MISSILES IN THE WHITE CITY:

HOW GOVERNMENTS CREATIVELY DESTROYED CHICAGO'S JACKSON PARK THREE TIMES IN 80 YEARS

A thesis

presented to

the faculty of the Graduate School

at the University of Missouri-Columbia

In partial fulfillment

of the requirements for the degree

Master of Arts

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by

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MAY 2016

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The undersigned, appointed by the dean of the Graduate School, have examined the thesis entitled

MISSILES IN THE WHITE CITY:

HOW GOVERNMENTS CREATIVELY DESTROYED CHICAGO'S JACKSON PARK

THREE TIMES IN 80 YEARS

presented by Judd Slivka

a candidate for the degree of master of arts in geography

and hereby certify that, in their opinion, it is worthy of acceptance.

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For my family, who got much too used to me not being around.

And for Frederick Law Olmsted, who designed a nearly perfect place. Twice.

ACKNOWLEDGEMENTS

This has been a team effort. Anything this long, for a former journalist used to writing 1,500 words and out, has to be. And I had a terrific team behind me.

Mark Palmer, the committee chair, led the way, encouraging me to find my own voice, instructing me on how to structure the beast and providing the critical structural device of historic pulses. Committee member Soren Larsen provided a sounding board on a number of topics, and introduced me to the idea of creative destruction. He also makes a fine person to discuss the intricacies of Warren Zevon lyrics with. Grace Yan, my external committee member, was a demanding taskmaster who introduced me to critical theory and pushed me to examine the social production of space through the lens of sports.

Any kind of archival research depends more than anything on the kindness of others. And I was lucky to find some very kind people. Tammy Kirk, the librarian at the U.S. Army Corps of Engineers' Nashville District provided key documents and pointed me in the right direction several times. Stephanie Kirk, archives technician at the National Archives and Records Administration's Chicago branch, performed records searches for me and pulled all the many boxes about the U.S. Army Anti-Aircraft Command's relationship with Chicago's lakefront. I could not have completed this research without Julia Bachrach at the Chicago Park District. Julia gave me free reign in the district's archives. Beyond that, she knows the history of Chicago's parks backwards and forwards. Her book, *The city in a garden: A history of Chicago's parks*, should be required reading for anyone doing research about Chicago. Her 1995 survey of Jackson Park's design was critical to my research. The staff on the fifth floor of the Harold Washington Library Center in Chicago were helpful and mostly cheerful. I'm especially indebted

to the undercover Chicago policeman who found my research as interesting as I did and would watch my things when I went to make copies or find another book in the stacks. He was not very good at being undercover, but he did an excellent job of deterring thieves.

Mike Urban, chair of the University of Missouri Department of Geography, encouraged me to find an academic reason to write about dead missile sites. John Dougan, the Missouri State Archivist, provided critical guidance at some important junctures, including providing a methodology to calculate radar ranges and another to navigate the National Archives. Art Mehrhoff, author, academic coordinator of the University of Missouri's Art and Archaeology Museum, and die-hard St. Louisian, provided important insight into urban planning throughout the country, but especially about the development of the Gateway Arch and St. Louis' use of tax credits to rebuild the Central West End. Julie Nilsson Smith helped with proof-reading and being an idea magnet. Ed Thelen, who installed the HIPAR systems at Jackson Park in the 1950s, was a great reference on all things Nike, despite his distrust of professors and the media and the combination thereof. His website (http://ed-thelen.org/) is the definitive collection point for information on the Nike missile systems. Mark Templeton, associate clinical professor of law at the University of Chicago and director of the Abrams Environmental Law Clinic, was kind enough to buy me lunch after I walked from downtown Chicago to Jackson Park. He also provided some influential ideas about large scale government actions that informed some of the writing.

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Chapter 1: Introduction

If the Bear got angry, he would come from the north. The bombers would fly trans-polar, launched from their bases in Saratov and Semipalitinsk, make their way through northern Canada and over the Great Lakes. And there it would be, twinkling in the night and all for the Bear's taking: Chicago, always the "next target" after Washington, D.C. and New York. It was the Midwest's finance center, the trading market for agricultural futures, home of the stockyards that fed the nation. The Bear could maraud unopposed, the bombers dropping nuclear bombs on a helpless populace. And soon the war would be over and Chicago – the drive-in on Milwaukee Avenue with the two dancing hot dogs on the roof, the suburbs and the slums -- would be a glowing nuclear wasteland. And America's fourth-largest city would be lit by the light of a Communist moon.

And so would St. Louis and Detroit and Minneapolis and Seattle. And New York and Los Angeles and Dallas. Where the Bear romped, he would stomp, and where he stomped American cities would be destroyed. It was, the American politicians said, the way of the Soviets and this was the moment they selected. "The modern champions of communism have selected this as the time," Wisconsin Joe McCarthy thundered in 1950 (McCarthy 1950). The Bear needed to be stopped – preferably by an attack of common sense before the bombers ever lifted off. Defenses would need to be built to make the Soviets think twice. Not just the anti-aircraft guns of World War II, but something that could engage the bomber further out, that had a longer reach than the downward and forward trajectory of the bombs. One Army first lieutenant stationed in Chicago suggested "disintegration rays" and "anti-gravity rays."[i] The

Army brass had a different idea: Buy up land around cities and build missiles that could reach out and knock down the bombers. It turns out that the best land in Chicago was a bunch of parks along Lake Michigan.

The parks never were intended to be missile bases. How could they have been? "Guided missiles" were a Jules Verne notion at the when the parks were created in the late 19th century and the Ferris wheel was the apex of American engineering. The parks were meant to showcase Lake Michigan, but also to provide beautiful gathering places for Chicagoans (Bluestone 1991). None of Chicago's lakeside parks more than Jackson Park on Chicago's south lake shore. It was designed by Fredrick Law Olmsted to bring people together.

The sweeping lake vistas served the same purpose but for different reasons: open space. Whether that space was a shimmering mirror to look at and dream on or for the first stage boosters of the missiles to fall into after launch is really dependent on the era. But the priority for the space – as determined by the city government of Chicago for the former and the U.S. Army Antiaircraft Command for the latter – was real.

Jackson Park was one part of the "emerald necklace" of green spaces Olmsted designed for Chicago, parks with expansive views of Lake Michigan, open spaces for promenading and exercising (Bey 2011). It was the site of the glittering White City built for the 1893 World's Columbian Exposition and a popular park ever afterwards. Olmsted envisioned concerts being played on an island in the middle of the park's large lagoon. And they were, at least until the Russians became a threat and one of Chicago's prized lake shore sites became a last line of defense for the nation's third largest city. The Army built Nike missile sites around the city, "ready," in the words of one hyperbolic newspaper reporter, "to send sudden death belting

into the sky to meet any enemy head on" (http://ed-thelen.org/C-41-Epperson/index.html, last accessed February 16, 2016). New York and Washington, D.C. were considered the first two targets to be hit in a nuclear exchange; Chicago was expected to be the third (Whitacre 1996).

Thus were 40 acres of a 500-acre park transformed. The transformation is important, but what drove it may be more important The change in Jackson Park can be classified as "creative destruction," when a society builds over its already-built environment to replace an older economic regime with a new one (Harvey 1985, Salzmann 2012, O'Donovan 2014). From a geographic perspective, creative destruction has always been looked at as either a process by which capitalist societies shed excess capital through reinvestment in physical spaces or as a process of economic reinvention (Mitchell 1998). While that process may be helped along and incentivized by government policies, analysis of creative destruction has almost always identified private interests as the destructors. The case of Jackson Park is different. If creative destruction is, as Mitchell wrote, a "displacement of an older landscape by a new one," (Mitchell 2013, 377) then it was government that acted as Jackson Park's creative destroyer not just once but three times: When the dunes were cleared to form the park to transform it into the site of the 1893 World's Columbian Exposition and when 40 acres along the lake were transformed in to a Nike antiaircraft missile base. There are plenty of examples of government changing landscapes to serve its purpose, especially for military means: the Air Force converting South Dakota prairie (Heefner 2007), the Army converting California desert to an armored training site during World War II (Bischoff 2000), the Atomic Energy Commission turning Bikini Atoll into a nuclear testing area (Davis 2007). But none of these examples – or the studies of them – have looked at government in the role of creative destroyer.

Our research question is deceptively simple: How can landscape change, especially by government, be articulated in the theoretical lens of creative destruction?

This thesis will travel places to answer that question. It will go from the banks of the Mississippi to a baseball stadium in Maryland, from a sterilized-for-your-enjoyment environment in Memphis to an Old Order Mennonite town in Ontario, Canada. But it will always, always, come back to Jackson Park, on Chicago's South Side. That is the unit of analysis, the study site. It is there that we will test the research question. We will mine the letters of 19th Century America's pre-eminent landscape architect, dig into the archives of Chicago's park commissioners and the United States Army Anti-Aircraft Command, take a trip to one of the grandest Gilded Age spectacles.

And at the end, after all the theory and all the travel, we shall create a test that shows whether or not governments can creatively destroy landscapes just as ruthlessly and effectively as private industry.

Chapter 2: Literature review

It glowed over St. Louis in 1968. The businessmen and politicians had wanted a symbol of "The Gateway to the West" for three decades. They got a 630-foot tall post-modern monument to civic pride and everything that St. Louis wanted to be. It was shiny. The President of the United States told St. Louisians that by pushing the monument forward they had chosen "progress and not decay" (Jordan 1965, 605). To a St. Louis business community that wanted a symbol, the Gateway Arch was everything. It was a tombstone, too, marking the graves of the Rock House Bar and the Little Bohemia restaurant "which served beer on candlelighted tables with checkered cloths, and where customers played chess or talked away the night to the somber lilt of gypsy or Slavic music" (Globe-Democrat, 1961, 41). The Gateway Arch, the centerpiece of the Jefferson National Expansion Memorial, loomed over a dead part of St. Louis.

There's a tombstone just like it in Baltimore, too, where the Maryland Sports Authority ordered an architecture firm to create a new baseball stadium that was modern in its conveniences but retained the "warmth and intimacy" of an old ballpark (Ingram 2015). People wax lyrical about the brickwork and iron arches at Orioles Park at Camden Yards, but few mention the previous economic regimes it stands on – before there was baseball there were railyards and slaughterhouses in the Fells Point neighborhood, and before that there were slaves; first base is the location of a former slave quarters (Ingram 2015). San Francisco's hip SoMa neighborhood sits on land that was once deemed "too valuable to permit poor people to park on it" (Hartman 1974). Vast tracts of Cold War Alaska were fenced off with barbed wire, converted from wild land to military bases (Hummel 2005).

The common thread here is that government's intentions are what destroyed each of

these areas. The reason is mostly, but not always, economic development. Sometimes it was baldly so, as was the case in San Francisco and Baltimore. Sometimes it was in the name of civic pride, such as in St. Louis and Jackson Park's original change from desolated landscape to 1893 World's Columbian Exposition site. And sometimes it was done because there was a perceived threat to the nation, as was the case in Alaska and one of Jackson Park's transformations from playing fields to missile base.

