



# Cronfa - Swansea University Open Access Repository This is an author produced version of a paper published in: Journal of Economic Geography Cronfa URL for this paper: http://cronfa.swan.ac.uk/Record/cronfa26495 Paper: Muellerleile, C. (2009). Financialization takes off at Boeing. Journal of Economic Geography, 9(5), 663-677. http://dx.doi.org/10.1093/jeg/lbp025

This item is brought to you by Swansea University. Any person downloading material is agreeing to abide by the terms of the repository licence. Copies of full text items may be used or reproduced in any format or medium, without prior permission for personal research or study, educational or non-commercial purposes only. The copyright for any work remains with the original author unless otherwise specified. The full-text must not be sold in any format or medium without the formal permission of the copyright holder.

Permission for multiple reproductions should be obtained from the original author.

Authors are personally responsible for adhering to copyright and publisher restrictions when uploading content to the repository.

http://www.swansea.ac.uk/library/researchsupport/ris-support/

# Financialization takes off at Boeing<sup>∞</sup>

See final version of this paper in: *Journal of Economic Geography*, 2009, vol. 9, iss 5: 663-677

Christopher M. Muellerleile Ph.D. Candidate University of Wisconsin-Madison Department of Geography

As of 2016, Assistant Professor, Swansea University, Department of Geography

Email: c.m.muellerleile@swansea.ac.uk

Twitter: @CMuellerleile

### Abstract

This paper examines the 2001 dislocation of the headquarters of the iconic U.S. aerospace company, Boeing, out of the Puget Sound region of the State of Washington, its ancestral manufacturing base. It argues the rationale for the exit was the desire on the part of Boeing's increasingly finance-focused executives to detach and disembed the "brains" of the company from the product-focused, engineering based corporate culture embedded in Puget Sound. The paper attempts to ground the logic of financialization by examining how it emerged at, and was shaped by one particular company. I employ economic geographers' conceptions of place-based corporate culture and societal, territorial and network embeddedness (Hess 2004) to explain how financialization and corporate dislocation can enable each other. The paper also briefly discusses Boeing's eventual decision to reembed its headquarters in downtown Chicago, Illinois.

Key words: Boeing, financialization, embeddedness, corporate culture, Puget Sound, Chicago

### 1. Introduction

On March 21, 2001, the Boeing Company—an icon of U.S. industry and arguably the world's predominant aerospace firm—announced its intention to downsize its Puget Sound based corporate headquarters of 1,000 employees to 500, and dislocate\* that headquarters far from Washington State and the company's 80,000 regional aerospace engineers, machinists and airplane

<sup>&</sup>lt;sup>α</sup>This version was accepted for publication, but was significantly edited in the proofing process.

<sup>\*</sup> I use the term "dislocate" because first and foremost Boeing's executives decided to leave Puget Sound. Only after that decision was announced did they begin looking for a new home.

assembly workers. Prior to the formal announcement made in Washington D.C. by Phil Condit, Boeing's CEO, only the inner circle of Boeing's senior management was aware of the plan to separate from the company's ancestral manufacturing base. Given Boeing's historically symbiotic relationship with Puget Sound's labor market (Markusen et al 1991, Morrill and Sommers 2005), word of the dislocation sent the region into shock. The following day, Seattle's two major newspapers published 24 articles and columns dedicated to the story. Seattle's dismayed mayor, Paul Schell, said, "I'm waiting for the locusts" (Song and Dunphy, 2001). Seven weeks later after an intense search, Boeing announced they would resettle in downtown Chicago, Illinois.

When Condit announced the move, the Boeing Company was deeply embedded in Puget Sound's socio-economic fabric, a clear example of a *firm-territory nexus* (Dicken and Malmberg 2001), or the symbiosis between a firm and a place. Why, then, the sudden decision to remove the headquarters from the base of the company's commercial aircraft operations? I will argue a number of events in the 1990s, most importantly a merger with competitor McDonnell Douglas in 1997, diversified Boeing's business and introduced the company to new management style exemplified by a strict focus on finance. After four years of prioritizing finance at the executive level, which corresponded with lackluster performance in the commercial aircraft division, Condit identified Boeing's corporate culture and the long-standing, intimate relationship between headquarters staff and the Puget Sound based commercial aircraft division as a direct contributor to the company's ongoing failure to adapt to changing economic conditions. As a result, Condit decided an increasingly finance-focused upper echelon of management had to be physically removed from the production culture institutionalized in Puget Sound.

By analyzing Boeing's headquarters dislocation, I aim to accomplish three things. First, is to ground what continues to be an ethereal concept, financialization, by providing a concrete example of how the logic of finance seeped through one particular corporation. Second, I will argue

corporate geographers, especially their concept of corporate embeddedness and its intersection with corporate culture, provide a useful framework for interrogating spaces of financialization. And third, after Hess (2004) and Pike (2006), I want to highlight how, in this particular instance, financialization had a disembedding impact on Boeing's social and territorial relations, but also eventually encouraged Boeing to re-embed in a location (Chicago) associated with more global networks.

In investigating Boeing's motivations for relocation I conducted twelve in-depth interviews with people intimately involved in various aspects of the relocation project. Because the relocation is still a sensitive issue for many in Puget Sound some of the interviews were off the record, and as such are not quoted. Nevertheless, this paper is based on the primary data I collected, and I have corroborated that data with secondary sources wherever possible including a wide selection of published accounts of the relocation.

This paper is organized into three main sections. The first (section two) situates the case within the growing literature on financialization as well as corporate geographers' work on embedded conceptions of the firm and corporate culture. Section three provides an historical account of the crisis and intense change Boeing experienced during the 1990s, part of which is an increasing focus on finance. In section four I analyze the product-based corporate culture of Boeing as the object of resistance to these changes and, consequently, as that from which the headquarters executives detached. Before concluding, I also briefly describe the rationale for, and significance of their decision to re-embed in Chicago.

