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Velocity Labor Market

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Alan Hyde

Abstract

Silicon Valley employers employ few African-Americans, Latino/as, or older workers, yet do not fit the usual paradigms of employment discrimination: they exhibit no taste for uniformity and do not employ job tournaments or internal labor markets. A new model of employment discrimination attributes disparate hiring in Silicon Valley to a combination of: demands for specific skill sets at hiring (the opposite of the subjective criteria that have long beguiled scholars of discrimination) and concomitant refusal to train; hiring through networks of personal contacts; and rewards to career paths that alternate employment with self-employment. Overcoming the disparate impact of these employment practices will require institutions going well beyond current employment discrimination law.

Employment Discrimination in a High-Velocity Labor Market: how a meritocracy creates disparate labor market outcomes through demands for skills at hiring, hiring through networks, and rewards to entrepreneurship*

by Alan Hyde**

Silicon Valley is the true land of opportunity, "the MOST meritocratic labor market I've seen anywhere in the world," according to one of its leading observers.¹ Programmers, engineers, designers have poured in from all over the world, knowing no one, but willing to work hard, and have achieved remarkable economic success. "I make integrated circuits," says T.J. Rogers, the blunt President and CEO of Cypress Semiconductors, "and electrons obey the laws of nature, and they don't care if the engineer pushing them is male or female, black or white or brown."²

Silicon Valley is rife with discrimination, one of the most unequal labor markets in a country with generally skewed earnings distributions.³ African-American and Latino/a representation in the workforce of any of the large employers is so low, below 4 percent, as to invite litigation, were the employer a Home Depot.⁴ Engineers older than 40 often feel they are essentially unemployable.⁵ Many high tech firms have a fraternity house atmosphere, full of men with undeveloped social skills and demanding long hours of employees. Sexual relations with coworkers are common and many are harassing.⁶

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¹AnnaLee Saxenian, personal communication, . (Dr. Saxenian is the author of *REGIONAL ADVANTAGE: CULTURE AND COMPETITION IN SILICON VALLEY AND ROUTE 128* (1994)).

²Charles Molineux & Stephen Frazier, *Diversity in Silicon Valley*, broadcast on Cable News Network Financial, Jan. 15, 2001. Transcript available on LEXIS.

³HYDE, *supra* n. *, at 207-12.

⁴ Julia Angwin & Laura Castaneda, *The Digital Divide: High-Tech Boom a Bust for Blacks, Latinos*, *SAN FRANCISCO CHRONICLE*, May 4, 1998, A1.

⁵see *infra* nn.47-48.

⁶Susan Orenstein, *What Happened at Juno*, *THE STANDARD*, Feb. 7, 2000.

Menial manufacturing and maintenance jobs are performed by poorly-paid members of immigrant groups without possibilities for advancement.⁷

It is not necessary to choose between these accounts. Both are true. Understanding how both are true can illuminate much about the nature of discrimination in American labor markets generally. I will argue that Silicon Valley's high-velocity labor market offers a particularly vivid example of several trends in the larger labor market, trends that existing discrimination law (and literature) do not deal with well, or at all. The Valley can be proud of the success of its immigrants, particularly Asian. This success shows the declining significance of overt--perhaps, even covert-- racial and ethnic discrimination. The Valley's practice of hiring for very specific skills, without additional requirements that applicants "fit" into firm culture, is a bulwark against certain kinds of discrimination.⁸ So are the internet job sites and agencies that reinforce this culture of immediate skills.⁹ Finally, as shown below, its entrepreneurial culture of start-ups and careers across firms help ameliorate any residual discrimination against Asians, and could conceivably be made to ameliorate other discrimination.

Yet Silicon Valley also shows that African-Americans and Latinos and Latinas, as groups, may still do poorly even in a labor market that is rapidly expanding and hires from many nonwhite groups. At least three reasons for this failure seem particularly important in explaining Silicon Valley. While all three have been discussed in the academic literature, putting them together provides a distinct model of discrimination (or disparate labor market outcomes) that is different from the pictures assumed in conventional law or economics.

First, employers put increased emphasis on present skills and relevant experience. They do not train employees or maintain ladders from assembly lines to white collar jobs, as was true in the older industrial economy. While from one perspective this is highly meritocratic, it may well have highly disparate outcomes across ethnic lines.

⁷Karen J. Hossfeld, *"Their Logic Against Them": Contradictions in Sex, Race, and Class in Silicon Valley*, in *WOMEN WORKERS AND GLOBAL RESTRUCTURING* 149-78 (Kathryn Ward ed. 1990); Lenny Siegel, *New Chips in Old Skins: Work and Labor and Silicon Valley*, in *GLOBAL PRODUCTIONS: LABOR IN THE MAKING OF THE "INFORMATION SOCIETY"* 91-110 (Gerald Sussman & John A. Lent eds. 1998).

⁸HYDE, *supra* n. *, at 16 and *passim*. Employers' demands for very specific skill sets at hiring, and concomitant unwillingness to train employees, are characteristic of high-technology and help explain its rapid turnovers, distinctive labor market intermediaries, and compensation practices. "As *Information Week* reported, 'The vast majority of companies do little to train people to fill [Information Technology] positions or reassign senior people--they treat filling IT jobs like buying PCs, looking to fill a specific spec sheet for the lowest price,'" quoted in U.S DEPARTMENT OF COMMERCE, TECHNOLOGY ADMINISTRATION, OFFICE OF TECHNOLOGY POLICY, *THE DIGITAL WORKFORCE: BUILDING INFOTECH SKILLS AT THE SPEED OF INNOVATION* 11 (1999), available at www.ta.doc.gov/Reports/TechPolicy/digital.pdf. See also Norman Matloff, *On the Need for Reform of the H-1B Non-Immigrant Work Visa in Computer-Related Occupations*, 36 U.MICH.J.L.REF. 815 (2003).

⁹HYDE, *supra* n. *, at 143-50.

Second, career ladders in high-velocity labor markets reward entrepreneurs who at some point leave the employer, armed with information and contacts, and start a new firm.¹⁰ Yet for reasons not well understood, racial and ethnic groups differ sharply in their ability to make effective use of entrepreneurial options.

Third, people who hire, particularly founders of start-ups, may prefer people like themselves and not experience this as prejudice against others. This may be particularly true in industries of interlocked firms dominated by a particular ethnic group, such as computer distribution is for Taiwan-born Chinese.¹¹ This bears some resemblance to what some academics call, provocatively, "aversive racism."¹² I prefer, however, to view hiring through networks of contacts as an efficient reduction of information costs. All of these phenomena exist outside of Silicon Valley and high-velocity labor markets, but become even more acute within them, when turnover is heavy, hiring constant, information low, and informal networks of contacts crucial.

There are no reported legal cases of employment discrimination (other than sexual harassment) against prominent Silicon Valley employers, and few unreported cases that really address discrimination.¹³ I am employing a somewhat subjective definition of "real employment discrimination" suits here, but not, I think, a controversial one. When the mercurial Larry Ellison at Oracle fires another executive who sues for his or her stock options, that individual may throw in a count alleging race or sex discrimination, and the case will eventually settle.¹⁴ This, however, is not a "real discrimination" suit by my lights, and neither is a suit alleging sexual harassment by a

¹⁰HYDE, *supra* n.*, at 7-32 and *passim*. See also Gillian Lester & Eric L. Talley, *Trade Secrets and Mutual Investments*, UNIVERSITY OF SOUTHERN CALIFORNIA LAW SCHOOL OLIN RESEARCH PAPER 00-15 (2000); Jarle Møen, *Is Mobility of Technical Personnel a Source of R&D Spillovers?*, NATIONAL BUREAU OF ECONOMIC RESEARCH WORKING PAPER 7834 (2000); Massimo Motta & Thomas Rønde, *Trade Secret Laws, Labor Mobility, and Innovations*, CENTRE FOR ECONOMIC POLICY RESEARCH DISCUSSION PAPER 3615 (2002); David P. Cooper, *Innovation and Reciprocal Externalities: Information Transmission via Job Mobility*, 45 J.ECON.BEHAV.& ORG. 403 (2000); April Mitchell Franco & Darren Filson, *Knowledge Diffusion Through Employee Mobility*, FEDERAL RESERVE BANK OF MINNEAPOLIS RESEARCH DEPARTMENT STAFF REPORT 272 (2000).

¹¹*infra* n.31.

¹²Samuel L. Gaertner & John F. Dovidio, *The Aversive Form of Racism*, in PREJUDICE, DISCRIMINATION, AND RACISM: THEORY AND RESEARCH 61 (Samuel L. Gaertner & John F. Dovidio eds. 1986).

¹³The closest is *Garrett v. Hewlett-Packard Co.*, 305 F.3d 1210 (10th Cir. 2002), reversing summary judgment for HP on an individual's claim of race and age discrimination.. Plaintiff alleged retaliation against him after his activities on behalf of an advocacy group for African-American employees. While the group had the full approval of top HP management, plaintiff, who worked at a facility in Colorado, alleged that local managers did not share this approval. The court also expressed concern about the entirely subjective nature of HP's evaluation system.

¹⁴See, e.g., Todd Wallack, *Former Oracle Executive Sues Over Termination*, SAN FRANCISCO CHRONICLE, May 13, 2000; see also Peter Delevett, *HP Age-bias Lawsuit is All Relative*, SAN JOSE MERCURY NEWS, Feb. 8, 2002 (age discrimination suit by cousin of Hewlett-Packard director).

boss against a single employee.¹⁵ The unreported discrimination cases that I have found all raise highly individual claims of this type. I do not believe there has ever been a suit challenging a firm's practice applying to more than a single individual. Yet, if I am correct in identifying demand for skills at hiring, contacts in networks, and unequal entrepreneurship, as the three most likely explanations for the Valley's low employment rates for African-Americans and Latinos/as, it is entirely possible that employers might be vulnerable to successful suits alleging discrimination. The social pressures against bringing such suits are great, analogous to, though different from, the social pressures against employers' suing to protect their trade secrets.¹⁶

Yet it seems only a matter of time before Silicon Valley hiring goes under the litigation microscope. When that happens, the legal system will be faced with an extraordinarily difficult choice. It could redefine concepts of discrimination so that most Valley employers would end up in violation of the statute. Arguably, this might not even require "redefinition." As we shall see, statistics on African-American hiring in particular are so poor that employers might already be guilty of what lawyers call "disparate treatment, statistically proven." But would this be a good idea? How would such discrimination be remedied? Are the personnel practices associated with civil rights remedies compatible with a high-velocity labor market? Could Silicon Valley's distinctive personnel practices: entrepreneurship and cross-firm careers, information intermediaries, high turnover--be harnessed instead to serve employment equity?

Part I of this chapter reviews data on discrimination in Silicon Valley. Part II explains these patterns as the result of demand for skills at hiring, hiring through networks, and unequal resort to entrepreneurship, and shows how these three phenomena assume crucial importance with the decline of internal labor markets and the rise of high-velocity labor markets. Part III analyzes these practices under the law of employment discrimination and concludes that some large Valley employers might be discriminatory, in a legal sense. Part IV discusses why, if this is the case, there are no employment discrimination suits, for practical purposes, in the Valley. Part V looks to the future and discusses whether the high-velocity personnel practices that have generated such wealth for so many, can be made to work better for those who have yet to benefit from them--or whether, by contrast, expanding legal remedies to include Silicon Valley's disparate racial outcomes would do more harm than good.

¹⁵Saritha Rai, *Harassment Suit in U.S. Shifts India's Work Culture*, NEW YORK TIMES, September 6, 2002, at W1.

¹⁶HYDE, *supra* n.*, at 38-40.

