Silicon Alley

The Rise and Fall of a New Media District

Michael Indergaard

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FOR JOHN AND FUMIKO

who endured—and helped me
endure—the creative storm

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PREFACE

I was in the right place at the right“moment in time,” as the new media people referred to the early Internet days. I had just arrived in New York City in 1994 and was wondering what kind of research I could do here that might fit with what I had done in the industrial Midwest. The key problems for cities there involved the decline of their manufacturing base and the rise of a postindustrial economy that seemed to promote more inequality and less security. In fact, the emergence of the new media in old industrial neighborhoods in cities such as Boston, San Francisco, and New York signalled that an important new chapter had begun in the troubled postindustrial transition of American cities. It initially appeared that the creative folks who inhabit our cities were developing commercial applications out of a potent mix of technology and culture—and that they were creating some kind of place-based form of industrial organization. This was welcome news not only for cities but also for the U.S. economy, which had stalled in the early 1990s. Like most everybody who witnessed it, I was startled when Lower Manhattan’s technobomenians seemingly sprang out of nowhere in late 1995. The early accounts in local newspapers and magazines had an almost ethnographic flavor, as if the reporters were anthropologists who had uncovered the strange beliefs and rituals of a previously unknown people. The“new media,” as it was called, intrigued me for two reasons. First, at the time in which it seemed that the media giants were extending their reach across just about everything, here was a feisty band of independents who were agressively anticorporate and committed to developing some sort of alternative media—a space for cultural production that would be free of hierarchical control. Second, the organization of the new media called to mind the“industrial district” model of industrial organization in that it featured networks of small, specialized firms concentrated in an enclave. In the late 1980s I, like many researchers (e.g., Charles Sabel, Allen Scott), had been drawn to the industrial district as an alternative model to mass production. Industrial districts seemed to be well suited to a new fragmentation of mass markets into a proliferation of niche markets—as evidenced by the flourishing regional economies in parts of Europe and Japan. The districts seemed a promising model for securing and perhaps even revitalizing cities that had been hardhit by industrial change. They were also appealing because they promoted a more open and democratic industrial politics. Thus, the first"story" I pursued about the new media was the formation of what seemed to be a new sort of industrial district—one that combined digital technology with the creativity of cultural producers. This new melding of technology and cultural production was reflected in the audacious name that was given to the district—"Silicon Alley"

By 1998 the story had changed. Large amounts of venture capital were flooding into Silicon Alley, and increasing numbers of its firms were becoming hits in the stock market due to their big initial public offerings (IPOs) of stock. The new media was being subsumed within a very different kind of development —one that was more financial in nature than creative. Most observers either focused on the irrational nature of Internet speculation or embraced the"New Economy" thesis about the wonders of unfettered technology and markets. To me, the core issue was the institutional forces involved: neoliberal policies that made the flood of cheap capital possible and made financial devices more accessible to entrepreneurs, the long-term financialization of the U.S. economy, the spread of new business doctrines about a New Economy, and, more specifically, the efforts to spread the institution of venture financing to emerging sites of new media production such as New York. Especially striking was the way in which New Economy entrepreneurs used images of new media creativity to alter the image of depressed real estate in Manhattan—and to help propel start-ups through the venture financing system and toward the stock market. Such developments resonated with another scholarly focus on cities: their symbolic economies. Of particular relevance was Sharon Zukin's pioneering work—especially her insights on the interaction between material and cultural forms of power. In order to deal with the prominent role of imagineering and speculation in the development of Silicon Alley—and in its impact on the city—I added Zukin's notions about"circuits" of capital and culture to my vocabulary. Then I sought a good vantage point from which to watch the inevitable train wreck that would follow the stock boom.

When the stock market crash came, its dire effects on Silicon Alley took some time to unfold, but ultimately were much worse than I had expected. In no small part, this was because New York's new media became swept up in yet another story—the World Trade Center attacks that helped usher Silicon Alley (as we knew it) to the dustbin of history and left behind a traumatized city. It might appear that New York was back at square one in its postindustrial travails. However, it seems important to make something of the Silicon Alley experience —to recombine the valuable resources that were created and to think through what might be a more desirable frame-work to use in that endeavor. In fact, strong echoes of the Silicon Alley experience can now be heard, as a broad range of actors look toward New York's creative economy to serve as an engine to pull it out of its latest crisis. Many of the elements of the new space of cultural production that the new media created in the 1990s—and some of the institutional actors that rose to prominence—are likely to come together in some new combination during the rebuilding of Lower Manhattan—perhaps under the rallying cry of building"the First City of the 21st Century."

