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The Glass Ceiling and Asian Americans

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Comments

Glass Ceiling Report

THE GLASS CEILING AND ASIAN AMERICANS

A Research Monograph

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Glass Ceiling Commission
Office of the Secretary
200 Constitution Avenue, N.W.
Washington, D.C. 20210

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I. EXECUTIVE SUMMARY

For Americans who are not of Asian ancestry, any meaningful, empirically-based discussion of the realities of a glass ceiling for Asian Americans runs up against a powerful counter-image: a media-saturated view of Asian Pacific Americans as highly educated and occupationally successful. Complementing this picture of upward mobility is that of a generally non-violent and law-abiding citizenry, relatively passive politically, and overall culturally resourceful. However, it is the *comparative educational and occupational success* of Asian Americans -- over and against that of African Americans, Latino-Americans, and Native Americans -- that has generated the idea of Asian-Americans as a "model" for other minorities. Insofar as this understanding has come to occupy the status of conventional wisdom in the contemporary United States, it has eroded our collective capacity to confront an alternative reality.¹

Some of the misconceptions regarding economic status are fed by statistical data that do not adjust for this population's geographical concentration in states and metropolitan areas, where wages and salaries, along with cost-of-living, tend to be far higher than the rest of the nation.² Similarly, when factors such as age or educational level are controlled for, Asian Americans have been found to earn less than non-Hispanic whites in comparable circumstances.³ Finally, the image of Asian Pacific Americans as entrepreneurs or managers of

¹In a review and analysis of images in the popular press in the 1960's and 1980's, Keith Osajima showed how certain cultural values associated with Asian Americans -- an emphasis on the family, education, hard work, and thrift -- were often linked with high educational attainment and occupational achievement. These images, he notes, have become slightly more complex in the 1980's, updated through the inclusion of research findings in the 1970's. As Osajima notes, in the final analysis, cultural explanations have dominated, becoming extremely elastic formulations, "remarkably pliable constructs," which are stretched and extended to encompass structural problems, which it is presumed Asian Americans will simply overcome as a matter of time and cultural fortitude. Keith Osajima, "Asian Americans as the Model Minority: An Analysis of the Popular Press Image in the 1960s and 1980s," pp. 165-175, in Gary Y. Okihiro, Shirley Hune, Arthur A. Hansen, and John M. Liu (eds.), *Reflections on Shattered Windows* (Washington State University Press), 1988.

²The per capita median incomes of Asian Pacific Americans will tend to be higher by virtue of their residing in high-income states and metropolitan areas. It is therefore misleading to compare these income data against a national median, as opposed to the median incomes of those residing in the same respective regions or metropolitan areas.

³William P. O'Hare and Judy C. Felt, *Asian Americans: America's Fastest Growing Minority Group* (Washington, D.C.: Population Reference Bureau), No. 19, February 1991.

small business obscures another reality, which is that the private, corporate sector is a major area of employment, not only for the general population, but for this growing minority population.⁴ Ethnic small businesses tend to be concentrated in ethnically or racially homogeneous enclaves, operating on a scale and in a manner quite different from large employers in mainstream sectors of the economy. There is some evidence that some self-employment among Asian Pacific Americans is taken up as a result of blocked mobility in mainstream areas of employment. While studies may, for their own purposes, report on managerial representation in ways that combine managers in both these sectors (salaried managers in large-scale bureaucratic organizations with managers of ethnic small businesses), in any systematic study of the glass ceiling this should be a critical analytical distinction.

The present report is concerned with barriers faced by professionals primarily in mainstream bureaucratic or corporate hierarchies, in particular those barriers which block mobility but which are as yet so invisible as to constitute a "glass ceiling." This glass ceiling is itself a major qualification to the conventional belief that hard work and education will lead to economic or occupational success. Indeed, a major finding is that Asian American educational achievement is not matched by comparable access to professional jobs which permit upward mobility in the long run.

Asian Pacific Americans are projected to contribute significantly to the net increase in the total labor force in next few decades and to have a disproportionate share of highly educated workers.⁵ Now the third largest

⁴Like the general population, the vast majority of Asian Pacific Americans (76.3%) work as private wage and salary workers, and only a small percentage (9.8%) are listed as self-employed. Susan B. Gall and Timothy L. Gall, *Statistical Record of Asian Americans* (Detroit, Washington, D.C., London: Gale Research Inc.), 1993, p. 278.

⁵While the immigrant proportion is expected to drop to around 72-74 percent in 2020, the growth rate of American-born Asians will double that of the foreign-born adult immigrant Asian population. Even so, the immigrant population will continue to dominate, and since the 1990 Immigration Act will continue to give preference to highly educated professionals, the majority of Asian immigrants will continue to be highly educated. Paul Ong and Suzanne J. Hee, "Work Issues Facing Asian Pacific Americans: Labor Policy," pp. 141-152 in *The State of Asian Pacific America: Policy Issues to the Year 2020* (LEAP Asian Pacific American Policy

minority, after blacks and Hispanics, they are expected to approximate 9.9 million by the year 2000, or 4 percent of the U.S. population. By 1990, they were already 7.3 million, having doubled their size since 1980.⁶ In addition to being the fastest growing of minority groups in the United States,⁷ Asian Pacific Americans are also the most highly educated of all groups, including white males. Yet while new jobs in the service sector are expected to require increasing education and skill levels,⁸ the implications of this growth for Asian Americans are still uncertain.

The employment pattern of Asian Americans in general is one of occupational or industry concentration. In California, for example, the most commonly held job for Asian female immigrants involves electrical equipment assembly work, whereas electrical engineering is the dominant profession for Asian male citizens.⁹ In terms of national data, professionalization for Asian Americans has meant engineering for men and nursing for women. Foreign-trained health professionals working in the United States, however, often find themselves working in medical institutions that are less attractive and less

Institute and UCLA Asian American Studies Center), 1993: 142, 144-146. Howard N. Fullerton, Jr., "New Labor Force Projections, Spanning 1988 to 2000," *Monthly Labor Review*, 3-12, November 1989.

⁶The 1980 figures themselves represent a doubling of the population since 1970. In 1970, the Asian American population numbered 1.4 million. By 1980, that population had more than doubled to 3.5 million, or 1.5 percent of the total U.S. population of 226.5 million. Population Reference Bureau, *Asian Americans: Growth, Change, and Diversity*, Vol. 40, No. 4, October 1985. By Robert W. Gardner, Bryant Robey, and Peter C. Smith. Bureau of the Census, *We the American Asians* (Washington, D.C.: U.S. Government Printing Office), September 1992.

⁷While the Census Bureau has published different population estimates for Asian and Pacific Islanders, there is little question that their rate of growth has surpassed other groups, including blacks, Hispanics, and non-Hispanic whites. William P. O'Hare and Judy C. Felt, *Asian Americans: America's Fastest Growing Minority Group* (Washington, D.C.: Population Reference Bureau), No. 19, February 1991.

⁸Whereas a college education is required for only 22 percent of today's jobs, it was estimated that one-third of all new jobs created between 1984 and 2000 would require a college degree. Reflecting this shift over to service, it was estimated, "In absolute numbers, the biggest job creation categories will be service occupations, administrative support, and marketing and sales, which together account for half of the net new jobs that will be created." While low-level service sector employment (e.g. cashiers, clerks, secretaries) would continue to be a part of the occupational picture, a growing segment of service jobs would increasingly require extensive training and knowledge. Among the six largest service industries that would call upon an increasingly skilled labor force were the following: retail trade, education, health care, general government, and finance industry. (As employers, they are listed in decreasing order, according to the number of employees.) *Workforce 2000*, 1987: 20-32, 96-101.

⁹These data were reported in a recent analysis of 1990 census data by the *San Francisco Chronicle* (September 6, 1993). For an analysis of how work in Silicon Valley is stratified by race, gender, class, and nationality, see also Karen J. Hossfeld, "'Their Logic Against Them': Contradictions in 'Sex, Race, and Class in Silicon Valley,'" pp. 149-178 in Kathryn Ward (ed.) *Women Workers and Global Restructuring* (Philadelphia: Temple University Press, 1990); Karen Hossfeld, "Small, Foreign and Female:" *Profiles of Gender, Race and Nationality in Silicon Valley*

remunerative,¹⁰ or in specialties that are more marginal or low-paying.

The corporate sector has already been identified as having some of the worst promotional opportunities for Asian American professionals. In California's Silicon Valley, Asian immigrants and Asian Americans make up 23.6 percent of the high-tech manufacturing workforce, and are found in many job categories, except high-level management. White males, by contrast, were more likely to be represented among managers than professionals.¹¹ While the electronics industry was noted to have the worst reputation among industries, discontent about blocked occupational mobility among Asian Pacific employees has been found across various industries. A constricted funnel faces this group as scientific or technically-trained professionals in government service, as well as academia.

A major and recurring finding was that glass ceilings suggested themselves in precisely those work contexts where we might reasonably expect their professional concentration to lead to greater managerial representation, i.e. science, engineering, and other technical professions. More likely than any other racial-ethnic group to be highly trained in technical or scientific arenas, Asian Americans are expected to be an important labor pool from which the nation is expected to draw in the years ahead. According to National Science Foundation predictions, there will be a shortage of about 560,000 science and engineering professionals by the year 2010, since the population projected to meet these labor force needs would come from an overall shrinking U.S. labor pool.¹² At the same

(Berkeley: University of California Press), 1994.

¹⁰Veterans Administration Hospitals have been identified as the single largest group of employers of immigrant doctors. Illsoo Kim, *New Urban Immigrants: The Korean Community in New York*, (Princeton, New Jersey: Princeton New Jersey Press), 1981, p. 150.

¹¹In terms of their overall representation in high-tech manufacturing, this figure is high, not only because Asians represent only 16.8 percent of the area's population, but because this represents a doubling of their size between 1980 and 1990, from one-tenth to one-fifth of the high-tech workforce. *Global Electronics*, Issue no. 101, February 1990; *Global Electronics*, Issue no. 116, October 1992, *Global Electronics*, Issue no. 121, September 1993.

¹²Even though blacks, Hispanics, American Indians, and Alaskan natives together make up 22 percent of the total U.S. population, they are less likely to be scientists or engineers than the other 78 percent. "In 1988, only 4.4% of the 4.5 million employed natural scientists or engineers in the U.S. were members of these minority

time, the barriers to mobility for Asian Americans are most glaring here.

According to some findings still emerging from an analysis of National Science Foundation surveys,¹³ they are less likely to be in managerial jobs than African and Hispanic Americans, and when promoted to middle or upper-levels of management more likely to receive lower economic returns relative to whites occupying similar positions, even though they are also likely to be *more qualified* in terms of education and work experience. Indeed, a recurring finding is that despite higher levels of formal education than other groups, they receive a lower yield in terms of income or occupational returns. Increasing seniority in years has been associated not so much with higher occupational status but rather increasing perceptions of a glass ceiling.

In general, the data in this report suggest a recurring pattern of managerial underrepresentation among Asian Americans, with education facilitating entry into the professional ranks, but bringing lower returns in terms of high-ranking executive jobs. While this is most apparent in corporate arenas of work, studies have found evidence of blocked mobility in other areas, such as law, journalism, government, and academia.¹⁴ Despite documented concerns, frustrations related to managerial aspirations are likely to be suppressed or internalized as "personal deficits," or else indirectly manifested in ways which include adjustments or changes in work habits, greater disinvolvement or lowered work performance, job transfers, and the development of alternative career pursuits outside the primary area of

groups." These fields have become increasingly less attractive for white males as well. P. 20 in Rebecca L. Rawls, "Minorities in Science," Special Report, *Chemical and Engineering News* 69 (15), April 15, 1991: 20-35.

¹³Paul Wong and Richard Nagasawa, "Asian American Scientists and Engineers: Is there a Glass Ceiling for Career Advancement?" *Chinese American Forum* 6 (3), January 1991, p. 4.

¹⁴Troy Duster, David Minkus, and Colin Samson, *Bar Association of San Francisco Minority Employment Survey: Final Report* (Department of Sociology, University of California, Berkeley, April 18, 1988; Alexis Tan, *Why Asian Americans Journalists Leave Journalism and Why They Stay* (New York: Asian American Journalists Association), 1990; *Asian Americans at Berkeley, A Report to the Chancellor*, May 1989; Chinese for Affirmative Action, *The Broken Ladder '92: Asian Americans in City Government* (San Francisco, CA.), May 1992; Dean Lan, "Information Hearing on Asian, Filipino, Pacific Islander (AFPI) Demographics and Employment," Hearings before the State Personnel Board, September 7, 1988; Don Nakanishi, "Asian Pacific Americans in Higher Education: Faculty and Administrative Representation and Tenure," in Joanne Gainen and Robert Boice (eds.), *Building a Diverse*

employment, e.g. ethnic small businesses. For these reasons, aggregate data may actually underestimate the prevalence of mobility problems.

Further research is required to clarify and more precisely determine the nature of barriers restricting mobility into management. Because knowledge on this subject is very much in its nascent state, the recommendations which come out of this report emphasize areas where research might be most fruitfully directed. However, certain policy recommendations are also clearly needed to ensure that employees are fully informed of existing promotional criteria and provided with opportunities for managerial training and self-development. Where career tracks within the organization have different long-term implications for mobility, counseling about alternative ladders or parallel pathways needs to occur at the outset. At the upper levels of this hierarchy, administrators should be rewarded where they demonstrate ability to effectively manage an increasingly diverse workforce and to develop promotional policies and practices that are widely considered fair and equitable.

The research recommendations are supportive of these organizational recommendations. A review of how Asian American scientists or engineers are differentially distributed across various job categories should include more *process-sensitive* assessments of the long-range career prospects of those recruited under these titles, as well as how duties and responsibilities are tied in with company interests or objectives. To the extent that Asian Pacific Americans are more likely than, say, white males, to be channeled into occupational tracks or lines of work which have lower returns in terms of long-term career mobility, it would be important to investigate the extent to which their greater presence in certain "pipelines" may explain some of their slower progress into management. Even so, testimony has indicated that Asian Americans are by-passed by others in the same pipeline who have fewer years of educational and work experience.

For this reason, it is critical that the criteria for such decisions are more closely examined, along with the possibility that there may be different trajectories that inhere in a particular position or career track.

The research recommendations, therefore, direct investigators towards identifying barriers to mobility *within* specific situational or workplace contexts. Because occupational concentration or clustering along racial and ethnic lines does not in and of itself constitute restricted occupational mobility, there is a need to generate a more process-sensitive understanding of existing occupational patterns. A number of factors, operating singly and in combination, present themselves as possible barriers, though the existing data are not unequivocal as to whether these barriers are "real" or "artificial." These include not only issues of individual qualification but institutional factors, such as the availability of management positions. Structural factors related to "downsizing" and overall restructuring in the economy as a whole may make such opportunities even scarcer. Through incentive or directive, company policy and executive decision may converge to channel Asian American expertise into alternative career tracks. Depending on the configuration of factors, the exercise of executive discretion may or may not be intended to have discriminatory outcomes.

Second, given evidence of managerial interest and eligibility among Asian Americans, a more *organizational* analysis is needed of how promotional decisions reflect considerations related to institutional culture, peer acceptance, and upper management's support. Existing research repeatedly notes employee-expressed needs for sponsorship, mentoring or networking activities in a "corporate culture" that otherwise seems foreign or unnavigable with present understandings. These attitudes need to be more systematically explored in terms of the *specific* institutional context in which particular personal or cultural attributes are seen as barriers. Moreover, such attempts should minimally capture a "triangulation" of perspectives which define particular work

relationships. These perspectives include (1) Asian American employee perceptions of barriers, as well as opportunities, for career development, (2) upper-management's attitudes or propensity towards tapping various professional pools, and (3) thirdly, the attitudes of other employees towards Asians as managers or supervisory role models. Delineating this social and cultural matrix is critical for understanding how both managerial interest and access are affected by role relationships and cultural factors which impede social integration into the workplace.

When the aerospace industry was at its height, job transfers and the availability of lateral mobility were outlets for some of this discontent. In recent years, management training workshops have served as another way of furthering professional development.¹⁵ Whatever the precise cause or combination of factors responsible for managerial underrepresentation among Asian Americans, the *disproportionately* low ratio of managers to those in the professional pool is an undisputed pattern.

Recent survey responses of Asian Americans strongly suggest barriers which are external, with the single most frequently mentioned company barrier to career advancement being arbitrary and subjective promotional processes.¹⁶ More objective data, based on qualifications such as education and work experience, lend support to this view insofar as cross-racial data indicate that Asian American levels of education and work experience are routinely higher.

Minimally, the promotional review process should be studied in ways that shed light on the criteria and assumptions which guide decisions which result

¹⁵From 1989 to 1993, participation in management training workshops steadily increased at UCLA/LEAP's Aerospace & Technology Management Program, totalling 200 by 1993, with TRW and Hughes Aircraft being two of the major company participants out of a total of 21 companies represented. These data were provided by J.D. Hokoyama, President of LEAP (Leadership Education for Asian Participants).

¹⁶In a 1993 survey of Asian American workers in Silicon Valley, forty percent of the responses cited arbitrary and subjective promotional processes. Asian Americans for Community Involvement, *Qualified But...: A Report on Glass Ceiling Issues Facing Asian Americans in Silicon Valley*, 1993, 26-27.

from the exercise of administrative "flexibility." To the extent that "arbitrary" processes may stem from the use of *informal*, subjective criteria, the latter may be invoked in ways which result in "systematic" bias. Thus, while poor English language skills and unfamiliarity with corporate culture have been identified as barriers by employers and Asian American employees alike, the two may not have a shared sense of the level or nature of language skills that is reasonable to expect. Employers may consider accents a liability in the workplace, without there being any clear and realistic assessment about the relationship of language to work performance.¹⁷ Asian Americans who are *native English speakers*, moreover, also experience a glass ceiling and were found in some studies to be at a relative objective disadvantage, even when compared with foreign-born, immigrant whites. For this reason, research will need to not only investigate the extent to which work standards are clearly specified with respect to oral or written skills but those situations where these standards may not be upheld because of greater social or cultural tolerance for certain English language barriers, accents, or cultural behavior. (Establishing a baseline for these research initiatives will require attention to the enforcement of existing policies around record-keeping.¹⁸)

In general, the goal of the proposed research agenda is to identify specific social or organizational dynamics that contribute to exclusionary or inclusionary patterns. *Attitudinal* or *behavioral attributes* of managerial candidates need to be evaluated from the "shop-floor" up, and include a more detailed analysis of how the *institutional* or *organizational* context defines the very qualities which constitute leadership, thereby shaping executive decisions on appointments. Case study research, therefore, is highly recommended for the purpose of specifying and identifying a variety of formal and informal policies and practices

¹⁷U.S. Commission on Civil Rights, *Civil Rights Issues Facing Asian Americans in the 1990s* (Washington, D.C.: U.S. Government Printing Office), Feb. 1992, pp. 136-145.

¹⁸According to the U.S. Department of Labor's 1991 report on *The Glass Ceiling Initiative*, even employers with

surrounding employee participation and sponsorship.

Finally, the above organizational analysis should be extended to include a focus on Asian Pacific Americans who have achieved managerial-executive status. The reasons for this have to do not only with the appearance of glass ceilings *within* management (i.e. the concentrations of Asian Americans at lower or middle levels of the managerial ladder), but with the need to understand how individual or cultural attributes interface with institutional structures and processes that contribute to variable experiences within these ranks. Asian Americans in corporate management may or may not possess the same leadership qualities as other groups within these administrative categories. To the extent that this is not only true but patterned, an understanding of barriers at this level would better inform company practice. In fact, the ability of corporate structures to be more responsive to an increasingly diverse labor force will depend on how divergent conceptions of leadership skills are *self-consciously* incorporated into managerial practices. The subject of the glass ceiling and Asian Americans is thus not simply a marginal phenomenon, but integral to further understanding how institutional structures in the workplace might be reshaped as part of a long-range commitment.

government contracts failed to keep adequate records for the purposes of monitoring.

II. OCCUPATIONAL PROFILE

The conventional wisdom in the contemporary United States is that Asian Americans are a highly educated, upwardly mobile, and culturally resourceful group. This view has persisted despite a body of evidence that points to structural barriers to mobility or institutional sources of inequality.

In the last two decades, Asian Americans have entered higher education in unprecedented numbers. However, most early Asian immigrants (1840-1934) were largely from poor peasant backgrounds and were recruited to meet the demand for cheap labor that could not be filled by native white American labor. While recent immigration continues to include poor segments of the Asian population who perform menial labor and other low-level service jobs, these new residents have largely arrived as a result of family reunification policies or as refugees. Where immigration policy has directly encouraged and selected for a particular kind of worker, the composition of this new immigration is highly educated and professionally trained, a significant departure from the historical pattern associated with Asian immigration to the United States. In the post-war period, expanding sectors of the American economy led to a demand for scientists, engineers, and health professionals, which American colleges and universities could not produce fast enough. Although prior training and experience distinctly set these recent professionals off from earlier immigrants, the fact that they have entered into the occupational pipeline as immigrants, with varying degrees of language and cultural adjustment problems, may play some role in their conversion into what observers have labeled the new, "high-tech coolie" labor. Because there is some evidence that foreign-born, immigrant whites do not experience similar barriers, this report recommends a more systematic comparative exploration of these issues. (See Section V, Summary and Recommendations).

The present section gives a general historical overview of the occupational status of Asians in the United States.

A. HISTORICAL OVERVIEW

Prior to World War II, Asians were generally classified as "nonwhites" in the census data, and only in rare statistical tabulations does one find them identified by race or ethnicity. Immigration laws, however, either explicitly or implicitly singled them out for exclusion based on race. Many of these laws were written and enacted in response to the labor needs of an industrializing society.

From the mid-nineteenth to the early twentieth century Asians who immigrated to the United States were generally consigned to jobs as laborers, menials, and low-level service workers. Initially welcomed when they performed hard labor, low-level service, or other undesirable forms of work, Asian immigrants were later excluded when they came into direct competition with white workers. As aliens, they were politically and economically vulnerable as a result of their ineligibility for naturalized citizenship, which for many would not occur until as late as 1952. Non-citizenship status, language barriers, and a hostile host society combined to relegate them to marginalized work, segregated in peripheral sectors of the economy.

Although the American-born children of these immigrants acquired all the formal rights of citizenry status denied their parents, this second-generation experienced its own barriers to mobility. Even as they began to professionalize, they also encountered barriers to entering more remunerative and satisfying work. Despite being college-educated, they found it hard, if not impossible, to find jobs outside the racial-ethnic enclaves encased by formal and informal discriminatory practices. Whatever their professional training, they often could not find jobs commensurate with their education. Their situation would not radically improve until the onset of World War II, which made it necessary for the nation to utilize a wider band of its human resources, including this untapped supply of technical reserve labor.

The onset of World War II opened up opportunities for college-educated Asians

in the United States.¹ The post-war period, in turn, witnessed still larger numbers of Asian professionals entering the U.S. labor force. (For a lengthier historical discussion of the occupational status of Asians in the United States, see Appendix I)

B. RECENT ASIAN IMMIGRATION

The Soviet Union's launching of the Sputnik satellite in 1957 drew the U.S. into a technological race in space exploration, and as the nation moved from a manufacturing economy towards an economy increasingly dominated by the service sector, the rate of education of its own citizenry was insufficient to meet these new labor demands. New entrants into the workforce, therefore, would be largely foreign-born and foreign-educated.

Special provisions of the Immigration Act of 1965 facilitated the entry of these trained professionals, which included large numbers of scientists, engineers, and health professionals. In addition, immigration preference was also given to family members of U.S. citizens and to refugees.² Post-1965 immigration, therefore, contributed dramatically not only to the size of the Asian population in the United States but to its diversity. Whereas only 6 percent of the general population was foreign-born, 59 percent of Asian and Pacific Islanders were born in foreign countries.³ By 1980, the census had identified more than 20 Asian ethnic subgroups.⁴

¹Japanese Americans, however, were herded off to internment camps, entering this labor market only after the war and their release from the camps.

²As noted in the Appendix I of this report, the national origins immigration quota system was abolished in 1965 and replaced by a seven-category preference system, which gave preference to relatives of U.S. residents and to immigrants with special abilities, talents, or needed skills. The effect was to dramatically transform the face of immigration, and in particular the nature of Asian American Pacific Islander population. U.S. Commission on Civil Rights, *The Tarnished Golden Door: Civil Rights Issues in Immigration* (Washington, D.C.), September 1980, p. 11, see footnote 55, for details surrounding these seven categories.

³Since relatively few Pacific Islanders are foreign-born (12 percent), the majority of foreign-born are concentrated among the other Asian ethnic subgroups. Vietnamese top the list with 90.5% of their population born outside the United States. Asian groups with populations below 50,000 all have immigrant populations approximating the Vietnamese: Cambodian (93.9%), Laotian (93.7%), Hmong (90.5%), Pakistani (85.1%), Indonesian (83.4%), Thai (82.1%). Other Asian ethnic groups with high proportions of foreign-born composition were Korean (81.9%), Asian Indian (70.4%), Filipino (64.7%), and Chinese (63.3%). Japanese Americans were less likely than these other groups to see their population grow by immigration; 28.4% of their population was foreign-born. U.S. Bureau of the Census, *We, the Asian And Pacific Islander Americans* (Washington, D.C.), September 1988, P. 3.

⁴Figures from the 1980 census are cited in the U.S. Bureau of the Census, *We, the Asian And Pacific Islander Americans* (Washington, D.C.), September 1988.

A majority of the Asian Pacific American population continues to be concentrated in some parts of the country more than others. In 1990, about 66 percent of Asian Pacific Americans resided in the five states of California, New York, Hawaii, Texas, and Illinois.⁵ In 1991, 59 percent of the Asian and Pacific Islander population resided in the Western region, whereas the white population was distributed more evenly throughout the United States (22 percent in the West, 21 percent in the Northeast, 32 percent in the South, and 25 percent in the Midwest).⁶ This geographic concentration is frequently overlooked when income comparisons are based on national averages.⁷ National comparisons suggest they have more disposable income. Yet because Asian populations in the U.S. are concentrated in regions where income and standard of living are high, their purchasing power is lower than that of the general population.⁸ When the total money earnings of Asian and white males (age 25 and over) *in the West* are compared, Asian and Pacific Islanders, with four or more years of education, earned less than their white male counterparts, \$38,519 compared to \$41,416.⁹ The misleading nature of national data is underscored in Table I. Whereas APA's appear to command the highest income at the national level, when comparisons more closely approximate similar regional conditions (i.e. metropolitan area), they along with other racial-ethnic groups are at a disadvantage vis-a-vis non-Hispanic whites.

⁵Bureau of the Census, *We the American Asians* (Washington, D.C.: U.S. Government Printing Office), September 1992, p. 2.

⁶Bureau of the Census, Current Population Reports, P20-459, *The Asian and Pacific Islander Population in the United States: March 1991 and 1990* (Washington, D.C.: U.S. Government Printing Office), 1992. By Claudette E. Bennett. P. 2.

⁷Bureau of the Census, *We the American Asians* (Washington, D.C.: U.S. Government Printing Office), September 1992.

⁸As noted in a later section of this report, Asian American researchers called attention to the fact that per capita income based on national figures is inappropriate when comparing the socioeconomic status of Asian Americans, with the rest of the general population. For this reason, they recommended that more accurate comparisons would be derived from comparing populations living within the same region.

⁹In general, the report from which these figures are drawn provides both national and regional data, although the information is not easily accessible for the comparative purposes mentioned here. Bureau of the Census, Current Population Reports, P20-459, *The Asian and Pacific Islander Population in the United States: March 1991 and 1990* (Washington, D.C.: U.S. Government Printing Office), 1992. By Claudette E. Bennett. Pp. 58-59, 61.

	NH-White	Asian Pacific American	African American	Latino
NATIONAL				
Median Income	\$31,100	\$36,000	\$19,000	\$24,000
Median per Person	\$12,000	\$10,500	\$6,600	\$6,200
% above \$75,000	10%	16%	3%	5%
% above \$10,000	13%	14%	30%	20%
Poverty Rate	9%	14%	29%	25%
4 METRO AREAS				
Median Income	\$40,000	\$37,200	\$24,100	\$25,600
Median per Person	\$17,600	\$10,800	\$8,600	\$6,300
% above \$75,000	20%	16%	6%	6%
% above \$10,000	11%	13%	25%	19%
Poverty Rate	7%	13%	22%	24%
<i>SOURCE:</i> Estimates based on observations drawn from the U.S. Bureau of the Census, 1990 1% Public Use Microdata Sample. NH-whites were sampled at a rate of 1 in 10, and African Americans and Latinos were sampled at a rate of 1 in 2. From Paul Ong, <i>The State of Asian Pacific America: Economic Diversity, Issues and Policies</i> , (LEAP Asian Pacific American Policy Institute and UCLA Asian American Studies Center), 1994.				

Finally, a preliminary look at the annual incomes for individuals in California underscores the stratifying effects of race, ethnicity, and citizenship status, along with age.

* College-educated, 45-year-old white males average \$60,776 annually, 33 percent more than the average for all college-educated 45-year-olds. But this narrows sharply among 30-year-olds. White males in that age group lead at \$39,279, 19 percent more than the overall average of \$32,861. Then come Asian male citizens (\$35,361), Hispanic male citizens (\$34,554), black males (\$30,843), white females (\$28,938), Asian female citizens (\$28,046), black females (\$26,588), Hispanic female citizens (\$25,488), Asian male immigrants (\$24,713), Hispanic male immigrants (\$21,191), Hispanic female immigrants (\$19,392) and Asian female immigrants (\$19,202).¹⁰

While the income gaps are greater with age, with white males topping the income bracket in the 45-year age group, it is unclear to what extent differentials at the upper level are due to a glass ceiling. Similarly, although income differences between groups narrow among 30-year olds, the reasons are unclear. Personal attributes, such as greater professional training or education among younger minority citizens and immigrants, is one possibility. Age discrimination may also give certain advantages to this cohort. Moreover, other factors operating in the larger economy will shape the overall structure of job opportunities and, in turn, who is available to be recruited for

¹⁰San Francisco Chronicle, September 6, 1993, p. A7.

these jobs.

Asian Americans in general are more likely to be in the labor force than the population as a whole, and the income disparities above may explain some of this greater participation. Apart from these income data, other research has underscored the significant percent of recent Asian immigrants in poverty,¹¹ trapped in ethnic economies, where they are largely disadvantaged by their limited English-speaking ability, low education, and poor job skills.¹²

Insofar as the Immigration Act of 1965 gave preference in immigration to those with professional training, encouraging the immigration of highly educated professionals from all developing countries, Asians from developing nations in the Pacific Rim constituted a majority of these immigrants. As noted by Ong, Cheng, and Evans, although Asians were less than a tenth of the total immigration into the U.S. prior to 1965, they made up more than half after 1971. Between 1972 and 1988, this immigration included about 200,000 with science backgrounds or training, especially scientists, engineers, physicians and other health practitioners. They tended to arrive from one of four major "sending countries," i.e. India, South Korea, the Philippines, and China.¹³ By 1990, Taiwan had surfaced as a major sending country, and Paul Ong and Evelyn Blumenberg reported on the distribution of scientists and engineers by country of origin as follows: in 1990, 71 percent of all foreign-born Asian Pacific scientists and engineers were from China (20%), Korea (19%), and India (14%), with the addition of

¹¹In 1989, 14 percent of Asian Americans lived in poverty, as compared with 13 percent of the general population. The Hmong had the highest rates of poverty at 63.5 percent. Bureau of the Census, *We the American Asians* (Washington, D.C.: U.S. Government Printing Office), September 1992, p. 7. Among certain subgroups, such as Cambodians and other Southeast Asian refugee populations, the poverty rate climbs as high as 45 percent. Paul Ong, *Beyond Asian American Poverty: Community Economic Development Policies and Strategies* (Los Angeles: LEAP Asian Pacific American Public Policy Institute), 1993.

¹²Following a year-long period of research focusing on low-income Asians in inner-city communities, a 1993 study outlined a number of strategies at the community, state, and national level that would improve the workplace opportunities for this impoverished segment. Paul Ong, *Beyond Asian American Poverty: Community Economic Development Policies and Strategies* (Los Angeles: LEAP Asian Pacific American Public Policy Institute), 1993. For an overview of that part of the Asian labor force in the U.S. who are wage workers or part of the "working poor," see articles included in the special volume *Asian Pacific American Workers: Contemporary Issues in the Labor Movement*, *Amerasia Journal* 18 (1), 1992.

¹³Paul M. Ong, Lucie Cheng, and Leslie Evans, "Migration of highly Educated Asians and Global Dynamics," *Asian and Pacific Migration Journal* 1 (3-4): 543-567, 1992, p. 544.

Taiwan (14%).¹⁴

Ever since World War II, then, Asian Pacific American scientists and engineers, native-born and foreign-born, have been a dominant and growing minority in scientific and technical fields, especially throughout the 1970's, when high-technology research and development fueled the growth of the aerospace and defense industry. While the end of the Cold War in the 1990's has led to major defense plant closings, other kinds of technological growth have continued to feed the demand for highly trained scientific personnel. The most publicly visible examples are the micro-electronics industry, the new technology in bio-genetic engineering, and the present Administration's promotion of communications technology that would enable an "Information Superhighway."

Summing up this trend in professional labor force growth, Ong and Blumenberg report on the increasing presence of Asian Pacific Americans as scientists and engineers (S&E):

No other minority group has contributed more to the technological capacity of this nation than Asian Pacific Americans. Although the S&E labor force is still largely non-Hispanic white, Asian Americans have become an increasing presence. They account for less than 2 percent in 1970 but nearly 7 percent by 1990...During the two decades, the number jumped from about 21,000 to 150,000, an increase of 603 percent. Extrapolating from recent trends, it is likely that there are now over a quarter-million Asian Pacific scientists and engineers. Like the larger Asian Pacific population, the S&Es come from ethnically diverse groups. Chinese comprise the largest ethnic group (34 percent), followed by Asian Indians (23 percent), Japanese (12 percent), and Filipinos (10 percent).¹⁵

While future projections about the economy are uncertain, technological needs in the past decade have outpaced the production of trained personnel. Immigrants have been recruited to meet these labor demands through two pathways: (1) as foreign-trained professionals who directly enter the occupational pipeline shortly after their

¹⁴Paul Ong and Evelyn Blumenberg, "Asian Pacific Scientists and Engineers," in Paul Ong (ed.), *The State of Asian Pacific America: Economic Diversity, Issues and Policies* (LEAP Asian Pacific American Policy Institute and UCLA Asian American Studies Center), 1994.

¹⁵Paul Ong and Evelyn Blumenberg, 1994.

arrival in the United States, and (2) as American-trained students who later seek jobs in the United States upon their graduation. Among other things, the following section notes that Asian students, on permanent or temporary visas, take the lion's share of doctorates in American institutions of higher education.

The 1990 immigration reform legislation reaffirms and expands the immigration preference given to foreign-trained professionals, with a three-fold increase to the number admitted on the basis of skills and talents. The expectation has been that this will increase the flow of Asian immigration.¹⁶

¹⁶William P. O'Hare and Judy C. Felt, *Asian Americans: America's Fastest Growing Minority Group* (Washington, D.C.: Population Reference Bureau), No. 19, February 1991, pp. 13-14.

III. THE EDUCATIONAL PIPELINE

Education has been viewed by Asian American Pacific Islanders as an important pathway to upward mobility. As suggested by the data in this section, their tremendous investment in higher education has created a large pool of candidates, men and women, in the pipeline to professional jobs. Indeed, since recent generations of Asian Americans have entered universities in significantly higher proportions than other groups and are sometimes said to be "overrepresented,"¹ their increasing presence in higher education has sparked controversies over their "overrepresentation," and whether they are accepted for admission at lower rates than other groups, including whites.² A fuller discussion needs to encompass the fact that the "educational pipeline" for Asians Americans has been tiered, reflecting not only their entry into elite universities or pursuit of higher degrees but their increasing enrollment at two-year universities. The tendency for Asian students (both American-born and foreign-born) to major in the math and sciences has also shaped the pathways of their movement through the pipeline.

A. EDUCATIONAL ATTAINMENT

A review of relevant data from the 1990 census showed that Asian Americans as an aggregate are above the national average in terms of educational achievement at both the high school and college levels. In terms of high school completion, 75 percent of the nation (aged 25 and over) had graduated from high school, compared to 78 percent of Asian and Pacific Islanders (aged 25 and over). A comparison of college completion is more striking: 20 percent of the general population had graduated with a bachelor's degree or higher, whereas 38 percent of Asians had BAs (about twice the rate

¹Deborah Woo, "The 'Overrepresentation' of Asian Americans: Red Herrings and Yellow Perils," *Sage Race Relations Abstracts* 14 (2), May 1990.

²Jayjia Hsia, *Asian Americans in Higher Education and at Work* (Hillsdale, New Jersey: Lawrence Erlbaum Associates, Inc.), 1988. Dana Takagi has focused in great detail on how the admissions controversy surrounding Asian Americans has been debated at Berkeley, UCLA, Stanford, Harvard, Brown, and Princeton. Dana Y. Takagi, *The Retreat from Race: Asian-American Admissions and Racial Politics* (New Brunswick, New Jersey: Rutgers University Press), 1992.

of the general population).³

Reporting on trends in higher education, Eugenia Escueta and Eileen O'Brien⁴ note that Asian Americans had doubled their enrollment between 1976 and 1988, from 198,000 to 497,000, or from 2 percent to 4 percent. These relatively large increases in Asian American enrollment were reflected in degrees awarded by gender and by citizenship status.

Women contributed significantly to the increase in the overall representation of Asian Americans in higher education. Even though their proportion of the Asian American student body remained fairly stable,⁵ in terms of actual numbers Asian American female students had doubled at the undergraduate level, increased by 75 percent at the graduate level, and quadrupled at the first professional level. Consistent with this trend, Asian American women earned a significant portion of bachelor's, master's, and even doctorate degrees, although their share declined with each degree earned. Specifically, these women earned about half of all bachelor's degrees awarded to Asian Americans, slightly more than a third of master's degrees, and less than a third of all doctorates.⁶ Compared to their counterparts in the general population, where women who were U.S. citizens accounted for 43 percent of all doctorates, Asian American women who were U.S. citizens represented only 29 percent of Asian Ph.Ds who were citizens.⁷

In short, the last decade has seen a dramatic increase in college enrollment

³Bureau of the Census, *We, the American Asians* (Washington, D.C.: U.S. Government Printing Office), September 1993 and the Bureau of the Census, *1990 Census of Population: Supplementary Reports, Detailed Occupation and Other Characteristics from the EEO File for the United States*, October 1992. Table 1. "Detailed Occupation and Other Characteristics from the EEO File for the United States."

⁴Eugenia Escueta and Eileen O'Brien, "Asian Americans in Higher Education: Trends and Issues," *Research Briefs*, American Council on Education 2 (4): 1-11, 1991.

⁵Asian American women were approximately 50 percent of Asian undergraduates, and slightly more than 40 percent of Asian graduate students.

⁶Roughly speaking, in 1989 this amounted to Asian American women earning about 19,000 bachelor's degrees (out of 38,000) awarded to Asian Americans, and 4000 (out of 11,000) master's degrees. Escueta and O'Brien, 1991, p. 5. In 1989, women received 185 (out of 626) doctorates awarded Asian American citizens, increasing to slightly more than a third of these degrees in 1992, 305 out of 828. Paula Ries and Delores H. Thurgood, *Summary Report 1992: Doctorate Recipients from United States Universities* (Washington, D.C.: National Academy Press), 1993, 72-74.

⁷Escueta and O'Brien, 1991, p. 7.

among Asian Americans, both men and women, although women still tend to lag behind. According to the Office of Minorities in Higher Education,⁸ this rapid growth in degrees awarded was directly tied to population growth, and the sharp increases of the 1980's having "leveled off" in the 1990's.