I. Protected Groups in the Silicon Valley Labor Market

A. Asians: the success story

More than a third, 34.1%, of the population of Santa Clara County reported in the 2000 census was born in another country.¹⁷ Fifty-seven (57.3%) of that group was born in Asia.¹⁸ The ratios were similar in the 1990 census, further analyzed by AnnaLee Saxenian to focus specifically on the high technology workforce. She found that thirty percent of the high technology workforce of Silicon Valley was foreign-born in 1990, one-third of scientists and engineers. Of that one-third in 1990, two-thirds were born in Asia, half Chinese, about a quarter Indian, and the rest mostly divided among Viet Nam, the Philippines, Japan, and Korea.¹⁹ Close to a quarter of technology firms started in the Valley between 1980 and 1998 had CEOs with Chinese or Indian surnames.²⁰ Po Bronson describes one of these, KillerApp.com, founded by Ben Chiu, Taiwan-born, who arrived in the Valley knowing no one, was turned down for money all along Sand Hill Road, and eventually sold the company for almost \$50 million.²¹ "The definitive smell inside a Silicon Valley start-up was of curry."²²

People who describe Silicon Valley as a meritocracy are thinking of stories like these. It is not my purpose to debunk them. Silicon Valley's strength is its openness to hard workers from whatever origin. Openness to immigrants is a significant part of the Valley's advantage over Boston and Austin, and something all these high-technology districts share in comparison with foreign equivalents.²³ Silicon Valley participates in global production networks, and for those in the Valley who experience that globalism every day, meritocracy and nondiscrimination are daily experiences, and have been for many years. For example, when Intel in 1983 opened new assembly plants in Chandler,

¹⁷<http://quickfacts.census.gov/qfd/states/06/06085.html>

¹⁸http://factfinder.census.gov/servlet/QTTTable?_bm=y&-qr_name=DEC_2000_SF3_U_DP2&-ds_name=DEC_2000_SF3_U&-_lang=en&-_sse=on&-geo_id=05000US06085

¹⁹ANNALEE SAXENIAN, SILICON VALLEY'S NEW IMMIGRANT ENTREPRENEURS 11-12 (1999).

²⁰SAXENIAN, *supra* n.19, at 23.

²¹PO BRONSON, THE NUDIST ON THE LATE SHIFT 15-17, 26-27, 31-33, 38-39 (1999).

²²MICHAEL LEWIS, THE NEW NEW THING: A SILICON VALLEY STORY 116 (2000).

²³Silicon Valley historically employs twice the percentage of foreign-born scientists and engineers as does the high-tech district around Boston's Route 128. Rafael Alarcón, *Recruitment Processes Among Foreign-born Engineers and Scientists in Silicon Valley*, 32 AM.BEHAV. SCIENTIST 1381, 1385 (1999). Texas, the second-largest state and one with a large high-tech sector, is not even in the top twelve in employment of foreign-born workers in information technology. RICHARD ELLIS & B. LINDSAY LOWELL, THE INFORMATION TECHNOLOGY WORKFORCE DATA PROJECT III-3 (1999)(www.uefoundation.org/itworkfp/html)

Arizona, and Ireland, they were set up by engineers from Intel's Malaysian facility.²⁴ Two particular aspects of Asian success in the Valley, however, complicate the pure model of careers open to talent: ethnic networks, and entrepreneurial options. Each is important. Each reinforces the other.

Asian engineers' success reflects not only their individual effort, but the working of formal and informal organization.²⁵ Informal ties are more important than formal organization. Ben Chiu's story is an example. As mentioned, his company, a comparison shopping engine, was not funded by Sand Hill Road venture capital. His investors were Taiwanese. Like the nightclub business in Taiwan that Chiu had left, Silicon Valley was "guanxi all over again: connections." His attorneys recommended a personal financial adviser who had been accountant for Jerry Yang (of Yahoo!) and Mark Andriessen (of Netscape), and that man introduced Chiu to investment bankers and facilitated the sale of the company.²⁶ The several thousand Chinese- and Indian-born engineers who responded to a survey ranked their most important network to be family and friends, followed by current and former colleagues, school alumni, members of formal ethnic associations, and, in last place, other professional organizations.²⁷

The start-ups founded by immigrant engineers also reflect, not simply the larger start-up culture of Silicon Valley, but also the glass ceiling. While Asians are statistically overrepresented in professional positions in the Valley, they are less common in managerial positions. "A 1991 survey of Asian professionals in the region found that two-thirds of those working in the private sector believed that advancement to managerial positions was limited by race." For those surveyed, this did not mean "racial prejudice and stereotypes" so much as a perceived "old boys' network that excludes Asians" and "lack of role models."²⁸ When these Asian professionals felt blocked in the companies for which they worked, they were particularly likely to start their own.

The New Economy, then, includes some very Old business forms: networks of ethnically-linked businesses that provide goods or services to the larger community. These networks do not just involve Chinese laundries or Korean greengrocers, but the

²⁴Dieter Ernst, *Carriers of Cross-Border Knowledge Diffusion: Information Technology and Global Production Networks*, Schumpeter Society Conference, ESRC Centre for Research on Innovation and Competition, University of Manchester, June 28-July 1, 2000. <http://les1.man.ac.uk/cric/schumpeter/papers/18.pdf>, at 15.

²⁵SAXENIAN, *supra* n.19; Rafiq Dossani, *Chinese and Indian Engineers and Their Networks in Silicon Valley*, Asia/Pacific Research Center, Stanford University, http://aparc.stanford.edu/docs/Dossani_Survey.pdf (2002); HYDE, *supra* n.*, at 168-73.

²⁶Bronson, *supra* n.21, at 31.

²⁷Dossani, *supra* n.25, at 22.

²⁸SAXENIAN, *supra* n.19, at 19, quoting ASIAN AMERICANS FOR COMMUNITY INVOLVEMENT, *QUALIFIED, BUT... A REPORT ON GLASS CEILING ISSUES FACING ASIAN AMERICANS IN SILICON VALLEY* (1993).

design, manufacture, and distribution of computers and components, linking California with Taiwan or Singapore.²⁹ Asian networks dominate aspects of high technology that do not require particular scientific or technical expertise, and might otherwise represent opportunities for other groups, such as distributing computers to retailers.³⁰

Retailing and distribution are not particularly high-tech jobs, but I include them here for two reasons. First, just because they don't require computer or engineering skills, they might be a way for less-skilled workers to share in the wealth created by a high-tech economy. Second, we have a splendid ethnography of Chinese immigrant computer distributors in Los Angeles that shows precisely why this business is not open to anyone who might want to enter it.³¹

Chinese-owned companies constitute 25 percent of the companies that distribute computers in Los Angeles County, despite making up only nine percent of retailers, and less than three percent of the county population. Virtually all the owners were born outside the U.S., three-quarters in Taiwan, and came to the U.S. as adults. Most became computer distributors because of family members in the computer business, gained experience in Chinese-owned firms, and now employ relatives in their own firm. Even as the companies grow larger, propensity to employ family members does not decline. Capital usually comes from the manufacturers in Taiwan, and otherwise disproportionately from personal savings, friends, and Chinese-owned financial institutions. Unlike some ethnic enclaves, the workforce is not all Chinese. Only thirty percent of firms have an all-Chinese workforce, and twenty-nine percent have non-Chinese managers. However, jobs reflect ethnicity. Whites typically work "in the front" in sales or as secretaries; the technicians and accountants "in the back" are Chinese. The Mexicans work in shipping or assembly. I have not found a similarly detailed study of hardware distribution in Northern California, but this picture certainly seems to apply there as well.

B. Women: a pressing research agenda

There is an amazing absence of research on women as a group in the Silicon Valley economy. My impressions are just that: impressions. In every interview I conducted with a woman, for example in her capacity as human resources director or

²⁹SAXENIAN, *supra* n.19, at 53-71.

³⁰For another example, in the 1980s Asians were preferred for unskilled assembly jobs, Edward J.W. Park, *Racial Ideology and Hiring Decisions in Silicon Valley*, 22 *QUALITATIVE SOCIOLOGY* 223 (1999). Recent ethnographies have reported more diverse workforces, e.g. Jennifer JiHye Chun, *Flexible Despotism: The Intensification of Insecurity and Uncertainty in the Lives of Silicon Valley's High-Tech Assembly Workers*, in *THE CRITICAL STUDY OF WORK: LABOR, TECHNOLOGY, AND GLOBAL PRODUCTION* 127 (Rick Baldo et al eds. 2001); Boy Lüthje, *Industrial Restructuring, Production Networks, and Labor Relations in the Silicon Valley Electronics Industry*, www2.ucsc.edu/cgirs/publications/papers/leuthje.pdf (1997).

³¹Yu Zhou, *Inter-firm Linkages, Ethnic Networks, and Territorial Agglomeration: Chinese Computer Firms in Los Angeles*, 75 *PAPERS IN REGIONAL SCIENCE* 265 (1996).

information manager, I always asked about distinct experiences of women as a group. These were nearly always denied to exist, in keeping with the general meritocratic ethos of the Valley, but, in truth, as I probed respondents for more specific examples, these rarely fell into clear patterns.

On balance, Silicon Valley appears to be an excellent place for women, as for anyone who welcomes challenge and opportunity. Women's economic gains largely reflect incorporation into high-skilled and high-paid jobs within sectors.³² One often encounters women who are vice-presidents or general counsels at an age where one would not expect to find this "back East," as Californians say. One of the few surveys of Silicon Valley women was conducted in November 2000 of 826 women. It reported that some 51 percent of women think that advancement opportunities for women are better in Silicon Valley than outside; 41 percent think they are about the same; and only 8 percent think they are better outside.³³ Women nevertheless feel that opportunities for men are still better than for women (60 percent agreed with that statement). Women in technology are more than twice as likely as the general sample to agree that gender has been a significant barrier to their career advancement (28 vs. 15 percent). Some 41 percent of women in technology believe that they have to "fit into a masculine workplace" in order to advance.³⁴

While formal and informal networks restricted to women exist, they appear to be much less influential than the Chinese or Indian networks.³⁵ Rather, the crucial network for women appears to be the relationship with the company founder (usually male). Companies with lots of women usually are companies that started with lots of women brought in by the founder, and thereafter have lower levels of supervision.³⁶

If women without family responsibility could be broken out for separate analysis, it seems possible that their work experience would not differ from similarly-situated men's, something that is increasingly true across the U.S. economy. However, such similarity is elusive for women with children. The Women of Silicon Valley survey

³²Martin Carnoy & Weimin Gong, *Women and Minority Gains in a Rapidly Changing Local Labor Market: The San Francisco Bay Area in the 1980s*, 15 *ECON. OF EDUC. REV.* 273 (1996).

³³WOMEN OF SILICON VALLEY, UNFINISHED BUSINESS: WOMEN IN THE SILICON VALLEY ECONOMY 16 (2001) www.womenofsv.org

³⁴Id. 22

³⁵HYDE, *supra* n.*, at 173-4.

³⁶James N. Baron, M. Diane Burton, & Michael T. Hannan, *Engineering Bureaucracy: The Genesis of Formal Policies, Positions, and Structures in High Technology Firms*, 15 *J.L.ECON.&ORG.* 1 (1999); James N. Baron, Michael T. Hannan, & M. Diane Burton, *Building the Iron Cage: Determinants of Managerial Intensity in the Early Years of Organizations*, 64 *AM.SOCIOL.REV.* 527 (1999); James N. Baron, Michael T. Hannan, Greta Hsu, & Ozgecan Kocak, *Gender and the Organization-building Process in Young, High-Tech Firms*, in *THE NEW ECONOMIC SOCIOLOGY: DEVELOPMENTS IN AN EMERGING FIELD* 245 (Mauro F. Guillén et al eds. 2002).

reported: "The number one source of stress for women in Silicon Valley is in balancing work with personal or family responsibilities. Some 67% say that this balancing act always or sometimes causes them stress."³⁷ Working hours are long and child care not available to meet the demand.³⁸

As mentioned, I have been unable to find a single lawsuit, reported or unreported, alleging structural discrimination against women (or any other group). There are, however, some unreported suits alleging sexual harassment.³⁹ This is not surprising, for reasons explored in journalism on high technology companies elsewhere.⁴⁰ Companies filled with young people working extremely long hours are likely to see relationships between coworkers. Men in Silicon Valley are often arrogant, and often there are suggestions that career advancement will be assisted by the relationship. When it ends, particularly if employment ends too, there may be a lawsuit.

C. African-Americans and Latinos and Latinas: missing

You can spend a whole day at any large Silicon Valley employer and never see a black face. In 1998, the San Francisco Chronicle requested the forms that government contractors file with the U.S. Department of Labor, and confirmed what everyone knew. Staff at thirty-three of the most prominent firms in the Valley are, on average, about 4 percent African-American and 7 percent Latino, even though African-Americans and Latinos make up 8 percent and 14 percent respectively of the Bay Area labor force.⁴¹

Silicon Valley's high-tech labor force was also about 4 percent African-American in 1980. Those Blacks were disproportionately in production work, lost jobs along with others in the industry recession in the mid-1980s, and were one-third less likely to be rehired than whites, Hispanics, or Asians.⁴² Managers hiring for unskilled assembly jobs interviewed from 1989 to 1993 were quite open in their preference for Asians over Latinos, Latinas, and African-Americans.⁴³ Four government contractors were fined by the Department of Labor in the 1990s for denying a job to a qualified applicant rejected on racial grounds: Apple, Oracle, Solectron, and Everex Systems. Low numbers of these groups in technical and scientific positions are normally attributed today to low numbers

³⁷WOMEN OF SILICON VALLEY, *supra* n.33, at 16.