I propose that the reconstruction should include an effort to create a foundation for a new kind of industrial district—one that supports an illdefined industry cluster populated by shape-shifting creative types who thrive on account of their ability to cross boundaries. I suggest that what is needed is a new kind of framework for bringing things together—a matter in which government policy matters a great deal. Problems that Silicon Alley had in developing sustainable applications of digital technology during the 1990s revealed problems in the framework that underlay the New Economy: neoliberal policies that selectively withdrew government so as to open up various markets (and subordinate everyone else) to the most powerful entrepreneurs—particularly from finance and real estate. A more desirable alternative, in my view, is a framework where government promotes a more open and more local industrial politics, in part, by opening itself up to requests for support that are developed collectively by assorted district participants and stakeholders.

My acknowledgments should begin with the people who kindly agreed to talk to me. They represented the following organizations: Abstract Edge, Agency.com, Cybergrrl Inc., Electronic Sales Systems, Ericsson Cyberlab, Flatiron Partners, Hudson Williams, New Media, the New York New Media Association, New York University Taub Urban Research Center, Open World Interactive, Pixelpark, Polytechnic University, Pseudo, RareMedium, Razor-fish, Razorfish Studios, Silicon Alley Reporter, 360hiphop.com, and Word. Since I wish to preserve their anonymity I cannot thank them individually. I would like to give special thanks to some individuals who helped me make arrangements for interviews, namely Jerry Colonna, Sherry Reisner, and S.Ron Butler. One of the people who gave me the most support in my research was Andy Pratt of the London School of Economics. Andy became an extraordinary friend, mentor, and role model. Our relationship began when he good-naturedly let me (then a total stranger) come along to do interviews with him in the summer of 1998. That it was one of the most intellectually stimulating adventures I ever had was due, in large part, to Andy. I would also like to note the special contribution of Bob Tillman, a colleague from St. John's University. Our conversations helped me develop my thinking on the IPO system and various other suspect aspects of the New Economy. Other people with whom I discussed Silicon Alley included Susan Christopherson, John Eade, Kuniko Fujita, Shinji Hara, Wolf Heydebrand, Richard Child Hill, Richard Lloyd, Paul-Brian Mclnerney, Chris Mele, Kenkichi Nagao, Ake Sandberg, and Allen J.Scott. My final acknowledgments on the academic side are to those who helped me write a"cross-over" book that would appeal to the general public as well as to academics. First, there are the two people who strongly encouraged me to undertake a book project—Sharon Zukin and David McBride. Besides offering critical intellectual inspiration, Sharon patiently pushed me to commit myself to writing a book that would have a broader appeal—a contribution to a"public" sociology—and helped me pull my ideas together. David McBride, my editor at Routledge, played the lead role in helping me develop the right voice for this project. I think back to my first attempt at writing a prospectus (the words marched woodenly across the page like toy soldiers). While I was deflated when David indicated this to me, he rehabilitated me by announcing cheerfully that the book had great potential and he advised usefully that I try to write a bit more metaphorically. I take full responsibility for the excesses that resulted. Both Sharon and David were amazingly restrained in letting me find my own way. Finally, two nonacademics provided important assistance in helping me find the right voice. There was Lenny Galper who read my first chapter and gave me an enthusiastic thumbs up. And there was Deanna Marx—my mother. At a critical juncture I asked her what it was that people most wanted to know about the dot-com episode. After our talk I wrote chapter 3 and never looked back.

The rest of my family gave other vital support, without which I could not have finished this work. Along with my mother, my stepfather Charles provided love and comfort when I came home for several“working vacations.” And my sister Jill White and her husband Steve kindly allowed me to turn their magnificent house into my work studio. In fact, I wrote the core of the book at“the White house.” Finally, the ones who deserve the most credit are my wife Fumiko and my son John. They had the love and patience to weather my all-too-frequent bouts of craziness, especially during my frenzied two-month effort to finish.

