrative of action.

Thesis Supervisor  
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usage

This project has been anything but linear, and thus has resisted codification into book form. Many of the concepts contained here were developed through the construction of a website with its hyperlinks and concise infobites. While I would hope to present a text which could sustain the interest of a full reading, I recognize that to be useful this book should be accessible at different levels of depth if it is used at all. For a research project such as this to serve as a resource for others, the information contained must be coherent both as a whole and in meaningful fragments suggestive that whole.

As a result of this attitude and project structure, this book allows for a linear reading following the larger sections/essays as well as a random survey of these sections and the smaller bits related to key words. I hope the result is navigably informative but not disjointedly obtuse, and is able to convey the concepts I have found provocative as well as the spirit of exploration they have inspired in me.
imagination

Childhood trains one of our greatest assets, the imagination. A sense of pondering possibilities beyond the immediate reality, of conjuring worlds which we never saw before yet can articulate as if we had lived there. In childhood, the boundary between imagination and perception is soft if it even exists. A fantastic story from a book can be as real as lived experience.

Our society, in order to maintain power structures, must channel imaginative abilities. As we grow up, we learn we must focus our imaginations into narrow standardized stories in order to comply with social norms. We must learn to be effective at a job, desire a particular set of commodities, and even commodify people in order to attain certain social structures. The reasons these structures congeal are complex to sort out, but these clots in the collective stream of consciousness share a common center: fear. And this fear creates powerful undercurrents; hatred, bigotry, racism, nationalism, fundamentalism, sexism, homophobia.

An unfettered imagination, especially when shared communally, can accomplish revolutionary feats. Freedom must be imagined before it can be attained. And on an individual level, imagination left to roam free can discover possibilities for unending evolution, an ongoing childhood which grows with grace and wisdom due to a developed creative response.

boundaries

As a society we seem to have lost the ability to distinguish between natural and constructed boundaries. That a human cannot fly has a natural and constructed component. If one expects to fly by flapping ones arms like a bird, the result will confirm a suspicion of limitation. However, the dream of flight has propelled the most amazing inventions — of dreams, science, of expression. Artists on the trapeze call themselves flyers.

Just as most boundaries of personal limitation are artificial constructions of perception, so are boundaries in social relations. Boundaries are signs of a limited imagination. People draw boundaries in order to assert power over other people. In drawing a line that separates you from me, I tell you who you are before you have a chance to speak. Boundaries create categories of otherness, an otherness which alienates a part of the self. Boundaries are illusory constructions, grown from fears.

Difference exists, is given by the condition of our inherent physical separateness. Rather than objectifying this difference and drawing boundaries between each other, we must constantly seek points of meeting. A world without boundaries is not one without definition, but one in which intense discovery of difference is possible, and the resultant collective imagination will be analogous to flying.

One might say that human societies have two boundaries. One boundary is drawn by the requirements of the natural world and the other by the collective imagination.

—Susan Griffin
interconnectivity

Most people living today under the condition called 'postmodernity' suffer from a profound sense of disconnection — from others and themselves. Mobility and wealth have enabled a certain luxury of existence which, along with an invisible underside of homelessness and despair, has distanced people from a sense of social responsibility, or at least from an effective agency for acting communally. Guilt is as much a commodity as desire, and neither find a strong focus for action in society today. What is needed is a renewed sense of connection between people and responsibility for their actions.

America was founded on an idea of independence and freedom. As strong as these concepts are ingrained into a positive consciousness as positive, autonomous ideas, they were born of a particular context. Independence meant freedom from oppression. To achieve that independence, that new country had to forge a profound connection among very disparate peoples. The idea of the independent individual today confuses an American heritage of resourcefulness in the unifying of differences with an unfortunate sense of self-reliance which refuses the interest of others.

The loss of meaning inherent in modern life calls for a constant evaluation of how we perceive social relations. Within this call lies another urge, one which invents methods and vehicles for renewed border crossings at every scale, and for weaving a notion of existence which embraces mutual responsibility and interconnectivity. The criticality to such a notion of community lies in the fundamental difficulty of individual difference.

"They [modernisms] can illuminate the contradictory forces and needs that inspire and torment us; our desire to be rooted in a stable and coherent personal and social past, and our insatiable desire for growth—not merely for economic growth but for growth in experience, in pleasure, in knowledge, in sensibility—growth that destroys both the physical and social landscapes of our past, and our emotional links with those lost worlds; our desperate allegiances to ethnic, national, class and sexual groups which we hope will give us a firm "identity," and the internationalization of everyday life... the spread all our identities all over the map; our desire for clear and solid values to live by, and our desire to embrace the limitless possibilities of..."
critique

What is lacking from the current system is a counter critique, a memory of displacement that occurs with every establishment of a power structure. This perceptual framework is essential to voicing differences and freeing imagination from the confines of oppressive patterns of social control. With new, critical modes of interconnected systems, those which embrace difference and highlight shared sensibilities, a sense of democratic belonging might result which avoids co-option by dominant norms. By generating such a hybrid reading of possibility and responsibility, the hope is to reinforce creative investigations of self and social abilities rather than accepting the current mediocrity inspired by compliance with generalized social norms.

identity

Identity is the result of the ongoing process of self-realization. One's identity derives from an understanding of the relationships between the self and the world, objects and people. Deriving these relationships is difficult, and therefore many social conceptions of identity exist to which people may relate. However, these generic conceptions usually do not provide answers to questions but instead present justifications for avoiding them. Every 'named' group identity is a mask for a social difficulty and therefore requires scrutiny rather than blind adoption in order to remain fluid. Identity is a process of eternal becoming, never a fixed decision of naming the self.

The inverse side of identity is a loss of identity, an erasure of one's voice. To be nameless is to have no agency to exercise choice or to be free from oppression. As long as any person is without a social identity then everyone's sense of identity is in jeopardy, because the relationships which inscribe value to these identities have begun to break down. Truth in the health and identity of a society is spoken by the oppressed of that society. We are all responsible for the protection of every person's freedom of choice to discover their voice.

Whole worlds of being which are part of the human inheritance remain unexplored, unclaimed.
Instead, the larger dimensionality of human experience has been stifled by narrowly proscribed ideas of identity.

—Susan Griffin

modern life and experience that obliter- ize, sometimes too late, that they are ize, sometimes too late, that they are
erate all values; the social and political not so different from us after all.” not so different from us after all.”
forces that propel us into explosive —Marshall Berman
conflicts with other people and other peoples, even as we develop a deeper sensitivity and empathy toward our ordained enemies and come to real-
possibility

What remains is to seek proposals which further these ideas. The cultural condition in the late 20th century, described by Frederic Jameson as ‘postmodernity,’ offers a difficult environment for the discovery and creation of meaning. We are accustomed to a barrage of images, of ideas which seem at once revolutionary and at the same time just sales pitches. The media presents radical juxtapositions of events and cultural products from around the world, juxtapositions which both alienate and become us, connecting us to a dense social production yet distancing us from ourselves. Jameson called for a system of mapping this reality which would then allow critical efforts to guide us from confusion.

Such critical efforts must ground themselves in the reality of the everyday; the wants, needs, and differences within society. But they also must give people agency for altering that reality, even for just a short time, so that they may experiment with possibilities. Such a process should be social and participatory, positing a general framework for interaction which allows for the contribution of specific individual sets of skills. And while these efforts must be critical and dead serious, they must also be playful, joyous, and recognize a full range of possible human intelligence: bodily, sensory, intellectual, spiritual.

Responding to such possibility, this book presents the modest beginnings or a project and collection of ideas which I hope can engender an environment of possibility and interconnectivity: The Urban Exploratory Circus.

*sketch*

One of the earliest sketches was an imagination of a circus arena with hard but permeable sides and a soft removable roof, a transformation of the traditional all canvas tent to a hybrid of inside and outside, an encloseable space where events articulate themselves as installations of fabric. This would later evolve into the Arena.
“I believe, in fact, that the condition of truth is to allow the suffering to speak.”

—Cornell West
The conditions under which we live no longer codify into neat categories such as urban and rural, city and country. Yet these idealized concepts frame a dream of finding both: the connected and vibrant life of the city, where action and interaction occur through both calculated expediency and random chance; and the purifying, quiet life in the country, with direct contact to the earth and the fulfillment of basic needs. The suburb represents an attempt to combine both worlds, and the result is a blurring between city and country, an objectification of both. In an attempt to keep the category precise, the U.S. census has designated as *urban* any incorporated or unincorporated place having over 2,500 inhabitants.

In our imagination or through arbitrary census designation, nearly all of us live in an urban setting. Urban is the perception of living among a community of people, most of whom you do not know. It is a conception of space as related to people, a density in which an individual can achieve a sense of anonymity.

The character of this anonymity is twofold. It provides a sense of freedom and independence. It creates a situation in which chance encounters bring surprise in the unknown, a possibility for connection. However, it can also engender a climate of fear and mistrust, a separation of purpose between individuals. Or, it creates a sense of isolation, of freedom from responsibility.

The idea of *urbanism* extends beyond one of planning city spaces. It includes reading perceptions in such a way as to amplify the positive aspects of the urban condition. It might also critique the negative ones, but if an urbanism is successful at the first point then disinterest will eliminate the second. To address the urban is to constantly attempt to deny the possibility of singular control over its effects.
To be alive means to explore. Reality is a construction of perceptions which allows for constant discovery and creativity. Every explorer brings this system of perceptions, an Althusserian ideology, into the discovered world. Acting as an interpretive device, such an ideology is a framework for understanding, for communication, for responsibility.

Fear precludes exploration; fear produces the desire for conquest. When an ideology becomes fixed, becomes a prescribed identity, exploration of the external world ceases, and all efforts toward understanding turn into selfishness. The point becomes not to understand complexity, but to prove that one's ideology is "correct." The only correct ideology is one which never considers whether it is right or not, but seeks a meaning which allows one to act responsibly yet remain open to the unexplored.