There was another common thread: The massive changes by government to a landscape can be viewed as "creative destruction," when a society builds over its already-built environment to replace an older economic regime with a new one (Harvey 1985, Salzmann 2012, O'Donovan 2014). From a geographic perspective, creative destruction has always been looked at as either a process by which capitalist societies shed excess capital through the structural process of reinvestment in physical spaces or as a process of economic reinvention (Mitchell 1998, Mitchell 2013, Mitchell 2015, Mitchell, Atkinson and Clark 2001, Mitchell and Vanderwerf 2010). While that process may be helped along and incentivized by government policies, analysis of creative destruction has almost always identified private interests in the service of capital as a structure or the over-accumulation of capital itself as the destructors. The above cases are different. If creative destruction is, as Mitchell wrote, a "displacement of an older landscape by a new one," (2013, 377) then it was government that acted served as the creative destroyer. It happened three times in Jackson Park alone: When the dunes were leveled to form the park; when the park was transformed into the site of the 1893 World's Columbian Exposition; and when 22 acres along the lake were transformed in to a Nike antiaircraft missile base. There are plenty of examples of government changing landscapes to

serve its purpose, especially for military means: the Air Force converting South Dakota prairie (Heefner 2007), the Army designating California desert as an armored training site during World War II (Bischoff 2000), the Atomic Energy Commission turning Bikini Atoll into a nuclear testing area (Davis 2007). But none of these examples – or the studies of them – have looked at government in the role of creative destroyer. Similarly, when creative destruction has been discussed in a geographic or spatial-economic context, it has always had its foundation in the original Marxist theory: Capital needs to be reinvested and those that need to do the reinvesting hold little nostalgia for what they expand over. The "spatial fix" addresses a contradiction of capitalism – there can be too much money in a system designed to produce money. Creative destruction's economic application, defined in 1942, has been cited so many times one observer called it "the 'father of modern theories of innovation'" (Nijhof 2003). But nary is there mention of how governments initiate creative destruction to accomplish their own aims in a capitalist economy – goals that often have further reaching effects than corporate raiders.

The beginnings of creative destruction: Marx and Engels

Karl Marx and Frederich Engels developed the idea of "creative destruction" in 1848. It started as a structural argument – the nature of capitalism is that there would be surplus capital, and the best place to put that capital was into new business infrastructure (Marx and Engels 2008). It was a concept translated from Hegel's "sublation," the cancelling out and lifting up (Palm 2009). Sublation existed outside history – it was a permanent construct, destined to repeat itself, a constant lifting and cancelling. Marx and Engels applied the theory through their own lens: the bourgeoise "cannot exist without constantly revolutionizing the

instrument of production, and thereby the relations of production, and with them the whole relations of society" (Marx and Engels 2008). Capitalism would constantly destroy itself in the service of itself – Hegel's lifting up and cancelling out, but this time it was a material process ultimately leading to the bourgeoisie's demise. Pre-capitalist systems would be torn down, replaced with constantly changing capitalist systems that would tear down their own barriers to increase production (McLellan 1971). Though not mentioned much in *The Communist Manifesto*, its extensive appearance in the posthumously-published *Grundrisse,* Elliott notes, "undergirds the conclusion that Marx's descriptions of capitalism's creatively destructive proclivities were not mere verbal fluff, but were instead a strategic component of his analytic program" (Elliott 1980).

Then there's this: Neither Marx nor Engels ever used the phrase "creative destruction." Which doesn't seem important, until the moment it does….

A brief side trip into Schumpeterian creative destruction

Thus, an important piece of framework. But it was still just underlayment. Until 1942 when an Austrian émigré economist to the United States borrowed the term. Joseph Schumpeter looked at creative destruction as constant change from within an economic system – constantly destroying an old economic structure and constantly replacing it with a new one (Aghion 1990). The man used powerful words: "the essential fact about capitalism" and "the perennial gale of Creative Destruction":

> … [T]he same process of industrial mutation that incessantly revolutionizes the economic structure from within, incessantly destroying the old one, incessantly creating a new one. This process of Creative Destruction is the essential fact about capitalism. (Schumpeter 1950)

The Harvard economist's view wasn't entirely unique; David Wells, the U.S. Special Commissioner of Revenue during the late 1890s, wrote extensively about destructive market forces in capitalism (Perelman 1995).

Schumpeter's use of the phrase may not have been even all that original. Reinert and Reinert (2006) argue that the term has its roots in a god of the Hindu religion, Shiva, the creator and the destroyer. Nietzsche's mentor, Schopenhauer, was deeply influenced by Hindu beliefs and transmitted some of those to Nietzsche himself. The philosopher had a strong influence on economist Werner Sombart, who introduced a version of the phrase ("from destruction a new spirit of creation arises") in 1913 discussing how a century-long shortage of wood in European forests forced the invention of substitutes for wood: coal and coke. The discovery of the substitutes, Sombart wrote, ignited the 19th century European industrial revolution (Reinert and Reinert 2006).

But it was Schumpeter who got the credit when he brought it to an Anglo-Saxon audience in 1942. The Harvard economist examined how capitalism built and reinvested itself and used "creative destruction" in *Capitalism, Socialism and Democracy* to characterize the economic growth cycle of capitalism. The chapter on creative destruction was just six pages long but yielded, in the words of one biographer, "the richest material ever written on the broad subject of capitalism"(Silverthorne 2007).

Schumpeter believed the entrepreneur was essential in capitalism. Business was a brutal, Darwinian place, his biographer wrote, and that "creative destruction can occur within a large innovative company (Toyota, GE, Microsoft), but it's much more likely to happen with start-ups, particularly since they now have so much access to venture capital" (Schulz 2007,

http://www.aei.org/publication/creative-destruction-the-words-of-the-prophet/, last accessed November 3, 2015).

Since then, the concept of creative destruction been used to study the U.S. automotive industry (Abernathy and Clark 1985), how local Walmarts absorb jobs and sales without expanding the market (Paruchuri, Baum and Potere 2009), changes in copyright law due to music streaming (Ku 2002) and how industries that group together geographically can create a critical mass of creative destruction (Gilbert 2012).

Harvey's creative destruction

It wasn't until the late 1960s that "creative destruction" was really applied to geography. Harvey, the spatial scientist-turned-Marxist, applied the idea of creative destruction to how a landscape was created.

"How could a new world be created, after all, without destroying much that had gone before?'" Harvey wrote in 1990. "You simply cannot make an omelette (*sic)* without breaking eggs, as a whole line of modernist thinkers from Goethe to Mao have noted" (Harvey 1990).

He took Marx and Engels' broad guidance and interpreted it more narrowly – and added even more structuralism to it. Harvey viewed early 20th Century capitalism as a Fordist system of production centered on repetitive tasks performed by unskilled labor. But then he sensed a change – Fordist-style production began to give way to "flexible accumulation," a more adaptable style of management and investment (Harvey 1990, 124). He developed a "rational landscape" as a measuring stick – a perfect model where no externalities affect the product cycle: Products are made and sold, their profits re-invested in more products to be made and sold. "Creative destruction is embedded within the circulation of capital itself," he wrote (1990, 106). Harvey is talking not just about capital's path, but where in the landscape it flows. His

rational landscape is a tenuous place, though, constantly balancing the accumulation of capital between ends: “that relationship between creation and destruction, fixity and motion, place and space, that sustains the very cycle of accumulation” (Barnes and Hayter, 1992, 650). Harvey’s rational landscape always results in a perfect cycle for his perfect structural model: creation of the new requires destruction of the old, and eventually the new becomes old and requires destruction.

> We look at the material solidity of a building, a canal, a highway, and behind it we always see the insecurity that lurks within a circulation process of capital, which always asks, how much more time in this relative space (Harvey 1985, 28).

Harvey’s model is too perfect – and too structural in nature. It accounts the churn of capitalism, but not for the entrepreneurs that drive it or the government that enables it. There is no real disruptive influence in Harvey’s cycle, but as he wrote more about creative destruction, he theorized there was an accelerator for it: technology. Harvey theorized that advances in technology -- particularly transportation and communication technology -- collapse spatial boundaries, shorten decision times and the movement of capital and generally speed up the creative destruction cycle. The built landscape factors into Harvey’s rational world, too. It is profitable until it becomes a hindrance to the production of more capital. It produces too slowly. Capital will move where labor and supplies are cheapest, where the most surplus value can be extracted (Harvey 1989). Harvey referred to this as a *spatial fix,* where “fix” means “solution” (O'Donovan 2014, Harvey 1981). But there is something more to the spatial fix than just keeping the machine of production lubricated. The spatial fix is a money sink – where capitalists disposed of their surplus capital before it overaccumulates. Unused capital in the rational landscape is an underused asset. Harvey often writes about this in the context of

deregulated markets (which seem to economically outperform regulated markets, especially for the formerly regulated). The spatial fix, he wrote in 2010, absorbs overaccumulated capital (http://davidharvey.org/2010/08/the-enigma-of-capital-and-the-crisis-this-time/, last retrieved April 11, 2016).

Direct adaptations of Harvey's work tend to focus on urban settings – those places where capital concentrates. Gilliland adopted this Harveyian theory of creative destruction when writing about 19th century Montreal's destruction of thousands of homes to widen the streets to improve traffic and thus, commerce (Gilliland 2002). Salzmann adapted Harvey's theory when he wrote about the relocation of the Chicago commercial harbor in the late 19th and early 20th centuries to the mouth of the Calumet River, away from a Chicago River that could no longer handle modern-day ships (Salzmann 2012). Page took the strict Harveyian approach, as well, writing about Manhattan's development in the first half of the 20th century, specifically how capitalist expansion caused the city to build over pre-existing areas (Page 2001). O'Donovan used Harveyian creative destruction to describe the process Binghamton, N.Y., city officials used to eliminate low-income housing from downtown Binghamton in favor of a shopping mall (O'Donovan). Even in others' eyes, Harvey's creative destruction was a society's or an industry's means to an end: Growth, always, over and over, repeating, the growth endlessly commodifying itself. But what if the landscape itself was the commodity?

Mitchell's re-interpetation of creative destruction

Clare Mitchell, a rural geographer at the University of Waterloo, saw it happening in a town near where she lived. St. Jacobs, Ontario, was a city that served as a regional service center for Old Order Mennonites and, as a result, drew tourists anxious to see the Mennonites

in their native environment. Mitchell noticed that a local developer took advantage of this, purchasing the old grocery store and converting it into a curio shop of Pennsylvania Dutch goods and renovating other structures to bring in other businesses that would sell to visitors, not the Mennonites who were the original draw to St. Jacobs. Eventually about 75 percent of the town's retail space was owned by a single developer (Mitchell 1998).

Mitchell saw what was happening in St. Jacobs and had written about the town's transformation before, but her writing lacked a framework.[ii] It wasn't until she started reading Marxist works in the mid-1990s that she discovered Harvey's version of creative destruction. But Mitchell did more than just apply Harvey's spatial fix for urban areas to rural towns turning themselves into tourist destinations. She borrowed the term and changed it, with a greater emphasis on agency than Harvey's version. Mitchell characterized Schumpeter's foundational argument as being an entrepreneurial society's quest for profits leading to a cycle of innovating new products and technologies to ensure those profits (Mitchell 2013), and her emphasis on entrepreneurship as an agent of creative destruction is faithful to Schumpeter's. The changes in St. Jacobs are testimony to that. In its evolution towards a profit-making tourism center, Mitchell observed, the original and authentic St. Jacobs was destroyed, replaced by a more profitable, less genuine version of itself.