This book incorporates some of my work that was previously published: an article in *Research in Urban Sociology, Vol 6* (2001), pp. 107–46; an article in *Urban Studies,* 40 (2003): 379–401; and a chapter I wrote for *Understanding the City: Contemporary and Future Perspectives,* edited by John Eade and Chris Mele (London: Blackwell, 2002), pp. 339–62. Sections of chapter 2 draw heavily on these works while chapters 1 and 3 include a limited amount of material from these sources. I would also like to acknowledge those who granted me permission to use their copyrighted illustrations: Agency.com (Urban Desires), the Association for Downtown New York (The Plug‘N' Go program, 1998) Bernd Auers and Bryce Lankard. Finally, St. John’s University provided substantial financial support at various stages of my project in the form of a summer research grant and a research leave.

CHAPTER 1
THE NEW MEDIA PEOPLE
Who Were They and Why Did They Believe?

In the early days of the World Wide Web few could match the cool graphics of Jaime Levy, self-professed"East Village chick" and"early true believer" in the power of the net. She also hosted some of the hippest"cyberslacker" parties on the Lower Manhattan circuit. While a DJ spun records web pioneers showed off their latest HTML tricks or performed skateboarding stunts in her roomy East Village loft. Most were liberal arts types rather than programmers—principled slackers, arty punk rockers, and deconstructionists from"good" families (several were grads of Brown's Modern Culture and Media department). Some turned their web pursuits into business ventures. Early Internet start-ups were cool because, like punk bands, they were garage projects. The last cyberslacker affair, held near the end of 1996, was marked by a musical farewell to the garage tradition by Nicholas Butterworth, founder of a promising start-up, SonicNet. Formerly, a bassist in a punk band, he screamed out a fifteen-minute rant via a live mike:

> It's the death of the Web as we knew it. It's over! And wasn't it good while it lasted? Who was there, who was there in 1995? Reaping it in—the money, the fame, the parties, all of it flowing in. They came to you—marketing directors, the executive vice-presidents, the general managers, they came to you and said"We don't know what the fuck we're doing." It was beautiful! Everyone here, all my friends, doing creative things with a capital C…the dream was to be a media assassin, to be a guerrilla—and to be paid. Well let me tell you something: Now you have a choice. You can be a guerrilla, or you can get paid. You cannot do both.[1]

Butterworth found his paycheck (and became a corporate VP) when Sonic-Net was acquired by MTV's parent, Viacom, and transformed into MTV's online unit (MTVi). Other members of Levy's clique have made their mark in disparate ways. Stefanie Syman and Steve Johnson founded *Feed,* a critically acclaimed"webzine" that never made it commercially. Rufus Griscom and Genvieve Field started up Nerve, a webzine whose commercial success shows that"literate smut" pays. Douglas Rushkoff, a professor of communications at NYU and an up-and-coming media critic, has authored books such as *Cyberia* and hosted a PBS documentary,"The Merchants of Cool," on the commercialization of youth culture (by companies such as MTV). Jason McCabe Calacanis created a popular trade magazine for New York's new media industry —the *Silicon Alley Reporter*. Josh Harris, another impressario on the party circuit, turned his cybergathering into an Internet TV studio— Pseudo.com—and announced on *Sixty Minutes II* that his goal was to put companies like CBS out of business. But taking on media giants hardly meant that the party was over. On six occasions Pseudo was raided by the NYPD and given citations for running an"illegal nightclub." Razorfish, a webshop started by Craig Kanarick and Jeff Dachis in 1995, competed with Pseudo to put on the most outrageous spectacles on the party circuit. At the end of 1999 it was a public company worth $1.8 billion and employed two thousand in a dozen offices worldwide. Jamie Levy, who turned down a chance to own one-third of Razorfish in 1995, started Electronic Hollywood, a modest venture that created an award-winning animation short (about an East Village slacker). But like many webshops, Electronic Hollywood"paid the rent" through designing ads, cartoons, and online games for corporate clients such as Tommy Hilfiger and MTV's new unit—SonicNet.