High college enrollment among Asian Americans is attributable not only to demographic factors related to population growth but also to their high rates of eligibility, enrollment, and retention. Once admitted, they have relatively low dropout rates, and consequently this persistence is reflected in their appearance further down the educational pipeline. Particularly noteworthy in the last decade has been the significant increase in the percentage of Asians who were U.S. citizens earning bachelor's, master's, and doctoral degrees.⁹ The most impressive gains were at the bachelor's and master's level where the number of degrees awarded more than doubled between 1979 and 1989. While the figure for doctorates is less impressive than that of other degree holders, the 46 percent increase in doctorates earned by Asian Americans put them ahead of other groups, including whites: "This was the biggest increase in earned doctorates of any ethnic group from 1979 to 1989. The number of African Americans and whites earning Ph.Ds. actually declined by 23 percent and 6 percent, respectively, while Hispanics and American Indians increased their number of doctorates by 23 percent and 15 percent, respectively."¹⁰

Despite the overall gain in doctorates on the part of Asian Americans, American-born Asians earn slightly fewer Ph.Ds. than might be expected given their numbers within the population.¹¹ Moreover, their share of doctorates is a small fraction of that earned by Asians who are non-citizens. Indeed, the lion's share of all doctorates

⁸Office of Minorities in Higher Education, *Eleventh Annual Status Report on Minorities in Higher Education*, 1992 (American Council on Education), January 1993, pp. 9-10, and 12-13.

⁹This amounted to a 148 percent increase at the bachelor's level and 95 percent at the master's, and 46 percent at the doctorate level, whereas corresponding increases for the total population were, respectively, 11 percent, 3 percent, and 10 percent. Escueta and O'Brien, 1993, p. 5.

¹⁰Escueta and O'Brien, 1991, p. 6.

¹¹Rebecca L. Rawls, "Minorities in Science," Special Report, *C & EN*, April 15, 1991, p. 24.

awarded to Asians went to those with temporary or permanent visas.¹² Between 1979 and 1989, these individuals doubled their number of doctorates (from 2137 to 4508), making up 88 percent of all Asian Ph.D's in 1989.¹³ In 1989, the latter were awarded 88 percent (or 4538) of all doctorates awarded to Asians, compared to 12 percent (or 626) awarded to Asians who were U.S. citizens. In 1992, the percentage of doctorates earned by Asians on temporary or permanent visas increased to almost 90 percent (or 7367), whereas those earned by Asians who were U.S. citizens declined to 10 percent (or 828). This trend towards an increasing share of all doctorates held by those with temporary or permanent visas can be observed for Asian women as well. In 1977, Asian women who held temporary or permanent visas earned 72 percent (246) of all doctorates earned by Asian women, steadily increasing their share to 83 percent (1524) in 1992.

B. FOUR-YEAR AND TWO-YEAR INSTITUTIONS

Although Asian Americans *as an aggregate* have college completion rates that exceed that of the general population, including whites, Southeast Asians (Vietnamese, Cambodians, Laotians, and the Hmongs) have done less well, graduating at rates well below the national average.

A more accurate overall picture of Asian Americans in the educational pipeline therefore should underscore two dominant patterns. On the one hand, a critical segment of Asian Americans is entering higher education at rates greater than their percentage in the total population. Thus, between 1980 and 1990, the Asian American population grew from 1.5 percent (or 3.5 million)¹⁴ of the total U.S. population to three percent (or 7.3 million) in 1990.¹⁵ This growth is dramatized by their high enrollment

¹²For a discussion of the increasing presence in the United States of foreign graduate students from Asian countries, see Ling-chi Wang, "Trends in Admissions in Colleges and Universities: Higher Education Policy," pp. 49-59 in *The State of Asian Pacific America: Policy Issues to the Year 2020* (LEAP Asian Pacific American Policy Institute and UCLA Asian American Studies Center), 1993, pp. 50, 55-56.

¹³Escueta and O'Brien, 1991, p. 7.

¹⁴Population Reference Bureau, *Asian Americans: Growth, Change, and Diversity*, Vol. 40, No. 4, October 1985. By Robert W. Gardner, Bryant Robey, and Peter C. Smith. P. 3.

¹⁵Escueta and O'Brien, 1991, p. 1.

and sharply increased visibility in some of the most elite colleges and universities. Although information on specific colleges and universities is scattered, the cumulative picture shows significant inroads into higher education. Reporting on available data for select institutions in select years, Dana Takagi has noted that Asian Americans made up 20 percent of the 21,000 undergraduates at the University of California, Berkeley in 1980, 8.5 percent of the student body at Harvard in 1982, and 8 percent of the enrollment at Stanford in 1985. Similarly, Ling-chi Wang pointed out that in 1991, Asian Americans made up 19 percent of the freshmen class at Harvard, 15 percent at Yale, and 24 percent at Stanford.¹⁶ By 1993, Asian Americans were approximately 40 percent of the freshman class at the University of California, Berkeley and UCLA, and 50 percent at UC Irvine.¹⁷

In California, where Asian Americans made up 9.6 percent of the population in 1990, their presence in four-year, as opposed to two-year institutions, was particularly striking. Comparing their enrollment pattern with that of other minorities over the 1980-1990 decade, the Office of Minorities in Higher Education reported:

Unlike other ethnic minorities, Asian Americans made some of their largest enrollment gains at four-year colleges and universities. California, the state with the largest Asian American population, experienced 101.3 percent growth in Asian American enrollment at four-year institutions, compared with a 55.4 percent gain at two-year institutions. Because of the four-year gains, Asian Americans in 1990 made up 16.5 percent of California's total four-year college enrollment, up from 8.8 percent in 1980.¹⁸

Even as they are making significant inroads into private or elite schools of higher education, Asian Americans are beginning to show greater enrollment increases at two-year colleges. Reporting on the increase between 1990-91, the Office of Minorities in Higher Education indicated that this pattern represents a significant break with trends of the recent past.

¹⁶Wang, 1993, p. 57.

¹⁷Office of the President, University of California.

Similar to the trend for other minorities, Asian Americans showed larger increases at two-year than at four-year institutions from 1990 to 1991. Overall, Asian American enrollment increased 19.1 percent at two-year institutions during this period, compared with a 6.7 percent gain at four-year institutions. Again, these figures represent a break with the recent past, when Asian students recorded much stronger gains at the four-year level.¹⁹

Increasing Asian American enrollment at two-year institutions is a phenomenon which falls short of cultural aspirations which generally have included aiming for the best quality education available, sacrifices which even those less economically well off have been willing to commit to in the past.

As competition for admission to four-year colleges increases, Asian Americans may be increasingly obliged to settle for an education at two-year institutions. In 1985, they had a less than average chance of being accepted to all institutions, both public and private, though their chances were reported to be slightly better at the most selective public institutions than at the most selective private institutions.²⁰ Over the past decade, applications have increased among Asian Americans, and while enrollment has doubled, there has also been a trend towards declining acceptance rates, such that their admittance rates were described by Hsia as "now the lowest among all groups of applicants."²¹

A major factor which has influenced their admission rate has been choice of major. Insofar as universities have sought to recruit within an overall framework of diversity, the narrow areas of subject interest where Asian students tend to concentrate (e.g. math, science, engineering, pre-medical programs or health sciences) have been cited as a major factor which contributes to lower than expected acceptance. Thus, although test scores and grades underscore their strength in areas of mathematical or

¹⁸Office of Minorities in Higher Education, 1993, p. 23.

¹⁹Office of Minorities in Higher Education, 1993, pp. 9-10.

²⁰One explanation for this difference in overall acceptance rates was attributed to the more "flexible or personalized" admissions practices (among the most selective private institutions) which included considerations based on nonacademic criteria. Hsia, 1988, pp. 90-92.

²¹Hsia, 1988, p. 93.

quantitative spheres, there is some evidence that such abilities have worked against their acceptance.²²

C. LANGUAGE VERSUS MATHEMATICAL SKILLS

Compared to other racial-ethnic groups, Asian Pacific Americans are likely to be overrepresented in the sciences, with very little difference between those who were U.S. or non-U.S. citizens. Thus, the following table shows that 25.7 percent of Asian U.S. citizens who had doctorates were in the field of engineering, and 21.4 percent were in the physical sciences. Similar figures were found for Asian doctorates with permanent visas (25.9 percent were in engineering and 23.4 percent the physical sciences). By contrast, only 7.7 percent of U.S.-born whites with doctorates had engineering degrees. The respective figures for U.S.-born Blacks and U.S.-born Mexican Americans with with Ph.Ds. in engineering were lower still, respectively, 5.1 percent and 4.9 percent. Similarly, whites, blacks, and Mexican Americans had relatively lower concentrations in the physical sciences than did Asian Americans.

²²Hsia, 1988, pp. 93-148.

Table 2
Statistical Profile Of Doctorate Recipients, by Race/Ethnicity and Citizenship, 1992

	TOTAL				Asian				Black				Native American	White			
	Total*	U.S.	Non US	Perm. Temp	Total*	U.S.	Non US	Perm. Temp	Total*	U.S.	Non US	Perm. Temp	Total	Total*	U.S.	Non US	Perm. Temp
Total Number	38,814	25,759	1,958	9,888	8,217	828	903	6,464	1,402	951	141	304	150	25,689	22,718	707	2,224
Male %	63.0	55.9	65.5	80.1	77.7	63.2	66.1	81.2	53.8	40.6	85.1	79.6	54.0	58.1	56.1	61.4	77.2
Female %	37.0	44.1	34.5	19.9	22.3	36.8	33.9	18.8	46.2	59.4	14.9	20.4	46.0	41.9	43.9	38.6	22.8
Doctoral Field %																	
Physical Sciences	16.7	13.7	18.1	24.7	25.6	21.4	23.4	26.5	5.8	3.6	4.3	13.5	11.3	14.6	13.8	15.0	23.0
Engineering	14.0	8.2	20.8	27.7	29.7	25.7	25.9	30.7	5.1	3.3	12.1	7.9	7.3	9.5	7.7	18.4	25.0
Life Sciences	18.3	18.1	17.8	19.3	19.5	21.1	19.5	19.2	14.2	9.0	19.1	27.6	13.3	18.2	18.5	15.6	16.3
Social Sciences	16.0	17.9	14.3	10.5	9.1	11.5	8.4	8.8	18.6	18.8	25.5	15.1	17.3	17.6	18.0	19.1	12.6
Humanities	11.4	13.4	12.5	6.1	4.1	6.3	6.4	3.5	9.8	10.0	4.3	11.8	12.7	13.8	13.8	19.9	11.6
Education	17.1	22.3	8.3	5.6	5.6	9.3	6.9	4.9	38.5	48.3	22.7	15.5	33.3	19.9	21.7	6.1	5.6
Professional/Other	6.4	6.4	8.2	6.1	6.5	4.7	9.5	6.3	7.9	7.0	12.1	8.6	4.7	6.4	6.5	5.9	5.9
					Mexican American				Other Hispanic				Puerto Rican	Other & Unknown			
					Total*	U.S.	Non US	Perm. Temp	Total*	U.S.	Non US	Perm. Temp	Total	Total*	U.S.	Non-US	
Total Number					240	205	12	22	915	339	115	454	213	1,988	359	497	
Male %					57.9	56.1	66.7	68.2	65.6	53.7	54.8	77.1	49.8	73.7	71.9	81.9	
Female %					42.1	43.9	33.3	31.8	34.4	46.3	45.2	22.9	50.2	26.3	28.1	18.1	
Doctoral Field %																	
Physical Sciences					10.8	9.8	25.0	13.6	15.8	12.4	14.8	18.7	12.2	17.0	18.4	21.5	
Engineering					5.8	4.9	0.0	18.2	12.0	10.0	12.2	13.7	6.6	17.3	12.5	23.5	
Life Sciences					18.3	14.6	33.3	40.9	21.6	14.5	16.5	28.2	16.9	16.5	18.9	19.3	
Social Sciences					23.8	25.4	25.0	9.1	18.6	22.1	14.8	16.7	15.5	20.0	17.8	14.7	
Humanities					10.8	11.7	16.7	0.0	15.8	17.1	26.1	12.3	11.7	10.9	12.8	7.2	
Education					25.4	27.8	0.0	18.2	11.6	18.9	11.3	6.4	34.3	11.6	12.5	8.0	
Professional/Other					5.0	5.9	0.0	0.0	4.5	5.0	4.3	4.0	2.8	6.8	7.0	5.6	

SOURCE: Paula Reis and Delores Thurgood, *Summary Report 1992: Doctorate Recipients from United States Universities*, Washington: National Academy Press, 1993, pp. 54-55.
* Includes individuals who did not report their citizenship at time of doctorate.

Summarizing these general patterns of field specialization, Escueta and O'Brien reported: "Almost 70 percent of the doctorates awarded to Asian Americans were in the areas of engineering, life sciences and physical sciences, yet less than half of all doctorates was awarded in these fields. Asian Americans earned the least number of Ph.d.'s. in professional fields and the humanities."²³

Substantial evidence exists that Asian Americans as an aggregate perform better on quantitative tests than on tests of verbal or written skills.²⁴ Indeed, it has been suggested that standardized tests and grades probably *overestimate* English proficiency levels for Asian Americans, whereas math scores likely *underestimate* their quantitative

²³Escueta and O'Brien, 1991, p. 7.

²⁴Compared to white students, Asian Americans generally perform relatively poorly on verbal Scholastic Aptitude Tests (SATs), though they score higher on math SATs as well as have higher high school grade point average (GPAs). Escueta and O'Brien, 1991, pp. 4-5.

skills.²⁵ In either case, there is "unequivocal evidence" that these language problems are concentrated among immigrant Asian Americans.²⁶ Unlike other minority groups and whites, Asian Americans tended to show a greater propensity towards excelling in quantitative subjects regardless of their social class background (as measured in terms of parental education).

Language barriers have certain long-range consequences by virtue of the fact career decisions are often decided on the basis of relative aptitudes early on. Asian Pacific American students have adopted educational strategies which have included studying longer hours and opting for lighter course loads. Choice of major, moreover, has typically meant career-tracks which preclude opportunities for improving English language skills. Many have avoided the humanities, arts, the social sciences, and (until recently) professions such as law, areas which require verbal facility or competence in writing or reasoning in English.²⁷ The large numbers who have become science majors are likely to have done so for a number of reasons, including language barriers as non-native English speakers, family pressure, perceived job opportunities, or efforts to avoid areas where subjectivity and bias are more likely to enter the evaluative process.

The most clearly documented factor affecting the decision to major in science, especially the applied sciences (e.g. engineering or computer science) has been recency of arrival in the United States. As Hsia notes, "Being male, Chinese, Korean or Vietnamese, and recent immigrants were related to the choice of an applied science major field in college. Being native born, acculturated to American values, of high socioeconomic status, female, and Japanese were related to a pure (as opposed to

²⁵Other measures, for example, showed that Asian Americans did less well on "usage items" than "sentence-correction items," or that certain tests overpredicted their actual writing skills assessments. Writing or verbal reasoning skills were thereby said to be overestimates of true abilities. Test items in quantitative tests, on the other hand, were said to underestimate math skills because such items inevitably contained verbal content which thereby made such tests harder for those with limited English skills. Hsia, 1988, pp. 70-78.

²⁶Hsia, 1988, p. 70.

²⁷Jayjia Hsia, "Asian Americans in Higher Education: Aspirations, Access, Enrollment, Major Fields, and Persistence," pp. 85-148 in Jayjia Hsia, *Asian Americans in Higher Education and at Work* (Hillsdale, New Jersey: Lawrence Erlbaum Associates, Inc.), 1988.

applied) science or nonscience major field choice."²⁸ Ironically, there is emerging evidence that while Asian Americans are "more likely than all other college applicants to plan majors in science and technology fields, they are more likely to be denied on account of their interests and abilities in mathematics, science, engineering, and medicine."²⁹

The long-run implications of language skill levels need to be investigated,³⁰ not only because such deficiencies may affect career decisions and progress early on in the educational pipeline but also because they may have implications for a "glass ceiling" later on. According to Hsia, teachers who reward students despite poor English-language skills may unwittingly prevent them from becoming effective participants later on. By not holding them to similar standards in English language usage and instead generously grading their performance in these language-related areas, teachers are said to do a disservice to Asian American students. This is especially true, she says, if students manage to maintain high grades by avoiding courses that are demanding of English communication skills.

...the failure to take high-level English courses may mean opportunities foregone to master verbal reasoning abilities important to subsequent performance in higher education and on the job....Immigrant Asian students may be using a strategy that could enhance short-term rewards, high grades, but exact long-term costs in inability to communicate adequately for a fast-track career path.³¹

The discrepancy between objectively scored indirect and direct tests of writing and teacher-assigned grades is disquieting. By perceiving their Asian students relatively favorably, and awarding them above-average grades in language-related subjects, teachers may unintentionally be doing them a disservice. If teachers fail to hold Asian American students to the same standards of achievement in language-related subjects as other students, Asian Americans will never master the fundamental

²⁸Hsia, 1988, p. 129.

²⁹Hsia, 1988, pp. 1-2.

³⁰While English language skills are important, another view, not necessarily contradictory, suggests that the maintenance of the mother tongue is critical for maintaining high career aspirations for some students. Tania Azores, "Educational Attainment and Upward Mobility: Prospects for Filipino Americans," *Amerasia* 13 (1): 39-52, 1986-87.

³¹Hsia, 1988, p. 75.

communication skills necessary to participate broadly and effectively in all aspects of American society.³²

These observations about teaching practices need to be placed into a larger context of barriers to access to English language instruction itself. Given that English language facility has immediate, and not just long-term consequences for careers, then an important consideration is the availability and quality of classes that can accommodate the needs for English language instruction.

There is already evidence that language problems have implications for career development in its early stages. Reporting on enrollment patterns at California State University at San Francisco and at the City College of San Francisco, Ling-chi Wang suggests that language problems constituted a major barrier to employment in general, and more specifically, to professional careers.

In 1991, CSU San Francisco reported 33 percent Asian Americans out of a total undergraduate student body of 14,672, and the City College of San Francisco had over 40 percent out of 70,000 part-time and full-time students. Students enrolled in these two institutions receive either general education or job-related training programs. In City College, the largest single bloc of Asian American students are enrolled in survival English classes.... Their perennial problems are having to wait for a long time to get into the English classes and getting trained for jobs that hopefully will still exist when they leave school.³³

The conventional view of most Americans is that Asians are gifted in the science and math fields. According to Uri Treisman, however, some of the observed performance advantage can be attributed to study habits rather than differences in ability.³⁴ Other research, moreover, has noted that American-born Asians tend to perform poorly in the sciences. Chemistry, for example, is a field where Asians are more likely than other racial groups (including whites) to concentrate. In a study of 6653 students taking general chemistry courses at the University of Wisconsin, Madison, covering the period from 1988 through 1990, Agnes Sec found that American-

³²Hsia, 1988, p. 84.

³³Wang, 1993, p. 54.

born Asians were about "5% more likely to get Ds, fail, or drop out of these courses."³⁵ Despite such poor performance, it has been suggested that their representation in the sciences and engineering is maintained primarily because they continue to enter these careers more frequently than other racial-ethnic groups: "U.S.-born Asians earn Ph.Ds. in all fields at a rate that is slightly below their representation in the population... but because they are more likely to earn those degrees in science and engineering than other groups are, they end up equitably represented among Ph.D. scientists and engineers."³⁶

While it was earlier noted that U.S.-born Asians are as likely to be represented among doctoral recipients in engineering as their non-U.S. born counterparts, there is nevertheless a lesser tendency among American-born Asians to choose careers in the math and sciences.³⁷ Those Asian Americans who are English-proficient and middle class have been noted to have academic difficulties which include math and science.

These middle-class, English-proficient, Asian American students, with mean SAT Verbal scores of 550 and SAT Mathematical scores of 620, used the following strategies more frequently than non-Asian comparison group members: dropping science and mathematics courses, completing freshman year with less than the normal course load, taking more courses in summer school, taking nine semesters to graduate instead of the normal eight, and withdrawing from college. Lack of congruence between parents' aspirations and students' interests or abilities was one possible explanation for the Asian American students' behavior.³⁸

Though grades and test scores may form the baseline for college admission, Asian Americans enter a narrower corridor. Even English-proficiency, together with excellent grades and test scores, does not ensure admission if student interests point to the narrow range of career tracks in which immigrants with language problems have tended to cluster.

³⁴Professor at the University of California, Berkeley, cited in Rawls, 1991, p. 25.

³⁵Rawls, 1991, p 25.

³⁶The above data are from Rawls, 1991, p. 24.

³⁷According to Hsia (1988, p. 161), "The 'overrepresentation' of Asians among science and engineering doctorates had never been due to high rates of participation on the part of native-born Asian Americans."

³⁸Hsia, 1988, p. 154.

...English-proficient Asian American students are more likely to be rejected by the most selective institutions on nonacademic, personal grounds, or on the basis of planned major fields rather than on inadequate grades, high school rank or test scores. Asian immigrants, particularly those with limited English proficiency, will be more likely to be turned down on the basis of their inability to communicate, and because too many wanted to enroll in engineering or physical science programs.³⁹

Asian Americans are more likely than other groups to be rejected on nonacademic grounds. Nonacademic criteria have historically been a basis for excluding Jews from medical schools and other elite institutions of their choice, and there are certain parallels between the Asian American and Jewish experience.⁴⁰ Since the mid-1970's, total applications to medical schools declined, while Asian American applications doubled. Though Asian students are not underrepresented in medical schools, their acceptance rates have remained consistently below that of white and other applicants, a pattern which has been attributed to the use of nonacademic criteria.⁴¹ Moreover, while other selective, four-year, institutions have been noted to be the "top choices" of Asian American students otherwise well-qualified, these institutions were more likely than other institutions to flexibly use nonacademic criteria, which tend to increase the barriers to admissions for these very applicants.⁴² Included among these criteria are extracurricular activities, the quality and origin or recommendation letters, personal essays or written statements, interviews or other assessments of personal qualities or ascribed characteristics.

In sum, the recent influx of immigrants has thrown into relief the issue of language versus math skills among Asian Americans. For these students, the admissions process is affected by a configuration of considerations, which includes not only grades and test scores, but proposed major and nonacademic criteria. The informal, subjective aspects of the non-academic evaluation process have been a major factor placing a "ceiling" on Asian American admissions into institutions of higher education. There are certain legitimate reasons for this, which include achieving

³⁹Hsia, 1988, p. 146.

⁴⁰Deborah Woo, "The 'Overrepresentation' of Asian Americans: Red Herrings and Yellow Perils," *Sage Race Relations Abstracts* 14 (2), May 1990.

⁴¹Hsia, 1988, pp. 139-145.

⁴²Hsia, 1988, pp. 89-120. Dana Y. Takagi, *The Retreat from Race: Asian-American Admissions and Racial Politics* (New Brunswick, New Jersey: Rutgers University Press), 1992.

diversity and balance in the student body. Non-academic criteria, however, run counter to a common attitude that Asian Americans bring to both education and work, namely, a great faith that objective performance will be recognized first and foremost and a tendency to underestimate other criteria and prerogatives that contradict such assessments. Such attitudes are carried over into the work sphere and are directly tied to perceptions of a glass ceiling.

D. FOREIGN-EDUCATED GRADUATES

A large majority (63 percent) of foreign-born Asian scientists and engineers are educated in the U.S. Asians in general were described as "the largest contingent of foreign students studying in the U.S.," with nearly half of them in science and engineering. These science and engineering students, in turn, made up 63 percent of all foreign students, receiving one-fourth of all science and engineering Ph.D. degrees awarded in 1990.⁴³

Foreign-educated graduates, on the other hand, enter the American labor market through a very different educational pipeline. These immigrant professionals have had mobility problems of their own, particularly health professionals for whom the credentialing process has been a chief barrier. Both their occupational segregation and their lower "returns" for their education will be discussed in the following section of this report.

SUMMARY

The profile of Asian Americans in the pipeline presents a picture of one of the most educationally prepared groups to enter the labor force. Their aggregate numbers in the civilian labor force already confirm this. In 1990, a higher proportion of Asian and Pacific Islander (API) men and women had bachelor's or graduate and professional

⁴³Paul Ong and Evelyn Blumenberg, "Asian Pacific Scientists and Engineers," in Paul Ong (ed.), *The State of Asian Pacific America: Economic Diversity, Issues and Policies* (LEAP Asian Pacific American Policy Institute and UCLA Asian American Studies Center), 1994.

degrees compared to white males in the same age groups. Among 25-29 year olds, for example, 27 percent of API males and 33 percent of API women had bachelor's degrees, compared to 21 percent of white males. Similarly, looking at those in the 25-29 age group who had graduate or professional degrees, 15 percent of API males had such degrees, 11 percent of API women, and 5 percent of white males.⁴⁴

At the same time, there is evidence that Asian Americans face increasingly higher barriers than other groups where college admissions is concerned. The role of informal, subjective criteria was underscored, and has special relevance to the glass ceiling in the work sphere as well. Recent research suggests that Asian Pacific American college graduates receive "lower returns on their education." Some research has even suggested that they experience *increasingly* lower returns with more years of education.⁴⁵ Indeed, where there are blocks to upward mobility in "noneducational" endeavors, one theory is that Asian Americans tend to overcompensate through "overachievement" in education, and in this way maintain some semblance of parity.⁴⁶ Even among those ages 40-69 and in the civilian labor force, 24 percent of Asian Pacific Islander (API) men and women had bachelor's degrees, compared to 14 percent of white males. Similarly, among those in the 40-69 age group who had graduate or professional degrees, 24 percent of API males had such degrees, 11 percent of API women, and 14 percent of white males.⁴⁷ In short, such patterns underscore a strong cultural sentiment that merit should be objectively-based and that educational achievement is critical in this respect. The

⁴⁴These percentages were calculated from Table 3. "Educational Attainment of the Civilian Labor Force by Age, Sex, Race, and Hispanic Origin: 1990," in Bureau of the Census, *1990 Census of Population: Supplementary Reports, Detailed Occupation and Other Characteristics from the EEO File for the United States*, October 1992.

⁴⁵Pauline Fong and Amado Cabezas, "Economic and Employment Status of Asian-Pacific Women," pp. 255-321 in U.S. Department of Education, *Conference on the Educational and Occupational Needs of Asian-Pacific-American Women*, October 1980: 270-272; Wen Lang Li, "Two Generations of Chinese Americans: Differentials in Education and Status Attainment Process," *Plural Societies* 17 (1): 95-107, May 1987; Marta Tienda and Ding-Tzann Lii, "Minority Concentration and Earnings Inequality: Blacks, Hispanics, and Asians Compared," *American Journal of Sociology* 93 (1): 141-165, July 1987; Harriet Orcutt Duleep and Seth Sanders, "Discrimination at the Top: American-Born Asian and White Men," *Industrial Relations* 31 (3): 416-432, 1992.

⁴⁶Ki-taek Chun, "The Myth of Asian American Success and Its Educational Ramifications," *IRCD Bulletin* XV (nos. 1 and 2): 1-12, Winter/Spring 1980; Charles Hirschman and Morrison G. Wong, "Socioeconomic Gains of Asian Americans, Blacks, and Hispanics: 1960-1976," *American Journal of Sociology* 90 (3): 584-607, November 1984; Stanley Sue and Sumie Okazaki, "Asian-American Educational Achievements: A Phenomenon in Search of an Explanation," *American Psychologist*: 913-920, August 1990.

⁴⁷These percentages were calculated from figures from Table 3. "Educational Attainment of the Civilian Labor Force by Age, Sex, Race, and Hispanic Origin: 1990," from the U.S. Bureau of the Census, *1990 Census of Population: Supplementary Reports, Detailed Occupation and Other Characteristics from the EEO File for the United States*, October 1992.

appearance of other criteria has fed the perception of their being arbitrarily by-passed by promotions, in favor of less qualified applicants. Indeed, this possibility cannot be ruled out, until there is more information.

As the rest of the report documents, educational attainment, while important for gauging the likelihood of entering professional careers, has yielded lower returns for Asian American Pacific Islanders, especially as far as their mobility into positions of middle or upper management.

IV. REVIEW AND ANALYSIS OF CURRENT RESEARCH

A. TITLE II: GLASS CEILING

Created under Title II of the 1991 Civil Rights Act, the Glass Ceiling Commission was given the mandate to study and prepare recommendations concerning barriers faced by women and minorities in the workplace. Specifically, such legislation had two goals: "(1) eliminating artificial barriers to the advancement of women and minorities; and (2) increasing the opportunities and developmental experiences of women and minorities to foster advancement of women and minorities to management and decision-making positions in business."¹ According to the U.S. Department of Labor, "the glass ceiling is most clearly defined as those artificial barriers based on attitudinal or organizational bias that prevent qualified individuals from advancing upward in their organization into management level positions."²

As one of seventeen Glass Ceiling Commission projects, the present report reviewed the status of Asian Americans. Given the limited nature of existing research, data were more available on their "aggregate" status as Asian Americans or Asian Pacific Islanders,³ rather than on ethnic subgroups within this population. There may be differential mobility or barriers here, but that will need to be uncovered by future research. As already indicated (Section III, The Educational Pipeline), there are certain

¹Title II - Glass Ceiling Act, Section 203a. Public Law 102-166--Nov. 21, 1991.

²U.S. Department of Labor, *A Report on the Glass Ceiling Initiative* (Washington, D.C.: U.S. Government Printing Office), 1991: foreword.

³Because Pacific Islanders have identified themselves as a distinct part of the Asian American aggregate (rather than one to be subsumed under the term "Asian American"), the term "Asian American Pacific Islander" and "Asian Pacific American" have also come into usage. Pacific Islanders were not enumerated in government data bases until recently, and therefore, many studies cited in this report focus on or refer to "Asian Americans," and an effort will be made in this report to preserve or acknowledge this fact. At the same time, where it is useful and possible to make explicit comparisons between foreign-born and U.S.-born, an effort will be made to reserve the term Asian American for American-born. Because it is not always possible to keep such distinctions clear, occasionally, data on "Asian Americans" may actually include foreign nationals, on permanent or temporary visas, who have not yet become naturalized citizens. For example, data derived from the census category "Asian or Pacific Islander" might be loosely referred to later as relevant to "Asian Americans." Reasons for this common usage of Asian Americans, over all other terms mentioned here, have been its convenience for distinguishing Asians in the United States from Asians in other countries. In addition, the term "Asian American" has come into usage, along with other terms ("Mexican-American," "African-American," etc.) in an effort to recognize the long history which such groups have had in the United States. Recent Asian immigration has caused this term to be stretched. However, because a large majority of Asian immigrants to the United States tend to eventually settle here and become citizens, the general use of the term Asian American runs throughout the present report.

general patterns that can be observed, even allowing for certain internal variations. Asian American educational attainment, for example, has facilitated their entry into the educational pipeline, though there is now cumulative doubt about the extent to which this education really "pays off" for these graduates.

B. THE STATE OF RESEARCH

Relatively little research has focused on mobility issues among Asian Americans, even among sociologists,⁴ who for disciplinary reasons, have been interested in both structural issues of social inequality and comparative occupational mobility.⁵ In a 1980 review of the four oldest American sociological journals,⁶ Lucie Cheng Hirata⁷ found a general paucity of research on Asian Americans. In the 80-year period (1895-1975) reviewed, she found 137 articles on Asian Pacific Americans, less than one percent of the total number of articles. Of these 137, eight focused on Asian American mobility.

A survey of these same journals since 1976 and up through 1992 turned up an additional thirty-one articles⁸ on Asian Americans. Less than one-third of these publications addressed mobility issues, despite an overall increasing interest in Asian Americans and their socioeconomic status. This period, however, saw the appearance of a number of books on Asian American economic status.⁹ The following suggest how the idea of an enclave economy has generally been an important context for

⁴Mely Tan, *The Chinese in the United States* (1973) and James W. Loewen, *The Mississippi Chinese* (1971) were the few monographs noted by Lucie Cheng Hirata in 1980. Lucie Cheng Hirata, "Social Mobility of Asian Women in America: A Critical Review," pp. 323-333 in U.S. Department of Education, *Conference on the Educational and Occupational Needs of Asian-Pacific-American Women*, October 1980.

⁵While other disciplines such as political science and economics have also been interested in these dynamics, the present literature focused on the sociological literature where research on mobility could be expected to more likely include discussions of cultural as well as structural considerations.

⁶*American Journal of Sociology, Sociology and Social Research, Social Forces, American Sociological Review.*

⁷Lucie Cheng Hirata, "Social Mobility of Asian Women in America: A Critical Review," pp. 323-341 in U.S. Department of Education, *Conference on the Educational and Occupational Needs of Asian-Pacific-American Women* (Washington, D.C.: U.S. Government Printing Office), October 1980

⁸The review centered on articles which focused on Asians, excluding others, such as the following, which made only very brief mention of them (i.e. as immigrants from Japan, Korean, and the Philippines). Tyree, Andrea and Katherine Donato, "The Sex Composition of Legal Immigrants to the United States," *Sociology and Social Research* 69 (4): 577-585, July 1985.

⁹Of the four major sociological journals reviewed here, the *American Journal of Sociology* and *Social Forces* were the two journals where book reviews could be found. A total of at least fourteen books on Asian Americans were reviewed. Nine focused on socioeconomic adjustment, of which six centered on ethnic small businesses.

understanding issues of structural assimilation among Asian Americans¹⁰: Edna Bonacich and John Modell, *The Economic Basis of Ethnic Solidarity: Small Business in the Japanese American Community*, 1980¹¹; Evelyn Nakano Glenn, *Issei, Nisei, War Bride: Three Generations of Japanese American Women in Domestic Service*, 1986¹²; Ivan Light, *Through the Eye of the Needle: Immigrants and Enterprise in New York's Garment Trades*, 1986¹³; Ivan Light and Edna Bonacich, *Immigrant Entrepreneurs: Koreans in Los Angeles, 1965-1982*, 1988¹⁴; Pyong Gap Min, *Ethnic Business Enterprise: Korean Small Business in Atlanta*, 1988¹⁵; Paul Siu, *The Chinese Laundryman: A Study of Social Isolation*, 1953.¹⁶

The above review also surfaced journal articles which indicate that small business employment continues to provide an important context, as well as theoretical model, for understanding issues of occupational mobility among Asian Americans.¹⁷ Like other immigrants,¹⁸ Asians in the United States have found ethnic small businesses to be an important source of livelihood.¹⁹ Although the present report is primarily

¹⁰Among the three exceptions to this focus on the enclave economy were (1) Darrel Montero, *Vietnamese Americans: Patterns of Resettlement and Socioeconomic Adaptation in the United States*, 1979, *Social Forces* 62 (1): 285-287, September 1983, (2) Nathan Caplan, John K. Whitmore, and Marcella H. Choy, *The Boat People and Achievement in America: A Study of Family Life, Hard Work, and Cultural Values*, 1989, *American Journal of Sociology* 96 (1): 251-252, July 1990, (3) Illsoo Kim, *New Urban Immigrants: The Korean Community in New York*, 1981, *American Journal of Sociology* 89 (2): 505-507, September 1983. Chapter four of Kim's book focuses on "Small Business as an Entry Point for Korean Immigrants." However, the overall book is concerned with the implications for "community."

¹¹*Social Forces* 60 (4): 1233-1235, June 1982; *American Journal of Sociology* 90 (4): 942-945, January 1985.

¹²*American Journal of Sociology* 93 (2): 512-514, September 1987.

¹³*American Journal of Sociology* 93 (5): 1249-1251, March 1988.

¹⁴*Social Forces* 68 (3): 993-995, March 1990; *American Journal of Sociology* 95 (6): 1596-1598, May 1990.

¹⁵*Social Forces* 68 (3): 993-995, March 1990.

¹⁶*Social Forces* 67 (4), June 1989. This book, based on extensive fieldwork in the 1930s and 1940s, was written over 35 years ago, to be rediscovered in 1980 by John Tschen, when researching New York Chinese laundry workers.

¹⁷Victor Nee and Jimmy Sanders, "The Road to Parity: Determinants of the Socioeconomic Achievement of Asian Americans," *Ethnic and Racial Studies* 8: 75-93, January 1985; Pyong Gap Min and Charles Jaret, "Ethnic Business Success: the Case of Korean Small Business in Atlanta," *Sociology and Social Research* 69 (3): 412-435, April 1985, pp. 423-429; Terry E. Boswell, "A Split Labor Market Analysis of Discrimination Against Chinese Immigrants, 1850-1882," *American Sociological Review* 51 (3): 352-371, June 1986; Robert M. Jiobu, "Ethnic Hegemony and the Japanese of California," *American Sociological Review* 53 (3): 353-367, June 1988; Min Zhou and John R. Logan, "Returns on Human Capital in Ethnic Enclaves: New York City's Chinatown," *American Sociological Review* 54: 809-820, October 1989.

¹⁸Comparative data for other minorities show important internal differences when disaggregated. Thus, while 1.7% of Hispanics were found to own small businesses, this was disproportionately so for Cubans, 4.7% of whom owned businesses, compared with 1.6% of Mexicans and .7% of Puerto Ricans. Among blacks, 1.3% were listed as owners of small businesses. See Roger Waldinger, Howard Aldrich, Robin Ward, and Associates, *Ethnic Entrepreneurs: Immigrant Business in Industrial Societies* (Newbury Park, London, and New Delhi: Sage), 1990, p. 56.

¹⁹When business ownership is reported as a percentage of group size, 5.5 percent of Asians were listed as owning their own business, as compared with 6.4 percent of the total population. When the figure for Asians is disaggregated, self-employment increases dramatically for certain Asian ethnic groups. Thus, Korean Americans were found to be overrepresented in terms of small business involvement: 9 percent of Koreans owned businesses, followed by 7.1 percent of Asian Indians, 7 percent of Japanese, and 6.6 percent of Chinese. The figures for Filipinos and Vietnamese were

concerned with corporate employment in mainstream sectors of the economy, small business enterprises which are concentrated in ethnically or racially homogeneous enclaves²⁰ are relevant to the glass ceiling for two reasons.

First, *even though the vast majority of Asian Americans are employed as private wage and salary workers, managerial status for this population often means self-employment, especially for foreign-born and non-native English speakers, who are otherwise excluded from more mainstream occupations.*²¹ Studies which use census data to report on Asian managerial employment may, for their own purposes, collapse salaried managers in large-scale bureaucratic organizations with managers of ethnic small businesses. For the purpose of analyzing the glass ceiling in mainstream corporate employment, analyses should ideally disaggregate managerial jobs to distinguish between these fundamentally different work contexts or economies.

Second, the relatively greater participation of Asian Americans²² in such commercial activities raises questions about the extent to which self-employment, especially among those with professional or college-educated backgrounds, is a reaction to blocked mobility in other sectors of employment. There is some evidence, in fact,

significantly lower: 3.4 percent of Filipinos and 2.0 percent of Vietnamese were small business owners. Waldinger, Aldrich, Ward, and Associates, 1990, 56.

²⁰Koreans seem to be an exception to the general pattern for immigrants to employ primarily family members or ethnic workers. Chung Kim and Won Moo Hurh, "Korean Americans and the 'Success' Image: A Critique," *Amerasia* 10 (2): 3-21, 1983, pp 10-11; Pyong Gap Min and Charles Jaret, "Ethnic Business Success: the Case of Korean Small Business in Atlanta," *Sociology and Social Research* 69 (3): 412-435, April 1985, pp. 423-429.

²¹In 1980, the foreign-born populations of the following groups were more likely than whites (24%) to list themselves in professional-managerial: 26% of foreign-born Filipinos, 28% of foreign-born Japanese, 30% of foreign-born Chinese, and 47% of foreign-born Asian Indians listed themselves as managers, professionals, or executives. Population Reference Bureau, *Asian Americans: Growth, Change, and Diversity*, Vol. 40, No. 4, October 1985. By Robert W. Gardner, Bryant Robey, and Peter C. Smith. See p. 30. Among those Asian groups which were more likely to identify themselves as "managerial" were Asian Indians (48.5%), Pakistani (45.2%), Chinese (32.6%), Japanese (28.5%), Filipino (25.1%), and Korean (24.9%). All other subgroups reported figures far below that of the total population. Bureau of the Census, September, 1988, p. 8.