# 2.1: Financialized corporate geographies?

The theoretical literature on financialization multiplied over the past 30 years, but empirical research remains somewhat inchoate and unspecified (French et al. forthcoming—citation pending

author's permission). On the whole the concept of financialization as studied in the social sciences remains imbued with an almost atmospheric quality, omnipresent but absent of context or cause. The aggregate impacts of financialization on publicly held corporations have been studied (Froud et al. 2000, Krippner 2005), but specific corporations have received scant attention. With a few exceptions (O'Neill 2001, Pike 2006, Froud et al. 2006), there is a dearth of intensive work investigating the impacts of financialization on individual non-financial corporations. This lacuna is significant as intensive studies of individual corporations, while necessarily falling short of identifying exact causality, can ground the otherwise shadowy qualities of financialization and offer persuasive narratives for understanding financialization and its effects.

The analytical context for corporate financialization begins with the widespread decrease in Anglo-American corporate profit margins since the mid-1970s (Crotty 2005). Responding to this, investors, increasingly institutional in nature (Clark 2000, Sassen 2005, Zorn et al. 2005), searched out new sources of consistent revenue. This sequence has fueled increasing "securitization," or "an exercise in bundling-up of assets so that they will yield clear and defined income streams" (Leyshon and Thrift 2007: 100). This trend reverberated in corporations making non-financial firms more likely to pursue profit from financial investments (Krippner 2005, Crotty 2005, Milberg 2008). All of this led to intense growth in the size and influence of global financial markets (Sassen 2005).

Within corporations, decreases in profits resulted in immense pressure from investors to reform the dominant conglomeration model, which valued sheer expansion and product diversification over pinpointing specific value generating activities (Davis et al 1994, Zorn et al 2005). Conglomeration left many publicly traded firms vulnerable to hostile takeovers as the pieces of firms became more valuable than the whole. The consequent movement to focus on core competencies was coupled with an increasing focus on high value added ventures and the principals of *shareholder value* (see Rappaport 1998). Quickly adopted as a reengineering product by consultancy

firms and taking different forms (Froud et al. 2000), the shareholder value model proposes corporate management's singular fiduciary responsibility is not to increase profits per se, but instead to "maximize returns to shareholders" in the form of increased share price or cash distributions often with the expense of reducing the capital base of a firm (Rappaport 1998: 5, also see Fligstein 1990, Useem 1996).

If finance-focused reengineering efforts are materially successful (they often fall short according to Froud et al. 2006), management could still fail if they are unable to effectively communicate with increasingly powerful capital markets. This requires corporate executives become fluent in the now ubiquitous language of finance-focused accounting. In essence, this accounting method evaluates internal operational decisions according to the potential of increasing present and future cash flow for the immediate benefit of investors (O'Neill 2001). This method is more than just a mathematical language for budgeting, tax compliance and profit projections. In his analysis of the competing logics that encompass the modern corporation, O'Neill (2001) describes financial accounting standards as "operationalizing a normative core." As it articulates operational decisions according to a particular form of finance, qualitative—or social—parts of a firm that cannot be accurately expressed though this idiom are devalued and/or dismissed as unintelligible. Difficult to quantify social assets such as corporate culture or employee pride in quality production are frequently devalued, for instance (ibid: ppg. 193), leaving economic geographers with the question how finance-minded corporate actors conceive of and negotiate the *places* that constitute corporate social relations and culture.

One way corporations implement new accounting models and other financially driven restructuring plans is to create or elevate the role of Chief Financial Officer (CFO). Beginning in the mid 1980s, this role, which previously focused on budgeting, accounting and tax compliance, became a key figure in the operational decision making of most large corporations. More

importantly, CFOs have become the key transmitters to and from capital market analysts that represent investment banks, hedge funds and powerful institutional investors (Zorn 2004, Zorn et al. 2005). The CFO both translates pressure to increase short-term return on investment into management decisions, and forces middle and upper management to transform their measurement of successful production into the standard languages of the capital markets.

Part and parcel to finance focused reengineering is a shift in management focus away from product and labor markets and towards finance and capital markets (Williams 2000, O'Neill 2001, Krippner 2005) as well as the increasing influence of outsiders such as consultants and financial analysts (Froud et al 2000, Zorn et al 2005). In other words, instead of achieving profitability by consistently producing quality products and a solid brand per se, corporations are likely to aim for profitability through tactical (and repetitive) manipulation of internal investments with the *objective* intension of improving return on capital (Williams 2000). By objective I mean management with little regard to the idiosyncrasies of particular products or industries, but instead focused on competing in the capital markets against every other publicly traded firm (see Froud et al. 2000 and Williams 2000). In addition, as large firms increasingly outsource and offshore productive activities, they also tend to shift focus to efficient cash flow and financial management of production networks and away from capital reinvestment or any particular product market (Milberg 2008). All of this leads to institutional investors, Wall Street analysts and corporate management coming together to form what Foucault (although referring to neoliberalism and the state) referred to as "a kind of permanent economic tribunal" constantly demanding business units justify their continued existence in the terms of finance accounting (quoted in Lemke 2001: 198).