Something strange happened in New York City as the twentieth century drew to a close. Technology became hip. Stranger yet, the city that was the capital of the"old economy," became a"new economy" hot spot of sorts—a playground for wired entrepreneurs and venture capitalists. The shift in hip sensibilities began in a familiar place, the bohemian environs of Lower Manhattan, but the new trend-setters were"*techno*bohemians." These creative types, who had begun experimenting with the Internet in the early 1990s, claimed that the web offered new possibilities for creative expression: anybody could be a publisher and there would be no need to compromise to please corporations. The media would be born anew.

Their visions of how the Internet would change the world inspired new ways of thinking about culture and media. However, in the thoroughly neoliberal 1990s the ability to meld art and technology in the creative process depended on being able to create products and markets—and charm investors.[2] Despite the rebel rhectoric, it was the corporate establishment, including the media giants and the masters of the financial universe, that stoked the fires lit by the technobohemians. Identities and strategies fluctuated in the white heat fueled by easy money and high-octane hype. The technobohemians were among the first to change. By the end of the decade, many had become full-time entrepreneurs seeking methods to make the new media pay its way. And the vision of new kinds of cultural production had become a vision of new consumer"choices"Moreover, assorted business allies also reinvented themselves, hoping to use the Internet to change the world—or at least a profitable chunk of it: corporations eager to go online, Wall Street expatriates turned venture capitalists, developers of wired real estate, newly minted MBAs and veteran execs itching to try out"new" economy entrepreneurship, and a legion of would-be players hoping to position themselves in the"deal flow."

Set in motion by a creative impulse and then propelled by financial forces, this wired carnival wound its way back and forth along Broadway for five years—from SoHo's wild parties to the stock market orgies of Wall Street and finally to the corporate spectacle that is Times Square. The corridor became a space where the rules were suspended while participants, intoxicated with the possibilities of a new media, tried on new identities and roles. This carnival took over the wired lofts and office buildings of artists, entrepreneurs, and executives who explored boundaries between the real and virtual worlds, as well as between culture, technology, and business. As they struggled to establish a new media industry—or exploit its image—assorted interests forged new circuits of culture and capital. In the process they created a place named *Silicon Alley* and formed a particular conception of Internet business opportunity. In order to answer the questions,"Who were these people?" and"Why did they believe?," we need to place them in a distinctive urban milieu that formed in the 1990s.

A PLACE

The Silicon Alley moniker identified both a place in New York City and a concept about the Internet industry. The terms"place" and"industry" usually imply a durability or continuity in sociocultural arrangements. But in Silicon Alley's brief but dynamic history, place and industry were works in progress. Telling the story of Silicon Alley requires an account of both place-making and industry-building—and nearly as many frames of reference as a postmodern novel. For starters, Silicon Alley's development was boosted by larger economic and political conditions that prevailed in the latter half of the 1990s—the heyday of neoliberal policy. Yet, its development drew on, and reassembled in unique fashion, distinctive elements of Lower Manhattan's physical and sociocultural environment. Moreover, bouts of place-making and industry-building that produced Silicon Alley were anchored in New York's uneasy postindustrial transformation. The aim of this book is to show how these forces came together to create this new space of cultural production.

Originally, the geography of Silicon Alley was rather well defined, the name designating a corridor in Lower Manhattan that followed Broadway south from the Flatiron District through Greenwich Village and SoHo. But over time the enclave's boundaries became ambiguous. Major offshoots sprang up in the Financial District and elsewhere in Manhattan; the city government tried to encourage the formation of new satellites in the other boroughs. And, at the high point, there were nearly as many new media firms and workers in the rest of the metropolitan region as there were in the city. However, there was something about the way that the dense mass in Manhattan marshaled energy that made it the clear center.

The district incorporated many elements of a setting that had long supported the making and mixing of creative culture and commercial enterprise. Segments of Manhattan's best-known cultural and commercial thoroughfares (Broadway and Fifth Avenue) ran through its midst, featuring landmarks such as the Flatiron Building (an elegantly strange, antique skyscraper) and New York University (a major research university that is wide open to its funky surroundings). A tangle of idiosyncratic side streets is endowed with thousands of small specialty shops and creative enterprises—many of them housed in old factory lofts (some with the cast-iron fronts revered as emblems of authenticity by yuppies). The warren of lofts, coffee shops, and restaurants allows the kinds of social encounters, both intended and accidental, that nurture creative subcultures. Of course, this terrain could not serve such a purpose if not for the presence of the various kinds of people that contribute to the cultural creativity and diversity of Lower Manhattan: college students, new immigrants,"old" minorities, gays, yuppie gentrifiers, and assorted creative types ranging from established professionals to burnouts and dropouts, with an army of struggling artists somewhere in between.