³⁸See generally MARTIN CARNOY, *SUSTAINING THE NEW ECONOMY: WORK, FAMILY, AND COMMUNITY IN THE INFORMATION AGE* (2000).

³⁹See, e.g., Rai, *supra* n.15.

⁴⁰See, e.g., Orenstein, *supra* n.6.

⁴¹Angwin & Castaneda, *supra* n.4.

⁴²Don Mar & Paul M. Ong, *Race and Rehiring in the High-Tech Industry*, in *AFRICAN-AMERICANS AND POST-INDUSTRIAL LABOR MARKETS* 337 (James B. Stewart ed. 1997).

⁴³Park, *supra* n.30.

of African-Americans and Latinos/as studying math or science and poor networks of recruiting, since so few people from those groups work in the industry now.⁴⁴

The story sparked some interest in the federal Equal Employment Opportunity Commission, specifically in Vice-Chair Paul Igasaki, who encouraged its office in San Jose to focus on the technology industry.⁴⁵ The only reported result of this effort was a relatively small (\$50,000) settlement at Acropolis Systems, Inc., of Milpitas, to a fired African-American human resources manager and two others. She claimed she was fired for refusing to "do something" about "too many blacks in the office." The company denied wrongdoing and disputed the incident but claimed to want to avoid the expense of further litigation.⁴⁶ Of course, that's what companies always say, but if the case settled for \$50,000, the EEOC must have doubted that it could prove the allegation.

D. Age Discrimination

There are many anecdotes of middle-aged technical workers who had difficulty finding jobs in information technology even in the tight labor markets of the last few years of the 1990s.⁴⁷ To quote a U.S. Department of Commerce study (not limited to Silicon Valley): "The IT industry is populated by many younger workers. Approximately 75 percent of computer systems analysts and scientists, and nearly 80 percent of computer programmers are under the age of 45. Many managers in the IT industry are in their 20s and 30s, and may be uncomfortable hiring or managing older and more experienced workers. A *Network World* survey of 200 readers with some hiring responsibility showed that younger network managers are less likely to hire older workers than younger workers. Almost half of respondents 20 to 30 years of age had never hired a person over the age of 40."⁴⁸

It is hard to know what to make of surveys like this.⁴⁹ For example, it is easy to find letters to computer magazines by older IT professionals claiming discrimination.

⁴⁴Angwin & Castaneda, *supra* n. 4.

⁴⁵Gary Rivlin, *Busting the Myth of the Meritocracy*, Standard, Feb. 28, 2000; Sarah Lubman, *Race Bias Suits Are Few at Tech Firms*, San Jose Mercury-News, July 15, 2002, www.bayarea.com/mld/mercurynews/3664217.htm.

⁴⁶Carrie Johnson, *Settlement Shows How Hard Life is for Minorities at Tech Firms, Critics Say*, Washington Post, July 22, 2001.

⁴⁷See, e.g., Norman Matloff, *Debunking the Myth of a Desperate Software Labor Shortage*, Ch. 5 <http://heather.cs.ucdavis.edu/itaa.real.html> (n.d.), a valuable essay perpetually updated by the author.

⁴⁸U.S. DEPARTMENT OF COMMERCE, *supra* n.8, at 17. The NETWORK WORLD survey was published as Neal Weinberg, *Career Crisis: Feeding Frenzy for Java-savvy Whiz Kids Leaves 40-Something IT Pros High and Dry*, NETWORK WORLD, September 14, 1998.

⁴⁹See also, e.g., Stacey Cowley, *Survey: Age Bias Seen by Over-45 Techies*, NETWORK WORLD/FUSION NEWS, April 23, 2001, www.nwfusion.com/news/2001/0423agebias.html, Norm Alster, *Too Old for High Tech*, UPSIDE, December 8, 1998.

One invented a resume of himself, fifteen years younger, in order to get interviews. It didn't make much difference.⁵⁰

The National Research Council was skeptical of any claims of systematic age discrimination.⁵¹ An analysis by Professor Henry Farber, of national data on information technology workers from the Bureau of Labor Statistics, showed little systematic difference between workers over forty and younger workers. The entire IT workforce is younger than workforces of similar educational attainment. Information technology workers over forty are more likely to lose jobs than younger workers. (The reverse is normally true). However, they were (during the years of the study) just as likely to find new jobs as younger workers, in similar amounts of time. Within three years of job loss, 82% of the above-40 group, and 84% of the under-40 group, found new jobs. The new jobs were comparable. In particular, the older workers' were not more likely to be part-time, or outside information technology, than the younger workers'. The older workers may take a larger pay cut, even accounting for the fact that they were paid more than younger workers at the time of job loss. Farber was unable to determine why older IT workers are more likely to lose their jobs. The reasons conventionally given are employer preference for newer programming languages, other hot job skills, and cost factors. Even if there is some illegal discrimination occurring against IT workers over 40, ending it "would not have a significant impact on tightness in the IT workforce in the long term."⁵²

Since 2000, half the Californians working in the technology sector have left the field, often taking jobs outside the technology sector that pay less.⁵³ This study, however, does not distinguish among workers so does not permit comparison of older and younger workers.

A related interpretive problem, in my view, is that we lack any longitudinal studies of the career of computer programmers or other computer professionals. Computer programming, in particular, is in many ways not a particularly good job, and it is perhaps not surprising that few people do it all their lives. As Peter Cappelli observes: "In brief, aside from pay, many IT jobs--but especially computer programming jobs--would qualify as lousy work. Most of the understanding about how to design work to

⁵⁰Mister Thorne, *Age Bias Persists in Silicon Valley*, Wall Street Journal, August 22, 2002, www.careerjournal.com.

⁵¹National Research Council, Computer Science and Telecommunications Board, *BUILDING A WORKFORCE FOR THE INFORMATION ECONOMY* 139-51 (2001). www.cstb.org or www.nap.edu/books/0309069939/html.

⁵²Id. 148.

⁵³Michael Dardia, Tracey Grose, & Hugh Roghmann, *What is Happening to Silicon Valley's Talent Pool?*, report sponsored by the Workforce Investment Boards of Santa Cruz, San Jose, NOVA, and San Mateo (Oct. 2004), at 12. www.sphereinstitute.org/publications/FinalPresentationNOVA10-8_v6.pdf.

meet the psychological needs of workers seems to have bypassed the IT professions."⁵⁴ Programming tasks are divided into small jobs; programmers work in isolation from each other and from the organization; work under considerable time pressure and receive little recognition.⁵⁵ So it may not be surprising that one sees so few programmers (in particular) over 40. A National Science Foundation analysis of Census data shows that, "six years after finishing college, 57 percent of computer science graduates are working as programmers; at 15 year the figure drops to 34 percent, and at 20 years--when most are still in their early 40's--it is down to 19 percent. In contrast, the figures for civil engineering are 61 percent, 52 percent and 52 percent."⁵⁶

The question is: what happens to them? It is at this point that very well-informed observers of the Silicon Valley labor market (for example, professors at Stanford Graduate School of Business) typically tell me a story about somebody whose kid played soccer on their kid's team. Some proportion of those who wrote code in the 1980s are now working elsewhere in IT firms, working for venture capital firms, teaching at community colleges, practicing law, or selling real estate in Oregon. Some founded their own companies, so are no longer in the employment statistics as employees at all, but are self-employed. Some are happy with how life turned out, some aren't, but nobody has any systematic picture. Few were unemployed in 2000, when unemployment rates in the Valley were below two percent. But, as Norman Matloff, who argues strongly that there is age discrimination, observes: "A programmer who becomes, say, an insurance agent after failing to find programming work counts in the statistics as an employed insurance seller, not an unemployed software worker."⁵⁷

The case that systematic age discrimination is taking place may be another of those assertions that presupposes the old world of internal labor markets that Silicon Valley has largely left behind. In an internal labor market, thin representation of workers in their 40s often suggests age discrimination, breach of implicit promises, or both. In a high-velocity labor market, no such inference follows. What appears as age discrimination may be a different phenomenon: demand for very specific skill sets at hiring, as a way of reducing information costs as firms constantly search for the best workers in a situation in which information of any kind is thin and unreliable. Firms will hire only programmers who can program in Java already. They will not train or retrain programmers they've worked with before, and do not value experience in older programming languages. Most published complaints about "age discrimination" go on to

⁵⁴Peter Cappelli, *Why Is It So Hard to Find Information Technology Workers?*, 30 ORGANIZATIONAL DYNAMICS 87, 94 (2001).

⁵⁵Avron Barr & Shirley Tessler, *Notes on Human Resource Issues in the Software Industry and Their Implications for Business and Government*, paper presented to NSTC Presidential Advisory Committee on High-Performance Computing and Communications, Information Technology, and the Next Generation Internet, Washington, DC, Oct. 30, 1997, at 4-5. www.stanford.edu/group/scip/avsgt/NSTC.pdf

⁵⁶Norman Matloff, *Now Hiring! If You're Young*, NEW YORK TIMES, Jan. 26, 1998, at A19.

⁵⁷Id.

include just this charge.⁵⁸ I'll look more closely at this demand in the section that follows, and in Part III of this chapter consider whether it might represent discrimination in a legal sense.

Still, even if systematic age discrimination is difficult to prove, there are undoubtedly individual cases of age discrimination in high technology. There are even journalistic anecdotes in which employers actually display prejudicial stereotypes about older workers, what lawyers call "direct evidence" of discrimination.⁵⁹ It is all the more surprising, then, that there appear to be no reported or unreported cases of age discrimination against high tech firms in the Valley, apart from the occasional individual executive's suit for stock options. I'll discuss why in Part IV.

II. Why Divergent Labor Market Outcomes by Race and Ethnicity?

In the classical economic account of discrimination, individual employers may indulge a taste for discrimination.⁶⁰ Such discrimination is economically subrational, but has little economic effect. It merely creates a labor market opportunity for another employer. More recent scholarship on disparate labor market outcomes has criticized the classical account and substituted a highly nuanced understanding of modern discrimination.⁶¹ In these accounts, the natural habitat of discrimination is the large firm with internal job tournaments, and discrimination reflects a combination of unconscious racism, subjective hiring criteria, failures to mentor, high information costs of learning about employees, and inefficient signaling.

The disparate labor market outcomes by race in Silicon Valley do not reflect either the classical account ("taste for discrimination") or the tournament account. I do not believe there is much taste for discrimination, and certainly no taste for association with whites as such (given the success of Asians). Disparate labor market outcomes do not reflect internal tournaments or promotion ladders, which are weak.⁶² Failures to mentor are a factor, certainly for women, yet mentoring is haphazard at best and also not

⁵⁸See, e.g., Cappelli, *supra* n.54; Matloff, *supra* n.47; Alster, *supra* n.49.

⁵⁹See sources cited *supra* n.49.

⁶⁰GARY S. BECKER, *THE ECONOMICS OF DISCRIMINATION* (2d Ed. 1971).

⁶¹David Charny & G. Mitu Gulati, *Efficiency Wages, Tournaments, and Discrimination: A Theory of Employment Discrimination Law for "High-Level" Jobs*, 33 HARV.C.R.-C.L. L.REV. 57 (1998); Linda Hamilton Krieger, *The Content of Our Categories: A Cognitive Bias Approach to Discrimination and Equal Employment Opportunity*, 47 STAN.L.REV. 1161 (1995); Linda Hamilton Krieger, *Civil Rights Perestroika: Intergroup Relations After Affirmative Action*, 86 CAL.L.REV. 1251 (1998); David B. Wilkins & G. Mitu Gulati, *Why Are There So Few Black Lawyers in Corporate Law Firms?: An Institutional Analysis*, 84 CAL.L.REV. 493 (1996).

⁶²See generally HYDE, *supra* n.*.

extended proportionately to Asians.⁶³ Nor are hiring criteria excessively subjective. The usual charge is that they are excessively specific.⁶⁴

Rather, disparate labor market outcomes in Silicon Valley are the very result of the distinctive features of employment in the Valley: short tenures, rapid turnover, cooperation among networked firms, start-ups and self-employment as career options built into the reward structure, and flexible compensation. I have argued that these aspects of working in Silicon Valley are responsible for a good portion of its remarkable technological and economic growth.⁶⁵ This chapter shows that these features can result in labor markets with strong racial disparities.

