Arch 348 – Evolo-Arch Competition Essay Submission Alexander William Josephson

"A SKYSCRAPER- we are trying to be as far away as we can, even more, from the ground. From the earth. It can be amazing working at the 101st floor of a tower, viewing the city from the sky, as if you were on a plane. That's what we can design, the best materials, the best people using, the best banks renting our shit, we assure the most incredible place, it would be easier, with us, with me, with our design to impress your client. My client too in the end. But then something suddenly changes, the unexpected shows up and we are all fucked. No escape. You are working on a contract-a coffee on the table. End. Then you look out the window and guess what you see> a boeing landing in your office. My heart is breaking, 2001 pieces. But who can tell me if we were right? People that died there, the two lovers that leaped out of the window? Thinking that in a world where everything's possible you can turn a fling into flight. "²

Caveat

The following risks being pretentious and at times old fashioned (to the architects of the manifestos of the ' $10/20s^3$ and of the ' $60/70s^4$ is due most of the credit), many regrets for this lack of forward thinking.

City

There is no end to a city; not really, it is our faith in growth that defines the metropolis, when a city stops growing it becomes unpopular, slow, and finally decadent. The popular

cities of the world are defined, amongst other things, by growth, energy and opportunity. Design functions in the same way; when asked to define something new, we do so in hopes that growth and change are always possible in the future. The act of designing is a project unto itself, there is the project at hand then the projects outside the physical. These are the passions and dispositions deep within. Design happens with these words-it is another project built between the fluidity of these lines⁵. This text is a skyscraper-it tests the heights of its page and the use of language.

What began as a dream in the minds of modernists is now a generations' folly. Instead of reinventing a new type of building for a new way of life and new demands-we have simply put the old model on a diet of steroids. Their original was a revolutionary statement asserting the fact that life as they knew it was changing drastically. Now life we this generation knows it is changing and nothing is being done to accommodate it. In high modernist terms; the contemporary versions of skyscrapers are caricatures of times past in hopes that something new might be developed. Everybody is hoping that someone else will take the big risk. Nothing is more telling than the fact that Frank Lloyd Wright proposed the 'mile high tower' of 'Broad Acres' complete with foliage and trees in 1923/56⁶. His project was remarkably similar to those for the World Trade Centre Freedom Tower-a metallic crystal rising to slice the sky. Propositions like these are part of an old model of artifacts or symbols within cities. Instead of going away from this; skyscrapers have tended to remain as distinct objects of scale. Rather than considering other functional requirements that might enrich them-they simply held height as paramount. Or they stand out as trendy sculptural solutions to a sudden demand for space. Monumentalism has been examined and drained of all value. A new nonhomogeneous architecture that will be the model for the skyscraper of the future is the end here.

Peoples' dreams made the city the metropolis of the twentieth century. It has not always been rational, if it were any hope for romance would be lost. Pleasures go alongside the pain of the city. The many woes that so many great minds critiqued the modern city for culturing were also a necessary aspect of its integrity. Together they are the resin holding it strong. Speed keeps the city alive, it is: pure human energy, take part in the game or get left behind. It doesn't matter; the city doesn't care, because in this game nobody cares, it can live on with or without you. It can't take us all away, but definitely a few here and there or even two thousand five-hundred and ninety-three – she lives on. Momentum is to put the energy of the city lightly; it is the force of it. The image is of the skyscraper. They were the dream of a special human space in the sky. They challenged gravity which was the new found force behind special relativity, but more importantly the gravity of practical restraint and intellectual inertia. Efficiency and sustainability are not the raison d'etre of the dream to be in the sky. It is more about the power to do so.

The skyscraper of the future and the city of the future are inseparable. Terms like skyscraper or city start to be interchangeable as if the only difference in the two might be a sound or linguistic game. It will be impossible to discriminate between the large scale structure of the city and its constituents, they become mutated into one. Here, they become synonymous of the same thing: the physique of the metropolis in its most extreme scales and spatial formats. These are formats both extremely small and largepotentially on the same scale as a country or the whole planet. As if they are two in the same physically and emotionally in a dense mess of debris and construction. They exist within our thoughts like a set of vectors leading to a design. But they are always admitting that at an instant something could change and leave parts of this idea behind without a trace.