To explore is to exercise creativity, to remove preconceptions and express rather than repress. To explore implies interaction, openness, discovery, change. It implies an encounter with otherness revealing the otherness within ourselves. However, the spirit of exploration recognizes that everything encountered becomes part of the self, that there is no real separation between the self and other. Exploration is the formation of identity, it is risk, understanding, the clarification of the self within a release of self determination.

To be exploratory is to assert being alive.
The circus reflects an open fascination with life. It draws upon the extremes — the greatest virtuosity and the darkest undersides of the human condition. It feeds on the social need for honesty, to see our hopes and fears in a communal setting. It is not exploitive, yet it is sensational. To perform in the circus requires the greatest degree of skill, for as it is often in life, any mistake could be your last mistake.¹

The circus creates hyperbolic situations: Of risking one’s life for the purpose of performance. Of exposing ones’ own “abnormal” reality in order stretch the reality of the “normal.” Of the insistence that a person can fly. The circus reorients a perception of reality and creates a sense of fantasy, removed from the “real” reality by the margin of a thin tent canvas. By creating such a delicate boundary, it opens questions of what reality means, other than that which people construct for themselves.

The circus asks the audience to risk its identity. Laughter is its safety net. It asks for this risk by taking the maximum risk itself. It forsakes the most fundamental assumptions of security by having no fixed home. The circus represents our desire for discovery in its movement. And it cement itself into our memories through its absence. It will stay only a short while, and this concern with time reflects human mortality. The circus takes nothing for granted and makes the most of the moment. Such a life requires the utmost economy of means for a maximum production of wonder and joy.

For all this polemic, the circus has no polemic. It remains on the underside, in the margins. Humor comes from undermining assumptions; laughter dethrones power. The circus is all inclusive. In the circus, the fool will be king, and all the subjects will be individually expressed, highly charismatic characters in a community of interdependent virtuosities.

¹ from a story of Stravinsky’s remarks on the circus, related by Krzysztof Wodiczko to me of his father, who knew the composer
Ideas of popular entertainment based on stretching reality to its extremes seem to be as old as civilization. Themes have included the sensational to the spectacular — acrobatics, battles with animals or between humans (often to the death), magicians, animal shows, freaks and oddities — all find their place in some form of circus. This entertainment covers the spectrum from refined artistry to pure shock. The Roman gladiators performed in the *circus*, hence the latin origin of the word. Spectacles such as the bullfight also follow in the tradition — an allegorical reality which requires risk and great skill and ritual virtuosity — for survival.

In late 19th and early 20th century America, the circus flourished as an affordable entertainment which brought wonder to small town America. Key these were animals, acrobats, clowns, and the sideshows — especially the freaks. While often exploited, the so-called “freaks” presented human variety and mortality in an extreme way. And the circus was a place for such people who society discarded. Very often, “freaks” were people brought from other cultures, especially “primitive” ones. While such an idea is a shocking transgression of rights today, in these contexts the display of other cultures as objective fascination was an unambiguous statement of otherness, expressive of an inner desire to discover difference. Early circuses also demonstrated technological wonders, including such marvels as the electric light bulb. The circus
Much of the exploitation of “freaks” has ended due to questions of human rights and medical technology which can treat formerly crippling conditions. However, to retain some of the value to the “freak show,” circuses still often retain versions of them. At Coney Island, the Freak Show has been revived and rejuvenated with arts funding; the performers all are willing participants.

The end development of this mentality might be Disneyworld and Epcot Center, which explore/exploit cultural stereotypes as well as technological fascinations and speculations.

A more recent adaptation of this idea is the Omnimax theater, with a domed screen and special projector which creates an entire viewing horizon, with an amazing visual impact. Of course, little is left to the imagination.

During this earlier history, the circus enjoyed official patronage in Europe, with architecturally significant circus buildings in almost every large city. Such an institutional structure made for a curious contrast to those events which went on inside, although a permanent building allows for the development of spectacular stage effects which would be impossible in a travelling show. The circus buildings had similar structures to the round panorama buildings of that time, in which scenes were painted for 360° viewing — a kind of early virtual reality.

shares this sense with the spectacles of World's Fairs and International Expositions — both of which attempted to showcase cultures as well as technologies.

Predecessors to the circus were great spectacles which often doubled as military training.
The Municipal Circus, a solidification of the otherwise transitory

The best aspects of the circus are virtuosity and provisionality. The virtuoso human performers inspire an admiration for skill and training required to produce an aesthetic performance. Individuals must trust themselves and their fellow performers in death-defying acts as well as in fulfilling promises of spectacular achievement. And these performances take place in a minimal setting, made possible by the bare provisionality of a travelling circus. Everything must be efficiently considered in order to work. Thus, both high and low technology join in purposeful synchronization towards an economy of means. In operation, the circus is not magic at all, but a combination of ingenuity, strength, and skill.
Provisionality also resides in the fact that a circus creates a temporary autonomous city which must service itself. It must provide its own infrastructure, whatever that might mean. Usually this includes power, water, communications, lighting and seating. These service not only the main attractions — the Big Top and sideshow tents — but also attached functions, such as performer housing, organizational offices and performer changing rooms, and the midway with its games, food and souvenirs. In a crude analysis, the circus must supply housing, offices, commercial functions, and entertainment and include service infrastructure for these.

freakshow

Open fascination with otherness, the freakshow created a one-way spectacle, the crowd gazing at the freak, objectifying this non-person who is somehow connected to us but not us. Such curiosity is human, as is the penchant for exploitation of such differences. The advantage of the freakshow is its openness and clarity of boundaries, and as a cultural artifact it gives us now a glimpse into ourselves and ability to dehumanize others. But by allowing one to stare, the freak show did cross a debilitating social boundary. Differences are fascinating, and staring is part of such fascination. But the dialog should extend beyond that which goes on in the wonder of one’s own mind, in which there is a true curiosity about sharing very different realities.
Virtuosity also represents itself as otherness, as an extension of human ability to a measure beyond doubt of competence. In the context of bodily ability, virtuosity represents both a recognition of mortality and an integration of mind and body. The best representations of virtuosity extend the perceived boundaries of human achievement and inspire hopes toward the fulfillment of dreams. Distancing on one hand, the otherness of virtuosity invites communion and understanding, of aspiration and hope, of learning a skill for the sake of understanding the connections between dreams and reality.
Thus the intricacy of the circus arises in the realization that it constitutes far more than stage performers. The performance takes place as a result of a great design collaboration similar to a theater production. There are stage sets, costumes, lighting concerns, music and musicians, and the coordination of these functions. Persons in the circus serve multiple functions and generate different parts of acts all themselves. Performers also supply manual labor to transport the circus. Everybody assists with everything, relying on particular expertise only in certain situations or during the performance itself.

Viewed from another angle, the circus can appear as a military operation, with reconnaissance scouting out the next territory, the advance guard proceeding to decide the staging for setup, the performance somewhat analogous to the battle, after which the group must quickly move on. Included as well is propaganda — signage, posters, announcements and parades. Movement, like the performance, is often a matter of life and death in terms of simple economic need. Circus performers rarely get rich, and have to spend many months on the road without a break just to survive.

Circuses can operate at many scales. Some merely set up a high wire or trampoline, or maybe just a clown performs around whom observers form a circle. A certain critical mass merits a ring, the sole territorial marker for the circus. This circle allows for viewing in the round, a situation which makes the audience more aware of itself; the backdrop to the performance is other audience members. It also challenges the performers to present in every direction, making spatial awareness very important. The edges to this circus “stage” are virtually nonexistent, and it is not at all uncommon for performers to penetrate this invisible line between audience and performance. However, this is the contract which one understands when entering the circus, that observing is part of the spectacle.

At the largest scale, the circus creates the traditional Big Top, a massive tent seating thousands of people and having one, three or even five rings. Few such large circuses continue to travel today, and fewer still carry their own tents and instead use fixed urban arenas. Under the Big Top, the challenge becomes to keep the spectacle engaged with audience awareness and participation and not degenerate into unidirectional entertainment.
The travelling circus bears a unique relationship to the territory it covers. At the level of immediate site, it must create a working "city" within a very short period of time, complete with housing, enclosure, signage, entertainment, workrooms, storage, and infrastructure. Territorial demarcation is essential both in terms of public recognition and controlling an environment of altered reality. Because the circus is nomadic, those pieces used for transit must also double function as program or territorial demarcations.

The second level of territory is the travelled route, the different sites the circus affects and which affect it. The travelling circus creates a map of a network on its tour. Its identity lies in its movement and in its way of creating territory, not in its connection to a fixed location.

A traditional form of cultural critique, the circus rests its appeal in presenting extremes of the familiar and by removing perceptual barriers between people. Circus is less about direct confrontation with problems and more about a generative idea of living and creating, seeking the unfamiliar in order to understand. In the face of difficulty, the circus presents an oblique option, a space of free association and hope for discovery.
That the “profession” of architecture is in a state of crisis is a commonly observed fact. Since the demise of the Modern movement and belief in the architectural avant-garde, the practice has lost its grounding in both professional knowledge and in criticality which used to validate the need for a trained architect. Most building today, especially in America, takes place without the assistance of an architect. And, of that remaining small percentage, little if any architectural production aspires to more than a combination of technical coordination and aesthetic decoration. Architects can no longer make convincing arguments that they have a product worth a client’s investment, whether this be a new vision for society or a unique mastery of the building arts.

Part of this difficulty comes from the profession’s unwillingness to let go of old models of practice. Architecture is one of the last vocations to demystify a sense of being a “gentleman’s” profession, a job for independently wealthy white Western men. As an art form, architecture is the most co-opted by power structures in society, as it requires large investments of money and time and, historically, creates structures which remain for a very long time.