This is not to say financially focused corporate executives succeed in every reengineering effort. On the contrary, as with any attempt to alter the focus of a large corporation, results are dependent upon negotiation of alternative visions, competing agendas, and the degree of resistance

to change within an organization (Schoenberger 1997, O'Neill 2001). One common source of resistance is corporate culture, which can be slow to evolve and deeply connected to a firm's mode of production. In the U.S., where mass production was invented and most successful, corporate cultures often evolved hand in hand with the hierarchical, structured and standardized models typical of mass production (Schoenberger 1997). This means change-minded management, pushing the narrative of shareholder value for instance, may find they need to not only restructure the processes on the factory floor, but also negotiate organizational norms, social alliances and internal labor markets. When other management efforts to change course—culturally or otherwise—fail, one solution is to spatially disembed a business unit and re-embed it in a new place (see Schoenberger's 1997 analysis of the Lockheed Corporation). Corporations typically relocate factories where they can erase institutional memories and hire cheaper labor. It is quite rare, however, to move a corporate headquarters, especially to a place where the company has no significant connections.

## 2.2: (Dis)Placing the firm

A *geographic* theory of financialization is in large part situated in economic geographers' scholarship on the corporation. Notably, as the discipline of economic geography "refigured the economic" over the past 15 years (Thrift and Olds 1996), so the sub-discipline of corporate geography refigured the firm. It is now well established that the corporation is an amalgamation of cultural identities, internal contestation and social, political and economic relations that often cross over the border of what might otherwise be considered the legal entity that is the corporation (O'Neill 2001, Talyor and Asheim 2001, Yeung 2001). While there is no unanimity on a definition of what the firm is, there is a consensus that the boundaries of corporate entities are indefinite, and these organizations cannot be understood, and defined, without considering the *places* in which they operate (Walker 1989, Dicken and Thrift 1992, Schoenberger 1997, Taylor and Asheim 2001, Yeung 2001). These insights suggest the need to refigure the relationship of corporations and

financialization—in both their conceptual and empirical forms. Instead of identifying or analyzing this relationship according to the measures of rational management in a free market system economic geography offers an alternative. Economic geography allows us to analyze financialization from the ground up, focusing on contingency and construction, studying how it intersects with corporate strategy (Froud et al 2006), and how it is resisted and alternatively constituted by actors in specific corporations in specific places.

Geographers, however, have spent surprisingly little time researching the relocation (see Pike 2006 for discussion of a closure) of specific corporate facilities as it relates to the goal of enhancing shareholder value. One reason may be the difficulty in isolating financialization from other potentially disembedding factors especially in an era when corporations appear to be increasingly footloose, taking advantage of reduced regulation, improved technology and efficient transport. But while corporations are increasingly mobile in the last 30 years, economic geographers (Yeung 1998, Dicken 2003) have debunked the hyper-globalist perspective that firms are becoming placeless.

Assuming instead some degree of spatial embeddedness as a starting point, as does the firm-territory nexus (Dicken and Malmberg 2001), allows geographers to examine in more detail the disembedding and re-embedding effects of corporate financial restructuring. Specifically in this paper, I utilize Hess's (2004) conceptualization of three related, but distinct, categories of embeddedness with the ultimate goal of analyzing how financialization can both encourage alienation from some socio-spatial fixes as well as facilitate deeper connections with others.

Reacting against what he calls the "overterritorialization" of the concept, Hess describes first, societal embeddedness, which is the "genetic code" or the cultural and societal background from which an actor or organization emerges. The second category is network embeddedness, which relates to the structure of relationships between people. This is not a spatial or temporal fix, but instead denotes a process of constant embedding and disembedding of actors or groups within an organizational architecture

and environment. The third is *territorial embeddedness*, which is the most spatial of the three categories and is the spatial "anchor" to which parts or wholes of social organizations and networks attach. I argue the process of financialization is constituted in part by the disembedding pressure it exerts on the societal and territorial characteristics of corporations, but also by the way it encourages corporations to re-embed in less culturally and spatially determined networks.

# 3.1: Boeing in the 1990s: Conglomeration and Crisis

Boeing's connection to the Puget Sound region is deep, dating to the founding of the firm in 1916. As the region's largest employer for most of Boeing's history, the labor market of Puget Sound developed hand in hand with the changes in Boeing's methods of production (Morrill and Sommers 2005). As such while Boeing has been hugely successful for most of its history, the economic recessions of the 20<sup>th</sup> Century caused violent downturns in aircraft orders, which resulted in massive layoffs in Puget Sound (see Sell 2001, Muellerleile 2007). At the end of 1980s, when this story begins, Boeing was the dominant global commercial aircraft manufacturer, but the next decade would be tumultuous. By 2001 the company would be less profitable and less recognizable to those who knew it in 1990. In particular, the events of the 1990s demonstrate a gradual separation, or social and territorial disembedding, of Boeing's executive management from its historical connection to Puget Sound.

### 3.2: Production crisis

Starting in the early 1990s Boeing's management, including the president of the company, Phil Condit, became acutely aware of the antiquation of the company's production methods and the necessity of rapid innovation. While the company consistently invented and integrated new aerospace technologies (Lawrence and Thornton 2005), Boeing's production processes changed little

since World War II (Useem 2000, Newhouse 2007). Part of the reason was the loyalty and consistency of U.S. government contracts. During hard times, there always seemed to be new military or space contracts to shield the company from some of the economic pressure to restructure (see Markusen 1991, Markusen and Yudken 1992). These contracts also funded development of new technologies that inevitably fed directly into the next generation of commercial aircraft (Rodgers 1996, Lawrence and Thornton 2005). Regardless of technological innovation, and some management pressure to become more flexible and lean, or "Toyotaize" as some Boeing managers called it, change was slow (Newhouse 2007: 121).