Much of this environment was incorporated by the new media with spectacular speed. Digital age imagery and infrastructure (e.g., high-speed Internet lines) seemed to bring a new liquidity to place. In part, the built environment was transformed as it was reimagined and reinterpreted. Two notable examples can be found on opposite ends of the enclave. The Flat-iron Building, formerly a testament to the pioneering age of skyscrapers, was recoded as Silicon Alley's preeminent landmark—its gateway for those approaching from Midtown to the north. The new media's Downtown anchor was a modern office building that formerly housed Drexel, Burnham, and Lambert—the notorious junk bond firm that was an icon of fast capitalism in the 1980s. In 1996, the building was transformed into the New York Information Technology Center—a new media hub and instant landmark signalling that Silicon Alley had reached the Financial District. The physical task of turning large swathes of Lower Manhattan into new media production spaces seemed to be accomplished with similar ease, requiring only the stringing of a bit of wire through buildings—not the large-scale demolition and construction projects that accompanied commercial redevelopment in the past. In reality, powerful social forces underlay this transformation. The rise of the new district was abetted by a larger postindustrial transformation that had left the area's physical and human assets unattached or underutilized as of the early 1990s. More directly, networks of organized interests, singularly and in combination, mustered a new array of power relations that helped Silicon Alley materialize.

In part, Silicon Alley was the latest round in the long struggle to reinvent New York as a postindustrial city—a process that elite property interests began to promote while factories still dominated Lower Manhattan. In fact, the large-scale deindustrialization of Lower Manhattan over the last four decades was not only the result of changes within industrial sectors, but also the product of commercial redevelopment (and related rises in real estate prices) that dislodged manufacturers.[3] Consequently, New York, like many cities, has become increasingly dependent on cultural industries and producer services that produce or manipulate symbols. In New York, the traditional media industries (publishing, advertising, broadcasting, motion pictures) accounted for over 137, 000 jobs in 1997; business services and securities employed 245,000 and 150, 000 workers, respectively.[4] The most important of the producer services is the financial sector, although the real estate industry has a special role in mediating ties between postindustrial sectors and the city. Real estate interests, in alliance with public sector allies, have often tried to repackage and remake Manhattan real estate as a site for high value uses. This has sometimes given rise to grand designs and massive public support for big complexes that help lock-in the city's dependence on the office market. The contested construction of the World Trade Center, which swept away a district of small firms and ethnic neighorhoods, was the preeminent example. More often, ad hoc collaborations have pushed redevelopment through. These endeavors often involve public-private partnerships—institutionalized as the template for development during the crises of the mid-1970s. At a time when the city was in the process of losing 600,000 jobs and in danger of defaulting on its bonds, political and business elites agreed that"the city's survival depended on a shared mission."[5] The new media's rise provided yet another opportunity for making over Lower Manhattan.

However, increasing dependence on the media, advertising, financial, and real estate sectors has made the city more vulnerable to business cycles, accentuated by the boom-bust rhythms of speculation; during downturns the city is burdened with surplus office space, especially in the Financial District. This was the case in the early 1990s when Lower Manhattan was pitted with empty space; in addition to factory lofts abandoned by a shrinking garment industry, the deserted space included downtown office buildings vacated by Wall Street firms in the wake of the 1987 crash and the subsequent recession.[6] Importantly, the rhythms of postindustrial expansion and retraction have become linked to the formation of creative communities. For some time, abandoned factory lofts had appealed to artists because they provided large, affordable spaces to work (and live). In fact, the colonization of lofts by artists that began in the 1960s and 1970s led landlords to boost rents, which further contributed to the displacement of manufacturers.[7] This pattern, in part, figured in the rise of the new media enclave. Yet, hundreds of new media firms also ended up in Wall Street office buildings—far outside the traditional terrain of artistic types. To understand this curiosity, and the formation of this new cultural production space more generally, one has to examine how social relationships formed to support the new media—a story that begins with the technobohemian social circuit.