²²This participation nevertheless reflects differential involvement among different Asian ethnic subgroups. For example, while both Filipino and Korean immigrants since 1965 have been largely from the urban, educated middle classes, Filipinos have been underrepresented in small business, whereas Koreans are heavily concentrated here, more so than other Asian Americans and or other immigrant groups. According to Min, "The Korean group shows the highest rate of self-employment among seventeen recent immigrant groups classified in the 1980 Census, while the Filipino group ranks fifteenth, ahead only of the Portuguese and Haitian groups...." Min theorized about a number of differences between Filipino and Korean immigrants that might explain their differential distribution. For one, the higher representation of Filipino immigrants as professional or white-collar workers in non-Filipino firms might be traced to the fact that since the Philippines is an English-speaking country, they had fewer language barriers than Koreans to entering the general labor market. Alternatively, Korean immigrants have had more of a history of working in an industrial business economy, which can be seen as giving them an "advantage" when it came to starting up small businesses. Pyong Gap Min, "Filipino and Korean Immigrants in Small Business: A Comparative Analysis," *Amerasia Journal* 13 (1): 53-71, 1986-87, p. 56.

that Asian American professionals who have experienced blocked upward mobility in large-scale, bureaucratic corporations find it necessary to reestablish ties with their ethnic communities and develop small business enterprises as outlets for frustrated ambitions. As a result, *ethnic small businesses* are interpreted by some researchers as an *indicator of underemployment and exclusion from mainstream occupations*.²³ Existing research is presently inconclusive, and even conflicting²⁴ however, with regards to the role of small business employment in mobility.²⁵

Studies or reports that have sought to explicitly address the issue of the "glass ceiling" among Asian Americans in large-scale corporate or bureaucratic settings have largely been self-initiated. Thus, a survey of 308 Asian Americans in the San Francisco Bay Area was undertaken in 1987 by Asian American professionals and managers themselves.²⁶ Asian American community organizations have also produced their own reports. Beginning in 1986, Chinese for Affirmative Action (CAA), a civil rights organization based in San Francisco, began publishing on the glass ceiling in city civil service: (1) *The Broken Ladder: Asian Americans in City Government*, February 24, 1986; (2) *The Broken Ladder '89: Asian Americans in City Government*, June 1989; (3) *The Broken Ladder '92: Asian Americans in City Government*, May 1992. The Organization of Chinese

²³Peter Li, "Ethnic Businesses among Chinese in the United States," *Journal of Ethnic Studies* 4: 35-41, 1977. Joseph S. Chung, "Small Ethnic Business as a Form of Disguised Unemployment and Cheap Labor," pp. 508-517 in U.S. Commission on Civil Rights, *Civil Rights Issues of Asian and Pacific Americans: Myths and Realities* (Washington, D.C.: U.S. Government Printing Office), May 8-9, 1979; Yvonne May Lau, *Alternative Career Strategies Among Asian American Professionals: The Second Rice Bowl* (Evanston, Illinois: Northwestern University), Doctoral Dissertation, June 1988; Edna Bonacich, "The Social Costs of Immigrant Entrepreneurship," *Amerasia* 14 (1): 119-128, 1988.

²⁴Waldinger, Aldrich, Ward, and Associates, pp. 49-78, "Trends in Ethnic Business in the United States," in *Ethnic Entrepreneurs*, 1990; U.S. Department of Labor, *Job Mobility Paths of Recent Immigrants to the United States* (Division of Immigration and Policy Research, Bureau of International Labor Affairs, September 1992). By Howard Wial; Edna Bonacich, "The Social Costs of Immigrant Entrepreneurship," *Amerasia* 14 (1): 119-128, 1988; Pyong Gap Min, "The Social Costs of Immigrant Entrepreneurship: A Response to Edna Bonacich," *Amerasia* 15 (2): 187-194, 1989; Edna Bonacich, "The Role of the Petite Bourgeoisie within Capitalism: A Response to Pyong Gap Min," *Amerasia* 15 (2): 195-203, 1989.

²⁵In an earlier historical period, self-employment in small businesses was generally desirable, though Asian immigrants were overwhelmingly relegated even here to low-level service enterprises. In the more recent past, minority-owned firms have been considered high-risk operations, with lower than average sales, where profits depend on long hours, a smaller proportion of paid employees, and overall fewer workers per firm. In addition, these firms tend to be concentrated in the retail and service sectors, rather than in the manufacturing or finance-insurance-real estate sector. Of Asian-owned businesses, 41.2 percent were reported to be in services and 28.5 percent in the retail trade. (Respective figures for the total population were low, with 36.9 percent of businesses in the total population in services, 19.6 percent in retail trade.) Only 6.5 percent of Asian businesses were in finance, as compared with 14.5 percent of businesses in the total population. Waldinger, Aldrich, Ward, and Associates, 1990, pp. 56-57.

²⁶Amado Cabezas, Tse Ming Tam, Brenda M. Lowe, Anna Wong, and Kathy Owyang Turner, "Empirical Study of Barriers to Upward Mobility of Asian Americans in the San Francisco Bay Area," in Gail M. Nomura, Rssell Endo, Stephen H. Sumida, and Russell C. Leong (eds.), *Frontiers of Asian American Studies: Writing, Research, and Commentary* (Pullman, WA: Washington State University Press), 1989

Americans (OCA), a national educational and civil rights organization, headquartered in Washington, D.C. came out with a brief report of its own in 1992, entitled *Shattering the Glass Ceiling: Entering the "Pipeline of Progress."* More recently, Asian Americans for Community Involvement (AACI), the largest Asian American community agency in Santa Clara County, conducted the first broad survey of Asian Americans in Silicon Valley: *Qualified But...: A Report on Glass Ceiling Issues Facing Asian Americans in Silicon Valley*, 1993. Finally, in November of 1993, Chinese for Affirmative Action along with the Council of Asian American Employee Associations jointly developed a survey for the purpose of identifying glass ceiling barriers. Included among the Asian employee associations which agreed to participate in this survey were the following: Lawrence Livermore National Laboratory, Levi Strauss & Company, NASA Ames, Pacific Bell, PG&E, Port of Oakland, Stanford University, University of California, Berkeley, and University of California Santa Cruz. At the time of this writing, the findings from this most recent survey were not available. Some of the other studies will be referred to in a later section of this report.

During the 1970's, social science researchers began to provide closer scrutiny to the issue of whether the overall socioeconomic status of Asian American Pacific Islanders had improved in the post-civil rights period. In a review of select social science analyses using 1970 census data, Sucheng Chan distinguished between "studies that depict continual improvement since the 1960s" and those "studies that paint a far less rosy picture of Asian American socioeconomic status."²⁷ Upon closer examination, even research cited as depicting "continual improvement since the 1960s" qualified their overall findings that Asian Americans were approaching occupational parity with whites, with some specifically pointing to a "ceiling" on mobility.

²⁷According to Chan, interpretive differences here derived from the nature of the data base, specifically, whether researchers disaggregated their data by region, generational or nativity status (foreign-born vs. American-born), or gender. For example, researchers basing their analyses on national data, instead of regional statistics, tended inadvertently thereby to artificially inflate the incomes of Asian Americans, by not adjusting for their geographical concentration in regions or states where both incomes and cost of living are high. In 1970, this would mean that half of the Asian American population was in five metropolitan areas -- Honolulu, San Francisco, Los Angeles, Chicago, and New York. Sucheng Chan, "Current Socioeconomic Status, Politics, Education, and Culture," pp. 167-185, *Asian Americans: An Interpretive History* (Boston: Twayne Publishers), 1991. For a listing of this research, see pp. 219-220, footnote 4.

For example, in an analysis of immigrant and native-born Asian Americans (Chinese, Japanese, and Filipinos) between 1960 and 1976, Charles Hirschman and Morrison Wong²⁸ found that the educational levels of immigrant and native-born Asians in general "equaled or exceeded those of whites in recent years," and that with certain exceptions, they were "more likely to be found in professional occupations than whites."²⁹ At the same time, Hirschman and Wong noted a "ceiling on advancement into positions of authority or institutional power." The view that Asians served in some functional role as "middlemen minorities" was offered as theory explaining the structural limits to their advancement.³⁰

.... middlemen minorities are permitted to occupy certain "occupational niches" which are noncompetitive with the dominant group. These positions allow for somewhat higher socioeconomic status than other minority groups, but there remains a ceiling on advancement into positions of authority or institutional power. This perspective has been applied by several authors to account for the relatively high socioeconomic position of the Asians in America... The positions which these middleman minorities occupy are precarious and dependent upon the goodwill of the dominant group. They are allowed to achieve, but only so high.³¹

Similarly, a 1988 report by the U.S. Commission on Civil Rights³² produced findings suggesting a glass ceiling. Despite some evidence for improvement over two decades,³³ the Commission noted that education failed to reward Asian Americans with the same opportunities for career advancement as it did non-Hispanic white males.

²⁸Charles Hirschman and Morrison Wong, "Trends in Socioeconomic Achievement among Immigrant and Native-born Asian Americans, 1960-1976, *The Sociological Quarterly* 22: 495-513, Autumn 1981.

²⁹Hirschman and Wong, 1981, p. 495. Chinese and Filipinos showed more of a bimodal distribution, with concentrations also at low-level service occupations and retail trade.

³⁰For a fuller discussion of the middleman minority concept, see Edna Bonacich and John Modell, "Middlemen Minorities," pp. 13-36 in *The Economic Basis of Ethnic Solidarity: Small Business in the Japanese American Community* (Berkeley, Los Angeles, London: University of California Press), 1980

³¹Hirschman and Wong, 1981: 496.

³²U.S. Commission on Civil Rights, *Economic Status of Americans of Asian Descent: An Exploratory Investigation* (Washington, D.C.: U.S. Commission on Civil Rights), 1988.

³³According to this report, the economic status of Asian Americans had improved significantly since the passage of the Civil Rights Act of 1964, particularly in terms of earnings. For example, when 1980 census data were compared with 1960 census data, it was found that earnings for American-born Asian men improved, bringing them close to parity with non-Hispanic white men. This was especially true when hourly rather than annual earnings was the measure. Asian American women, both native-born and immigrant, were noted to compare favorably with their non-Hispanic white female counterparts, earning as much if not more than the latter. A critical review of these findings is included at the

While education facilitated the entry of native-born Asian men into professional jobs, they were less likely to be in managerial positions, even with "comparable skills and characteristics."³⁴ Specifically, among native-born males, 6.5 percent of Filipinos and 10.5 percent of Japanese were identified as managers in 1980, compared with 12 percent of whites.³⁵ Even after controlling for education, work experience, English ability, urban residence, and industry of employment, along with other variables, such as marital and disability status, "Asian descent" had a negative effect on one's chances of moving into management.³⁶ A more dramatic point of contrast is at the level of "chief executives and general administrators, public administration." According to 1990 census data, of all such persons, 58.7 percent³⁷ were white males, whereas only 1.4 percent³⁸ of Asian Pacific Islanders, men and women included.³⁹

In the end, the 1988 report by the U.S. Commission on Civil Rights was unable to assess the reasons behind such patterns of managerial underrepresentation or its true nature: "Whether the outcome is the result of discrimination, choice, or simply a greater propensity to report field of specialization on the census instead of manager remains an issue for future research."⁴⁰ The reasons for this uncertainty were attributed to three major problems with census data said to impede the gathering evidence for a glass ceiling: (1) although the census category "manager" details "a diversity of occupational positions ranging from high corporate positions to managers of small retail stores," it does not enable these positions to be qualitatively differentiated so that high-status managerial positions can be *systematically* distinguished from managerial titles which are less consequential; (2) the absence of relevant data that would enable one to

end of the monograph. U.S. Commission on Civil Rights, 1988, pp. 118-131.

³⁴U.S. Commission on Civil Rights, 1988, pp. 4, 7-8, 72-76.

³⁵U.S. Commission on Civil Rights, 1988, p. 74.

³⁶U.S. Commission on Civil Rights, 1988, pp. 74-75.

³⁷11,171 out of 19,023.

³⁸267 out of 19,023.

³⁹Bureau of the Census, 1990 Census of Population: Supplementary Reports, Detailed Occupation and Other Characteristics from the EEO File for the United States, *Table 1. "Detailed Occupation of the Civilian Labor Force by Sex, Race, and Hispanic Origin: 1990,"* October 1992.

⁴⁰U.S. Commission on Civil Rights, 1988, pp. 74-75.

determine whether the presence of Asian Americans in professional but non-managerial positions is a matter of "discrimination or choice," and (3) the absence of data that would indicate whether a person's occupational identification as "manager" related to specific job responsibilities or training, or conversely, a more amorphous identity. About this third ambiguity, the Commission explained, "Managers whose work reflects specific fields of training may be more likely to list the occupations pertaining to their specific fields of work than to list manager as their occupation, whereas managers whose work is less tied to a specific field of training may be more inclined to list manager as their occupation."⁴¹

The above shortcomings with the census data are directly relevant to glass ceiling issues in corporate management. If quantitative analyses are to be refined, then our very understanding of the nature of these categories deserve attention and consideration. (See Section V. Summary and Recommendations)

Studies in the last two decades which have critically reassessed the occupational status of Asian Americans -- without necessarily addressing the goal of documenting the objective problem of a glass ceiling -- have generally reported on limits to mobility using one or two kinds of measures: (1) the ratio of Asian Americans who are in managerial positions to their numbers in the professional pool, as compared to the ratio of whites (or other groups) in these corresponding categories and (2) the relationship between education and occupational mobility, in particular "returns" on education in terms of income or occupational status.

C. LOWER RETURNS ON EDUCATION

Despite dramatic inroads made by Asian and Pacific Islanders into institutions of higher education, there has been converging evidence that education for Asian Pacific Americans often brings lower returns than it has for other groups,⁴² often increasing

⁴¹U.S. Commission on Civil Rights, 1988, pp. 72, 74.

⁴²Dean Lan, *Prestige with Limitations: Realities of the Chinese-American Elite* (San Francisco, CA: R&E Research Associates),

with education and age. Gender differences account for some of the largest income discrepancies.⁴³ Foreign-born status also had a significant dampening effect on returns to education.

In what is believed to be the first consultation with Asian Pacific Americans ever sponsored by a federal agency,⁴⁴ the U.S. Commission on Civil Rights was presented in 1979 with testimony and data relevant to how educational success might camouflage problems in this population.⁴⁵ (See Appendix II). In the area of employment, the high labor force participation of Asian Americans has often been viewed positively as a sign of low unemployment. Some of the early testimony during this consultation, however, pointed to underemployment among both longtime residents and recent immigrants.⁴⁶ High rates of labor participation of a particular variety (e.g. enclave and family-owned businesses) may actually disguise a certain amount of underemployment created by mainstream employer discrimination practices. The inability to find jobs opportunities

1976; Eric Woodrum, "An Assessment of Japanese American Assimilation, Pluralism, and Subordination," *American Journal of Sociology* 87 (1), July 1981; Charles Hirschman and Morrison Wong, "Trends in Socioeconomic Achievement among Immigrant and Native-Born Asian Americans, 1960-1976," *American Journal of Sociology* 90 (3): 585-607, 1984; Victor Nee and Jimmy Sanders, "The Road to Parity: Determinants of the Socioeconomic Achievement of Asian Americans," *Ethnic and Racial Studies* 8: 75-93, January 1985; Wen Lang Li, "Two Generations of Chinese Americans: Differentials in Education and Status Attainment Process," *Plural Societies* 17 (1): 95-107, May 1987; Marta Tienda and Ding-Tzann Lii, "Minority Concentration and Earnings Inequality: Blacks, Hispanics, and Asians Compared," *American Journal of Sociology* 93 (1): 141-165, July 1987; Amado Cabezas and Gary Kawaguchi, "Empirical Evidence for Continuing Asian American Income Inequality: the Human Capital Model and Labor Market Segmentation," pp. 144-164 in Gary Y. Okihiro, Shirley Hune, Arthur A. Hansen, and John M. Liu (eds.), *Reflections on Shattered Windows: Promises and Prospects for Asian American Studies* (Pullman, Washington: Washington State University Press), 1988; Jayjia Hsia, *Asian Americans in Higher Education and at Work* (Hillsdale, New Jersey: Lawrence Erlbaum Associates, Inc.), 1988: 182-203; Deborah Woo, "The Gap between Striving and Achieving: The Case of Asian American Women. pp. 185-194 in Asian Women United (ed.), *Making Waves* (Boston: Beacon Press), 1989; Paul Wong and Richard Nagasawa, "Asian American Scientists and Engineers: Is there a Glass Ceiling for Career Advancement?" *Chinese American Forum* 6 (3), January 1991; William P. O'Hare and Judy C. Felt, *Asian Americans: America's Fastest Growing Minority Group* (Washington, D.C.: Population Reference Bureau), No. 19, February 1991; Harriet Orcutt Duleep and Seth Sanders, "Discrimination at the Top: American-Born Asian and White Men," *Industrial Relations* 31 (3): 416-432, 1992; Joyce Tang, "The Career Attainment of Caucasian and Asian Engineers," *Sociological Quarterly* 34 (3): 467-496, 1993; Joyce Tang, "Whites, Asians, and Blacks in Science and Engineering: A Reconsideration of Their Economic Prospects," pp. 249-292 in *Research in Social Stratification and Mobility* vol. 12 (JAI Press Inc.), 1993; Paul Ong and Evelyn Blumenberg, "Asian Pacific Scientists and Engineers," in Paul Ong (ed.), *The State of Asian Pacific America: Economic Diversity, Issues and Policies* (LEAP Asian Pacific American Policy Institute and UCLA Asian American Studies Center), 1994.

⁴³Hsia, 1988, p. 182.

⁴⁴Individual Asian Americans have previously testified before Congress, as in the case of Stephen Thom's grandfather who spoke against the Chinese Exclusion Act of 1882. U.S. Commission on Civil Rights, *Civil Rights Issues of Asian and Pacific Americans: Myths and Realities* (Washington, D.C.: U.S. Government Printing Office), May 8-9, 1979, p. 367.

⁴⁵The Commission invited a number of professors, researchers, attorneys, community leaders, directors of social service agencies, and direct service providers to testify on a range of issues. The collective testimony here encompassed civil rights, the census, women's issues, immigration, Pacific Americans, education, employment, housing, and health. Testimony and full papers are included in the volume *Civil Rights Issues of Asian and Pacific Americans: Myths and Realities*, a consultation sponsored by the U.S. Commission on Civil Rights, May 8-9, 1979.

⁴⁶See the first three presentations by Minoru Yasui (Executive Director of the Commission on Community Relations in Denver), Canta Pian (Acting Director, Division of Asian American Affairs, U.S. Department of Health, Education, and Welfare), and Professor Ling-chi Wang (University of California, Berkeley).

commensurate with one's education and training may be a reason that Asian American families also tend to have more wage earners. Asian small businesses, moreover, frequently have a number of unpaid family members, critical to their operation. Viewed by the larger public as symbols of "successful" entrepreneurship, they were characterized by participants at this consultation as a form of disguised unemployment and underemployment, affecting even those with professional training and education.⁴⁷

In general, inferences about mobility from educational data alone were found to be misleading. Indeed, occupational patterns of Asian American professionals, presumably models of upward mobility, suggested barriers resembling a "glass ceiling." For example, in 1979 college-educated Asian American women were concentrated in clerical jobs, part of a larger picture and pattern of occupational segmentation and concentration among Asian Americans.⁴⁸

Such findings not only called into question popular stereotypes of Asian Americans as an upwardly mobile and rapidly assimilating minority but showed the relationship between education and occupational attainment to be problematic or uncertain, and suggestive of "artificial barriers" associated with a glass ceiling: "those well-educated and considered to have successfully entered the primary sector of the labor market are found to be in only certain jobs that are race-typed...segregated consistently by racial prejudice, lower salary schedules, restricted upward mobility, and inferior employment status and benefits."⁴⁹

In general, the state of knowledge on Asian Americans was deemed to be poor, attributable not simply to the prevalence of cultural stereotypes, but to the presence of

⁴⁷U.S. Commission on Civil Rights, 1979, pp. 372-373, 392, 395, 400-402, 442-444, 470-471, 501-502, 508-517.

⁴⁸U.S. Commission on Civil Rights, 1979: 9-10, 28, 389-566; Pauline Fong and Amado Cabezas, "Economic and Employment Status of Asian-Pacific Women," pp. 255-322 in U.S. Department of Education, *Conference on the Educational and Occupational Needs of Asian-Pacific-American Women* (Washington, D.C.: U.S. Government Printing Office), October 1980; Judy Chu, "Labor Market Activities of Asian Pacific American Women," pp. 24-35, in Proceedings of a Conference on the Impact of Cultural Differences on the Labor Market Activity of Black, Hispanic, Asian American and Pacific Islander Women, San Francisco, California (Women's Bureau, U.S. Department of Labor), June 10, 1985; Deborah Woo, "The Gap between Striving and Achieving: The Case of Asian American Women," pp. 185-194 in Asian Women United (ed.), *Making Waves* (Boston: Beacon Press), 1989.

⁴⁹U.S. Commission on Civil Rights, 1979, p. 45.

institutional barriers that prevented their participation at critical levels of decision-making which would influence the nature of data-gathering. Underrepresentation in key decision-making bodies at the federal level was cited as a critical reason for the relative absence of sensitive measures and useful data. At this conference, Ling-chi Wang, a professor at the University of California, Berkeley, underscored the absence of any comprehensive federal study on Asian Americans, together with the "conspicuous absence of Asian Americans on Federal commissions, boards, councils, advisory committees, and task forces," including the staffs of the Commission before which he spoke.⁵⁰

...Federal Government agencies responsible for collecting data, investigating violations, and enforcing civil rights laws have come up with virtually no comprehensive report or study about Asian Americans. Whether it be this Commission, the Office of Federal Contract Compliance, EEOC, the Census Bureau, the Bureau of Labor Statistics, and on and on with all the researching arms of the various departments within the Federal establishment, we have found very little of any usable type of information on Asian Americans.

In other words, Asian American problems have been totally ignored by the Federal establishment by virtue of the absence of data... Absence of high level Asian Americans in these crucial agencies effectively render the Asian American community ineligible for needed resources and services.⁵¹

In sum, lower returns on education and continued occupational segregation, including exclusion from policy-making positions, qualified the view that historical discrimination had been ameliorated with the institutionalization of legal protections, if not the passage of time. As already noted at the beginning of this section, more recent research lends further support for the view that while Asian Americans seem to be approaching earnings or occupational parity, lower returns on education significantly qualify this picture.

Although various studies have noted lower returns on education for Asian Americans, there is no consensus on the reason for, or explanation of, the barriers. The

⁵⁰U.S. Commission on Civil Rights, 1979, p. 25.

theoretical perspectives which have been offered to account for such patterns have for the most part acknowledged two broad kinds of explanations for barriers to mobility -- personal, cultural, or group attributes, on the one hand, and organizational or institutional practices, on the other. This analytical distinction is implicitly acknowledged where a distinction is drawn between "attitudinal" and "organizational" bias, "employee" and "employer" characteristics, between "socialization" and "social treatment," or between "human capital" models and more institutional or "structural" approaches.

"Personal" or "Group Deficits" as Barriers

Barriers to mobility that focus on personal or group "deficits" generally assume deficiencies in the attributes of the candidate up for promotion. Whether these barriers are features of "individual" employees, or more salient as "group" or "cultural" traits, employee qualifications are best evaluated in relation to a particular work context and its requirements, rather than as static qualities.⁵² For this reason, even though managerial effectiveness may call upon certain human relations skills, these qualities are not abstract considerations, but occur in the context of a particular relationship to the organizational culture and its other employees.

Thus, even racial-ethnic groups in the same organization had very different perceptions of the barriers experienced by the other. In one study which sought to elicit the views of different racial-ethnic groups on barriers experienced by minorities, whites were less likely than any other group feel that race discrimination was a barrier, although to the extent that this was acknowledged, they were most likely to agree (36%) that minorities were "excluded from informal networks by Whites." These discrepancies in perception were patterned in other ways. For example, 58 percent of Asian employees felt that minorities employed at their company had to be "better performers than Whites to get ahead," whereas only 32 percent of whites agreed with

⁵¹U.S. Commission on Civil Rights, 1979, pp. 24-25.

⁵²Taylor Cox, Jr., *Cultural Diversity in Organizations: Theory, Research & Practice* (San Francisco: Berrett-Koehler

this view. Similarly, 57 percent of Asian employees concurred with the statement that "In general, People of Color have a harder time finding a sponsor, or mentor, than Whites," compared to only 35 percent of whites who thought so. In a study of scientists and engineers, whites were more likely to rate opportunities for advancement as "excellent" or "good," and race relations as "excellent" or "good," with few here aware of job dissatisfaction among Asian Americans. More than 80 percent, in fact, felt no special effort was needed to increase opportunities for Asian Americans to enter administrative positions.⁵³

In general, a recurring theme in this and other studies is that differential treatment is accorded Asian Americans because of deficiencies in language or interpersonal skills, and because they are not otherwise seen as management material.⁵⁴ Perhaps most significant is the fact that even where language problems are acknowledged by Asian Americans to be personal deficiencies, perceptions of discriminatory treatment are also strong (See Appendix III. Language Barriers).

In a recent survey of Asian American employees in Silicon Valley, respondents who were asked to identify the "main obstacle in career advancement" named the following employee characteristics as barriers: written and verbal communication skills (25%), lack of role models (18%), interpersonal interaction styles (17%), and leadership ability (11%).⁵⁵ When asked to identify all "company characteristics" which created obstacles, however, there was a strong perception of unequal treatment: "arbitrary and subjective promotional processes" was the single most frequently mentioned barrier to career advancement (40%), followed by lack of encouragement from supervisors (30%), lack of role models (30%), and racial prejudice and stereotypes (25%).⁵⁶ The fact that "lack of role models" appears as an obstacle both at the level of "employee" and

Publishers, Inc.), 1994.

⁵³Paul Wong and Richard Nagasawa, "Asian American Scientists and Engineers: Is there a Glass Ceiling for Career Advancement?" *Chinese American Forum* 6 (3), January 1991.

⁵⁴John P. Fernandez, with Mary Barr, *The Diversity Advantage* (New York: Lexington Books), 1993, pp. 257, 260-261.

⁵⁵Asian Americans for Community Involvement, *Qualified But...: A Report on Glass Ceiling Issues Facing Asian Americans in Silicon Valley* (San Jose: Asian Americans for Community Involvement of Santa Clara County, Inc.), 1993, p. 25.

"company" characteristics underscores both the importance of culturally relevant role models and the noticeable structural absence of Asian Americans in managerial positions.

Whether or not poor English is also accompanied by language discrimination, it is a major barrier for foreign-born or recent immigrants. In addition, cultural differences in social histories or backgrounds constrain even the most informal socializing, where social interaction assumes a shared frame of reference. Thus, the following Asian American explained how cultural differences made it hard to comfortably intermingle in certain social circles:

Even though I'm a U.S. citizen, in some ways I was still a "foreigner" in America because of language and culture...

It's not just because I can't speak English well... In Taiwan, I can mix in much easier. I can tell or understand jokes, or politics. In America, we had no common background (with white male executives).⁵⁷

The fact that lower returns on education have been observed not only for those with alleged language problems but for more acculturated or assimilated Asian Americans weakens the argument that a glass ceiling is due simply or primarily to individual or group deficits, and specifically, lower qualifications in terms of English language facility. Japanese Americans have assimilated along a number of dimensions, and yet a pattern of inequality and lower returns on education was observed vis-a-vis whites of equivalent qualifications. Thus, for the decades from 1950 to 1970, Eric Woodrum reported that minority disadvantage was a persistent feature.

Japanese Americans were overrepresented relative to whites in professional and technical jobs and underrepresented in managerial and official jobs for their educations in 1950 and 1960. By 1970 they were significantly underrepresented in both high-status occupational categories in view of their education. Income returns on advanced education and income returns for professional and managerial work have consistently

⁵⁶Asian Americans for Community Involvement, 1993, pp. 26-27.

⁵⁷*Oakland Tribune*, September 19, 1993.

been lower for Japanese than for white Americans... An irony substantiated by these findings is that precisely those college-educated, professional Japanese Americans celebrated as exemplifying an "assimilation success story" systematically receive less prestigious, authoritative employment and less financial compensation than similarly qualified whites.⁵⁸

A comparative look at the career histories of Asian and white engineers in the 1980's similarly found that native-born Asians were at a relative disadvantage. While closing the earnings gap, they were underrepresented in management, and their relative absence in upper echelon positions could not be explained by educational qualifications. Instead, the data pointed to "a fairly large mismatch between career status and qualifications in the native-born Asian workforce."⁵⁹ Perhaps most revealing is the fact that they were relatively less well located even when compared to foreign-born, immigrant whites.

.... it is striking to learn that native-born Asians are more likely to be in the lower echelons of the engineering profession than foreign-born Caucasians.... While formal schooling and technical training are important for the minority population to gain access to high-paying professions, these qualifications are insufficient for native-born Asians engineers to achieve upward mobility.⁶⁰

This racial difference in managerial presence persisted even when certain factors that might account for this pattern were "controlled for." As Joyce Tang explained: "A low tendency for native-born Asians to be managers cannot be attributed to their lack of human resources, placement in undesirable sectors, or uneven field distribution....the underrepresentation of native-born Asians in management suggests that neither mastery of English nor familiarity with American labor market practices is the key to achieving higher occupational status."⁶¹

Other research similarly has indicated that even with English skills, U.S. citizenship, comparable or superior levels of education, Asian Americans continued to

⁵⁸Woodrum, 1981, p. 166.

⁵⁹Joyce Tang, "The Career Attainment of Caucasian and Asian Engineers," *Sociological Quarterly* 34 (3): 467-496, 1993, p. 479.

⁶⁰Tang, 1993, pp. 483, 487.

earn less than their white counterparts in same occupations, and the cost of being an immigrant was greater if one were Asian than white.⁶² The fact that foreign-born whites faced no such blocked mobility⁶³ suggests racial barriers or the possibility that European employees with English-language difficulties are treated differently.⁶⁴

The role of gender, and the "cost" of being an Asian American woman, is another issue which captures the problem of discerning the extent to which alleged deficiencies are the product of cultural socialization, or differential treatment due to social intolerance or discrimination. In the above Silicon Valley survey, Asian American women indicated that they were less likely to experience discrimination due to race: compared to 59 percent of males who believed their promotional opportunities were limited for this reason, 44 percent of Asian American women felt this way.⁶⁵ It is possible that these women may not report as much race discrimination because some of the barriers are experienced as gender-related.⁶⁶

In sum, personal, cultural, or other group deficits are reasons which have been offered to explain promotional barriers. Survey responses have underscored Asian American employees' perceptions of barriers, which include not only language deficiencies but external barriers such as arbitrary or subjective evaluations, the absence of mentoring or sponsorship, and exclusion from informal networks. Obstacles to

⁶¹Tang, 1993, p. 479.

⁶²Hsia, 1988, pp. 186-189, 192.

⁶³In another study, it had similarly been found that foreign-born status among white males were more likely to be at parity with U.S.-born white males. For Asian American males, however, foreign-born status brought lower returns on their human capital investments. Amado Cabezas and Gary Kawaguchi, "Empirical Evidence for Continuing Asian American Income Inequality: the Human Capital Model and Labor Market Segmentation," pp. 144-164 in Gary Y. Okihiro, Shirley Hune, Arthur A. Hansen, and John M. Liu (eds.), *Reflections on Shattered Windows: Promises and Prospects for Asian American Studies* (Pullman, Washington: Washington State University Press), 1988

⁶⁴Ronald Chin, "Asian Americans in Corporate Organizations," pp. 58-60, in Grace Yun (ed.), *A Look Beyond the Model Minority Image: Critical Issues in Asian America* (New York: Minority Rights Group), 1989; John P. Fernandez, with Mary Barr, *The Diversity Advantage* (New York: Lexington Books), 1993.

⁶⁵Asian Americans for Community Involvement, 1993, p. 16.

⁶⁶Socialization patterns may put women at odds with company norms in several ways, converting certain "female-specific" attributes and styles into negative qualities at the workplace, or else obliging women to adhere to more "feminine" norms which inhibit the expression or development their talents. Women's preference for more "democratic" rather than "autocratic" orientations towards leadership, for example, subjects them to a no-win situation in that leadership is generally conceived of in more directive terms, yet women who emulate this style are more likely to be negatively evaluated. Differential social treatment would also extend to sexual harassment or the institutional demands of entire work environment that is insensitive to the presence and needs of women. Cox, 1994.

career advancement cannot be attributed to simple cultural parochialism or clannishness. In the above Silicon Valley survey, 36 percent of Asian Americans felt excluded or unwelcomed when they sought entry to networks outside their own circles.⁶⁷ Finally, not all experienced obstacles to promotion, and it should be noted that in this same survey, 27 percent saw no obstacles to advancement.⁶⁸ A profile of such individuals would be useful, as would be a profile of those who have actually made it into management (see Section V. Summary and Recommendations). Differences in upward mobility, however, may also signal barriers that are not only personal but external, including more structural or institutional barriers.

Occupational Segmentation: Industry or Institutional Tracking as a Barrier

An alternate theory to explain a glass ceiling is that lower returns on education are due to barriers which are more structural or institutional in nature. Educational achievement, as a qualifying "attribute," would have indirect implications for mobility through its influence on occupation or sphere of employment.

How individuals are initially positioned within an industry has important implications for mobility. Asian Pacific women in Silicon Valley are concentrated in jobs as operatives or laborers, earning less than both white men and women.⁶⁹ For Asian Americans in general, different industries are tiered and show their concentration at the lower end of the occupational scale or in less than desirable sectors.

In the transportation, communication, and public utility industries, and in finance, insurance, and real estate, Asian/Pacific Americans predominantly are clerical workers; and in the service industries, Asian employment is high in hotels, restaurants, and health services, however, they are mostly food and cleaning service workers. In hospitals they are

⁶⁷Asian Americans for Community Involvement, 1993, pp. 26-27.

⁶⁸Asian Americans for Community Involvement, 1993, p. 25.

⁶⁹"Silicon Valley's Workforce Remains Segregated," *Global Electronics*, Issue No. 101, February 1990; "High-Tech Employment Patterns in Silicon Valley, 1990," *Global Electronics*, Issue No. 116, October 1992; "Census Income Data Shows Sharp Gender and Ethnic Differentials in Silicon's Valley's High Tech Industry," *Global Electronics*, Issue No. 121, September 1993; Rebecca Villones, "Women in the Silicon Valley," pp. 172-176 in Asian Women United of California (ed.), *Making Waves: An Anthology of Writings By and About Asian American Women* (Boston: Beacon Press), 1989.

mostly nurses rather than physicians, and even in the ranks of nurses, discrimination apparently exists." ⁷⁰

While lack of education is a barrier for operatives or laborers, specifically relevant for the issue of a glass ceiling is that even among those with professional training, lower returns were a pattern.

The first systematic study to analyze how industry concentration might present a form of discriminatory employment for Asian Americans⁷¹ found that low wages among Asian Americans could be attributed to a combination of "low-employment in high-wage industries"⁷² and "high employment in low-wage industries."⁷³ Even in retail trade, where they are known to concentrate more other groups, they were most likely to be in low-wage rather than high-wage sectors.⁷⁴ Summarizing these findings for the U.S. Commission on Civil Rights two years later, in 1979, Amado Cabezas pointed out that Asian American employment was "one-half of parity in 12 of the 17 major manufacturing industries in the area..."⁷⁵ Moreover, Asian Americans were "below parity as managers even in industries where they are above parity as professionals and technicians."⁷⁶ Other research has also suggested that lower pay and lower occupational status among college-educated Asian Americans can be attributed to industry or occupational segregation.⁷⁷

⁷⁰U.S. Commission on Civil Rights, 1979: 390.

⁷¹Amado Y. Cabezas and Harold T. Yee, *Discriminatory Employment of Asian Americans: Private Industry in the San Francisco-Oakland SMSA* (San Francisco: Asian, Inc.), July 4, 1977. Asian Inc., the San Francisco-based non-profit organization conducted this research.

⁷²High-wage industries included construction, wholesale trade, and manufacturing industries such as food products, paper, printing and publishing, petroleum refining, primary metals, and fabricated metal products." Cabezas and Yee, 1977, p. 9.

⁷³Cabezas and Yee, 1977, pp. 9-10.

⁷⁴These retail businesses included "Eating and Drinking Places, General Merchandise Stores (mostly department stores), Apparel Stores, and Miscellaneous Retail Stores (mostly drug stores) - versus Building Material Stores, Food Stores (mostly the supermarkets), and Furniture and Home Furnishings Stores, which are all higher wage retailers." Asians employed in Commercial Banking and Insurance were mostly clerical workers.

⁷⁵U.S. Commission on Civil Rights, 1979, p. 390.

⁷⁶These industries were identified as "Chemical Products, Electric and Electronic Equipment, and Commercial Banks." Cabezas and Yee, 1977, p. 10.

⁷⁷Pauline Fong and Amado Cabezas, "Economic and Employment Status of Asian-Pacific Women," U.S. Department of Education, *Conference on the Educational and Occupational Needs of Asian-Pacific-American Women* (Washington, D.C.: U.S. Government Printing Office.) October 1980; Kwang Chung Kim and Won Moo Hurh, "Korean Americans and the 'Success' Image: A Critique," *Amerasia* 10 (2): 3-21, 1983; Amado Cabezas, Larry Shinagawa, and Gary Kawaguchi, "New Inquiries into the Socioeconomic Status of Pilipino Americans in California in 1980," *Amerasia Journal* 13: 1-21, 1986-87; Cabezas, Amado and Gary Kawaguchi, "Empirical Evidence for Continuing Asian American Income Inequality: the

Occupational concentration or clustering along racial and ethnic lines does not in and of itself imply restricted access or mobility, or artificial barriers. Indeed, in terms of their representation in managerial and professional occupations, Asian and Pacific Islanders appear to be doing comparatively well: 31.2 percent of API males were in some "managerial and professional specialty," compared to 27.4 percent of white males.⁷⁸ The following table shows this occupational distribution disaggregated for Asian Pacific Islanders, with Asian Indians more likely (43.6%) to cluster here than any other subgroup. As noted earlier, managerial status for Asian Americans often means self-employment.

Characteristics	United States	Asian and Pacific American	Asian											
			Total	Chinese	Filipino	Japanese	Korean	Indian	Vietnamese	Cambodian	Laotian	Hmong	Thai	Other
OCUPATION														
Employed persons 16 years old and over	115,681,202	3,411,586	3,264,268	819,932	750,613	452,005	345,655	391,949	248,881	35,623	46,010	9,756	48,028	115,816
Percent.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty.....	26.4	30.6	31.2	35.8	26.6	37.0	25.5	43.6	17.6	9.8	5.0	12.8	23.6	31.9
Technical, sales and administrative support	31.7	33.2	33.3	31.2	36.7	34.4	37.1	33.2	29.5	23.3	15.2	18.9	26.5	33.6
Service	13.2	14.8	14.6	16.5	16.8	11.1	15.1	8.1	15.0	17.9	14.6	20.0	26.8	14.0
Farming, forestry, and fishing	2.5	1.2	1.1	0.4	1.5	2.7	0.7	0.6	1.4	1.7	1.5	2.3	0.7	0.8
Precision production, craft and repair	11.3	8.0	7.8	5.6	7.4	7.8	8.9	5.2	15.7	17.2	19.8	13.9	7.5	7.3
Operators, fabricators, and laborers	14.9	12.1	11.9	10.6	11.0	6.9	12.8	9.4	20.9	30.0	43.9	32.1	15.0	12.4

SOURCE: BUREAU OF THE CENSUS, U.S. Department of Commerce. Economics and Statistics Administration, *We the American Asians*, Washington, D.C., September 1993, p. 9.

Managerial-professional status for minorities in the mainstream, however, has often meant a different occupational distribution, with inequality implied. For example, given that Filipino Americans (both foreign-born and U.S.-born) were also found to have lower income returns on their education, one explanation might lie in this differential occupational distribution and the opportunities that inhere in the

Human Capital Model and Labor Market Segmentation," In Gary Y. Okihiro, Shirley Hune, Arthur A. Hansen, and John M. Liu (eds.), *Reflections on Shattered Windows: Promises and Prospects for Asian American Studies* (Pullman, Washington: Washington State University Press), 1988; Amado Cabezas and Gary Kawaguchi, "Industrial Sectorization in California in 1980: The Continuing Significance of Race/Ethnicity, Gender, and Nativity," pp. 57-99 in Sucheng Chan (ed.), *Income and Status Differences Between White and Minority Americans: A Persistent Inequality* (Lewiston, N.Y.: Edwin Mellen Press), 1990.