As the U.S. economy surged in 1996, and especially as a result of a price war with Airbus in 1997, Boeing realized a dramatic increase in commercial aircraft orders that pushed its antiquated assembly lines to the breaking point (Imberman 2001). On October 3, 1997, shortly before a substantial merger deal with McDonnell Douglas (hereafter MDD) was scheduled to close, Boeing was forced to shut down its 737 and 747 aircraft production lines for 25 days. Phil Condit did not publicly admit the closure until October 22, when he explained the shutdown would result in a \$2.6 billion write-off. Boeing's stock fell 8% in one day, equivalent to a \$4.3 billion loss in capitalization, and the stock fell another 12% over the next week (Holmes and France 2002, Newhouse 2007). As a result, Boeing reported a \$178 million loss in 1997, the first annual loss in its history, and was later sued by investors who claimed the MDD merger, bolstered by Boeing's relatively strong stock price, may not have been approved if the severity of the shutdown was exposed to investor scrutiny earlier.

For the next year Boeing struggled to recover. After a tongue-lashing by Wall Street analysts in August of 1998 over Boeing's apparent inability to solve its structural production problems, Condit decided his repeated warnings to his senior management team were not taken seriously. Encouraged by Harry Stonecipher, the former CEO of MDD and new second in command of Boeing, Condit fired the head of the commercial airlines unit and a number of other high-ranking

executives. He then appointed Stonecipher to "clean up" commercial airlines. The firings were the first significant management shakeup in Boeing's history. It seems, however, Condit may not have fired *anyone* if Stonecipher had not pressured him to do so (Proctor and Veloccci 1998, Newhouse 2007), and even then it took almost a year after the shutdown. The company experienced serious problems in the past, yet had not fired senior managers. As one executive explained, "...there was a sense of entitlement. That you worked at Boeing, you'll always have a job…" (personal interview).

Indeed, Boeing was known as a place where managers could make a career, methodically following those above them up the corporate ladder. Condit is the perfect example, starting as an aerospace engineer, becoming an engineering project manager and eventually working his way into senior management. This nepotistic environment resulted in a tight knit, socially insular management style. Decisions were made slowly and methodically, and rarely without approval from superiors. This tendency was magnified by an intense focus on quality control of machines that carried people over oceans and mountain ranges, but it eventually became ingrained in every part of the company's operations. In addition, the engineers' and machinists' unions, historically strong at Boeing, were powerful stakeholders who demanded a voice in significant operational decisions. As such, they slowed down any drastic change pushed by management until assured their interests were reasonably protected. Only a merger with a very different company, MDD, finally forced Boeing to reassess its tendency for incremental change even when radical change was crucial.

### 3.3: Mergers and Acquisitions

By 1996, Phil Condit had worked at Boeing for over 30 years, so he had experienced numerous boom and bust cycles common in the commercial aircraft business. He was determined to reduce the company's vulnerability to these violent swings by diversifying Boeing's product mix; commercial aircraft made up more than 75% of revenues in the early and mid 1990s (Boeing Annual Reports 1995-2006). Consequently, Boeing's executive management began to seriously consider

mergers and acquisitions to enhance the company's revenue streams with products such as satellite communication networks, aircraft financing, and aircraft services. Boeing purchased Rockwell North American Aircraft in 1996 and Hughes Space and Communications in 2000. Neither of these, however, was as significant as the MDD merger.

MDD made a good partner as its commercial aircraft division was moribund and its main profit center was military aircraft, which meant minimal overlap with Boeing. The Boeing name was retained for the combined company because of its stronger financial position, its reputation, and its continued lead in global aircraft deliveries. MDD's St. Louis, Missouri, headquarters became the home of the combined company's Military Aircraft and Missile Systems Group, but the corporate headquarters remained in Puget Sound. Officially, Boeing acquired MDD, but because of the influx of MDD executives and the degree of influence that MDD eventually wielded over the combined company, some industry pundits called it a "reverse takeover" and charged "McDonnell Douglas bought Boeing with Boeing's money" (Useem 2000).

While the deal reduced Boeing's focus and dependence on commercial airlines, it is most important to this story for a different reason—the corporate culture and leadership philosophy of MDD was profoundly different from that of Boeing's, not least in their more disciplined (although not always successful) financial management. There were stark differences in the way the two companies functioned. For most of its post World War II history, Boeing's mission was to develop the most advanced and highest quality commercial aircraft with the expectation they would sell because similarly well designed planes had sold in the past. The internal sentiment was, if the company focused on building the most reliable airplanes and providing the best service, profitability and the stock price would take care of itself (Harris 1999). In other words, this was a producer-driven culture, not a capital market or finance driven culture.

In contrast, MDD was a more conservative company than Boeing, taking fewer risks, and in its recent history focusing on maximizing shareholder value by efficiently managing its finances. They were not always successful, struggling to survive through the second half of the 1980s, but these struggles and numerous failed programs encouraged a more flexible and objective management style. Among characterizations of MDD executives I heard were "the voyeurs" implying they watched their company from a distance and were not afraid to wind down programs to create a lean and financially oriented company. This suggests MDD was not a group of engineers obsessed with their products, but instead, at least at the executive level, a group of financial technicians focused on maximizing shareholder value.

If anything demonstrates the influence of MDD on the new Boeing, it was the agreement in the merger negotiations to appoint Harry Stonecipher, previously the CEO of MDD, the president of the new Boeing. Stonecipher became the second in command at Boeing in 1997 and immediately began asking, eventually demanding, detailed financial data about every aspect of Boeing's business. To his chagrin, Stonecipher found financial data was difficult to access, and in many cases did not exist (Harris 1999, Useem 2000). Continuing to see meager profits in the commercial airline unit even with record production levels (Harris 1999), he convinced Condit to search outside the firm—a rare occurrence at Boeing—for a new CFO in late 1998. They chose Deborah Hopkins, a proven financier at Unisys and General Motors Europe.