She identified five stages of creative destruction:

1. *Early commodification*, in which entrepreneurs recognize an area's potential profit and invest in the community by purchasing older buildings and changing their functions to tourism-oriented commercial ones.

2. *Advanced commodification*, in which the previous investment levels escalate, an area's tourism profile rises and businesses that support the local residents shut down.
3. *Pre-destruction*, in which new capital is reinvested into those businesses that serve the increasing population.
4. *Advanced destruction*, in which even more tourist-facing investments are made and local residents leave and the "rural idyll" is completely destroyed.
5. *Post-destruction* in which investment goes, emotionally, too far, authenticity is lost and a new type of tourist rises, one not looking for an idealized rural landscape, but for another type of experience all together (1998, 277).

Looking back, Mitchell redefined "creative destruction" as being neither positive nor negative: It was just change.

> Using only this objective interpretation, then, creative destruction is the displacement (or erasure, as Chang and Huang, 2005 suggest) of an older landscape by a newer one that embodies an innovative activity (i.e. a new function), user, and representation (Mitchell 2013, 377).

Mitchell made a unique observation about St. Jacobs – but she had not observed a rare thing. Barnes and Hayter, for example, observed a British Columbia sawmill town transform into a tourist destination in the late 1980s – but the transformation came after the sawmill closed (1992). What happened in St. Jacobs was happening in other places where rural landscapes were idealized and then commodofied (Tonts and Greive 2002). Mitchell's processes of commodification and the name "creative destruction" just gave the evolution a vernacular. Mitchell's creative destruction has been used to examine changes along the Singapore River waterfront, which went from rurally idyllic and somewhat rundown to flashy

and glitzy (Chang and Huang 2005). It was adapted by researchers studying the conversion of rural towns to heritage sites in China (Fan, Wall and Mitchell 2008). Its widest application has been to the effects tourism has had on indigenous communities (Chang, Su and Chang 2011). Mitchell's theory of post-destruction can be seen in Tombstone, Arizona, the Western "town too tough to die" that became a tourism mecca full of false storefronts and curio shops. "Tombstone is becoming a Disneyland," one business owner said as the National Park Service placed the town on the Interior Secretary's Threatened List in 2005 (Carroll 2005).

The government and creative destruction

Harvey and Mitchell both viewed creative destruction as intrinsic to the ongoing process of capital accumulation. Mitchell, in particular, viewed it as function of entrepreneurship. What hasn't been written about as much is the tendency of governments to work as creative destroyers, particularly in mixed capitalist economies. Pure capitalism exists in the same realm as Harvey's rational landscapes – an ideal place with no external forces. But in real-world capitalism (whether it's state-monopoly capitalism or mixed-economy capitalism), government functions as its own externality. Private industry has the capital and the market incentive to invest in the change, but it is government that has the power to condemn, the power to direct and the power to define a landscape's purpose. In applying creative destruction to governments, we see instances where the government destroys to promote capital accumulation in Harvey's flexible economy, but also to correct market failures and legitimize and expand its own power.

Governments have the capacity to create distinctive landscapes. The government has the ability to preserve memory, such as battlefields and monuments (Tranel and Hall 2003). It has the ability to contradict itself by protecting large swaths of land from development for the purposes of bombing small parts of it (Meierotto 2014). And governments can spend money on scales no entrepreneur could. The American government is its own economic engine, providing more than $3.1 trillion spending to the states in Fiscal Year 2013 alone (OMB 2015). Regardless of level, government values often dictate what happens next in a landscape, whether it's slum renewal, bringing in a Bass Pro Shop or building a missile base on a prairie. These actions invariably build over a previous landscape regime to create a new one.

Creative destruction by government tends to happen in two ways: 1) a government, sometimes local sometimes federal, decides it needs a tract of land for its own purpose and takes it; 2) a public-private entity converts the landscape for its own purpose, with the endorsement of a government. Examples of the former tend to happen under the legal theory of "takings," which justifies a governmental use of eminent domain in the name of the public good (Treanor 1995). For instance, when the National Park Service created Minute Man National Historic Park in Massachusetts in 1959, it used the Condemnation Act of 1888 to aggressively obtain private land within the park's boundaries (Hemmat 1986).

So many of the examples of this approach are related to the military's use for space, such as the U.S. Army's establishment of the 18,000-square mile California-Arizona Maneuver Area in the high desert of California between 1942 and 1944. The Air Force's deployment of Minuteman missiles to South Dakota prairielands serves as another example – and perhaps a more cautionary one. The Air Force placed 150 missile silos and ten launch-control facilities

over 13,500 square miles of mostly prairie, some of them on farms that went back to the 1800s. Though the surface disturbance was slight – chain-link fence-surrounded one-or two-acre rectangular parcels with three-phase electricity running to them – there was controversy. One farmer asked the Air Force to locate a silo anywhere but the center of his wheat field, even offering to donate the land to the government for silo if it were at a corner of his field. The Air Force refused and took his land through eminent domain (Heefner 2007). Then there are times when eminent domain isn't used, such as in the case of Bikini Atoll. The atoll is a group of small islands surrounding a lagoon in the Republic of the Marshall Islands and there were people living in them in 1946 when the United States chose Bikini as a nuclear test site. The government relocated the Bikinians several times and today, about 3,000 people live in exile – they can visit the atoll, but can't stay – throughout the Marshall Islands (Davis 2005). In each of the above cases, the wishes of a government entity significantly altered the landscape by subsuming an existing economic use to a government desire. Private property owners inside the park boundaries found their land taken for a park. The Bureau of Land Management found its protected and grazing lands taken for a military training area. The farmers of South Dakota lost field and range space. The Bikinians lost their homes and entire trading livelihood. In each case, something new arose from that destruction.

The second method of governmental creative destruction is more recognizable: The public-private partnership that creatively destroys the landscape through the use of public and private capital. In some cases, such as the gentrification of St. Louis's Central West End Neighborhood, the public's capital investment comes in the forms of historic- and low-income tax credits while developers supply the money (Swanstrom 2014). In other cases, taxpayers

carry a portion of the financial burden through tax diversion. Memphis, Tennessee's mid-2000s effort to become a logistics and knowledge-economy hub is an illustration of this. The city's political and business leaders felt that a "world-class city" needed to have a tourist/commercial component, centered around a sports attraction. They wanted Memphis to join the list of former industrial cities that restarted their downtown hearts by creating a corporatized landscape based on tourism and entertainment (Silk 2004). It's a process that's been called "urban imagineering" (Short et al, 2000, 320) and in this case, it was part of a U.S. Housing and Urban Development program that gave Memphis access to a pool of $17 billion in tax incentives to create its downtown area (Silk 2004). The development of Baltimore's Oriole Park at Camden Yards stands as another private/public example of landscape change. Since the 1950s, Baltimore has directed more than $400 million in taxpayer funds into urban imagineering around the Inner Harbor, financial district and Camden Yards areas since the 1950s (Ingram 2015). Orioles Park at Camden Yards, the Baltimore Orioles' baseball stadium, was the centerpiece of much of that development. It could not, or at least would not, have been built without taxpayer funds, though it was for a private business concern. In fact, the building or refurbishing of 30 Major League Baseball stadiums has cost taxpayers a total of $9.7 billion through 2010 (Long 2012). The partnership also included the public Maryland Stadium Authority's use of eminent domain to possess the old railroad warehouse that now is a signature component of the ballpark's visual landscape. The partnership altered the landscape around the area. Other than the obvious "There's a stadium here where there was none before," Camden Yards has had another effect: the clearing of land for parking lots (Chapin 2004). Just as with government-led creative destruction, all three of these use cases

demonstrate how public-private partnerships in mixed capitalist economies have plowed under existing landscapes to fulfill a government-projected image. The tax-credit-assisted Central West End gentrification moved low-income families out of homes and created a showplace neighborhood of restored, high-value homes. The development of the FedEx Forum in Memphis created a tourist-centric space in Memphis that replaced an existing landscape of low-income homes and small businesses. And Camden Yards created a tourist-facing space over what once was an industrial area.

There is no perfect example here. Every decision is made with some kind of economics in mind – slums are renovated with the hope of urban renewal and rebirth (a government program with private industry implications), the FedEx Forum was built to make Memphis seem like a city of today and tomorrow (another public-private partnership) and the Gateway Arch was a public project that benefitted private landowners. What's important to see is that creative destruction takes many forms, but that when we're talking about government propelling it, it is much more about structure and much less about agency.

Chapter 3: Data sources and methods

If, on a sunny day, you were to leave the Museum of Science and Industry in Chicago and head south on Lake Shore Drive, you would be in Jackson Park. You would pass the site where the German Building stood during the 1893 World's Columbian Exposition. If you kept going south, you would cross and pass a chain link fence that keeps golf balls from the drive, the former site of a Nike missile base. Before that it was a running track, and before that the site of one of the world's largest buildings. If you decided to leave the museum and instead get your feet wet walking through the Columbia Basin, you would pass the site of the former Brazil Building and the State of Illinois' hulking building, both built for the 1893 exposition. What you would see there now is a meadow, and if you were there during the spring, you would see the yellow-green rosettes of Pale Indian Plantain swaying in the breeze. You would not see the sentries and the guard dogs, the thin missiles with their delta-shaped wings rising out of below-ground magazines. In this way, Jackson Park's landscape is an archive unto itself. Turkel made an argument for thinking of a portion of British Columbia this way:

> People interpret material traces to reconstruct past events, the conditions under which such interpretation takes place, and the role this interpretation plays in historical consciousness and social memory (Turkel, 2007, xix).

Archival research

But if Jackson Park's landscape is an archive, there is an equally full and rich textual archive about the park's evolution. There was once a tendency in historical geography to believe that archives were merely repositories of facts, a place that "buried in sources were facts which could be dislodged by the enquiring mind, verified by the lateral thinker" (Lorimer 2010, 252) .

Chicago Park District's archives were a major source of research for the park, as the annual reports by the district and its predecessor, South Parks Commission, charted the growth and changes within the park itself. And they could be read as Lorimer's static, objective facts. But the documents in the archives have their own flavor and favor their own history. "Even the most apparently mundane archival traces and the archival practices that set about to preserve them are embedded in social worlds, narratives and relations of power" (DeLyser 2015, 211). Withers characterized the archivist's Derrida's view of an archive as "both a place and a reflection of social and institutional authority" (Withers 2002, 304). The Chicago Park District archives are no different. The annual reports produced by the district reflect the values of the time the district leadership wanted communicated: Serving the community, progress to the next step. Some of the district's most complete and laudatory reports were compiled by Works Progress Administration staff – part of Roosevelt's massive New Deal employment project. A project by a Democratic president in a city that was traditionally Democratic would be well looked-upon in archives – especially since progress was made in adapting the park to public uses. This research also relied heavily on the National Archives, which serves as the repository of documents from U.S. government agencies. But these are not complete records. As Baker points out, the historical record is incomplete and cannot be extended (Baker 1997). Communications with the U.S. Army Corps of Engineers' historical office revealed that any records regarding the closure and remediation of the missile base at Jackson Park would be held by the Corps' Louisville district, which managed the project. Any records regarding the base's establishment would be held by the Corps' Chicago district. A search of the Chicago district's records revealed no documents[iii]. Any documents that had not been destroyed by the

government had been transferred to the National Archives in Chicago.[iv] The National Archives retained five boxes of documents that had mentions of the Nike missile base in Jackson Park.[v] The boxes contained maps of Nike missile sites in Illinois, Indiana and Michigan, leases for the land, directives from the air defense group commanders and other errata. These were not complete. For instance, records series RG 291 included records from the Chicago office of the Federal Property Resources Services Real Property Division from 1952-1986. A lease from extension for the Jackson Park site from 1964 was included in the series – but there was no record of the original lease from the 1950s. The haphazard nature of the documents plays both to Baker's point but also to one made by Foucault, that the archive has an abstract function as "the system that governs the appearance of statements as unique events" (Foucalt 1972, 129).