As artists began to experiment with CD-ROMs in the late 1980s and with website design in the early 1990s, a distinctive subculture began to form. Their ranks included college-age young people who felt that opportunities for their generation were limited or mundane (hence, the birth of the cyberslacker). In contrast to the common view that digital technology reduces the need for people to meet face-to-face, many web pioneers sought out such opportunities. The cyberslacker party circuit that convened in the lofts of web notables was one important example. Such gatherings were important both for learning about the latest technical developments in web graphics and for reaffirming the sense that what they were pioneering was of special importance. They also provided spaces for the creation of a special set of sensibilities and ideals.

Initially, the web pioneers were driven by an artistic ethic: Use new digital tools to produce work that was"cool," that is, work that creatively explored the limits of the medium. But, they soon sought ties with business interests so as to be able to sustain their creative work materially, especially as the computer infrastructure and tools for doing the"coolest" things became more expensive. And in truth, for those who hoped to become known for their creative prowess, it became increasingly clear during the 1990s that fame awaited those who used technology to make money. Many approached corporations with evangelical zeal, spreading the word that a new media age was at hand. At any rate, the web pioneers gained powerful allies who not only helped"wire" the spaces of Lower Manhattan, but also made them accessible to creative types of modest means.

Two sets of organized interests played roles in helping a new media community materialize in Lower Manhattan. The first could be termed"new media industry-builders." Their ranks included a handful of venture capitalists initially, and then a number of major corporations whom they drew into the new media adventure. These early industry-builders focused on creating spaces—social as well as physical—wherein connections could be woven between the web pioneers and various business interests. Their success in creating a new commercially oriented circuit for the new media, including the formation of the New York New Media Association (NYNMA), shifted the center of gravity in the new media community. NYNMA proved to be a powerful device for linking diverse elements to the new media (and to the core group of venture capitalists). Its membership—over eight thousand individuals from some four thousand firms at the peak in 2000—included lawyers, accountants, and corporate executives as well as assorted digital entrepreneurs and workers.

When these industry-builders tried to secure a major property to redevelop as a new media center (the future New York Information Technology Center), they found that they needed the cooperation of real estate interests. Though most new media start-ups were located originally well north of the Financial District, the new media was first embraced by a Downtown real estate coalition that included the Rudin family (a major real estate developer), the Alliance for Downtown New York (a quasi-public entity for the Financial District), and the Economic Development Corporation of New York (a quasipublic entity for the city). This group had its own agenda regarding the new media: fill empty office buildings in the Financial District, where vacancy rates exceeded 20 percent in the early 1990s, by linking them with the new media. This strategy was all the more attractive when the new media was becoming identified as the first new industry to form in the city in half a century. Their provision of subsidized wired space in fourteen buildings played a major role in causing some seven hundred tech firms to settle Downtown. Another consequence was to reinforce the Silicon Alley identity while extending its perceived boundaries. When the bull market for Internet stock fueled an explosive expansion of the new media into new parts of Manhattan, other real estate interests similarly used the image of the new media to redefine their territories—further strengthening and extending the sense of Silicon Alley as a place.

A CONCEPT

A new vision of Internet business evolved with the development of Silicon Alley. As web pioneers struggled to connect with corporations, investors, and online users, their sensibilities about the Internet took a marked commercial turn. The commercial idea behind Silicon Alley was that the core problem (and opportunity) for Internet business was not developing technology per se, but creating and distributing new modes of expression that use Internet techology. The Internet economy was said to be a new media and communications business where the main avenue for creating value was developing creative business applications. This view of the Internet defined the enclave's identity vis-à-vis rival centers such as Silicon Valley. It also resonated with New York firms. The"new media" label indicated that its raison d'être was different from that of a computer enclave. New York assets lay in the media industries and business services, not computers.

Recent studies suggest that the power of a technology scheme depends on the networks of support that can be assembled.[8] Likewise, the viability of the Silicon Alley commercial concept has pivoted on the ability of new media actors, collectively and individually, to create ties with business partners, consumers, and investors. The provision of wired facilities by the Downtown real estate coalition was the most successful collective effort to organize material support for the new media. NYNMA's main contribution was to provide arenas where new media firms, job seekers, suppliers, and investors could meet one another and to host forums where new media interests could discuss collective issues.