On the other hand, architecture has avoided pursuit of some of its own ideas, its own calls for crisis and change. By focusing on permanent structures, it has...
infrastructure

In its efficiency, the circus must provide its own infrastructure, both for travelling and for supplying the circus site. This extreme degree of functionality juxtaposes itself to the circus purpose, which is to be unreal. Beyond supplying power, lighting, sound, toilets, food and water to the site, the circus must advertise and stake out territory. By deploying its own infrastructure, the circus depends on nothing of the traditional city except the imagination of its inhabitants. Design of the circus thus takes on the charge of removing all assumptions and building them from scratch, towards a vision of performance, which can only happen through the highly precise and focused design of the circus infrastructure itself.

"Architectural and planning attention should primarily increase the range of choice of activities and not merely increase the amenity value of existing situations."

—Cedric Price
ignored trends toward temporality and mobility, marginalizing insights gained by the likes of Buckminster Fuller, Archigram, or Frei Otto. And, by focusing on object buildings, architecture has cut off two modes of consideration. One is the expansive vision of total design, investigated by the Arts and Crafts movement as well as the Bauhaus. The other is a systemic approach to the larger scale — that which has been called urbanism but which needs a new consideration.

**provisionality and speed**

Traditional typologies and named programs no longer form a framework for architectural design. Despite mythologizing and structuralist attempts at restoring a system of signification to architectural communication, many forces — complexity, consumerism, and globalization — undermine all attempts at a retreat into some collective language. Complex and changing programs obviously move much faster than architecture can, which becomes increasingly apparent as architects create sad self-parodies in attempt to articulate imagery which reflects an information society. “Form follows function” is a reductive maxim, based on a narrow interpretation of the predictability of function. Architecture is seldom, if ever, used for just the purposes for which it is built.

Hence, architecture needs a new, strategic approach to form and program, one which is less prescriptive and more suggestive, in which an organic system of interacting constraints determines where and how building occurs. That one of these overlapping constraints is an individual architect’s facility for design is part and parcel of the system. However, it is the system which should predominate and develop its own links to communicating use (or facilitating function), not individual forms. And while the operative principles behind such a system will result from deductions or analogies to life and culture, these links, in springing from accountable cultural, ethical and political attitudes, will allow the analogy to be socially challenged and under-

**ground**

Attaching to the ground is, for the circus, a question of avoidance and minimalism. The effort is to reduce ground contact to a minimum while maximizing the strength of each connection. The ground holds the circus down.
stood. An “organic” system implies growth, change, iteration, and the integration of real life. However, it is not without values.

In being provisional, architecture can speed up to keep pace with culture. This is because, instead of proposing forms which culture can appropriate and empty of meaning, architecture will propose interrogative environments which respond to pressures and use. Provisionality in this sense does not imply open, flexible space as an empty box, but rather a mixture of some highly precise, designed objects and a generic support framework or infrastructure which can orchestrate relationships between these objects. Architects must renew an interest in developing such newly flexible infrastructures at all scales — bodily, architectural, and urban.

scale and total design

Architecture must return to a synthesizing praxis in creating designed environments. The tradition of craftsmanship has been predominantly replaced by mass production and manufacturing, but this is no reason for architects to step back from integration with the way buildings are produced. Manufacturing represents an expansion of possibility, not a destruction of tradition. By finding points of access to the design of manufactured items architects can learn specific skills in integrating production with use: just as architects traditionally might have specialized in understanding stone or wood, contemporary architects might develop an expertise with glazing technology or premanufactured wall panels.

At this level, architects can consider integrating much more than surface and space as design consideration. Through collaboration or through individual combinations of skills, architecture can address many levels of design, including industrial design, furniture, graphics and performance. Collaborative ideas such as this drove the spirit of the Bauhaus, an attitude somehow lost as architects attempted to claim some particular (shrinking) ground as solely their own.

public

Traditionally, the travelling circus has relied on local labor for the setup, maintenance, and teardown of the site. Expediency operates in large numbers of bodies instead of expensive, heavy machinery. Thus circus in this way gives back to the local community both a temporary source of labor and an event of collaborative significance.
urbanism, networks, regions

The traditional architectural dependence on the context of urbanism has stranded architectural discourse in a lament over ‘center’ and ‘periphery.’ While the traditional city offered a centralizing density and a mix of functions which could contribute to a democratic, communal and connected society, the demands for very large homogeneous concentrations of industry and service require commuter lifestyles. A viscous circle results when it comes to housing: as people recognize freedoms of movement which comes with wealth and then attempt to separate themselves into income groups, they become more disconnected from those who are different from themselves, and hence more afraid. Attempting to reconcile these conflicting cultural forces through new versions of traditional city design usually leads to further disguised wealthy enclaves or historicist kitsch. Architecture still can create settings for true community and integration of difference, but it can no longer do so through urbanism.

Instead, architects need to look to larger scales which reflects human consciousness. People now imagine themselves living in regional as well as global communities and generate a “networked” mentality toward who belongs. Information technology facilitates such connections, although it also isolates its users from random interaction with unintended persons. Architecture must build public environments which allow such encounters, but also recognize the dispersed nature of contemporary communication.

Networked design strategies offer hope for both providing hinges to connectivity between people while also fostering awareness of differences. Many such networked entities exist — franchise chains, automated teller machines, transit systems, highway interchanges, and public infrastructure in general — but rarely are these structures given a second thought by architects, who are busy competing with each other over paltry few “ideal” design commissions of museums or university buildings. Such infighting will only lead to further suffering for trained architects, and the quality of the built environment will continue to degrade.

"Demystification tries to keep track of the complex dynamics of institutional and other related power structures in order to disclose options and alternatives for transformative praxis; it also attempts to grasp the way in which representational strategies are creative responses to novel circumstances and conditions."

—Cornel West
This project will present one effort toward a renewing an architectural proposition. It seeks to design an organic system strategically deployed to allow for adaptation over time and alteration by its users. It considers both the design of infrastructure and of particular architectural pieces, and the system which organizes these elements at different scales (body to site scale) and mediums (graphics, sound, light, materiality, temporal change, built form). To focus these considerations, it begins by considering how to generate a meaningful context of interconnection at a regional level.

The circus vehicle is a key element in both image, transportation, and territory. Using trucks and trains from mass culture and adapting it to particularities, the circus adapts these containers. Wheels are as important as tents or trapeze. In creating a new ground, these vehicles suggest new modes of occupancy and territoriality.
In its movement, the circus maps a territorial site of association, one which can indicate the interconnectivity of a region. As a strategy for architecture the idea of developing a regional network through installations and movements between them is a way of dealing with relationships rather than only objects. Different sites within a region can begin to lend that region coherence and create a new perspective on local divisions and boundaries; all can belong to a single network, which gains meaning through built form and information exchange. In this project, I imagined a collection of units that can travel in different sized groups through this region, installing themselves according to their various programs. These groups can recombine or conglomerate but behave according to rules which ensure programmatic coherence as well as providing infrastructural support.

Great Lakes

Recognition of a region as site allows for both a revelation of common terms over a large area as well as the delineation of differences and possible relationships within a larger whole. The Great Lakes unify what is essentially the “midwests” of two countries, areas of relatively large population which carries the burden of being perceived as the unenlightened “interior” of these nations. The population presides over the remnants of a massive manufacturing infrastructure which swallowed whole the concepts of mass production, capitalism and ruthless industry bosses. This area has borne the brunt of, moving backward through time, suburbanizing and mallification, racial warfare, environmental destruction, labor strife, and the quiet removal of native people. With each crisis comes the collective forgetting of the prior one and how they might be connected; underlying ideologies are lost to the martyrdom of highlights – the race riots, the “death” of Lake Erie and fire on the Cuyahoga River, the union riots – which are recited with a collective sigh of relief that at least things are better now.

However, these truths indicate a loss of identity. This is revealed by the strong attachments made to
prescribed options of identity, whether they be church, civic, state, or ethnic allegiances. A certain provincialism reigns, even in the larger cities. The strength of these identity groups has long faded since the days when communities were made of families who rarely moved away. The remaining fears conspire to squelch out any dissenting voices and confine developing minds into narrow modes of possibility. Instead of individuality and expression, mediocrity becomes the aspiration, the formula for success. Falling outside the "norm" earns one disrespect, marginalization, or silent exile to the larger cities or out of the region altogether, to the coasts.

Nevertheless, that so many people live here testifies to the natural abundance of the region. Raw materials abound and the lakes themselves are conduits of sea trade to the interior. They serve as connectors at this and many other levels, not the least of which is the fact of their currents and fluid continuity. Their size supports complex natural as well as urban ecologies, yet the limitations became apparent when Lake Erie, the shallowest, became so polluted that all marine life perished.

The complexity of life surrounding this abundance bears a rich mythology, mostly untold, both imaginative and destructive. Proposing a new circus within this context offers a chance to unearth some of these secrets as well as present a vision of a social ecology to stimulate the creative spirit.

regional network

At the largest scale, architecture needs to address conditions of interconnectivity within a complex sphere of influence. By understanding forces at this level, new conditions for design can arise which both address difficulties of using land and
also provide a necessary perception of a larger context in a meaningful, liberative way.

The Urban Exploratory Circus, as a regional infrastructure, is part of a democratic experiment, a kind of experiment which Cornell West has termed an "institutionalized critique of illegitimate forms of authority." It is intended as a cultural resource, shared by the constituents of the region, defined by those who wish to support it but available to all who wish to use it.

Networks within a region are a given. Even before human settlement, ecological patterns form and overlap. These include drainage systems, geological makeup, animal territory and migrations, and ecosystems of countless scales. Human productivity networks overlay these systems, mostly ignoring or conquering them in Western tradition, the contemporary expression of which includes highway, railroad, air travel,

maps
The Great Lakes are a highly prominent geographic feature of the United States and Canada (opposite) and extend ocean ship trade into the center of these countries. Over the geographical order is stratified a dense system of cultural organization, geared primarily for efficiency (below). For example, time zones, area codes, zip codes, marketing zones, counties and so on create artificial divisions and connections, all of which mean very little to human experience other than facilitating the exchange of goods and information. Only the latitude and longitude bear a relevance to geography while also achieving a level of compelling abstraction.
communications, pipelines and utilities. Cultural referents respond to both of these for another level of understanding, from sacred sites related to nature to museums, historical sites, halls of fame, and so on which serve to anchor culture to place. All those constructs which grow from culture, however, reflect a certain bias which, through physical expression, institutionalizes a sort of forgetting, a limitation of other options.