Let us seed design with reflections of what we cannot see-a dream of a new city and build it together. Design here, is not an exercise in updated stylistic memory, it is a representation of a state of being and personality.

Energy

Energy is an extreme format of matter-it breaks the rules of the static and turns its parts into action. Energy breaks down and changes form, it is by definition subject to the laws of thermodynamics and also to entropy-breakdown. Architecture is the ultimate attempt to refuse that inevitable breakdown in nature and the skyscraper has become architecture's poster child of that desire for permanence-through monumentalism.⁷ Skyscrapers became the vision of the modern city in its extreme format. The cities we live and love now are the last throws of this modern era in design. This direction takes us away from a prejudice or pre-form. If one describes the path a bolt of lightning takes through air one might understand how a city of energy would grow and be developedthrough paths of least resistance. Cities of the future will grow in freedom as an organism would if it had become alive, breeding duplicate parts and structures to hold everything together.

The Gazprom Tower competition in St. Petersburg held in the fall of 2006 was evidence of the current state of commercial skyscraper architecture. For a company that prides itself as one of the largest and most progressive in the world, they chose the most conventional and commercial project afforded to them. It is a project that lacks any solid and rooted connection to the historic context. In fact it was placed on the outskirts of the city, as if to say that contemporary architecture were no longer capable of any grace. It is evidence of the incredible misdistribution of wealth that is being accumulated in the energy sectors of the global economy and the lack of education regarding architecture in general.

The end is not in sight, the discovery of the Schotken natural gas reserve in northern Siberia will provide decades of natural gas to China, they are already building a pipeline directly from Siberia to the Northern Chinese provinces. This will span thousands of kilometers and employ thousands of people, the attitude is do whatever it should require to build it. This is the right attitude to have about architecture: do whatever it takes to have it done. Instead of applying the logic of their pipeline to their headquarters they applied the reverse.

Cities will need vast physical reserves of energy in the future. The Earth will become more and more inhospitable to 'life as we know it', why should we delude ourselves into believing otherwise. The cities of the future will need new structures to store and manage energy and fuel reserves, it may also need places where parts of the population exist in isolated controlled environments much like bubbles. Massive infrastructural frameworks wherein living beside and maintaining these precious reserves will be a fundamental new way of life. Water will become as valuable as fossil fuels, itself becoming a source for hydrogen fuel. Instead of keeping stores of energy outside the centers of major cities, the resources will be held within, ready to withstand huge shifts in global economies which will effect prices more drastically than today.

Personal stores of energy will be critical to the citizens of the future and the viability of large scale construction projects. It was ironically only until the late twentieth century that the thousands of oil tanks lying within our cities had been decommissioned and removed. The average North American household had a tank of many hundreds of gallons of heating oil, the purpose was to pay the lowest price for the oil by buying either in large quantities or to have bought as much as possible whenever prices were lowest. It was also an insurance against disaster, a measure of personal independence.

Architecture, not the specialized culture that is known today, will be mainstream in the future. Everyone will be a participant in city building-a place that changes daily and physically on a pace foreign to present day logic. One only needs to imagine the possibility of speed and movement in the future, compare our ability to move lives now to those of our great grandparents', when electricity was a rare luxury item. Today electricity isn't even good enough-we are searching for something better.

Appendage

The older laws of our cities are governed by a logic that at times contradicts the requirements of the present and makes minimal concessions for the future. Cities such as Toronto are experiencing building booms dominated by skyscrapers to house the rush of suburban immigrants and young people that work in the downtown core. These buildings, though dense, have been placed under the same logic that governed the older building codes and setbacks. The result is much wasted spaces on streetscapes of a downtown core that desperately needs connections and action. The laws of the past must be done away with in exchange for a new set more aware of the changing demands of the contemporary population. They need to be focused on the people inside cities and less on ideological theories held sacred by academics and city planners⁸.