⁷⁸Bureau of the Census, Current Population Reports, P20-459, *The Asian and Pacific Islander Population in the United States: March 1991 and 1990* (Washington, D.C.: U.S. Government Printing Office), 1992. By Claudette E. Bennett. P. 8.

trajectories of certain ladders or tracks.⁷⁹ Their distribution in managerial-professional jobs was distinct from that of native white men:

... Pilipino men mostly were accountants, civil engineers, and electrical engineers, while women mostly were registered nurses, elementary school teachers, and also accountants. Few Pilipinos were found among public administrators, financial managers, marketing managers, physicians, attorneys, architects, aerospace, industrial, and mechanical engineers, computer analysts, natural scientists, social scientists, and social workers - - occupations which showed high concentrations of native white men.⁸⁰

The appearance of Asian American males in "professional and technical" jobs has in the past meant their concentration into two or three areas within the professional/technical category, namely, engineering, accounting, and health technology.⁸¹ In 1990, they continued to cluster in these areas: 31 percent of Asian Pacific Islander males in professional specialties were engineers, as compared with 20 percent of white males.⁸² As "accountants and auditors," API males continued to cluster here more than white males: 15 percent,⁸³ compared to only 9 percent⁸⁴ of white males in such management-related occupations. In the health professions, 12.7 percent of API males were physicians, compared to 5.7 percent⁸⁵ of white males. API females in professional specialty occupations were overwhelming concentrated (29%) as registered nurses.⁸⁶

As managers, Asian Americans tend to be distributed in different tracks, such as research and development (R&D).⁸⁷ Food management also appeared as an area of

⁷⁹Similarly, whether are jobs in the primary or secondary sector of employment, in large corporate enterprises or high-risk, small ethnic business establishments, will also affect income and mobility.

⁸⁰Amado Cabezas, Larry Shinagawa, and Gary Kawaguchi, "New Inquiries into the Socioeconomic Status of Pilipino Americans in California in 1980," *Amerasia Journal* 13 (1): 1-21, 1986-87, p. 7.

⁸¹U.S. Commission on Civil Rights, 1979, p. 28

⁸²In 1990, 31 percent (107,323 out of 351,345) of API males in professional specialty occupations were engineers, and of these, 30 percent (32,383 out of 107,323) were electrical and electronics engineers.

⁸³37,092 out of 249,424.

⁸⁴646,664 out of 7,398,764.

⁸⁵383,033 out of 6,619,249.

⁸⁶78,414 out of 269,089.

⁸⁷Paul Wong and Richard Nagasawa, "Asian American Scientists and Engineers: Is there a Glass Ceiling for Career

concentration: 15 percent of API men are food managers, compared to 7 percent of whites who are managers in food service. A more dramatic point of contrast and inequality is at the level of chief executive officers: of all persons who were CEOs in public administration, 58.7 percent⁸⁸ were white males, compared to only 1.4 percent⁸⁹ of API, men and women included.⁹⁰

Some of this depressing effect on mobility has been explained in terms of "crowding hypothesis": high numbers of individuals concentrated in a particular occupational field is said to have a negative effect upon wages. This possibility has been offered to explain the lower wages of Asian females, including the college-educated, who are concentrated in the lower-tier, primarily clerical, occupations of generally high-wage industries.⁹¹ While it is often in those professional career tracks where Asian Pacific Americans are "crowded" or heavily represented that a glass ceiling is often found, blocked mobility may be also due to the limited opportunities available in these particular tracks.

Differential mobility has been attributed not only to crowding but to "dual hierarchies,"⁹² where Asian Americans are channelled in a number of ways. According to Yvonne May Lau, they were often "into staff, not line positions," or otherwise "pressured into accepting positions in the relatively unfavorable specialties," such as R & D (research and development) positions where promotions seemed to follow a slower

Advancement?" *Chinese American Forum* 6 (3), January 1991; Paul Ong and Evelyn Blumenberg, "Asian Pacific Scientists and Engineers," in Paul Ong (ed.), *The State of Asian Pacific America: Economic Diversity, Issues and Policies* (LEAP Asian Pacific American Policy Institute and UCLA Asian American Studies Center), 1994.

⁸⁸11,171 out of 19,023.

⁸⁹267 out of 19,023.

⁹⁰Bureau of the Census, 1990 Census of Population: Supplementary Reports, Detailed Occupation and Other Characteristics from the EEO File for the United States, *Table 1. "Detailed Occupation of the Civilian Labor Force by Sex, Race, and Hispanic Origin: 1990,"* October 1992.

⁹¹Amado Y. Cabezas and Harold T. Yee, *Discriminatory Employment of Asian Americans: Private Industry in the San Francisco - Oakland SMSA* (San Francisco: Asian, Inc.), July 4, 1977. Pauline Fong and Amado Cabezas, "Economic and Employment Status of Asian-Pacific Women," U.S. Department of Education, *Conference on the Educational and Occupational Needs of Asian-Pacific-American Women* (Washington, D.C.: U.S. Government Printing Office), October 1980, p. 294.

⁹²Yvonne May Lau, *Alternative Career Strategies Among Asian American Professionals: The Second Rice Bowl* (Evanston, Illinois: Northwestern University), Doctoral Dissertation, June 1988, pp. 18-34.

pace.⁹³ This kind of segregation would also explain their ignorance of corporate culture and the inside knowledge of other reward systems which other careerists possess. Even where Asian Americans were specifically selected or recruited for imputed linguistic or cultural abilities, these managerial appointments were not necessarily desirable, limited to supervising all-Asians or to overseas job assignments, appointments which also suggested stereotypical assessments of cultural capabilities.

Since detailed information on occupational distribution tends to be aggregated from different work settings or organizations, the implications of these data on occupational distribution are by no means always clear-cut. In an effort to assess the effect of clustering into certain jobs or sectors of the economy, Charles Hirschman and Morrison Wong controlled for sector of employment, along with other variables. As they explain, "Less visible are the inequalities that are maintained by segregated institutional frameworks. Systematic differences in earnings can arise if minorities are disproportionately concentrated in firms and settings that pay less for the same qualifications and performance."⁹⁴ Yet, even when sector of employment was controlled for, they were unable to identify the nature of the barriers.⁹⁵ Their conclusion, however, strongly supported the existence of a glass ceiling: "What did prove to be a fairly important mechanism across all ethnic minorities... was the unequal participation in the occupational hierarchy. If minorities with the same resources and opportunities...as whites were able to reach the same mark on the occupational ladder, earnings inequality would be reduced substantially."⁹⁶

⁹³Lau, 1988, pp. 24-28. See also Paul Ong and Evelyn Blumenberg, "Asian Pacific Scientists and Engineers," in Paul Ong (ed.), *The State of Asian Pacific America: Economic Diversity, Issues and Policies* (LEAP Asian Pacific American Policy Institute and UCLA Asian American Studies Center), 1994.

⁹⁴Charles Hirschman and Morrison Wong, "Trends in Socioeconomic Achievement among Immigrant and Native-Born Asian Americans, 1960-1976," *American Journal of Sociology* 90 (3): 585-607, 1984, p. 601.

⁹⁵As Hirschman and Wong explain, their methodological strategy did not provide any support for their theoretical perspective: "A major hypothesis of our study is that minority advantages and disadvantages are maintained through institutional separation across the economy. Our effort to measure one aspect of this was sector, a fivefold classification that tapped the self-employment and retail trade components of the ethnic economy, two other components based on the dual economy hypothesis (core-periphery), and the government sector... however, this classification did not seem to identify a significant intervening mechanism in the ethnic stratification process....Differentials in work intensity (weeks worked last year and hours worked last week), with sector and occupation (and other variables) controlled, did not seem to explain ethnic differentials..." Hirschman and Wong, 1984, pp. 602-603.

⁹⁶Hirschman and Wong, 1984, p. 603.

The case of foreign medical doctors illustrates how occupational segmentation and tracking have consequences for long-term professional development and mobility. The marginalization of Korean immigrant doctors, for example, has been attributed to their relegation not only to medical institutions that were less attractive or remunerative,⁹⁷ but to practices in specialties that were similarly more marginal or low-paying:

...Korean medical doctors are heavily concentrated in several specialties that American-born doctors usually avoid...62 percent of Korean immigrant doctors have been forced to choose such nine "fringe" specialties as anesthesiology, psychiatry, obstetrics and gynecology, pediatrics, radiology, pathology, physical medicine and rehabilitation, and general practice. Ambitious American-born graduates have avoided making a professional career out of these relatively low-paying specialties. In contrast, only about 15 percent of Korean doctors have managed to acquire positions in the eighteen "core" specialties that are included under the general titles of "medicine" and "surgery." Korean physicians have functioned as a backstop to American-born doctors in staffing hospitals. At the same time, American medical institutions have been reluctant to offer residencies in "core" specialties to Korean immigrant doctors, who have a different educational and cultural background.⁹⁸

Foreign-trained medical professionals often experience lower mobility than U.S.-trained doctors, because of the fact that when they enter this country, they usually are located within the less prestigious hospitals within the medical system:

... foreign interns are disadvantaged relative to U.S. natives in terms of both the prestige of their jobs and the quality of their on-the-job training. Because physicians in the U.S. usually remain in the kind of hospital in which they entered the U.S. internship/residency system, most foreign doctors do not "catch up" to their native peers in terms of occupational prestige within that system.⁹⁹

The credentialing process, another barrier for foreign medical graduates, will be discussed in the following section.

⁹⁷Veterans Administration Hospitals have been identified as the single largest group of employers of immigrant doctors. Kim, 1981, p. 150.

⁹⁸Kim, 1981, p. 158.

⁹⁹U.S. Department of Labor, *Job Mobility Paths of Recent Immigrants to the United States* (Division of Immigration and

In sum, where it has been possible to take a closer look at the occupational distribution of Asian Pacific Americans, one finds a pattern of occupational segmentation. Where these concentrations lead to dead-end careers, organizational or institutional tracking may present itself as a systematic barrier. A deficit model, however, has tended to dominate or preempt the exploration of such institutional barriers.

The Credentialling Process: Formal Barriers for Foreign Educated Health Professionals

The credentialling process surrounding foreign-trained health professionals was an objectively identifiable barrier, capturing a more general debate about whether certain standards or requirements are "artificial," arbitrary, or unrelated to job performance.

Asian Pacific Americans are disproportionately represented as health professionals. While only three percent of the total U.S. population in 1990, they make up 10.8 percent of practicing physicians and 4.4 percent of registered nurses. Many of them have degrees from U.S. health programs. By contrast, two thirds of all Asian Pacifics in the United States receive their degrees from foreign medical and nursing schools.¹⁰⁰ For this reason, the credentialling process has not only been a major barrier, but one which disproportionately affects Asian Pacific Americans. Whereas Europeans had previously formed the bulk of these graduates, by the early 1980's FMGs from Asian countries made up nearly half of these FMGs.¹⁰¹ Foreign-trained nurses (FNGs)¹⁰² are also predominantly Asian Pacific (about three-fourths), with a large

Policy Research, Bureau of International Labor Affairs, September 1992) By Howard Wial, p. 7.

¹⁰⁰Asian graduates of American health programs tripled from 2 percent to 6 percent in the late 1970s to mid-1980's, and almost doubled to 11 percent in 1991. Paul Ong and Tania Azores, "Asian Pacific American Health Professionals on the Front-Line," in Paul Ong (ed.), *The State of Asian Pacific America: Economic Diversity, Issues and Policies* (LEAP Asian Pacific American Policy Institute and UCLA Asian American Studies Center), 1994.

¹⁰¹Foreign medical graduates (FMG) in general make up about a fifth of all physicians practicing in the U.S. Thirty percent of these FMGs are U.S. born citizens, and 70 percent foreign nationals. U.S. Commission on Civil Rights, *Civil Rights Issues Facing Asian Americans in the 1990s* (Washington, D.C.: U.S. Government Printing Office), Feb. 1992, 146.

¹⁰²Although less than a tenth of the nursing force, FNGs have been critical to providing services to poor and disadvantaged patients in metropolitan public hospitals. Ong and Azores, 1994.

majority coming from the Philippines.¹⁰³

During the 1960s, there was an overall deficiency in the distribution of health care in the United States, with a particular need for high-level professional service workers who could deliver medical care to America's rural and urban inner-city populations. Most American-born doctors were not only highly specialized but geographically concentrated in more profitable private and group practices in suburban institutions. To fill the void in general practitioners, Asian foreign-medical graduates were initially recruited through preference categories in the immigration law and later through liberal licensing laws. The relationship between foreign medical graduates and American-born or trained medical doctors was, in this sense, "complementary" rather one of direct competition.

As the demand for trained health professionals was met, licensing requirements became stricter beginning in the 1970's, thereby "devaluing" medical degrees from foreign medical schools, with a disproportionate effect on graduates from India, the Philippines, Pakistan, and Korea, who began immigrating in large numbers after 1965.¹⁰⁴ Proponents or defenders of these new and stiffer requirements felt these changes were necessary for protecting professional standards.

From the point of view of foreign medical graduates, however, these recent licensing and certification requirements constituted an artificial barrier, unwarranted by other indicators of their competency to practice. The U.S. General Accounting Office, for example, found no difference in the performance record of foreign medical

¹⁰³Ong and Azores, 1994.

¹⁰⁴Illsoo Kim described the impact which changes in licensing laws had on Korean nurses, depending on the time of their immigration: "Until 1971, New York State operated a special licensing system for foreign-educated nurses in which records of transcripts and clinical experience in the home country were evaluated and credited in the qualifications for state R.N. Licenses. According to the system, foreign-educated nurses were required to take examinations in only those subjects in which they showed poor performance both in school and in practical experience. Thus, the early-arriving Korean nurses could acquire New York State's nursing licenses without too great an effort. But, since the early 1970s, New York has imposed an identical examination on both foreign and domestically educated nurses seeking R.N. licenses. Foreign-educated nurses must take the National League for Nursing State Board Test Pool Examinations, which cover all the subjects of nursing education." Illsoo Kim, "The Mobility of South Korean Medical Professionals," pp. 147-178 in *New Urban Immigrants: The Korean Community in New York* (Princeton, N.J.: Princeton New Jersey Press, 1981), p. 175.

graduates, as compared with U.S. medical graduates.¹⁰⁵ Qualifying one for practice in the United States meant meeting stiffer certification, licensing, or endorsement requirements than those faced by U.S. medical graduates, e.g. more tests or examinations, longer periods of postgraduate training or residencies.

The U.S. Commission on Civil Rights has reported that parties representing various sides of this issue have agreed on the need to establish a national clearinghouse of information that will ease the documentation process on educational background and credentials. There have also been efforts to move towards a more uniform pathway towards licensure and to propose legislation that will reduce differential treatment in other aspects of job training, e.g. the granting of clinical or hospital privileges, allocation of residency positions, or the hiring for staff positions.¹⁰⁶

The proposals for change surrounding the credentialing process implicitly acknowledge the lower returns to education brought by specific institutional policies. The credentialing process is perhaps a more "visible" barrier than other institutional barriers which make for "glass ceiling." For example, Ong and Azores note that the concentration of Asian Pacific American health professionals in public hospitals gives them few opportunities to further train, develop their skills, or prepare for licensing exams. In either case, their disproportionate underrepresentation in supervisory positions in the medical and nursing professions suggests a glass ceiling. Thus, reporting on their three major public hospitals in Los Angeles, Ong and Azores note: "Asian Pacific Americans comprise 34 percent of the professionals (physicians and nurses), 28 percent of supervisory professionals (e.g. Supervising Clinic, Staff or Surgery Nurse, or Senior Physician), but only 12 percent of management positions (Chief Physicians, Directors of Nursing, or Nursing Directors). There is no simple explanation for this discrepancy..."¹⁰⁷

¹⁰⁵U.S. Commission on Civil Rights, Feb. 1992, p. 147.

¹⁰⁶"The Certification on Foreign-Educated Professionals," in U.S. Commission on Civil Rights, *Civil Rights Issues Facing Asian Americans in the 1990s* (Washington, D.C.: U.S. Government Printing Office), Feb. 1992, pp. 145-148.

¹⁰⁷Ong and Azores, 1994.

Summary

To summarize this general discussion on lower returns to education, there is little question that higher education and educational specialization have already facilitated the entry of Asian Americans into certain professional occupations, industries, or sectors of the economy. According to data made available in the *Statistical Record of Asian Americans*,¹⁰⁸ there is some evidence of an association between education and representation at the managerial levels. Thus, 22.9 percent of Asian Pacific American men with four or more years of college were in executive, administrative, and managerial workers, as opposed to 16.6 percent of those with only one to three years of college. A similar pattern held for women: 19.3 percent of Asian American women with four or more years of college were listed as executive, administrative, and managerial workers as compared to 9.8 percent of their counterparts with only one to three years of college.¹⁰⁹

While statistics on both educational attainment and occupation are *separately* available, information on the *relationship* between educational attainment and occupational status tends not to be compiled in this way. More importantly, if comparisons are to be made about the relationship between education and managerial representation for different groups, then information on the general population, especially white males, is critical. In the *Statistical Record of Asian Americans*, mentioned above, there were no comparable figures enabling one to assess the relative importance of education for white male mobility. At the same time, survey data have indicated a strong perception among Asian American professionals that they are frequently passed over for promotion by those with less education, training, and years of experience. Former EEOC member, Joy Cherian, underscored in no uncertain terms the fact that criteria for advancement are often differentially applied. The following case was illustrative of how educational credentials were less a requirement for white males:

¹⁰⁸This source compiles information from published reports from government and private associations.

¹⁰⁹Susan B. Gall and Timothy L. Gall (eds.), *Statistical Record of Asian Americans* (Detroit, Washington, D.C., and London: Gale Research Inc.), 1993, p. 281.

If it is not the glass ceiling then I don't know what it is when an Asian American with extensive supervisory experience, with two masters degrees, with highly successful performance in the same position on an acting basis, is denied a permanent position as Division Chief at the GS-14 level in a federal government agency by the same selecting official who had rated him highly successful. That Asian American was passed over in favor of a White male with a high school education and little managerial experience.... The evidence showed that the same selecting official had earlier passed over another Asian American with almost identical qualifications, in favor of...another White male with a high school education.¹¹⁰

In a more well-known case, David Lam, now a Silicon Valley entrepreneur, was passed over for promotion in 1979 when he worked for Hewlett-Packard. The candidate chosen over him was a white male he had personally hired and trained just eleven months prior. Lam eventually left to found his own semiconductor and software firm.

D. CORPORATE, GOVERNMENT, AND ACADEMIC SECTORS

Research by the Equal Employment Opportunity Commission and U.S. Commission on Civil Rights has noted the underrepresentation of Asian Americans in management across a number of occupational sectors, including private employment, all levels of government, and both public and private institutions of higher education.

Ratio of Professionals to Managers

The ratio of those in the professional category to those who finally end up in management suggests a constricted pipeline for both Asian Pacific American men and women.

While Asian Pacific American males are strongly represented as professionals in the workforce (23 percent), they are underrepresented in executive-managerial positions (14 percent). Similarly, Asian Pacific American females, despite their mobility into professional jobs (17 percent) were less likely to be represented as executives as

¹¹⁰Joy Cherian, "Asian Americans: An Emerging Force to Break the Glass Ceiling," New Orleans, Louisiana, Remarks at the 1993 Annual Program of the Chinese-American Librarians Association, June 28, 1993, p. 11.

managers (12 percent). Non-Hispanic white males, by contrast, made up a smaller share of professional workers (14 percent), but were more likely to advance into executive-managerial levels (17 percent).¹¹¹

In a speech given in June of 1993, departing EEOC member Joy Cherian reported on how a "glass ceiling" had so skewed the occupational situation of Asian Americans in this country that they are noticeably absent in high-ranking positions of executive or supervisory authority in both private and public employment.¹¹² Despite common glass ceiling issues affecting women and other minorities, including groups defined by religion or national origin,¹¹³ Cherian pointed out that Asian Americans had to also struggle with an obdurate public perception that denied these problems: "...many Americans are unwilling to accept the reality that Asian Americans, despite their reasonably good record of achievement, face a real, hard, shatter-proof glass ceiling when it comes to moving up to managerial positions."¹¹⁴ Compared to other minority groups for which data were collected, Asian Americans were reported to be distinctly underrepresented as managers, even though fairly well represented among professionals in general. The low ratio of actual managers to those in the eligible pool of potential managers was a major indicator suggesting distinct thresholds to mobility. Although comprising "disproportionately large numbers among the qualified pool" for these positions, very small numbers of Asian Americans actually went into management.

Virtually across the board, in private employment; in employment with state, local, and federal government agencies; in employment with public and private institutions of higher education, Asian Americans enjoy the distinction of being represented very highly as professionals. But, for some strange reason, the same data show that when it comes to being part

¹¹¹Paul Ong and Suzanne Hee, "Work Issues Facing Asian Pacific Americans," pp. 141-152 in *Asian Pacific America: Policy Issues to the Year 2020*, (Los Angeles: Leadership Education for Asian Pacifics (LEAP and UCLA Asian American Studies Center), 1993, p. 147.

¹¹²Cherian served six years on the EEOC and was one of five members. Despite apparent differences among them over policy recommendations, the Commission members uncovered an unequivocal pattern of occupational immobility among highly educated Asian Americans in both private and public employment.

¹¹³Cherian, 1993, p. 1.

¹¹⁴Cherian, 1993, p. 6.

of the management team, those same professionals -- a category of workers from which most managers come -- do a disappearing act.¹¹⁵

As further summarized by Cherian, the EEOC surfaced the following specific facts regarding their objective, statistical underrepresentation at managerial levels:

Of all professionals employed by over 38,000 private employers, 5.3% are Asian Americans, but only 2% of all officials and managers are Asian Americans.... Among the minority groups for which we collect these data, Asian Americans are the only ones that are disproportionately underrepresented in the management positions by comparison to their participation rates in professional jobs. All other minority groups are employed as managers and officials in numbers very roughly equal to their representation in the professional fields, but Asian American managers and officials make up fewer than half of their representation in professional jobs.

... in public employment at all levels of government, Asian Americans are employed as officials and administrators at the rate of only one-third of their representation in professional jobs with the same employers.

...when it comes to employment in the ranks of executives, administrators and managers at our private and public institutions of higher learning -- colleges and universities -- the situation seems to be worse for Asian Americans than in any other employment sector. Here, Asian American managers are only one-fourth of their participation in professional and faculty positions.¹¹⁶

At the end of Cherian's tenure, the facts of differential mobility were more pronounced than the reasons.

While concentration at the *relatively lower end* of the "same" job ladder (despite higher educational levels) is a glass ceiling concern, employment data aggregate individuals from different work settings or organizations. Yet it is noteworthy that Asian Pacific Americans tend to pursue career opportunities in some sectors more than others.

In 1992 Asians were the group least well-represented in Academe. Whereas the

¹¹⁵Cherian, 1993, p. 7.

¹¹⁶Cherian, 1993, pp. 7, 8, 10.

majority of All Ph.D.'s. in the U.S.¹¹⁷ found employment in Academe (52.2%), only 38.9 percent of Asian Ph.D.'s. had such postgraduate commitments.¹¹⁸ Other minorities, including blacks (54.5%) and Hispanics (59.4%) were more likely to concentrate here. By contrast, a much higher percentage of Asian Americans had postgraduate commitments in industry or some form of self-employment: 45 percent of Asians, in contrast to 19.1 percent of all Ph.D.'s., 15.9 percent of Hispanics and 9.8 percent of Blacks. A fairly similar proportion of all doctorate recipients indicated they had commitments to work in the government sector: 9.6 percent of Asians, 10 percent of blacks, and 8.3 percent of Hispanics, 9.7 percent of all Ph.D.'s.¹¹⁹

While there is no consensus on the obstacles facing Asian American professionals in each of pipelines, Cherian, as already noted, pointed to their managerial underrepresentation in corporate America, in governmental hierarchies, and both public and private universities. For comparative purposes, an attempt will be made to separately examine private industry, government service, and academia, gross as even these comparisons might be.

Industry employment

By virtue of their size and concentration in industry, Asian American scientists and engineers are an important group where the issue of the glass ceiling has surfaced. They are, without question, more than adequately represented as part of the technical or science and engineering staff.

According to National Science Foundation data, since 1978 the percent of Asians employed as scientists and engineers has been growing at a much faster rate than whites.¹²⁰ In 1982, they were three times more likely to be scientists¹²¹ and engineers

¹¹⁷All Ph.D.'s included citizens and permanent citizens.

¹¹⁸Academe included two- and four-year colleges and universities and medical schools.

¹¹⁹Paula Ries and Delores H. Thurgood, *Summary Report 1992: Doctorate Recipients from United States Universities* (Washington, D.C.: National Academy Press), 1993, p. 32.

¹²⁰"Since 1978, the employment rate of Asian American scientists and engineers has been growing 9% per year, or 146% through 1988, which is much faster than the 7% per year growth (or 97% overall) in scientific and engineering employment for whites over the same period." P. 24 in Rebecca L. Rawls, "Minorities in Science," Special Report, C &

than their percentage in the population would predict.¹²² By 1987, Asian doctoral scientists or engineers made up 9 percent (or 36,400) of the total number of doctoral scientists and engineers in the U.S. even though they were only 3 percent of the professional work force, and only about 2 percent of the total U.S. work force. Asian Ph.D's also concentrated in engineering. Compared to 16 percent of all other races, Asians represented 35 percent of all engineers with Ph.D's.¹²³

The majority of all Asian Ph.D. scientists and engineers employed in the U.S are immigrants. As Ong and Blumenberg report, whereas 92 percent of non-Asian scientists were born in this country, only 17 percent of Asian scientists and engineers were U.S.-born, with nearly half of them arriving during the 1980s. Although foreign-born status tends to increase with degree level, the majority here were educated in the United States.¹²⁴

Both native-born and foreign-born scientists and engineers not only gravitated towards private industry employment, but experienced barriers to entering management. In California's Silicon Valley, Asian immigrants and Asian Americans make up 23.6 percent of the high-tech manufacturing workforce,¹²⁵ and are found in many job categories, except high-level management. In 1990 a large majority worked as technicians (30.8%), craft workers (30.3%), semi-skilled operatives (47%) and unskilled laborers (41.2%). White males, by contrast, were concentrated at the upper end of the occupational scale. In fact, they were more highly represented among managers than

EN, April 15, 1991, pp. 20-35.

¹²¹As scientists, Asian Americans are more likely to be chemists. Thirteen percent of all Asians who were scientists were chemists, compared to only 8 percent of whites and other minorities combined. Similarly, of those scientists with Ph.d.'s, 20 percent of Asians were chemists, compared with 13 percent of Ph.d.'s. scientists representing other racial groups. Not surprisingly, membership in the American Chemical Society was 98% white or Asian, about the same as in 1975, when the National Science Foundation began collecting such information. Rawls, 1991, p. 21.

¹²²Paul Wong and Richard Nagasawa, "Asian American Scientists and Engineers: Is there a Glass Ceiling for Career Advancement?" *Chinese American Forum* 6 (3), January 1991, p. 3.

¹²³Rawls, 1991, p. 24.

¹²⁴Paul Ong and Evelyn Blumenberg, "Asian Pacific Scientists and Engineers," in Paul Ong (ed.), *The State of Asian Pacific America: Economic Diversity, Issues and Policies* (LEAP Asian Pacific American Policy Institute and UCLA Asian American Studies Center), 1994.

¹²⁵In terms of their overall representation in high-tech manufacturing, this figure is high, not only because Asians represent only 16.8 percent of the area's population, but because this represents a doubling of their size between 1980 and 1990, from one-tenth to one-fifth of the high-tech workforce.

professionals: 62.8 percent were officials or managers, as compared with 50.9 percent professionals; only 9.7 percent were operatives. While 21.5 percent of Asians were also professionals, only 12.5 percent were officials or managers.¹²⁶ Education alone did not explain this differential mobility into management. According to the Pacific Studies Center (Mountain View, California) which conducted this research, since most of these "high-level employees" have one or more college degrees, "discrimination and other cultural factors appear to reduce the management opportunities for qualified Asian professionals."¹²⁷

As late as 1992, not a single Asian Pacific executive could be found as head of any of the large computer or semi-conductor companies in Silicon Valley.¹²⁸ The concentration of Asian Pacific Islanders in "executive-administrative-managerial" category, therefore, needs to be more carefully evaluated. In 1993, it was reported that in California, managerial jobs were among the top three most commonly held jobs for Asian female citizens and Asian male immigrants who were 30 years old during the 1990 census.¹²⁹ Such data underscore the importance of distinguishing between managerial types at different levels of the hierarchy (e.g. chief executive officer versus office manager) or in different sectors of the economy (mainstream versus enclave employment).

The corporate sector was viewed as having the worst promotional opportunities for Asian Americans in Silicon Valley.¹³⁰ In general, the relative absence of Asian

¹²⁶*Global Electronics*, Issue no. 101, February 1990; *Global Electronics*, Issue no. 116, October 1992, *Global Electronics*, Issue no. 121, September 1993.

¹²⁷*Global Electronics*, Issue no. 116, October 1992.

¹²⁸A. Pollack, "It's Asians' Turn in Silicon Valley," *New York Times*, January 14, 1992, cited in Paul Ong and Evelyn Blumenberg, "Asian Pacific Scientists and Engineers," in Paul Ong (ed.), *The State of Asian Pacific America: Economic Diversity, Issues and Policies* (LEAP Asian Pacific American Policy Institute and UCLA Asian American Studies Center), 1994.

¹²⁹The two other occupations where these women concentrated were secretaries and accountants/auditors. *San Francisco Chronicle*, September 6, 1993.

¹³⁰Among those who worked in these respective employment sectors, 53 percent from the corporate sector said promotional opportunities were inadequate, as compared with 44 percent of those working in government. Fifty two percent of those surveyed worked for private corporations; 37 percent for government. The remaining employees worked for non-profit organizations (6%), or were self-employed (4%). Asian Americans for Community Involvement, *Qualified But...: A Report on Glass Ceiling Issues Facing Asian Americans in Silicon Valley* (San Jose: Asian Americans for Community Involvement of Santa Clara County, Inc.), 1993, pp. 15, 9.

Americans in executive-managerial positions has been attributed to the absence of eligible or interested candidates for these jobs. Yet the survey results in this study suggested a great deal of managerial interest. A majority (75 percent) of the 325 Asian Americans surveyed expressed an "interest in being a manager." Opinion was divided over whether promotional opportunities were the same as that of their non-Asian co-workers. Of those expressing an interest in managerial work, 46 percent felt their promotional chances were worse than non-Asian workers, while 43 percent thought their chances were the same. The foreign-born were more likely (56 percent) to feel their opportunities were limited by "race,"¹³¹ as opposed to 33 percent of native-born who felt this way. Technical personnel, similarly, were more likely (62 percent) to feel their management prospects were limited by race than their non-technical counterpart (48 percent).¹³²

Stereotypes of Asians as being more equipped for technical rather than people-oriented work surfaced as a major reason for they are not considered managerial material.

Most of us have proved our technical capability. However, many major corporations tend to overlook the non-technical side of many Asian Americans. Corporations pick pigeon holes for us. And what is worse, they believe that we are quite content staying in those technologically airtight pigeon holes.¹³³

While identifying employees with "managerial interest" might constitute the first step in addressing career obstacles, the issue of fair evaluative criteria is a more complex matter surrounding the promotional process.

In the previously mentioned survey of Asian Americans in Silicon Valley, 85 percent of respondents had college degrees and 48 percent graduate degrees. Of those who worked in the corporate sector, 53 percent said promotional opportunities for

¹³¹Asian Americans for Community Involvement, 1993, pp. 20-21.

¹³²Asian Americans for Community Involvement, 1993, p. 16.

¹³³U.S. Commission on Civil Rights, *Civil Rights Issues Facing Asian Americans in the 1990s* (Washington, D.C.: U.S. Government Printing Office), Feb. 1992, p. 132.

Asian Americans were inadequate, with 66 percent identifying race as a major barrier. *Of all industries, the electronics industry evoked the most dissatisfaction:* 54 percent said promotional opportunities were inadequate, compared to 39 percent in all other industries. *Increasing seniority, moreover, was associated with increasing perceptions of a glass ceiling.* Fifty three percent of those with 11 to 15 years of tenure with their current employer felt their promotional chances were worse than their non-Asian American coworkers. Only 25 percent of those with less than 5 years at their current employer held this view.¹³⁴ These findings are consistent with other studies which have found that promotional opportunities plateau over time. Thus, Jayjia Hsia reported, "Across all fields, Asian Americans with less than 15 years of experience earned comparatively higher salaries than those with more experience. Overall, Asian Americans with 15 years or more of experience earned on the average up to 4% less than whites with similar experience."¹³⁵

Recent findings have also indicated a definite association between age and income, showing a brighter picture for minorities and women in California in the *younger* age groups, with some among this younger generation earning as much, if not more, than their white male counterparts:

* Pay differences of 200 to 400 percent are routine among older workers with the same job titles, with white males typically far ahead of others. But in younger groups, pay differences are narrowing. It was unusual to find pay differences exceeding 100 percent, and those were concentrated in jobs that attract many unskilled poorly paid immigrants.

* Among 30 years olds, white women or minorities were paid as well or better than white males in two-thirds of all job titles. Among 21-year-olds, white males were the highest paid people in only one-quarter of all job titles.¹³⁶

Despite this positive shift towards the narrowing of racial differences among the young, the large

¹³⁴Asian Americans for Community Involvement, 1993, pp. 2, 18-19.

¹³⁵Jayjia Hsia, *Asian Americans in Higher Education and at Work* (Hillsdale, New Jersey: Lawrence Erlbaum Associates, Inc.), 1988, p. 199.

¹³⁶*San Francisco Chronicle*, September 6, 1993, p. A7.

majority of young women and minorities are still concentrated in jobs which are traditionally lower-paying. Ethnicity and race, moreover, continue to be stratifying factors, along with age.

* Among all 45-year-olds, white males were the best paid in about half of all California jobs. In the 64-year-old category, white males were better paid than their peers in about two-thirds of all jobs.

* College-educated, 45-year-old white males average \$60,776 annually, 33 percent more than the average for all college-educated 45-year-olds. But this narrows sharply among 30-year-olds. White males in that age group lead at \$39,279, 19 percent more than the overall average of \$32,861. Then come Asian male citizens (\$35,361), Hispanic male citizens (\$34,554), black males (\$30,843), white females (\$28,938), Asian female citizens (\$28,046), black females (\$26,588), Hispanic female citizens (\$25,488), Asian male immigrants (\$24,713), Hispanic male immigrants (\$21,191), Hispanic female immigrants (\$19,392) and Asian female immigrants (\$19,202).¹³⁷

While the electronics industry had the worst reputation among industries, *discontent among Asian American employees extends across various industries*. In a 1987 survey of 308 Asian American employees in a wide range of industries in the San Francisco Bay Area,¹³⁸ *career advancement and greater monetary rewards were found to be among the primary reasons for job changes*. Among Chinese Americans, where the median number of job changes to date was three, 75 percent of Chinese Americans mentioned "career advancement"¹³⁹ as an important reason, whereas 56 percent left for "better wages."¹⁴⁰ Filipino and Japanese American employees, although a smaller part of this sample, cited the same barriers to upward mobility as Chinese Americans: "about three-fourths reported company-related barriers, such as corporate culture, management insensitivity, and lack of informal networking. Lack of mentors and role

¹³⁷San Francisco Chronicle, September 6, 1993, p. A7.

¹³⁸Amado Cabezas, Tse Ming Tam, Brenda M. Lowe, Anna Wong, and Kathy Owyang Turner, "Empirical Study of Barriers to Upward Mobility of Asian Americans in the San Francisco Bay Area," pp. 144-164 in Gail M. Nomura, Russell Endo, Stephen H. Sumida, and Russell C. Leong (eds.), *Frontiers of Asian American Studies: Writing, Research, and Commentary* (Pullman, WA: Washington State University Press), 1989, pp. 89-91.

¹³⁹These responses refer to short-term career advancement. A smaller percentage of employees (25%) indicated they had planned such job changes with long-term career advancement in mind.

¹⁴⁰The findings were similar for highly-educated professional Chinese American women. One exception was that more women seemed to be planning a career in the near future: whereas 81 percent of men here planned to be with their employer in the next five years, only 62 percent of women indicated they would stay.

models were cited by more than one-half of the respondents."¹⁴¹ Other research underscored how Asian American professionals often experience a form of "status contradiction," where aspects of their racial-ethnic identity or image alternately present advantages or disadvantages.¹⁴²

In a recent study of occupational mobility and departure,¹⁴³ Joyce Tang offered a more optimistic view of job mobility patterns. A major finding here was that foreign-born Asian engineers were far less likely to change jobs, and therefore much more likely to have a longer tenure in engineering than whites. An important factor explaining their long-term retention, she said, was the operation of universalistic criteria.

Asian immigrants are less likely to leave engineering for other work than native-born Caucasian engineers, when all factors are held constant. An optimistic reading of this result is that -- unlike other Asian professional immigrants in such areas as health care, who are unable to apply skills in their own area of expertise -- engineers from Asia are less likely to experience underemployment...

...The data do not fully support the "scutwork" hypothesis that Asians as a group had been relegated to less desirable technical engineering during the 1980s.¹⁴⁴

Engineering is one of the high-paying professions where individual performance is little affected by social origins and cultural background... The gravitation of foreign Asian students to technical and scientific fields suggests that foreigners, particularly non-native speakers, are able to demonstrate their competence more in engineering than in other fields... The finding that Asian immigrant engineers as a group are less likely than others to move to other fields bolsters this assertion... Universalism in engineering may dampen Asians' desire to move to fields or positions

¹⁴¹Cabezas, Tam, Lowe, Wong, and Turner, 1989, p. 92.

¹⁴²Dean Lan, *Prestige with Limitations: Realities of the Chinese-American Elite* (S.F., CA: R&E Research Associates), 1976. The research here examined through in-depth interviews the attitudes and experiences of a prominent group of Chinese Americans from diverse occupational backgrounds. While many here owned their own companies or corporations, they nevertheless experienced their careers limited and shaped by their racial-ethnic identity. Lan reports on the adjustment processes and coping strategies related to deemphasizing or else retaining aspects of racial-ethnic identity.

¹⁴³Joyce Tang, "Caucasians and Asians in Engineering: A Study of Occupational Mobility and Departure," pp. 217-256 in *Research in the Sociology of Organizations*, Vol. 11 (JAI Press), 1993.

¹⁴⁴Tang, 1993, p. 240.

based on more subjective measures for job assessment -- despite the fact that their career goals may remain unfulfilled.¹⁴⁵

In short, Tang interprets job stability as a sign not only of satisfaction but of the belief that the personnel review process is more objective in engineering than in other fields. Although she makes a final reference to "unfulfilled" career goals, Tang is relatively silent on the reasons. Where she discusses the tendency for native-born Asians to change jobs, this pattern is similarly interpreted as reflective of greater options rather than as a negative reaction to barriers to upward mobility.

Native-born Asians are as likely as Caucasians to venture outside engineering. Contrary to the prevailing view that Asian professionals in general are in a closed job market..., native-born Asian engineers do not seem to be confined to specific jobs because of their training.¹⁴⁶

Tang's other research, on the other hand, has explicitly acknowledged *barriers to occupational mobility into management as a particular point of racial disparity*.

The largest gap in representation between Asian and white scientists and engineers is in management. In 1982, only nine percent of Asians, as opposed to 22 percent of whites, had primary managerial responsibility. A heavy underrepresentation of Asians in this highest-paying field not only reflects their marginal status but also affects their overall economic standing in the science and engineering labor markets.¹⁴⁷

A major finding of this same study was that the earnings disparity between Asians and whites was more likely to be found in the "hard" sciences rather than the "soft" sciences.¹⁴⁸ In her review of the career histories of Caucasian and Asian engineers,¹⁴⁹ Asian engineers compared poorly in terms of relative earnings, occupational status, and promotions. The earnings differential was particularly

¹⁴⁵Tang, 1993, p. 242.

¹⁴⁶Tang, 1993, p. 240.

¹⁴⁷Joyce Tang, "Whites, Asians, and Blacks in Science and Engineering: A Reconsideration of Their Economic Prospects," pp. 249-292 in *Research in Social Stratification and Mobility* vol. 12 (JAI Press Inc.), 1993, p. 261.

¹⁴⁸Tang, "Whites, Asians, and Blacks in Science and Engineering: A Reconsideration of Their Economic Prospects," 1993. Tang suggests that the disparity is significant in the physical sciences only, and that one reason might be that "relatively old fields" like the physical sciences have few minority hires. Although Tang is not really explicit, the implication is that some form of discrimination leads to lower returns.