An infrastructure at a regional scale which highlights connections has the possibility of communal observation and information, thereby avoiding any co-opting by power-driven sources. The purpose of the regional framework is to highlight these relationships, responsibilities, and differences, allowing for a hybrid reading within a larger sense of belonging.

“In stable self-contained communities culture is often quite invisible, but when mobility and context-free communication come to be of the essence of social life, the culture in which one has been taught to communicate becomes the core of one’s identity.”

—Ernest Gellner
Between the ideas of circus and regional site and linking into the programmatic and physical exploration of this project is the idea of *container*. For the circus, the container is the basic unit of transportation, the mobile unit. At a level of regional site, the shipping container signals ubiquitous generic connection; anything could be in there. It is a product of the vernacular and industry *par excellence*. As a vehicle for the programming of this project, adaptation of both levels of container — the completely generic and the highly specific — provide ways to express programmatic and design ideas. And, as cultural object nearly devoid of expressive cultural connotations, the container provides an excellent opportunity to subvert expectations.
Within the world of the shipping container, the idea of the generic or universal poses in stark contrast to extreme specificity, or individuality. Shipping containers conform to standards held the world over, with only minor differences in overall dimension. And yet, these minor differences are crucial when it comes to stacking and handling, as can be seen in the intensely expressive variety of animated devices designed to move and handle these generic boxes. On the inside of the box lies a different, secret specificity. A vast world of possible contents romanticizes the generic container. Most people never see the complex packaging for the goods inside or the monstrously wonderful machines. They only witness the generic box.

**the generic and the specific**

Shipping containers, by being modular and specific, express extreme versatility. Stackable, towable, liftable — they provide stress resistance in every dimension. Demarcation becomes a rigor of information, implying a complex map between colors, coding, owners, shippers, and clients who need their goods. A circus all its own.
container as program

To reconsider the traditional construction of "program" is to first recognize the obsolescence of traditional notions of programmatic assignment. This is due to the inflexibility and stagnant nature of their conception in current practice. To name a "thing" as lobby or classroom or multipurpose space is to engage with a problematic vocabulary based not in generating critique or imaginative models for occupying space, but rather in signposts empty of reference. While using such names may expedite casual conversation, they do not serve to generate architectural ideas.

In response, this project will seek a new metaphor describing "program" within the construction of architectural design. As a strategy, the program will break down into containers, this word bearing reference to the traveling nature of the circus, suggesting on one hand a center for conceptualization while on the other hand remaining open-ended as to how the contents might come together.

Fig. 26A. Lifting and stacking portal frame straddle carrier. (United States Lines)
The circus and the container respond to each other. In common they both have unique relationships to the ground and to the wheel. In this depiction of the Cirque Bouglione, trucks line up in a unified front suggesting the idea of the performance. They create a sense that one can get on and the whole thing will drive away.

At top, containers can take on transforming lives of their own.
In architecture, a long history of uses has resulted in a codified set of traditional programmatic space types, named predominantly after functional uses. While this tradition generates a language base for architectural conversations, it also carries the danger of overprescribed architecture. Named programs tend to control architectural production and prevent spatial configurations from finding an appropriate level of adaptability for what must really take place. This is not a call for generic, unprogrammed space. Rather, program should operate as a sort of staging for architectural strategies. A stage, in order to promote flexibility, must be highly precise as to what kind of environment is intended.

Architecture, in framing life, offers limits against which to react. In order to open up possibilities behind architectural programming, it is important to implement strategic concepts for space rather than functional ones.

**circus school**

A first pass at describing the program for this project discovers the limitation outlined above. To propose a circus school immediately conjures images which might overprescribe what will happen here. It is an ambiguous naming, however, coupling the open, suggestive notion of circus with the very prescriptive idea of school. While it still carries some unfortunate connotations, the description of this project as a “circus school” carries enough communicative value to be remain, at least for the moment. Once the project begins its unfolding, it can release any necessity of such a descriptive generator.

The purpose of developing this project as a school rather than traditional circus derives from the necessity of critique and the fostering of regional connections. By offering training, this circus allows local people to penetrate the territory of the professionals. It is intended as a place of transformation, for letting go of constraints and discovering ways of belonging. Within the circus are elements of wonder, secrecy and mystery, all of which reveal themselves without any loss in quality. The circus is very matter-of-fact, and yet it still amazes. It takes ordinary people and everyday objects and reorganizes them into a spectacle of the unfamiliar.
programming logic

To service the different functions of the circus, the program divides into four groups: performance, technical, special functions or extensions, and infrastructure. The program is designed to function recursively, that is, each "unit," whether it be an individual container or an installed site of all containers, must function autonomously and fulfill a minimum requirement of each of the four programmatic functions. Thus, while one container might operate primarily as a circus structure, it must also provide a minimum level of communication, be able to support its own services for some of its functioning, and provide at least minimal housing and security for its user. Alternatively, a container constructed as infrastructure for a larger site must also provide at least some very minimal measure of circus.

The purpose is to both share the workings of the circus from inside out as well as to transfer essential skills based in this training. While the original program is limited to elements serving as a seed, the infrastructure is designed to be expandable within the original framework.

circus

The circus program pieces constitute the first half of the circus school, with elements focusing on different aspects of performance. Units are for two different kinds of aerialists, two different gymnastics spaces, a magician, and a clown. While these functions form the heart of the circus, they are only one fourth of the necessary program.

technical

Technical functions include the production of masks and makeup, costumes, music, graphics, lighting and video graphics. Necessary as support to the show, these functions proclaim a virtuosity in their own right and are integral to the circus performance.

extensions

Extensions are special functions and spaces required for the coordination, operation, and conglomeration of the circus. Two types of large arena/theater spaces allow for special shows. A satellite function oversees the network through various communications technologies. Public relations, housing, and marketplace round out the needs of a circus site, both in the immediate site and for the network.

infrastructure

The key element of the circus is that which seems least romantic, the infrastructure. The circus must create new ground and provide its own services in an efficient infrastructural arrangement. These pieces are designed to combine different functions for the greatest efficiency and versatility. They include elevated boardwalks, lighting and signage poles, seating and projection towers, power supply, and water services.

program diagram

The foldouts on the following two pages map the above described functions. Further explanation follows these maps.
**performance**

**Flying (acrobatic)**
The flying trapeze operates as a training, opus for performance, and integrated with projection. Two transformer trucks couple to form the rigging, the trapeze unfolding and raising quickly under external power. Ideal installation includes a system to allow the projection tower and string for high visibility.

**Munition (acrobatic)**
Enclosed gym and instruction for stationary sports such as ropes, single trapeze, etc. includes stage but no enclosure.

**Balancing (gymnast)**
Enclosed exercise floor, possibly with a raisable roof (allowing horizontal tilting), one or two gymnast trainers provide basic exercise training and orientations.

**Choreographing (gymnast)**
A series of stages and surfaces for various configurations, including smooth and rough surfaces as well as step-up/over steps. Gymnasts might train with the group, forming large groupings and dynamic combinations.

**Walking (acrobatic)**
Enclosure for "secret" training but also allows for small performance stage that is enclosed. All spaces are highly interiorized.

**Masking (drama)**
Because masks and mask arts as well as costumes, choreography, props, spaces are interior and exterior, with extensive boxes for storage.

**technical**

**Masks (makeup)**
Enclosed, climate-controlled space as well as small workshop and storage for costumes. Also some recourse to research data on changing fact and identity through culture.

**Conduits**
Enclosed space for both design and laborative as well as holes to facilitate for moving materials at specific sites. Also works as repair location for fabric structures.

**Musical**
Deploys into small, recording and mixing space, enclosed controlled performance studio, extensive space and sound experimental apparatus.

**Graphics**
For production of both conventional and digital media graphics, spaces include enclosed design studio as well as ventilated painting studio.

**Lighting and Projection**
Includes indoor and outdoor lighting arrays and large screen/building projection screen including sound, also digital design capability.

**Video Arcade**
Includes game development and testing in enclosed video hall and smaller development rooms, emphasis on interactive games between people or site as well as remotely linked.
Standardized, collapsible truss structures elevate an injection-molded polymer walkway to truck bed height. ... The translucent materials allow for subsurface lighting and image projection.

Special structures for integration with the boardwalk system include bridges, ramps, stairs, and hanging elements. Sails are provided in the truck with the boardwalk and other infrastructural systems. Empty containers double as workshops.

Includes poles for signage, lighting, and creating temporary fenced enclosures; includes ticket booths. Integrates both to specialized base structures and into the boardwalk system. Further possible configurations include umbrella canopies and fabric wall fences.

Enclosed meeting facility for integration of corporate supporters as well as providing workspace for organizational individuals.

Can use existing commercially available trailers, provided as needed for different site arrangements. Possibility for development of transformer for multiple housing.

Umbrella or stall setup, enclosure optional. Some lockable storage provided.
The first context to each programmatic unit is its transportability and relationship to the container. There are several possibilities for each container which range from using commercially available units to custom built transforming units which perform in response to programmatic needs. In many cases, a single program requires more than one vehicle for its transportation. In other instances, parts from different program uses may share single containers if necessary. Finally some of the travelling components, such as the housing or the midway/marketplace might use commercially produced vehicles instead of attempting reinvention.

The infrastructural program acts as a connective tissue between the other uses. Icons in the map indicate what services each function requires so that the appropriate infrastructure might be installed. In some cases, these service requirements are optional or can be supplied in different ways. If a performance space does not have electricity, it might still offer day use. Or power might be supplied by the truck’s diesel engine itself in the lack of a larger system.