Individual firms struggled in their efforts to gain leverage vis-à-vis web users and business customers. Most web designers, many of whom had hoped to become strategic partners for corporations, found themselves relegated to the status of subcontractors or modest service providers. Several thousand small computer firms who were able to earn a profit (usually modest) provided the bedrock for the enclave. Yet, they were overshadowed by the attention directed to several dozen start-ups that took more ambitious courses of action, gambling that they could become national contenders in an emerging sector. The gambits of the would-be national contenders usually involved some sort of network-building. Leading web design shops (e.g., Razorfish, Agency.com, and Rare Medium) added a broad array of services, and opened up offices in other cities (and countries), hoping to create extended service networks that would make them indispensable to corporate customers. Online communities (e.g., iVillage and StarMedia) created networks of websites and users organized around a theme (e.g., identities related to women or Hispanics). Some Silicon Alley providers of advertising services (e.g., DoubleClick and 24/7) set up networks of websites that they marketed to advertisers based on the latter's demographic targets. Finally, e-commerce firms, the segment made notorious in the dot-com frenzy, were marketing networks: they tried to use rapid growth and extensive advertising in order to make themselves into entities whose presence (and"brand") would overshadow rivals.

Most of Silicon Alley's would-be national contenders came to see the bull market for Internet stocks as a means of achieving rapid growth—and an instant extension of their networks and reputations. To this end they sought to connect with the financing networks of venture capitalists that fed into the initial public offerings (IPOs) on the stock market. Between 1998 and 2000 over four dozen Silicon Alley firms launched IPOs. As the stock market climbed and peaked, great riches and fame spilled into Silicon Alley. After a run of spectacular IPOs in 1999, twenty-nine Silicon Alley start-ups ended up with combined stock values that exceeded $29 billion. Founders of start-ups such as DoubleClick, Razorfish, Agency.com, StarMedia and iVillage became not only rich (on paper), but also celebrities. Their firms hired large numbers of employees as did firms that were positioning themselves to launch IPOs. The new media's rapid expansion boosted demand for other business services and overheated the real estate market to the extent that it seemed that the entire landscape of Manhattan was being made over.

The local media and leaders hailed the new media as New York's new economic engine—a sector that had lessened the city's dependence on Wall Street,while providing a path for taking New York into a"New Economy." But in fact, the lure of the stock market diverted, and even discouraged, leading firms from trying to turn users into paying consumers or from developing other forms of revenue.

ANOTHER"NEW ECONOMY"

Of course, the party's long over. The economy is indeed entering uncharted territory, but it conforms neither to the alternative media vision celebrated by the web pioneers nor the"new economy" mantra that enthralled stock analysts, entrepreneurs, politicians, and pundits at the end of the 1990s.

Early on, the dreams of an alternative media were relegated back to the subcultural margins as web pioneers sought credibility as entrepreneurs. Yet, the image of the new media as a transformative force burned even more brightly. New media visions and pioneers morphed to become part of a short-lived, but potent whirlwind that caught up investors and American cities. A tidal wave of capital and hype seemed to lift all boats or at least those firms that could tap into Internet-related wealth and images; when the stock bubble burst it was just as indiscriminate in capsizing Internet enterprises. The crash and ensuing slide in stock values smashed the hopes of Silicon Alley's would-be national contenders.

After the crash, Silicon Alley firms continued to work on the problem of making online enterprise pay, but hope faded that they would be part of an autonomous sector. It seemed more likely that most would take the role of producer services and assist corporate giants in weaving the Internet into their oligopolistic webs. Due to their myriad ties with subsidiaries and partners—and their ability to control intellectual property—the media corporations seemed poised to act as"financial shells within which all media can be merged and re-purposed."[9] Some firms that grew rapidly after going public still hoped to get big (and reduce competition) through mergering with, or acquiring, rivals. But the best that most of Silicon Alley's deflated champions could hope for was to follow the route taken earlier by Butterworth's SonicNet: become a subsidiary under the umbrella of a major firm such as MTV. Thus, despite Silicon Alley's anticorporate origins, its raison d'être became ever-more-wedded to New York's standing as a global corporate center.