For example, the setback laws alone in post modern cities such as Toronto or Berlin have forced them to be at least thirty percent larger then they need to be. If these rules continue to be taken so seriously, they will eat and consume the possibilities for a future. New Orleans is a perfect example of how a complete catastrophe has been intensified by beurocracy and old rules. Instead of being embraced as an opportunity to set an example for the future, wherein these kinds of large scale environmental disasters will be more common place, the city has become a rotting carcass. The regulations of government organizations arrested the organic redevelopment of the city and also the vision of architects themselves. That city turned its back on the faith in architects as creators of great cities.

Drawing⁹

We are now living in the final throws of the modernist city. Its dream may have taken almost a century to accomplish, but it has refused to see the other options for the city as anything else but science fiction. There is a new demand representing the city anew and the old ways should not be seen as sacred. The city is not an artifact in the making, there is no need to reconstruct a past with frameworks or forms of the present. This kind of nostalgia is not productive and is at least inefficient.

The innovative graphic drawings: plans, sections, axonometric projections, and other tools invented by post renaissance modernists were firstly a depiction of what the future [presently] could be but they were also an avante-garde type of representation. The dream of the city as drawn by visionaries was determined and influenced by the absolute graphic representation of it. A future for the skyscraper is the future of representation in higher dimensions, possibly without paper. It is a fully interactive and three-dimensional understanding of the city. Once cutting and slicing, is in the section, was the only way we could learn about ourselves. It was only natural that these devices used to understand our physical bodies would be projected onto the physical things we would build. As if to say that there is a primal or genesis type connection that embodied in any work is the mind and body of its creator.

The present state of architectural design supports this hypothesis. All of the buildings twisting and morphing as they rise into the sky, much as a landscape does horizontally are deep struggles to escape the definition of the plan and section. They try and fail because they simply place those tenets of the past behind an aesthetic or sculptural smoke screen. This is all in an effort to see the city in the same light as a skyscraper: a unique and cohesive body. The romance of the city is lost when it is homogeneous or predictable; it is the contradiction and exception to rules that the city is beautiful and special.

Perversion

Our fantasies will imprint themselves onto our cities. The ultimate precedents for this are the legacies of Saigon, Las Vegas and Los Angeles to name a few. Their economies of sex, money, drugs and stardom; have transformed the fabric of those places to house these pleasures¹⁰. Designing the new skyscraper is an exercise in honesty that acknowledges all kinds of dreams¹¹. But it also sees the impossibility of being in the future instantaneously, in effect acknowledging that the future of human space is quite unimaginable. To have proposed the idea of the internet to a child growing up after World War Two would have been futile-they wouldn't believe it. As long as there are human beings alive, they will try to extend their experience of an environment to a point that seems perverse to any present status quo or even the dead avant-gardes. The proliferation of pornography is an example of how something deemed grotesque in the past is slowly, though hesitantly, becoming main-stream.

Violence as a force is of the natural elements of society and attractive element of the city. Part of the allure of the city and the dream of the skyscraper is a class struggle, the fetish differences. Having an office in the sky was to become a symbol of success and power; and people would go to battle to achieve those ends. Even the word skyscraper holds within it a sense of aggression. The explorer instinct is strong within us and the last mysterious frontier on earth is the discovery of the city that has yet to be built. The city and its future guises are the mysterious terrain and the last landscape on this planet to be discovered.¹²

Ego Twins

Our brains develop from conception in a mysteriously elegant way, one row of developing cells in our skulls folds to form two opposing structures, tubes as a matter of

fact¹³. These two sides in turn develop by folding into themselves creating more pairs in opposition within themselves while always in the end being two sides (left and right brain). As if in conflict with each other or suggesting that the idea of the two or twin physical aspect actually affects the way we think. There might be some unseen energy or power that exists in the unobservable: in the idea - the concept of the opposition. Our consciousness might only possible through the opposition or presence of structures in relation one another. Pairs appear in many ways and not necessarily in the sense of identity: within human thought, language and understandings. We say right or wrong, small or large, black or white, and even symmetry. Symmetry is interesting; architecture has been preoccupied by this for over two thousand years (Vitruvius)¹⁴. The city of the future will be as complex as our own brains; enfolded spaced and structures bent in on themselves¹⁵.