Finally, a crucial aspect to the articulation of program is the setup, which in almost each case requires the assistance of local persons at the site of installation. A certain minimum number of persons must travel with the circus (and thus require housing and services) and then a large number can assist with setup. In the program map, icons key the approximate number of persons in each group.

key

Enlargement of the key to the previous pages. Figures indicate types of trucks or containers and number for each programmatic use. Icons then also indicate infrastructural demands as well as number of bodies needed for transport and setting up.

- standard commercial container
- standard flatbed trailer
- custom designed transformer truck
- small trailer, truck, or other vehicle
- materials carried with other components inside container
- lighting
- electricity
- projection
- water
- toilets and changing
- allow for view
- number of persons required to travel with and operate circus
- number of persons to assist locally with setup
- indicates ratio of setup to operators (total number variable)
flying (aerialist)
The flying trapeze operates as training, opens for performance, and integrates with projection. Two transformer trucks couple to form the rigging, the trusses unfolding and raising quickly under manual power. Ideal installation includes association to at least one projection tower and siting for high visibility.
The point to structuring the program in pieces, especially the performance and technical elements, is to allow a flexibility in connection. The project differs from a traditional circus not only in its focus on education, but also in its strategy of deployment. Pieces of the program may travel alone or in groups. Their definition comes from the flexibility in the relationship between autonomy and community. When different programmatic elements join, they are able to produce different performances and collaborations. They can also share resources. However, no unit in the program is ever truly alone due to the network of communications between all pieces at all times.

Communications enforces a coherence as the system enlarges. No piece is deployable without a link which allows other components to see where it is. This tracking and mapping will be available to the public in order to locate components and influence their journeys. This also enforces the attitude of autonomy within a connected larger meaning; the map created by the travelling components will attest to varying needs and loci within the region and generate further ties as pieces accumulate destinations.

These sketches represent a preliminary design for the trapeze program piece. Suspended between two containers with rise into a vertical position, the trapeze deploys from a minimum of two trucks travelling together. It posits its own ground and sky and imagines a space of flying. Further attention to detail will begin to shape its linkages to other elements in the program and infrastructure.
**multifunction**

Most of the circus infrastructure is designed to perform a multiple of functions. The early study model on this page imagines a fabric, foldable wall which can both generate enclosure and rotate to create passage and cover. Its surface can also receive projections or advertising.

The concept evolved into the "signage and lighting" program, wherein foldable poles support uses such as this as well as carrying electric lines and lights.

Infrastructure insists on a certain modularity to design which encourages changeability and invention. The rules for such functionality, however, might not arise from commonly understood rationalism: it is a circus, after all.

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**signage and lighting**

Includes poles for signage, lighting, and creating temporary fenced enclosure. Also includes ticket booths. Integrates both to specialized base structures and into the boardwalk system. Further possible configurations include umbrella canopies and fabric wall fences.
play

This specialized container transforms itself into one of the key circus infrastructures, the boardwalk. The boardwalk provides a raised walking surface (at the 4'-0" level of the typical truck bed) as well as a conduit for services. While the mechanics for such a device as this might be beyond functional irrationalism, its possibility brings the notion of play across that of infrastructure.

The association between children and construction vehicles is not a fascination with the power of these machines. They are large toys that otherwise macho men play with all day.

boardwalk

Special structures for integration with the boardwalk system include bridges, ramps, stairs, and hanging elements. Some are provided in the truck with the boardwalk and other infrastructural systems. Empty container doubles as a workshop.
A sketch model for a reinvisioned Big Top, the circus arena has hard sides erected from transformed container bodies which attach to form seating. A retractable fabric roof then allows for both the enclosed performance as well as serving as an open air theater. The transition between these two can happen in a matter of minutes, so that the climax of a show can be the removal of the roof and an abrupt return to "reality."

Because the arena is large and the program is usually dispersed into small groups, each unit which comprises this structure is imagined as also being able to stand alone, serving as a projection tower and deploying temporary outdoor seating. Thus, the fragment which suggests the whole is also still crucial as infrastructural support. Only when the entire circus gathers in one place do the projection towers join to create the arena.

The separated units of the circus arena, as fragments these become outdoor projection towers and mobile bleacher seating for creation of performances.

Up to 10 transformer trucks connected to create an enclosed arena with convertible roof to host performances and double as outdoor amphitheater and park. Individual trucks require definition for autonomous use.
The idea of formal site planning suffers from the same distancing to reality as does typology in architecture. Use will not necessarily follow planning. With the circus, the difficulty is compounded by the need to set up on a wide variety of sites. Furthermore, different sized programmatic groups in this project will have to negotiate their own interactivity. Forcing them to assume a figure on the ground will not lead to the kind of active provisionality which the circus requires. On the other hand, completely *ad hoc* configurations will lead to confusion and waste.

The answer is a system of relational strategies between programmatic elements as well as between the circus and site. These strategies begin with infrastructural requirements and become more specific with each programmatic element. While internal relationships begin to reveal themselves through this logic, external ones are more difficult, as the circus exists in distinct juxtaposition from the city and does not attempt to be "contextual." Instead, it must reproduce concepts of ground, wall and sky so that its fragile reality will find protection from the harsh provisions of the weather and of the city.

**wrong**

This site model (below) serves less to inform how this project will work than it copies the traditional circus. Missing are relationships revealed in the form and design of the individual elements which insist on certain juxtapositions and relationships.

While it allowed a certain exploration of forms and initial impulses, the lack of integrated rigor renders this model a "failed experiment" in terms of site strategy. Fortunately, this early mistake was not a fatal one.
The search for a siting strategy moves through some of the more traditional notions of city planning or urbanism. At a formal level, this presents some acute difficulties for a system, in that rules which work for varying sites with varying configurations need a clear rule-based and not formal strategy. The upper diagrams, of attitudes toward ground and occupation, begin to reveal relationships to site better than do the plans. Plan configurations begin to explore issues of connectivity and infrastructure, although the figure/ground nature belies the specificity of relationships which would transform such speculation from idealized planning to realistic deployment. What is needed is the rigor of a military engagement but with all secrets revealed (or in the process of revelation).
relational systems

The study models on these pages begin to locate relational strategies between formal elements which inform how pieces may be deployed and also tied together with infrastructure. The first one (top left) remains largely figural, although the central focus creates a comprehensible and efficient radial alignment.

More toward an investigation of interrelationships, the second (top right) model links modules through a projection screen and infrastructural lines. While certain territories result from this enclosure, they are less the primary motivation as are the metaphorical relationships. These are most clear in the third sketch (opposite) in which a small number of elements arrange themselves in multiple relationships. Some of these are formal while others seem random or resultant; however, a systematic logic allows such occurrences. While these models are largely devoid of content, they do begin to link form to meaning.
**ad hoc vs ideal**

The attempt to give a coherent system of form to the program went through many iterations at different scales, pushing through extremes in different directions. While the village-like, *ad hoc* configuration at left contains an element of *organic* growth, the systemic relation behind that grown lies more in the author's idiosyncrasies than in its own generative properties.

The opposite problem exists in the idealized layout to the right, superimposed on an aerial photo of an empty lot. Here, the radial configuration belies any individual character in the pieces, who find themselves aligned and enslaved to geometry.

An answer to this dilemma lies not in finding a middle ground, but in seeking a very different approach, one in which the organic system is explicitly laid out in the pieces and interconnections themselves. While working at a site planning level does inform their behavior and identify constraints, it suffers at this point without specificity of the pieces it deals with. These rules will derive from understandings of the container, efficiencies in infrastructure, demands of performance and audience, the necessity of noticeability, relationships to given site conditions, and efficiencies of construction. The key to the circus is such efficiency, which in the end also relates back precisely to the human dimension, both in body and spirit.
game

The generation of this project attempts to formulate a simple system of rules which provides for programmatic functioning yet adds a narrative structure to the program. This narrative, in turn, by guiding the rules of the "game," lends coherence to the provisional system at different scales — from the individual moving container to the entire regional framework. It also aims to establish relationships between pieces of the program which allow for some means of interpretation by which the system itself can be modified by its users and its journeys.

This set of internally generated rules references an external sensibility, one of finding a relationship between programs in the city and building an architecture as a linkage between parts. The operations within provisionality, then, follow two criteria. The first is an internal set of rules tracing form to program and installation. The second governs site selection and bringing the program to an audience where it will be accessible and needed.

The strategies come together in what might on one hand be called a game, a system of rules and pieces that can be socially understood and deployed. Such social understanding is crucial both for the operation of the circus and for its ability to draw interpretations and instill a sense of meaning. In their precision, the rules allow a range of perceptual responses and creative gestures; an evolution of sorts. This, then, is what on the other hand might be called an organic system, where once the game gets set in motion, it persists as a life form of its own. Such is an example which architecture has always claimed but seldom is able to achieve.

organic

leaf

classical drawing
The next six drawings attempt to give definitive form to particular parts of the program, focusing particularly on performance pieces and infrastructure. Each drawing is a section or elevation cut through the imagined spaces. The intent was to examine function as it relates in a real way to the ground, sky, and enclosure. In section, “interior” and “exterior” spaces show themselves immediately, so that relationships between pieces can emerge.

Icons indicate which programmatic elements each drawing represents and a key plan locates them on the “idealized” site for reference purposes. The hope was for a further development into a language of form that could open up possibilities of construction and of siting, so that the project would begin sharing strategies across different scales. In some cases, details also suggest themselves and express linkages between parts as metaphorical bridges.

The critique of these drawings is twofold. The first problem is the one of ground — in every case the ground is idealized into a thin line, a non-context. To operate, these structures require a development in different contexts, with very real constraints and conditions in order to generate a meaningful connection to the ground. This lack of reality extends into the second critique, that while fanciful these structures lack a true constructional logic, although they suggest one. They thus skate a line between being metaphorical creatures and serious proposals for architecture. However, they do serve a bridging purpose into more precise development.
Drawing A represents a gymnast floor with a raisable roof for shifting performance. It connects to the infrastructure via the elevated boardwalk. As proposed, two containers/trucks would arrive and open up, deploying structure between them.