Rapid turnover creates a constant need to hire, despite generally low levels of information about individual applicants. Three employer responses, each individually rational, reduce information costs but create racially disparate outcomes. First, employers require very specific skill sets at hiring and are not willing to train or retrain employees who lack those skills. This has particularly negative impact on older, African-American, and Latino/a employees. Second, employers rely heavily on contacts, connections, and hiring entire teams. Social and business contacts continue to be segregated and thus reinforce disparate labor market outcomes. Third, low rates of entrepreneurial activity among African-Americans have direct labor market consequences.

In a classical labor market like Gary Becker's, racial discrimination by an individual employer may be subrational but merely creates an opportunity for another employer so has limited systemic effects.⁶⁶ By contrast, in a high-velocity labor market or similar network, racial discrimination by an individual employer is not irrational and does not create labor market opportunities for another employer. Instead, as Kenneth Arrow observes, in a network, there are rewards to discrimination, and no costs.⁶⁷

A. Introduction: Job Searches, for Top Employees, Without Tournaments

In a high-velocity labor market like Silicon Valley's, where people tend to stay on the job for eighteen months or so, employers hire all the time, often with little

⁶³See, e.g., sources cited supra n.28 (Asians); supra n.36 (women).

⁶⁴See, e.g., sources cited supra n.55.

⁶⁵See generally HYDE, supra n.*.

⁶⁶BECKER, supra n.57.

⁶⁷Kenneth Arrow, *What Has Economics to Say About Racial Discrimination?*, 12 J.ECON.PERSP. 91, 98 (1998).

information.⁶⁸ Constant hiring spreads information among firms,⁶⁹ and creates a need for novel labor market intermediaries.⁷⁰ Let's look more closely at how this works in the market for programmers, who have been frequently discussed in the popular and academic literature. Programmers are the most common example in discussions of age discrimination and probably illustrate racial disparities as well as any other occupational group.

Discussions of computer programmers often observe that the best are vastly superior to the mean, more productive by a factor of twenty or so.⁷¹ Whether this is true or not, employers act as if it is true. They devote enormous time and energy to identifying superior workers.⁷²

Older companies used to identify good employees through a slow method that economists call a "job tournament."⁷³ In these models, employers don't worry much about the job skills that they can't observe at hiring anyway. They hire a bunch of people who look pretty good and then offer them incentives if they perform really well. Some won't make it and will get washed out as probationary employees; some look better and may get trained by the employer; some will ascend to the top of the heap. The partnership or fat salary is the price the employer pays in order to induce the entering employee to work as hard as possible. In the interesting variant by Charny and Gulati, the employer will be able to distinguish a small group of superstars (and hire them), but will be relatively indifferent to which subset of a mass of fairly standard applicants are hired. Charny and Gulati show how such tournaments may result in racially disparate outcomes.⁷⁴

⁶⁸U.S. DEPARTMENT OF COMMERCE, *supra* n.8, at 13.

⁶⁹HYDE, *supra* n.*, at 27-89.

⁷⁰HYDE, *supra* n.*, at 143-50.

⁷¹See, e.g., Cappelli, *supra* n.54; Matloff, *supra* n.47, at Chapter 7.2.

⁷²Some years ago, my brother and I invented the concept of a "tequila distribution" to describe a distribution in which a handful are excellent while the mass are mediocre. Tequila distributions thus look quite different from "normal" bell curves; they contain a mass near the left axis and a long, thin, tail extending to the right. They take their name from my (highly subjective) observation that really good tequilas are excellent, as good as the best whiskeys, while the mass are undrinkable. My brother, a radiologist, believes that ability among orthopedic surgeons is also distributed according to a tequila curve. I have no independent opinion on that question. In any case, employers behave as if programmers were distributed along a tequila curve.

⁷³See, e.g., Lorne Carmichael, *Firm-Specific Human Capital and Promotion Ladders*, 14 BELL J.ECON. 251 (1983); Edward Lazear & Sherman Rosen, *Rank-Order Tournaments as Optimum Labor Contracts*, 89 J.POL.ECON. 841 (1981); Barry J. Nalebuff & Joseph E. Stiglitz, *Prizes and Incentives: Towards a General Theory of Compensation and Competition*, 14 BELL J.ECON. 21 (1983).

⁷⁴Charny & Gulati, *supra* n.61.

The tournament device is not available to a typical Silicon Valley start-up (or even established firm). Where job tenures average eighteen months, the employer obviously cannot promise a long career ladder, backload benefits, or even maintain long probationary periods. Instead, employers try to find excellent employees at the hiring stage. Matloff interviewed a number of prominent information technology employers in 1997 and 1999, that is, during the years they complained of "desperate shortages." They were nevertheless extremely picky. All employers admitted being flooded with resumes, and nevertheless hiring no more than a maximum of 5 percent of applicants (Cisco). Many companies hired fewer than 1 percent.⁷⁵ The devices employed to do so contribute, as we now see, to racially disparate outcomes.

B. Demand for specific skills at hiring

Employers in high-velocity labor markets are less likely than older employers to search for generalists with multiple aptitudes--the kind of engineer or lawyer who would be the best contributor to a firm over a forty-year career. Instead, jobs are defined to include highly particular skill sets, and actual experience in using them. During the period of my research, programmers had to be able to program in Java. Matloff cites job advertisements like "Must have experience writing C++ code for TCP/IP applications on SPARC platforms."⁷⁶ This pickiness did not simply reflect a generally tight labor market. It is an inherent feature of high-velocity labor markets. Indeed, in 2002, despite the elimination of half a million jobs in information technology nationally, employers continued to search for database administrators, web architects, and others--and they looked for very specific skills.⁷⁷

To employers, these specific skill requirements refute any implication of bias or discrimination, the kind of discrimination that would, by contrast, creep in if employers were looking for someone to "fit into firm culture" or "make partner" someday. "If we find someone who programs fast in Java, we will hire them today," I was told dozens of times, "whatever they look like or whatever planet they come from." The success of programmers from Asia is supposed to demonstrate the lack of discrimination that results when jobs are tightly defined by objective, job-related performance criteria.

Such jobs do look like the Holy Grail to human resources professionals and lawyers, accustomed to identifying discrimination either with intentional hostility, or job requirements unrelated to performance yet with disparate racial impact.⁷⁸ If African-

⁷⁵Matloff, *supra* n.47, at Chapter 4.1.

⁷⁶Matloff, *supra* n.47, at Chapter 4.1.

⁷⁷Denise Dubie, *Resumes Pile Up, Yet Key Jobs Open*, Network World, August 5, 2002, www.nwfusion.com/news/2002/0805hiring.html.

⁷⁸*Garrett v. Hewlett-Packard*, discussed *supra* n.13, illustrates the traditional focus of discrimination law on evaluation criteria that are too subjective, as opposed to too specific.

Americans are not hired as programmers and engineers--and they are not--this simply reflects their lack of skills, or human capital, and not discrimination.⁷⁹

Matters are not so simple, however, for specific required skill sets may be an instrument generating discriminatory outcomes, even if not necessarily illegal discrimination. First, obviously, they take the education system and labor market as they find them. If African-Americans don't learn Java somewhere else, that's not the companies' problem. What if companies are the most efficient trainers in Java, and no other institution even offers such training in the Valley? A democratic society can't conscript employers to train employees. It could offer incentives to encourage conversion of a high-velocity labor market into one of more stable employment: by taxing separations, limiting flexibility, enforcing covenants not to compete--but these risk harming the very scientific and economic vitality of the district. Possibly the unwillingness of companies to train employees creates a market opportunity for a labor market intermediary to train, certify, and place employees, whether a proprietary school, community college, or employee organization like the Working Partnerships project of the South Bay Labor Council.⁸⁰ Second, a job requirement such as "ability to program in Java" (or some other hot language) will clearly favor younger programmers over older. I'll return to these points in Part III, when I analyze whether either of these disparate outcomes violates Civil Rights laws.

C. Connection Networks

One of the most attractively meritocratic aspects of Silicon Valley's labor market are the stories of young people arriving from distant places, knowing nobody, and succeeding in establishing reputations based entirely on their competence.⁸¹ This is no myth. On the other hand, there is no reason to think that employer openness to unknown job candidates is the whole story, or functions in a racially-neutral manner. Kenneth Arrow and Ron Borzekowski model compensation generally as a function of employee contacts in networks: the more contacts, the greater the compensation.⁸² Whether or not this is true for the economy as a whole, interviews certainly demonstrate the importance of network contacts in a high-velocity labor market. The growth of temporary help and other recruiting firms reflects the fact that personal contacts become more, not less, important in the age of internet job boards and employer access to thousands of

⁷⁹“Human capital” functions in economic discourse primarily as a justification for inequality, which can always be attributed to variations in “unobserved human capital.” In human capital models, differences in income do not reflect differences in jobs, but differences in the characteristics of individual employees. See generally EDWARD LAZEAR, *PERSONNEL ECONOMICS* (1995).

⁸⁰HYDE, *supra* n.*, at 175-76; CHRIS BENNER, *WORK IN THE NEW ECONOMY: FLEXIBLE LABOR MARKETS IN SILICON VALLEY* 171-74 (2002).

⁸¹BRONSON, *supra* n.21; see also JON KATZ, *GEEKS: HOW TWO LOST BOYS RODE THE INTERNET OUT OF IDAHO* (2000), although his eponymous geeks ended up in Chicago, not Silicon Valley.

⁸²Kenneth J. Arrow & Ron Borzekowski, *Limited Network Connections and the Distribution of Wages*, www.federalreserve.gov/pubs/feds/2004/200441/200441pap.pdf (August 18, 2004).

resumes.⁸³ Hiring may often reflect contacts from past work assignments, though in today's Silicon Valley rarely social contacts.⁸⁴ Hiring often involves entire teams. Phil Schneidermeyer, managing director of Advanced Technology Practice at the search firm Korn/Ferry International: "You go out to look for one, but your expectation is that whomever you hire will bring in five to eight other members of his or her previous team."⁸⁵

We know essentially nothing systematic about how different groups protected by discrimination laws make use of networks of contacts. Some assumptions are plausible. Older workers should be advantaged over younger workers in markets in which personal contacts are important. Ethnic ties to workers already in the industry probably reinforce the likelihood of being hired. As mentioned, firms with the highest percentage of women employees are those that rely most heavily on recruiting those personally known to founders.⁸⁶ Once inside the firm, a large California high technology-engineering firm, networks were closely associated with mobility but did not function differently for non-whites and women, though both groups were lightly represented in the sample.⁸⁷

D. Entrepreneurial Preference

In the entrepreneurial version of the American success story, the successful founder often prefers members of his own ethnic group. It is not possible to break down Silicon Valley workforce statistics by the ethnicity of the firm founder. The difference

⁸³On the use of the Internet by employers and employees, see David H. Autor, *Wiring the Labor Market*, 15 J.Econ.Persp. 25 (2001). On the increased importance of labor market intermediaries, see BENNER, supra n.80, at 83-200; Jeffrey L. Bradach, *Flexibility: The New Social Contract Between Individuals and Firms?*, Harvard Business School Working Paper 97-088 (May 1997)(describing recruitment of chief financial officers and other top executives who serve on a temporary basis).

⁸⁴Older scholarship on Silicon Valley often emphasized social contacts shared by mobile professionals, e.g. SAXENIAN, supra n.1, at 29-40. By the end of the century, however, Silicon Valley ranked below the national average on all indicators of social capital. Its rates of volunteering, and of "civic leadership" (serving as officer or committee member in a local organization, or attending any public or club meeting) were the lowest of any community in Harvard's Kennedy School Social Capital Community Benchmark Survey. Residents still know many former coworkers, reflecting their high rates of job mobility, but are less likely than people elsewhere to socialize with them outside of work. James L. Koch, Ross Miller, Kim Walesh, & Elizabeth Brown, *Building Community: Social Connections and Civic Involvement in Silicon Valley. Preliminary Findings Report*. www.cfsv.org/communitysurvey/docs/scrsfd.pdf (2001); Stephen S. Cohen & Gary Fields, *Social Capital and Capital Gains: An Examination of Social Capital in Silicon Valley*, 41 CAL.MGT.REV. 108 (1999).

⁸⁵Elizabeth Millard, *Luring Techies*, STANDARD, Jan. 31, 2000.

⁸⁶Sources cited supra n.36.

⁸⁷Joel M. Podolny & James N. Baron, *Resources and Relationships: Social Networks and Mobility in the Workplace*, 62 AM.SOCIOL.REV. 673 (1997).

may not be great. All Valley employers employ lots of Asians, and none employs many African-Americans.