Genetic construction is a compelling theory of thought; even physically it can be one of the most alluring forms in science. Some schools of architecture at present even propose the architecture of the future as a genetic or parametric one. These are great visions and aesthetic projects, but they remain homogeneous. They are proposing a model of the city for all of its skyscrapers as a unique system, planned and constructed. They forget that genetics is an evolutionary science, a non homogeneous development with multiple characters and types. In fact, it has been recently proven that ancient humans cross bred with other types of lesser evolved beings and that our genetic codes had been affected by these activities over time (Broad Institute, HSM).

The Gates of Mycenae in ancient Greece were flanked by a pair of Persian lions with human faces and wings. Towers often flanked the gates of ancient cities in pairs as if the power lay in the idea of symmetry itself, making the figures seem even more powerful. The symmetry of the World Trade Centre in its original configuration was extremely powerful and central to its symbolism. Though, in that case, the reason to have two towers built was mostly practical. The twin configuration becomes more interesting if it is looked at from a slightly different perspective. Because they are desire to build more broadly associated and connected architectures. Many of the twin towers built recently almost all have adjoining sky bridges, a familiar icon of the late futurist visions of the city from the 1920's. The future holds a much more extreme kind of connection and goes beyond the human formal condition of the individual building or pair. The skyscraper of the future will have no client, or figure to celebrate. But it is also not the architecture of global nomadism that was proposed in the mid twentieth century.¹⁶

Anti-Gravity

Sprawl is a natural human disposition-there is no need to be so scared of it. The effort to prevent it seems misguided and conservative-sprawl has been limited in most cases to a definition limited to the horizontal. Urban sprawl could be encouraged in the centers of future cities in a vertical format. We have only to acknowledge the growing feeling that there is no up and no down.

It makes even more sense in the vertical plane, or maybe even the multidimensional. Time can also sprawl in the future. Imagine a 'verticazontal' sprawl in cities, this would surely be a welcomed condition to all of the sub-planning critics. Populations will begin to get so large around the world that verticality will blend with the horizontal, land and setback laws will disappear as technology allows it. This new city breaks all of the rules by placing us in unthought-of positions in space, filling our experience with lightness and transparency.

Lace

The Earth is continually threaded with thousands of kilometers of sub-oceanic fiber optic cables and cities are a mess of subterranean systems. It is orbited by hundreds of

satellites; together they make a new ground, a virtual ground. Telling the difference between the virtual and physical world may become impossible. Using these kinds of virtual environments, the scale and types of architectural spaces will be infinite¹⁷. They will also be completely free of cost except for the data and processing to interact within it.

Global trends in everything from fashion to currency valuation ebb and flow over these networks. The average amount of time a North American person spends on computers daily is over six hours. These people are hungry for flexibility and change, the 'softness' that this hardware lends should also be natural to architecture.

The internet has given birth to entirely new and abstract space, one that we see at moments on a screen. The internet's vast array of systems that are constantly and freely morphing to the requirements of its users is like a second planet within our own connecting us all. Its structure is more similar to microfilaments randomly connecting each other. It is only a matter of time before this structure becomes more conscious and physically apparent in the world as a whole. These electronic worlds are at the largest scales imaginable. Small scale autonomous structures that we now call skyscrapers will be replaced by an even denser and far reaching system. This virtual ground is an abstraction of whatever it is that we sense as pressure under our feet.

Systems of energy infrastructure are still changing, these systems change our way of life: oil pipelines and train tunnels through mountains, high tension power lines, television and data cable, fiber optic data cables, and to name another the radiation based networks. Here is an architecture that proposes full integration of these systems as the structure of the architecture itself.¹⁸ An endless knot of wires and structures upon which and within which we can insert and stuff private and public spaces.