Early in 1999 Condit formally introduced Hopkins on a quarterly conference call with Wall Street analysts as a "change agent" (Zuckerman 1999a). The CFO position at Boeing was historically focused on accounting and managing the books, but was not closely involved in operational decisions, and rarely acted as a conduit to the capital markets (Harris 1999). Hopkins, however, was a trained financial technician, and took as her first task re-educating Boeing management to measure which processes and products were creating value as opposed to 'selling

airplanes for fun' (Zuckerman 1999a, Useem 2000). She and her revamped finance team began collecting, calculating and delivering detailed accounting data to Boeing line managers as well as Wall Street analysts—something the company had rarely done. In the same conference call Condit said, "nothing escapes scrutiny here...there are no sacred cows," and later, "what you will see is a lot more aggressive attention to the numbers" (Zuckerman 1999b). One of the internal criticisms of Stonecipher and Hopkins, as well as Condit as he warmed to the finance perspective, was they seemed more interested in positive accounting projections and less concerned with what Boeing was selling. Hopkins said, "It's called discipline. That is what this is. This is very strong discipline" (Zuckerman 1999b). This was antithetical to Boeing veterans who grew up in a company fascinated, more than anything else, in building the highest quality and most technically advanced airplanes. On the other hand, it was exactly the sort of attitude Wall Street was looking for. A Merrill Lynch analyst said, "Is this something of a turning point? Yes. But it is going to take time" (Zuckerman 1999a). Another said, "It is amazing that we are at this point and they are only now figuring out how to drop the losers and keep the winners" (Zuckerman 1999b).

# 4.1: Flight from Puget Sound

Boeing senior management's decision to dislocate from Puget Sound can be explained from numerous perspectives, many of which are alluded to in this paper. I assert, however, that while various changes to Boeing's corporate structure and strategy contributed, ultimately it was the calculus of financialization that encapsulated all of these factors and justified the choice that previously seemed perverse. As the influence of finance reached a critical intensity within the senior ranks of Boeing, the powerful resistance to change embodied in the entrenched production culture resulted in the choice to dislocate from the place that reproduced that culture. In fact it is *because* 

Boeing's airline production was so socially and territorially embedded in Puget Sound that Boeing's executive management had to escape that environment.

# 4.2: Engineering resistance

Regardless of the global dispersion of Boeing's supply chain and technological changes in Boeing's aircraft production, the entire company, especially the headquarters, was continually influenced by its Puget Sound based corporate culture. From its inception, the skills and demands of aerospace engineering dictated Boeing's social and managerial architecture. For eight decades, almost every president of Boeing's Commercial Airlines, as well as Chief Executive Officer of the entire company, came from the ranks of the company's engineering corps. Indeed, most of the company's management was composed of professional engineers that "regard themselves more as members of a learned society than as mere employees of a corporation" (Imberman 2001: 40). Imberman equates this to the typical scenario of medical doctors managing a hospital or lawyers managing a law firm. In other words, Boeing's societal embeddedness, or *genetic code* (Hess 2004) was structured on the skill and profession of aerospace engineering.

I will describe two effects of Boeing's genetic code. First, the engineers' approach to managing a company is quite different from the formulaic, capital market focused approach of the voyeurs or financiers. Boeing's engineers, not least because flight has such potential to be dangerous, tended to be first and foremost concerned with safety and quality. This contributed to Boeing's solid reputation and for most of its history, success in the product market. While cost was a consideration for the company, the true conviction was airplanes were only worth building if they were unquestionably the best and safest in the sky. This "suspenders and belt engineering" buttressed Boeing's emphasis on customer service and created a strong brand in the market place (*Time*, 1980: 56). As early as 1980, however, there was an awareness of the drawbacks of this

approach, not least of which was a "...disadvantage in bidding on Government contracts, where low cost often wins out over high quality" (ibid.).

In the late 1990s when mergers, acquisitions, and financial pressures called for a reinvention of the company, many employees felt threatened. They believed the essence of the company, and therefore their own identity as part of that company, was under duress. One business writer's description of the culture and dedication to engineering and quality manufacturing seems particularly apt. "Boeing has always been less a business than an association of engineers devoted to building amazing flying machines. Sheer technical bravado—and at times an almost willful disregard for financial realities—have defined [Boeing]..." (Useem 2000). Not only, then, was Boeing's genetic code structured on quality production, but it also reproduced a tendency to shrug off the intense financial calculus that became increasingly popular and ultimately necessary in the 1980s and 1990s. Given that almost all of Boeing's management hatched from this culture, even when pressure to manage for value was exerted from the outside and ordered from the top, they were unable to defy their cultural genes and radically break with the past.

A second effect of Boeing's genetic code was its contribution to the hierarchical and bureaucratic organizational structure that made Boeing, outside the domain of aerospace engineering, slow to adapt. Like many large, mass-producing corporations in the 20th century, Boeing evolved as a top-down, enclosed structure where virtually all decisions were made at senior levels and filtered down to the design lab or factory floor. In addition, chain of command thinking permeated Boeing as a result of its historically close relationship with the Defense Department. Furthermore, Boeing's engineering environment demanded decisions based on precise data and scientific calculation resulting in a tendency to over-manage the initial decision-making process (Newhouse 2007). Since many of the managers were engineers themselves, this held true throughout the organizational structure. As a result, once decisions were made, they were rarely

questioned, for all those concerned drew from and contributed to a similar way of thinking. Not surprisingly, this made for a somewhat inflexible and relatively staid environment (Imberman 2001)—a telling difference from its major competitor, Airbus, which developed as an organization much later and was thus more familiar with flexible and lean production methods and less defined by aerospace engineering per se. Perhaps this explains why by the late 1990s, Airbus was approaching a 50% market share of global commercial aircraft deliveries (MacPherson and Pritchard 2003).