Still, if Valley employers are just like America here, it adds up to another strike against African-Americans. African Americans are less than one-third as likely as white Americans to be self-employed, a ratio that has been constant for many years.⁸⁸ Rates of entrepreneurship by ethnic group are almost perfectly negatively correlated with unemployment rates for that group, suggesting a strong tendency for entrepreneurs to prefer their own kind.⁸⁹ To illustrate how this works in the “meritocracy” of Silicon Valley, a survey of several thousand Chinese and Indian engineers active in formal associations found that they were most likely to be employed in a firm that has at least two founders from their country of birth. Almost 60 percent of Indian engineers, and 54.5% of engineers born in the People's Republic of China, work for firms in which more than ten percent of the workforce shares this characteristic.⁹⁰

Obviously future research, and even journalism, will contribute much to our understanding of how disparate outcomes are generated in meritocratic, high-velocity labor markets. For the rest of the chapter, though, let's assume the following stylized portrait of discrimination in high-velocity labor markets. Firms hire constantly for the relatively short-term. They demand experience in narrowly-defined skill sets, and rely on intermediaries that can credibly confirm individuals' skills. They derive no particular benefit from workplace diversity as such, given short tenures and high turnover. Hiring personnel have no particular objection to employees of different ethnicity, but no incentive whatever to go find them.

Under these conditions, getting a job depends mainly on ability to acquire hot skills, connections to individuals at other firms, and rates of entrepreneurial activity among one's own ethnic group. Recent graduates of technical institutes, even foreign, will do well. Older workers should have good network connections, but if they lack entrepreneurial aptitude--that is, if they have not already started their own firm-- they will face constant pressure to update skills. African-Americans will do particularly poorly: their schools will disproportionately prepare them poorly in mathematics and science; they will find few African-Americans inside companies; and even fewer owning them.

⁸⁸Robert W. Fairlie & Bruce D. Meyer, *Ethnic and Racial Self-employment Differences and Possible Explanations*, 31 J.HUM.RESOURCES 757 (1996); Robert W. Fairlie, *The Absence of the African-American Owned Business: An Analysis of the Dynamics of Self-Employment*, 17 J.LAB.ECON. 80 (1999).

⁸⁹FARRELL BLOCH, ANTIDISCRIMINATION LAW AND MINORITY EMPLOYMENT: RECRUITMENT PRACTICES AND REGULATORY CONSTRAINTS 39-40 (1994).

⁹⁰Dossani, *supra* n.25, at 20.

III. Are Silicon Valley employers violating civil rights laws?

If a Home Depot store has very few women in high-paying sales or managerial jobs, as used to be common, it can expect to be sued under the discrimination laws, as also used to be extremely common.⁹¹ In 1997, Home Depot settled multiple discrimination suits for \$104.5 million, eventually making major changes in its personnel processes.⁹² Are large Silicon Valley employers with poor records of employing African-Americans or Latinos/as or people older than forty, similarly vulnerable? The difficulties in analysis show some of the problems involved in mapping our existing law of employment discrimination onto high-velocity labor markets.

A. Stable career jobs as the natural habitat of employment discrimination law

I have shown elsewhere how the law of trade secrets and employee organization reflects an assumption of stable long-term careers inside individual firms.⁹³ It may surprise readers that the law of employment discrimination makes the same assumption. If asked to name an employment practice forbidden by the civil rights laws, I suppose most people would name the refusal to hire someone because of that individual's race, color, sex, or religion. While such a refusal does indeed violate the Civil Rights Act, in practice there are very few lawsuits growing out of refusals to hire. Rather, the natural habitat of the law of employment discrimination is the discharge, or failure to promote.⁹⁴ In these two situations, the law normally assumes stable employment, that would have continued had it not been disrupted by an act of discrimination.

Refusal-to-hire cases are almost impossible to prove. There is rarely a presumption that any individual will be hired for any particular job, and individuals rarely are told, or find out independently, why they did not get any particular job. Employers are not normally required to keep records of job applications, and few do. Finally, such suits are rarely worth an attorney's time. Until the statute was amended in 1991, remedies were limited to compensatory damages. If someone doesn't get a job because of discrimination, but gets a different job instead that pays about what the old one did, there may have been discrimination but there is no legal damage. Since 1991, punitive damages are theoretically possible, but again almost impossible to establish in hiring cases.

⁹¹Civil Rights Act of 1964, Title VII (Equal Employment Opportunity), 42 U.S. C. §2000e *et seq.*

⁹²Susan Sturm, *Second Generation Employment Discrimination: A Structural Approach*, 101 COLUM.L.REV. 458, 509-19 (2001).

⁹³HYDE, *supra* n.*, at 27-70 (trade secrets law assumes implicit long-term employment contracts and does not reflect information spillover through employee mobility), 151-82 (employee organization assumes stable communities of employees working for one employer).

⁹⁴John J. Donahue & Peter Siegelman, *The Changing Nature of Employment Discrimination Litigation*, 43 STAN.L.REV. 983 (1991).

By contrast, loss of a stable job, well into the employment life-cycle, is worth fighting over. The same is true if the employer signals that the employee will not proceed further up a promotion ladder. Damages may well be substantial, as the employee's earnings may exceed significantly his or her opportunity wage. Something will have been said about the discharge or failure to promote, and that statement may turn out to be evidence of discrimination, if either direct evidence of prejudice, or pretextual. Comparison will be possible between the potential plaintiff and other employees. Particular hiring practices, such as subjective criteria, might turn out statistically to have disparate impacts across protected groups.

B. Applying discrimination law to a high-velocity labor market

1. General problems

There is thus little case law, and little academic literature, on applying discrimination law to labor markets in which hiring is constant, job tenures are short, internal labor markets weak, and racial disparities appear at the hiring stage. (By contrast, the literature on discrimination in internal labor markets, identified with tournaments, patterns of mentoring, subjective criteria, and inefficient signaling, is quite sophisticated).⁹⁵ The problems in proving discrimination are severe. Some have already been suggested.

First, discrimination that occurs at the hiring stage is difficult to document. Second, many plaintiffs who are in fact victims of discrimination will not bother to sue if other jobs are available. It is obviously a good thing if jobs are available and unemployment is low. I am not suggesting these things should be changed for the sake of developing antidiscrimination law. Rather, I am just reinforcing the point that the natural habitat of antidiscrimination law is the lucrative late-career job up the career ladder.

Third, the highly flexible forms of acquiring labor bedevil statistical analysis and thus make discrimination difficult to prove. For example, programmers (like just about any other business service in the Valley) may be obtained by hiring an employee; subcontracting to a self-employed individual, unincorporated business, or incorporated business, inside or outside the US; or hiring a temporary employee referred (and nominally employed) by an agency, or an immigrant on a temporary visa.⁹⁶ Collecting and presenting the relevant statistical evidence, on all these modes of acquiring programming services, is obviously far more complex than comparing the resumes of all the accountants or legal associates to see which made partner and which did not. Civil

⁹⁵Sources cited supra n.61.

⁹⁶These are merely the most common ways of obtaining services. Others are possible in Silicon Valley. It has been claimed that Cisco once bought a software company in order to obtain the services of its chief technology officer. Chong-Moon Lee, *Four Styles of Valley Entrepreneurship*, in *THE SILICON VALLEY EDGE: A HABITAT FOR INNOVATION AND ENTREPRENEURSHIP* 116 (Chong-Moon Lee et al eds. 2000).

rights laws forbid discrimination in "employment," but not, as a general matter, discrimination in contracting for business services.⁹⁷

Fourth, and, I believe, most important, disparate outcomes are, as shown above, generated largely through the practices of demand for skills and experience at hiring, skewed sources of information in networks, and skewed distribution of business ownership. The demand for skills and experience at the time of hiring is just the sort of thing often proposed as an antidote to the discrimination generated by subjective hiring criteria, yet it, too, may generate disparate outcomes, particularly by age and ethnicity. Yet it is difficult to imagine a successful challenge under the discrimination laws to a hiring criterion for being too specific. This will require some legal discussion.

2. The problem of demands for specific skills and experience at hiring

In some circumstances, disparate treatment, violating the Civil Rights Act, can be proved simply statistically, where a protected group is underrepresented in a workforce at a rate that is two standard deviations away from a predicted normal representation.⁹⁸ The very low percentages of African Americans in Silicon Valley firms may suggest exploration of these theories. Such statistical proof is relevant under two slightly different legal approaches that are often confused with each other: "statistical proof of disparate treatment" and "disparate impact." In the *Hazelwood School District* case, involving a suburban school district with very few nonwhite teachers, the Supreme Court stated that a distribution two standard deviations away from normal distribution might alone constitute proof of disparate treatment. However, on the facts of that case, the low numbers of African-American teachers hired triggered instead an obligation in the employer to explain what was going on. For example, the Court held, the school district might show recent improvement in its hiring, or dispute the definition of the relevant labor market.

Proving disparate treatment (called, since 1991, "intentional" discrimination)⁹⁹ solely through statistical evidence might appear an attractive option to plaintiffs' lawyers. In fact, however, lawyers prefer not to make much use of this theory. An unsuccessful suit against Sears by the federal Equal Employment Opportunity Commission in the 1970s relied almost exclusively on statistical proof of gendered patterns in job assignments, women rarely being assigned to the more remunerative commission sales. The courts were unimpressed with the statistics, imagining that women might not have been interested in the better jobs.¹⁰⁰ The plaintiffs' bar learned the lesson that no statistics are

⁹⁷Robert E. Suggs, *Racial Discrimination in Business Transactions*, HASTINGS L.J. 1257 (1991).

⁹⁸*Hazelwood School Dist. v. U.S.*, 433 U.S. 299 (1977). See generally Bloch, *supra* n.89, at 53-70.

⁹⁹Civil Rights Act of 1964, §706(g)(1), 42 U.S.C. §2000e-5(g)(1).

¹⁰⁰Vicki Schultz, *Telling Stories About Women and Work: Judicial Interpretation of Sex Segregation in the Workplace in Title VII Cases Raising the Lack of Interest Argument*, 103 HARV.L.REV. 1750 (1990).

good enough by themselves. One must present vivid anecdotes of individual discrimination.

The procedure is similar but not identical where plaintiffs allege that a particular hiring practice has a "disparate impact," a judicially-created interpretation of the Civil Rights Act, added in terms to the statute in 1991.¹⁰¹ Plaintiff identifies a particular employment practice with a disparate impact on different groups, and then the employer explains what is going on. The difference is that the employer has an additional defense to a "disparate impact" case. In such a case, the employer is permitted to show that the facially neutral employment practice, producing the disparate impact, is "job related for the position in question and consistent with business necessity."¹⁰² By contrast, "business necessity" is not a defense where the plaintiff has demonstrated "intentional discrimination," that is, disparate treatment.

A hypothetical suit alleging race or age discrimination by a Silicon Valley employer might scrutinize the practice of highly-specific job qualifications under both lenses. It's not clear that the difference would be important. Plaintiffs could easily show the low representation of (say) African-American programmers or engineers, and the role of specific qualifications (e.g. experience in programming in C++ of TCI/IP applications on SPARC platforms...) in generating disparate outcomes. Employers, however, could probably defend the practice. To the charge that such skill requirements have a "disparate impact," employers would argue that they are justified by "business necessity." As mentioned, there is room for debate here. Advocates insist that good programmers trained in older languages can adapt to newer problems.¹⁰³ However, it is difficult to imagine a court substituting its judgment for the employer's on an issue like that.¹⁰⁴

The employer could also probably defend its skills requirement against a "disparate treatment" charge, to which "business necessity" is not a defense. The issue here would involve the definition of the labor market. Defining the relevant labor market was one of the issues that the Supreme Court refused to decide in the school teacher case. Since few cases have used the theory, there remains much uncertainty about how to define labor markets. Surely a high-tech employer will successfully argue that the standard is not the total number of African-Americans (for example) in the Bay Area labor market. But

¹⁰¹Civil Rights Act of 1964, §703(k), 42 U.S.C. §2000e-2(k).

¹⁰²Civil Rights Act of 1964, §703(k)(1)(A)(i), 42 U.S.C. §2000e-2(k)(1)(A)(i).

¹⁰³Matloff, *supra* n.47.

¹⁰⁴I should mention that in California, unlike the nation as a whole, it is quite clear that an age discrimination suit may be based on a theory that a particular employment practice or hiring criterion has a "disparate impact" on older workers. Calif.Gov.Code §12941.1, added to California's fair employment law in 1999, declares a legislative "intent that the disparate impact theory of proof may be used in claims of age discrimination," an issue still unresolved as to the federal Age Discrimination in Employment Act, 29 U.S.C. §621 *et seq.*

is the standard the market for programmers, or Java programmers, or Java programmers with experience on highly specific applications?