The future will tend towards rampant and fast change¹⁹, economies will wane and wax weekly or monthly rather than quarterly or annually as they do today. A new type of microeconomics, developed based on data collected at the Fed-X Corporation in 2005, is

a proof to this. Accountants and economists found that because of the chaotic nature of the transportation industry, Fed-X in one week or a few days might lose billions of dollars due to excess capacity under low demand for services. However, the next week could be followed by incredible upswings in revenue and profit.²⁰ These massive and fast changes are evidence of a new kind of exchange, violent and uninterrupted. Because globalization is such a powerful economic and electronic phenomenon, it will be architecture's job to make it a physical one as well.

Ruin²¹

The new city will latch onto the remains of the old, grabbing at their foundations and using them like roots. The dark old ground at the crust of the earth will be a scattered mess of urban spoglia and active flood planes. Natural disasters will have left the old cities of the world in constant defense and reconstruction until the old model is abandoned. But this is not so hard to believe it already happened in the past. The fall of rome in 476 marked the beginning of a new age of decay. The decay of the physical history of Rome was an active and conscious process undertaken by all, it was not a passive cycle. Those beautiful lime marble bodices were taken and reborn into lime. Then only until the fascist regime of the 1920's and 30's did the physical heritage of rome become exposed again. The pantheon was half buried in a residential block, three of its columns were replaced, as if our need to simulate the past was greater than moving forward. The new ground will be the remnants of war; the coming second religious war will change the fabric of many contemporary cities. The foundations of the world trade center are the perfect example of this as they are going to be integrated not only into the space of a monument but also into the new space of buildings being reconstructed.

These ruins will comprise a fracture set of large open wounds wherin new contructions will be inserted for structural support. Like teeth inserted into gums, these new buildings will leap from the old as if they were organic.

Formless²²

A new architecture begins when it no longer gives form to buildings but rather gives them tasks. Thus formless is not only an adjective having a given meaning, but a term that serves to bring things down in the world, generally requiring that each thing have its own form. What it designates has no rights in any sense and get itself squashed everywhere like a spider or an earthworm. In fact for academic men to be happy, the universe would have to take a shape. All of philosophy has no other goal: it is a matter of giving a frock coat to what is a mathematical frock coat.²³

Architecture will be emptied out, it will become voids bordered by fluid and endless lines. They replace the solidity and heavily constructed positives of monumental space. These new spaces are experiences or residues that rise into the sky and into the horizon.

There is no conclusion today, tomorrow is already here and everything here is now obsolete. There is already something else being done, another painting, a portrait perhaps that captures better the light of this second than the last.

Notes

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2	Elisa Fuksas, I Swear from the Bottom of My Heart, 2006. p 73
3	A.F. Marinetti, <i>The Futurist Manifesto 1909-11</i> . Italy H. Breton. <i>The Surrealist Manifesto</i> J.Arp. <i>DADA</i>
4	Archizoom, archigram, superstudio. (web site, whitney museum of art) Archizoom proposed a No-Stop City that would embrace the world, a kind of hi-tech global village. Superstudio offered its own weird and wonderful version, Continuous Monument: An Architectural Model for Total Urbanisation. Archigram drew up designs for colorful cities, and architectural "happenings", which could pop up overnight and even walk from one location to another.
5	Jon Hejduk, Interviewed by Gary Michael Dault, 1982.
	Guy Debord. An interpretation of the way text was laid out as form in his manifesto for the Surrealist International called Memoires, bound in sandpaper 1957.
6	Bruce Brooks Pfeiffer, Frank Lloyd Wright, pubblished 2004, Taschen. ISBN 3822827576 p82. <i>Because the Broadacre project was an exploration of horizontal space, a one-mile-high skyscraper might at first seem out of place 'but by the 1950s Wright had decided that some cities were 'incorrigible,' and that even Broadacre City could use a tall building as a cultural and social hub.</i>
7	George Bataille. <i>Inner Experience</i> , is quoted in the book Formless by Yves Alain-Bois & Rosali

- George Bataille. *Inner Experience,* is quoted in the book Formless by Yves Alain-Bois & Rosalind Krauss on the nature of architecture and its goals. p46
- Lebbeus woods Because governments and corporations cannot be expected to take the initiative in establishing new and multilayered societies, the impetus for their creation must come from below, from people who begin to build directly, without the sanction of any institutionalized authority. These people include those from every socially defined group whose energies, once released, flow readily into a turbulent and newly complex human stream, one composed of distinct atoms of existence, and not melded into an indiscriminate flood.