Phil Condit and some of his deputies, especially following the MDD merger, were aware of Boeing's weaknesses. *Territorially embedded* (Hess 2004) in Puget Sound, however, the proximity of the headquarters executives to the commercial airline management contributed to the reproduction of the engineering bias and the micro managing of operational decisions. Condit did not hide his disdain for the tendency within Boeing to filter decisions though the various social networks at headquarters. In his press conference announcing the move out of Seattle he said:

The fact is that if you're living with somebody, it changes the dynamics of the way the system works...If I'm down the hall, Jerry Daniels' feeling about what he's doing or what he's thinking about and how he's running his business is affected because he can wander down the hall and say, 'well, what do you think?' And I don't want him to do that, I want him to run his business. So it does affect the dynamics (Condit 2001).

This suggests Condit was interested in not only a physical separation, but also different decision making criteria based less on social consensus than financial data. Even when the executive strategy team decided that financialization was their priority, however, it was difficult to implement because there was resistance. The cultural dedication to building "amazing flying machines" (Useem 2000) contributed to this resistance for it was not simply that the executives were attempting to alter the process by which Boeing manufactured airplanes; they were attempting to splice the genetic code that produced and bound Boeing.

Even when Boeing implemented financial accounting methods and paid more attention to shareholder value in the late 1990s, there was a perception in the financial markets that, regardless of the degree to which Boeing diversified, it would inevitably be a "Seattle based commercial aircraft company." One executive explained it this way:

Another reason [for exiting Seattle] that I think existed was the Boeing stock prices tended to track, the patterns tended to track the airlines. So that if the airlines were doing well, then it looked like Boeing's stock would do well. If the airlines were going through difficult times, it would look like Boeing's stock would go down a bit. And I think one of the reasons for this is, historically, Boeing had been identified as a commercial aircraft business. And the fact that they then merged with McDonnell Douglas, and in point of fact, from there on, and this is just a rough number, saying roughly 50% of the business was government contracts, didn't seem to be appreciated by the street [the financial markets]. It still seemed to think of Boeing as a commercial aircraft business rather than an aerospace company. And I think there was a perception that as long as the headquarters remained in Seattle, and Seattle was indeed the headquarters of commercial airplanes, that people would continue to think of Boeing as a commercial airplane company rather than an aerospace company (personal interview).

Thus, the move was intended to radically renew Boeing and underscore that it was not simply a Seattle commercial airline company, but as Boeing's Chief Administrative Officer, said, "in fact...a much larger entity," with financial discipline, a diverse product set, cutting edge production methods and a global reach (*Harvard Business Review* 2001: 22).

In other words, Phil Condit and Harry Stonecipher believed by moving they would begin rewriting Boeing's genetic code, starting a process that the remaining Puget Sound executives could complete. Insofar that Condit and Stonecipher wanted commercial airlines to become more accountable, they also believed only the managers of that particular unit could accomplish this task. With more social distance between headquarters and Puget Sound, the new Chicago executives would exert a different form of pressure, composed of fewer words and more financial consequences. If the commercial airplanes unit failed to independently adapt to changing economic

conditions, headquarters would starve them of resources. Indeed, this is exactly the prescription market analysts and financially focused management consultants typically offer (Froud et al. 2000).

### 4.3: Networking Chicago

Boeing's decision to relocate to Chicago, IL was made seven weeks after they announced the decision to leave Puget Sound. In the interim the company conducted an intense project to compare Chicago, Dallas, TX and Denver, CO. Each city offered millions of dollars in incentives such as tax breaks or new construction grants, and while Boeing did seriously consider these offers, the monetary incentives did not compare in importance to some of the company's other selection criteria. I will briefly outline three key reasons for the Chicago decision, the first of which is the most tangibly geographic and least unique to Chicago compared to the other two cities. Being nearer to both New York and Washington, D.C. became important to Boeing's in the 1990s as finance and international politics became vital to their success. They ruled out the East Coast as a home, however, because they also wanted to remain relatively close to Puget Sound, St. Louis, and Los Angeles where their three main business units were located. Consequently Boeing's ambulatory executives wanted a home in the geographic middle of the U.S. in a city with a well-connected international airport.

Second, during their search Boeing's executives became acutely aware of the tight-knit community of elite business executives and other organizational leaders in Chicago. While almost none of these leaders were involved with the aerospace industry, they proved to be exactly the sort of people Phil Condit and his cohort were interested in mingling with. As Boeing became more an international systems integrator than a manufacturer or assembler of airplanes (MacPherson and Pritchard 2003) their executives incrementally shifted focus toward the coordination of an intricate network of business partners and domestic and foreign government agencies. Locating in Chicago gave Boeing executives the opportunity to re-embed in a network of businesspeople that were

focused on just that—business. Instead of working down the hall from the head of commercial airlines, Condit saw a move to Chicago as a chance to work down the street from the CEO of the Chicago Mercantile Exchange or to regularly discuss financial strategy with members of the exclusive Chicago Commercial Club. Boeing saw in Chicago the opportunity to reconstitute their headquarters in a new urban milieu, one characterized by *network embeddedness* (Hess 2004), or in other words, focused on the *process* of constructing, dissolving and reconstructing the company's internal and external relationships. This contrasts with the insularity of Puget Sound, where regardless of the evolution of the broader regional economy, the executives were bound to the history of and constant pressure to reproduce the place-based Boeing corporate culture.