¹⁴⁹Tang, "The Career Attainment of Caucasian and Asian Engineers," 1993.

noticeable between foreign-born Asians and whites, with Asians earning 18 percent less and taking six to eleven years before reaching parity. Although Tang suggests that recency of arrival may be a partial explanation for this income difference, she found no evidence of such income loss among white immigrant engineers.¹⁵⁰ In fact, *where occupational status is concerned, both foreign-born and native-born Asian engineers were more likely to be in the lower levels of the engineering profession than foreign-born whites:* "Asians, regardless of nativity status, are heavily underrepresented in authority positions compared to Caucasians. They also have a lower tendency than their Caucasian counterparts to move into management from technical positions."¹⁵¹

These findings on low promotion into management underscored disadvantages which are partially concealed by the issue of parity in terms of earnings. Thus, while closing the earnings gap around the mid-1980's, *in terms of managerial representation, even native-born Asian engineers were at a relative disadvantage compared to foreign-born, immigrant whites.* Their relative absence in these upper echelon positions spoke to a disparity that could not be explained by educational qualifications:

It is hardly surprising to find that foreign-born Asians have to overcome more hurdles than others to climb the occupational ladder.... However, it is striking to learn that native-born Asians are more likely to be in the lower echelons of the engineering profession than foreign-born Caucasians.... While formal schooling and technical training are important for the minority population to gain access to high-paying professions, these qualifications are insufficient for native-born Asians engineers to achieve upward mobility.¹⁵²

This racial difference persisted even when other factors that might account for this pattern of managerial underrepresentation among native-born engineers were also "controlled for." Summarizing these observations, Tang stated that lower managerial presence of native-born Asians could not be attributed to cultural differences in assimilation or "human resources," or else occupational concentration in different fields or sectors of the economy that might have very

¹⁵⁰Tang, p. 474.

¹⁵¹Tang, 1993, p. 472.

¹⁵²Tang, 1993, pp. 483, 487.

different trajectories or stages in career development:

The racial difference in gaining entry into management persists after taking all relevant factors into consideration. In contrast, the negative impact of nativity status for Caucasian immigrants is attenuated and becomes insignificant, when everything else is held constant. These results are in line with the "glass ceiling" hypothesis of Asians' absence in management.¹⁵³

A range of explanations are offered to account for this glass ceiling, including discrimination, personal choice, company incentives that reward Asians for remaining on the technical track, availability of lateral mobility as a way of achieving income parity, and unfamiliarity with the dominant culture or "lack of full participation in an English-speaking network."¹⁵⁴ Elsewhere, "employee prejudice" has been suggested as one factor operating against mobility into the supervisory jobs.¹⁵⁵

Other studies have also pointed to a glass ceiling for Asian American scientists and engineers. In a multi-year national study still in progress, Paul Wong and Richard Nagasawa analyzed National Science Foundation surveys on scientists and engineers. Among the preliminary findings, Asian Americans were found to be more underrepresented in managerial jobs than African and Hispanic Americans. Where Asian Americans were promoted to managers, these appointments were circumscribed to areas such as "research administration, particularly as supervisory project leaders in technical projects which are composed of small groups of scientists and engineers."¹⁵⁶ Wong and Nagasawa's own in-depth sample survey of 235 Asian American scientists and engineers in the Phoenix and Tucson metropolitan areas confirmed this pattern of managerial underrepresentation.

¹⁵³Tang, p. 479.

¹⁵⁴On this last point, Tang is suggesting that despite the outward appearances of assimilation, native-born Asian Americans who have close ties with their ethnic communities or subcultures are less exposed to those aspects of the dominant culture which as part of the informal culture of the corporation, are essential for success.

¹⁵⁵Harriet Orcutt Duleep and Seth Sanders, "Discrimination at the Top: American-Born Asian and White Men," *Industrial Relations* 31 (3): 416-432, 1992.

¹⁵⁶Wong and Nagasawa, 1991, p. 4. See also Paul Ong and Evelyn Blumenberg, "Asian Pacific Scientists and Engineers," in Paul Ong (ed.), *The State of Asian Pacific America: Economic Diversity, Issues and Policies* (LEAP Asian Pacific American Policy Institute and UCLA Asian American Studies Center), 1994.

Asians are noticeably absent in high level administrative or executive positions in the high-tech industry or in academia. In our sample, 15% of the white respondents are top managers and 14% are middle level managers. In contrast, only 2% of the Asians are top managers and only 8.2% are middle level managers.¹⁵⁷

Those Asians Americans who actually reached middle or upper-levels of management received lower economic returns relative to whites occupying similar positions. The latter earned twice as much as Asian Americans in management.

Data from Southern California corporations also show their representation in management to be much smaller than their numbers in the professional pool. For example, Asian Americans make up 24 percent of the technical staff at Hughes Aircraft, 15.7 percent at Rockwell International, 13.8 percent at Aerospace Corporation; 20 percent of the science and engineering staff at TRW's space and defense sector, and 10 percent at Northrop. At the same time, their percentage in management was relatively small: they were 5 percent of the managers (in technical areas) at Hughes Aircraft, 11 percent at TRW, and 3 percent of managers companywide at Northrop. Rockwell and Aerospace declined giving further information, and McDonnell Douglas and Lockheed declined giving any data at all.¹⁵⁸

Individual recognition for contributions sometimes occur. High-level administrative recognition for Asian Americans, however, is practically unheard of. A rare exception was the appointment in 1992 of Don Tang, as "chief of Lockheed's top secret military spacecraft unit in Sunnyvale -- one of the most sensitive jobs in the U.S. defense industry."¹⁵⁹

The "success stories," however, are few compared to those situations which

¹⁵⁷Wong and Nagasawa, 1991, p. 5.

¹⁵⁸An internal study of the above companies was conducted by UCLA professor William Ouchi and reported in the *Los Angeles Times* (11/16/92).

¹⁵⁹The LA Times called attention to the following individuals' accomplishments, noting that Howard Ozaki, of Hughes Aircraft "pioneered early amplifiers that were critical to his firm's dominance of the military radar business... David Huang, a former Rockwell International engineer, is credited with helping pioneer experimental rocket engines. Fred Tsay, A Jet Propulsion Laboratory scientist, theorized first that moon sand was formed by solar wind bombardment." In 1992, Kwang-I Yu, a scientist at TRW, left to start up his own electronics firm, Parcel Inc., in Pasadena, where he worked on producing a "fast data searching system," whose technology he pioneered at TRW. *Los Angeles Times*, November 16,

suggest stagnation and nontransferable skills. More often than not, Asian Americans face a glass ceiling. Among Exxon Production Research's 1300 employees in Houston are 600 scientists and engineers, 75 of which are Asian. Few, if any of these even reach first-level management. Wei-Chang Liauh, former chemical engineer for Exxon, left the company after being bypassed for promotion for almost ten years. Perceiving obstacles to his own promotion in 1983, Liauh began studying law at the University of Houston, graduating in the top 20 percent of his class 3 and 1/2 years later. In 1989, he filed an EEOC complaint against Exxon. His career path, since then, however has been as a prospering attorney in patent and civil law.¹⁶⁰

The following remarks, cited in a 1992 report by the U.S. Commission on Civil Rights, suggest that the pipeline narrows and that standards are raised:

Within my company there are about 800 to 1,000 research and engineering professional staff members. About 60 of them are of Asian origin. We think that there are altogether about 200 management and management track positions in the company. There are no Asians in management positions and only one Asian in a management track position...we usually have to prove that we are better in order to be equal...¹⁶¹

A case which came before the Glass Ceiling Commission suggested that even Asian Americans who receive service recognition are more likely to be considered dispensable than other, non-Asian employees, particularly during periods of major company reorganization.

The loss of talent that employers incur as result of a glass ceiling is hard to measure. Some of the loss has been to overseas enterprises. As reported by the *LA Times*, Yaw-Nan Chen, director of Taiwan's science division at its Los Angeles diplomatic mission, has estimated that approximately 6000 to 7000 Taiwanese scientists and engineers have repatriated. Philip Chen, president of the Chinese Engineering and Scientist Association of Southern California pointed to the work of specific individuals now assisting Taiwan with the development of its satellite program (Peter Tai, formerly

1992.

¹⁶⁰*The Houston Post*, May 31, 1993.

¹⁶¹U.S. Commission on Civil Rights, Feb. 1992: 133.

with TRW, and Frank Wong, formerly with Aerospace Corp).¹⁶²

In a recent report by the *Oakland Tribune* (July 19, 1993), a departure of Taiwanese Americans from Silicon Valley was described as part of a "reverse brain drain." Reporter William Wong visited Taiwan to talk to some of them at Hsinchu Science Park, Taiwan's high tech enclave, which has drawn on the professional experience and talents of many of these expatriates. Microelectronics Technology Inc., for example, was founded by eight former employees in Silicon Valley. Hsu Tzu-Hwa, vice-president and one of the founders of MTI, was a former research-and-development engineer with Hewlett-Packard. While Hsu subsequently left because his own ambitious could be not be realized there, he did not fault American management. The problem, he indicated, was the enormous size of the organization that made the corporate ladder a hard one to climb for anyone: "Hewlett Packard being so big, even if I weren't Chinese, it would have taken me a long time to climb up. I was interested in moving up." Hsu admits certain social and cultural differences created additional barriers for Chinese, who were family-oriented and did not want to spend a lot of time socializing after-hours with company executives. Another expatriate, Min Wu, president of Macronix International Co. Ltd, gave a somewhat more critical account of how language and cultural barriers became structural impediments. After 15 years as an engineer in Silicon Valley, he indicated that among the major reasons for his leaving was the artificial ceiling to advancement which he saw placed on many talented individual.

The following Asian American commented on how technical careers seemed to reach their peak at age 40.

Even though I'm a U.S. citizen, in some ways I was still a 'foreigner' in America because of language and culture. It was tough on our careers. We did well in the technical world, but after you reach 40 years old, what are you going to do? I wanted to explore different areas, but I didn't feel I had many opportunities to explore management options in America... In the technical field in America, there's a ceiling on chances for Chinese-

¹⁶²*Los Angeles Times*, November 16, 1992.

American engineers to rise to senior management positions. There's "unfound talent" among Chinese engineers in America. They don't have a chance to show their talent.¹⁶³

Apart from such "reverse migration,"¹⁶⁴ Asian American professionals have been spurred by glass ceilings to leave large electronics firms and gamble on becoming entrepreneurs of their own companies. It is in such small firms that these Asian Americans gain the opportunity and experience of being CEOs. According to estimates by the Asian American Manufacturers Association (Menlo Park, California), there are more than 200 Asian American high-tech companies in the Bay Area.¹⁶⁵

In sum, a recurring theme in different studies of Asian employment in industry is their simultaneous overrepresentation as professionals and underrepresentation as managers. This experience echoes that of women and other minorities. A 1990 survey by Korn Ferry International, an executive recruiting firm, found that while women and minorities presently make up 51 percent of workforce, they made up only 3 percent of the top 1360 executives in Fortune 500 companies.¹⁶⁶ Given that Asian Pacific Americans tend to concentrate in particular occupations or industries, research on the glass ceiling needs to be more industry-specific. Some way also needs to be developed to capture the lateral mobility that occurs between various work spheres. To the extent that lateral transfers between companies are a common reaction to the glass ceiling, research which focuses solely on vertical mobility would underestimate the amount of dissatisfaction expressed through job changes.

Government Employment

As the nation's single largest employer, government has been officially committed to creating fair and equal access to at all levels of public employment. At

¹⁶³*Oakland Tribune*, July 19, 1993.

¹⁶⁴Paul Ong and Suzanne Hee, "Work Issues Facing Asian Pacific Americans," pp. 141-152 in *Asian Pacific America: Policy Issues to the Year 2020*, (Los Angeles: Leadership Education for Asian Pacifics (LEAP and UCLA Asian American Studies Center), 1993.

¹⁶⁵"Asian-American Entrepreneurs Enrich Silicon Valley Tradition," *Electronic Business*, November 12, 1990: 8-81.

¹⁶⁶Asian Americans for Community Involvement, 1993, p. 39.

least 13.2 percent of Asian Americans are government employees. According to the *Qualification Standards* for federal employment, education and work experience are the two most important criteria for both hiring and promotion.¹⁶⁷ The Silicon Valley survey, mentioned earlier, noted that the federal government's Equal Employment Opportunity (EEO) programs were somewhat more successful at alleviating problems of Asian American representation at lower than at the higher levels of management.¹⁶⁸

Despite such formal guidelines, and their relevance for Asian Americans in white-collar work, government employment has not been without its complaints regarding a "glass ceiling." *A review of civil service employment indicates that existing rules and regulations have been insufficient for achieving "workforce diversity" at administrative levels. Underrepresentation of Asian Americans in upper management was found to be either increasing or unchanging. More disturbing is the fact that longstanding documentation of these problems has been met with general unresponsiveness.* Given their own good faith efforts, Asian American civil service employees, like their corporate counterparts, have not only become increasingly cynical of professed employer concerns for "qualified" workers but have come to increasingly perceive barriers in terms of "racial discrimination."

For the past twenty years, Asian American Pacific Islander employees at a major government research center in California have actively monitored their relative representation in high-level administrative or supervisory positions. Since 1973, an Asian American Pacific Islander advisory group selected by this constituency to represent career development concerns has had as one of its major responsibilities the ongoing study of AAPI representation at both the managerial and upper managerial levels. Problems with upward mobility were systematically documented and brought

¹⁶⁷Patricia A. Taylor and Sung-Soon Kim, "Asian-Americans in the Federal Civil Service 1977," *California Sociologist* 3 (1): 1-16, Winter 1980, p. 3.

¹⁶⁸A comparison was made of employers who had EEO policies for the managerial level and those employers who did not. Based on employee perceptions of Asian American representation at lower, middle-, and upper-management, employers without EEO policies elicited somewhat more responses pointing to underrepresentation. Asian Americans for Community Involvement, *Qualified But...: A Report on Glass Ceiling Issues Facing Asian Americans in Silicon Valley* (San Jose: Asian Americans for Community Involvement of Santa Clara County, Inc.), 1993, pp. 21-23.

to the direct attention of appropriate agency officials. Despite the fact that all employees represented by this advisory group are civil service workers, and that the EEO program's office at this agency had been the recipient of such reports, these research efforts, which have made the "glass ceiling" clearly visible, have rarely been translated into policy measures that would seriously address the problem. Only since early 1993 have positive steps been taken to substantially remedy the situation since these problems were first raised in 1973. Because the advisory group requested anonymity for the organization, the source for the following data is not cited.

In 1973, AAPI males had a disproportionately low ratio of managers to employees. Four out of 64 AAPI employees, or 6.3 percent, were managers. By contrast, the ratio given for "non-minority males" was higher, 194 out of 1295, or 15 percent. At that time, AAPI employees in general were 5 percent of the workforce, but only 2 percent of management. A comparison of AAPI males to white males, based on highest educational level achieved (i.e. technical, B.S., Masters, Ph.D. degrees) showed that AAPI males occupied lower pay grades than their white male counterparts despite having the same educational level and having more work experience. As stated in the summary report for 1973: "American-Asians are approximately one grade lower than the white male in each category. Moreover, American-Asians with M.S. and Ph.D. degrees are at a lower grade than whites with B.S. degrees... Except at the B.S. Level, the American-Asians have more work experience."

Subsequent reports underscored not only continuing underrepresentation but growing dissatisfaction. In 1975, AAPIs at this government research center indicated they were "not paid equally for equal work." While 1974 promotion rates were similar to whites, AAPIs had been consigned to lower grades to begin with (despite high education and more years of work experience), and therefore promotions did not truly address previously mentioned disparities, particularly those at the upper-levels: "many of the promotions were given to the more recent and younger employees, while promotions to Asian-Americans with longevity service... were nominal. It is in this area

that upgrading should be seriously considered."

By 1977, barriers to upward mobility began to be attributed to "racial discrimination" at the top. A glass ceiling was identified by scientists and engineers heavily concentrated at the GS-13 level, the pay grade level just below management and senior technical staff. Two-thirds of these GS-13 employees felt they were in "dead-end" jobs, while almost half of GS-14 employees felt that way. Not surprisingly, two-thirds of all AAPI employees said they were willing to transfer laterally within the organization for a promotion. The 1977 report underscored the longstanding nature of AAPI underrepresentation since 1973:

One of the persistent and long-standing problems is the lack of adequate and fair representation of Asian-Americans in top management positions particularly at the Division and Directorate levels. Based on educational training and work experience there is no clear reason for the striking underrepresentation of Asian-Americans in these important positions... The problem has not been effectively grappled since it was raised in the 1973 Status Report by the American-Asian Ad Hoc Committee. We feel that there are at the present time qualified Asian-Americans for these upper level management positions as well as qualifiable Asian-Americans through suitable training programs....

... The Asian-Americans have an average grade 2 grade levels below their white counterparts in spite of the fact that their employment service time was over 3 years longer... This disparity is again a longstanding one which has not been rectified since it was brought to light in the Status Report of 1973.

In 1980, the AAPI Advisory group for this same organization issued yet another report. While applicants for managerial positions had increased since 1977, so apparently were the barriers. The following facts uncovered extremely long delays in promotion, despite perceptions that Asians had to "work harder for advancements." Even new employees were dissatisfied and considering changing jobs. Overall, there was a noticeable increase in perceptions of racial discrimination.

- *Nearly unanimous belief by all respondents that individuals are preselected.*
- *Over half the respondents believe that discrimination is practiced at "X". 60% of the respondents believe that management is responsible and 45% believe that discrimination is practiced on the basis of race. 18 of 19 employees with over 15 years service believe that discrimination exists.*
- *64% of the responses indicate that Asians have to work harder for advancements than others. Same as 1974 survey.*
- *Half of the new employees, those with under 5 years service, want to advance at "X" within the system but contemplate moving elsewhere if they feel that they can't advance.*
- *30% of those respondents with over 15 years of experience have not been promoted at all and one individual with over 24 years of service at "X" is still a GS-4.*

The obdurate fact of objective disparity with whites as far as promotional opportunities was matched by persistent failure of agency heads to acknowledge or deal with the fact of managerial underrepresentation. In separate letters to the Director of the Center and to the then Assistant Administrator in the EEO Office, the Advisory Group thus pointed not only to this disparity in appointments at higher levels, e.g. in Senior Executive Service (SES) levels, but the absence of leadership in addressing this situation:

One out of ten from the non-minority group at "X" is a chief of an office, branch, division, or directorate. This contrasts sharply with only 1 out of 44 Asian Americans, (2 branch and 2 office chiefs). No Asian Americans has ever held a division chief or director's position at "X"...

The disparity is even greater in terms of GS ratings at higher levels. For example, 1 out of 14 non-minority at "X" has a GM or GS-15 rating. There are 33 SES positions at "X"; not one of these positions at "X" is held by a member of the minority group. Based on a fair and equal apportionment of the Asian American staff population one would expect at least three Asian American SES positions rather than zero. (Furthermore, there are no SES Asian Americans in the entire "X" organization.)...

...The most significant fact of all is that the same trends in the management and higher GS categories cited here were reported repeatedly to "X" management and the EEO by the Asian American Advisory Group over the past decade. In the interim no substantial reforms have been realized...

Although AAPIs were promoted over the next three years into the managerial ranks, these promotions occurred primarily in the lower managerial levels. Like other minority employees, they plateaued at the GM-13 level. The pipeline thereafter became extremely constricted. In 1987 12 percent of AAPI were located at GM-13. At the GM-14 level (the minimum pay grade for senior managers), there were only 7.6 percent of AAPI. The GM-15 level saw even fewer AAPIs in management 4.9 percent, and their representation at the SES level was the worst of all, 2.9 percent. As summarized by the 1988 advisory group report, "AAPI representation at all managerial levels except the GM-13 level is disproportionately lower than its share of the ...workforce. The AAPI representation becomes progressively worse as the managerial position becomes higher." The report documented two sources of promotional delays that seemed to produce a glass ceiling for AAPIs: relatively infrequent promotions and longer "average time spent in a grade before promotion" For both reasons, AAPIs were detained at the lower levels for a longer period than whites.

In 1991, AAPIs comprised 10.7% of the workforce at this government research center, but only 5.3 percent of management. A survey of AAPI employees in 1991 showed that more than half of the respondents expressed interest in management positions. As in 1973, age continued to be a factor, with those under 30 expressing more satisfaction with their promotion rate than those over 50. Although no objective information was provided on whether these promotions were occurring primarily among younger employees, the absence of AAPIs at upper levels of management at that time suggests that this was the case. Fifty nine percent of the respondents indicated that they must work harder and produce more than their peers to receive recognition.

By 1993, the size of the AAPIs grew to 13.6 percent of the above workforce while

the numbers in management increased to 9.2 percent. The underrepresentation was even worse at the higher pay grade levels, with only 7 percent of those at the GS/GM-15 grade level (and above) being AAPI.

In summary, from 1973 to 1993, the size of AAPI workforce at this government research center has grown markedly, but its representation in management has not kept pace and continued to remain disproportionately low. In 1973, AAPIs comprised 5 percent of the workforce but only 2 percent of management. By 1993, AAPIs had grown to 13.6 percent of the workforce, but still comprised only 9.2 percent of management, well below what one might expect given their numbers in the workforce. Despite the efforts of AAPI employees to draw attention to this problem for the past twenty years, their proportion of the management workforce has not only failed to keep pace, but continues to be well below parity, underscoring a glass ceiling in this government situation.

As government employees, Asian Americans are distributed across local, state, and federal sectors. As with the above series of reports, studies have been undertaken on their occupational status of in these respective spheres of government employment, uncovering similar patterns of managerial exclusion and neglect. Again, more disturbing than the fact of underrepresentation is existing management's failure to acknowledge the inequities and thereupon substantively address the problem.

In city government, Asian American professionals have been found to have had the worst promotional record of all groups, since studies of the problem were initiated in the 1980's. These studies, comprising three reports over the six-year period from 1986 to 1992, focused on civil service workers in San Francisco.¹⁶⁹ The initial study, prompted by a city department's effort to "circumvent civil service procedures in order to appoint a white male to a top-level health administrative post," uncovered pervasive patterns of

¹⁶⁹Chinese for Affirmative Action, *The Broken Ladder: Asian Americans in City Government* (San Francisco, CA.), February 24, 1986; Chinese for Affirmative Action, *The Broken Ladder '89: Asian Americans in City Government* (San Francisco, CA.), June 1989; Chinese for Affirmative Action, *The Broken Ladder '92: Asian Americans in City Government* (San Francisco, CA.), May 1992.

a glass ceiling for Asian Americans since supported by subsequent reports. *These reports consistently document the following patterns: (1) the relegation of Asian American professionals to technical positions, with few or no opportunities for career advancement, despite their forming a sizeable portion of the city's professionally trained employees; (2) particular underrepresentation in public safety and judicial services, even according to conservative estimates of workforce parity;¹⁷⁰ (3) biases in civil service examinations which disproportionately affect Asian Americans more than "nonminorities"; and (4) the routine appointment of white males over all other groups in those situations where civil service examinations are waived for high-level positions (i.e. "exempt" appointments).*

In terms of overall workforce parity, Asian Americans were described as "worse off today than during the mid-1980's," with fewer departments meeting parity in 1992 than in 1985 and 1988.¹⁷¹ In 1986 they had equaled, if not exceeded, workforce parity in only half of the city's 31 departments which had 30 or more professionals. Those departments where they were significantly below workforce parity included public safety, law enforcement, and the judicial system. The 1992 CAA report found no positive change in this situation between 1985 and 1990. Asian Americans were specifically noted as underrepresented in "departments with a high degree of public contact, service to the community and enforcement power: Adult Probation, City Attorney, District Attorney, Fire, Juvenile Court, Police, and Library." All of these departments had a total labor force of more than 70 professionals each, though Asian representation was never more than 15 percent.¹⁷² Failing to achieve workforce parity in "departments requiring public contact and public relations,"¹⁷³ they continued to be clustered into "dead end technical positions," such as finance or operations. The Department of Public Works was described as "the most typical example of the ghettoization of Asian American professionals."

¹⁷⁰Twenty-two percent was the figure used for the first two reports. In 1992, the figure used was 29 percent.

¹⁷¹Chinese for Affirmative Action, May 1992.

¹⁷²Chinese for Affirmative Action, May 1992, p. 5.

¹⁷³Chinese for Affirmative Action, May 1992, pp. 4-5.

In terms of managerial representation, Asian Americans continued to have the worst promotional record, with the lowest ratio of administrators to professionals. In 1990 they comprised 29 percent of professionals, yet made up only 13.3 percent of administrators. Their ratio of administrators to professionals was about 1 to 2. Specifically, "Whites show a 1.26 ratio, Blacks show a 1.19 ratio, Hispanics show a .83 ratio, and Asians show a .47 ratio."¹⁷⁴ In 1986, only three departments¹⁷⁵ had Asian Americans represented at official and administrative parity. In the city's 61 departments, they were relatively absent even in "second-in-command" positions. None headed any of the city's 41 major departments. The situation had changed little by 1989. Thus, CAA reported: "Only 4 of the 30 departments employing at least 4 administrators meet workforce parity for Asian administrators. Only 6 of the 60 departments meet workforce parity for Asian Administrators. Among the departments that fail to meet workforce parity, there is a deficit of 69 Asian administrators."¹⁷⁶ The Department of Public Works was singled out for special attention in the 1992 report because it illustrated an "endemic" problem of dead-end jobs in which Asian Americans concentrated: with over 50 percent of its professional workforce Asian American, only 10 percent of Asian Americans in 1988 were administrators; by 1990, Asian administrative representation had modestly improved to 23 percent. Despite this improvement in the Department of Public Works,¹⁷⁷ *the overall trend that departments have shown in Asian American administrative appointments has been one of decline:* "The number of major departments (those employing more than 5 administrators) meeting workforce parity for Asian American administrators increased slightly from 3 in 1985 to 4 in 1988, then plummeted to 1 in 1990." Put another way, *"Approximately 25 percent of major departments have no Asian administrators."*¹⁷⁸ The largest departments continued to have *"some of the worst promotional records for Asian Americans."* For example, although Asian Americans were

¹⁷⁴Chinese for Affirmative Action, May 1992: 1 (footnote 1).

¹⁷⁵Community College, Controller, and San Francisco Unified School District.

¹⁷⁶Chinese for Affirmative Action, June 1989, p. 5.

¹⁷⁷Chinese for Affirmative Action, May 1992, pp. 1, 3, 11-13.

¹⁷⁸Chinese for Affirmative Action, May 1992, pp. 1, 7.

23.5 percent of the fire department, none were in administration. Similarly, while they made up 24 percent of municipal railway's professional employees, only 3.6 percent were administrators.¹⁷⁹

*Some of the reasons behind the lower than expected representation of Asian Americans have been located in artificial requirements which have little to do with job-related performance and existing loopholes in the promotional process.*¹⁸⁰ The height requirement used by the San Francisco Police Department, for example, was found by the federal court in 1973 to be discriminatory. Civil service exams have also been identified as a source of bias. Written exams which allow very little reading time have disproportionately excluded otherwise eligible candidates. The oral interview has been particularly fraught with subjective bias, insofar as interviewers have narrowly conceived notions of management or leadership qualities or otherwise prejudge certain candidates according to stereotypes about accents, cultural ability, or other criteria which have little to do with job performance.

Another source of Asian American underrepresentation have been loopholes in the appointment and promotional process. *Where latitude has been permitted to department heads, Asian Americans have fared worse than in civil service exams.* "Temporary" appointments, for example, are a way of bypassing civil service exams, and in turn can be extended indefinitely. In 1989, 69.7 percent of these non-civil service/limited tenure jobs went to whites, whereas 15.5 percent went to Asians, 16.5 percent to Blacks, and 5.5 percent to Hispanics.¹⁸¹ The "Rule of Three," similarly, has enabled departments to choose from the top 3 candidates on a civil service list, a situation of latitude which has generally worked unfavorably for minorities.¹⁸² Although the "Rule of Three" was recently replaced by the "Rule of the Lists," the change has been to give even greater latitude to civil service managers, with no

¹⁷⁹Chinese for Affirmative Action, May 1992, p. 7.

¹⁸⁰Chinese for Affirmative Action, February 24, 1986, pp. 3, 11-12; Chinese for Affirmative Action, June 1989, pp. 8-9, 16; Chinese for Affirmative Action, May 1992, pp. 6, 10-11, 13.

¹⁸¹Chinese for Affirmative Action, June 1989, pp. 24-25.

guarantee that latitude will not lead, as it has in the past, to the exclusion of Asian candidates.¹⁸³ Finally, the category of "exempt appointments" is a major source of Asian American underrepresentation at the highest levels of decision-making. As top administrative appointments, those occupying exempt positions do not sit for civil service examinations but are the political appointees of elected officials. In 1986, there were reported to be approximately 1900+ exempt appointments under the San Francisco City Charter, 131 of which were in high-level administration, and only 4 of these held by Asian Americans. In 1992, CAA described Asian Americans as "the least likely group to gain an exempt administrative appointment." In fact, whites were increasingly likely to be appointed to these positions, with transparently negative consequences for diversifying civil service leadership.

In 1988, white civil service administrative appointments represented 72.3%; white exempt administrative appointments represented 77.2%, a 5 percentage point difference. In 1990, white civil service administrative appointments represented 69.8 percent; white exempt administrative appointments represented 82.2%, a 12 percentage point difference.¹⁸⁴

In sum, despite the fact that government employment offers certain protections in the form of guidelines for hiring and promotion, the preceding data on Asian Americans in city government suggest another arena of persistent underrepresentation and administrative neglect. Barriers that affect Asian Americans in some government arenas have to do with achieving "workforce parity" or "critical mass." Under such situations, they often have fewer sources of mentoring, and other kinds of support necessary for career development. Ironically, these very problems were also cited as acute and chronic problems in work spheres where there are already high concentrations of Asian Americans.¹⁸⁵ As with their experience in the corporate sphere,

¹⁸²Chinese for Affirmative Action, June 1989, p. 16.

¹⁸³Chinese for Affirmative Action, May 1992, p. 10.

¹⁸⁴Chinese for Affirmative Action, May 1992, p. 8.

¹⁸⁵Amado Cabezas, Tse Ming Tam, Brenda M. Lowe, Anna Wong, and Kathy Owyang Turner, "Empirical Study of Barriers to Upward Mobility of Asian Americans in the San Francisco Bay Area," pp. 144-164 in Gail M. Nomura, Rssell Endo, Stephen H. Sumida, and Russell C. Leong (eds.), *Frontiers of Asian American Studies: Writing, Research, and Commentary* (Pullman, WA: Washington State University Press), 1989. Asian Americans for Community Involvement, *Qualified But...: A Report on Glass Ceiling Issues Facing Asian Americans in Silicon Valley* (San Jose: Asian Americans for

Asian Pacific Americans in government often find that though education is an explicitly important criterion for mobility, it does not guarantee managerial appointment. The few who reach the managerial ranks seldom move into the upper ranks of administration. (See Appendix IV, State and Federal Civil Service Employment)

Academia

As with the corporate and governmental sectors, Asian Americans in academic institutions are poorly represented in high-level administrative work. According to former Equal Employment Opportunity Commission member Joy Cherian, only one-fourth of Asian Americans in professional or faculty positions are administrators. In his opinion, the situation in academia is "worse for Asian Americans than in any other employment sector."¹⁸⁶ In 1980, for example, they were less likely to be in educational management than in other kinds of management: "3.1% of 12,960 education managers and administrators versus 19.0% of 1,960 accountants, auditors, personnel, training, and labor relations specialists in management-related occupations."¹⁸⁷ Other statistics underscore their virtual absence in the executive ranks of academic employment. When one considers their share of the total number of academic administrative jobs, Asian Americans occupy only 1 out of every 100 (or 1 percent) of these positions.¹⁸⁸

Unlike corporate employment, academic employment has attracted significantly fewer Asian Americans with doctorates. As Grace Yun has noted, the Immigration Act of 1965, combined with the college matriculation of the baby boom generation led to the first real appearance of Asian American faculty in American universities: "By 1980, over 21,000 Asian American faculty were teaching at U.S. institutions making up 3.3 percent of all American university professors."¹⁸⁹ While there has been a slight growth in the

Community Involvement of Santa Clara County, Inc.), 1993.

¹⁸⁶Cherian, 1993, p. 10.

¹⁸⁷*Asian Americans at Berkeley: A Report to the Chancellor*, May 1989, p. 38.

¹⁸⁸Eugenia Escueta and Eileen O'Brien, "Asian Americans in Higher Education: Trends and Issues," *Research Briefs*, American Council on Education 2 (4): 1-11, 1991, p. 2.

¹⁸⁹Grace Yun, "Status of Asian American University Faculty," pp. 135-151 in Grace Yun (ed.), *A Look Beyond the Model Minority Image: Critical Issues in Asian America* (New York: Minority Rights Group), 1989, p. 135.

percent who are full-time faculty, from 2 percent in 1975 to 5 percent in 1989,¹⁹⁰ overall fewer Asian American doctorates are entering higher education, compared to industry. In 1992 only 38.9 percent of Asian Ph.D.'s. had postgraduate commitments in academia,¹⁹¹ compared with the majority of all Ph.D.'s. in the U.S.¹⁹² who found employment here (52.2%). Even other minorities, such as blacks (54.5%) and Hispanics (59.4%) were more likely to concentrate in institutions of higher learning. Reviewing data from a number of governmental sources, Eugenia Escueta & Eileen O'Brien¹⁹³ confirmed this overall trend of Asian Americans away from academic careers: in 1973 45 percent of Asian American Ph.D.'s. planned careers in academe, with this figure dropping to 39 percent in 1989.¹⁹⁴

A demographic profile of Asian American faculty reveals an overwhelming majority of males, a large percentage of whom are foreign-born.¹⁹⁵ According to Escueta and O'Brien, 40 percent of Asian American faculty are foreign nationals, 81 percent of whom are male. Asian American male faculty in general were disproportionately represented (78%) over Asian American women (22%).

Since important administrative appointments generally come with tenure, the tenure process represents a critical turning point in the academic career. Yet this process has been fraught with difficulty for minorities in particular.¹⁹⁶ The data on Asian Americans have produced divergent interpretations regarding their tenured status in higher education.

According to Escueta and O'Brien, more than 30 percent of Asian Americans

¹⁹⁰Escueta and O'Brien, 1991, p. 7. EEOC numbers were cited were 24,252 out of a total of 514, 552 (or 5 percent) of full-time faculty.

¹⁹¹Academe included two- and four-year colleges and universities and medical schools.

¹⁹²All Ph.d.'s. included citizens and permanent citizens.

¹⁹³Escueta and O'Brien, 1991.

¹⁹⁴This decline was also noted for white Ph.Ds.: in 1973, 64% of white Ph.D.'s. planned careers here; in 1989, this figure had dropped 52%.

¹⁹⁵Yun, 1989, p. 138.

¹⁹⁶George R. LaNoue and Barbara A. Lee, *Academics in Court: The Consequences of Faculty Discrimination Litigation* (Ann Arbor: University of Michigan Press), 1989.

were in non-tenure track positions. Yet among ladder-rank faculty, they are described as having one of the lowest tenure rates of all groups, only 41 percent of Asian faculty being tenured,¹⁹⁷ whereas the overall tenure rate is 52 percent. Asian American women were reported to have an even lower tenure rate (31%) than their male counterparts (44%).¹⁹⁸ Thus, Escueta and O'Brien advised: "Colleges and universities should examine their tenure and promotion practices to determine the causes for the low tenure rate of Asian faculty, their concentration in non-tenure track positions, and their underrepresentation among higher education administrators."¹⁹⁹ Elsewhere, Sands, Parson, and Duane cited a study sponsored by the Graduate Records Examinations Board and Educational Testing Service. In this report, it was stated that "Asian Americans had the highest rates of post-doctoral appointments and positive promotion and tenure decisions." This same source similarly arrived at more optimistic conclusions regarding the status of faculty representation among Asian Americans: "although their interest in academe is limited, the production of Asian-American Ph.D.'s. is more than sufficient to supply faculty to the academic labor force."²⁰⁰

One reason for these divergent interpretations may reflect changing trends. In either case, if Asian Americans continue to move into the administrative ranks as slowly as they have been, then even with very positive tenure rates, it is questionable whether there will be a "sufficient" supply to offset the underrepresentation of Asian Americans at the administrative level. Asian American women in educational administration have pointed to a number of social and cultural barriers. In addition to male "chauvinism," institutional pressures to assume "assertive" roles present contradictions stemming from their own cultural socialization as well as resistance from those expecting more

¹⁹⁷This rate is comparable to that of African Americans.

¹⁹⁸The tenure rate for women overall was 38 percent, and for men overall, 58 percent. Escueta and O'Brien, 1991, p. 8.

¹⁹⁹Escueta and O'Brien, 1991, p. 2.

²⁰⁰Shirley V. Brown, *Increasing Minority Faculty: An Elusive Goal*. A research report of the Minority Graduate Education (MGE) Project, jointly sponsored by the Graduate Records Examinations Board and Educational Testing Service, 1988. Cited in Roberta G. Sands, L. Alayne Parson, and Josann Duane, "Faculty-Faculty Mentoring and Discrimination: Perceptions Among Asian, Asian American, and Pacific Island Faculty," *Equity and Excellence* 25 (2-4): 124-129, 1992, p. 125.

traditional role behavior.²⁰¹

Unlike other spheres of employment, academic institutions, given their educational mission, have a direct and longstanding influence on the availability pool itself. The skewed distribution of Asian American faculty into a narrow range of disciplines or fields is likely to persist, precisely because policies for recruitment are for the most part based on the existing availability pools. Breaking this cycle would mean committing resources towards training the next generation of students in areas where Asian Americans are largely underrepresented, thereby creating a pool of candidates from which a more diverse faculty might be recruited.

*Possible reasons for the small numbers of Asian American faculty in management include a greater interest in research as well as concerns about the further intrusion of subjective factors in promotional decisions.*²⁰² Existing evidence has shown that Asian American faculty have a stronger commitment and interest in research, manifested by an overall record of research publications higher than that of their colleagues.²⁰³ According to a survey by the National Research Council, in 1985 "41 percent of Asian-American faculty listed research as their primary activity in contrast to only 21 percent of all full-time faculty."²⁰⁴ At the same time, other research data suggest that their movement up the ladder into the administrative ranks is affected by slower overall advancement and a concentration in the lower faculty ranks, despite higher

²⁰¹Washington Association for Asian and Pacific American Education, "Asian/Pacific American Men and Women Administrators Co-Existing in Educational Leadership" (Tumwater, Washington: Superintendent of Public Instruction), 1980

²⁰²Sucheng, Chan, "Beyond Affirmative Action: Empowering Asian American Faculty," *Change* 21 (6): 48-51, Nov-Dec 1989. Although Asian-American faculty are becoming somewhat more visible on college campuses, their effective involvement and participation has been highly variable when one considers the various kinds of authority or power that faculty can exercise in this institutional setting. Chan identifies six forms by which influence or power might be wielded: *collegial, reputational, administrative, bureaucratic, personal, and agitational*. Asian-American faculty in engineering and the sciences are seen as having achieved considerable reputational power, due to their achievements in these fields, without, however, this being translated into collegial or administrative power.

²⁰³Richard B. Freeman, "Discrimination in the Academic Marketplace," pp. 167-201 in Thomas Sowell (ed.), *Essays and Data on American Ethnic Groups*, (Washington, D.C.: the Urban Institute), 1978, pp. 196-199. Grace Yun, "Status of Asian American University Faculty," pp. 135-151 in Grace Yun (ed.), *A Look Beyond the Model Minority Image: Critical Issues in Asian America* (New York: Minority Rights Group), 1989, pp. 139-141. Nancy Wey, "Asian Americans in Academia," pp. 38-54 in Yung-Hawan Jo(ed.), *Political Participation of Asian Americans: Problems and Strategies* (Pacific/Asian American Mental Health Research Center), 1980, p. 44.

According to Wey, 46.8% of the Asian-American have publications, compared to 35.4% non-Asian Americans. Of those Asian-American faculty with Ph.D. degrees (87.3%), 44.7% have publications and 42.5% have no publications. Of the non-Asian American faculty with Ph.D. degrees (73.7%), only 31.0% have publications but 42.7% have no publications.

qualifications.²⁰⁵ Asian American faculty received lower income returns, despite higher qualifications, whether measured in terms of degree held or number of publications. In fact, they were "invariably the lowest paid," regardless of field, degree level, or articles published.