The same problems found in government documents – notions of power and social place – were confronted looking at archival documents and photos dealing with the Columbian Exposition. Much of the original material consulted about the fair was found in landscape architect Frederick Law Olmsted's letters. The letters argued, often forcefully, for changes in the park's landscape. As letters, they were designed to promote and argue Olmsted's view. Another sturdy leg of the Columbian Exposition research was exposition president H.N. Higginbottham's final report in 1898 to the event's board of directors. It is rich in details such as attendance figures and costs. But like Olmsted's letters, the report is designed to have a specific effect, to bolster the exposition's image. Tougher to find, but more important to deal with, is the selectiveness of what was in both the archives and in the contemporary literature at the time. Holdsworth writes that the historical record provides a "useful lens" for seeing what remains of an event or a place (Holdsworth 1997, 55). But the archival lens for the exposition

was inescapably White. The fair's messages of progress and democracy contrast against its depiction of women, the erasure of labor and the exploitation of foreign cultures (Bank 2004). The archives are incomplete, or don't have any indication at all, that non-whites existed at the fair in any significant way other than as performers.

Even the publications of the time period had this blind spot. The same issue comes up examining the literature of the day. Non-Americans, and non-White Americans, are barely present in the exposition's narrative at all. Cooks points out that the popular periodical *Harper's Weekly*'s only racist cartoon caricatures of the exposition were of African-Americans. The "Johnson family" is drawn with ape-like features, performing acts such as attempting to trade a spotted mule for the fair's painting contract (Cooks 2007).

Secondary research

There is no shortage of books and articles about Jackson Park – or at least part of tis existence. Google Scholar shows about 18,000 articles and books that reference the Columbian Exposition alone (retrieved February 28, 2016). The EBSCO Academic Search Complete database shows 126 journal articles that reference the exposition (retrieved February 28, 2016). There are books and books and books about the Columbian Exposition, including Erik Larson's *Devil in the White City*, soon to be made into a film starring Leonardo DiCaprio as a charming serial killer who preyed on visitors to the exposition (McNary 2015).

It was important to view many of these books to understand the historical context of the landscape change in Jackson Park. The park's first transformation was very much the result of business interests pushing for change. It became necessary to to look at qualitative, contextual research to to understand how place was transformed (DeLyser et al 2010, 10). This

became instructive, not just in Jackson Park, but also as I tried to answer the research question. The search for context through historiography allowed me to create a mental landscape of creative destruction. Once the exposition closed, academics lost interest in the park. Most of the post-1894 secondary sources used were from newspapers of the time. The *Chicago Daily Tribune* (later the *Chicago Tribune*) became a main source of information as it covered the park's changes. The *Daily Southtown*, a primarily African-American newspaper, was also used to try and fill in some of the gaps created by the *Tribune's* relentless focus on the mostly white neighborhood of Hyde Park.

The research process

This thesis research was divided into three distinct periods:

1. Theoretical background development

Where and how did creative destruction develop? How had it evolved and how has it been applied? This was historiography designed to understand the theoretical underpinnings of creative destruction. My research began in the middle of the process, with Harvey's application 1970s application of creative destruction to geography. It moved forward from there to look at modern uses of creative destruction. It was in that move forward that I discovered Clare Mitchell's adaptation of the theory. Mitchell is a rural geographer at the University of Waterloo and taught her interpretation of creative destruction to her graduate students, who then applied it to a varied number of landscapes. Mitchell did not evolve her version in a vacuum, however. She built it on the work of not just Harvey but also of economists and geographers

who had used Harvey's interpretation of creative destruction, such as Barnes and Hayter. Once Mitchell's creative destruction lineage was established, I went back in the timeline to Marx, Engels and Hegel, with a little Sombert thrown in for good measure. Moving back in the timeline required the introduction of Joseph Schumpeter, whose economic theory of creative destruction far exceeds Harvey's in both theoretical and cultural popularity. What seemed to be lacking in the literature was an examination of government as a source of creative destruction. Schumpeter excepted, all the creative destruction research seems to be focused on the leverage powers of entrepreneurs. But government seemed to often be a far larger actor due to its use of eminent domain and the ability to unilaterally plan landscapes.

2. Historical development

Jackson Park became a study site by mistake. Research in creative destruction got me thinking about Nike missile base near the house I grew up in in New Jersey and how the radar facility became an art park and the launch battery became a subdivision. From there it was looking at a map to see bases sprinkled around the nation, including Chicago and St. Louis. The original idea was to look at two spaces that had become bases and then had transitioned into either parks or desolated landscapes. But the scope for that was too huge. A chance re-reading of Larson's *Devil the in the White City* sparked some sort of connection and further research made it obvious that Jackson Park could stand as the poster child for government as creative destroyer.

But this was a study of historical pulses – periods of significant landscape change, caused by government action -- and Jackson Park's landscape has changed incrementally in the last 40 years. The idea of the pulse came from reading through the direction of Jackson Park

backwards while wearing creative destruction goggles. This sounds more trite than accurate, but it's what happened. I started reading about the park as a Nike missile site and researched why Jackson Park had been chosen as a site. Then I looked at what it was before. And before that. And before that. What I found was that the history of Jackson Park was kind of boring – except when the government wanted something. Then it became a matter of charting out the history of government demands – regardless of whether it was a local or national government. Research discovered three significant pulses between the time the park was created in the 1870s and the decommissioning of the missile base at the park 100 years later:

- 1890-1893: Jackson Park's transformation from a landscape of vague intention to the site of the 1893 World's Columbian Exposition.
- 1893-1920: The park's transformation from exposition site to recreational asset.
- 1951-1971: The federal government's "taking" of 80 acres to build a Nike antiaircraft missile site.

The "pulses" are characterized by changes not just in the landscape itself but in the nature of the landscape's use. The rope that binds together a world's fair, the development of squash courts and a fear of the Soviets is that a government needed the land to be something other than what it was. The park continues to be vibrant and evolving; it's been named one of two finalist sites for the Obama Presidential Library (Thayer 2015). The next "pulse" will likely come if the park's acreage is affected by the library siting.

Archival research was done in the Chicago Park District archives, the University of Chicago's Special Collections, the Chicago Public Library (in particular the World's Columbian Exposition Ephermera Collection and the Charles Arthur Dudley Photography Collection), the

National Archives and Records Administration's Chicago branch and the Chicago History Museum.

3. Theoretical framework

The base question for this thesis has to be "How do governments creatively destroy?" A secondary question is "Did governments creatively destroy Jackson Park?"

The two questions dictated the research process. The first step was identifying commonalities within the process of creative destruction. That is, what makes creative destruction what it is, whether it's proposed by Marx or Harvey. It took reading more than 100 book chapters and journal pieces to identify those commonalities. But once they were established, it provided a structure to look at landscape change -- whether it was driven by the contradiction of capitalism itselt or by government needs or desires.

Like the child's "punch-buggy" game, once you start looking for creative destruction, it's hard to not see it. Research became looking for commonalities and adding them to an ever-lengthening list. And it included broadening the definition of what creative destruction was and moving it away from the notion of structure and towards the notion of agency. Then commonalities became apparent in government-led landscape changes, whether it was the building of a basketball arena in modern-day Memphis or a Ferris wheel in 19th Century Chicago.

The search for those commonalities ultimately informed the development of a three-step test that asked basic questions to determine whether a site was creatively destroyed or not.

The first question is “Was the “instrument of production” altered to facilitate the accumulation of capital?” The next question was ““Does the change come from within, rather than from outside?” And the third question is “Was there “displacement of an older landscape by a new one?”

Chapter 4: Historical-geographical analysis: The creative destruction of Chicago's Jackson Park

There are the numbers and the facts: 542.89 acres. 342 boat slips. The first public golf course west of the Alleghenies. Two lagoons. Tennis courts. A water play area. A taco place. A hamburger grill (District 2016). But they're just a recitation. Numbers don't tell the story of the place. They don't tell how America's leading landscape architect's face fell when he was told he had less than three years to transform its landscape ("If a search had been made for the least park-like ground within miles of the city, nothing better meeting the requirement could have been found"((Schuyler and Kaliss 2015, 669). They don't tell how Chicago's civic leaders used it to challenge Paris and New York and all the look-down-your-nose Easterners that Chicago was more than a slaughterhouse town with an abnormally high murder rate. They don't tell how the U.S. government took the same 22 acres of a park that had once housed the largest indoor structure in the United States and turned it into a missile base. Number and facts can only take you so far, and to understand how Jackson Park came to be a reflection of America's values at any given time, numbers and facts don't help at all.

By looking at periods of Jackson Park during "pulses" of history, we can see how governments – both public and public-private used the park to reflect and promote their values at the moment. The park's history can be seen in three pulses of creative destruction:

- 1890-1893: Jackson Park's transformation from a landscape of vague intention to the site of the 1893 World's Columbian Exposition.
- 1893-1920: The park's transformation from exposition site to recreational asset.
- 1951-1971: The federal government's "taking" of 80 acres to build a Nike antiaircraft missile site.

Jackson Park is perhaps the poster child for how governments use creative destruction to alter landscapes. Its transformation began before anyone knew what it would become. It was 1871 and Frederick Law Olmsted and his partner, Calvert Vaux, had been engaged by Chicago's South Park Commission to create a park in south Chicago, along the lake. It was not chosen for its beauty, but because the land couldn't be economically brought into Chicago's street-grid system (Schuyler and Kaliss 2015, 19). In 1871, Jackson Park was low ridges with stunted pines (the tallest was only 40 feet tall), sandy swampy land and windswept dunes (Schuyler and Kaliss, 23). Water was to be its central feature, a lagoon that would be "intricate, sequestered, sylvan and rich in variety of color and play of light and shade." (Schuyler and Kaliss, 2015, 19). History interceded in the form of Mrs. O'Leary's cow, who kicked over a lantern and started a fire that ultimately killed 300 people, left 100,000 homeless and caused $200 million in property damage (about $4 billion in today's money)[vi]. The city focused on rebuilding and the South Park Commission ceased any work on Jackson Park.

It wasn't until almost 20 years later, in August of 1890, that the area of the park was really considered again. This time it was of the utmost importance. Chicago had been awarded the 1893 World's Columbian Exposition, celebrating the 400th anniversary of Columbus' founding of the New World. Chicago had defeated New York for the fair and pressure was on. "The most marvelous exhibit of modern time or ancient times has now just closed successfully at Paris," the man who led New York's bid told the *Chicago Daily Tribune*. "Whatever you do is to be compared with that. If you equal it you have made a success. If you surpass it you have made a triumph. If you fall below it you be held responsible by the whole American people for

assuming what you are not equal to. Beware. Take care!" (Chicago Daily Tribune, 1890). But the landscape was going to be a problem (Fig. 1).