The answer doesn't much matter for the African-Americans. Nobody believes there are enough African-American programmers in any of these labor markets to establish deviation from an ideal distribution. (Advancing African-Americans would require attention to exclusion from other, less technical positions; from networks of information; and from educational opportunity. I'll take these up below).

However, the definition of labor market would be critical to a suit by older programmers alleging intentional age discrimination and relying on statistical proof. Suppose the employer hires only programmers with actual Java experience and also hires no programmers over 40. If the relevant employment pool is "programmers in the Bay area," the employer's zero will be evidence, perhaps proof, of intentional discrimination. The employer will surely argue however that its distribution of older programmers must be measured instead against the ideal distribution in the market for programmers with Java experience. If there are any programmers in the Bay area over 40 with Java experience, the employer who hires none will fall short of the statistically ideal distribution. However, if the pool is defined, or redefined, the employer, though short of the ideal, may no longer deviate from it by two standard deviations. The "business necessity" defense, supposedly irrelevant in cases of intentional discrimination, will come back as part of defining the labor market. There must be some limit to this argument, but it will take much litigation to learn what it is.

So it is difficult to imagine a successful case demonstrating discrimination in hiring programmers based on statistical proof. Ironic confirmation of this statement comes in a recent publication suggesting the widespread presence of intentional discrimination, statistically proven, in the US workforce, and advocating greater use by plaintiffs' lawyers of the theory.¹⁰⁵ In this study, discrimination is established by comparing a particular employer's employment statistics with other employers in its industry. If a given industry employs a workforce that is fifteen or twenty percent African-American, a particular employer that employs only two or three percent may well have some explaining to do. Using this test, it is impossible to establish discrimination in the computer or software industry. So few African-Americans or Latinos work in the industry that no individual employer deviates much from its normal distribution.¹⁰⁶

¹⁰⁵Alfred W. Blumrosen & Ruth G. Blumrosen, *The Reality of Intentional Job Discrimination in Metropolitan America—1999*, www.eeol.com/1999_NR/1999_n1.htm .

¹⁰⁶Blumrosen & Blumrosen, *supra* n.105, Chapter 15, at 210 (unable to establish discrimination in computer industry). Under this method of proving discrimination, the most discriminatory employers in the US turn out to be large hospitals. Blumrosen & Blumrosen, *supra* n.105, Chapter 15, at 202. Conclusions like this suggest why the law has made little use of the theory of statistical proof of disparate treatment .

Statistical proof might be more useful in demonstrating intentional discrimination for positions without such rigorous entry requirements. It is indeed difficult to explain why Intel's office clericals are only 4 percent African-American.¹⁰⁷

3. The problem of exclusion from information networks

It is not surprising that employers who hire all the time, and cannot observe job performance, will rely heavily on networks: hiring an individual in the expectation that he will bring a team with him; hiring individuals known to current employees from past work. Networks are efficient solutions to high information costs, even though they will magnify racial and ethnic disparities existing at the time of labor market entry (and thus reduce incentives in excluded groups ever to enter that labor market).

Still, this kind of racially disparate outcome would seem to be a much easier legal case than disparate outcomes resulting from requiring specific skill sets at hiring. Recruiting through particular contacts may be efficient, but if it has a disparate impact, it is unlikely to be justified by business necessity--not in a world in which internet job boards and job sites make thousands of resumes available. If exclusion from networks reflected only the fact that it's quicker and easier to hire your friends and your friends' friends, law could correct this problem, particularly as to those Valley employers who are government contractors subject to affirmative action requirements.

Silicon Valley employers therefore balance, delicately, the convenience of hiring through referral networks with their genuine commitment to nondiscrimination, as they understand it. Even the lowest ranks of the industry, the manufacturing jobs, are considerably more diverse by ethnicity and gender today than ten or twenty years ago, when one normally observed white men supervising "short, brown, foreign" women.¹⁰⁸ They too now share an express ethos of nondiscrimination. Chun worked at a contract manufacturer in the summer of 1997. She observed her supervisor, a man of Vietnamese origin, simultaneously encourage workers to let him know if they had a friend or cousin who needed a job, and then tell a story about having to fire a Vietnamese speaker. "On the line, you hear me speak Vietnamese to other workers. Some people think I favor them if you speak my language. They think I give better treatment. But, he speaks my language. I still let him go....It doesn't matter if you speak my language or if you don't. I treat everyone equally."¹⁰⁹

If a workforce is already unbalanced ethnically yet recruits largely or entirely by word of mouth, it will not hire workers from groups not already represented. Is this illegal discrimination? The answer is somewhat unclear. Judge Posner once decided a case of a

¹⁰⁷Angwin & Castaneda, *supra* n.4.

¹⁰⁸Hossfeld, *supra* n.7; and sources cited *supra* n.30.

¹⁰⁹Chun, *supra* n.30, at 148.



janitorial firm owned by a Korean immigrant with an overwhelmingly Korean workforce. It hired employees strictly on referral from current employees and received few if any serious applications from non-Koreans. Posner held that this was not intentional discrimination. Rather, it was the cheapest method of recruitment, resulted in the best information about job applicants and some screening of them.¹¹⁰ However, in that case, there was no claim that employee referral constituted discrimination because of its "disparate impact."

Since the events giving rise to that decision, the law of "disparate impact" has been made somewhat more pro-plaintiff by the Civil Rights Act of 1991. Today, an employer that relied exclusively on employee referral would be challenged because of its disparate impact on groups not previously represented in the workforce. It could defend exclusive reliance on employee referral only on a showing that the practice was a business necessity. It's not clear how this "business necessity" defense would apply to low-tech jobs like the Korean janitorial firm before Judge Posner, or the thirty percent of Taiwanese Chinese-owned computer distributors in Los Angeles County that lack any non-Chinese employees.¹¹¹ (Does "business necessity" simply mean the cheapest and most efficient way of proceeding, or something without which the business would fail?) However, high-tech employers could hardly show any kind of business necessity for relying solely on employee referral to fill high-tech positions, since internet job boards make thousands of resumes available for high-tech positions. Moreover, Posner's opinion was not applied in a later case, when an employer actually received applications from African-Americans, and still did not hire any. This turned reliance on employee referrals into illegal intentional discrimination.¹¹² However, few Silicon Valley employers receive many applications from African-Americans.

So, in theory, the kind of heavy reliance that some Silicon Valley employers place on referrals by current employees--a practice that helps to generate racially disparate outcomes--might constitute unlawful discrimination because of its disparate impact. This conclusion seems somewhat pedantic, however. My reading of the cases--and conversations with lawyers--suggest that such a claim would not be brought without additional strong anecdotal evidence of qualified African-American applicants who actually applied but were turned down.

4. The weak claim of "diversity".

Workforces like Silicon Valley's, with low representation of African-Americans and Latinos/as, raise the question of how strong is the legal system's commitment to "diversity" as such. Suppose I am correct that the low representation of these groups

¹¹⁰EEOC v. Consolidated Service Systems, 989 F.2d 233 (7th Cir. 1993).

¹¹¹Zhou, *supra* n.31.

¹¹²EEOC v. O&G Spring and Wire Forms Specialty Co., 38 F.3d 872 (7th Cir. 1994), cert. denied 513 U.S. 1198 (1995).

primarily reflects employers' demand for high skills on hiring, and unequal access to information and entrepreneurial networks. A strong advocate of workplace "diversity" might claim this misses the point. Such firms would benefit, it might be said, from a more diverse workforce, and thus should be required to recruit one.

The evidence on the advantages of "diversity" as such is not that strong, even as to large and general workplaces. Perhaps there is a case for requiring ethnic and racial diversity in newsrooms or elementary schools. However, I do not know of any literature looking specifically at diversity in highly technical or scientific work teams. It is hard to imagine that diversity as such would contribute anything at all to a technical project. It is difficult to describe any advantage, to the employer putting together a project on wireless data networks (for example), employing a few dozen engineers, programmers, and managers for a defined period and then likely to be spun off or sold, in diversity as such. By contrast, it is easy to see some potential advantages in an entire team from India or Taiwan, for example if the business plan is for the team to operate for a time in California, then relocate to another country.

For a generation or more, our discourse of workplace equity, fairness, or justice has given way to a discourse of diversity. It may be doubted that diversity as such could ever have borne the weight placed on it. For this chapter, however, we need only note that the case for opening more jobs in Silicon Valley to excluded groups must rest on arguments of equity or justice, or private or public gain, but not on diversity as such.

5. Existing discrimination law targets employers, not networks

Our existing law of discrimination, like our law of employee organization, locates the relevant employee community within the boundaries of a single employer. The discriminating unit is the single employer. (As mentioned, statistical proofs of discrimination single out individual employers who are deviant in their industries, not entire networks of discrimination).¹¹³ Remedies for discrimination, if found, will similarly fall on particular employers, who might be ordered to promote particular individuals, or modify particular practices with discriminatory impact.

Much of this apparatus assumes the internal labor markets and promotion ladders of an earlier era. The EEOC, or counsel to the private plaintiff, asks the employer: "Are there any female vice-presidents? Do any African-Americans serve in this agency above GS-14?" We do not know what questions to ask of an employer with flat managerial hierarchies, twenty-five or thirty percent turnover a year, where a quarter or so of the people working on any day are either self-employed consultants or employees of a temporary help agency, where no one expects to make a lifetime career, where successful careers inevitably involve changes among employers, stints as a self-employed consultant, and ultimately founding one's own company.



¹¹³Blumrosen & Blumrosen, *supra* n.105.

Obviously there will be no cases alleging discriminatory failure to promote or discharge. Even discriminatory failure-to-hire cases may have difficulties in defining what it means to "hire." These ambiguities would be tolerable if Silicon Valley's high-velocity labor market were delivering employment equity, in some rough and ready fashion. But it is not, and so our intellectual failure to define equal employment in terms of today's jobs becomes a serious one.

I had thought that in talking to plaintiff's lawyers, I would learn of potential discrimination suits against Silicon Valley employers that foundered on definitional and statistical questions of this kind. This turned out not to be true. Instead, there has never been a systematic discrimination suit against a Silicon Valley employer. The problems in this section remain, however. They may lie a few years in the future. They may never arise, if discrimination suits become irrelevant in tomorrow's labor markets. I think, however, a time will come when we will want our law of discrimination to come to grips with careers that do not take place entirely within the boundaries of a single firm.

6. Conclusions on the existence of illegal discrimination

The low representation of older workers, African-Americans, and Latinos/as in Silicon Valley most probably represents a combination of legal and illegal discrimination. The numbers are so low as to trigger some burden on employers to justify them. Employers could, however, probably justify the highly-specific skill sets required, despite their exclusory effects. Only against a background assumption of old-style internal labor markets, in which firms employ for entire careers and expect to train, do these skill requirements appear suspicious. I have argued throughout this book that courts should not impose the picture of internal labor markets on high-velocity labor markets, and I must maintain that position despite my sympathy for those excluded. So I think that a general preference for specific skill sets, and refusal to train, do not violate the Civil Rights laws even where the effect is to exclude older, African-American, and Latino/a employees and result in workforces that are almost entirely white and Asian.

Illegal discrimination, however, probably occurs when employers act on prejudicial stereotypes, or recruit solely through networks known to them. The stereotyping particularly harms older workers, while the networks particularly exclude African-American and Latino/a workers, particularly from less-skilled jobs. Both kinds of cases are difficult to win in practice. A stereotyping case normally requires direct evidence of the prejudice. Such prejudice against old people is sometimes expressed. A case of "hiring through referral" normally requires showing actual application by, and rejection of, qualified members of excluded minority groups. Journalism suggests that both scenarios are found in Silicon Valley.



IV. Why are there no reported legal cases finding, or even alleging, discrimination in Silicon Valley?

So the question is raised of why there are no reported or unreported cases challenging systemic exclusion of older workers, or African-Americans, or Latinos/as, from the Silicon Valley job market.

Reported cases are of course useless for social science purposes; they are not a representative sample of any social practice, including litigation, and not accurate accounts even of the facts in the reported case.¹¹⁴ Reported employment discrimination cases are even less representative of employment discrimination cases than other reported cases are of their class. Lawyers who practice in the area confirm that the "best" cases from plaintiffs' point of view nearly always settle, and the price of the settlement is a confidentiality order--for which defendant was willing to pay quite a bit-- that forbids counsel or the parties from discussing the case. So I was not surprised to discover no officially-reported cases finding a high-tech employer in Silicon Valley guilty of discrimination. I fully expected to interview lawyers, and to that end interviewed numerous lawyers who represent either plaintiffs or defendants (occasionally some of each) in employment litigation.