Drawing B and C both express different approaches to the infrastructure. B shows the side elevation of a boardwalk and some of the possible unique attachments for it. Also here is a raised umbrella structure deployed from four signage and lighting posts. In C, these posts are further expressed, with rotating fabric walls creating changeable enclosure. Lights can be mounted on posts or suspended between them.
Drawings D and E form a relationship between two programmatic elements, the projection tower and the trapeze structure. Fabric encloses the sides of the trapeze as a shadow scrim which also reflects and transmits projections. The tower itself (D) is a transformer truck, moving into the vertical position to do its job (as do the trapeze trucks). This projection tower is the fragment from the arena, when all projection towers come together they enclose a circle for a reinterpreted Big Top.

Drawing F describes a video arcade, one of the technical spaces which would have more stringent enclosure requirements. A truss system supports an insulated and enclosed fabric roof. The container boxes themselves can close for equipment security.
shadows

Each piece of the circus program must perform and allow performance in addition to education. The projection side screens allow for shadows at day or night, and may be partially opened to form backdrops. Between these two sides, the aerialist inside focuses on the one open side — the sky.
This proposal for one programmatic element — the flying trapeze — seeks to articulate some of the essential relationships each element of the circus must have. It also hopes to suggest a degree of buildability and image which leads to further understandings of the project as a whole. Thus, the proposal includes a key to the functioning of the whole system, which is a design for the boardwalk infrastructure.

To create a system requires setting up standard modules. The boardwalk begins with the assumption of a four foot floor height in most of the circus, which is the standard floor height within a shipping container. The next module is the boardwalk floor itself. This floor required a support system which would be modular with a minimum number of pieces, rigid through cross bracing, quick to set up and take down, and able to form both linear and planar configurations with the standard boardwalk modules. The boardwalk would also need to accommodate services, carrying both water and electric lines. Finally, the boardwalk would have a connective joint to accept vertical posts for signage, lighting, and fabric enclosures.

The generic boardwalk design then informed the highly specific trapeze unit through their need to connect. The floor of the trapeze unit consists of modified boardwalk modules which fold upward when to become the sides of the trapeze truck when it is ready to move. Besides interfacing with the infrastructure and accommodating aerialist performance and training, the trapeze unit deploys large fabric screens which serve as shadow privacy walls as well as projection surfaces. The resultant shadow/light box effect allows both a wide range of phenomenal experience to the unit as well as the possibility for synchronized performance through video feeds from remote sites.

Another constraint which the trapeze shares with the boardwalk is the requirement for manual setup. The structure then must be very lightweight yet strong and be integrated with a mechanical system that a group of people can operate.
The boardwalk consists of 4-1/2 x 9 foot panels manufactured from injected resin or plastic. Manufacture allows for precise tolerances and standardization which improves the versatility of these pieces. It also lends coherence to the individual panel unit, integrating structure and material qualities into a durable piece. Finally, it simplifies the setup process from being one of construction to one of assembly.

The material is lightweight but strong, allowing manual while performing the demanding job of supporting heavy foot traffic. Designed with built-in reinforcing cross ribs, the panels would be perforated for drainage and material efficiency. The translucency of the surface allows this new floor to be lit from below at night. It can also stand in a vertical position for lighting, enclosure, and projection effects.

As an item manufactured for a precise purpose, the boardwalk panel can potentially find other commercial uses.
A collapsible structure supports the boardwalk panels and allows for unlimited extension in both directions. This operation is made possible by a jointing system at the base of each triangular leg which folds downward, drawing closed the scissors braces which extend in each direction. Such joints fall directly below the contact points for interface to the boardwalk panels. At the tops of these seats are four pegs onto which the panels attach. At the sides of each installed surface, the extra pegs can hold posts for signage and lighting. Holes in the top of the boardwalk panels accept a handrail, which uses the same scissors brace for its support. Finally, brackets suspended between the collapsible support structure and the panels carry water hoses and electric lines.
transport

When folded, the trapeze truck conforms to highway standard container dimensions. Boardwalk panels form the sidewalls which will fold down to provide a larger surface for the performance unit. In the folded position, these panels are cross braced and give a shadowed impression to the apparatus within. Thus, in transport mode, the trapeze truck retains the condition of translucent containment found in the fully erected performance space.

The collapsed truss inside suggests a desire to be released from containment, a stasis awaiting metamorphosis. Transport is a metamorphosis of its own.
overviews

Images on these pages depict the interior space as seen from above, with the perception of enclosure given by different transmissive elements. No side is solid, the floor itself is translucent, and the net provides the real "ground" between earth and flying.
flying (aerialist)

Articulation of this program follows from some of the early sketches for a flying space, with raised ground, spatial enclosure with translucent fabric screens for walls, and an open sky. The structures must support three different riggings: the trapeze, the net, and the side screens. The trusses themselves become end walls capable of holding lights or being lit. Collapsible braces extend between the main center truss and the two wings which hold the screenwalls. Struts hold the trusses in a vertical position and also facilitate their raising.

The floor consists of the truck bed with sides made from boardwalk panels. These panels provide consistency with the circus system and make for easy connections to the infrastructure. The steel trusses hinge to the truck bed near the point of attachment to the tractor. Thus when the two units back together and connect, the trusses will open apart, pulling the net and trapeze rigging into position.

The piece performs within its own system of logic and supports the human performance within. None of the setup or manipulation uses external power; all operates by mechanically focused human power.
show

with the sides closed, a shadow play or the possibility of projection, or the protection of those just learning while activity remains visible

show

open for an audience, lowering one fabric side transforms training space into performance, lowering both sides sets artists into open air
models
(top) view from above; a sense of the net
(left) the folded transport truck, translucent to the apparatus within
(below) illumination at night provided by projection; performers in shadow between the screens
In its functionalism, the trapeze unit seeks a simplicity which belies a great flexibility towards accepting transformation. Its alteration allows a diversity of altered senses of reality, from enclosure to lighting to movement. The ultimate service of functionalism is to create an illusion which blurs into reality, such that reality is revealed as itself a condition of perception.
"The inhumanity of contemporary architecture and cities can be understood as the consequence of an imbalance in our sensory system. ... The dominance of the eye and the suppression of the other senses tends to push us into isolation, detachment and exteriority. The 'art of the eye' has certainly produced imposing and thought-provoking structures, but it has not rooted humanity in the world. The fact that the Modernist idiom has not been able to penetrate the surface of popular taste and values is due to its one-sided visual emphasis; Modernist design has housed the intellect and the eye, but it has left the body and the other senses, as well as our memories and dreams, homeless."

— Juhani Pallasmaa
To deploy the circus, two scales must interact. At the local site scale, the circus must announce its approach and presence through site staging, advertising, and the setup event, which will involve local labor. Each piece thus follows a design logic which minimizes mechanical power in favor of human participation. A series of diagrams on the following pages articulates such deployment for the flying trapeze unit.

The second scale, that of the regional network, informs how the pieces move and provides an infrastructure of intercommunication for both performers and public participants. The network must operate through mutual awareness, so beyond logistical communications there must be public awareness of interconnected events. Thus, even though different pieces may be forming local configurations and generating a particular set of responses through interaction, these local sites also remain interested in progress and innovation of other pieces.

To set forth the operational strategies for the network, further mappings come into play. Such a temporal/spatial map should have two levels of legibility. One is for the logistical director and circus personnel, who use it to organize schedules and regroupings. The second level makes the circus operation clear to the public who are interested in participation. Here, legibility of the regional site is essential in order to foster a real understanding of the scope of the circus and its operational interconnectedness.

“The point is not to force [people] to think otherwise but merely to expose the conventional and contingent nature of their internalized construct so that it is no longer ‘natural’ — i.e., the way things ought to be — but is merely a ‘choice’ — i.e., that can be otherwise. This is the mission of critique, the basis of cultural politics of difference, and the true meaning of opening up a ‘space for freedom’.”

— Sibel Bozdogan
One the two trucks arrive and back together, technicians couple the beds together and remove the tractors. Then workers elevate and level the truck bed, relieving the wheels.

Next, workers set out the foldable support brackets which will hold the floor. Meanwhile, others unhook the cross bracing that holds the floor panels in the vertical position, preparing them to be lowered.
Lowering the side panels proceeds incrementally, with two people being able to handle each panel. These are hooked into the support brackets and secured.

The next job is to open the trusses. A line of workers gathers on each side of one truss and pulls the wings of the truss open. A technician locks the folding struts and installs cross bracing.

After a final check for security in the trusses, they are ready to be lifted.
Lifting the trusses proceeds in stages and requires a large number of assistants. Either by grasping cables at the ends of the trucks or by turning a jack crank, they slowly lift the trusses. When they reach enough clearance for technicians to install the trapeze, the trusses are temporarily locked. Once the rigging (including any lighting or other attachments) is complete, the technician in charge gives the signal to pull and the trusses rise to finished position.

The technicians quickly install the net or might give instruction on net rigging. The net can be set up quickly, because it will often be stored at night.
Nearly complete, the trapeze is usable for performance but awaits the optional side screens. These unroll from just under the raised platform. Workers pull rigging lines in a simple "raising of the curtains." The mechanical system here is optimized so that two people can operate it in the event of a performance which calls for these sides to transform.

Once the apparatus is fully erected, everyone is invited to switch their role, just as circus people do, and become performers.
network map

The map (opposite) compiles the entire circus program and proposes a sample deployment based on the internal logic of the system. The fixed programmatic pieces, represented by icons along the top, combine into various groups. In this case, there are six such groups, indicated by the six columns. Each group requires a certain amount of infrastructural connective tissue and support services, which are indicated by the icons within the particular group. The number of icons within each group indicates the number of vehicles travelling together. While it is possible for some elements to travel completely alone, this particular configuration focuses on how dynamic interactions begin.