However, Silicon Alley's ability to leverage New York's corporate base became problematic after September 11, 2001, when the shocking terrorist assault brought down the twin towers of the World Trade Center, killing nearly three thousand persons, and inflicting tens of billions of dollars in economic damage. The utter destruction of the World Trade Center and the staggering blow it delivered to the New York economy signalled that the old order was being challenged, although from a very different direction than had been anticipated. The new liabilities of global economic centers changed the context for Silicon Alley.[10] Symbols of global centrality and agglomerations of specialized workers and firms—once a dependable beacon for talent and money—may now invite targeting and mass destruction. The New Economy isn't what it used to be. Neither is New York (nor the world).

The astonishing reversals of fortune, for Silicon Alley and for New York, raise questions about the relationship between cities and economies that are increasingly digital and global. These issues are of more than academic interest. In rebuilding Lower Manhattan, New York will have to rethink its role and identity vis-à-vis the world economy and its needs and possibilities given the rise of new digital technologies. As the stench of the martyred towers faded, a whiff of desperation became evident. In a *BusinessWeek* issue devoted to"The Future of New York," the headline of the feature story declared,"The Center Must Hold." Even suburban real estate interests who prosper by wooing firms away from the city were quoted as saying that their fortunes depended on New York retaining a"white-hot center."[11] A section under the subtitle,"Silicon Alley" suggested that the magic of digital technology might keep the center"hot." Its author advised, rather hopefully, that an"Information City" complex of advanced business services, featuring a large"communications and computer-services workforce," was now bolstered by a"network of New York venture capital" that had been created during"the Silicon Alley boom." Moreover, the president of the New

York Software Association, discerning a glimpse of New York's future in the recent past, proclaimed that,"Silicon Alley can be a motor of rebuilding, just like we were a motor for the city's growth during the 1990s."[12]

But, what is one to make of the Silicon Alley that turned New York into a boom town during the 1990s? Was the enclave a Potemkim Village set up to snare a share of the not-so-smart money—a show put on to steal the spotlight from"real" centers of technology such as Silicon Valley? To be sure, it was showtime in New York, but at the beginning of the twenty-first century the studied making of symbolic gestures (e.g., entertainment, marketing, financial maneuvers) is a most serious business. Increasingly, it is a business that pivots on the interactions of media, computers, and capital. But what exactly is the role of cities here?

At first glance, one does not have to refer to the city to understand how the Internet and New Economy visions were joined. Even before the stock collapse, writers such as Robert Shiller and Thomas Frank sketched the mechanisms through which various intellectual and institutional threads had come together to promote Internet stock speculation and New Economy thought.[13] Some of the ideals that fired the imagination of web pioneers were embraced by right-wing libertarians and free market fundamentalists who argued that technology would reduce the restrictions faced by individuals and firms. Prominent Internet entrepreneurs such as Jeff Bebos of Amazon.com proclaimed that the new technology had"changed the rules" for starting up firms. The view that Internet technology meant that old rules and limitations could be transcended was given credibilty by financial analysts, business writers, business schools, and even by the Federal Reserve chairman and the treasury secretary.

Yet, these accounts do not explain how new media entrepreneurs and financiers made digital visions more"real" by weaving them into material arrangments—a process centered in the hothouse environments that cities supplied in the 1990s.

CREATIVE CITIES AND CYBERSPACE

It is often said that cities no longer make sense in a digital age—that the ease of communication makes it unnecessary for people to cluster together. But, in fact, various kinds of Internet-related firms and workers have clustered in a new kind of urban place—the"new media" district—so as to influence how firms and consumers make sense of the Internet as a commercial domain. Why did these firms concentrate in urban enclaves such as Silicon Alley, the"Digital Coast" (Los Angeles), and"Multimedia Gulch" (San Francisco)? The answer in the case of Silicon Alley is twofold. New media industry-builders sought the kind of resources that cities are uniquely equipped to supply, while Lower Manhattan real estate interests, seeing in the new media a reason for tenants to believe in the centrality of their properties, embraced new media firms (and visions).