Fig. 1. Jackson Park site, c. 1880-1890. Scrub oak and sand occupy the Jackson Park site of the World's Columbian Exposition circa 1880-1890, before the land was cleared and improved. Photo: J.W. Taylor/Photo courtesy of the Chicago History Museum

The World's Columbian Exposition board of directors chose Olmsted – who by that time had cemented his reputation as the nation's most venerated landscape architect -- to design the grounds, and Daniel Burnham, the city's most prominent architect, to direct the overall project.

"Topographically, [Jackson Park] was a morass, divided by a few low, narrow sand dunes; one third of it below the surface of the Lake at ordinary stages of the water and the greater part of it subject to be occasionally flooded," Olmsted wrote to the director of the board (Schuyler and Kaliss 2015, 178).

Fig. 2. Lake exposure of the park, c. 1880-1890. Jackson Park, circa 1880-1890, before it was improved for the World's Columbian Exposition. Photo: J.W. Taylor/Courtesy of the Chicago History Museum

Still, the site had its charms – and one in particular: There was "but one natural object at all distinctively local, which can be regarded as an object of much grandeur, beauty or interest. This is the Lake," Olmsted wrote (chuyler and Kaliss 2015, 182).

Lake Michigan was the star of the landscape (Fig 2). "Your visitors from Europe will never have seen a body of fresh water comparable in majesty to your lake. It is to be considered also, that Chicago itself, is, in its history and in its commerce to be a most interesting, perhaps the most interesting, of all the exhibits of the Exposition. What would have been its history, what its commerce, what its interest to the world, if Chicago were without this Lake?," Olmsted wrote (Schuyler and Kaliss 2015, 182).

Lake Michigan became the mirror that the fair – and Chicago's desire to be considered a world-class city – would reflect in. But it would take work. Olmsted designed the fair to be a celebration of the lake, with canals and basins that would shimmer. It would take dredging out

the canals and using the muck to elevate buildings. The fair's architectural centerpiece would focus around the Grand Basin. It would be surrounded by the Court of Honor, three imposing buildings designed by three of the nation's leading architects: the Administration Building, designed by Richard Morris Hunt, who also designed the Statue of Liberty's pedestal; the Manufactures and Liberal Arts Building, designed by George B. Post, who had previously designed the tallest building in the world to that time; and the Agriculture Building, designed by the New York City firm of McKim, Mead & White, which designed New York's original Pennsylvania Station. Separating the basin from the lake was a huge colonnade and the Arch of the Peristyle, designed by Charles B. Atwood, who designed no less than 60 of the exposition's buildings, including the Fine Arts Building, the only exposition building that still stands today (Schulyer).

The World's Columbian Exposition became a civic undertaking, as well it might in Chicago. The city was at the center of the "commercial style" of architecture, with the skyscraper (and the term "skyscraper") being invented in Chicago by Burnham and his partner, John Root. The giants of commerce influenced this architectural school by paying leading architects well to build ever higher and to explore new technologies in glass rolling and steel fabrication (Burg 1976). These were the same men that promised to bankroll part of the exposition, should Chicago beat out New York and St. Louis. The directors of the exposition are who's who of Gilded Age Chicago culture: steel magnate Charles Schwab; Milo Barnum, who made his fortune in insurance and the iron industry; the railroad man John Bunn; financier Charles Yerkes; the publisher Andrew McNally (Handy 1893). These were the commercial titans who ran Chicago and who influenced its mayor, Carter Harrison, Sr. (also a director of the

exposition). But if it was private money and civic pride that helped land the exposition, it was Chicago's government that allowed it. Four sites were considered for the event: Two of them were existing city parks (Jackson and Garfield) and two were owned by municipal corporations (Schuyler and Kaliss 2015). The South Park Commission, which controlled Jackson Park, was a municipal institution, but in 1890 its five members were businessmen: James Ellsworth, president of the Union National Bank of Chicago; Joseph Donnersberger, real estate agent; John B. Sherman, president of the Chicago Union Stockyards; William Best, real estate agent; and Martin J. Russell, editor and part-owner of the *Chicago Herald* newspaper (Schulyer 2015). Commerce and government came together in Chicago, each helping and making way for the other.

The exposition was built, at great expense and with numbers that are hard to fathom. The superintendent of landscape calculated that just the shoreline of three areas was 29,549 linear feet. Preparing the largest island in the lagoon – named the Wooded Island --- for the fair required 12,000 cubic yards of sand and 29,000 cubic yards of black loam (Schuyler and Kaliss 2015) (Fig. 3). Dredging and filling alone cost $615,000 in 1890 dollars (about $15.8 million in modern money). Jackson Park's unimproved 469 acres were raised six and a half feet. (Burg 1976). "…[In the construction of the main buildings there were used nearly 20,000 tons of iron and steel and 30,000 tons of staff, many thousand tons of glass and about 70,000,000 feet of lumber," one guidebook to the fair proclaimed (Bancroft 1893, 67). Between 12,000 and 14,000 men were working daily on the exposition grounds (Higinbotham 1898, 36). The total costs, as calculated by the board of directors, was $27.2 million (or $746.5 million in modern dollars (Higinbotham, 66).

The money yielded results: A grand city that stretched inland from the lake at a scale that most could not imagine. The Agriculture Building was 140,000 square feet, more than double the size of an average Walmart SuperCenter. The Fine Arts Building (which stands as the Museum of Science and Industry today) was a comparatively modest 160,000 square feet. But the most awe-inspiring was the Manufactures and Liberal Arts Building, which fronted on Lake Michigan and formed the northern edge of the Court of Honor. It was 787 feet wide by 1,687 feet long. It had more than 30 acres under roof – the largest building in America at that time. But even that doesn't hint at the building's scale. For that, we need the exposition's own hype. The building was four times larger than the Roman Colosseum. It could seat 300,000 people at once (Handy 1893, 224) (Fig. 4).

Fig. 3. The Lagoon's construction. Construction of the lagoon for the World's Columbian Exposition, 1891, looking towards Lake Michigan. Photo: C.D. Arnold/Courtesy, Chicago History Museum

Fig. 4. The most awe-inspiring building of them all. The exterior of the Manufactures and Liberal Arts Building and the basin at the World's Columbian Exposition, 1893. Note the custom-built electric launch in the basin. Photo C.D. Arnold/Courtesy Chicago History Museum

The poet Edgar Lee Masters called the exposition grounds "an inexhaustible dream" (Masters 1933, 7). Theodore Dreiser, then a newspaperman, wrote of the nights of the fair: "When the long shadows have all merged into one and the stars begin to gleam out over the lake and the domes of the palaces of the White City" (Dreiser as quoted in Lingeman 1986, 119).

The buildings glistened. They glistened white, a design choice to make the exposition grounds glimmer. Their facades were made of staff, a blend of plaster of Paris with some glycerin and

dextrin mixed in to bind it (Fig. 5). The buildings were painted white, to reflect all the better the glow from the electric lights that lined the exposition's walkways (Fig. 6) (Graff 2012, 706).

Fig. 5. The White City from the lake. View of the White City from Lake Michigan, 1893. Photo: W.J. Jackson/Courtesy Chicago History Museum

Fig. 6. The White City glistens at night. View of the World's Columbian Exposition's Administration Building at night in 1893, looking over the Grand Basin. The Electricity and Mines buildings are to the right, the Machinery building is to its left. Photo: G. Hunter Bartlett/Courtesy Chicago History Museum

Fig. 7 The Statue of the Republic and the Peristyle. The 111-foot tall Statue of the Republic with the Peristyle in the background in 1893. Photo: Goodyear Archival Collection/Courtesy Brooklyn Museum

But it had to end. More than 27 million people visited the World's Columbian Exposition between May 1 and October 30, 1893 (nearly 717,000 on one day alone) Higinbotham (1898, 250). Hotel keepers, restaurant owners and the concessionaires made their money. One Chicago newspaper editor noted that the city's finest brothel nearly doubled its staff during the exposition (Dedmon 1953, 203). It left a commercial legacy – Shredded Wheat, Aunt Jemima Syrup and Juicy Fruit gum were all introduced at the fair. It inspired Frank Baum's Emerald City in "The Wizard of Oz" (Patton 1993). It put Chicago on the map in a way that couldn't be ignored. It ushered in an age where governments and business leaders worked hand-in-hand to achieve a goal, a period that Trachtenberg calls "a corporate alliance of business, culture, and the state" (Trachtenberg 1982, 217). It is a relationship that's ultimately between capital and the state and links creative destruction to political economy.

The exposition's closure left a large space that needed to be converted into something useful. Buildings made of staff are temporary, and the exposition was never planned to be permanent. The post-exposition period gives us our second pulse of history, in which government creatively destroyed Jackson Park from one vision to another: from a site dedicated to commerce and raising Chicago's profile to a jewel in the city's park system and a place for Chicago's residents to recreate. The fair itself had a long-reaching impact. The city's elites decided that "dignity, beauty and convenience" of the White City called for a holistic improvement of the city's lakefront from Jackson Park north to Grant Park (Burnham 1993). The lake front work would later serve as the foundation of a general park plan for the city, a plan that included 17 new neighborhood parks on Chicago's South Side alone, each with their own

baths, gymnasiums. These were “clubhouses for the people,” Burnham wrote, with the aim to “improve the health morals of the people, and to stimulate local pride and patriotism” (Burnham 1993, 44).

But what of Jackson Park? The White City quickly fell into disrepair. A November visitor noted the buildings’ grimy appearance and thought them in need of soap and water. “The angels on the Woman’s Building look down forlornly on the passers-by,” she wrote, “and appear to please for one admiring glance for the sake of times agone” (Dean 1895, 424). The park’s guards contract ended on January 1, 1894 and they threw the gates open. “Every one who passed the Java Village gathered an armful of wicker-work canes and bamboo stuff and those in vehicles fairly loaded up with these articles,” the *Chicago Daily Tribune* reported (Chicago Daily Tribune, 1894). Two days later, a fire that started in the lakefront casino building consumed it and the adjacent music hall, as well as the Peristyle that fronted on the lake. Embers set the roof of the Manufactures and Liberal Arts building aflame, though it was quickly extinguished.

The plan was to make into a recreational park. Some 560 acres of the park would be transformed into a grassed and wooded space, with gently curving roads that hid the saloons and cable cars of the bordering neighborhoods (Chicago Daily Tribune, 1895a). The Midway Plaisance, which hosted the world’s first Ferris wheel and the exotic cultural exhibits, would be transformed into a one-mile long, 660-foot wide boulevard with three driving lanes. The new, de-White Citified Jackson Park was consistent with American attitudes towards parks in the late 19th Century: bulwarks against growing urbanization, “pleasure grounds meant to be pieces of

the country, with fresh air, meadows, lakes and sunshine right in the city" (Cranz 1982, 3). Paul Cornell, a Chicago real estate developer of the mid- and late-19th Century and member of the South Park Commission, believed parks would be "lungs to the great city and its future generations" (Chicago Park District, 2016). These were more than just public attitudes – physical fitness was encouraged both formally and informally by governments. Competitive play, such as basketball and track, became the focus of programs in high schools and colleges (Berryman 2010). Municipal governments reflected these values in their planning polices. The City Beautiful movement was arguably born in Chicago in 1909 when Burnham and Bennett submitted their plan for Chicago. The design sensibility of the movement, separating residences from businesses, is as much a reflection of public health values as it is about the esthetic (Perdue, et al, 2003).