As nearly as I can determine, there has never been a case attacking any Silicon Valley employment practice as a systemic exclusion of, or discrimination against, older, or African-American, or Latino/a, or female, employees. The absence of age discrimination is particularly striking. There is a handful of unreported cases, all involving highly individual claims, such as an individual woman sexually harassed by a particular supervisor, or a discharged Oracle executive suing for stock options who adds a discrimination count to a breach of contract claim. Yet nearly everyone believes that there are employers that do systematically discriminate against older workers, and the statistics on African-Americans and Latinos/as would prompt litigation in other industries. Why not here?

At least three explanations have been suggested to me, but I think we can reject two of them. (1) There is no shortage of capable lawyers who represent plaintiffs in discrimination suits. (2) California law is not unfavorable to discrimination plaintiffs (as it is to trade secrets plaintiffs); if anything, it is more favorable to plaintiffs. In my judgment, the absence of successful discrimination suits in Silicon Valley, even against stereotyping and exclusion from referral networks, reflects: (3) the availability until recently of alternative, even preferable, employment for victims of discrimination, and the costs of suing.



A. The plaintiffs' lawyers?

There is no shortage of lawyers in the Bay area, and no shortage of lawyers willing to take a discrimination case on behalf of a plaintiff. The lawyers are not in bed with, or in any way dependent on, the large Valley employers.

I found plaintiffs' lawyers by tracing lawyers involved in cases mentioned in news articles, and by referral from other lawyers in the area. Many resemble the lawyers drawn into employment discrimination practice after the 1991 amendments to the Civil Rights Act created jury trials and increased damages. My generalizations about these lawyers are commonplace in the field, though lack comprehensive academic treatment. They approach discrimination litigation like personal injury litigation. They conceptualize discrimination as a bad event that happens to an individual, like a car accident or defective product. They are compensated from contingent fees, so have incentives to put their energies into cases that offer the possibility of really large jury verdicts. In the employment discrimination field, such a case involves: a sympathetic plaintiff, subject to an affront that is easy to explain and comprehend, that caused her to leave or be fired from a well-paid job, leaving her with substantial documentable losses (such as doctor bills), and out of well-paid work for a substantial period. An incident, or course of incidents, of sexual harassment, or age discrimination, fills the bill well. By contrast, there will be little incentive to take cases for people who didn't get hired in the first place (discrimination hard to prove); people who didn't get one job but got another (no damage); poorly-paid employees (low damage); or victims of discrimination that is subtle or difficult to grasp.

Nationally, such lawyers take few cases of race or national origin discrimination, and their California counterparts are no different. However, nationally, such lawyers gravitate toward age discrimination cases, with their sympathetic plaintiffs, unlikely to work again, suffering the losses of high income positions appropriate to their late stage in the life cycle.¹¹⁵ This makes the absence of such cases in the Valley more surprising.

The Bay area, however, also contains an unusual number of lawyers who conceptualize discrimination as something that happens to classes of people, particularly ordinary working people, not just to affluent individuals. I spoke to three of the ablest.

Patricia Shiu and Joan Graff are veteran plaintiffs' advocates at the Employment Law Center, a project of the Legal Aid Society of San Francisco. Originally founded to assist immigrants, the Center now specializes in all aspects of discrimination litigation on behalf of poor and working people. (It does not concern itself with "glass ceiling" issues of promotion to or within managerial ranks). It employs around twenty lawyers and does not receive funds from the federal Legal Services Corporation.

¹¹⁵George Rutherglen, *From Race to Age: the Expanding Scope of Employment Discrimination Law*, 24 J.LEG..STUD. 491 (1995).

Its last case in Silicon Valley concerned Atari (which dates it fairly effectively), a class action concerning its obligation before layoffs to inform workers under a California statute that predated the federal Worker Adjustment and Retraining Notification (WARN) Act. Some of its other cases involve worker classification issues and thus might help low-income workers in the Valley. One involved a class of janitors misclassified as independent contractors, settled (without published opinion) when their employer reclassified them as employees. In another, they cooperated with the Equal Employment Opportunity Commission in a suit against a temporary help agency that was the vehicle for its clients' race discrimination.¹¹⁶

They confirmed the difficulty in applying to Silicon Valley the kinds of discrimination litigation they usually do, largely because of the high job mobility, lack of loyalty, and low aspirations for workplace community. People who feel discriminated against either leave, or stay because they are making money, but don't fight. But Joan Graff thought that the absence of discrimination complaints in the Valley was a sign of a weak sense of community (which she termed "narcissism"). Valley employees don't have any sense of a larger community, she said, citing the recent bankruptcy of the United Way of Santa Clara County.¹¹⁷ All they care about is work, like the employees, discussed by Juliet Schor, who would rather stay at work than go home.¹¹⁸ That makes work the only place left to be a community, the only place to overcome "narcissism." But it's not a community either, given the end of loyalty and short tenures. In this environment, a focus on nondiscrimination or workplace diversity or community will not succeed.

Barry Goldstein is a partner at the Oakland firm of Saperstein, Goldstein, Demchak & Baller. They do not bring individual discrimination suits, only class actions or other attacks on systemic practices, and are famous for their suits reforming job assignments at Home Depot, based largely on statistical disparities in men's and women's assignments.¹¹⁹

Goldstein agreed that many Valley employers had statistics that resembled Home Depot's and said that his firm has considered suits in the Valley but never brought one. He pointed out some of the problems. Companies do not really have entry-level positions. Where compensation is flexible, as it normally is for white-collar employees of all types, it is difficult to frame a class of plaintiffs since courts often hold that individual issues will predominate over the group's. He suggested that sales might be an area of discrimination, based on his representation of sales employees at a technology company in a different part of the country, where none of the sales force had degrees in computer science and whites

¹¹⁶EEOC v. Recruit USA Inc., 939 F.2d 746 (9th Cir. 1991). See Kathleen Pender, *Job Agency Will Settle Bias Lawsuits*, SAN FRANCISCO CHRONICLE, June 17, 1992, at B3.

¹¹⁷On nationally low rates of community participation in Silicon Valley, see the survey cited *supra* n.84.

¹¹⁸JULIET SCHOR, *THE OVERWORKED AMERICAN: THE UNEXPECTED DECLINE OF LEISURE* (1991).

¹¹⁹Sturm, *supra* n.92.

seemed to be making more money than African-Americans. In that case, the clients preferred that he send a confidential letter to the employer and then work together with the employer on fairer sales assignments. By contrast, he has never even sent such a letter, or heard of one, in the Valley. If there is any discrimination in sales assignments, he thought it would reflect relations with purchasing vice-presidents and other cultures in which women or African-Americans might not "fit in." He also told me that Asians of all types in the Bay area labor market simply do not sue. In the entire history of his firm, during which they have always had Asian lawyers in the office, they have brought only one case on behalf of Asian plaintiffs, against the San Francisco Fire Department.

I'll return to some of these points below. I've given a fuller account of these interviews to dispel any notion that the absence of discrimination suits in the Valley reflects a lack of imagination or courage by lawyers. I do not believe any area of the country has more thoughtful or courageous lawyers practicing employment law, either on behalf of employees, or employers.

B. Legal obstacles

In the book, I discussed some of the difficulties in deciding whether one state's law is really different from another's. It is necessary to examine both formal law "on the books," and informal aspects of the sociology of litigation. Both turned out to be essential to understanding why employees are normally free to depart Silicon Valley firms and start competing firms. That is, formal California law prohibits enforcement of covenants not to compete. Understanding the trade secret story required understanding social factors. Formal trade secret law in California is little different from other states' (it has the same Uniform Statute but does not give independent weight to negotiated trade secret agreements), and interpretations of that statute have been adopted by courts inside and outside California that would make it the functional equivalent of enforcing noncompetes. Nevertheless, employers rarely sue, because such suits cause them reputational harm, rarely succeed, and threaten them as hirers as well as losers of labor.¹²⁰

Does California law provide any formal or informal obstacles to civil rights plaintiffs? We can be definitive that there are no formal obstacles. Federal civil rights laws against race, sex, and age discrimination apply as minima in all states. States may extend additional protection to plaintiffs, and, as mentioned, California has, to age discrimination plaintiffs. They are allowed to proceed under state law by showing that a putatively neutral employment practice, such as targeting highly-paid employees for layoff, has a "disparate impact" on older workers.¹²¹ There has been little reported litigation under this statute, enacted in 1999. It is hard to believe that it means what it says. A job description that requires Java programming certainly has a "disparate impact" against older employers. California courts will eventually have to define what kinds of

¹²⁰Hyde, *supra* n.*, at 27-40.

¹²¹*supra* n.104.

business justifications will support such practices with "disparate impact" against older workers.

My interviews disclosed only one informal aspect of California law that might discourage discrimination suits, and even this is impressionistic and mostly understood as a modest change from a past practice that may have encouraged such suits. Bay area juries used to have a reputation for being generous to victims of all kind of legal harm, including accident plaintiffs as well as discrimination plaintiffs. Many observers believe that this is less the case as San Francisco in particular becomes less working-class, more professional class. However, high-velocity labor markets are also blamed. Karen Jo Koonan of the National Jury Project/West in Oakland observes the influence of New Economy workers in employment cases. "Dot-commers jump from job to job" and "have no sense that the employers owe anything to the employees."¹²² The converse may also be true. Dot-commers also think that employees owe no duties of loyalty or confidentiality to employers, at least where this would inhibit their own employability and the employer undertakes no reciprocal duties to employ them. However, it does not appear that even these dot-commers are less generous than juries elsewhere, as opposed to San Francisco juries in former times.

C. Social obstacles to discrimination suits

In general, people won't sue to protect their rights against discrimination if there are other jobs to be had, or if they can leave and start their own company. They sue when they are about to lose late-career jobs paying above opportunity wage. So much employment discrimination litigation is endogenous to internal labor markets. The internal labor market creates the job that is the subject of the typical discrimination suit.

In a dynamic and expanding economy, employees who lose or fail to get a job due to prejudice normally get a different, better job. As Henry Farber has shown, this is true for job losses in information technology in general, comparing older information technology professionals with younger.¹²³ Farber's data include job losses for many reasons, including incompetence or poor performance. Perhaps he has hold of two offsetting trends. There is some stereotyping against older professionals in information technology, that results in some job losses, and longer job searches, that younger workers would not experience. But by the same token, for older workers, job loss is less likely to signal incompetence. Those older workers have a persuasive explanation of some of those job losses that younger workers would not—they were forced out because of discrimination. (This particularly matters if the job lost was at an information technology employer that normally offers somewhat stable employment but chose not to do so for this individual. Nobody has to explain being laid off from most Silicon Valley employers). So most information technology workers who lost jobs, even for illegal reasons, were

¹²²Dennis J. Opatrny, *S.F. Juries Getting Smarter, and Stingier*, THE RECORDER, June 14, 2000.

¹²³National Research Council, *supra* n.51, at 135-51.

able, at least in the 1990s, to find other jobs and were not stigmatized by the illegal discrimination.

By contrast, suing that former employer in a discrimination suit could have a powerful negative impact on future employability, powerful in a high-velocity labor market in which employees are back on the job market every eighteen months or two years. Lawsuits and lawyers are not well-regarded in the Valley, which also believes itself, with considerable justification, to be meritocratic. Network hiring, with its heavy emphasis on colleagues' and intermediaries' vouching for specific individuals, makes it easy to retaliate against people with reputations as troublemakers. So long as victims of discrimination can get other jobs, they have every incentive to do so, and little incentive to pursue legal remedies. It has been suggested that the US economy generally might be able to keep unemployment rates low through adopting more high-velocity work practices.¹²⁴ If this is so, one might see similar decreases in discrimination suits across the economy.

It is harder to explain why employees at the very end of their careers don't sue. I think there are not many such employees who are really victims of discrimination. Even in the 1990s, the woods did not seem to be full of unemployed or underemployed older programmers who would really have preferred that decade's programming jobs to their current occupation, whatever it was.

In the US in 1990s, essentially no new net jobs were created in traditional internal labor markets. Manufacturing employment declined and public employment held steady. All new net jobs were in the services. Some of these jobs in the services were extremely remunerative (the expanding information technology, financial, and legal sectors) and some were not. While there is no good statistical proxy for traditional internal labor markets, it appears to me that few were in traditional internal labor markets with implicit contracts for lifetime employment. As fewer such jobs are created and existing jobs disappear, discrimination law will either change or die.