The third and related way Chicago matched Boeing's profile was the degree of global and financial connectedness in the city. While the transactions of the Chicago Mercantile Exchange, the Chicago Board of Trade and the Chicago Board Options Exchange were not directly related to Boeing's financial strategy, their presence was a concrete example of the city's attachment to global financial networks. Moreover, Chicago's banking and finance sectors internationalized drastically in the past 15 years, and there has also been significant growth in advanced producer and corporate services in Chicago, both of which facilitate globally networked cities (see Beaverstock and Taylor 1999, Taylor 2001). These services, especially management consultants, also are one of the key tools that corporations use to restructure towards financialization—the fundamental goal for Boeing. As an economic development consultant in Chicago said:

We spent a lot of time, for example, documenting Chicago's depth in some of the key businesses that they [Boeing] had already diversified into or might want to diversify into. Financial services, transportation, equipment leasing, and so on. And showed them that coming here they would be able to move into an environment where there was a lot of mature talent in those fields, opportunities to team with other firms, opportunities to purchase other firms, what have you. And I think made a pretty good business case for that. And I think the flip side of that was, we were saying to Boeing, 'If you purely want to be an airplane company, you should probably just go to Texas. It has great weather, and it has a mature

aerospace industry. But if you want to become an international, diverse, company capable of attacking the best, young talent, then we can give you an urban economic environment that will let you do that (personal interview)

Whether it was data or rhetoric or both that were persuasive, Boeing's executives were convinced Chicago would best facilitate their increasingly global ambitions.

# 5.1: Conclusions

Discerning the potentially transformative power of a new firm-territory nexus in Chicago's Loop convinced Boeing's executives to make that city their new home. But the realization that Chicago might facilitate their metamorphosis only happened *after* they decided to dislocate from Puget Sound. The decision to dislocate without knowing where they would relocate demonstrates their belief that regardless of the destination they would gain increased capacity to re-focus their company on financial priorities at a distance from their manufacturing base. In that decision Boeing's executives enacted the societal and territorial disembedding influence of financialization, underlining the necessity of understanding financialization and disembedding as dimensions of a whole (see Pike 2006), rather than distinct processes.

This highlights another chief argument of this paper; corporate geography, despite being pronounced dead twenty years ago (Walker 1989), is an extremely useful tool for grappling with the inner-workings of financial capitalism. In taking serious the way firms constitute, and are constituted by, financial logics *and* socio-spatial relations, we find a valuable framework for the analysis of financialization. Far from treating financialization as an inevitable naturally expanding influence of market forces, for example, corporate geography lends us tools to investigate how places are fundamental constituents of the necessary conditions and contingent processes that comprise corporate financialization.

Finally, as the case of Boeing's dislocation demonstrates, qualitative studies of particular firms in particular places provide rich empirical data and concrete examples that have great purchase in explaining elusive concepts such as financialization. Often it seems the world of giant corporations, Wall Street investment banks and corporate financial calculus has acquired an air of mysticism that produces angst in potential researchers. If, however, we continue to pay close attention to particular manifestations of finance, especially how particular corporate geographies of finance are made and remade by actors, we will find the subject more amenable to further research.

# **References:**

Beaverstock, J.V. and Taylor, P.J. (1999) "A roster of world cities", Cities, vol. 16, no. 6, ppg. 445-458

Clark, G. (2000) Pension Fund Capitalism, Oxford University Press, Oxford and New York

Condit, P. (2001) Press conference, Washington D.C. 21 March, 2001, [audio file] available at: <a href="http://www.boeing.com/news/releases/2001/q1/news-release-010321b.html">http://www.boeing.com/news/releases/2001/q1/news-release-010321b.html</a>

Crotty, J. (2005) "The Neoliberal Paradox: The Impact of Destructive Product Market Competition and 'Modern' Financial Markets on Nonfinancial Corporation Performance in the Neoliberal Era", included in Epstein, G. (eds.), Financialization and the World Economy, Edward Elgar, Cheltenham, UK

Davis, G.F., Diekmann, K. and Tinsley, C. (1994) "The decline and fall of the conglomerate firm in the 1980s: The deindustrialization of an organizational form", American Sociological Review, vol. 59, ppg. 547-570

Dicken, P. (2000) "Places and Flows: Situating international investment" included in *The Oxford Handbook of Economic Geography*, Clark, G., Feldman, M. and Gertler, M. eds. Oxford University Press, Oxford

Dicken, P. (2003) "Placing' Firms: Grounding the debate on the 'Global' Corporation", included in Peck, J. and Wai-chung Yeung, H. eds., Remaking the Global Economy, Sage Publications, London Dicken, P. and Thrift, N. (1992) "The organization of production and the production of organization: why business enterprises matter in the study of geographical industrialization", Transactions of the Institute of British Geographers, Vol. 17, Iss. 3

Dicken, P. and Malmberg, A. (2001) "Firms in territories: A relational perspective", *Economic Geography*, Vol. 77, Iss. 4

Fligstein, N. (1990) The Transformation of Corporate Control, Harvard University Press, Cambridge, MA

French, S., Leyshon, A., Wainwright, T. forthcoming, "Financializing Space, Spacing Financialization", *Progress in Human Geography* 

Froud, J., Haslam, C., Johal, S. and Williams, K.(2000) "Shareholder value and Financialization: consultancy promises, management moves", *Economy and Society*, vol. 29, iss. 1, ppg. 80-110

Froud, J., Johal, S., Leaver, A. and Williams, K. (2006) Financialization and Strategy: Narrative and numbers, Routledge, New York

Harris, R. (1999) "Fearless in Seattle: Can an outspoken female CFO with no aerospace background put Boeing back on course?", CFO Magazine, April 1, 1999

Harvard Business Review (2001) "Inside Boeing's Big Move", Harvard Business Review, October, vol. 79, iss. 9, ppg. 22-3

Hess, M. (2004) "Spatial' relationships? Towards a reconceptualization of embeddedness", *Progress in Human Geography*, vol. 28, iss. 2, ppg. 165-186

Holmes S. and France, M. (2002) "Boeing's secret", Business Week, 5-20-2002, pg. 110