[Asian American] faculty earn less than... white faculty, but are better qualified... whether measured by the percentage holding a Ph.D., the proportion of Ph.D.'s from top-rated departments, or the number of publications per person... [Asian Americans] are in the high-paying natural sciences to a greater extent than... whites, so that they would tend to have the highest salaries overall, if everyone were paid the same within each field. But [Asian Americans] are almost invariably the lowest paid, by two or three thousand dollars per year, in every field, for any given level of degree, and any given number of articles published.²⁰⁶

In the context of such existing disparities, Asian American faculty may have concerns that promotional evaluations at the administrative level may be even more subjective. Thus, Berkeley chancellor Chang-Lin Tien explained, "The people who are doing the evaluating for these positions are mostly members of the majority, and so minorities don't get totally equal evaluation. So rather than fighting for equal judgment, they find that it is not worth it to fight."²⁰⁷ At present, more needs to be learned about level of administrative interest, and the extent to which a lack of administrative interest is tied to an intrinsic interest in research or, alternatively, concerns that evaluations at the administrative level will be more subjective.

As noted earlier, the virtual absence of Asian American faculty in administration

²⁰⁴Cited in *Science* 258 (13), November 1992, p. 1225.

²⁰⁵Richard B. Freeman, "Discrimination in the Academic Marketplace," in Thomas Sowell (ed.), *Essays and Data on American Ethnic Groups*, (Washington, D.C.: the Urban Institute), 1978, see pp. 196-199. Thomas Sowell, "Affirmative Action Reconsidered," *The Public Interest* 41, Winter 1976: 47-65. Nancy Wey, "Asian Americans in Academia," pp. 38-54 in Yung-Hawan Jo (ed.), *Political Participation of Asian Americans: Problems and Strategies* (Pacific/Asian American Mental Health Research Center), 1980. Dale Minami, Office of the Attorney General, *Asian and Pacific Islander Advisory Committee: Final Report*, December 1988: 99.

Wey, for example, reported that at California State University, Long Beach, a larger percentage of Asian American faculty in the lower ranks had Ph.Ds. compared to non-Asian faculty: "Of the Asian American faculty, 87.3% have Ph.D. degrees, 12.7% have Masters degrees. Of the non-Asian-American faculty, 73.7% have Ph.D. degrees, 23.8% have Master's degree and 2.4% have less than a Master's degree." Some of this difference (especially among the highest ranking faculty), Wey suggests, might be explained by the relatively recent hiring of Asian Americans so that they have in total fewer years of service, and therefore fewer opportunities for promotion since hiring. However, among faculty lower on the ladder, Asian Americans were found to take a longer time to be promoted from associate professor to full professor. Pp. 43-44.

²⁰⁶Thomas Sowell cited in Grace Yun, "Status of Asian American University Faculty," in Grace Yun (ed.), *A Look Beyond the Model Minority Image: Critical Issues in Asian America* (New York: Minority Rights Group), 1989, p. 62.

²⁰⁷Cited in *Science* 258 (13), November 1992, pp. 1227-1228.

level is directly affected by the rate of tenure, since tenured faculty are usually the source of such appointments. Where information exists on some of the more problematic tenure cases involving Asian Americans, these cases support the view that despite formal safeguards, subjectivity is a prevalent feature of the evaluative process.

Dale Minami,²⁰⁸ an attorney who has handled several such cases, has found that despite the institutionalization of procedural guidelines that are presumed to insure a fair review, procedural errors are but a small part of problematic tenure reviews. Rather, subjective interpretations of a candidate's file have been a major source of "artificial barriers to a favorable recommendation."²⁰⁹

As in the corporate world, promotional decisions are often prejudiced against candidates who are not part of an informal inner circle, and who furthermore pursue intellectual interests which take them away from this relatively closed community of scholars. Candidates who are not part of informal departmental politics are most vulnerable at the time of tenure review since departments are ostensibly the most well-informed about a faculty member's contributions. As Minami observed, "...candidates who do not socialize with other professors, who have many interests outside the university, who study subjects not considered significant or not well understood by their colleagues, and who do not play the game of courting favor with those in power in their department may find themselves out of a job at tenure time."²¹⁰ (See Appendix V: Asian American Faculty)

In sum, until there is more of a critical mass of faculty who have the appropriate expertise to seriously evaluate the files of Asian American candidates, then the potential for "arbitrary," if not politically-motivated, decisions will continue be a reality of the review process. It has elsewhere been pointed out that the influence of "non-specialist outsiders" in such reviews frequently inserts "extraneous standards of scholarly

²⁰⁸Dale Minami, "Guerrilla War at UCLA: Political and Legal Dimensions of the Tenure Battle," *Amerasia* 16 (1):81-107, 1990.

²⁰⁹Minami, 1990, p. 83.

excellence."²¹¹ While the tenure process serves as a "floor" of security, academic employment provides yet another mirror on the ceiling which Asian Americans experience in the corporate and government sectors.

²¹⁰Minami, 1990, pp. 85-86.

²¹¹L. Ling-chi Wang, "A Critique of *Strangers from a Different Shore*," *Amerasia* 16 (2): 71-80, 1990.

V. SUMMARY AND RECOMMENDATIONS

SUMMARY

This report has been concerned with how institutional structures, practices, or conditions have systematic consequences for Asian American professionals trying to move into the managerial pipeline. A major finding of this research was that glass ceiling effects can be better understood by looking at "individual qualifications" in relationship to specific institutional contexts. Although the glass ceiling might be the civil rights issue of the 1990's for Asian Pacific Americans,¹ their situation is also representative of a more general one, where the shifting or variable nature of the "fit" between institutional expectations, on the one hand, and personal or group characteristics, on the other, is an overarching feature, which defines the contours of barriers or opportunities at different levels. For example, educational institutions have generously rewarded and reaffirmed Asian Americans for their academic achievements. Corporate institutions and organizations, on the other hand, have witnessed the talents of this burgeoning workforce channeled or concentrated into largely technical areas, with restricted access to higher levels of decision-making. An alleged lack of managerial interest is dispelled by survey data. Personal attributes, in other words, are not abstract and de-contextual qualities, but ones which are rewarded within certain social, institutional or organizational contexts, and either punished or ignored in others.

A second, and related, finding is that inferences about mobility cannot be reliably predicted from objective qualifications which are often prerequisites for managerial promotion. Despite the positive correlation between education and mobility,² cumulative evidence also points to "lower returns on education" for Asian Americans,

¹Henry Der, "Asian Pacific Islanders and the 'Glass Ceiling' -- New Era of Civil Rights Activism?", pp. 214-231 in LEAP, *The State of Asian Pacific America: Policy Issues to the Year 2020* (Los Angeles: Asian Pacific American Public Policy Institute and UCLA Asian American Studies Center), 1993.

²U.S. Bureau of Census, Current Population Reports, *Series P70-32, What's It Worth? Educational Background and Economic Status: Spring 1990* (Washington, D.C.: U.S. Government Printing Office), 1992; U.S. Bureau of Census, Current Population Reports, P20-459, *The Asian and Pacific Islander Population in the United States: March 1991 and 1990* (Washington, D.C.: U.S. Government Printing Office), 1992.

specifically where long-range career trajectories are concerned. Differing views regarding the relevance and fairness of certification tests in the case of foreign-trained health professionals³ captures a more general debate about whether certain standards or requirements are "artificial," arbitrary, or unrelated to job performance. Ironically, Asian Americans often choose careers in science and engineering for a number of reasons, including the expectation that evaluations will be more objective. Yet their managerial underrepresentation in science and engineering could not be explained in terms of objective qualifications as measured by years of education or work experience. If anything, Asian American candidates were overqualified by such standards. Employee complaints, therefore, have included or focused attention on arbitrary promotion processes and the issue of standards being artificially "raised" for Asian professionals.

Highly educated, Asian Pacific Americans have rapidly entered the professional ranks, forming a large eligible pool of workers with managerial aspirations. In general, their move up the occupational ladder has required greater investments in terms of education and work experience than non-Hispanic white males. The occupational profile of this workforce, however, remains one of disproportionate underrepresentation in high-level administration and overall stagnation, either at the entry point to management, or at lower levels of the managerial ladder. This profile held not only for scientists and engineers in private industry, where they are concentrated, but also for Asian American professionals in academe, the second major arena where Asian Ph.Ds. were most likely to indicate employment plans. Finally, a glass ceiling or "broken ladder" also characterized civil service work. Despite formal guidelines for hiring and promotion, government employment also revealed a constricted pipeline. Indeed, where these guidelines gave upper management a latitude and flexibility where important appointments were concerned, the likelihood of an Asian appointment was diminished.

³As noted in this report, for foreign-trained health professionals, the certification process constituted a formal barrier to practicing in the United States, and disproportionately affected Asian Pacifics, given their large numbers among immigrant doctors and nurses.

Relevant studies which found mobility into management to be limited for Asian American professionals tended to note relative stagnation in terms of one or more of the following patterns: (1) lower returns on education, (2) longer lengths of time to achieve managerial promotion in general and advancement into top executive-managerial positions in particular, (3) strong employee perceptions of being by-passed for promotion due to discrimination, stereotyping, or a less than objective review process, and (4) a low ratio of administrators or managers, as compared to their representation in the professional pool.

For Asian Americans, the issue of a glass ceiling represented a shifting or highly uncertain context, in which subjective biases intersected with informal criteria to impede or block mobility.

Thus, even while written or verbal communication skills were acknowledged to be a major obstacle to career advancement, especially for non-native English speakers, there was also a strong sense of bias. With little means of discerning the extent to which language requirements were intrinsically essential for job-performance, these alleged deficiencies were seen as invoked primarily as a basis for exclusion. Foreign-born white scientists and engineers, according to some of the evidence, did not experience similar barriers, whereas U.S.-born Asian Americans seemed to share the fate of foreign-born Asians. If deficiencies in language abilities are ostensible reasons for a glass ceiling, the barriers faced by more assimilated, U.S.-born Asians suggest that personal qualifications are only part of the equation. In general, uncertainties surrounding the evaluation process give legitimacy to concerns that files may be misrepresented, or that promotional criteria may be inconsistently or differentially applied. The marginalization and relative exclusion of Asian Americans from these decision-making processes contribute further to their perception of barriers being artificial.

In important respects, the glass ceiling mirrors how institutions interface with certain group attributes. Given that institutional cultures are implicitly organized around a select set of cultural principles, the lens is necessarily skewed. The question is

whether standards or "standardization" are counterproductive or exclusionary of *other* relevant criteria that might be considered.⁴

Although the cultural makeup of Asian Pacific America is diverse, important elements to this makeup have implications for their organizational participation. According to one line of analysis which is consistent with the thesis that the educational and occupational performance are differentially rewarded, Confucian values of respect for authority and unquestioned obedience essentially prepare its cultural recipients for "lower-echelon white-collar jobs having little or no decision-making authority, low mobility and low public contact."⁵ Asian American students in their early formative school years have been viewed by both Asian and non-Asian teachers as comparing less favorably to white students in terms of "leadership skill."⁶ Other research has specifically noted their collectivist or cooperative orientation as a barrier in terms of how such traits may clash with cultural values underlying the institutional culture of the corporation.⁷ Because of cultural issues related to saving "face," moreover, many problems are camouflaged, or inappropriately dealt with, even when employer efforts are sincere. According to Herbert Wong, president of a San Francisco diversity consulting firm, companies or employers who were serious about giving their employees a stake in the company's welfare mistakenly invested in the ongoing education of their employees, only to have their Asian Pacific American workers leave shortly thereafter. By not addressing the structural or institutional sources of promotional difficulties, they unwittingly encouraged such transfers. Other research

⁴At one time, a height requirement of 5 feet, 8 inches was considered essential for joining police force and had a disproportionate impact on Asians and other groups ("no more than five Chinese police officers were members of the 1900-strong police force, accounting for less than 1 percent of all patrol officers. Based on preliminary arguments presented to him, the Federal judge struck down the requirement which had an adverse impact against Asians, Hispanics, and women.") Presentation by Henry Der, in U.S. Commission on Civil Rights, *Civil Rights Issues of Asian and Pacific Americans: Myths and Realities* (Washington, D.C.: U.S. Government Printing Office), May 8-9, 1979, p. 407.

⁵Bob Suzuki, "Education and the Socialization of Asian Americans: A Revisionist Analysis of the 'Model Minority' Thesis," *Amerasia Journal* 4 (2), 1977.

⁶In addition, Asian American students fared less well on a number of other dimensions measuring communication competence, including being seen as "less persuasive," "less likely to participate in group communication," "less willing to share information with others," "less open in expressing their feelings and less skilled at eye contact during communication. Hideko Bannai and David A. Cohen, "The Passive-Methodological Image of Asian American Studies in the School System," *Sociology and Social Research* 70 (1): 79-81, October 1985

⁷Taylor Cox, Jr., *Cultural Diversity in Organizations: Theory, Research & Practice* (San Francisco: Berrett-Koehler Publishers, Inc.), 1994.

has also noted that the needs of Asian American employees are not simply material, but related to intrinsic features of the job, such as possibilities for autonomy, innovation, leadership, the valuation of other skills or aspects of one's identity.⁸ The response to blocked mobility may involve further investments in education, such that "overachievement" in this arena becomes a major compensatory strategy,⁹ with disaffected employees returning to graduate school, with the belief that further degrees will ensure a competitive edge. Short of this realization, lateral transfers, dual careers, or small business employment may also echo some of this dissatisfaction.¹⁰

According to the Department of Labor, there is high variability in how upper management responds to workforce diversity.¹¹ For Asian Americans, EEO programs were found to have "some slight benefit" on promotion but more at lower management level; whereas multicultural training programs seemed to have a "slight but definite advantage" on promotional opportunities.¹² Other research has indicated that what is needed is not Affirmative Action/Equal Employment Opportunity programs as separate strategies but as ones which are integral and strategic aspects of overall corporate planning.¹³

In general, little is known about how organizational practices, which may be highly variable, contribute to a glass ceiling for Asian Pacific Americans. While group

⁸Yvonne May Lau, *Alternative Career Strategies Among Asian American Professionals: The Second Rice Bowl* (Evanston, Illinois: Northwestern University), Doctoral Dissertation, June 1988.

⁹Ki-taek Chun, "The Myth of Asian American Success and Its Educational Ramifications," *IRCD Bulletin XV* (nos. 1 and 2): 1-12, Winter/Spring 1980; Charles Hirschman and Morrison G. Wong, "Socioeconomic Gains of Asian Americans, Blacks, and Hispanics: 1960-1976," *American Journal of Sociology* 90 (3): 584-607, November 1984; Stanley Sue and Sumie Okazaki, "Asian-American Educational Achievements: A Phenomenon in Search of an Explanation," *American Psychologist*: 913-920, August 1990; Joanne Chen, "The Asian American Dream?" *A. Magazine* 2 (3), p. 70.

¹⁰According to J.D. Hokoyama, President and Executive Director of LEAP (Leadership Education for American Pacifics), when the aerospace industry was at its height five years ago, discontent among Asian American professionals took the form of lateral transfers to other companies. One could easily move, say, from TRW to Hughes Aircraft or to McDonnell Douglas. Such transfers are now harder to come by. An emerging issue during this period of economic restructuring may not only be the "glass ceiling," but the nature of job security itself, the "floor" or foundation from which careers develop. As companies cut back on their workforce in response to general economic restructuring and "downsizing," managerial positions have become less available. Indeed, managerial staff have not been spared in this reshuffling.

¹¹U.S. Department of Labor, *Pipelines of Progress: A Status Report on the Glass Ceiling* (Washington, D.C.: U.S. Government Printing Office), August 1992.

¹²Asian Americans for Community Involvement, *Qualified But...: A Report on Glass Ceiling Issues Facing Asian Americans in Silicon Valley* (San Jose: Asian Americans for Community Involvement of Santa Clara County, Inc.), 1993, pp. 22-24.

¹³John P. Fernandez, with Mary Barr, *The Diversity Advantage* (New York: Lexington Books), 1993, pp. 293-297.

patterns may suggest cultural attributes, caution must at the same time be taken towards oversubscribing to "Asian cultural values" as an explanation.¹⁴ Other analyses have underscored the need to incorporate structural explanations precisely because cultural values, enduring as they are, are insufficient to explain historically-specific patterns or shifts in these patterns.¹⁵ In other words, a narrow focus on culture as an exclusive attribute of employees ignores the important role played by structural or institutional factors.

Attitudinal or behavioral traits, whether they are seen as specific to employees or supervisors, focus on deficiencies or qualifying attributes in individuals or groups of individuals. However, given a situation of workforce diversity and differential mobility patterns, differences may not only reflect individual or group characteristics but the effect of institutional cultures, organizational practices, and social dynamics within the workplace.

In terms of negative long-term consequences for mobility for Asian Americans, the culture of corporate America was identified in one study as "the most serious type of impediment by far to upward mobility."¹⁶ The research data on Asian Pacific

¹⁴The proclivity of Korean Americans to take up small business activities does not necessarily indicate any special cultural value attached to commercial employment. Instead, barriers to mainstream employment have been cited as an explanation. As Illsoo Kim reported, "63 percent of Korean male householders in the New York metropolitan area were engaged in urban white-collar occupations at the time of their departure for the United States. These immigrants showed little propensity for commercial activity in their homeland; yet 34 percent of them were running commercial businesses in 1976." Illsoo Kim, *New Urban Immigrants: The Korean Community in New York*, (Princeton, New Jersey: Princeton New Jersey Press), 1981, pp. 102-103.

In general, a more dynamic cultural analysis would include the transformation of these values over time, along with the existence of subcultural values which exist in sharp counterpoint to dominant, overarching themes. Sylvia Junko Yanigasako, *Transforming the Past* (Stanford, California: Stanford University Press), 1985. Ben Tong, "Warriors and Victims: Chinese American Sensibility and Learning Styles," pp. 70-93 in Lee Morris with Greg Sather and Susan Scull (eds), *Extracting Learning Styles from Social/Cultural Diversity* (University of Oklahoma: Southwest Teacher Corps Network), 1978.

¹⁵As Hirschman and Wong explain: "The most common explanation for overachieving minorities is that they possess "middle-class" cultural values such as thrift, perseverance, and commitment to work that are conducive to socioeconomic employment...A more substantial variant of the cultural perspective posits that kinship networks, ethnic institutions, and a high degree of ethnic solidarity are the most influential factors... However, the fact that Asian-Americans have only succeeded in making substantial socioeconomic progress in the last twenty to thirty years, while cultural orientations and social institutions were presumably the same as that prior to World War II, cautions against the simple acceptance of this interpretation. We argue that cultural variables must be interpreted in light of the structural conditions that give rise to them and maintain them over time." Charles Hirschman and Morrison Wong, "Trends in Socioeconomic Achievement among Immigrant and Native-Born Asian-Americans, 1960-1976," *The Sociological Quarterly* 22: 496.

¹⁶Amado Cabezas, Tse Ming Tam, Brenda M. Lowe, Anna Wong, and Kathy Owyang Turner, "Empirical Study of Barriers to Upward Mobility of Asian Americans in the San Francisco Bay Area," in Gail M. Nomura, Russell Endo, Stephen H. Sumida, and Russell C. Leong (eds.), *Frontiers of Asian American Studies: Writing, Research, and Commentary* (Pullman, WA: Washington State University Press), 1989, p. 96.

Americans presented a collage of repeating patterns, empirical regularities which suggested not only occupational concentration but clear instances of stagnation, with this plateau better documented in some employment sectors than others (e.g. industry and government vs. academe). Little is known, however, about the configuration of *specific* institutional processes that surface as barriers in particular sectors, industries, or institutions. As already suggested by the fact that Asian Pacific Americans are more highly rewarded for educational achievements than for occupational performance, the issue of qualification is an assessment that occurs within specific institutional arrangements. This report has emphasized the need to move away from a narrow focus on either individual or cultural attributes, where external barriers are potentially interpreted simply as "personal deficits," or where qualifications are construed in narrow binary terms (e.g. "qualified" vs. "unqualified"), without regard to a range of possibilities, options, and avenues for tailoring a "fit" with the organizational structure and culture.

Much of existing research tends to be "correlational," with patterns of differential mobility suggesting variations in institutional access by age, gender, or citizenship status, length of tenure or seniority, or professional training. Such correlations by definition do not say much about the dynamic processes that would indicate "causation," although they encourage speculation about the barriers. For example, seniority among Asian Pacific Americans was correlated with increasing perceptions of a glass ceiling but it was unclear whether this was due to barriers which are "age-related" or perhaps to some attribute of those with longer tenure.¹⁷

To better fine-tune the analysis is a key recommendation. While the following recommendations are presented separately as *policy* or *research* recommendations, there may be situations under which these two might be conjoined. For example, those corporations seeking to evolve away from a monolithic enterprise and develop a more

¹⁷Foreign-born Asians, for example, were found to change jobs less often than their native-born counterparts. Joyce Tang, "Caucasians and Asians in Engineering: A Study of Occupational Mobility and Departure," pp. 217-256 in *Research in the Sociology of Organizations*, Vol. 11 (JAI Press), 1993.

shared vision of corporate success or prosperity might serve as ideal sites for monitoring the effects of certain programmatic changes.

RECOMMENDATIONS

The recommendations which follow are twofold in nature: (1) they identify policy initiatives which should be implemented based on the professional stagnation that has already been documented for Asian Pacific American professionals, and (2) they suggest areas where research knowledge could be improved through the refinement of existing standard data bases and through the pursuit of process-sensitive research agendas.

The first set of recommendations relate specifically to the implementation of policies that would clarify existing promotion procedures and ensure that overall corporate appointments to management, particular senior appointments, are more coordinated and planned so that artificial barriers are minimized. These initiatives are of immediate relevance to those employment sectors where the ratio of Asian Americans professionals to managers already reflects a constricted pipeline.

- 1. More coordination between corporate and educational sectors is recommended, so that students are more apprised of the range of skills and experiences they will need to cultivate to fully prepare themselves for the workplace situation.***

Target populations should include not only institutions of higher education but high schools and community colleges, where the development of English language skills, along with other basic skills are initially shaped. In the interests of ensuring a large eligibility pool, companies should actively fund and support educational programs which help systematically develop these human resources with long-range goals and objectives in mind.

2. ***Companies should develop and institutionalize a variety of ways in which both formal and informal company policies around promotion or career development opportunities are better publicized and made available.***

Beginning with the initial hiring process, strategies need to be in place so that employees are made more aware of the criteria by which they are being evaluated and the various career tracks or ladders that exist in the corporation. Moreover, there should be strategies to ensure that this information is not only formally distributed but clearly understandable and readily accessible in other ways to employees. Companies should support and facilitate occasions where such information might be provided on a regular basis, either through personnel review processes, the development of an informal networking or mentoring process, or some combination of these or other methods that prove to be effective or useful, particularly with respect to monitoring problems or concerns (informal interviews, surveys, open forums, round-table discussions, a clearinghouse for complaints or grievances).

3. ***Formal channels need to be institutionalized to encourage actual participation in specific projects that would provide on-the-job training and preparation for other assignments, including those leading to management.***

Opportunities need to be provided for employees to more fully participate and utilize existing or latent skills, either in their present job assignments or those they would like greater access or exposure to.

4. ***Consideration for all levels of management, particularly senior-level appointments, should include promotional criteria or rewards related to demonstrated interest, sensitivity, competence, and experience in working with a diverse labor force.***

In the context of overall corporate strategic planning, management tracks will increasingly involve managing a more diverse workforce. In addition to

whatever other criteria candidates are expected to meet, appointments to senior executive positions should give serious consideration and priority to those candidates with qualities, attributes, or experiences that reflect a commitment and responsibility to recruiting and training a diverse workforce. Corporations should institutionalize such criteria (e.g. in the form of managerial bonuses) so that they become not only a more explicit part of ongoing discussion but one where specific objectives can be measured. Until such a time as barriers to upper management no longer exist, the need is to not simply emphasize the importance of "communication or interpersonal skills" for managerial qualification but to begin an ongoing discussion and exchange over what these skills specifically entail in relational context.

5. *Meaningful alternatives to managerial jobs need to be developed with employee needs in mind.*

In addition to ensuring that the performance evaluation process is consistent and fair, and that employees have accurate perceptions regarding the available promotional opportunities, corporations need to creatively institute a variety of other rewards, formal and informal, as a way of acknowledging employee contributions under circumstances when managerial opportunities are by definition limited. These rewards or incentives will be most meaningful if they are guided by a careful assessment of employee needs.

The above recommendations are aimed at not only addressing issues of company morale that are related to perceptions of a glass ceiling, but at encouraging more coordinated institutional responsibility, whether this be in the form of cross-institutional collaboration between schools and workplaces, or in the form of a hierarchy of responsibilities or commitment from the "shopfloor" up.

The following recommendations relate to improving the existing state of research that might help guide such policies, particularly with respect to appreciating how different work contexts variably shape employment patterns and opportunities within

private industry employment.

1. *New quantitative measures should be developed to capture "occupational mobility" into management.*

Census data on occupational category by ethnic or racial group presently enable certain comparisons in terms of the ratio of professionals to managers. These ratios, however, do not speak directly to the issue of mobility. One of the few studies which have sought to compare the occupational mobility of minorities with the majority male population was sponsored by the U.S. Commission on Civil Rights, and entitled *Social Indicators of Equality for Minorities and Women*, August 1978. Noting that the "rate of occupational change" says little about mobility itself, the Commission developed an indicator based on "the average change in prestige scores of those who changed occupations in the past 5 years."¹⁸ Since the census presently codes occupations according to prestige scores, ratios were developed to compare minority with majority populations in terms of relative net gain or loss that occurred as a result of changing occupations. Comparable measures might be developed to also specify movement into managerial positions, or different levels of management. Development of these measures would contribute to more refined quantitative analyses.

Because job dissatisfaction among Asian Pacific Americans often took the form of transfers or job changes, movements *within* organizations need to be distinguished from movements *between* different employment sectors. A 1992 Department of Labor report also saw this need to conceptualize how mobility occurs within and between various institutional or work structures.¹⁹

¹⁸U.S. Commission on Civil Rights, *Social Indicators of Equality for Minorities and Women* (Washington, D.C.: U.S. Government Printing Office, August 1978), pp. 38-39.

¹⁹U.S. Department of Labor, *Job Mobility Paths of Recent Immigrants to the United States* (Division of Immigration and Policy Research, Bureau of International Labor Affairs, September 1992). By Howard Wial. Pp. 1-4.

2. *Promotional processes and work relations in general should be studied within at least a half-dozen work sites where Asian Pacific Americans are concentrated.*

Because work problems among Asian Pacific Americans are likely to be suppressed or internalized for cultural reasons, there is clearly a need for survey data which guarantee confidentiality. However, survey data, including other kinds of correlational or statistical analysis, can be better appreciated alongside more qualitative or ethnographic research. The latter is more capable of not only generating contextually rich descriptions but discovering processes or patterns that are not already available as "codifiable" factors for the researcher using more quantitative methods. For this reason, qualitative research may be better able to address existing gaps in our understanding of workplace dynamics. Recognizing the limitations with conventional research methods, the National Institute of Health convened an historic symposium of researchers and scholars in mid-year, 1994, to specifically address ways of applying these more qualitative strategies to a range of empirical problems.²⁰

In a similar vein, a series of focused research sites should be funded for the purpose of assessing different management strategies and their consequences not only for promotional opportunities but for work relations in general. The goal is twofold: (a) to develop a richer, more textured and dynamic picture of the workplace through ethnographic methods and (b) to establish a basis at the same time for broad institutional comparison.

At least a half-dozen work sites should be studied for a period of from six to eight months. While these sites should be ones where Asian American professionals are concentrated, these organizations might be chosen for a number of other criteria as well, e.g. whether such organizations represent models²¹ of

²⁰NIH, conference on "Improving the Health of the Nation with Qualitative Research," July 25, 1994.

²¹See Fernandez, 1993, pp. 300-308 for a discussion of specific companies which have developed strategies in response to a diverse workforce.

where upper management is actively engaged in monitoring employee concerns, or promoting strategies which are proving to be effective for individuals, work groups, or the company as a whole. Companies which have low ratios of Asian American administrators relative to professionals ought also to be studied. Such research could, in fact, be pursued in tandem with corporations interested in making changes in policies that would improve employee participation, morale, and performance. In general, a broad basis for institutional comparison should incorporate criteria which make it possible to study how different managerial strategies or workplace cultures affect overall employee involvement or integration. The apparently lower barriers experienced by foreign-born or immigrant white scientists deserve closer examination.

In-depth analysis of each work site should focus on both objective routines and subjective experiences. Towards this end, the social context of the workplace should be delineated from the perspective of various participants, as they interface with each other within the organizational structure and its cultural matrix. At minimum, a "triangulation" of views would include the views and perceptions of Asian American professionals, upper-management, as well as other employees. Employee-identified needs for mentoring or networking activities already suggest the exclusion of Asian Americans from certain formal or informal circles. Similarly, it would be important to explore the extent to which employers or supervisors who are unable to find eligible or interested candidates are disempowered by their own narrow channels of information. Barriers, for example, may also be due to narrow culturally-based conceptions of leadership, or the attitudes of other employees towards Asian Pacific Americans as possible supervisors in executive roles.

In addition to interviews and self-reports, which lend themselves well to information about the workplace, its culture, as well as factors related to individual career needs, these insights are necessarily circumscribed by the social

location of respondents.²² Other methods, including participant observation, should be employed to take in other aspects of the institutional landscape. An analysis of the subjective aspects of promotional review (i.e. of both reviewers and of the reviewed) would be critical and might include observation of the interview process and any post-interview discussion of the candidate. The specific goal is to gain an understanding of how criteria and assumptions guide promotional decisions, and the consequences of "rigorous" or "flexible" implementation. To the extent that "artificial" barriers to promotion exist at this level, they may not necessarily be resolved by workshops or training sessions aimed at simply sensitizing employees or upper-management to their respective "deficiencies."

Establishing a baseline for these research initiatives may also require stronger enforcement of existing EEO policies around record-keeping, since it has been noted that even employers with government contracts failed to keep adequate records for the purposes of monitoring.

Finally, an analysis of the organizational hierarchy in terms of objective career tracks where Asian American professionals are concentrated should provide insight into whether barriers must be seen in terms of jobs being inherently "dead-end" regardless of its occupants.

3. *An occupational profile of Asian Americans in management should be developed to give a more detailed understanding of their distribution across existing managerial categories.*

The underrepresentation of Asian Pacific Americans in management strongly indicates "artificial" barriers. At the same time, it was noted in one survey that 27

²²Asian immigrants, for example, may invoke Confucian values as an explanation for their mobility, when in fact, it may be their previous training or skill levels which have established a floor for their advancement. Journalists, along with social scientists who rely on such self-reports, may do so for certain specific purposes. A fuller account, however, would also include the larger landscape, an understanding of how such biographies intersect with certain historical, societal, or institutional set of conditions.

percent of Asian Pacific Americans saw no obstacles to advancement.²³ Asian Pacific Americans who have achieved managerial-executive status provide a critical benchmark around which to identify patterns and conditions which distinguish their situation from their counterpart among aspiring professionals who have hit a "glass ceiling." More importantly for comparative purposes, more needs to be understood regarding the managerial structures in which Asian Americans are distributed or concentrated.

Although the census category "executive-administrative-managerial" is disaggregated into discrete categories, it is not possible to systematically draw meaningful distinctions between manager types in different sectors (e.g. public administration versus corporate management),²⁴ or at different levels in the corporate hierarchy (office manager, R&D supervisor, vs. high-level corporate executives). In other words, despite detailed occupational breakdowns, census information is insufficient for qualitatively differentiating or ranking positions in any methodical way. With a few exceptions (e.g. legislators and chief executive officers), high-status managerial positions are not clearly distinguished from less rewarding types.

As noted earlier in this report, the distinction between managers in mainstream corporate America and those in ethnic enclaves is a critical one for Asian Americans, since these managerial structures are not comparable. A person who owns or runs a restaurant, with less than a high school education, might list himself as manager precisely because he has no other specialized skills or training. In one study, where English language deficiency did not result in losses to income or occupational "mobility," at least one reason offered was their concentration in ethnic enclaves where such skills were not necessary.²⁵ Small

²³Asian Americans for Community Involvement, *Qualified But...: A Report on Glass Ceiling Issues Facing Asian Americans in Silicon Valley* (San Jose: Asian Americans for Community Involvement of Santa Clara County, Inc.), 1993, p. 25.

²⁴Dual labor or split labor market theorists have referred to these respective sectors as "primary" and "secondary," or as "core" and "periphery."

²⁵Sherrie A. Kossoudji, "English Language Ability and the Labor Market Opportunities of Hispanic and East Asian

business employment may also be a reaction to a glass ceiling in mainstream employment. Figures which conflate these two sectors of managerial employment, therefore, may underestimate the lack of parity between Asian Americans and whites.

Finally, barriers to managerial advancement may revolve around narrow views about management areas where Asians would be ideally suited (e.g. managing all-Asian teams, as contact persons for Asian countries in the Pacific Rim, or bi-cultural intermediaries). An organizational analysis of career tracks should, therefore, not only include an examination of "dead-end" jobs which are less likely to lead to management, but a look at those administrative tracks towards which Asian Americans are steered. The problems or opportunities available to careerists in these positions have yet to be charted or evaluated.

For these reasons, an analysis of glass ceiling issues would be enhanced by (a) studies which analyze and compare the distribution of Asian Americans along the managerial continuum, and (b) the availability of census information which enables these positions to be systematically ranked and meaningfully compared.

In sum, certain dimensions of the problem presently escape existing statistical accounts. While more refined analysis is needed to more broadly evaluate the extent and nature of the glass ceiling among Asian Americans, some kind of institutional commitment needs to be ensured at the policy level. In the few instances mentioned in this report, where problems of a glass ceiling, or "broken ladder," were laboriously documented in particular institutions, there were no comparable steps to follow up or address these problems once surfaced. At best, the leadership response could be described as minimal, if not one of "benign neglect."

The above recommendations, therefore, called for two sets of initiatives. The first

set emphasized strategic points of intervention at various stages of the educational or occupational pipeline, where information could be clearly communicated about career opportunities and company policies. In the case of employees, the institutionalization of policies was proposed for integrating employees into formal and informal networks that have direct implications for better utilizing existing talents. In addition, it was recommended that managerial appointments, particularly at the senior-level, give greater weight to promotional criteria emphasizing demonstrated interest, sensitivity, competence, and experience in working with a diverse labor force. The second set of recommendations called for the development of standard data bases that can serve as the baseline for not only more refined quantitative research but more process-sensitive, ethnographic research approaches in those spheres of employment where Asian Americans are professionally concentrated. The recommendations proposed at the completion of such research agendas should include clear and reasonable timetables for these changes to be implemented. Without such collaborative and concerted efforts, a glass ceiling is likely to be paralleled by employee disaffection, the underutilization of human resources, declines in productivity, along with a weakening in the "floor" of job security, e.g. through layoffs and other forms of turnover.

As a pervasive feature of the workplace which profoundly affects the integration of individuals or groups into the workplace milieu, the corporate organizational world has historically been based on a culturally limited set of norms, assumptions, and values. As an increasingly diverse work force becomes a reality, corporations alert to the weaknesses of such a monolithic conception have encouraged greater employee involvement in order to coordinate and collaborate towards a shared vision of company objectives. The Glass Ceiling Commission should set a basic research agenda which encourages and facilitates collaborative efforts between those in the research community, and supports policy directives which ensure the coordination of these research efforts.

VI. ANNOTATED BIBLIOGRAPHY

Asian Americans at Berkeley: A Report to the Chancellor, May 1989.

An advisory committee appointed in the fall of 1987 was charged with carrying out an in-depth study of Asian Americans on the campus of the University of California at Berkeley. Questions addressed student educational experiences, faculty recruitment and advancement, and staff employment opportunities as well as questions about campus-Asian American community relations. Among the issues raised by students was the relative absence of Asian American role models among ladder-rank faculty (especially in the social sciences and humanities). A section of the report is devoted to the status of Asian American faculty at Berkeley, including their underrepresentation in the ranking academic administrative positions or at senior management levels. Another section discusses staff employment opportunities in management, noting that their distribution here showed them "stagnating" in the middle managerial ranks, while absent at both the entry levels, and in top-level positions.

Asian Americans for Community Involvement, Qualified But...: A Report on Glass Ceiling Issues Facing Asian Americans in Silicon Valley (San Jose: Asian Americans for Community Involvement of Santa Clara County, Inc.), 1993.

This publication by the largest Asian American community agency in Santa Clara County reports on the first broad survey of Asian Americans in Silicon Valley. In general, Asian American perceptions are summarized in a variety of ways, by employer type, occupation, gender, age, tenure with company, managerial interest, foreign-born or American-born status, and the perceived viability of Equal Employment Opportunity Programs and Multicultural Training programs. Perceived causes are noted and followed by a set of recommendations.

Cabezas, Amado, Tse Ming Tam, Brenda M. Lowe, Anna Wong, and Kathy Owyang Turner, "Empirical Study of Barriers to Upward Mobility of Asian Americans in the San Francisco Bay Area," pp. 85-97 in Gail M. Nomura, Russell Endo, Stephen H. Sumida, and Russell C. Leong (eds.), *Frontiers of Asian American Studies: Writing, Research, and Commentary* (Pullman, WA: Washington State University Press), 1989.

This article reports on a survey of 308 Asian American professionals and managers, conducted in the San Francisco Bay Area in 1987. Focusing on barriers to upward mobility, the questionnaire elicited responses to thirteen possible barriers, which could be clustered into factors which were either employer- or employee-related. Included among the former were corporate culture, management insensitivity, lack of informal networking, lack of mentors, lack of role models, race, sex, and age discrimination barrier, and situational

company-related barriers, such as shrinking opportunities and lack of education/training possibilities. Among the employee-related factors were geographic inflexibility, work-family conflicts, and language difficulties.

Cabezas, Amado and Gary Kawaguchi, "Empirical Evidence for Continuing Asian American Income Inequality: the Human Capital Model and Labor Market Segmentation," pp. 144-164 in Gary Y. Okihiro, Shirley Hune, Arthur A. Hansen, and John M. Liu (eds.), *Reflections on Shattered Windows: Promises and Prospects for Asian American Studies* (Pullman, Washington: Washington State University Press), 1988.

This article presents statistical data to show that Asian Americans, especially the immigrant and female populations, frequently earn less than white workers because they are marginalized by their segregation into peripheral jobs in the "secondary labor market," where pay and job security are problematic, and opportunities minimal for upward mobility or promotion into decision-making positions. Specifically, 1980 census data were presented for the San Francisco-Oakland-San Jose Standard Consolidated Statistical Area.

Cheng, Lucie and Edna Bonacich (eds.), *Labor Immigration Under Capitalism: Asian Workers in the United States Before World War II* (Berkeley: University of California), 1984.

This anthology focuses on Asian workers in the United States prior to World War II and beginning with their immigration in the 1850's. The book's major effort is to provide a larger economic and political context for understanding this historical immigration. Within the scope of this task, several of the empirical studies show the critical role played by different groups of Asian immigrant workers in the development of two states, California and Hawaii. Their importance as a source of labor for the emerging industrial and agricultural economies on the Pacific West Coast is captured in the changing nature of immigration laws as well as in census data that reflect how these developments depended on recruitment into certain occupational categories to the exclusion of others.

Cherian, Joy, "Asian Americans: An Emerging Force to Break the Glass Ceiling," New Orleans, Louisiana, Remarks at the 1993 Annual Program of the Chinese-American Librarians Association, June 28, 1993.

Cherian argues that while Asian Americans have benefited from equal opportunity laws, they face a glass ceiling in several areas of employment. Select data gathered during his tenure as a member of the U.S. Equal Employment Opportunity Commission are presented to show the statistical underrepresentation of Asian Americans in managerial and administrative positions across corporate, government, and academic hierarchies. Cherian also

reports on particular cases, where Asian American candidates were by-passed for promotion in favor of whites who were less-qualified.

Chinese for Affirmative Action, *The Broken Ladder '92: Asian Americans in City Government* (San Francisco, CA.), May 1992.

Beginning in 1986, Chinese for Affirmative Action (CAA), a civil rights organization based in San Francisco, began publishing regular reports on the glass ceiling in city civil service. These studies, basically comprising three reports over the six-year period from 1986 to 1992, focused on civil service workers in San Francisco. The 1992 CAA report found no positive change in the situation of Asian American civil servants between 1985 and 1990 and, instead, noted that they were "worse off today than during the mid-1980's." In terms of managerial representation, Asian Americans continued to have the worst promotional record, with the lowest ratio of administrators to professionals. These professionals were shown to also cluster in dead-end technical positions, with few or no opportunities for career advancement, despite their forming a sizeable portion of the city's professionally trained employees. Biases in civil service examinations and the allocation of "exempt" appointments (where civil service examinations are waived for high-level positions) were cited to explain the relative absence of Asian Americans from important administrative posts. In 1992, CAA described Asian Americans as "the least likely group to gain an exempt administrative appointment."