Below the groupings, the temporal dimension begins. In this map, only the primary programs are indicated. A full logistic would require breaking each group out into its own map for a different level of understanding infrastructural exchanges, improvements, etc. However, this mapping indicates how the system operates. As each group travels, its progress gets indicated by parallel lines. Stops for performance/installation show up here as solid blocks lying over the lines. These stops can be coded and mapped onto the regional map at the bottom. At some points, different groups meet and exchange units in both random and purposeful encounters. Diagonal lines follow these exchanges.

Near the bottom, all of the groups converge into a single site. At this point, all of the projection towers can join and form the arena, as indicated by the icon. Here is the full circus, a reunion and reconfiguration.

Life persists, however, and the circus disbands again into smaller groups which can cover more ground and regenerate the sense of having a true regional existence. The new groups do not necessarily follow the ones prior to the confluence, and as one of the strategies is for exploration and experimentation, new groups and dynamics are always essential. The overall communications system prevents any true separation, and movement within the region offers continued chance meetings and planned exchanges.
While this investigation has borne the fruit of numerous possible expressions for a programmatic and architectural circus school, many leads remain unexplored. With the first actualized pieces of the imagined program now available for critique and testing, further questions deserve some exposition. Following, then, is a list of concepts outlining strategies which can inform future design.

**color, graphics and realism**

An initial intuition about color, derived from the obvious emphasis of the circus, has brought up questions about the division between design and accommodation. The circus operates in a commercial world as well as an ideological one, and this dualism invites free expression of both. Where to stop design and allow for nuances such as advertising and graphics will inform the quality and expression of such forms from "reality." The conceptions of the infrastructure have begun imagining how signage as well as vendor stands might integrate, but absolute formats are still up in the air. The most promising approach is the invention of an unconventional medium for advertising for which companies could develop unique pieces, informed by the circus context. Currently, the approach for such a medium has been the one of projection, which requires surfaces of varying quality.

**screen types and virtual presence**

This idea of projection invites a series of further questions which only the operation of the circus might begin to answer. Relying on screens for communication always bears the danger of degrading into unidirectional spectating and a separation from an idea of leaving traces. On the other hand, such technology is not new and holds promise in its familiarity. Social, especially outdoor observation of images on a screen creates a different dynamic than does the television or indoor movie theater.

Although this project has thus far relied on projection screens, much possibility exists for self-luminous screens at different scales. Such displays would operate in the daytime as well as at night. Not only would these create a different quality of light and shadow, but they also can potentially be designed as responsive elements which allow direct interaction. The key point to remember in all such speculation is an insistence on social interaction.

**simulation**

The idea of the simultaneous is highly tempered by attitudes toward simulation. The common root makes apparent one attitude within our culture toward perception, which is based on a Platonic idea of reality, that all we perceive is merely some simulation of what is "real." Levels of abstraction then follow, from direct perception to hearing second hand from a known and trusted perceiver to an anonymous human source to media sources of varying levels of "anonymity." With each abstraction, the idea of the simulation becomes more problematic, to the point at which consciousness feels hopelessly disconnected from the "real" events.

However, a reversal in this understanding of reality offers a much richer and uncynical view of simulation by linking its meaning back to simultaneity and the primacy of perception. From this standpoint, reality begins with the individual body moving in physical space, a reality constructed through modes of perception. An understanding of a simulation, then, takes on a significance of how it triggers perceptual reaction and an understanding of simultaneous events, imaginable through the medium of perceived phenomenon. The medium becomes part of the message, part of what constitutes interconnectivity as well as reinforcing simultaneity in a meaningful way.
lighting and transformation

Because so much of the activity of the circus takes place at night or in the dark, another set of strategies should seek rationales towards daily transformation from light to dark.

A case in point is the trapeze unit itself, which by day expresses its trusses and human shadows behind the screens. As day slips into night, however, the structure dematerializes. As in traditional amusement rides, lights might articulate the structure in these trusses to enliven their transformation. Lights both inside and outside of the structure can play across the side screens or up through the translucent floors, creating a luminous enclosure for performance. This effect is heightened further with projected and animated images. A static creature supporting trapeze practice by day, this unit dematerializes into dynamic complex images and effects at night.

After the show, security becomes the other nighttime transformation required in the circus. Traditionally, security has dictated tight enclosure of entire sites. Due to the inefficiency and expense of such perimeter fencing, this project proposes more localized security measures, with lockable containers to contain valuable elements while the overall site remains passable. The effect would be that of a temporary park with 24 hour access in an atmosphere of trust. The sleeping pieces would hold a different poetic power and might even allow for certain impromptu occupation.
projections
(top) detail of trapeze unit
(below) fabric wall enclosures as well as vertical boardwalk panels offer different surfaces and levels of luminosity
Though it is the nature of the mind to create and delineate forms, and though forms are never perfectly consonant with reality, still there is a crucial difference between a form which closes off experience and a form which evokes and opens it.

—Susan Griffin

installation and juxtaposition

Apart from internally generated rules and strategies of relationship, the way the circus relates to the site demands rigorous scrutiny. Because it so strongly contrasts to the hard, permanent built reality around it, the circus has a large degree of freedom in defining its position in the city. Some pieces might assume a parasitic role either clamping onto existing structures, projecting onto them, or simply enjoying the potency of the juxtaposition. By becoming other in the city, the circus creates a new way of seeing the same city, now disconnected from prior assumptions.

technology and the body

Another approach to the body besides that of rigorous physical training is the integration of technology and various interfaces to bodily awareness. In the circus every contact between the body and objects reveals a technological understanding of both physics and metaphor. Results of such awareness include most circus events — flying trapeze, trampoline, juggling objects, balancing apparatus, etc. This tradition has the potential to inform relationships to more recent technologies such as analog and digital media. In every case the technology must do more than itself, press beyond the effect of its newness and integrate with human bodily experience in a meaningful way.
things left behind — stories and history

Sequence in the circus begins with the selection of a site and ensues with the marking out of that site, the arrival of the circus, the setup, the performance, and the teardown of that site. What remains should barely, if at all visible.

An ongoing circus design should further recognize this dynamic and posit devices to facilitate each of these phases. For example, the small metal shoes to the scaffolding of the boardwalk can be carried ahead and be laid out on the site, giving clues to the impending event and allowing the arriving circus to find where it goes. These plates could just rest on hard ground or be driven into wooden planks to “float” on softer ground. They are the first object on the site and the last to leave. Invariably, one will get left behind to be “discovered” as an artifact pregnant with suggestion.

Key to the circus is the unfolding of such stories, of a human impulse to generate meaning in events and objects. The circus collects stories as it travels and needs a way of accumulating such stories. Of course, not all would be recorded, especially those inadvertent ones simply caused by the presence of the circus in the city. However, the meaning of social responsibility is an awareness of such external effects and a willingness to answer for them.

The circus strives to write a good story, which is perhaps the most important requirement of its design.

The first thing the architect must do is to unweave the social and psychological fabric of our time, isolating the threads that will serve as meaningful sources. This process is complicated by the deluge of information that comes from the electronic media. The sorting-out process alone could absorb several lifetimes and only scratch the surface. But some general issues would certainly emerge: the tension between public and private sensibility, the pressures brought on by technological progress, the overstructuring of people’s lives, the apocalypse-or-utopia scenarios of nuclear science, the climate of risk, the changing nature of personal relationships, the pervasiveness of consumer culture, and the neuroses generated by infinite choice. These might sound like themes for a poet or a playwright, but that is precisely the point: architecture can and should embrace the same narrative issues. The most significant trend informing today’s perceptions of the universe. Whereas traditionally people sought the reassurance of a consistent and orderly view of natural phenomena (usually embodied in religious faith), they have now been forced by the information explosion to confront the contradictory coexistence of such forces as cohesion and entropy, order and disorder. In the most compelling sense, people now face the ultimate condition of dialectic.

—James Wines
This section considers precedents both as inspiration and as fact — some works exist which ask questions that this project is responsible to address if it is to follow along similar lines of investigation. That the circus bears a long and complex tradition is food enough for consideration; added to that is a series of designers, artists and thinkers who have found inspiration in the provisionality, mobility, lightness or performance of the circus. Further examples not elaborated here appear in the bibliography.

**worlds fairs and expositions**

These events have always created spectacles similar to the circus, sharing the idea to bring together many cultures and technologies. Architecture and exhibits of worlds fairs can be very circus-like, both in the often temporary buildings they create and also in the sometimes sideshow atmosphere when different cultures are portrayed.
Konstantin Melnikov, Leninградskaya Pravda project, Moscow

Konstantin Melnikov, Soviet Pavilion at the Exposition des Arts Décoratifs, Paris, 1925
avant garde and constructivism

The imagery from Russian constructivism inspires imagination not only in the forms but in the spirit of hope from this place so prone to oppression. In the spirit of the avant garde, architectural consideration was wide open to non-architectural expression. The speculation was toward a political critique and proposals of possibility, not toward architecture to solidify established norms.

The Vesnin project on this page is especially interesting in prefiguring the work of Archigram in the 1960s and 70s (turn the page and see).
Oskar Schlemmer

Schlemmer's strength was in integrating an intense study of the body with spatial readings. The body served doubly as formal object and subject in space. In the theater the concept of total design is a given.
archigram

No investigation of circus or spectacle or event structure is complete without a nod to Archigram. Their Instant City (top erection sequence and large image above) held to some notions of the circus, although an important component was consumer/image culture to the point of camp. More "serious" but even more visionary projects included the Cushicle (top figure), a self-contained environment for one person, and the Plug-In City (left) which took modularity and systems to great lengths of expression.
Cedric Price

In academia, one constantly discovers the stuff from which one is formed, often invisibly through the unentanglable connections of many individuals. In one sense this further places creation at the juncture between thoughts rather than within an individual's creativity; however, at some point inspiration arises in a single mind. At some point midway through this project I discovered one such source of my inspiration and am somewhat embarrassed at the previous oversight. This figure is Cedric Price, perhaps forgivably obscured by his many illustrious followers — Archigram, Renzo Piano, Rem Koolhaas.