But well before that, in 1895, Olmsted submitted a plan to the South Park Commission that focused on the outdoor spaces, emphasizing three areas: "the Lake," "the Fields" and "the Lagoons" (Olmsted, et al, 1895). The landscape would provide "all of the recreative facilities which the modern park should include for refined and enlightened recreation and exercise" (Park and Cemetery, 1895, 20). The park would stay connected to Lake Michigan, both visually and physically, though the Basin would be narrowed. But the biggest change – at the request of the South Park Commission – was the inclusion of fields. Olmsted meant it to contrast with the lake shore scenery and lushness of the lagoon shores. But it was also designed to take advantage of the enthusiasm for sports.

Facilities were built for outside sports: shelters, racing courses for bikers, open air gymnasiums (one for men, one for women, one for children), a bathing beach, tennis courts,

baseball and football fields (Chicago Daily Tribune, 1895). In 1899, the park commissioners voted for a nine-hole public golf course to be built (South Park Commission, 1899). The decision was so popular that an 18-hold course was built the next year. And it was popular – some 87,500 people played on the 18-hole course and 40,000 played on the nine-hole course in 1906 (South Park Commission, 1906). In 1919, more than 285,000 golfed the park's courses (Davis, 1919).

Over the next three decades, improvements would be made to the park, including some significant work by Works Progress Administration crews (Bachrach, 1995). During the 1930s, much of the park's character would change with the construction of South Lake Shore Drive, which cut most of the park off from Lake Michigan (U.S. Army Corps of Engineers, 2009). But the character of the park remained unchanged. Works Progress Administration historians compiling park history in 1941 said the park "provides as wide a range of facilities for outdoor recreation as any other park in America" (Works Progress Administration 1941,).

It took the Cold War for the next pulse of government change to Jackson Park's landscape.

Ed Thelen was a Minnesota boy and so the cold winds coming off the lake didn't bother him much. But things at U.S. Army Nike Missile Site C-41 were a bit primitive in 1955 – the radar site he worked out had only an outhouse – and there were other causes for concern. The radar site was located at Promontory Point, about a mile from the center of Jackson Park. It controlled three missile batteries that were located where the White City once stood. The radar site was connected to the batteries by telephone line, which, presumably, wouldn't work in a

nuclear war. “They sent us radios we could use to talk to other batteries,” he said. “But they didn’t send us batteries for them” (Thelen 2016).[vii]

Thelen was an Army radar tech assigned to C-41, the missile site the Army claimed at Jackson Park. This was the third major pulse of government changing the landscape – 80 prime acres of the park, including tennis court and the running track – off limits to the public behind a barbed-wire-topped chain link fence. It reflected a major government value at the time: Fear of the Soviets.

C-41’s presence was a constant reminder of that fear and of how the government converted vast portions of the nation into weaponized areas. Dias was discussing the American West when he wrote about “broadly placed missile silos, Strategic Air Command (SAC) bases, and fighter squadrons stationed near American cities, the Pentagon fought the Cold War in Americans’ backyards” (Dias in Fernlund 1998, 75). But he could have been writing about Jackson Park and the Hyde Park and North Kenwood and South Kenwood neighborhoods adjacent to it.

Jackson Park’s use as a missile site – and the Army’s land grab of prime locations around Lake Michigan – came as a result of fear. American strategic planners believed that Soviet bombers would come over the North Pole (the shortest distance between the Soviet Union and the Continental United States) and drop their bombs on American cities (Schaffel 1991). And so they built a line of radar stations covering the entire northern approaches to the United States. Located mostly in Canada, the “Pine Tree Line” became operational in 1951 and almost immediately sparked concerns that it wasn’t comprehensive enough (Bouchard 1999). A second, more northerly line of radar stations, running through the waist of Canada, the Mid-

Canada Line, became operational in 1958. A third radar station line, north of the Arctic Circle, known as the Distant Early Warning Line, or DEW Line, also became operational in 1958 (Lackenbauer, et al, 2005). The defenses were bolstered by air bases filled with tactical fighters, designed to intercept and destroy intruding bombers. Defense planners talked of a "bomber gap," where Soviet long-range bombers outnumbered U.S. bombers. U.S. Air Force intelligence estimated that the Soviets would have between 600 and 700 bombers operational by 1959 (Newhouse 1989, 110). Fear of the Red Bear – fueled by each coup or rigged election that resulted in a Communist government – built on itself.

The frightening prospect of a long-range Soviet bomber dropping a nuclear warhead on an unsuspecting America city resurrected a "Pearl Harbor" atmosphere in the United States. As nuclear stockpiles increased, the United States encouraged citizens to build fallout shelters and created civil defense systems designed to cope with an enemy attack (Whitacre 1996, 16).

The Army's solution was to build series of missile batteries to catch those bombers that leaked through the defenses. The system, the Nike-Ajax missile system, was described as "an awesome jack-in-the-box mechanical monster with a robot brain" (Norman 1954, 4). It was a two-stage missile, 21 feet long and only 12 inches in diameter, that flew at almost 2 ½ times the speed of sound. In 1955, the Army named 30 sites top priorities for Nike launchers, all of them around cities.[viii] Ultimately, the Army built about 300 sites across 29 states (Whitacre, 39). And it was the missile system's unique attributes that made Jackson Park so perfect.

The first factor for siting the missiles in Jackson Park was strategy. Army air defense planners employed a defense-in-depth strategy in the siting of Nike bases. Launch sites were designed to be mutually supporting and overlap each other. And they were designed with specific compromise in mind: weighing the mass firepower that could be achieved by concentrating bases near cities against moving bases away from cities to defend against

attacks from multiple bearings (U.S. Army 1962). The Army ultimately built seven Nike launch sites at six locations in the Chicago-Gary Defense Area that were immediately adjacent to Lake Michigan and a total of 21 launch facilities in the area itself (Fig. 8).

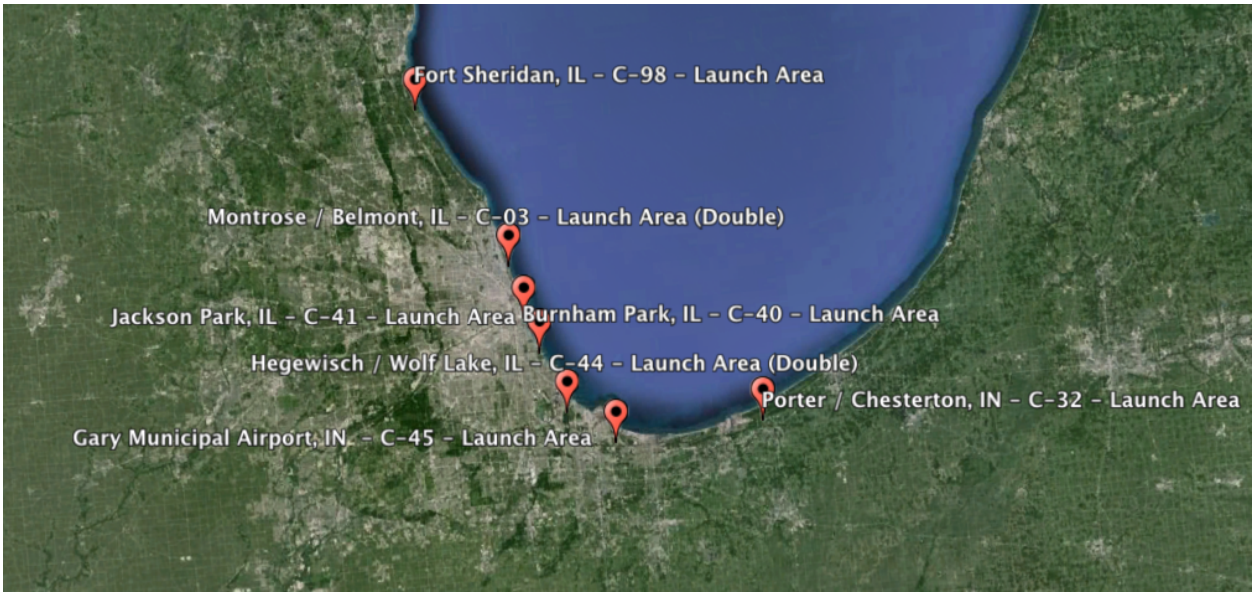

Fig. 8. Nike launch sites in Chicagoland. The Chicago-Gary Defense Area included seven Nike launch sites immediately adjacent to Lake Michigan. Jackson Park was designated C-41 and is the fourth pin from the top on the lake's western shore. KMZ file courtesy Nike SiteSearchers

The second factor was radar range. The original range of the Nike-Ajax acquisition radars – the technology that would first find the bombers – was only about 125 miles (Cole 1985). Adequately defending Chicago meant getting radars as close to the projected incoming bomber paths as possible. Which explains why the Department of Defense built Nike sites in parks: Olmsted, and later Burnham and Bennet's vision of Chicago's parks meant giving the public access to the lakefront. But the Army needed that land to expand its radar range. An Army general explained it this way to the *Chicago Daily News*:

"We don't want to take any park land, but we have no alternative. A circular defense of the city is best from a military point of view. In lake front cities like Chicago the defense must cut across

the ‘diameter’ of the circle, the lake shore. (Reilly 2014, http://uchicagogate.com/2014/10/02/missiles-on-the-lakefront-the-forgotten-story-of-congressman-ab-mikva-and-nike-base-c-41/#note-11, last accessed October 20, 2015)

The third factor that placed the missiles in Jackson Park and other lakefront parks was the technical details of the missiles themselves. If bombers leaked through the three early warning lines and the interceptors sent to destroy them, American planners believed they would fly low to avoid radar detection. For Chicago, this translated to skimming over Lake Michigan before popping up and lofting their bombs. The missiles needed to reach the bombers before they were able to initiate the pop-up maneuver (and, in later years when the Nike system was upgraded to carry nuclear payloads, to engage Soviet bombers beyond populated areas). The missiles needed to quickly leave their launch facilities, which required a booster. In the case of the Nike-Ajax, the booster produced 59,000 pounds of thrust for 2 ½ seconds before falling away as the second stage ignited. That booster had to fall somewhere, which is why the Army looked for places along the axis of attack that were empty (Whitacre 1996, 31). Called “disposal areas,” the Army specified that they be circles with a one-mile radius with the center located 1 ½ miles from the nearest launcher or populated area (Cagle 1959). And what better, more empty place was there around Chicago than the waters of Lake Michigan?

The Army’s first choice of location for the the Jackson Park battery was the Wooded Island. They could not have chosen a worse place. The island sat in one of the park’s lagoons and was one of Olmsted’s touchstones. It was centered around the only strong oaks he found in his initial survey of the park, on a low sandy ridge, and he created the exposition’s Lagoon District around it (Schuyler and Kaliss 2015). The district in general, and the Wooded Island in particular, were designed to be “in refreshing relief to the grandeur of the buildings” (Schuyler

and Kaliss 2015). He felt so strongly about the island's beauty that he fought with Burnham to keep buildings from being placed there. He lost, but managed to limit the buildings to graceful Japanese buildings. The Wooded Island stayed when the park was converted and it had become a Chicago landmark by the time the Army rolled in. In 1895, the *Chicago Daily Tribune* reported 33 different types of roses in bloom on the island (Chicago Daily Tribune 1895b). In 1933, the paper published a series on places to see in Chicago and the island merited its own article.