Silicon Valley's labor market challenges many ways in which lawyers and economists have understood labor markets, but no challenge is greater, or more intellectually difficult, than its challenge to our legal and conceptual apparatus for understanding discrimination and equal opportunity. If law does not change, Silicon Valley will continue to be essentially all white and Asian, and disproportionately young. In the book from which this chapter is drawn, I largely defend high-velocity labor markets. I argue throughout the book that there is a national interest in growth and innovation that supports such legal institutions as bans on covenants not to compete, narrow enforcement of trade secrets, self-employment, temporary help agencies, and H-1B visas.¹²⁵ It is more difficult to defend high-velocity labor markets if they will forever

¹²⁴Lawrence F. Katz & Alan B. Krueger, *The High-Pressure U.S. Labor Market of the 1990s*, 1999 BROOKINGS PAPERS ON ECON. ACTIVITY 1 (1999).

¹²⁵HYDE, *supra* n. *.

exclude African-Americans and Latinos in significant numbers. It is tempting to suggest that law should be less focused on discrimination and more on job creation and growth, but it is simply hypocritical to say this if one knows that such growth policies will not help African-Americans or Latinos.

Even if existing legal tools were more widely used, they would still not bring African-Americans or Latinos into the Valley's labor market. Statistical proofs of discrimination don't work in industries in which no employer hires many members of minority groups.¹²⁶ Other statistical proofs would at best trigger employer obligations to explain disparate outcomes.¹²⁷ Since narrow skill requirements are probably easier to defend than network hiring, more legal scrutiny of employment might result in even stricter skill requirements at hiring, and the loss of the valuable informational functions of the Valley's labor market intermediaries. None of these strategies would accomplish anything if, as is true today, potential victims of discrimination do not sue.

In order for law to bring African-Americans and Latinos into high technology, it would have to become more intrusive in ways that might lose public support and might stifle some of the Valley's flexibility and information-based institutions. Law could, for example, mandate more rigid quotas, particularly for government contractors; or make statistical proof of discrimination easier (by rejecting most explanations of it); or insist on duties to train employees and applicants in protected groups before hiring individuals on H-1B visas. Any of these policies would represent a major change in the Valley's distinctive labor market, moving it away from the flexibility represented by short-term hiring for specific existing skills, and by networks and other intermediaries, and toward traditional labor markets that are simply less productive of high technology growth and innovation. Again, if a national consensus ever developed in favor of restoring older labor markets, it could be implemented by restricting temporary and self-employment, and enforcing covenants not to compete and trade secrets agreements, at considerable cost to innovation and wealth creation. Critics of high-velocity labor markets and advocates for more traditional labor markets, typically minimize the costs imposed by such markets, which include excessive termination of employees and insufficient adjustment; legal and other battles over the rents accruing to such fixed jobs; and too much aggregate unemployment. I also doubt that there would be much public support for policies like quotas, discrimination suits based entirely on statistics, or conscripting employers to train. However since African-Americans as employees benefit little from the labor market innovations of a high-velocity labor market (although they benefit along with all consumers of information technology), they might favor such labor market reforms.

 ¹²⁶Blumrosen & Blumrosen, *supra* n.105.

¹²⁷*Hazelwood*, *supra* n.98.

V. Public policy initiatives to open up high-tech jobs to excluded groups: African-Americans, for simplicity

I see no easy solution to this problem, and none that emerges entirely within the realm of what we have traditionally regarded as the law of discrimination. I have also considered and rejected two other policies sometimes advocated on antidiscrimination grounds. I do not favor either a national policy favoring traditional internal labor markets, or a major cut in the H-1B visa program, at least on an antidiscrimination rationale. Eliminating the H-1B program entirely would create the most opportunities for programmers in India and Ireland; a few opportunities for older programmers; and none at all for African-Americans and Latinos.

I therefore favor experimentation with a variety of other public policy initiatives. The goal would be to find levels of information technology at which African-Americans and Latinos might feasibly be employed, and then preferably to create incentives for employers to find ways of doing so. The problem of disparate labor market outcomes will test Silicon Valley's high-velocity labor market. In theory, its distinctive labor market institutions, ideal for transmitting information, providing incentives to employees, and creating wealth, should be able to address problems of disparate labor market outcomes with an efficacy unknown to present approaches.

A. Create incentives for employers to improve the numbers.

Large information technology employers that receive government contracts are subject to formal affirmative action requirements and informal pressure. Before subjecting all employers to more liability for statistical discrimination, we should try more targeted pressure on particular employers, that can afford to do so, to improve their hiring from excluded groups. They would be given relatively free reign to design recruitment and training programs. Those that were effective could become more widespread. In evaluating results, law would have to be sensitive to the aspects of a high-velocity labor market that make genuine contribution to growth. For example, regulators should be responsive to employer programs that create opportunities for African-American contractors or "permatemps," if the employer is already making use of these contracts and the opportunities are genuine. Obviously if such requirements affect rates of economic and technological growth, they will not be developed further, but there is no reason to assume in advance that no progress is possible here.

B. Hi-tech solutions to high-tech problems.

As with retirement plans and health insurance, there is a lamentable gap between the creativity that has gone into the design of some aspects of high-velocity work practices while ignoring others.¹²⁸ Perhaps some existing institutions can be adapted to serve equal employment opportunity. Internet job boards and job sites for African-American, or

¹²⁸On extremely low levels of retirement savings and health insurance coverage among Silicon Valley professionals, see HYDE, *supra* n.*, at 206-15.

older, employees could help demonstrate that such individuals are available. Of course, as we have seen, internet job sites appear to reinforce meritocracy, but with so many resumes available, make contacts and networks even more important. This creates opportunities for temporary help agencies and advocacy groups focused on older or African-American workers.

Some Silicon Valley employers have developed distinctive ways of organizing human resources (besides outsourcing to a temp agency). Susan Sturm describes human resources problem-solvers at Intel, delegated unusual authority to treat human resources complaints as symptoms of deeper problems, then work on the problems. These are probably unique to Intel and would not export easily.¹²⁹ Intel is an unusual Silicon Valley employer. Its core business is to dominate chips for personal computers, and in that aspect of its business, it is more interested in stability and maintaining its dominance than are most Valley employers. (Intel also was on a buying spree in the late 1990s to find some market to dominate other than the personal computer, but none of those acquisitions yet plays anything like the role of its core business). Intel, to an extent possibly unique in Silicon Valley, is a place at which people make careers, where departing employees may well face trade secrets suits (invariably unsuccessful), and product lines may well be moved to remote locations with few other high-tech opportunities to tempt departing Intel employees.¹³⁰ Intel also describes itself as unusually “paranoid” about outside scrutiny.¹³¹ While its human resource problem solvers may have many achievements to their credit, employment opportunities for members of minority groups are not among them. Intel's statistics are if anything worse than most Valley employers.¹³²

C. Equal employment for careers, not within single employers

If there ever are discrimination suits against employers in networks, like Silicon Valley's, counsel, in seeking relief, must be sensitive to the networked aspect of contemporary careers. Law needs a period of experimentation with remedies for discrimination that cross firm lines. These might include several firms agreeing to fund particular training efforts, or a new placement agency. Perhaps a victim of discrimination might receive funding from the discriminatory employer for her own startup, rather than accept a promotion from that employer. I cannot report on successful efforts here. There aren't any. It will take some time to learn what works.

A basic problem is that artificial cooperation among entities in a network is never as effective as the kind of natural cooperation that is the subject of the book, the natural sharing of information, cooperation among firms in bringing products to market,

¹²⁹Sturm, *supra* n.92, at.

¹³⁰HYDE, *supra* n.*, at 27-28, 38-40.

¹³¹ANDREW S. GROVE, *ONLY THE PARANOID SURVIVE* (1996). See generally TIM JACKSON, *INSIDE INTEL* (1997).

¹³²Angwin & Castaneda, *supra* n.4.



technology licensing and second sourcing, and the like. For example, consider the failure of the Talent Alliance. AT&T, after announcing the elimination of forty thousand managerial positions in 1996, “proposed to a group of ‘peer corporations’ that they form a network to help laid-off employees find work more easily and conversely to help the companies find the right talent quickly. It seemed an exciting idea at the time: fourteen large companies jumped quickly on the bandwagon, including leaders such as DuPont, Johnson & Johnson, and UPS....” However, the idea never got “off the ground.” No employers joined after the initial group, at least one dropped out, and fewer than ten people were ever placed through this network.¹³³

Similarly, if the EEOC somehow found the resources to sue the ten or twenty largest firms in Silicon Valley alleging disparate treatment in hiring for some positions without rigid entry requirements, it (just) might be able to win a suit. I am suggesting, though, that if it did, it would still not know what to ask for in relief. Would a decree requiring hiring (perhaps by contractors, monitored by the large firms) of a certain number of African-American cablers accomplish anything? Would it result six months later in a lot of unemployed cablers? Or would this be a “foot in the door” that would alter lives and aspirations for many individuals not even the subject of the decree?

A “Talent Alliance” linking large Valley employers under EEOC decree might seem like a good remedy if all were found to have discriminated. It might work, or might be as unused at AT&T’s. I have been urging further study of how people really match with jobs in a world of networked careers, internet job boards, new labor market intermediaries, and the like. I stress that this is not some academic ritualized professing of humility; it is necessary if we are to think straight about problems of equity and discrimination.

D. Equity in business contracting

Increasing the density of African-American programmers, engineers, and scientists calls for thinking over the extremely long term—the opposite of “internet time.” There are few such individuals now and no trend toward their increase. Certainly the US should target science and tech education for minorities.

It seems desirable to me to find nontechnical niches in the information technology industry that would be more feasible targets for shorter-term integration. If one generation of African-Americans works somewhere in information technology, learning the players and some of the vocabulary, it seems more likely that their children will aspire to higher jobs in the industry, like cars in Detroit, though there is little relevant literature on the point. Finally, since companies do not maintain promotion ladders up from entry-level positions, targeted positions should be those that are often held by the self-employed.

¹³³Charles Heckscher, *HR Strategy and Nonstandard Work: Dualism Versus True Mobility*, in *NONSTANDARD WORK: THE NATURE AND CHALLENGES OF CHANGING EMPLOYMENT* 267, 277-78. (Françoise Carré et al eds. 2000).

A strategy of using public policy and funds to encourage subcontracting to minority-owned contractors accomplishes several goals, since business ownership is especially low among African-Americans. However, existing African-American small business owners employ workforces that are overwhelmingly African-American.¹³⁴ Application by government of antidiscrimination and affirmative action principles to business contracting raises difficult constitutional issues that I cannot explore here, but that do not constrain voluntary efforts by employers. There is much to be gained from modest experiments to create more African-American entrepreneurs running technician, service, and outsourced manufacturing businesses, particularly if these could be carried out by companies, with public participation limited to technical assistance grants and the like. The modal existing self-employed African-American male is a truck driver.¹³⁵ Channeling more distribution work to them is a very feasible first step.

E. H-1B Technical Skill Training Grant Program Grants

Employers who apply for H1-B visas since the last Congressional reauthorization of the program now pay a \$1000 fee, much of which is used for targeted technical training of minority technicians and repair people. This has turned out to be a very good program. It creates some rewards to human capital investment by African-Americans and could yield the fabled "foot in the door" of the information technology industry that is currently lacking. Minority repair people and technicians may, over time, found their own small businesses. By watching them, we will learn things about how to open opportunities in a high-velocity labor market.

This program, however, was sold to Congress under the inaccurate claim that such training would alleviate the need for H-1B visas. This is inaccurate because H1-Bs are normally programmers and engineers, not repairers or technicians. In my view, a program to train minority repair persons and technicians is nevertheless an excellent program; over the very long term it will help readjust minority attitudes toward education and their place in the information technology industry. Since companies still apply for the maximum number of H-1B visas even when there are many unemployed programmers already documented to work, requiring them to train minority technicians is a very modest return request.¹³⁶ However, the Bush administration has sought to abolish the training program.¹³⁷

¹³⁴Timothy Bates, *Utilization of Minority Employees in Small Business: A Comparison of Nonminority and Black-owned Urban Enterprises*, in *AFRICAN AMERICANS AND POST-INDUSTRIAL LABOR MARKETS* 391 (James B. Stewart ed. 1997).

¹³⁵Arne L. Kalleberg et al, *NONSTANDARD WORK, SUBSTANDARD JOBS: FLEXIBLE WORK ARRANGEMENTS IN THE U.S.* 14 (1997)(from CPS Supplement).

¹³⁶All 65,000 H-1B visas for fiscal year 2004-05 were exhausted on the first day they were available. Edward Alden, *US uses up quota of skilled visas*, *FINANCIAL TIMES*, Oct. 5, 2004, at 8.

¹³⁷Jennifer Bjorhus, *Tech Job Training Risks Getting Sacked*, *SAN JOSE MERCURY-NEWS*, Apr. 15, 2002, at A1.