The new spaces of habitation constructed on the existential remnants of war and natural disaster do not celebrate the destruction of an established order, nor do they symbolize or commemorate it. Rather they accept with certain pride what has been suffered and lost, but also what has been gained. They build upon the shattered form of the old order a new category of order inherent only in present conditions, within which existence feels its strengths, acknowledges its vulnerabilities and failures, and faces up to the need to re-invent itself. There is an ethical and moral commitment in such an existence, and therefore a basis of community.

- ⁹ Joseph Beuys. Artist as Guru. He is quoted to have said that everything in life is ðrawing". There is reference in Matthew Barney's work wherein he proposed in Cremaster 5 that only in PERVERSION would humanity find its salvation in the future. Musee D'Arte Modern de Paris, 2002
- ¹⁰ Paulo Soleri: Soleri proposed a 1,000-meter tall structure with a footprint of one square kilometer, flanked by two 'exedrae' or semicircular structures. Soleri's described his Hyper Building as a vertical 'arcology,' a term he invented to describe the merging of architecture and ecology. He sited his Hyper Building in the Mojave Desert between Los Angeles and Las Vegas, cities he believes symbolize contemporary society's penchant for consumption and hedonism. It played on

these cities' sense of artifice, incorporating a virtual-reality recreation park and using climate controls to simulate seasonal changes

- ¹¹ Dziga Vertov, film director 1926, *Man with a movie camera 1917*, *I am eye. I am a mechanical eye. I, a machine, am showing you a world, the likes of which only I can see.*
- ¹² Lebbeus Woods, Architect and Professor at Cooper Union Chanin School of Architecture. *Radical Reconstruction*, personal poetry. Published 1992.
- ¹³ Subtle technologies Conference University of Toronto in collaboration with the University of Waterloo School of Architecture. Speaker Series. Dr. Kistman.
- ¹⁴ Vitruvius referenced is the rebirth of classical architecture by renaissance architects in order to find a link to the ancients.
- ¹⁵ Ignacio Sola Miralles, *Terrain Vague*. Paul Virilio Ecole Special d'architecture Paris, *Espace Vague*. Essays.
- ¹⁶ Constant Niewenhuis, *New Babylon*, writings exerted from an exhibition at the Rijksmuseum of Amsterdam. In his project for a new type of nomadic culture, he suggests that spaces and also convertible or movable.
- ¹⁷ Constant Niewenhuis:

For us, social space is truly the concrete space of meetings, of the contacts between beings. Spatiality is social. In New Babylon, social space is social spatiality. Space as a psychic dimension (abstract space) cannot be separated from the space of action (concrete space). Their divorce is only justified in a utilitarian society with arrested social relations, where concrete space necessarily has an anti-social character.

- ¹⁸ Freidrich Nietzsche, *Thus Spoke Zarathustra*. The concept of the new world and the reign of the Uberman or Over Man. *The press, the machine, the railway, the telegraph are premises whose thousand-year conclusion no one has yet dared to draw.*
- ¹⁹ Harvey, *The Condition of Post-Modernity*, chapter 12 Space Time Compression.
- ²⁰ Economist July 2006, The New MicroEconomy. Authors undisclosed as per magazine policy.
- ²¹ Giovanbattista Piranesi. *Ruins of Rome*. etchings and prints. Carceri prisons 1750
- ²² Yves Alain-Bois & Rosalind Kauss. Formless, A users guide. Published 1996, Zone Books. Thus, the dream of architecture, among other things, is to escape entropy. This dream may be illusory on its face; but this is something that must be demonstrated nonetheless-which is to say that one must "exit the domain of the project by means of a project".
- ²³ George Bataille. *Inner Experience*, is quoted in the book Formless by Yves Alain-Bois & Rosalind Krauss on the nature of architecture and its goals. p46