> For years its secluded nooks and sheltered paths have been a lovers' paradise, and many a man and his wife look back upon pleasant days of their courtship there. Uncounted thousand of hearts have fluttered there. Its spell has helped many a bashful swain to "pop the question" and prompted many a shy feminine "yes." (Vedder 1933)

The local community requested the Army find a new location. It relocated the battery's radar and control facility to Promontory Point, a small peninsula in Burnham Park that jutted out into the lake north of Jackson Park. Its missile battery would go in the park itself, on the lakeward side of one of Olmsted's treasured lagoons. It would be built over the park's running track and some ball fields. Those had been built, more or less, on the site of the exposition's Manufactures and Liberal Arts building. The missile battery only took up 22 acres of Jackson Park – but it fundamentally affected the landscape and the people who used it (Figs. 9 and 10).

Fig. 9. Aerial view of Jackson Park. An aerial view of Jackson Park from the south, c. 1948. Nike site C-41's radar facility would be placed at Promontory Point, the sandy semi-circular peninsula in towards the top of the photo. C-41's launch facility would be placed where the track is in the lower part of the picture, to the lake side of the lagoon. Photo courtesy Chicago Park District Archives

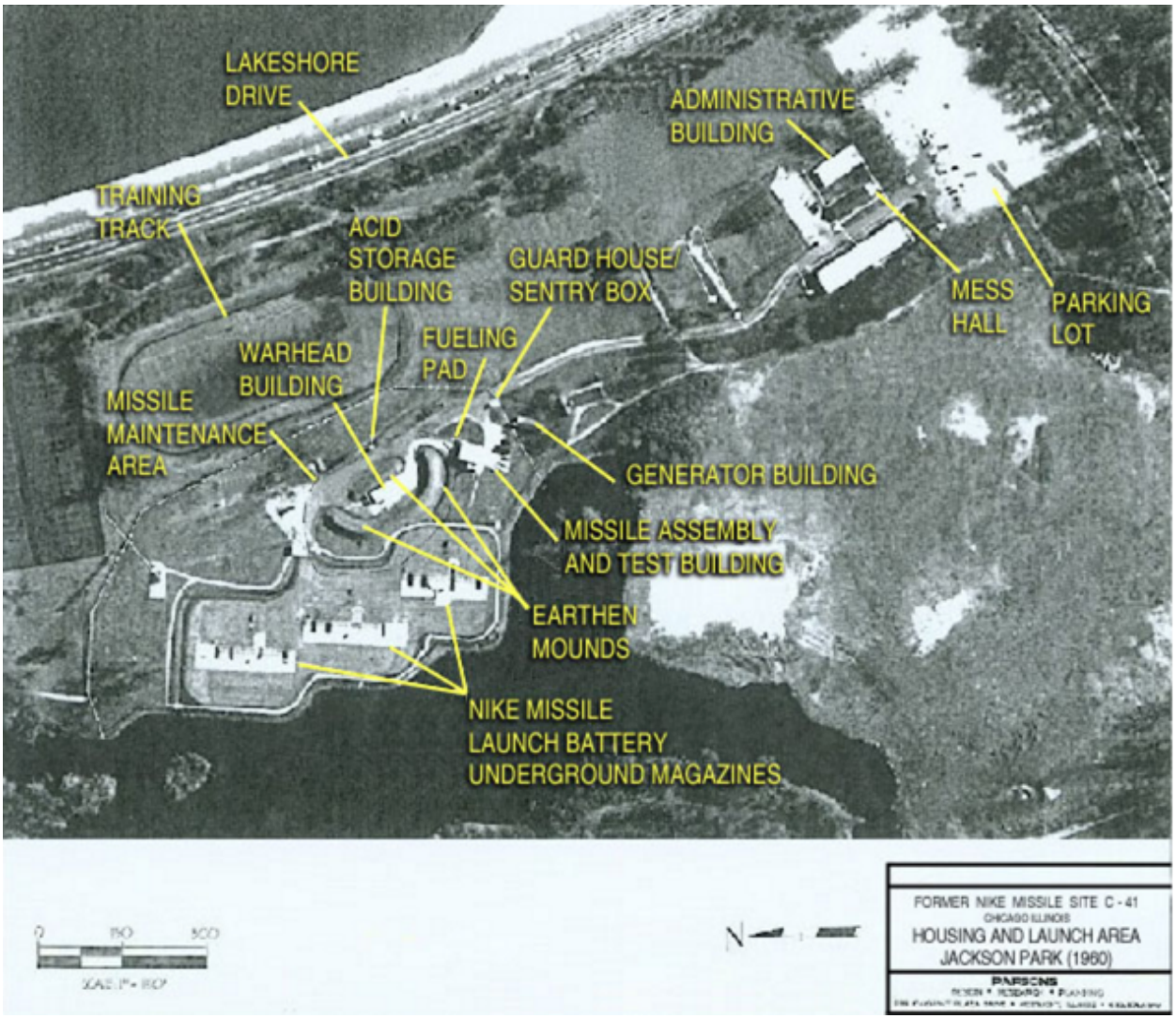

Fig. 10. Nike site C-41, c. 1960. How C-41's launch facility appeared in 1960. The track from the park remained. The sites three missile launchers are located in the lower left of the image. The barracks pictured in the previous photo are in the cluster of white buildings in the upper right portion of the picture. Diagram courtesy U.S. Army Corps of Engineers, Louisville District..

The Chicago Park District replaced the lost recreation space by filling in the north and south bayous to build more meadows that could be used for ball fields. This destroyed both the physical and visual connection between water bodies in the park; it also destroyed two historic bridges that led to the Wooded Island (Bachrach 1995). Local citizens fumed. Sol Tax, a

University of Chicago professor, wrote an angry letter to the park district superintendent about the Army's land use:

"The loss is far more than 'aesthetic.' It is as though somebody moved into one's home, set up shop in the middle of the living room, and argued that he was only taking up 10% or 15% of the total area, leaving plenty of space for the family. The integrity of our best recreational facility is destroyed."[ix]

The Southown Economist, Chicago's South Side newspaper, opined in 1956: "Southtown and the entire Southside has lost the lake front for recreational purposes between Jackson and Grant Parks." The Chicago American weighed in that "sweeping stretches of Chicago's once-dazzling front yard are going to pot. The Army is one of the responsible villains." A Chicago alderman complained to the Chicago Tribune that the bases in Burnham and Jackson Parks were cutting off large stretches of lakefront from Chicagoans (Sivilich 2001).

The pleas fell on deaf ears. The Park District agreed to lease the Army park land for $1, renewable every 10 years, as long as the Army restored the land, such as replacing the 357 trees and 610 shrubs in the line of sight area that connected the launch and radar facilities.[x] The park district pushed back on the Army about taking more land for housing – though the Army did get some billeting at Jackson Park, just not as much as they wanted (Fig. 11).

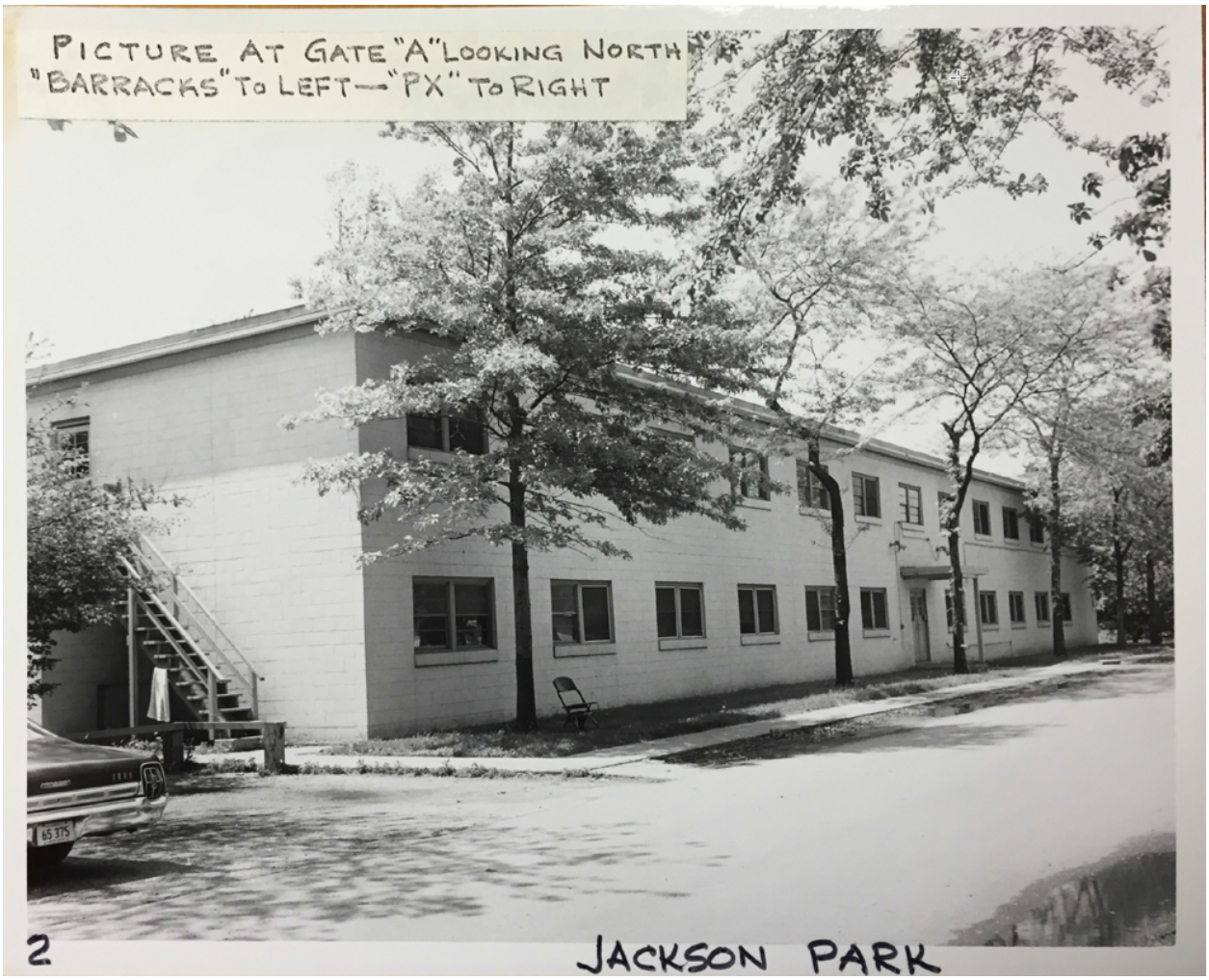

Fig. 11, Army buildings built in Jackson Park. Enlisted barracks and Post Exchange for Nike Missile Site C-41 in Jackson Park, c. 1960. Photo courtesy Chicago Park District archives

It was not neighborhood pressure that closed site C-41. It was obsolescence. The rapid development of intercontinental ballistic missiles (ICBMs) quickly made the Nike-Ajax system nearly useless. By 1958, the Army had upgraded the Nike facilities around Chicago, New York City and Washington D.C., to the more powerful Nike-Hercules system. The new system could acquire targets at 175 miles instead of 125 miles and could carry larger, even nuclear, payloads (Whitacre, 1996). But even these weren't powerful enough or fast enough to defend against a Soviet ICBM. A third generation of Nike missile, the Nike Zeus, was planned, but the program

was ended in 1963 after numerous technical flaws (Whitacre). The Chicago area Nike sites kept their Hercules missiles and kept standing watch. Jackson Park's site was deactivated in 1971 (Morgan and Berhow, 2002) around the time most other Nike sites were being taken offline. All that remained at that point was remediation. The Army paid the park district $268, 714.70 to replant and remediate the site (Council 2006). The buildings were razed, the concrete magazines were left in place, the site remediated. Part of C-41 is now a driving range along Lake Shore Drive. Just north and west of the driving range is prairie area, named Bob-o-Link Meadows (Bachrach 1995) (Fig. 12). Somewhere in the stands of obedient plant, asters and wild onion are the last vestiges of C-41 – a manhole cover and a sump discharge pipe into the park's East Lagoon.