What Price brought to architectural thought was an attitude of enabling, a sensibility grounded in the culture of the 1960s yet unique to architecture, which had throughout the modern movement focused on solving problems. Price noted how ill-equipped architecture is for this task, its production being too slow and the medium too static for the complexity of real life. To him, architecture at its best should create something which did not exist before, stimulating the imagination toward avoiding problems in the first place. He sought such creation not in form but in infrastructure at a very 'real' technological and functional level, yet the purpose of their deployment was never anything recognizable as functionalism. This is because the 'function' of these projects was to open a space for interaction, not to close a gap in ideology by solving an isolated problem.

Two further attitudes of Price's works were very influential, even if I did not realize at first the parallel. One is his frequent contextualizing work at a regional level in order to lend coherence at a large scale. His networks gave a substance to his programs before architecture even began and suggested that much more than architecture could contribute to these projects.

The other understanding which Cedric Price brings to bear on architectural production is his attitude toward technology. Avoiding a fetishization of emergent electronic possibilities, Price's approach to the technological allows both high and low tech, as long as certain criteria pertain. These are: appropriateness, that the technology applies to the project, whether or not it is conventional; criticality, where the technological plays a visible part in understanding the project, for smoothing or for shock; and finally that the technology create a context of constraint for the project rather than implying a false infinitude.

Price offers further inspiration, such as how to address impermanence, flexibility, how to use what exists or even decide not to build. But in total his ad hoc-ness belies a keen awareness of creating order against which freedom can emerge. It is this attitude which the circus always held.
“Architectural and planning attention should primarily increase the range of choice of activities and not merely increase the amenity value of existing situations.”
Melvin Charney
Charney's 1970 'Memo Series' proposes an alternative monument to the one called for in a competition brief for an air force memorial. Instead of a centralized monolith declaring the glory of flight, Charney suggests, through a long series of memos (short materials), a network of sites including existing structures and events, none of which propose buildings. Thus Charney answers a classical proposal for architecture to freeze and rewrite history with a subversive network, a different kind of architecture.
Buckminster Fuller

Despite debatable forms and proposals, Fuller's enthusiasm and inventiveness cannot be denied. He embraced unconventional possibilities for architecture and learned provisionality from the military. His visions always included extended metaphors to new ways of living and ramifications for the entire world. He thought systematically and designed artifacts ready for real world tests.

Robert Irwin and James Turrell are among a handful of artists who have intensely investigated the phenomenology of light, space and material in relationship to human perceptions. Their minimal environments always create indeterminate perceptual situations, striking chords in self awareness. Their works create environments or alter existing ones in profound, generative ways.
Frei Otto

A pioneer in lightweight structure design, Frei Otto has investigated tensile structures for over three decades. His workshop has instigated nearly all design advances in this field during that time. Oddly, few architects know who Frei Otto is.
**mobile theaters**

This pavilion by FTL Happold includes the design of specialized transport vehicles which integrate themselves into the final structure. Their logic is very convincing and the product enjoys the mobility and temporality which most architecture forsakes. The setup is completely motorized, however, and the intent behind the project is largely commercial.
Coney Island

A permanently installed circus, Coney Island provided an alternative reality to the gritty one of New York City. Now, in the post-modern era, Las Vegas has superceded Coney Island as the United States’ playground, and may have an analogous relationship in spirit as escape.
scaffolding

The idea of infrastructure for the circus follows a conception of scaffolding, of providing a versatile structure which also achieves certain material and spatial qualities (unintentional in the case of scaffolding).
Alexander Calder

Calder's lifelong fascination with the circus begins to make more sense now.
The bulk of my institutional architectural training did not prepare me to undertake this thesis project. While my education (at work as well as in school) introduced me many of the requisite architectural and form-making skills, the fact of my unpreparedness points toward a general dilemma of the practice of architecture itself, which is a problem of relevance. Architecture as a social, critical, or avant-garde art seems increasingly irrelevant in practice today, despite a profusion of fantastically skilled form-makers. And while the inherent beauty in some of the better contemporary projects legitimizes them to some degree in and of themselves, architects seem to have stopped imagining that they have a role in changing the world.

This could have something to do with architectural egomania — of decisions involving ridiculous money expenditures on objects which will persist for periods likely long exceeding their merit — an egomania which precludes a meaningful insight on how the world might be different, because such revolutionary proposals issue from humility and collaboration.

collaboration

It might be this cooperative approach that has yet to enter strongly into architectural practice and education. Despite some success and a great deal of lip service to the idea of design by coalition or committee, architects are still trained to imagine themselves as sole strugglers, individual visionaries, creative geniuses. The very structure of this project as a thesis at a major architectural institution, in which each student must serve as client and architect for a project of their sole devising, attests to this situation.

If this project has been successful at all, a good part of the merit lies in what collaborative effort I could bring to it. With every discussion the project took on new life, especially when it inspired ideas in someone else besides myself. It began to operate, in some sense, like the circus. Imagination begins to build on itself and different people bring different skills to the performance. As a seed for collaboration, the architectural project comes alive. And while certain individual visions may direct this process in revolutionary directions, it is the project as representing the dynamic relations among the participants which might ultimately shape reality for the better.
My architectural training also focused on solving architectural problems. This might sound reasonable, except that it severely limits architectural agency; architects must wait around for problems to solve rather than revealing problems by proposing their solutions. In other words, architecture needs the capacity to generate opportunities, not act as a social bandage. When architecture attempts to reconcile social ills through built form it deceives itself of false heroism, followed by a crippling sense of impotence when the problem persists.

Architectural design is part of the integrated system of social and natural reality and remains free to propose modifications to that reality. Architecture has been said to “stage” or “frame” life, and yet as a container of living, most architecture remains mutely functional, even if you read the rhetoric espoused by its designers. Architecture should generate possibilities for social life rather than offering token or illegible gestures to “the public.” Cedric Price perhaps said it best 30 years ago:

*Instantaneous architectural response to a particular problem is too slow. Architecture must concern itself continually with the socially beneficial distortion of the environment. Like medicine it must move from the curative to the preventive. Architecture should have little to do with problem solving — rather it should create desirable conditions and opportunities hitherto thought impossible.*

**design**

The design process for this project focused on integrating several concepts in architectural thinking. These were, roughly, a *systematic* or *strategic* approach to the design project, focusing on the relationships the architecture would create; a *multi-scalar* attitude which moved among regional, site, architectural and bodily scales, considering in the process an attitude of total design; and a *characteristic* sense toward form-making, in that intuitive expression often lends itself better to multiple functions within a system than does a logical, reductive reasoning.

For architects to design strategies for relationships within a system they must rely heavily on collaboration, especially with those who are affected in those relationships. This does not mean endless public meetings resulting in the design of lowest common denominator compromise. It does, however, require a level of expertise at understanding different points of view, a familiarity with those who will use the architectural object. To denounce their “otherness” as unenlightened or uneducated belies the wisdom latent in lived reality. So the first motion toward understanding the issues involved in developing a system is for the architect to listen.
The next attitude, that of considering design at several scales, releases architecture from a prescriptive marginalized role and returns it to the tradition of the craftsman or the Bauhaus. By considering design of the total environment, from space to object to infrastructure, the architect regains the ability to communicate visions of a meaningful totality. This sense is not one of a reductive metaphor but rather of an open sense of analogous experience which can posit realities extending from those we already know. In generating these different levels of scale and knowledge, the architect again relies on collaboration for varying expertise. The difficulty of locating such expertise crippled this project at some key points.

Finally, in returning to the creation of architectural forms, the architect’s voice or character does make a difference in creating a consistency of design. The architect is part of the process, of the system being created and cannot claim autonomy. Design shapes the world and mind of the designer as it occurs, and any attempts to objectify this process start to close down true intuitive wisdom. Laments about architectural form-making do not preclude architecture’s having a voice. It is just when form-making becomes the sole motivation to a particular object that architecture ceases to communicate, or at least cannot be communicated pedagogically.

realism

My prognosis for architecture seems to me to be a search for realism. My experience with the circus enriched the meaning of this word by both stretching it and exemplifying it. The stretch was the suspension of disbelief that the circus creates, the opening in consciousness in which dreams are as real as reality itself. The example is the operation of the circus, its functionality, provisionality, expression, motivation, collaboration, difficulty, magic. The circus designs itself by living its own design. This flexibility allows the circus to continually reinvent itself, adopting devices and artifacts from culture as it needs while always playing to a human desire for corporeal awareness, interconnectedness, and virtuosity.
| theory |  |
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| art and architecture |  |


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<td>Handbuch der Architektur. Tiel 4, 4 Halbband, 2 Heft, &quot;Panoramen, etc.,&quot; Stuttgart: Arnold Bergsträsser Verlagsbuchhandlung, 1894.</td>
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lightweight structures


IL5 *Convertible Roofs.* University of Stuttgart: Institut for Lightweight Structures (IL), 1972.

IL14 *Adaptable Architecture.* University of Stuttgart: Institut for Lightweight Structures (IL), 1975.

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film and performance


*Ringling Bros. Barnum & Bailey Circus.* Cleveland, 1975?

Even when experience is unnamed and denied, what is denied shapes the mind.

—Susan Griffin
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mask

The imaginative mask operates in a very different way by layering rather than concealing. By donning a mask, an actor becomes more than a different person or creature. The actor becomes a hybrid entity, a person and the assumed identity. It is the expression of this duality which generates understanding and reveals ideas about both (or more than two) identities. Identity, then becomes not a fixed object that can be separated, but a shifting application of action and perception. By allowing a dual perception, the mask brings awareness to the consciousness behind perception.