Chun, Ki-Taek, "The Myth of Asian American Success and Its Educational Ramifications," *IRCD Bulletin XV* (Nos. 1 and 2),: 1-12, Winter/Spring 1980.

This author questions the degree to which educational achievement is appropriately awarded in the work sphere by introducing empirical indicators which suggest a much bleaker picture. A major argument is that the wide use of statistical measures, such as education and income, have not been accompanied by commensurate efforts to see that these are appropriately adjusted so that they take into account other relevant, qualifying factors. This criticism is also applied to the use of broad occupational categories for obtaining a composite picture of this population. Chun reports on a pattern of occupational segregation and underrepresentation of Asian Americans and shows how an overall analysis of their occupational status requires that statistical measures be better conceptualized.

Cox, Taylor, Jr., *Cultural Diversity in Organizations: Theory, Research & Practice* (San Francisco: Berrett-Koehler Publishers, Inc.), 1994.

This book reports on a broad base of research related to cultural diversity in U.S. firms. Information is included which is specific to Asian Americans in the workplace. Perhaps more importantly, the author has provided a conceptual

framework for appreciating how dynamics within an organization derive not only from its participants, but from the organizational structure and its values. Chapter 3, "Review of Research on Diversity and Organizational Performance," underscores how the nature of value congruence between employees and firms can affect company productivity and costs, as well as employee commitment, satisfaction, and turnover. The organizational literature also surveys studies which variously report on how company management of diversity positively or negatively affects creativity and problem-solving. Two other chapters respectively address cultural and institutional dynamics. Chapter 7, "Cultural Differences," discusses cultural patterns or differences in the following specific areas: time and space orientation, leadership style orientations, individualism versus collectivism, competitive versus cooperative behavior, locus of control, and communication styles. Chapter 9, "Institutional Bias," identifies features of the organization that all groups must adjust to, though their differential impact poses greater bias for some groups than others. Some of the source of these organizational biases include the following: self-promotion and the use of self-evaluations; the bureaucratic model; brainstorming, verbal fluency, and monolingualism; individualist reward systems; biases embedded in selection processes; and the use of "male" traits in defining management and leadership. The Asian American experience can be better appreciated against this larger backdrop and context.

Der, Henry, "Asian Pacific Islanders and the 'Glass Ceiling' -- New Era of Civil Rights Activism?", pp. 215-231 in LEAP, *The State of Asian Pacific America: Policy Issues to the Year 2020* (Los Angeles: Asian Pacific American Public Policy Institute and UCLA Asian American Studies Center), 1993.

Der outlines a number of problems that Asian Pacific Islanders will face as they seek to address promotional barriers into management. Specifically, three issues are discussed: "(1) socioeconomic differentials between Asian Pacific Islanders and black Americans that reinforce distrust of affirmative action policies favoring "advantaged" racial minorities over economically disadvantaged individuals, (2) population growth leading to possible fragmentation of Asian Pacific Islanders as a racial minority group, and (3) higher tolerance by Asian Pacific Islanders for enduring racial discrimination, instead of pressing ahead for remedies." Finally, Der suggests three strategies for addressing the glass ceiling: (1) the formation of strong employee organizations, (2) the education of appropriate federal and state officials about various forms of promotional bias, and (3) the cultivation of a sense of social responsibility among Asian Pacific Islanders that involves sharing their knowledge, skills, and experience with other racially disadvantaged groups.

Duleep, Harriet Orcutt and Seth Sanders, "Discrimination at the Top: American-Born Asian and White Men," *Industrial Relations* 31 (3): 416-432, 1992.

The issue of whether the earnings of American-born Asian men are lowered by discrimination is examined, with particular attention toward investigating potential discrimination against Asian Americans in high-paying positions. Microdata from the 1980 census are used to compare the labor market performance of Asians with that of non-Hispanic whites. It is shown that the average American-born Chinese, Japanese, and Korean man earns about much or more than white men with comparable characteristics, whereas Filipino and Asian Indian men earn between 9 percent and 30 percent less. Highly educated men in all Asian groups earn less than comparable whites when occupation and industry are taken into consideration. American-born Asian men are less likely to be in managerial positions than white men with comparable characteristics. On the other hand, Asians are more likely than whites to be in professional positions. The occupational differences between Asians and whites may reflect discrimination.

Escueta, Eugenia and Eileen O'Brien, "Asian Americans in Higher Education: Trends and Issues," *Research Briefs*, American Council on Education 2 (4): 1-11, 1991.

The information in this research brief highlights demographic trends and patterns for Asian Americans as students and faculty in higher education, including information which allows comparison of their status with other racial-ethnic groups. A major source for these statistical data are a number of government sources. In their summary discussion, the authors discuss how problems of analysis are exacerbated by the aggregation of data. Among the findings which the authors call specific attention to from the available data are the relatively small proportion of doctoral degree earners among Asian American women and among Asian Americans who are U.S. citizens, as well as the low tenure rates of Asian faculty in general, and the implications which this has had for their respective and overall underrepresentation among faculty.

Fleming, Lois (chairperson), "Excerpts from Testimony on the Exclusion of Asian Americans in the Construction Industry and the King County Domed Stadium Project," Hearing before the Washington State Commission on Asian American Affairs, Office of the Governor, Olympia, Washington, Held at the Wing Luke Museum, Seattle, Washington, December 19, 1974.

The testimonies here were solicited by the Alaska Cannery Workers Association and thirteen other Asian American groups to explore the alleged exclusion of Asian Americans from construction work, particularly at the Domed Stadium project, begun in 1972. While nearly 5 percent of the population in King County, Asian workers received less than one half of one percent of the man hours already put into construction in an impacted area which was almost 50 percent

Asian. (At the time of these hearings, no more than two Asians out of work force of 300 were on the job). Several barriers were mentioned: (1) apprenticeships in dead-end jobs, (2) exclusive union hiring hall, (3) a 1970 court decision which, at labor's request, confining the issue of discrimination in construction union work specifically to blacks, and (4) reporting procedures on federal contracts that do not capture the temporary hirings, turnovers, or job losses, even among black workers.

Fong, Pauline and Amado Cabezas, "Economic and Employment Status of Asian-Pacific Women," pp. 255-322 in U.S. Department of Education, Conference on the Educational and Occupational Needs of Asian-Pacific-American Women, October 1980.

Using both 1960 and 1970 census data, the authors developed a profile of Asian American women workers that not only underscored their relatively high labor force participation but their concentration in particular occupational categories, a pattern which they attributed to economic necessity rather than choice. A large majority of Chinese, Filipino, and Japanese women were concentrated in clerical, operative, and service categories, where earnings are relatively poor. While a substantial proportion of Chinese, Filipino, and Japanese women were also found to be employed in professional occupations, they tended to occupy the lower rungs, serving as accountants, nurses, and health technicians, rather than lawyers, judges, physicians, or engineers. A high proportion of these professional women fell into the 25 to 34 age cohort. Few women were in managerial roles. In general, increasing education brought lower income returns for these women. The authors also point to the relative absence of both genders in jobs which require public contact and language facility. Thus, Asian males were shown to be more heavily concentrated in accounting, science, and engineering, but not in teaching, law, or sales. Similarly, Asian American women were more likely to be bank tellers, bookkeepers, file clerks, and machine operators, rather than receptionists, secretaries, or telephone operators. The concentration of Asian Americans across different industries revealed below-parity employment or else their concentration in the lower echelons of particular industries.

Hing, Bill Ong, *Making and Remaking Asian America Through Immigration Policy, 1850-1990* (Stanford, California: Stanford University Press), 1993.

This book looks at the effect which immigration laws have had on the development of Asian American communities in the United States. Attention is specifically given to the Filipino, Chinese, Japanese, Korean, Vietnamese, and Asian Indian communities, which represent 90 percent of all Asian and Pacific Islanders. In addition to reviewing how early immigration policies excluded and thereby controlled the shape of these communities, the book discusses

demographic changes brought about by 1965 amendments to the immigration law. Some discussion is given to the impact upon "careers," particularly with respect to how immigration from Asian countries simultaneously increased the numbers in professional, executive, or technical occupations as well as those in low-level service work. In general, Hing's discussion suggests that there is a uniqueness to each community that is better explained by immigration history and demographic factors than by cultural explanations which presume a uniformity based on common socialization experiences. Educational performance, political participation, and identity are reevaluated in the context of this diversity.

Hirata, Lucie Cheng, "Social Mobility of Asian Women in America: A Critical Review," pp. 323-341 in U.S. Department of Education, Conference on the Educational and Occupational Needs of Asian-Pacific-American Women, October 1980.

Hirata's review of the sociological literature found minimal research on mobility among Asian American women, much of it not only descriptive and uncritical, but unqualified in portraying Asian American women workers as "success stories." In one study which examined data for separate groups of Asian American women (Koreans, Filipinos, Chinese, Japanese), Hirata noted that while the authors conclude the absence of discrimination, this conclusion is contradicted by some of their own empirical findings. Critical gender differences in general, she points out, are obscured by the use of large census categories such as "professional-managerial."

Hirschman, Charles and Morrison Wong, "Trends in Socioeconomic Achievement among Immigrant and Native-Born Asian Americans, 1960-1976," *American Journal of Sociology* 90 (3): 585-607, 1984.

The educational achievements of both immigrant and native-born Asian Americans (i.e. Japanese, Chinese, and Filipinos) were observed to have equaled or exceeded the educational attainment of whites. While some of these groups seemed also to have approached "socioeconomic parity" in terms of earnings or occupational attainment (especially in terms of their greater representation in professional occupations than whites), this parity was found to exist not because of any real parity but because of "overachievement in education." These findings are discussed in the context of changing structural factors or conditions that create ceilings or opportunities for advancement for Asians in the United States.

Hsia, Jayjia, *Asian Americans in Higher Education and at Work* (Hillsdale, New Jersey: Lawrence Erlbaum Associates, Inc.), 1988.

Hsia's research is one of the most comprehensive and detailed reports on studies of Asian American academic performance. Underscoring declining acceptance rates among Asian Americans at selective institutions, she suggests that

nonacademic criteria are largely responsible for these lower admittance rates. At the same time, she notes that the poor English-language skills of immigrant Asians in particular may be underestimated by objective test scores and grades, making them less prepared for college work and more inclined to maintain high grades by majoring in math and science courses which are less demanding of writing and other communication skills. Chapter 7, "Education, Occupation, and Income," is of special relevance to the glass ceiling. Data are presented showing lower returns for education, along with occupational concentrations and patterns that reflect their underrepresentation in prestigious, high-status jobs, including management. Data were also provided for Asian Americans in academe, industry, and government.

Jiobu, Robert M., "Earnings Differentials Between Whites and Ethnic Minorities: The Cases of Asian Americans, Blacks, and Chicanos," *Sociology and Social Research* 61 (1): 24-38, 1976.

Despite reporting that Japanese Americans had achieved "socioeconomic parity," and that Chinese Americans were "near parity," whereas Blacks and Chicanos remained "deprived," Jiobu concluded that Chinese Americans were below parity because they received low returns on their education. Inequities were not attributed to "inferior education" or disproportionate representation in low-paying occupations. Instead, he reasoned that since Chinese had the "highest occupation coefficient," they should have fared better were they compensated for their education.

Kossoudji, Sherrie A., "English Language Ability and the Labor Market Opportunities of Hispanic and East Asian Immigrant Men," *Journal of Labor Economics* 6 (2): 205-228, 1988.

The research here specifically tested for the effect of English language ability on income and occupational mobility. The foreign-born Hispanic and East Asian populations were compared because they together represent 75 percent of all legal immigration. Koussoudji found that at every skill level, the costs of English language deficiency were higher for Hispanic immigrant workers than for Asian immigrant workers. While those with little or no English abilities (including Asian immigrants) are in general forced into low-level service and operative jobs, Asian immigrants were found to escape some of the loss to earnings potential by being able to move into managerial work. The author of this research speculated that Asian immigrants at these "upper levels" suffered little or no "productivity loss" for one of two possible reasons: (1) the demand for such immigrant professionals was so high that language deficiencies were ignored, or (2) they were concentrated into ethnic enclaves where English language skills were not necessary.

Lan, Dean, "Informational Hearing on Asian, Filipino, Pacific Islander (AFPI) Demographics and Employment," Hearings before the State Personnel Board, September 7, 1988.

This document is a detailed report on the representation of Asian Americans in California civil service. Information is presented for Asians, Filipinos, and Pacific Islanders as separate groups, as well as for this population as a whole. With respect to their aggregate status, their representation in top management was below what one might expect given their overall representation in the labor force as well as at the journey or mid-management levels. In addition, five departments were selected for attention due to problems of severe underrepresentation either at the entry or decision-making levels: the California Highway Patrol, the departments of Corrections, Mental Health, Social Services, and Transportation. Departmental recommendations were detailed and specific, followed by a set of general recommendations.

Lau, Yvonne May, *Alternative Career Strategies Among Asian American Professionals: The Second Rice Bowl* (Evanston, Illinois: Northwestern University), Doctoral Dissertation, June 1988.

The above study was based on in-depth interviews of forty-five Asian American professionals who had experienced restricted or blocked mobility in the corporate world and, in response to this glass ceiling, had developed alternative or parallel career commitments. While these more marginal or sideline ventures were typically entrepreneurial in nature and suggestive of traditional types of ethnic small business (e.g. restaurants, import-export businesses), they are shown to be fundamentally different, approached with a different attitude towards risk-taking while fulfilling extrinsic or intrinsic needs not met in the original or major area of employment. Two chapters are particularly relevant to the glass ceiling. Chapter two discusses how separate tracking or dual hierarchies are responsible for initial occupational segregation, and ultimately, the long-term career stagnation of Asian American professionals. Chapter three focuses on how informal aspects of corporate culture further exclude these professionals by shifting the emphasis to more informal, subjective criteria based on values and an image of worth or "fitness" which runs counter to how Asian Americans are perceived or otherwise socialized.

Martinelli, Phyllis Cancilla and Richard Nagasawa, "A Further Test of the Model Minority Thesis: Japanese Americans in the Sunbelt State," *Sociological Perspectives* 30 (3), July, 266-288, 1987.

Data on Japanese Americans are examined in terms of the model minority thesis to address the question of whether or not this image is a myth. Occupation and income return from education, based on the 5 percent Public Use Microdata Samples of the 1980 US Population Census are examined for Japanese American

males in Arizona. The findings suggest that the model minority thesis does not apply in this case; white males are more than two times as likely to be in managerial positions as Japanese American males, and the latter receive less return from education than the former. It is suggested that further studies explore in greater depth cultural and structural factors in relation to mobility, income, and occupation for Japanese and other Asian Americans.

Minami, Dale, "Guerrilla War at UCLA: Political and Legal Dimensions of the Tenure Battle," *Amerasia* 16 (1): 81-107, 1990.

As a lawyer who has handled and represented the academic cases of Asian American faculty, Minami details the legal and political struggle surrounding a particular tenure case on a campus where Asian Pacific Americans are a sizeable part of the student body. The discussion revolves around issues raised by academic context, legal alternatives, and an analysis of both legal and political strategy. Alongside the details of this specific case, Minami offers an incisive analysis of how the decision-making process in general is open to subjective bias and the implications this has for Asian Americans.

Nakanishi, Don, "Asian Pacific Americans in Higher Education: Faculty and Administrative Representation and Tenure," in Joanne Gainen and Robert Boice (eds.), *Building a Diverse Faculty* (San Francisco: Jossey-Bass Publishers), Number 53, Spring 1993.

Despite high undergraduate enrollments, Asian Pacific Americans are not otherwise well-represented when it comes to other aspects of the academic hierarchy. Nakanishi's insights are derived from recent institutional studies and commission reports and the experiences of over fifty faculty across the nation. His paper addresses certain misconceptions surrounding the status of this group in higher education: (1) that they are well-represented in faculty and key administrative positions, (2) that they do not face discriminatory employment practices, and (3) that they will be less likely to contest unfair denials of tenure or promotion. Several recommendations are offered on how institutions might be more responsive to this lopsided situation in which high student enrollment is paralleled by glass ceilings which affect Asian American professionals at other levels of the institutional hierarchy.

Ong, Paul and Tania Azores, "Asian Pacific American Health Professionals on the Front-Line," in Paul Ong (ed.), *The State of Asian Pacific America: Economic Diversity, Issues and Policies* (LEAP Asian Pacific American Policy Institute and UCLA Asian American Studies Center), 1994.

This research locates the experience of Asian Pacific American health professionals within the larger context of a stratified health care system, governed by differential access to services. A profile of this group includes data

which underscore their disproportionate overrepresentation as registered nurses and doctors, concentration in major public hospitals in metropolitan areas, the effect of immigration policy on the expansion and contraction of this labor force, and barriers to occupational mobility, including a glass ceiling into supervisory positions.

Ong, Paul and Evelyn Blumenberg, "Asian Pacific Scientists and Engineers," in Paul Ong (ed.), *The State of Asian Pacific America: Economic Diversity, Issues and Policies* (LEAP Asian Pacific American Policy Institute and UCLA Asian American Studies Center), 1994.

This article provides a detailed discussion of the larger context in which Asian Pacifics have assumed an important role as scientists and engineers, paralleling certain developments in the U.S. economy over the past two decades. A profile of this group of professionals in terms of its demographic characteristics shows the majority of them as foreign-born but U.S.-educated, overrepresented among those with graduate degrees, and concentrated in research and development. A section devoted to "earnings and glass ceilings" discusses how well these professionals are faring. The authors find greater evidence for lower returns on education for foreign-born than for U.S.-born Asian Pacifics, although it is suggested that a bias may exist against the latter as well, due to possible differences in "quality of education" that have not been controlled for.

Ong, Paul and Suzanne J. Hee, "Work Issues Facing Asian Pacific Americans: Labor Policy," pp. 141-152 in LEAP Asian Pacific American Policy Institute and UCLA Asian American Studies Center, *The State of Asian Pacific America: Policy Issues to the Year 2020*, 1993.

In the context of growth projections for the Asian Pacific American labor force, this report analyzed data from projections for 2020 and from the Current Population Survey. As part of this analysis, information is provided on educational attainment, labor market barriers, contribution to the U.S. economy, international dimensions, and policy options.

Organization of Chinese Americans, *Shattering the Glass Ceiling: Entering the "Pipeline of Progress"* (Pittsburgh, PA: Tiffany), 1992.

This publication by a national educational and civil rights organization briefly discussed the impact of the glass ceiling on Chinese Americans, identifying barriers ranging from differences in communication skills and cultural traits to corporate recruitment practices to management vacancies, and the availability of opportunities to participate in career development training programs. OCA's role and level of commitment to combatting the glass ceiling was underscored in a set of initiatives it has undertaken.

Osako, Masako Murakami, "The Effects of Asian-American Kinship Systems on Women's Educational and Occupational Attainment," pp. 211-236 in U.S. Department of Education, *Conference on the Educational and Occupational Needs of Asian-Pacific-American Women*, October 1980.

This article explored the role of socialization in the career development of Asian American women. The focus is on the extent to which the Asian American family encourages or discourages the actualization of potential on the part of Chinese, Japanese, and Filipino women. Stereotypes about these women as passive or subordinated by virtue of either cultural practice or a structural division of labor are contradicted by historical and anthropological evidence. With immigration to America, the family's authority structure is dramatically transformed, the general effect being to erode the household head's traditional authority. Parental expectations and values inculcating deference to authority are identified as having a detrimental effect on Asian women's performance and hence their educational and occupational attainments. On the other hand, positive career involvement is encouraged by other features associated with the Asian American family: small number of children, family stability, and extended kin support in childrearing and other household tasks.

Sue, Stanley and Sumie Okazaki, "Asian-American Educational Achievements: A Phenomenon in Search of an Explanation," *American Psychologist*: 913-920, August 1990.

Sue and Okazaki present a perspective which challenges two major explanations (genetic and cultural) for Asian American educational performance. Thus, while much popular and scholarly writing has highlighted the educational achievements of this population, the authors propose that in the context of blocked occupational mobility, continued educational investments cannot be explained simply or exclusively in terms of Asian cultural values. The conclusion discusses some of the research and policy implications of this view.

Tang, Joyce, "Whites, Asians, and Blacks in Science and Engineering: A Reconsideration of Their Economic Prospects," pp. 249-292 in *Research in Social Stratification and Mobility* vol. 12 (JAI Press Inc.), 1993.

In this study, Tang questioned the thesis of lower returns on education, at least as measured in terms of income attainment. Her data and analysis suggest that Asian American in the physical sciences trail their white counterparts, while they have a slight edge over blacks in engineering. The earnings of both Asian and black engineers lag behind that of white engineers.

Tang, Joyce, "The Career Attainment of Caucasian and Asian Engineers," *Sociological Quarterly* 34 (3): 467-496, 1993.

This article explored the influence of race and nativity, on the one hand, and assimilation, human capital, and market structure, on the other, to explain income patterns and career transitions in the engineering profession. Tang analyzed and followed the career histories of 12,200 Caucasian and Asian engineers from 1982 through 1986. The objective was to determine how well Asians have performed in the American engineering labor market in terms of wages, occupational status, and promotion in comparison to Caucasians. The results indicated more racial disparity in managerial representation and upward mobility than in earnings, and more disparity in career attainment between foreign-born Asians and Caucasians than between native-born Asians and Caucasians. In terms of managerial representation, however, even native-born Asians were at a relative disadvantage compared to foreign-born, immigrant whites. Their relative absence in these upper echelon positions spoke to a disparity that could not be explained by educational qualifications.

Taylor Patricia A. and Sung-Soon Kim, "Asian-Americans in the Federal Civil Service 1977," *California Sociologist* 3 (1): 1-16, Winter 1980.

Civil service personnel statistics are analyzed to determine the impact of a variety of factors on salary, using a 1 percent sample. Asian Americans were found to be substantially better educated than nonminorities, underrepresented in clerical occupations, and overrepresented in professional occupations. Despite the fact that this occupational profile for Asian Americans was generally similar to Anglos, inequality was found to be present in pay.

Tienda, Marta and Ding-Tzann Lii, "Minority Concentration and Earnings Inequality; Blacks, Hispanics, and Asians Compared," *American Journal of Sociology* 93 (1): 141-165, July 1987.

Tienda and Lii documented that the more highly educated among Asian Americans were more likely than less educated workers to suffer from relative earnings losses vis-a-vis whites. This was most apparent where there was the greatest minority concentration: "among the highest-educated workers, Asian men experienced the greatest income losses from minority concentration, while black men with less than high school degrees lost most, relative to the earnings of their similarly educated white counterparts..."

U.S. Commission on Civil Rights, in *Civil Rights Issues of Asian and Pacific Americans: Myths and Realities* (Washington, D.C.: U.S. Government Printing Office), May 8-9, 1979.

This report was based on papers and testimonies before the Commission on a range of topics, including the census, women's status, immigration, Pacific Americans, education, employment, and housing. Data on employment challenged prevailing misconceptions or myths regarding the occupational status of this population, including the belief that Asian Pacific Americans face no employment discrimination, receive high income returns on their educational investment, and are particularly successful in small business.

U.S. Commission on Civil Rights, *Civil Rights Issues Facing Asian Americans in the 1990s* (Washington, D.C.: U.S. Government Printing Office), Feb. 1992.

Chapter 6 of this report, "Employment Discrimination," includes a discussion of the glass ceiling, summarizing data from a variety of sources, including roundtable conferences, statistical sources, local and national studies. Other employment issues discussed in this chapter may have either direct or indirect relevance for a glass ceiling: language rights in the workplace, the certification of foreign-educated professionals, discrimination causes by the immigration reform and control act, discrimination in construction unions, and employment discrimination against Asian American women.

U.S. Commission on Civil Rights, *Social Indicators of Equality for Minorities and Women* (Washington, D.C.), August 1978. By Haven Tipp and Linda Zimble.

This report sought to systematically evaluate progress towards racial and gender equality by making comparative information available in the form of separate statistical indicators, thereby circumventing problems associated with data based on the national population. Measures which are relevant to the glass ceiling and Asian Americans include those for "occupational prestige," "occupational mobility," and "occupational segregation."

U.S. Commission on Civil Rights, *The Economic Status of Americans of Asian Descent: An Exploratory Investigation* (Washington, D.C.: U.S. Government Printing Office), October 1988.

This report sought to address the extent to which discrimination continues to adversely affect the economic status of Asians in the United States, despite legal protections. A key issue was whether the economic status of this group has improved since the passage of the Civil Rights Act of 1964. When 1980 census data were compared with 1960 census data, it was found that earnings for American-born Asian men improved, especially when hourly rather than annual earnings was the measure. The earnings gap, moreover, between Asian and non-

Hispanic white men closed dramatically during this period. Asian American women, native-born and immigrant, were noted to compare favorably with that of their non-Hispanic white female counterparts, earning as much if not more than the latter. A critical review of these findings is included at the end of the monograph. Some of the Commission's own findings, moreover, included data suggesting a glass ceiling for American-born Asian males (pp.72-76).

Washington Association for Asian and Pacific American Education, "Asian/Pacific American Men and Women Administrators Co-Existing in Educational Leadership" (Tumwater, Washington: Superintendent of Public Instruction), 1980.

The barriers that Asian Pacific Americans experience as educational administrators were explored in two workshops. Three main problem areas were identified: (1) limited access to leadership positions, (2) conflict between APA men and women in their work relations, and (3) difficulty negotiating the demands of family and work life. Although the workshops served primarily to identify problems or barriers rather than to critically analyze them in-depth, they underscore how ethnicity and gender affect their integration in the workplace. The perception that Asian Americans are "non-threatening" and therefore "accepted" by both blacks and whites, for example, enables them to work effectively with both groups. However, relevant to the glass ceiling is the view that as minorities, they are expected to perform as "super-minority," yet are channeled into "soft-money" positions or "dead end positions," where possibilities for upward mobility into top-level positions of decision-making are limited. Suggestions or alternatives for addressing these problems were discussed.

Wey, Nancy, "Asian Americans in Academia," pp. 38-54 in Yung-Hawan Jo (ed.), *Political Participation of Asian Americans: Problems and Strategies*, Pacific/Asian American Mental Health Research Center, 1980.

The author presented data on Asian American faculty from two universities -- California State University, Long Beach and the University of California, Los Angeles. Underrepresented in general on university faculty, Asian Americans with jobs in academia are overconcentrated in the sciences. Moreover, Wey pointed out that inequities around upward mobility were glaring: when compared to non-Asian Americans with the "same qualifications," they were in lower academic ranks; in cases of "superior qualifications," they were promoted more slowly than non-Asian American faculty.

Wong, Paul and Richard Nagasawa, "Asian American Scientists and Engineers: Is There a Glass Ceiling for Career Advancement," *Chinese American Forum* 6 (3): 1-6, January 1991.

This paper reported on research findings emerging out of a multi-year national study on Asian American scientists and engineers. Part 1 analyzed National Science Foundation Survey of Scientists and Engineers done in the years 1982, 1984, and 1986. The determinants of career mobility were evaluated for both Asian American men and women, in both private and public sectors, and in terms of racially comparative data which include whites, African Americans and Hispanic Americans. Some of the preliminary findings from these data indicate that barriers to mobility into management for Asian Americans are even greater than African American and Hispanic Americans, who are underrepresented in science and engineering as professionals. Opportunities for Asian Americans in management were largely in research administration. Part 2 of this study attempted to look at social psychological and institutional variables, in three specific ways: (1) surveys administered in a select number of geographical locations where there is a heavy concentration of high-tech industries, (2) in-depth interviews about experiences in the corporate culture, including barriers and opportunities, and (3) case studies of specific corporations and the effect of the glass ceiling on career opportunities. The data here underscored culture-bound barriers, lower returns on education, and overall greater job dissatisfaction .

Woodrum Eric, "An Assessment of Japanese American Assimilation, Pluralism, and Subordination," *American Journal of Sociology* 87 (1), July 1981.

Using both census data and generation-specific surveys conducted by the Japanese American Research Project, the author suggested that while Japanese Americans mirror certain assimilation patterns of European immigrants, their pattern of representation in the professional or managerial groups fluctuated between overrepresentation and underrepresentation, depending on the historical period in question. Overall, the evidence revealed lower returns on their educational and occupational achievements. Although Japanese Americans had assimilated along a number of dimensions, inequality vis-a-vis whites of equivalent qualifications was dramatized by the combined presence of high educational achievement and comparatively low earnings or occupational attainment. Although the reasons for such inequities remained unclear, the fact of minority disadvantage was a persistent feature.

Yun, Grace, "Status of Asian American University Faculty," pp. 135-151 in Grace Yun (ed.), *A Look Beyond the Model Minority Image: Critical Issues in Asian America* (New York: Minority Rights Group), 1989.

This analysis, based on a national and regional faculty survey, looked at the careers of Asian American and white science faculty. The demographic data underscored important differences in background, most significantly the fact that white faculty were more likely to be from working-class backgrounds than Asian Americans, whose fathers were reported to have been "professionals, administrators and managers." Yun suggests that this difference was not a result of "upward mobility of native-born descendants of early Asian immigrant laborers, but rather the recruitment of foreign-born and foreign-educated scholars from advantaged backgrounds..." Their status and relative performance were further compared with white faculty in terms of research productivity and teaching loads.

**APPENDIX I.
HISTORICAL OVERVIEW OF
ASIANS IN THE AMERICAN LABOR MARKET**

A. EARLY IMMIGRANT STATUS: MIDDLE TO LATE-NINETEENTH CENTURY

Although their total number prior to World War II never reached one-quarter of one percent of the total US population, each successive wave of major Asian immigration was followed by anti-Asian sentiment and various forms of legislated exclusion. In general, attempts to exclude or segregate tended to follow their entry into direct competition with white workers. Exclusion assumed two general forms -- restrictive immigration and occupational segregation. As "aliens ineligible for citizenship," Asian immigrants were more vulnerable than other immigrant groups not only to being used as a form of cheap labor but also to exclusionary policies. The largest groups of early Asian immigrants to be denied the right to naturalization were the Chinese, Japanese, and Filipinos. Although there are official records of Koreans and Asian Indians in the United States prior to World War II, their numbers were relatively small.

By virtue of being the first Asian immigrants to arrive in the United States in significant numbers, the Chinese became the first national group to be excluded by federal law. From their arrival, beginning in the 1850's until their formal exclusion in 1882, a thirty-year period of conflict would characterize their relationship with "native" whites. Drawn by news of the California gold rush, 20,000 Chinese would arrive in California in 1852, prompting the passage of a Foreign Miners' Tax the following year. In 1853, Chinese immigration dropped to less than 5000.¹

In general, the Chinese found greater acceptance when not in direct competition with whites. This applied to Chinese miners who confined themselves to working

¹Historian Sucheng Chan ascribed this drop also to the discovery of gold in Australia. Chinese immigration in 1854 climbed back up to 16,000, and then oscillated for the next ten years between 2000 and 9000 immigrants a year. Sucheng Chan, "Immigration and Livelihood, 1840s to 1930s," pp. 25-42 in *Asian Americans: An Interpretive History* (Boston: Twayne), 1991, p. 28.

abandoned mines as it did to those who provided needed services as cooks and launderers.² As cheap labor, they were indispensable for the dangerous work of laying the mountainous western half of the Transcontinental Railroad.³ When the railroad was completed in 1869, almost ten thousand Chinese were discharged.⁴ Jobless, many eventually found work in agriculture as migrant laborers, harvesters, or tenant farmers. According to one estimate in the 1880's, the Chinese made up 75 percent of the seasonal farm workers.⁵ The first successful anti-Chinese bill was passed by Congress in 1879. Vetoed by President Hayes in 1880⁶, another bill was introduced, including among its arguments the view that thousands of whites were leaving California because of the Chinese presence. Two years later, the Immigration Act of 1882 was signed into law. Another two years later, the Immigration Act was further clarified to explicitly forbid the entry of wives of laborers.⁷

Although the Exclusion Act of 1882 severely curbed Chinese immigration, it did not put a stop to the mob violence which wreaked havoc on the Chinese throughout the state, since Chinese still in the U.S. continued to be the mainstays in manufacturing and agriculture. Rather the harassment and violence of the 1870's intensified. Between 1890 and 1900, rioting, burnings, beatings, shootings, and other forms of intimidation had reached such a point that it had spread not only to rural areas but to other Western states.

With the exclusion of Chinese beginning in 1882,⁸ immigrants from Japan would take their place, becoming a sizeable population within less than two decades, contributing to both California's and Hawaii's agricultural economies. When Hawaii

²Chan, 1991, pp. 33-34.

³Victor G. Nee and Brett de Bary Nee, *Longtime Californ': A Documentary Study of an American Chinatown* (Boston: Houghton Mifflin Co.), 1973, pp 38-43.

⁴Apart from not being invited to the celebration ceremonies, these former employees were denied free passage back to California. Chan, 1991, p. 32.

⁵Nee and Nee, 1973: 43.

⁶The Burlingame Treaty recognized the rights of citizens from China and the United States to emigrate. Chan, 1991: 54.

⁷Nee and Nee, 1973, pp. 55-56.

⁸The Immigration Act of 1882 was the first in a series of laws that would restrict Chinese immigration. U.S. Commission

became a formal U.S. territory in 1900, contract labor became illegal, and free immigrants, such as the Japanese, were actively recruited. The mainland also desired Japanese workers for railroad work, lumber mills, and farming, and beginning in 1902 lured almost 34,000 Japanese from Hawaii, until this was stopped in 1907 by an executive order from President Theodore Roosevelt prohibiting such remigration.⁹ However, the production of specialty crops so depended upon such labor that while they numbered only 55,000 on the mainland (as compared to 150,000 in Hawaii) before 1908, there was a dramatic shift thereafter. Between 1908 and 1924 more than 120,000 arrived on the Western part of the continent (in contrast to 48,000 immigrating to Hawaii).¹⁰ Overall, however, these numbers represent a general decline in Japanese immigration from 1900-1910, as a result of a "Gentlemen's Agreement" with Japan (1907), whereby Japan agreed to stop issuing passports to laborers seeking to emigrate. Moreover, any loopholes to Japanese immigration were effectively dealt with by the 1924 National Origins Act. The 1924 Act, which would not be repealed until about forty years later (in 1965), created a permanent quota or ceiling on the total number of alien immigrants (150,000/year), limiting the immigration of each nationality group to two percent of the US residents of that nationality in the country, as reflected in 1890 census. The intent and effect was to restrict immigration to the Western Hemisphere.¹¹

Insofar as racial relations were shaped by larger economic dynamics, especially how different sectors of the economy were developing, Asian Americans were excluded from certain sectors that were growing. These early immigrants, geographically concentrated¹² in California and Hawaii,¹³ did not participate in the industrialization

on Civil Rights, *The Tarnished Golden Door: Civil Rights Issues in Immigration* (Washington, D.C.), September 1980, p. 8.

⁹As Sucheng Chan explained, this order specifically prohibited those with passports to Hawaii, Mexico, or Canada from remigrating to the continental U.S. Chan, 1991, p. 37.

¹⁰Chan, 1991, p. 38.

¹¹U.S. Commission on Civil Rights, September 1980, pp. 9-10, 13.

¹²According to Bonacich, there is also some internal variation among Asians in that some tended to resettle elsewhere. Thus, while the Chinese were heavily concentrated in California between 1860 to 1940, they also tended to migrate elsewhere, especially to New York, whereas the Japanese for the most part stayed in California and Hawaii. Edna Bonacich, "Some Basic Facts: Patterns of Asian Immigration and Exclusion," pp. 60-77 in Lucie Cheng and Edna Bonacich (eds.), *Labor Immigration Under Capitalism: Asian Workers in the United States* (Berkeley: University of California), 1984.

¹³Edna Bonacich, "Asian Labor in the Development of California and Hawaii," pp. 130-185 and John M. Liu, "Race, Ethnicity, and the Sugar Plantation System: Asian Labor in Hawaii, 1850 to 1900," pp. 186-210 in Lucie Cheng and Edna

occurring on the East Coast. Many, moreover, found themselves locked out of the growing and industrializing sectors of the economy in California.

In a review of statistical data in the early part of this century, Edna Bonacich¹⁴ documented a disproportionate amount of occupational segregation among Asian workers in the pre-World War I period. Reporting separately on two census years (1870 and 1910), she noted that in 1870 Chinese¹⁵ were overrepresented in the service industries (44.6%) and mining (26.9%). Although only one-third of California's population worked in service industries, the Chinese, who were only 14 percent of the labor force, were overly concentrated here, representing seventy percent of laundryworkers. They were underrepresented, on the other hand, in agriculture (10.3%), manufacturing (10.3%), and in trade and transportation (5%). Within these occupational fields, moreover, they were again narrowly distributed, such that in manufacturing, they worked primarily as cigar makers and tobacco workers, boot and shoemakers, brick and tile makers, and cotton and woolen mill operatives. They were notably absent, by contrast, from construction, where a large percentage of manufacturing workers found jobs. This occupational segregation implicitly amounted to exclusion from sectors of the economy that were growing and offered better job opportunities.

The occupational distribution of Asians continued to be skewed forty year later. Reporting on occupational data for 1910,¹⁶ Bonacich found that in both California and Hawaii, Chinese and Japanese were concentrated in three general areas of work -- farm labor, domestic and personal service work, and heavy labor in manufacturing. Again, it was their relative exclusion from "advanced" sectors of employment as well, that

Bonacich (eds.), *Labor Immigration Under Capitalism: Asian Workers in the United States* (Berkeley: University of California), 1984.

¹⁴Edna Bonacich, "Some Basic Facts: Patterns of Asian Immigration and Exclusion," pp. 60-77, and "Asian Labor in the Development of California and Hawaii," pp. 130-185 in Lucie Cheng and Edna Bonacich (eds.), *Labor Immigration Under Capitalism: Asian Workers in the United States* (Berkeley: University of California), 1984.

¹⁵Bonacich reasoned that since there were only 33 Japanese in California at the time, the totals for "nonwhites" here more accurately represent the Chinese industrial distribution.

¹⁶The available data here are incomplete. According to Bonacich (1984: 70), "The census presents only selected occupations for Chinese and Japanese and does not provide the totals for the broad occupational categories." For this

painted a total picture of restricted opportunities.

Like the 1882 Chinese Exclusion Act, the 1907 Gentlemen's Agreement would close the door to Japanese laborers. The Gentlemen's Agreement, however, had a loophole enabling wives and relatives to enter. Thus, while the resident Chinese community remained a bachelor society, the immigration of Japanese women enabled the Japanese community to form families. Between 1909 and 1923, over 33,000 Japanese women immigrated as wives or "picture brides."¹⁷ Like their male counterparts, Japanese women were concentrated in labor-intensive, low-wage work which was not directly competitive, in this case, with white women. Japanese male labor would eventually become increasingly expensive, and the appearance of permanent settlements would, in turn, give further fuel to anti-Japanese sentiment, which had already led to the Gentlemen's Agreement. In 1913, the Alien Land Law was passed, preventing first-generation Japanese (Issei) from owning or leasing land for more than three years.

When Japanese immigration, in turn, was restricted by the 1924 National Origins Act, workers from India were already helping to fill the need for agricultural workers. While Asian Indians were originally considered for work on Hawaiian plantations, the recruitment of Japanese in the late 1880's made this unnecessary.¹⁸ First arriving in the United States in 1898, Indian immigrants did not really begin to enter in any significant numbers until 1904, when 224 were noted to have come directly from India. (Indirect migration from Canada would eventually become significant, too.)¹⁹ Legal immigration from India would stop in 1917, when India was listed among those countries in the "barred zone," which restricted entry to nonimmigrants, such as students, travelers, or officials. In general, the vast majority (65-80%) of all Indian workers in the United

reason, detailed comparisons are hard to make.

¹⁷Evelyn Nakano Glenn, "The Dialectics of Wage Work: Japanese-American Women and Domestic Service, 1905-1940," pp. 470-514 in Lucie Cheng and Edna Bonacich (eds.), *Labor Immigration Under Capitalism: Asian Workers in the United States* (Berkeley: University of California), 1984, p. 472.

¹⁸Ron Takaki, *Strangers from a Different Shore: A History of Asian Americans* (New York: Penguin Books), 1989, p. 294.

¹⁹The figures in this section are from Sucheta Mazumdar, "Punjabi Agricultural Workers in California, 1905-1945" pp. 549-578 in Lucie Cheng and Edna Bonacich (eds.), *Labor Immigration Under Capitalism: Asian Workers in the United States*

States were agricultural laborers or unskilled workers.