Fig. 12. Bob-O-Link Meadow. Summer foliage in Bob-o-Link Meadow covers a portion of former Nike Site C-41 in Jackson Park in August 2016. Started in 1982, the meadow is a nature sanctuary and an effort to reintroduce native prairie to the park's urbanized setting. Photo courtesy author.

Chapter 5: Discussion and conclusions

The existing theories of creative destruction assume that the destruction happens to speed up the production of wealth and fix the crisis of overaccumulation. They don't account for a landscape being creatively destroyed for other purposes or by agency rather than capital.

Was Jackson Park creatively destroyed between 1890 and 1971? And if so, was it creatively destroyed in a way that the major proponents of the theory – Marx and Engels, Schumpeter, Harvey and Mitchell -- would recognize as creative destruction? And if it's not immediately recognizable as one of the four established flavors of creative destruction, is it an emerging fifth kind that hasn't been considered?

We can build a test with a few simple questions.

The first question is "Was the "instrument of production" altered to facilitate the accumulation of capital?" If the answer is yes, then we've satisfied at least some of the Marxist and Harveyian preconditions for creative destruction. In this case, that instrument is the landscape itself, Jackson Park. Jackson's Park transformation for the World's Columbian Exposition was certainly to facilitate the accumulation of capital. The fair's aim was to prove Chicago was a world-class city, a city worth spending money in and relocating to. The concession stands brought in more than $4 million ($102 million in 2015 dollars) and the exposition's 30,000 stockholders received about a $1 million in returns (about $25.4 million in 2015) (Higinbotham 1898). Products sold at the fair became national brands that are still sold today, long after their creators have a-moldered in the grave. "Buffalo Bill" Cody set up a version of his "Buffalo Bill's Wild West and Congress of Rough Riders of the World outside the fair's gates (Cody would not agree to give

the exposition's organizers 50 percent of his proceeds), averaged 16,000 spectators per performance for 318 performances and cleared $1 million (about $25.4 million in 2015) (Braun 2014). By any measure, Jackson Park's initial transformation from wind-swept dunes to the White City satisfies the first step of the test.

But the park's transformation fails that first test in its subsequent pulses of change because all four flavors of creative destruction assume that profit is the motive. And once the salvagers removed the White City and fires took care of the rest, the park was no longer a place for capital accumulation. It was, instead, a community benefit paid for by community members as taxes. If the basis of Harvey's creative destruction is the application of change to a rational capitalist landscape, if the basis of Mitchell's creative destruction assumes commodification of the landscape, Jackson Park – or any government-led park – cannot pass our test. In strictly capitalist terms, parks are losers. The Chicago Park District itself had a $1.4 billion deficit, including $944 million in long-term debt, in 2013 (Illinois Policy Institute 2013). In societal terms, parks create other benefits, among them creating an infrastructure for healthy activities (Rosenberger 2009). Jackson Park's post-exposition transformation created a place for the south city's residents to exercise, to boat and to breathe. But it was not designed to drive a profit – the underlying assumption of creative destruction. We see the same conundrum when we try to apply the first step of the test to park's Nike missile base period. There was no profit motive to the conversion (except, in an indirect way to the military-industrial complex contractors that built the base and, in a very macro way, to the contractors who designed and fabricated the missile systems). But protecting Chicago -- and by extension the system of

capitalism itself -- from an attack by Soviet bombers provided a collective societal benefit, even at an economic loss.

Our test's second question is "Does the change come from within, rather than from outside?" One of Schumpeter's ideals was that industry or the market itself creates the change. This is market-based capitalism and entrepreneurship. The 1890-1893 change in Jackson Park did come from within, in so far as it was a piece of land owned by a municipal corporation and leaders of the corporation ordered its development. The park's post-exposition changes also came from within – the municipal government wanted change. But it was also an adjustment based on market demand. When South Park Commission President Henry Foreman communicated to the commissioners in 1909 that there had been "numerous demands during the past summer for additional spaces for playing ball and also for tennis" that could not be granted due to the park's design, he was, in effect, relaying a market desire for the commissioners to address (they did eventually add more fields and tennis courts).[xi] The park's transformation came about from professional managers measuring demand and responding to it. When the park district built a 20-foot tall navigation light tower at the yacht harbor's entrance in 1942, it was responding to a market demand (Chicago Park District 1943). But the park's transformation fails the second question when it comes to the third pulse of history, the missile base conversion. Change came from outside rather than inside. Even in its initial transformation phase, the fate of Jackson Park had always been controlled by Chicagoans. The adaptation of the tennis courts and running track into an anti-aircraft missile base came from an outside actor – the federal government. It was not a reflection of market demand (in fact, the park's "customers" reacted angrily). The change was externally forced, not market-driven,

and so Jackson Park's third phase-transformation fails this part of the test. Then again, it does invite the argument that it is the attempt to satisfy market forces, and not Frederick Jackson Turner's taming-the-frontier-through-rugged-individualism-ethos, that drives capitalism.

The test's third step is "Was there "displacement of an older landscape by a new one?" as Mitchell wrote. Inarguably yes. But we need to examine the reasons for change. The first phase of the park's change was driven by capitalist forces. We can trace Jackson Park's development under Burnham's and Olmsted's influences through Mitchell's five steps of commodification (albeit rapidly). The second transformation does replace an older landscape with a newer one, as the White City is taken down and a new sculpted landscape is created. So it follows Mitchell's definition, but not the context around it, which tends towards the entrepreneurial. The third phase-transformation also displaces landscape. But though it's in the service of capitalism, it's not a profit-driven displacement. The difference in how and why Jackson Park's landscape changed between 1954 and 1971 and how St. Jacobs, Ontario changed in the the 1990s was, as Twain said, "the difference between lightning and a lightning bug."

The Chicago River of the late 19th century was a stinking miasmal waterway. It was where Chicago's runoff ran off. And it was quite the runoff: Overflow from an overwhelmed sewer system, offal and cattle blood from the stockyards, the refuse of a growing city. The river was narrow and as ships got bigger, they could no longer turn around in the river's harbor. Chicago's harbor was moved to the mouth of the Calumet River. It was a decision that was done by the government (the U.S. Army Corps of Engineers did the bulk of the work), but was driven by capitalism. The cost of land along the Chicago River was essentially the cost of land in the

city's central business district and cut into the manufacturing industry's margins. Steel firms, in particular, had already begun relocating to the mouth of the Calumet (Salzmann 2012). This creative destruction was the classical kind – born out of the need for higher profits. It is the creative destruction that Marx and Engels and Schumpeter and Harvey and Mitchell would realize right off: A method to speed up the production of money and fix the crisis of overaccumulation.

They would recognize what the World's Columbian Exposition Board of Directors did to Jackson Park between 1890 and 1893, too. They would understand the charge of 50 cents for two revolutions on the world's first Ferris wheel and 50 cents for admission to the Javanese village (Flinn 1893). But it would be harder for them to recognize the creative destruction inherent in the latter stages of the park's transformation, because it is so antithetical to both entrepreneurship and capitalism.

The three-step test yields mixed results and it's because we are looking at creative destruction through an exceptionally focused lens: capital overaccumulation. The existing theories of creative destruction assume that the destruction happens to speed up the production of wealth. They don't account for a landscape being creatively destroyed for other purposes.

But it happens constantly. O'Donovan points out that Binghamton, New York's vacant blocks downtown were created by the city's urban renewal agency obtaining and then destroying derelict houses used by the working class in the 1960s (O'Donovan 2014). National Park Service planners designing Independence National Historic Park in Philadelphia in the 1960s chose to destroy a number of mid-to-late 19th Century buildings to accomplish their

vision of a seamless historical district, like Williamsburg, Virginia's (Low, Taplin and Scheld 2002). The Arizona Department of Transportation is using eminent domain to extend a freeway through Phoenix's southern metropolitan area – a move that will demolish about 200 homes, not to mention the landscape changes wrought by the agency periodically purchasing industrial space (KNXV-TV 2015). It may be the role of government that destroys landscapes more often – and more prominently – than previously thought.

There is a disturbing quality of "It depends" in these tests. And perhaps they generate more questions than answers, which gives us a path forward for more research. Does, for instance, installing missiles to defend the entire capitalist system create an economic benefit? And how can that be measured? Or how – or how often – is private industry either complicit or the beneficiary of the government's practicing creative destruction? This thesis was admittedly a war of limited scope, which leaves a whole world out there for studying. One of the most fruitful fields might be looking at the interplay of two theories of governing and the role they play in government-assisted creative destruction. Foucalt's theory of governmentality and Weber's theory of the power of bureaucracy both provide fertile ground. Viewing creative destruction through Foucalt's broad approach to what government is and what it does for citizens would likely open up more avenues for interviewing. And looking at Weber's theories of bureaucracy and power in the context of creative destruction might help further the understanding of the role of the apparatus of government in how and when governments choose to creatively destroy a landscape.

The impetus behind many of those decisions for Jackson Park is lacking in this thesis. Beyond its limited scope, there are problems with archival research. And that can be a problem

for a document that looks at structure as much as this one does. The sweep of the research is defined by the arc of the archives. Oftentimes, it was a very narrow arc. The entire archive of the Chicago Park Department is held in a single room that also holds pieces of exhibits and space for two interns. The back and forth, the telegrams, the contracts and records with comments scribbled in the margins simply don't exist. The Army's records are incomplete, and numerous searches of archives for siting and survey reports yielded nothing. So we have to take the word of those quoted in secondary documents like newspaper reports. The "true intent" of the engineers and anti-aircraft specialists who chose C-41 as a Nike site may never be known.

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[v] Phillips, S., archives technician at the National Archives Chicago, July 2015, personal communication with the author.

[vi] All modern-dollar computations were done using the calculator at http://www.in2013dollars.com/ . 1912 and onward figures are based on the Bureau of Labor Statistics' Consumer Price Index. Pre-1912 calculations are done using Robert Sahr'sinflation conversion factors, located here: http://liberalarts.oregonstate.edu/spp/polisci/research/inflation-conversion-factors-convert-dollars-1774-estimated-2024-dollars-recent-year

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