Imberman, W. (2001) "Why Engineers Strike—The Boeing Story", *Business Horizons*, Nov-Dec. 2001, pgg. 35-44

Krippner, G. (2005) "The financialization of the American economy", *Socio-Economic Review*, vol. 3, iss. 2, ppg 173-208

Lawrence, P. and Thornton, D. (2005) *Deep Stall: The Turbulent story of Boeing Commercial Airplanes*, Ashgate Publishing, Burlington, VT, USA

Lemke, T. (2001) "The birth of bio-politics': Michel Foucault's lecture at the College de France on neo-liberal governmentality", *Economy and Society*, vol. 30, iss. 2, ppg. 190-207

Leyshon, A. and Thrift, N. (2007) "The Capitalization of Almost Everything: The Future of Finance and Capitalism", *Theory, Culture & Society*, vol. 24, iss. 7-8, ppg. 97-115

MacPherson, A. and Pritchard, D. (2003) "The international decentralization of the US commercial aircraft production: implications for US employment and trade", *Futures*, vol. 35, ppg. 221-238

Markusen, A. and Yudken, J. (1992) "The Birthing of Aerospace", *Technology Review*, vol. 95, iss. 3, ppg. 28-29

Markusen, A., Hall, P., Campbell, S. and Deitrick, S. (1991) The Rise of the Gunbelt: The military remapping of industrial America, Oxford University Press, New York

Milberg, W., (2008) "Shifting sources and uses of profits: sustaining US financialization with global value chains", Economy and Society, vol. 37, iss. 3, ppg. 420-451

Morrill R. and Sommers, P. (2005) "Seattle as a Digital City: Unexpected or Inevitable?", Canadian Journal of Regional Science, 6-22-05, ppg. 349-368

Muellerleile, C. (2007) "Dislocating Boeing: A story of embeddedness and corporate culture of the world's iconic manufacturer of "amazing flying machines"", unpublished M.S. thesis at the University of Wisconsin-Madison, available from author

Newhouse, J. (2007) Boeing Versus Airbus: The Inside Story of the Greatest International Competition in Business, Knopf, New York

O'Neill, P. (2001) "Financial narratives of the modern corporation", *Journal of Economic Geography*, vol. 1, iss. 2, ppg. 181-199

Pike, A. (2006) "Shareholder value' versus the regions: the closure of the Vaux Brewery in Sunderland", *Journal of Economic Geography*, vol. 6, ppg. 201-222

Proctor, P. and Velocci, A. (1998) "Woodard Ousted in Boeing Shake-Up", Aviation Week and Space Technology, vol. 149, no. 10, pg. 82

Rappaport, A. (1998) Creating Shareholder Value: A Guide for Managers and Investors, 2<sup>nd</sup> edition, The Free Press, New York

Rodgers, E. (1996) "Flying High: The story of Boeing and the Rise of the Jetliner Industry", Atlantic Monthly Press, New York

Sassen, S. (2005) "The Embeddedness of Electronic Markets: The Case of Global Capital Markets", included in Knorr Cetina, K. and Preda, A. (eds.), *The Sociology of Financial Markets*, Oxford University Press, Oxford and New York

Schoenberger, E. (1997) The Cultural Crisis of the Firm, Blackwell, Cambridge, Massachusetts

Sell, T.M. (2001) Wings of Power: Boeing and the Politics of Growth in the Northwest. University of Washington Press, Seattle

Song, K.M. and Dunphy, S.H. (2001) "Boeing bolts: Headquarters move shocks the region; manufacturing jobs will remain here, company seeks image as global aerospace leader", *Seattle Times*, 22 March, A1

Taylor, M. and Asheim, B. (2001) "The Concept of the Firm in Economic Geography", *Economic Geography*, vol. 77, iss. 4

Taylor, P. (2001) "Urban Hinterworlds: geographies of corporate service provision under conditions of contemporary globalization", *Geography*, vol. 86, iss. 1, ppg. 51-60

Thrift, N. and Olds, K. (1996) "Refiguring the economic in economic geography", *Progress in Human Geography*, vol. 20, iss. 3, ppg.311-337

Time (1980) "Masters of the Air: Boeing captures the cruise missile contract and dominates world aviation" Time, 7 April, pg. 52-58

Useem, J. (2000) "Boeing VS. Boeing" Fortune, 10-2-2000 Vol. 142, Iss. 7

Useem, M. (1996) Investor Capitalism: How Money Managers Are Changing the Face of Corporate America, Basic Books, New York

Walker, R. (1989) "A Requiem for Corporate Geography: New directions in industrial organization, the production of place and the uneven development", *Geografiska Annaler Series B-Human Geography*, vol. 71, iss. 1

Williams, K. (2000) "From shareholder value to present-day capitalism", *Economy and Society*, vol. 29, iss. 1, ppg. 1-12

Yeung, HWC. (1998) "Capital, State and Space: Contesting the Borderless World", *Transactions of the Institute of British Geographers*, vol. 23, iss. 3, ppg. 291-309

Yeung, HWC. (2001) "Regulating 'the firm' and sociocultural practices in industrial geography II", *Progress in Human Geography*, vol. 25, iss. 2

Zorn, D.M. (2004) "Here a Chief, There a Chief: The Rise of the CFO in the American Firm", *American Sociological Review*, vol. 69, ppg. 345-364

Zorn, D., Dobbin, F., Dierkes, J. and Kwok, M. (2005) "Managing Investors: How Financial Markets Reshaped the American Firm," included *The Sociology of Financial Markets*, Cetina, K. and Preda, A. eds., Oxford University Press, Oxford and New York

Zuckerman, L. (1999a), "Boeing beats estimates and renews promises", New York Times, 27 January

Zuckerman, L. (1999b), "Boeing weighs tough steps to increase profits", New York Times, 25 February