The first official record of Koreans in the United States was in 1899.²⁰ Like the Asian Indians, their numbers were relatively small compared to the Chinese, Japanese, and Filipino immigrant populations prior to World War II. Between 1899-1902, Korean emigrants totaled 168, averaging 42 per year. In 1905, the peak year of Korean immigration, 4929 were admitted. That same year, however, the Korean government restricted emigration. In addition, between 1905 and 1910, about 1133 Koreans left the United States for Korea. Japan's annexation of Korea in 1910 reduced emigration from Korea even more sharply. In 1920 the total number of Koreans in the United States was 6174. In both Hawaii and California, the majority lived in rural areas, predominantly engaged as farm workers.

Like other Asian immigrants, Filipinos were also overrepresented in agriculture. However, given the timing of their arrival in California, certain opportunity structures or economic niches were less available. Between the years 1909 and 1946, slightly over 125,000 Filipinos, predominantly male, migrated to Hawaii.²¹ Although arriving in Hawaii as early as 1906, they were not only the last important wave of immigrants recruited to meet plantation demands for cheap labor, but invariably at the bottom of the pay scale. After 1926, active recruitment was unnecessary because migration seemed to have "achieved a satisfactory momentum of its own, although movement was still carefully supervised."¹ Women began appearing in large numbers in the early 1920's. At its peak in 1931, the Filipino population in Hawaiian territory was more than 63,000, or 17.1 percent of the island's population.²² Filipinos would constitute the largest group of Asian agricultural workers on the mainland by the 1920's. The agricultural economy following World War I saw falling farm prices and therefore

(Berkeley: University of California), 1984.

²⁰The following figures are from Sun Bin Yim, "The Social Structure of Korean Communities in California, 1903-1920," Pp. 515-548 in Lucie Cheng and Edna Bonacich (eds.), *Labor Immigration Under Capitalism: Asian Workers in the United States* (Berkeley: University of California), 1984.

²¹Sharma, Miriam, "Labor Migration and Class Formation Among the Filipinos in Hawaii, 1906-1946," Pp. 579-611 in Lucie Cheng and Edna Bonacich (eds.), *Labor Immigration Under Capitalism: Asian Workers in the United States* (Berkeley: University of California), 1984, pp. 582-584.

substantially reduced possibilities for making a livelihood as tenant farmers or landowners.²³ In 1930, 80 percent of Filipinos were still on the plantations. Their structural opportunities for upward mobility, however, had changed little. In the end, the Great Depression and mechanization in farming, combined with their own dissatisfaction as agricultural wage laborers, propelled many off the plantation altogether. White mob violence would become particularly virulent as the economic depression grew deeper.²⁴ Like other Asian immigrants, they found greater acceptance as workers in the service sector, where in 1930, 25 percent (or 11,400) were so employed.²⁵ Until 1934, Filipinos were U.S. nationals, and therefore able to enter the United States more freely than other Asian immigrants affected by the passage of various restrictive immigration laws. The Tydings-McDuffie Act in 1934 reclassified the Filipinos aliens, and thereby put an end to their unrestricted entry.²⁶

B. THE SECOND-GENERATION AND WORLD WAR II

The particular vulnerability of early Asian immigrants is captured in the fact that they were effectively targeted by restrictive immigration laws from which the American-born second generation were relatively immune. As aliens ineligible for citizenship, moreover, they could not vote, own land, or even pursue careers which required citizenship status, e.g. law and public service. American-born Asians could legitimately hold title to land and had somewhat greater opportunities for pursuing a wider range of career options. Between 1910 and 1930, the percentage of Chinese and Japanese enrolled in U.S. schools steadily increased, so that by 1930 they had already surpassed whites in terms of school attendance.²⁷ Despite educational parity, Asian

²²Sharma, 1984, p. 586.

²³Chan, 1991, p. 39.

²⁴Takaki, 1989, pp. 326-327.

²⁵Takaki, 1989, pp. 316-317.

²⁶As Takaki explains, the 1934 law was more restrictive than that affecting Chinese and Japanese: "The Tydings-McDuffie Act did not have a provision allowing Filipino "merchants" to bring wives here as the 1888 law did for the Chinese, and it did not exempt family members and wives as the 1908 Gentlemen's Agreement did for Japanese." Takaki, 1989, pp 331, 337.

²⁷Charles Hirschman and Morrison G. Wong, "The Extraordinary Educational Achievement of Asian-Americans: A

Americans nevertheless found their job opportunities circumscribed, unable to actually secure positions, whether it be union jobs and certain kinds of white-collar employment, or jobs as highly trained professionals.

Some of the earliest data on the employment problems of college-educated Asians in the United States were collected prior to World War II. Specifically, data on the underemployment and unemployment of first and second-generation Chinese and Japanese were among the major findings gathered by sociologist Robert E. Park in his 1925 Survey of Race Relations. Other studies which reported on occupational data from the 1925 survey included a study published in 1928 by Eliot Grinnell Mears (a professor of geography and international trade), entitled, *Resident Oriental on the American Pacific Coast: Their Legal and Economic Status*, and another by sociologist William Carlson Smith, *Americans in Process: A Study of Our Citizens of Oriental Ancestry*, published in 1937.

Despite stereotypes of Asian Americans which have equated educational achievement with occupational success, the experiences of this second generation stand as a forerunner to later experiences of the glass ceiling. Where nascent conflict emerged in the area of small business and skilled work, inequities in pay and promotional opportunities were a dominant pattern. William Carlson Smith thus reported: "The head of a commercial college in Honolulu informed the writer that she had no difficulty in placing oriental students in positions...They are, however, not on parity with those of north-European ancestry; they are usually paid a lower salary for the same work and the opportunities for advancement are more limited."²⁸ Smith concluded that overall there was "considerable discrimination against the races of color in the occupational field. The Orientals are not promoted to the more responsible positions."²⁹ Even those bosses or executives who might have favored more equitable policies simply because it made better business sense were deterred by the requirements of informal social interaction that such promotions might require on and off the job. The only situation

Search for Historical Evidence and Explanations," *Social Forces* 65 (1): 1-27, September 1986.

²⁸William Carlson Smith, *Americans in Process: A Study of Our Citizens of Oriental Ancestry* (Ann Arbor, Michigan: Edwards Brothers, Inc.), 1937, p. 77.

cited to warrant deviation from such discriminatory practices were budgetary shortfalls which made hiring Asians at lower salaries more economically feasible.

The problem of employment for second-generation American-born Asians was not only acute but chronic. Discriminated against in mainstream American society despite their fluency in English, they were so Americanized that they lacked the language facility that might have enabled a few to find jobs in their own communities.³⁰ Most, however, desperately wanted to escape jobs in such ethnic enclaves, which were not only lower-paying and of lower occupational status but lacked the capacity to absorb all these college graduates. According to the available evidence,³¹ while Asians were officially enumerated in professional service work, there were many barriers to their actually practicing as professionals.³² Citing their vocational problems, Eliot Grinnell Mears felt that the only realistic job options available to second-generation Asians were in those very undesirable sectors of the economy where their parents had been relegated to, namely, agricultural pursuit, domestic and personal service, or small ethnic enterprises. The managerial occupations to which they might aspire under such circumstances were those which existed in racial-ethnic enclaves, e.g. manager of tea-rooms. Venturing outside these segregated communities and entering into direct competition with whites meant either that Asian Americans had to have higher qualifications for the same job or accept positions at lower rungs of the ladder. Thus, Mears stated: "In the meantime they must exhibit unusual qualifications to compete successfully against Americans in the same line of work; therefore it is not surprising that well-educated persons of Oriental parentage are forced to a lower step on the occupational ladder, because they cannot get a hold on the upper rungs."³³

²⁹Smith, 1937, p. 86.

³⁰Eliot Grinnell Mears, *Resident Orientals on the American Pacific Coast: Their Legal and Economic Status* (Chicago, Illinois: The University of Chicago Press), 1928, pp. 321-322, 328-329.

³¹Mears included tabulations from the 1920 census which listed Japanese and Chinese men and women in various professions. No figures, however, were included from which to assess their relative representation in the professions, as compared to other occupations. Nor were comparable figures made available for the general population.

³²Mears, 1928, pp. 317-329.

³³Mears, 1928, pp. 208-209.

Reporting on research done between 1929 and 1933 by Stanford social scientists Edward K. Strong, Jr., Reginald Bell, and their associates, Sucheng Chan noted similar sentiments expressed about the career aspirations of second-generation Japanese Americans (Nisei). Like Mears, Strong and his colleagues advised the Nisei to steer away from professional jobs, such as medicine, dentistry, engineering and geology, teaching, and law, even though many polled had indicated a preference for such occupations over agricultural work.³⁴ In general, the work considered suitable for Asians and Asian Americans during this period was thought to be that where racial prejudice was said to be less pronounced, i.e. work which was not directly competitive with white workers, certainly subordinate, and not requiring close physical contact or social interaction. Indeed, as Chan points out, one area of professional employment which Strong and his associates considered plausible for Nisei was "as accountants and actuaries, because such work was 'an inside activity in which there is little need to contact the general public.'"³⁵

So poor or uncertain were their employment prospects prior to World War II that some were forced to leave the country. The few who managed to gain entry into the same line of work as whites were frequently passed over for promotion.³⁶ An even less fortunate scenario was that of professional graduates facing downward mobility into low-level service work.³⁷

It would take World War II to bring many Asian professionals into the mainstream.³⁸ Formerly denied the right to become naturalized citizens, Chinese along

³⁴Twenty two percent aspired to become doctors, dentists, and pharmacists, 15% engineers, compared to 9 percent who mentioned agricultural work. Cited in Chan, 1991: 114.

³⁵Chan, 1991: 114.

³⁶Thus, it was reported that a Japanese draftsman working for the Southern California Telephone Company for ten years found he could not advance, despite his recognized ability. He eventually left for Japan where he became vice-president of a small steamship company. Mears, 1928, p. 320.

³⁷An example is given of a Harvard graduate who had no choice but to work as a janitor in Los Angeles. Mears, 1928, p. 322.

³⁸L. Ling-chi Wang, "The Politics of Assimilation and Repression: The Chinese in the United States, 1940-1970," unpublished manuscript on file at the University of California, Asian American Studies Library.

with Filipinos were naturalized en masse³⁹ so that they could participate in the war effort as technicians, engineers, or military personnel. By contrast, Japanese in the United States, including their American-born offspring, were identified with the enemy, and consequently suffered the loss of property, status, and liberty through their internment during the war.⁴⁰

In addition to making it possible for many Asian Americans at the time to become naturalized citizens, the Second World War also opened the door for the first time to mainstream employment. Previously underemployed college-educated Americans of Asian ancestry, both men and women, were among the first beneficiaries. Reporting on the few figures available that show how important the war was in facilitating this transition, Sucheng Chan stated:

In 1940 only about 1,000 Chinese -- a fifth of them women -- held professional and technical jobs out of a gainfully employed population of 36,000. Ten years later, some 3,500 -- a third of them women -- did so among 48,000 gainfully employed. Most of the professionals worked as engineers and technicians in war industries, which experienced an extraordinary boom and were desperately short of manpower. Among Chinese American women, the rise in the number of white-collar clerical workers was also noticeable -- from 750 in 1940 to 3,200 in 1950. Like women of other ethnic backgrounds, Chinese American women entered the labor force in significant numbers in the 1940s: working women numbered 2,800 in 1940 and 8,300 ten years later.⁴¹

For over a century, the history of Asian immigration policy in the United States had been one which alternately pushed for immigration and exclusion. The 1924 National Origins Act in particular had had an adverse and disproportionate impact on Asian immigration ever since it was enacted. In addition to placing a ceiling on immigration of 150,000 per year, the 1924 Act set quotas based on two percent of the

³⁹Chan, 1991, p. 122.

⁴⁰Chinese in general were granted the right of naturalization until 1943. Filipinos would not obtain these rights until 1946. Japanese in the U.S. were denied these rights unequivocally beginning in 1922 and until 1952. *Sucheng Chan, Asian Americans: An Interpretive History* (Boston: Twayne), 1991, pp. 47, 122.

⁴¹Chan, 1989, pp. 121-121. Chan's data are derived from L. Ling-chi Wang, "The Politics of Assimilation and Repression: The Chinese in the United States, 1940-1970," unpublished manuscript on file at the University of California, Asian American Studies Library.

total numbers of that nationality group residing in the United States according to the 1890 census. In terms of its practical consequences, such a policy meant exclusion for Asians. Aliens from the Western Hemisphere were exempted from such quotas and classified as "nonquota" immigrants.⁴² The national origins immigration quota system was eventually abolished in 1965 and replaced by a seven-category preference system, which gave preference to relatives of U.S. residents and to immigrants with special abilities, talents, or needed skills.⁴³ The effect was to dramatically transform the face of immigration, and in particular the nature of Asian American Pacific Islander population.

⁴²U.S. Commission on Civil Rights, *The Tarnished Golden Door: Civil Rights Issues in Immigration* (Washington, D.C.), September 1980, pp. 9-10.

⁴³U.S. Commission on Civil Rights, September 1980, p. 11, see footnote 55, for details surrounding these seven categories.

APPENDIX II.
**U.S. COMMISSION ON CIVIL RIGHTS CONSULTATION ON "CIVIL
RIGHTS ISSUES OF ASIAN AND PACIFIC AMERICANS: MYTHS
AND REALITIES," GEORGE WASHINGTON UNIVERSITY,
WASHINGTON, D.C. (MAY 8-9, 1979)**

The issue of a glass ceiling among Asian Americans had been brought before the U.S. Commission on Civil Rights in a two-day consultation (May 8-9, 1979). A number of Asian American professors, researchers, attorneys, community leaders, directors of social service agencies, and direct service providers came forward to testify on a range of issues, including employment.¹ The testimonies and papers from this have been published in the Commission report entitled *Civil Rights Issues of Asian and Pacific Americans: Myths and Realities*.

The employment information presented illustrated how the problems of Asian Americans are often camouflaged by certain socioeconomic indicators. Asian Americans as a whole seemed to share a unique form of "underemployment," even though there might be differences in its manifestation and degree. Some of the earliest testimony, for example, pointed to the existence of underemployment of both longtime residents and recent immigrants, who for different reasons were denied access to jobs and promotional opportunities commensurate with their education and training.² On the second day of the consultation, panelists presented data on "employment issues" that further underscored these workplace inequities. Specifically, this evidence not only questioned patterns of upward mobility and income equality, but the use of standard socioeconomic indicators generated by the U.S. Bureau of the Census.

For example, the aggregation of Asian and Pacific Americans into one census category was shown to create a different picture than one obtained from the use of distinct and separate categories for the populations in question. In 1979, Asian

¹The collective testimony here encompassed civil rights, the census, women's issues, immigration, Pacific Americans, education, employment, housing, and health. Testimony and full papers are included in the volume *Civil Rights Issues of Asian and Pacific Americans: Myths and Realities*, a consultation sponsored by the U.S. Commission on Civil Rights, May 8-9, 1979.

²See the first three presentations by Minoru Yasui (Executive Director of the Commission on Community Relations in Denver), Canta Pian (Acting Director, Division of Asian American Affairs, U.S. Department of Health, Education, and

Americans sought to ensure that the forthcoming 1980 census reflect the diversity of their population, since sole use of the aggregate census category "Asian Americans" camouflaged important social, economic, and historical differences among Asian American subgroups.³ National data, similarly, camouflaged important regional differences. In 1979, the geographical concentration of Asian Americans in two states -- California and Hawaii -- meant that the use of national median income⁴ for comparative purposes would artificially skew the earnings of those in these high-income states towards the upper end. In other words, *national* figures made it appear that Asian Americans were not only on parity with other groups, but excelling. In reality, their incomes were to a large degree inflated due to their regional concentration in states where the high cost of living also took a deep cut into earnings. Disaggregated data, such as metropolitan area statistics, came closer to capturing the inequities concealed by national averages.

In addition to bringing a critique to the way data were gathered and comparisons made, the panelists showed that assumptions or inferences about mobility from educational data alone were misleading. Indeed, the occupational patterns of Asian American professionals, presumably models of upward mobility, suggested a glass ceiling. For example, in 1979 college-educated Asian American women were concentrated in clerical jobs, part of a larger picture and pattern of segregation and underemployment among Asian Americans.⁵ A glass ceiling was also manifested in other ways -- lower returns on education, underrepresentation in policymaking positions at the federal level, and segregation in the manufacturing and service industries.⁶ The relationship between educational preparedness and occupational attainment, in other words, was extremely problematic or uncertain in these instances.

Welfare), and Professor Ling-chi Wang (University of California, Berkeley).

³U.S. Commission on Civil Rights, 1979, pp. 27-28, 55-59, 389-393, 402-403, 434-444, 500-502.

⁴Median household income, for example, was considered less accurate than median household per capita income. For comparative purposes, the former might underestimate the disproportionately large number of multiple wage earners in the Asian American household, or the low returns on educational achievement that might necessitate such high participation in the labor force.

⁵U.S. Commission on Civil Rights, 1979, pp. 9-10, 28.

⁶U.S. Commission on Civil Rights, 1979, pp. 389-566.

Finally, participants to this 1979 consultation also emphasized that existing data were overall deficient due to the lack of representation of Asian Americans in key decision-making bodies, especially in federal agencies. Thus, Professor Ling-chi Wang underscored the absence of any comprehensive federal study on Asian Americans, together with the "conspicuous absence of Asian Americans on Federal commissions, boards, councils, advisory committees, and task forces," including the staffs of the Commission before which he spoke.⁷

...Federal Government agencies responsible for collecting data, investigating violations, and enforcing civil rights laws have come up with virtually no comprehensive report or study about Asian Americans. Whether it be this Commission, the Office of Federal Contract Compliance, EEOC, the Census Bureau, the Bureau of Labor Statistics, and on and on with all the researching arms of the various departments within the Federal establishment, we have found very little of any usable type of information on Asian Americans.

In other words, Asian American problems have been totally ignored by the Federal establishment by virtue of the absence of data... Absence of high level Asian Americans in these crucial agencies effectively render the Asian American community ineligible for needed resources and services.⁸

Referring to the data that would be presented by panelists, Professor Wang pointed to the pervasiveness of inequities overlooked by popular stereotypes of Asian Americans as an upwardly and rapidly assimilating minority:

Careful analysis will show (that) a disproportionately large percentage of Asian Americans, especially among the non-English-speaking ones, are now working in substandard menial jobs in sweatshops and in service industry, while those well educated and considered to have successfully entered the primary sector of the labor market are found to be in only certain jobs that are race-typed...segregated consistently by racial prejudice, lower salary schedules, restricted upward mobility, and inferior employment status and benefits. Popular stereotypes and pseudo-scientific studies suggesting Asian Americans are successful or fully assimilated, therefore, have virtually no material basis.⁹

⁷U.S. Commission on Civil Rights, 1979, p. 25.

⁸U.S. Commission on Civil Rights, 1979, pp. 24-25.

⁹U.S. Commission on Civil Rights, 1979, p. 45.

Professor Wang also testified¹⁰ that prior to World War II, the identity of Asian Americans as professionals had yet to be established. Those among them who had managed to acquire a college or university education were often forced to return to menial jobs on farms or to the segregated service sector of the economy -- restaurants, laundry business, and small grocery stores. Small ethnic business enterprises, mistakenly viewed by the larger public as symbols of "successful" entrepreneurship, are shown to better reflect the unemployment and underemployment that affects Asian American community, even those with professional training and education.¹¹ The war industry would eventually call upon the untapped potential of these educated Americans. Just as the war opened the door for other minorities and women to move into new occupational arenas, so it would draw on the much needed technical skills of Asian Americans, thereby promoting the greater inclusion of Americans into the workforce. Given that the dynamics of inclusion were motivated not so much by egalitarian, democratic considerations as by economic needs, Professor Wang was cautious about the implications well-educated Asian Americans:

...it would be erroneous to perceive the new job opportunities afforded these well-educated Asian Americans in war-related industries during the war and throughout the Cold War as the definitive removal of the racial barrier and final acceptance or assimilation of Asians in the American mainstream, as many, including Asian Americans, have come to believe... In the case of the well-educated Asian Americans, it was by necessity that they were drawn or drafted into the war industries, clearly not due to such politically charged notions of "success" and "assimilation." In other words, Asian Americans were recruited... in very much the same manner as their ancestors or parents when they were first brought over from Asia to meet the demand for a particular type of labor in the rapidly developing economy of the West.¹²

In sum, a number of factors were mentioned which contributed to a distorted picture of the status of Asian Pacific Americans. Analyses of Asian Pacific Americans in general were shown to be fundamentally affected by the level of detailed information

¹⁰U.S. Commission on Civil Rights, 1979, pp. 44-45, 372-374.

¹¹U.S. Commission on Civil Rights, 1979, pp. 372-373, 392, 395, 400-402, 442-444, 470, 501-502; 508-517.

made available in the census. Aggregated data which did not adjust for the regional concentration of Asian Pacific Americans in high-income states were shown to artificially elevate Asian incomes above the national average. In general, lower returns on education, occupational segregation, and exclusion from policy-making positions qualified the view that historical discrimination had been ameliorated with the institutionalization of legal protections, if not the passage of time. A narrow focus on the educational achievements of Asian Pacific Americans and their recent mobility into the mainstream thus ignored important patterns of occupational segregation and underrepresentation.

¹²U.S. Commission on Civil Rights, 1979, pp. 44-45.

APPENDIX III. LANGUAGE BARRIERS

While Asian Americans have identified "written and communication skills" as a major obstacle to career advancement,¹ it is difficult to determine the degree that language barriers directly interfered with work performance, as opposed to serving simply as a basis for "racial prejudice and stereotypes" and "arbitrary" treatment. Standards for work performance should ideally be based on realistic expectations associated with job performance. Recognizing this, the Equal Employment Opportunity Commission has published guidelines regarding "national origins discrimination" that have been particularly attentive to how prejudice about accents may be used as an arbitrary and unnecessary basis for discriminatory treatment.

Future research might attempt to ascertain the extent to which language skills are carefully assessed with regard to the work in question. The following Asian American employee commented before the U.S. Commission on Civil Rights on how standards were artificially high, disqualifying in ways which were not only prejudicial towards foreign-born speakers but also not clearly proven to be essential for job-related tasks.

Even after we pass a certain test or a certain set of tests, the rules or penalties are much harsher against us if we ever make any mistake...

Many of us feel that our Asian accent is a major stumbling block in our career path... There is no doubt that communication skills are very important. However, adopting a standard that is unreasonably high may be tantamount to allowing an employment practice that is prejudicial against foreign-born Asian American employees...²

Even though requirements for English fluency may be relevant if not critical for job performance, these requirements might also be manipulated as the grounds or rationale for capping mobility. Cases brought before the Glass Ceiling Commission indicated how an employee's demonstrated language ability could be contradicted or

¹Asian Americans for Community Involvement, *Qualified But...: A Report on Glass Ceiling Issues Facing Asian Americans in Silicon Valley*, 1993.

²U.S. Commission on Civil Rights, *Civil Rights Issues Facing Asian Americans in the 1990s* (Washington, D.C.: U.S.

misrepresented by superiors.

Allegations of language problems and misrepresentation of an applicant's file were also noted by former EEOC member, Joy Cherian. In the following case, the person in question was alleged not only to have "communication problems" but to have generated cost overruns. The contrary, in fact, turned out to be true.

...another Asian American was denied a promotion to a GS-15 position in spite of enviable academic qualifications and a distinguished career inside and outside the government on the pretexts of communication problems and cost overruns under his command. The true facts were otherwise. He had been rated outstanding in written communications six times by five different supervisors, and above average another four times. And the cost overruns had occurred not under him, but under others -- all of whom were White Americans -- who had been promoted ahead of him. Even more, the evidence was that he had in fact brought the costs under control during his command.³

Whatever the perceived cause of discrimination, at issue in cases of promotional denial is the accurate representation of a file. Where discrimination involves misrepresentation by an employer, there is already precedent for successful legal action. A federal court judge, for example, recently ruled that Vincent Maximilian-Yee, an administrator for Hughes Aircraft who had been fired in 1985, be reinstated, the grounds being that his employment history had been misrepresented by his supervisor.⁴

The number of cases filed with the Equal Employment Opportunity Commission for accent discrimination (as well as English-only challenges) was reported to have increased 30 percent, from 11,114 in 1989 to 14,394 in 1992. Most recently, a settlement was reached in a civil suit filed by five Filipino Americans, collectively fired on February 11, 1992 because of alleged language problems (*Ramirez vs. American Mutual Protective Bureau*). Although the defendants involved (the U.S. General Services Administration and the company it had contracted with, American Mutual Protective

Government Printing Office), Feb. 1992, p. 132.

³Cherian, 1993, p. 12.

⁴*Los Angeles Times*, September 16, 1992.

Services) admitted no wrongdoing, the settlement of the case essentially upheld the principle equal opportunity and non-discrimination where accent and national origin are concerned. (*Asian Week*, 1/10/94)

APPENDIX IV. STATE AND FEDERAL CIVIL SERVICE EMPLOYMENT

The little evidence that is available on state employment is mixed. According to Joyce Tang, Asian Americans fare better in the public sector in general, and in state agencies in particular. Summarizing relevant findings from her own study, she reported:

There are fewer road blocks for Asians to move ahead in state than in local agencies. Asian engineers benefit more from a bureaucratic system in which guidelines for job assignment, evaluation, and promotions are more formalized.... The data also suggest greater sanctions for affirmative action policies at the state level...¹

In a separate study of state employees in California, however, more evidence was found for the underrepresentation of Asian Americans in supervisory positions. In 1988, Dean Lan, Program Manager for the State Personnel Board of California, produced what was then the most detailed report to date on Asian American representation in state civil service.² Apart from calling attention to the overall underrepresentation of Asian, Filipino, and Pacific Islander groups in five state departments,³ Lan felt "the compelling finding" was their general absence at the "decision-making level."⁴ Only 2.2 percent (or 15) of all state CEA (Career Executive Assignments) were held by this population. Among those departments identified as having few if any such personnel in management were the Department of Transportation. While 8.9 percent of the workforce here, not a single Asian, Filipino or Pacific Islander had been appointed to any of the 45 CEA positions, even though Asian made up a substantial portion of Caltrans' engineers: "16.98 percent of all Senior Transportation Engineers, 14.99 percent of all Associate Transportation Engineers, 21.31 percent of all Associate Engineers, and 16.69 percent of all Associate Transportation

¹Joyce Tang, "The Career Attainment of Caucasian and Asian Engineers," *Sociological Quarterly* 34 (3): 467-496, 1993, p. 483.

²Dean Lan, "Informational Hearing on Asian, Filipino, Pacific Islander (AFPI) Demographics and Employment," To the State Personnel Board, September 7, 1988.

³California Highway Patrol, the Departments of Corrections, Mental Health, Social Services, and Transportation.

Engineers."⁵

A more broad-based look at Asian Americans and their status in federal civil service was done by Patricia A. Taylor and Sung-Soon Kim.⁶ The findings echo patterns found in corporate employment, namely, despite similar levels of education and work experience, along with high proportions in professional occupations, there exist large income disparities, relative to nonminorities.

In the first Title VI case to be tried before a jury under the amended 1991 Civil Rights Act, Harry Herman, A Filipino employee who has been with the U.S. Customs service since 1970, has sought back pay and other damages for what he believes has been discriminatory treatment in promotional policy. A senior inspector since 1975, Herman has since 1980 applied seventeen times for a supervisory position, only to be passed over each time by younger candidates, with lower credentials and fewer years of work experience. Between 1974 and 1982, Herman advocated for more hirings and promotions of Asian Pacific Americans as inspectors. Nominated federal employee of the year in 1990, he was denied advancement on the grounds that he lacked leadership and writing skills. In short, federal employment has not been immune to charges of a glass ceiling.

⁴*East West*, September 15, 1988.

⁵Dean Lan, "Informational Hearing on Asian, Filipino, Pacific Islander (AFPI) Demographics and Employment," To the State Personnel Board, September 7, 1988, p. 50.

⁶Patricia A. Taylor and Sung-Soon Kim, "Asian-Americans in the Federal Civil Service 1977," *California Sociologist* 3 (1): 1-16, Winter 1980.

APPENDIX V. ASIAN AMERICAN FACULTY

In general, the ratio of non-tenured to tenured faculty would be more meaningful if disaggregated by colleges or university, and if the tenure process itself were separately evaluated. In what is now frequently referred to as the Justus study, the University of California was compared to a number of other institutions¹ which were seen as trying to improve their minority representation and found to have the "highest overall proportion of underrepresented minority faculty of any of these institutions."² Specifically, its total minority faculty in 1986 was 16.2 percent, and of its tenured faculty 8.9 percent were minority. Its Asian American faculty represented 8.8 percent of those in the non-tenured ranks of assistant professors, and 5.5 percent of all those tenured.³ In almost all the universities in this study, the proportion of Asian American faculty was relatively higher, in both the tenured and untenured ranks, when compared with officially "underrepresented" minorities. Moreover, aggregate data from the 1980 census suggest they are "overrepresented" as faculty, even if underrepresented as administrators. Asian Americans were 3.4 percent of the 60,000 postsecondary level faculty,⁴ more than double their overall percentage in the total U.S. population (1.5%).⁵

Yet even if Asian American faculty are seen as "overrepresented," given their numbers in the population at large, the sizeable presence of Asian American students⁶ is in striking contrast to the proportion of Asian American faculty, which is significantly smaller, and concentrated, moreover, into a narrow range of specialities. Factors such as role modeling and mentoring at these earlier stages can influence the nature and

¹Columbia, Duke, Harvard, Illinois, Maryland, Michigan, MIT, North Carolina, North Carolina State, Stanford, SUNY Buffalo, Texas, Wisconsin, and Yale.

²Joyce Bennett Justus, Sandria B. Freitag, and L. Leann Parker, *The University of California in the Twenty-First Century: Successful Approaches to Faculty Diversity*, Spring 1987. Cited in *Asian Americans at Berkeley: A Report to the Chancellor*, May 1989: 40.

³*Asian Americans at Berkeley: A Report to the Chancellor*, May 1989, p. 40.

⁴*Asian Americans at Berkeley: A Report to the Chancellor*, May 1989, p. 38.

⁵Population Reference Bureau, *Asian Americans: Growth, Change, and Diversity*, Vol. 40, No. 4, October 1985. By Robert W. Gardner, Bryant Robey, and Peter C. Smith. See p. 3.

⁶Dana Y. Takagi, *The Retreat from Race: Asian American Admissions and Racial Politics* (New Brunswick, New Jersey: Rutgers University Press), 1992.

production of Ph.D.'s. later on in the pipeline. In fact, the Asian American presence becomes increasingly problematic as one moves up the academic hierarchy. Looking at the status of Asian American faculty at the University of California, Los Angeles, Nancy Wey found that while Asian Americans were 4.7 percent of the total faculty, this figure was "less than the Asian-American student enrollment at U.C.L.A., which is 8.9%; less than the Asian-American Ph.D. recipients nationwide, which are 6.5%; and less than the 15% Asian-Americans in the Greater Los Angeles population."⁷ Don Nakanishi similarly noted that at UCLA, beginning with the training and recruitment of Asian American as graduate students, up through the administrative ranks, fewer and fewer Asian Americans were noticeable at each subsequent juncture in the pipeline.

At UCLA, for example, in 1987, the representation of Asian Pacific Americans followed a common downward pattern of declining representation (found at practically all major colleges and universities): 20 percent of the entering freshman class were Asian Pacific Americans, but they constituted only 10 percent of all entering graduate students, 6 percent of the nontenured faculty, and 4 percent of the tenured faculty... On the other hand, at practically every major university in America, Whites reflect the opposite, upward pattern of increasing representation in the academic pyramid. For example, in 1987 at UCLA, Whites constituted 48 percent of the entering freshman class, 67 percent of all entering graduate students, 81 percent of all nontenured faculty, and 90 percent of all tenured faculty... Furthermore, Asian Pacific Americans in top administrative posts at UCLA and most major universities are practically nonexistent... Currently, only two of the top seventy-five administrators at UCLA are Asian Pacific American.⁸

In California, a state where Asian Americans grew from 5.3 percent of the population in 1980 and almost 10 percent in 1990,⁹ they comprised only 5.1 percent of UC Berkeley's ladder-rank faculty (81 out of 1587) during the 1986-1989 period. Moreover, when compared to other institutions cited in the Justus report, UC ranked

⁷Nancy Wey, "Asian Americans in Academia," Pp. 38-54 in Yung-Hawan Jo (ed.), *Political Participation of Asian Americans: Problems and Strategies*, Pacific/Asian American Mental Health Research Center, 1980, p. 46.

⁸Don Nakanishi, "Asian Pacific Americans in Higher Education: Faculty and Administrators," *New Directions for Teaching and Learning*, Vol. 53, 51-59, 1993, pp. 52-53.

⁹Population Reference Bureau, *Asian Americans: Growth, Change, and Diversity*, Vol. 40, No. 4, October 1985. By Robert W. Gardner, Bryant Robey, and Peter C. Smith. See p. 11.

fourth in terms of Asian faculty recruitment and retention.¹⁰ In a separate report to the Chancellor at the University of California, Berkeley, an Asian American advisory subcommittee underscored the fact that American faculty were concentrated in just three of Berkeley's ten organizational units.¹¹ The relative absence of Asian American faculty in certain disciplines, schools, or fields of study points to a form of underrepresentation that is directly tied to issues of diversity. Again, a more disaggregated analysis reveals a more complex situation and profile.

Asian Americans are underrepresented in all but three (Ethnic Studies, Engineering and the Physical Sciences) of the ten organizational units. Nearly one-half of Asian American faculty are concentrated in Engineering and the Physical Sciences; only 43 Asian Americans, or 3.6% of the 1,195 ladder-rank faculty are in the remaining eight organizational units.¹²

In short, while the University of California is among those universities which have been seen as relatively successful in terms of minority faculty representation, the above analysis suggests a long road ahead for those nation's colleges and universities concerned with diversifying and addressing such faculty imbalances. Berkeley's Asian American advisory subcommittee found problems with how the University has interpreted federal regulations regarding how faculty recruitment goals are tied to some designated availability pool. Specifically, the argument was made that while the University cast its net widely, recruiting nationwide, rather than from the "immediate labor area," it effectively recruited from a select few universities: "nearly one-half come from the only five universities: Berkeley, Harvard, Stanford, MIT, and Columbia." These institutional pools tended not to be ones where the diversity among Asian Americans would be reflected, since Asian Americans were "more likely to earn their doctorates from institutions on the west coast." Despite their ethnic diversity, some groups are

¹⁰*Asian Americans at Berkeley: A Report to the Chancellor*, May 1989, p. 42.

¹¹These organizational units consist of colleges and divisions of the College of Letters and Sciences and include the following: the Department of Ethnic Studies, the College of Engineering, the Physical Sciences Division of Letters and Science, the College of Natural Resources, the Biological Sciences Division of Letters and Science, the College of Chemistry, Professional Schools, Humanities Division of Letters and Science, the College of Environmental Design, and the Social Sciences Division of Letters and Science.

¹²*Asian Americans at Berkeley: A Report to the Chancellor*, May 1989, p. 42.

more disproportionately underrepresented in faculty than others. At UC Berkeley, Filipinos and Koreans are strikingly underrepresented in the faculty. In terms of gender distribution, Asian American women as a whole formed an extremely small percentage of the ladder-rank faculty.

Among the eighty-one Asian American ladder-rank faculty members at Berkeley, 51 percent (40) are Chinese Americans; 21 percent (17) are East Indians; 21 percent (17) are Japanese Americans; 2 percent (2) are Filipinos; 2 percent (2) are Koreans; and the remaining 3 percent (3) are other Asians -- showing a clear need also for affirmative action for Filipino, Korean, and other Asian American faculty. Nine Asian American women comprise less than one percent of the faculty.¹³

In general, because universities and colleges tend to link recruitment efforts to availability rather than to committing resources to training candidates that would enlarge those availability pools, the effect is to perpetuate certain skewed distributions. Thus, even though Asian Americans are underrepresented in a number of Berkeley's academic units, there is little effort to increase their availability pool. Instead, the College of Engineering, which has the "highest representation" of Asian faculty on campus (11.6%), was more likely to be targeted for a faculty appointment than other units. Such goals make sense, at one level, given an overwhelming number of Asian student applicants to the College of Engineering. At the same time, failing to increase Asian faculty representation in fields where they have been traditionally underrepresented (such as the social sciences, arts, and humanities) has direct implications for the availability pool later on, insofar as students fail to consider a wider range of career options. Thus, Nancy Wey, looking at statistics for California State University, Long Beach, found that Asian Americans were underrepresented among the faculty, and disproportionately concentrated in the Civil and Mechanical Engineering Departments. There was a bias, moreover, towards larger numbers of foreign-born and foreign-educated Asians: "only 1.8% of the total faculty consist of Asian American born and educated in the United States, while 3.9% are Asians born and educated for the

¹³*Asian Americans at Berkeley: A Report to the Chancellor*, May 1989, pp. 42-43.

most part in Asia."¹⁴ Grace Yun similarly concluded, "the occupational status of Asian American science faculty did not so much reflect the upward mobility of native-born descendents of early Asian immigrant laborers, but rather the recruitment of foreign-born, foreign-educated Asian scholars from advantaged backgrounds to American academic institutions over the past several decades."¹⁵

The secrecy and confidentiality which has traditionally surrounded the academic decision-making process has made it extremely hard to investigate cases where differential or discriminatory treatment has occurred. Until recently, there was no way in which a candidate could gain access to documents enabling a comparison of his or her files with that of other faculty who had gained tenure in the same department and institution. In the case of *University of Pennsylvania v. Equal Employment Opportunity Commission*, Rosalie Tung filed to obtain such comparable information on other faculty in her department when she was denied tenure. The result of this U.S. Supreme Court decision was to dismiss the university's right to keep all such documents confidential on the grounds of "academic freedom" under the First Amendment. The long-term implications of this decision for minority and women, however, is still undetermined, since the process continues to allow subjective biases to play an important role, although the screen concealing this process has now been partially removed. As Minami noted:

The Court ruled that no special privilege existed for such documents in common law and that the costs of disclosure were outweighed by the need to determine whether illegal discrimination has taken place...

This decision will probably not alter the *result* of tenure reviews, only the *manner* in which information is presented. Rather than alter their opinions, opponents of a minority or female candidate will simply document their biased opinions better. The decision will significantly change, however, the chances of winning complaints and lawsuits based

¹⁴Nancy Wey, "Asian Americans in Academia," pp. 38-54 in Yung-Hawan Jo (ed.), *Political Participation of Asian Americans: Problems and Strategies*, Pacific/Asian American Mental Health Research Center, 1980, p. 40.

¹⁵Grace Yun, "Status of Asian American University Faculty," pp. 135-151 in Grace Yun (ed.), *A Look Beyond the Model Minority Image: Critical Issues in Asian America* (New York: Minority Rights Group), 1989, p. 139.

on sex and race discrimination, because dismantling the confidentiality shield will expose biased decisions.¹⁶

Given that the review process essentially involves the judgment or opinion of already tenured faculty, there is always the risk that the work of upcoming faculty whose areas of study do not fit neatly into traditional domains will not be fully appreciated. Decision-making rests heavily on judgments about whether a faculty member's work meets the criterion of "pioneering" or "pathbreaking" work. The fact that those sitting in judgment frequently do not possess the requisite expertise means that the contributions of minority and women faculty -- whether it be at the level of research, teaching, or public service -- cannot be fully appreciated. Their research generally tends to be on the edge or periphery of conventional scholarship, precisely because particular issues have been historically neglected or ignored.

In short, until there is more of a critical mass of faculty who have the appropriate expertise to seriously evaluate the files of Asian American candidates, then the potential for "arbitrary," if not politically-motivated, decisions will continue to be a reality of the review process. It has elsewhere been pointed out that the influence of "non-specialist outsiders" in such reviews frequently inserts "extraneous standards of scholarly excellence."¹⁷ While the tenure process serves as a "floor" of security, academic employment provides yet another mirror on the ceiling which Asian Americans experience in the corporate and government sectors.

¹⁶Dale Minami, "Guerrilla War at UCLA: Political and Legal Dimensions of the Tenure Battle," *Amerasia* 16 (1):81-107, 1990, 83-84.

¹⁷L. Ling-chi Wang, "A Critique of *Strangers from a Different Shore*," *Amerasia* 16 (2): 71-80, 1990.